

Alaska

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALASKA													
31-33	Manufacturing	-	488	102	10 770	331 193	8 805	19 092	238 180	1 159 253	2 121 188	3 304 952	130 253
311	Food mfg	-	158	69	7 623	185 501	6 515	14 376	138 505	560 768	796 717	1 357 459	48 188
3117	Seafood product preparation & packaging . .	-	122	65	7 174	172 214	6 297	14 064	131 896	518 934	760 303	1 279 152	45 311
31171	Seafood product preparation & packaging	-	122	65	7 174	172 214	6 297	14 064	131 896	518 934	760 303	1 279 152	45 311
311711	Seafood canning	-	31	16	1 254	31 617	1 095	2 081	20 894	109 731	141 487	251 001	7 095
311712	Fresh & frozen seafood processing . .	-	91	49	5 920	140 597	5 202	11 983	111 002	409 203	618 816	1 028 151	38 216
3118	Bakeries & tortilla mfg	1	10	1	257	8 276	113	151	4 458	12 651	5 669	18 397	D
31181	Bread & bakery product mfg	1	9	1	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	1	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	8	2	c	D	D	D	D	D	D	D	2 809
3121	Beverage mfg	2	8	2	c	D	D	D	D	D	D	D	2 809
31212	Breweries	1	6	2	c	D	D	D	D	D	D	D	D
312120	Breweries	1	6	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg	1	32	3	279	10 044	229	472	7 463	26 470	28 829	50 439	1 371
3211	Sawmills & wood preservation	-	19	3	219	8 894	178	387	6 598	23 946	25 681	44 747	1 203
32111	Sawmills & wood preservation	-	19	3	219	8 894	178	387	6 598	23 946	25 681	44 747	1 203
321113	Sawmills	-	19	3	219	8 894	178	387	6 598	23 946	25 681	44 747	1 203
322	Paper mfg	-	2	1	c	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	c	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	c	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	57	5	448	12 564	330	590	8 403	27 153	13 359	40 527	2 076
3231	Printing & related support activities	4	57	5	448	12 564	330	590	8 403	27 153	13 359	40 527	2 076
32311	Printing	4	52	5	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing . .	4	28	3	267	7 901	193	377	5 298	14 413	7 743	22 104	646
324	Petroleum & coal products mfg	-	10	4	377	32 241	278	702	25 082	349 372	1 005 487	1 362 562	53 948
3241	Petroleum & coal products mfg	-	10	4	377	32 241	278	702	25 082	349 372	1 005 487	1 362 562	53 948
32411	Petroleum refineries	-	6	4	339	28 150	260	604	23 327	325 862	976 112	1 309 608	52 531
324110	Petroleum refineries	-	6	4	339	28 150	260	604	23 327	325 862	976 112	1 309 608	52 531
325	Chemical mfg	-	6	3	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	3	2	e	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	3	2	e	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	-	3	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	27	2	194	8 459	156	329	6 570	21 693	22 313	43 553	2 065
3273	Cement & concrete product mfg	3	25	2	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg .	3	15	1	100	4 575	87	173	3 807	10 839	11 211	22 113	1 037
327320	Ready-mix concrete mfg	3	15	1	100	4 575	87	173	3 807	10 839	11 211	22 113	1 037
332	Fabricated metal product mfg	2	49	5	374	13 365	273	543	8 612	24 910	25 235	50 243	1 377
3323	Architectural & structural metals mfg	2	21	3	204	6 606	139	267	3 867	11 309	15 561	27 143	666
33231	Plate work & fabricated structural product mfg . .	3	11	3	126	4 206	91	168	2 502	5 581	8 272	13 934	554
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	18	1	106	3 928	86	146	2 678	7 243	3 915	11 032	308
33271	Machine shops	1	18	1	106	3 928	86	146	2 678	7 243	3 915	11 032	308
332710	Machine shops	1	18	1	106	3 928	86	146	2 678	7 243	3 915	11 032	308
336	Transportation equipment mfg	2	21	4	c	D	D	D	D	D	D	D	478
3366	Ship & boat building	3	14	3	c	D	D	D	D	D	D	D	D
33661	Ship & boat building	3	14	3	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	5	21	-	c	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	5	16	-	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	46	2	168	4 684	129	277	3 065	9 394	6 212	15 456	1 737
3399	Other miscellaneous mfg . .	2	27	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANCHORAGE, AK MSA												
	Manufacturing	4	187	26	2 022	62 871	1 459	2 737	38 766	157 819	164 645	322 318	11 408
311	Food mfg	5	30	9	714	18 184	466	675	9 737	54 976	58 273	113 262	3 002
3117	Seafood product preparation & packaging . .	2	9	5	310	5 595	283	396	3 582	15 153	24 146	39 296	242
31171	Seafood product preparation & packaging	2	9	5	310	5 595	283	396	3 582	15 153	24 146	39 296	242
311712	Fresh & frozen seafood processing . .	2	6	4	275	4 363	259	344	2 965	12 873	22 146	35 019	D
323	Printing & related support activities	4	36	5	346	10 563	250	471	7 062	22 720	10 944	33 746	1 865
3231	Printing & related support activities	4	36	5	346	10 563	250	471	7 062	22 720	10 944	33 746	1 865
32311	Printing	4	32	5	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Boroughs and Census Areas: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALEUTIANS EAST BOROUGH, AK												
	Manufacturing	–	2	2	f	D	D	D	D	D	D	D	D
311	Food mfg	–	2	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging . .	–	2	2	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	–	2	2	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing . .	–	2	2	f	D	D	D	D	D	D	D	D
31-33	ALEUTIANS WEST CENSUS AREA, AK												
	Manufacturing	–	8	6	g	D	D	D	D	D	D	D	10 431
311	Food mfg	–	7	6	g	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging . .	–	7	6	g	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	–	7	6	g	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing . .	–	7	6	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Boroughs and Census Areas: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANCHORAGE BOROUGH, AK													
31-33	Manufacturing	4	187	26	2 022	62 871	1 459	2 737	38 766	157 819	164 645	322 318	11 408
311	Food mfg.....	5	30	9	714	18 184	466	675	9 737	54 976	58 273	113 262	3 002
KENAI PENINSULA BOROUGH, AK													
31-33	Manufacturing	-	56	12	1 246	56 678	977	2 429	41 787	283 005	746 406	1 026 963	49 905
311	Food mfg.....	-	24	7	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	-	20	7	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	20	7	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	-	17	6	f	D	D	D	D	D	D	D	D
KETCHIKAN GATEWAY BOROUGH, AK													
31-33	Manufacturing	2	18	7	762	31 092	579	1 203	21 545	27 510	78 067	131 334	2 221
KODIAK ISLAND BOROUGH, AK													
31-33	Manufacturing	-	25	13	1 576	35 380	1 405	3 078	28 554	82 542	121 887	204 311	7 835
311	Food mfg.....	-	17	13	1 552	34 788	1 383	3 051	28 117	80 692	120 936	201 619	D
3117	Seafood product preparation & packaging..	-	17	13	1 552	34 788	1 383	3 051	28 117	80 692	120 936	201 619	D
31171	Seafood product preparation & packaging	-	17	13	1 552	34 788	1 383	3 051	28 117	80 692	120 936	201 619	D
311712	Fresh & frozen seafood processing ..	-	14	10	1 436	31 382	1 276	2 804	25 453	63 157	104 322	167 475	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANCHORAGE, AK													
31-33	Manufacturing	4	187	26	2 022	62 871	1 459	2 737	38 766	157 819	164 645	322 318	11 408
311	Food mfg.....	5	30	9	714	18 184	466	675	9 737	54 976	58 273	113 262	3 002
KENAI, AK													
31-33	Manufacturing	-	9	4	521	30 058	347	691	19 280	106 658	172 669	276 003	D
KETCHIKAN, AK													
31-33	Manufacturing	2	16	7	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KODIAK, AK												
31-33	Manufacturing	-	18	9	1 359	30 701	1 251	2 763	25 750	58 758	92 202	150 847	D
311	Food mfg.....	-	12	9	g	D	D	D	D	D	D	D	6 975
3117	Seafood product preparation & packaging..	-	12	9	g	D	D	D	D	D	D	D	6 975
31171	Seafood product preparation & packaging	-	12	9	g	D	D	D	D	D	D	D	6 975
311712	Fresh & frozen seafood processing ..	-	11	8	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
ALASKA		ALASKA—Con.	
Companies ¹	number.. 442	Quantity of electricity purchased for heat and power	1,000 kWh.. 382 969
All establishments	number.. 488	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 206 119
Establishments with 1 to 19 employees	number.. 386	Total value of shipments	\$1,000.. 3 304 952
Establishments with 20 to 99 employees	number.. 73	Value of resales	\$1,000.. 349 609
Establishments with 100 employees or more	number.. 29	Value added	\$1,000.. 1 159 253
All employees	number.. 10 770	Total inventories, beginning of year	\$1,000.. 319 721
Total compensation ²	\$1,000.. 401 470	Finished goods inventories, beginning of year	\$1,000.. 193 101
Annual payroll	\$1,000.. 331 193	Work-in-process inventories, beginning of year	\$1,000.. 41 031
Total fringe benefits	\$1,000.. 70 277	Materials and supplies inventories, beginning of year	\$1,000.. 85 589
Production workers, average for year	number.. 8 805	Total inventories, end of year	\$1,000.. 320 908
Production workers on March 12	number.. 9 600	Finished goods inventories, end of year	\$1,000.. 196 538
Production workers on May 12	number.. 8 383	Work-in-process inventories, end of year	\$1,000.. 26 069
Production workers on August 12	number.. 11 147	Materials and supplies inventories, end of year	\$1,000.. 98 301
Production workers on November 12	number.. 6 090	Gross book value of total assets at beginning of year	\$1,000.. 2 034 162
Production-worker hours	1,000.. 19 092	Total capital expenditures (new and used)	\$1,000.. 130 253
Production-worker wages	\$1,000.. 238 180	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 12 576
Total cost of materials	\$1,000.. 2 121 188	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 117 677
Cost of materials, parts, containers, etc., consumed	\$1,000.. 1 672 145	Total retirements ²	\$1,000.. 39 525
Cost of resales	\$1,000.. 304 632	Gross book value of total assets at end of year	\$1,000.. 2 124 890
Cost of fuels	\$1,000.. 99 141	Total depreciation during year ²	\$1,000.. 97 778
Cost of purchased electricity	\$1,000.. 27 567	Total rental payments ²	\$1,000.. 31 224
Cost of contract work	\$1,000.. 17 703	Buildings and other structures rental payments ²	\$1,000.. 13 868
		Machinery and equipment rental payments ²	\$1,000.. 17 356

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

ALASKA

Skagway-Hoonah-Angoon Census Area was renamed from Skagway-Yakutat-Angoon Census Area in September 1992 when Yakutat Borough organized from part of its area.

Yakutat Borough was organized from part of the Skagway-Yakutat-Angoon Census Area (renamed Skagway-Hoonah-Angoon Census Area) in September 1992.

Appendix E. Metropolitan Areas

ALASKA

Anchorage, AK MSA

Anchorage Borough, AK

Alabama

1997

Issued May 2000

EC97M31A-AL

1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALABAMA													
31-33	Manufacturing	-	5 444	2 089	352 618	10 187 756	275 637	545 980	6 928 393	29 221 522	38 723 397	67 970 076	3 058 564
311	Food mfg	1	272	136	34 935	673 916	27 555	50 119	451 318	2 147 032	3 977 191	6 124 330	145 894
3111	Animal food mfg	-	39	20	1 194	31 169	795	1 643	18 686	146 749	806 497	955 884	8 297
31111	Animal food mfg	-	39	20	1 194	31 169	795	1 643	18 686	146 749	806 497	955 884	8 297
311111	Dog & cat food mfg	-	5	4	413	11 949	253	614	5 829	55 746	90 378	147 343	2 469
311119	Other animal food mfg	-	34	16	781	19 220	542	1 029	12 857	91 003	716 119	808 541	5 828
3112	Grain & oilseed milling	-	11	6	670	23 916	434	1 224	11 838	85 398	670 359	753 463	32 197
31122	Starch & vegetable fats & oils mfg	-	8	6	658	23 793	425	1 215	11 750	84 732	668 360	750 789	32 149
311221	Wet corn milling	-	1	1	c	D	D	D	D	D	D	D	D
311222	Soybean processing	-	2	2	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing	-	4	2	142	4 193	49	110	941	10 981	52 067	63 447	D
311225	Fats & oils refining & blending	-	1	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	12	1	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	1	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	2	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	14	12	1 807	48 228	873	1 705	23 039	134 808	331 737	466 995	18 152
31151	Dairy product (except frozen) mfg	1	11	9	1 396	37 258	550	1 169	14 371	100 217	278 914	379 147	D
311511	Fluid milk mfg	1	10	9	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	8	3	3	411	10 970	323	536	8 668	34 591	52 823	87 848	D
311520	Ice cream & frozen dessert mfg	8	3	3	411	10 970	323	536	8 668	34 591	52 823	87 848	D
3116	Meat product mfg	2	67	40	21 066	338 144	18 443	31 720	274 759	1 152 811	1 402 588	2 559 080	36 204
31161	Animal slaughtering & processing	2	67	40	21 066	338 144	18 443	31 720	274 759	1 152 811	1 402 588	2 559 080	36 204
311611	Animal (except poultry) slaughtering	1	23	4	394	7 815	289	456	4 212	17 817	57 368	75 079	1 065
311612	Meat processed from carcasses	6	9	5	541	12 406	382	812	7 465	24 267	71 452	95 986	2 176
311613	Rendering & meat byproduct processing	4	5	3	187	5 189	108	231	2 655	22 300	25 592	48 301	3 506
311615	Poultry processing	2	30	28	19 944	312 734	17 664	30 221	260 427	1 088 427	1 248 176	2 339 714	29 457
3117	Seafood product preparation & packaging	1	20	12	1 694	26 906	1 385	2 430	16 234	68 076	119 270	187 351	4 095
31171	Seafood product preparation & packaging	1	20	12	1 694	26 906	1 385	2 430	16 234	68 076	119 270	187 351	4 095
311712	Fresh & frozen seafood processing	1	19	12	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	77	25	3 697	99 630	2 267	4 706	49 572	243 970	245 739	489 403	12 024
31181	Bread & bakery product mfg	-	73	22	3 333	91 821	1 951	4 093	43 869	222 677	220 591	443 286	D
311811	Retail bakeries	5	45	2	e	D	D	D	D	D	D	D	482
311812	Commercial bakeries	-	27	19	3 023	88 067	1 747	3 833	41 964	214 494	215 347	429 852	9 733
31182	Cookie, cracker, & pasta mfg	-	3	3	e	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	c	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	-	1	1	c	D	D	D	D	D	D	D	D
3119	Other food mfg	-	29	18	4 336	95 886	2 983	5 897	50 558	289 756	364 100	651 026	32 997
31191	Snack food mfg	-	4	3	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	-	1	1	c	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	3	2	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	2	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	6	5	565	15 126	371	710	7 319	33 229	68 043	101 519	4 526
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	5	4	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	-	1	1	c	D	D	D	D	D	D	D	D
31199	All other food mfg	1	16	9	2 052	42 461	1 698	3 393	29 360	129 508	126 183	254 889	15 070
311991	Perishable prepared food mfg	-	5	3	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	2	11	6	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	30	9	2 718	67 791	1 316	2 778	26 632	315 108	425 050	740 248	16 459
3121	Beverage mfg	2	28	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	26	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	9	5	g	D	D	D	D	D	D	D	13 808
312113	Ice mfg	2	15	1	c	D	D	D	D	D	D	D	619
3122	Tobacco mfg	-	2	2	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALABAMA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	-	107	81	20 290	505 069	18 418	38 590	426 995	1 351 918	2 110 938	3 461 006	126 192
3131	Fiber, yarn, & thread mills .	-	36	34	6 562	155 854	6 140	12 589	138 246	312 909	707 039	1 024 315	20 916
31311	Fiber, yarn, & thread	-	36	34	6 562	155 854	6 140	12 589	138 246	312 909	707 039	1 024 315	20 916
313111	mills	-	36	34	6 562	155 854	6 140	12 589	138 246	312 909	707 039	1 024 315	20 916
313112	Yarn spinning mills ...	-	32	31	5 766	140 525	5 399	11 084	124 385	287 650	621 832	912 886	20 030
31312	Yarn texturing, throwing, & twisting mills	-	4	3	796	15 329	741	1 505	13 861	25 259	85 207	111 429	886
3132	Fabric mills	-	50	37	11 658	299 399	10 439	22 880	251 768	650 404	941 113	1 591 624	94 066
31321	Broadwoven fabric mills .	-	24	20	9 309	252 765	8 467	18 914	217 165	526 140	710 142	1 233 921	73 324
313210	Broadwoven fabric mills	-	24	20	9 309	252 765	8 467	18 914	217 165	526 140	710 142	1 233 921	73 324
31322	Narrow fabric mills & schiffli machine embroidery	-	10	6	1 117	20 981	912	1 928	15 384	49 522	48 621	99 975	9 862
313221	Narrow fabric mills	-	9	6	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	3	5	3	165	3 557	127	207	1 847	8 704	10 076	18 583	D
313230	Nonwoven fabric mills .	3	5	3	165	3 557	127	207	1 847	8 704	10 076	18 583	D
31324	Knit fabric mills	-	11	8	1 067	22 096	933	1 831	17 372	66 038	172 274	239 145	D
313241	Wet knit fabric mills ..	-	5	4	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	1	6	4	c	D	D	D	D	D	D	D	262
3133	Textile & fabric finishing & fabric coating mills	-	21	10	2 070	49 816	1 839	3 121	36 981	388 605	462 786	845 067	11 210
31331	Textile & fabric finishing mills	-	18	9	g	D	D	D	D	D	D	D	11 145
313311	Broadwoven fabric finishing mills	-	12	5	f	D	D	D	D	D	D	D	7 828
313312	Textile & fabric finishing mills	-	6	4	g	D	D	D	D	D	D	D	3 317
314	Textile product mills	1	125	46	10 581	250 105	8 575	17 362	174 931	722 318	953 473	1 627 480	55 800
3141	Textile furnishings mills	1	56	19	5 038	104 302	4 393	9 190	81 152	436 148	532 979	929 632	18 341
31411	Carpet & rug mills	3	4	4	1 889	40 808	1 590	3 330	29 974	131 726	186 234	317 454	7 450
314110	Carpet & rug mills	3	4	4	1 889	40 808	1 590	3 330	29 974	131 726	186 234	317 454	7 450
31412	Curtain & linen mills	-	52	15	3 149	63 494	2 803	5 860	51 178	304 422	346 745	612 178	10 891
314121	Curtain & drapery mills	-	39	7	647	10 184	537	915	5 924	16 531	20 811	37 710	212
314129	Other household textile product mills	-	13	8	2 502	53 310	2 266	4 945	45 254	287 891	325 934	574 468	10 679
3149	Other textile product mills .	2	69	27	5 543	145 803	4 182	8 172	93 779	286 170	420 494	697 848	37 459
31491	Textile bag & canvas mills	1	27	3	372	7 232	305	499	4 568	11 937	10 451	23 200	1 180
314912	Canvas & related product mills	1	20	3	327	6 493	272	440	4 176	10 423	8 792	20 134	1 143
31499	All other textile product mills	2	42	24	5 171	138 571	3 877	7 673	89 211	274 233	410 043	674 648	36 279
314991	Rope, cordage, & twine mills	1	8	3	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	5	32	19	3 349	87 679	2 475	4 518	54 800	160 109	192 030	349 667	20 104
315	Apparel mfg	1	368	226	37 566	562 710	32 836	56 219	442 593	1 427 759	1 537 036	2 938 859	51 679
3151	Apparel knitting mills	2	158	86	10 513	182 593	9 384	17 103	140 440	353 182	537 854	893 744	30 290
31511	Hosiery & sock mills	2	141	73	7 331	118 363	6 517	11 362	91 848	231 033	357 782	591 218	26 038
315111	Sheer hosiery mills ...	1	9	3	419	7 614	391	734	6 399	7 243	7 661	16 184	946
315119	Other hosiery & sock mills	2	132	70	6 912	110 749	6 126	10 628	85 449	223 790	350 121	575 034	25 092
31519	Other apparel knitting mills	2	17	13	3 182	64 230	2 867	5 741	48 592	122 149	180 072	302 526	4 252
315191	Outerwear knitting mills	2	16	12	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	188	134	26 622	373 553	23 075	38 519	297 138	1 043 391	954 742	1 978 816	20 755
31521	Cut & sew apparel contractors	3	89	54	7 058	90 355	5 856	9 655	70 816	176 772	35 500	210 923	3 343
315211	Men's & boys' cut & sew apparel contractors	2	25	23	3 975	49 275	3 636	5 725	42 560	99 051	18 169	116 105	1 668
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	64	31	3 083	41 080	2 220	3 930	28 256	77 721	17 331	94 818	1 675

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALABAMA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31522	Men's & boys' cut & sew apparel mfg.....	1	61	49	11 824	169 656	10 756	17 231	142 103	425 178	561 409	993 751	10 124
315221	Men's & boys' cut & sew underwear & nightwear mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	1	28	26	7 202	104 433	6 689	10 013	89 941	220 840	380 245	611 386	6 303
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	—	10	9	2 667	37 447	2 407	4 101	31 433	158 031	121 948	277 075	2 670
315225	Men's & boys' cut & sew work clothing mfg.....	6	8	6	797	11 255	688	1 130	8 874	21 337	20 636	42 106	500
315228	Men's & boys' cut & sew other outerwear mfg.....	—	10	5	839	12 246	657	1 319	8 114	21 397	32 540	51 658	608
31523	Women's & girls' cut & sew apparel mfg.....	1	33	26	5 960	86 688	5 098	9 233	65 355	300 048	265 727	574 040	6 481
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	2	13	11	h	D	D	D	D	D	D	D	1 271
315233	Women's & girls' cut & sew dress mfg.....	—	5	2	242	2 829	178	259	1 741	4 847	1 365	5 556	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg.....	9	3	3	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.....	—	8	8	2 529	42 099	2 192	3 610	32 538	84 413	140 032	221 880	D
31529	Other cut & sew apparel mfg.....	—	5	5	1 780	26 854	1 365	2 400	18 864	141 393	92 106	200 102	807
315291	Infants' cut & sew apparel mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg.....	1	2	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	1	22	6	431	6 564	377	597	5 015	31 186	44 440	66 299	634
31599	Apparel accessories & other apparel mfg.....	1	22	6	431	6 564	377	597	5 015	31 186	44 440	66 299	634
315992	Glove & mitten mfg....	9	3	2	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg.....	—	17	3	226	3 393	188	255	2 204	26 674	39 969	57 353	D
316	Leather & allied product mfg.	6	19	1	119	1 993	92	152	1 522	4 663	5 890	10 633	178
321	Wood product mfg.....	1	487	226	25 949	625 499	21 634	43 718	449 904	1 484 453	2 907 862	4 381 779	128 377
3211	Sawmills & wood preservation.....	1	166	90	7 109	184 926	6 001	13 442	137 480	518 412	1 337 009	1 843 676	62 271
32111	Sawmills & wood preservation.....	1	166	90	7 109	184 926	6 001	13 442	137 480	518 412	1 337 009	1 843 676	62 271
321113	Sawmills.....	1	138	70	5 877	152 327	5 055	11 367	117 333	435 729	889 923	1 319 311	51 134
321114	Wood preservation....	1	28	20	1 232	32 599	946	2 075	20 147	82 683	447 086	524 365	11 137
3212	Veneer, plywood, & engineered wood product mfg.....	—	54	33	3 697	102 474	3 191	7 272	81 267	229 479	420 131	646 528	29 722
32121	Veneer, plywood, & engineered wood product mfg.....	—	54	33	3 697	102 474	3 191	7 272	81 267	229 479	420 131	646 528	29 722
321211	Hardwood veneer & plywood mfg.....	3	14	11	702	17 464	624	1 356	12 779	32 517	35 747	68 627	D
321212	Softwood veneer & plywood mfg.....	—	8	8	1 717	55 471	1 554	3 821	47 709	116 876	262 198	376 453	9 368
321213	Engineered wood member (except truss) mfg.....	3	2	2	c	D	D	D	D	D	D	D	D
321214	Truss mfg.....	2	22	7	e	D	D	D	D	D	D	D	2 237
321219	Reconstituted wood product mfg.....	—	8	5	710	18 700	582	1 360	14 248	56 729	89 716	145 656	15 845
3219	Other wood product mfg....	1	267	103	15 143	338 099	12 442	23 004	231 157	736 562	1 150 722	1 891 575	36 384
32191	Millwork.....	—	105	42	4 457	94 492	3 501	6 397	62 461	243 331	404 991	649 878	12 172
321911	Wood window & door mfg.....	1	29	13	1 427	31 373	1 053	1 997	18 678	78 036	128 900	207 734	3 414
321912	Cut stock, resawing lumber, & planing....	—	38	15	1 211	25 298	998	1 851	15 660	83 575	171 235	250 735	3 818
321918	Other millwork (including flooring)....	1	38	14	1 819	37 821	1 450	2 549	28 123	81 720	104 856	191 409	4 940
32192	Wood container & pallet mfg.....	3	64	19	1 216	20 208	1 046	1 761	14 845	42 005	52 083	94 142	3 030
321920	Wood container & pallet mfg.....	3	64	19	1 216	20 208	1 046	1 761	14 845	42 005	52 083	94 142	3 030

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALABAMA—Con.													
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	1	98	42	9 470	223 399	7 895	14 846	153 851	451 226	693 648	1 147 555	21 182
321991	Manufactured home (mobile home) mfg ..	1	28	25	8 166	193 283	6 859	12 827	132 331	381 163	624 843	1 008 310	13 537
321992	Prefabricated wood building mfg	1	16	5	330	6 906	232	472	4 131	13 906	21 073	35 059	348
321999	All other miscellaneous wood product mfg	1	54	12	974	23 210	804	1 547	17 389	56 157	47 732	104 186	7 297
322	Paper mfg	—	89	69	19 091	966 527	15 046	34 407	720 383	2 953 766	3 346 014	6 287 709	635 509
3221	Pulp, paper, & paperboard mills	—	19	19	14 788	846 928	11 646	27 438	637 903	2 651 918	2 851 475	5 489 047	613 052
32211	Pulp mills	—	2	2	f	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	9	9	9 996	578 076	8 017	18 676	446 387	1 755 467	1 678 636	3 420 358	D
322121	Paper (except newsprint) mills	—	7	7	i	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	8	8	h	D	D	D	D	D	D	D	319 851
322130	Paperboard mills	—	8	8	h	D	D	D	D	D	D	D	319 851
3222	Converted paper product mfg	—	70	50	4 303	119 599	3 400	6 969	82 480	301 848	494 539	798 662	22 457
32221	Paperboard container mfg	—	45	36	3 038	86 052	2 343	4 957	57 256	197 124	361 696	560 293	18 196
322211	Corrugated & solid fiber box mfg	—	25	20	1 742	52 053	1 237	2 518	31 146	111 227	241 757	352 767	13 180
322212	Folding paperboard box mfg	—	8	8	817	22 166	719	1 669	17 339	52 350	67 508	121 453	3 005
322214	Fiber can, tube, drum, & similar products mfg	—	9	7	411	10 565	333	666	7 943	31 160	50 437	81 706	D
32222	Paper bag & coated & treated paper mfg	—	10	5	725	19 503	616	1 174	15 725	50 746	75 226	128 349	D
322222	Coated & laminated paper mfg	—	4	1	159	5 441	122	275	3 949	19 829	22 403	43 194	1 242
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	1	12	8	451	12 105	377	721	8 188	49 296	51 257	98 925	1 617
322299	All other converted paper product mfg ...	1	12	8	451	12 105	377	721	8 188	49 296	51 257	98 925	1 617
323	Printing & related support activities	3	510	74	7 331	196 317	5 262	9 576	119 726	404 656	349 550	756 269	33 264
3231	Printing & related support activities	3	510	74	7 331	196 317	5 262	9 576	119 726	404 656	349 550	756 269	33 264
32311	Printing	3	485	72	7 133	190 129	5 115	9 319	115 669	391 868	346 401	740 353	32 780
323110	Commercial lithographic printing ..	3	236	36	3 620	110 661	2 572	4 819	65 908	211 593	202 887	415 450	20 159
323112	Commercial flexographic printing ..	1	13	6	327	10 214	237	448	6 213	21 513	25 310	46 897	3 728
323113	Commercial screen printing	4	73	10	584	10 977	448	671	6 447	23 249	15 382	38 500	2 029
323114	Quick printing	1	98	7	1 117	24 358	740	1 321	14 402	58 314	108 654	2 489	2 489
323116	Manifold business form printing	—	10	7	735	17 063	535	992	13 162	43 079	23 694	67 502	932
323118	Blankbook, looseleaf binder, & device mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	3	41	5	338	6 722	254	406	4 193	12 898	10 208	23 091	882
32312	Support activities for printing	1	25	2	198	6 188	147	257	4 057	12 788	3 149	15 916	484
323122	Prepress services	2	23	1	c	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	1	34	17	2 221	89 376	1 637	3 368	56 872	420 984	1 276 147	1 703 677	39 022
3241	Petroleum & coal products mfg	1	34	17	2 221	89 376	1 637	3 368	56 872	420 984	1 276 147	1 703 677	39 022
32411	Petroleum refineries	—	3	3	442	21 228	297	479	12 940	216 003	904 943	1 135 118	19 654
324110	Petroleum refineries ..	—	3	3	442	21 228	297	479	12 940	216 003	904 943	1 135 118	19 654
32412	Asphalt paving, roofing, & saturated materials mfg	4	25	11	1 078	41 606	772	1 813	26 043	101 297	248 185	343 511	11 125
324121	Asphalt paving mixture & block mfg	1	14	2	204	6 279	128	244	2 987	12 046	33 788	45 853	1 038
324122	Asphalt shingle & coating materials mfg	5	11	9	874	35 327	644	1 569	23 056	89 251	214 397	297 658	10 087
32419	Other petroleum & coal products mfg	—	6	3	701	26 542	568	1 076	17 889	103 684	123 019	225 048	8 243
324199	All other petroleum & coal products mfg ...	—	3	2	f	D	D	D	D	D	D	D	7 931

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31-33	ALABAMA—Con. Manufacturing— Con.												
325	Chemical mfg	1	207	87	15 486	690 616	10 520	22 905	399 236	3 661 269	3 562 843	7 191 228	590 366
3251	Basic chemical mfg	2	71	33	5 831	315 742	3 386	7 452	161 937	2 114 305	1 511 335	3 611 077	297 831
32511	Petrochemical mfg.	—	2	2	f	D	D	D	D	D	D	D	D
325110	Petrochemical mfg.	—	2	2	f	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	—	23	4	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	23	4	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	25	16	1 875	94 020	1 086	2 494	48 785	598 267	336 530	932 476	51 385
325181	Alkalies & chlorine mfg	—	3	3	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	21	12	1 294	61 362	763	1 802	34 331	402 241	215 138	614 726	27 954
32519	Other basic organic chemical mfg	5	20	11	3 049	173 792	1 772	3 832	91 596	1 075 808	542 305	1 613 164	107 586
325192	Cyclic crude & intermediate mfg	—	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	6	17	8	2 570	155 816	1 470	3 248	80 781	1 005 838	489 242	1 491 235	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	21	15	5 198	193 933	4 314	9 554	139 791	688 873	1 121 957	1 792 581	130 724
32521	Resin & synthetic rubber mfg	—	11	6	856	44 638	642	1 393	32 008	276 525	356 628	638 759	93 083
325211	Plastics material & resin mfg	—	8	6	851	44 481	639	1 387	31 918	275 511	356 083	637 205	92 962
32522	Artificial & synthetic fibers & filaments mfg	—	10	9	4 342	149 295	3 672	8 161	107 783	412 348	765 329	1 153 822	37 641
325221	Cellulosic organic fiber mfg	—	2	2	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	8	7	h	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	18	10	1 288	49 207	886	1 824	28 222	216 153	328 773	541 060	81 800
32531	Fertilizer mfg.	—	15	7	f	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	—	3	1	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	—	11	5	538	14 195	413	879	9 638	63 342	191 988	255 801	3 879
32532	Pesticide & other agricultural chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	4	12	5	270	8 879	182	293	5 933	28 113	12 623	40 623	3 366
32541	Pharmaceutical & medicine mfg	4	12	5	270	8 879	182	293	5 933	28 113	12 623	40 623	3 366
325411	Medicinal & botanical mfg	—	4	2	174	5 084	130	193	3 652	15 065	5 868	20 782	1 933
3255	Paint, coating, & adhesive mfg	1	35	9	1 043	41 557	406	813	12 531	113 885	179 830	293 265	3 597
32551	Paint & coating mfg	1	28	9	996	39 983	373	746	11 771	105 767	165 208	270 582	2 987
325510	Paint & coating mfg	1	28	9	996	39 983	373	746	11 771	105 767	165 208	270 582	2 987
3259	Other chemical product mfg	—	34	14	1 767	78 467	1 298	2 887	49 581	493 574	392 221	890 022	72 391
32599	All other chemical product & preparation mfg	—	26	10	1 589	72 742	1 189	2 647	46 313	428 041	322 836	756 704	71 470
325991	Custom compounding of purchased resin	—	9	3	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	15	7	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	218	113	20 487	657 921	16 482	31 748	475 561	1 699 854	1 677 241	3 383 550	161 261
3261	Plastics product mfg	1	158	84	9 252	224 007	7 453	13 991	150 815	556 552	684 901	1 249 462	56 598
32611	Unsupported plastics film, sheet, & bag mfg	—	12	7	1 013	22 674	796	1 592	16 447	44 655	79 819	134 690	5 001
326111	Unsupported plastics bag mfg	—	6	4	703	13 413	583	1 176	11 188	23 929	51 134	74 613	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	6	3	310	9 261	213	416	5 259	20 726	28 685	60 077	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	26	13	731	17 062	604	1 127	11 964	47 371	59 319	104 287	2 556
326121	Unsupported plastics profile shape mfg	1	10	1	137	2 813	111	228	2 038	8 166	5 808	13 857	782
326122	Plastics pipe & pipe fitting mfg	1	16	12	594	14 249	493	899	9 926	39 205	53 511	90 430	1 774
32614	Polystyrene foam product mfg	1	6	2	278	5 711	228	445	3 999	30 893	18 042	49 068	789
326140	Polystyrene foam product mfg	1	6	2	278	5 711	228	445	3 999	30 893	18 042	49 068	789

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALABAMA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32615	Urethane & other foam product (except polystyrene) mfg	2	10	5	200	4 330	166	285	3 046	9 175	14 233	23 296	1 052
326150	Urethane & other foam product (except polystyrene) mfg	2	10	5	200	4 330	166	285	3 046	9 175	14 233	23 296	1 052
32616	Plastics bottle mfg	4	7	7	571	11 270	490	654	8 804	33 559	56 431	89 839	4 407
326160	Plastics bottle mfg	4	7	7	571	11 270	490	654	8 804	33 559	56 431	89 839	4 407
32619	Other plastics product mfg	1	91	49	6 395	161 510	5 113	9 798	105 617	387 507	455 230	843 038	42 705
326191	Plastics plumbing fixture mfg	—	17	6	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	—	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	73	42	5 325	133 652	4 210	8 110	84 303	284 279	367 790	653 807	38 139
3262	Rubber product mfg	—	60	29	11 235	433 914	9 029	17 757	324 746	1 143 302	992 340	2 134 088	104 663
32621	Tire mfg	—	30	12	8 476	357 987	6 924	13 948	277 035	861 107	798 733	1 649 085	82 506
326211	Tire mfg (except retreading)	—	11	8	8 221	352 372	6 732	13 544	273 551	843 502	779 666	1 611 595	81 102
326212	Tire retreading	—	19	4	255	5 615	192	404	3 484	17 605	19 067	37 490	1 404
32622	Rubber & plastics hoses & belting mfg	—	4	2	209	5 229	147	324	3 289	20 057	23 380	48 058	1 003
326220	Rubber & plastics hoses & belting mfg	—	4	2	209	5 229	147	324	3 289	20 057	23 380	48 058	1 003
32629	Other rubber product mfg	—	26	15	2 550	70 698	1 958	3 485	44 422	262 138	170 227	436 945	21 154
326291	Rubber product mfg for mechanical use	2	14	7	606	19 197	495	834	10 907	19 297	41 060	67 926	3 524
326299	All other rubber product mfg	—	12	8	1 944	51 501	1 463	2 651	33 515	242 841	129 167	369 019	17 630
327	Nonmetallic mineral product mfg	—	300	108	9 046	273 709	7 121	14 252	188 203	934 928	769 046	1 682 576	73 576
3271	Clay product & refractory mfg	—	25	16	1 717	48 067	1 387	2 838	34 127	120 256	95 537	216 191	7 552
32711	Pottery, ceramics, & plumbing fixture mfg	—	5	2	e	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	20	14	g	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	1	5	5	443	12 630	355	767	9 316	38 445	20 745	59 610	3 030
327122	Ceramic wall & floor tile mfg	—	2	2	f	D	D	D	D	D	D	D	D
327124	Clay refractory mfg	—	9	6	423	16 779	295	647	9 902	42 311	52 661	95 928	2 243
3272	Glass & glass product mfg	—	17	4	884	32 254	671	1 367	21 404	109 886	38 327	130 129	2 451
32721	Glass & glass product mfg	—	17	4	884	32 254	671	1 367	21 404	109 886	38 327	130 129	2 451
327215	Glass product mfg made of purchased glass	—	17	4	884	32 254	671	1 367	21 404	109 886	38 327	130 129	2 451
3273	Cement & concrete product mfg	1	188	63	4 210	121 096	3 272	6 678	80 951	461 257	380 584	837 885	49 895
32731	Cement mfg	—	5	5	701	32 215	511	1 212	20 604	204 772	124 791	331 892	25 462
327310	Cement mfg	—	5	5	701	32 215	511	1 212	20 604	204 772	124 791	331 892	25 462
32732	Ready-mix concrete mfg	2	96	28	1 654	42 451	1 287	2 282	28 869	118 254	152 271	266 964	15 591
327320	Ready-mix concrete mfg	2	96	28	1 654	42 451	1 287	2 282	28 869	118 254	152 271	266 964	15 591
32733	Concrete pipe, brick, & block mfg	—	26	17	629	17 056	478	999	10 759	58 234	42 100	99 613	3 753
327331	Concrete block & brick mfg	—	16	10	e	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	—	10	7	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	4	61	13	1 226	29 374	996	2 185	20 719	79 997	61 422	139 416	5 089
327390	Other concrete product mfg	4	61	13	1 226	29 374	996	2 185	20 719	79 997	61 422	139 416	5 089
3274	Lime & gypsum product mfg	—	13	9	613	20 627	486	1 039	15 330	78 383	110 189	190 226	3 367
32741	Lime mfg	—	8	5	413	14 662	315	707	10 962	61 978	61 616	125 047	2 923
327410	Lime mfg	—	8	5	413	14 662	315	707	10 962	61 978	61 616	125 047	2 923
32742	Gypsum product mfg	—	5	4	200	5 965	171	332	4 368	16 405	48 573	65 179	444
327420	Gypsum product mfg	—	5	4	200	5 965	171	332	4 368	16 405	48 573	65 179	444

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALABAMA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	-	57	16	1 622	51 665	1 305	2 330	36 391	165 146	144 409	308 145	10 311
32791	Abrasive product mfg ...	-	2	1	c	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	2	1	c	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	55	15	g	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg.....	5	21	3	c	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg..	-	10	2	199	7 144	157	328	4 767	27 638	12 891	39 750	1 381
327993	Mineral wool mfg	-	9	6	856	27 753	737	1 159	20 977	99 387	86 677	186 128	3 155
327999	All other miscellaneous nonmetallic mineral product mfg.....	-	15	4	246	8 151	182	363	4 124	18 986	19 893	38 967	2 493
331	Primary metal mfg	-	135	92	23 728	887 514	18 828	41 199	645 132	2 352 798	4 134 991	6 637 902	320 516
3311	Iron & steel mills & ferroalloy mfg	-	11	10	5 965	266 080	4 697	10 562	199 842	1 241 304	1 473 245	2 715 776	198 654
33111	Iron & steel mills & ferroalloy mfg	-	11	10	5 965	266 080	4 697	10 562	199 842	1 241 304	1 473 245	2 715 776	198 654
331111	Iron & steel mills	-	10	9	i	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	14	8	687	23 871	559	1 191	15 237	64 833	133 628	197 253	6 619
33121	Iron & steel pipes & tubes mfg from purchased steel	-	6	4	410	15 929	320	692	9 469	45 938	101 679	146 744	5 778
331210	Iron & steel pipes & tubes mfg from purchased steel	-	6	4	410	15 929	320	692	9 469	45 938	101 679	146 744	5 778
33122	Rolling & drawing of purchased steel	1	8	4	277	7 942	239	499	5 768	18 895	31 949	50 509	841
331222	Steel wire drawing	-	4	3	238	6 912	209	462	5 030	15 918	25 628	41 145	D
3313	Alumina & aluminum production & processing ..	-	12	11	3 804	165 037	2 999	6 573	122 549	208 419	1 363 660	1 704 295	45 683
33131	Alumina & aluminum production & processing	-	12	11	3 804	165 037	2 999	6 573	122 549	208 419	1 363 660	1 704 295	45 683
331314	Secondary smelting & alloying of aluminum .	-	3	2	c	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	5	5	3 180	149 134	2 548	5 662	111 731	148 380	1 195 960	1 479 669	D
331319	Other aluminum rolling & drawing	-	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	19	13	2 873	93 076	2 307	4 870	69 598	231 580	354 534	588 705	15 048
33141	Nonferrous metal (except aluminum) smelting & refining	-	4	2	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	4	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	7	5	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	4	3	g	D	D	D	D	D	D	D	3 916
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	8	6	1 255	35 971	921	2 018	23 392	104 751	116 014	223 275	6 098
331491	Other nonferrous metal rolling, drawing, & extruding	-	5	3	219	6 543	126	291	2 878	23 200	28 383	51 051	D
331492	Other nonferrous metal secondary smelting, refining, & alloying...	-	3	3	1 036	29 428	795	1 727	20 514	81 551	87 631	172 224	D
3315	Foundries	-	79	50	10 399	339 450	8 266	18 003	237 906	606 662	809 924	1 431 873	54 512
33151	Ferrous metal foundries .	-	51	37	8 695	294 616	6 912	15 589	212 054	558 358	680 783	1 257 876	43 420
331511	Iron foundries	-	33	26	6 617	230 430	5 291	12 228	164 627	384 784	585 841	988 683	33 358
331512	Steel investment foundries	-	4	3	756	18 118	515	1 045	10 636	66 373	18 556	84 900	1 986
331513	Steel foundries (except investment)	-	14	8	1 322	46 068	1 106	2 316	36 791	107 201	76 386	184 293	8 076
33152	Nonferrous metal foundries	1	28	13	1 704	44 834	1 354	2 414	25 852	48 304	129 141	173 997	11 092
331521	Aluminum die-casting foundries	7	8	3	395	14 894	305	531	8 412	17 650	12 599	29 371	1 546
331522	Nonferrous (except aluminum) die-casting foundries	-	3	3	215	3 888	152	214	2 563	6 991	4 879	11 665	D
331524	Aluminum foundries (except die-casting) ..	-	12	5	993	22 933	814	1 516	13 090	17 979	107 252	122 928	9 129

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALABAMA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	986	324	29 995	846 681	22 481	46 061	543 227	2 060 361	1 907 993	3 995 401	144 774
3321	Forging & stamping	-	36	13	1 037	32 660	744	1 477	17 024	69 103	91 002	161 154	6 476
332111	Forging & stamping	-	36	13	1 037	32 660	744	1 477	17 024	69 103	91 002	161 154	6 476
3321111	Iron & steel forging	-	8	1	e	D	D	D	D	D	D	D	1 253
332114	Custom roll forming	-	8	4	273	7 515	167	358	4 155	18 059	23 323	42 843	D
332116	Metal stamping	-	19	7	451	12 750	387	767	9 564	26 049	23 083	49 293	3 377
3322	Cutlery & handtool mfg	-	8	3	569	15 944	476	841	11 779	47 583	16 636	64 484	778
33221	Cutlery & handtool mfg	-	8	3	569	15 944	476	841	11 779	47 583	16 636	64 484	778
332212	Hand & edge tool mfg	-	4	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	295	123	10 074	292 987	7 190	16 508	174 549	700 363	754 981	1 458 168	38 002
33231	Plate work & fabricated structural product mfg	-	147	68	5 433	167 193	3 737	9 695	96 681	392 891	473 556	873 275	16 766
332311	Prefabricated metal building & component mfg	-	18	10	1 462	47 721	877	1 798	24 570	126 358	140 925	266 201	3 504
332312	Fabricated structural metal mfg	-	104	49	3 433	105 782	2 432	7 145	63 079	245 896	312 716	563 128	12 521
332313	Plate work mfg	2	25	9	538	13 690	428	752	9 032	20 637	19 915	43 946	741
33232	Ornamental & architectural metal products mfg	-	148	55	4 641	125 794	3 453	6 813	77 868	307 472	281 425	584 893	21 236
332321	Metal window & door mfg	-	29	11	934	24 795	696	1 629	15 986	55 928	58 226	112 532	3 790
332322	Sheet metal work mfg	1	79	30	1 940	52 847	1 479	2 742	32 728	128 346	135 480	260 430	13 208
332323	Ornamental & architectural metal work mfg	-	40	14	1 767	48 152	1 278	2 442	29 154	123 198	87 719	211 931	4 238
3324	Boiler, tank, & shipping container mfg	-	48	26	2 706	89 174	2 001	4 059	59 864	252 560	265 571	521 017	10 388
33241	Power boiler & heat exchanger mfg	-	12	5	481	15 581	354	603	7 758	37 083	42 631	79 236	1 535
332410	Power boiler & heat exchanger mfg	-	12	5	481	15 581	354	603	7 758	37 083	42 631	79 236	1 535
33242	Metal tank (heavy gauge) mfg	-	19	14	1 614	51 900	1 145	2 438	34 837	125 326	112 028	236 408	4 835
332420	Metal tank (heavy gauge) mfg	-	19	14	1 614	51 900	1 145	2 438	34 837	125 326	112 028	236 408	4 835
33243	Metal can, box, & other metal container (light gauge) mfg	-	17	7	611	21 693	502	1 018	17 269	90 151	110 912	205 373	4 018
332431	Metal can mfg	-	6	4	373	14 564	329	605	12 222	72 459	76 117	151 240	1 607
332439	Other metal container mfg	1	11	3	238	7 129	173	413	5 047	17 692	34 795	54 133	2 411
3325	Hardware mfg	2	13	12	1 823	42 304	1 330	2 690	30 161	106 857	92 287	199 957	5 049
33251	Hardware mfg	2	13	12	1 823	42 304	1 330	2 690	30 161	106 857	92 287	199 957	5 049
332510	Hardware mfg	2	13	12	1 823	42 304	1 330	2 690	30 161	106 857	92 287	199 957	5 049
3326	Spring & wire product mfg	-	19	10	606	15 440	486	893	9 763	40 131	51 130	92 223	2 994
33261	Spring & wire product mfg	-	19	10	606	15 440	486	893	9 763	40 131	51 130	92 223	2 994
332618	Other fabricated wire product mfg	-	19	10	606	15 440	486	893	9 763	40 131	51 130	92 223	2 994
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	408	79	5 789	151 870	4 503	8 062	102 397	300 069	198 296	492 751	30 011
33271	Machine shops	2	374	67	4 775	125 991	3 705	6 435	85 386	241 635	128 988	370 113	22 338
332710	Machine shops	2	374	67	4 775	125 991	3 705	6 435	85 386	241 635	128 988	370 113	22 338
33272	Turned product & screw, nut, & bolt mfg	-	34	12	1 014	25 879	798	1 627	17 011	58 434	69 308	122 638	7 673
332721	Precision turned product mfg	-	20	4	293	7 422	239	469	5 455	15 033	6 245	21 682	1 275
332722	Bolt, nut, screw, rivet, & washer mfg	-	14	8	721	18 457	559	1 158	11 556	43 401	63 063	100 956	6 398
3328	Coating, engraving, heat treating, & allied activities	4	55	19	1 185	30 965	937	1 861	21 239	75 226	44 158	129 712	7 884
33281	Coating, engraving, heat treating, & allied activities	4	55	19	1 185	30 965	937	1 861	21 239	75 226	44 158	129 712	7 884
332811	Metal heat treating	8	7	3	185	5 605	128	315	3 741	13 316	12 330	39 112	2 293
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	22	8	472	12 388	387	762	8 939	37 691	22 546	56 978	2 188
332813	Electroplating, plating, polishing, anodizing, & coloring	6	26	8	528	12 972	422	784	8 559	24 219	9 282	33 622	3 403

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	ALABAMA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	104	39	6 206	175 337	4 814	9 670	116 451	468 469	393 932	875 935	43 192
33291	Metal valve mfg	—	16	9	2 845	84 996	2 151	4 296	56 372	207 114	170 107	392 394	24 579
332911	Industrial valve mfg	—	9	5	1 684	52 000	1 235	2 479	32 220	131 811	116 863	263 300	D
332912	Fluid power valve & hose fitting mfg	—	2	2	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	1	5	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	88	30	3 361	90 341	2 663	5 374	60 079	261 355	223 825	483 541	18 613
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	19	7	666	17 457	546	1 144	11 621	53 146	46 654	100 062	4 801
332997	Industrial pattern mfg	2	15	2	136	3 687	112	185	2 784	6 219	1 822	8 018	641
332999	All other miscellaneous fabricated metal product mfg	—	42	18	1 797	43 381	1 396	2 713	26 531	146 782	131 762	275 675	8 119
333	Machinery mfg	1	293	117	15 635	447 314	11 446	23 222	269 385	970 692	1 404 017	2 388 004	93 268
3331	Agriculture, construction, & mining machinery mfg	—	32	12	2 019	56 556	1 429	2 739	28 729	87 881	294 161	395 241	12 329
33311	Agricultural implement mfg	—	19	6	1 242	31 503	856	1 429	11 155	55 619	131 280	194 820	6 644
333111	Farm machinery & equipment mfg	—	17	5	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	9	4	665	21 748	497	1 136	15 715	25 503	155 888	186 682	5 333
333120	Construction machinery mfg	—	9	4	665	21 748	497	1 136	15 715	25 503	155 888	186 682	5 333
33313	Mining & oil & gas field machinery mfg	2	4	2	112	3 305	76	174	1 859	6 759	6 993	13 739	352
333131	Mining machinery & equipment mfg	2	4	2	112	3 305	76	174	1 859	6 759	6 993	13 739	352
3332	Industrial machinery mfg	3	55	18	1 923	57 592	1 250	2 363	30 851	112 691	87 592	199 792	D
33329	Other industrial machinery mfg	3	43	17	1 851	55 916	1 191	2 251	29 632	109 786	85 590	194 618	6 791
333291	Paper industry machinery mfg	1	13	6	372	13 276	273	615	8 263	17 442	22 336	39 330	1 235
333294	Food product machinery mfg	—	4	2	143	3 457	99	197	2 511	6 104	4 398	9 193	261
333298	All other industrial machinery mfg	3	19	9	1 309	38 702	807	1 419	18 577	85 280	58 084	144 350	5 248
3333	Commercial & service industry machinery mfg	3	18	10	1 748	47 382	1 286	2 677	27 875	77 055	118 952	196 587	D
33331	Commercial & service industry machinery mfg	3	18	10	1 748	47 382	1 286	2 677	27 875	77 055	118 952	196 587	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	c	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	8	4	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	3	11	7	f	D	D	D	D	D	D	D	2 731
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	18	14	3 109	83 511	2 549	5 348	61 003	268 912	393 756	659 951	14 284
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	18	14	3 109	83 511	2 549	5 348	61 003	268 912	393 756	659 951	14 284
333411	Air purification equipment mfg	—	3	3	125	2 899	90	170	1 331	6 079	4 272	10 355	D
333412	Industrial & commercial fan & blower mfg	—	5	2	c	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	3	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	7	6	2 255	63 923	1 924	4 161	47 886	204 827	333 977	542 690	12 181

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALABAMA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	2	72	21	1 725	54 504	1 307	2 768	36 629	101 413	60 031	161 789	7 896
33351	Metalworking machinery mfg	2	72	21	1 725	54 504	1 307	2 768	36 629	101 413	60 031	161 789	7 896
333513	Industrial mold mfg ...	2	18	7	325	12 932	242	568	8 332	21 112	6 705	28 894	1 980
333514	Machine tool (metal forming types) mfg ...	3	2	2	c	D	D	D	D	D	D	D	D
333515	Special die & tool, die set, jig, & fixture mfg .	1	40	11	1 018	31 464	780	1 663	21 209	51 107	22 920	75 254	4 267
	Cutting tool & machine tool accessory mfg ..	1	11	1	c	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	8	3	957	18 954	883	1 611	12 501	93 109	89 499	185 620	D
33361	Engine, turbine, & power transmission equipment mfg	—	8	3	957	18 954	883	1 611	12 501	93 109	89 499	185 620	D
333611	Turbine & turbine generator set unit mfg	—	1	1	c	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	90	39	4 154	128 815	2 742	5 716	71 797	229 631	360 026	589 024	14 980
33391	Pump & compressor mfg	—	9	5	351	12 903	239	457	7 230	44 308	44 789	89 607	2 876
333911	Pump & pumping equipment mfg	—	4	3	c	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	3	1	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	43	17	2 486	72 220	1 742	3 683	43 613	114 914	227 255	341 870	7 018
333922	Conveyor & conveying equipment mfg	—	21	8	1 256	36 897	763	1 787	19 640	47 808	122 830	170 610	4 307
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	7	3	239	8 649	168	377	5 515	17 865	25 750	43 522	670
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	15	6	991	26 674	811	1 519	18 458	49 241	78 675	127 738	2 041
33399	All other general-purpose machinery mfg	1	38	17	1 317	43 692	761	1 576	20 954	70 409	87 982	157 547	5 086
333993	Packaging machinery mfg	1	5	3	253	8 541	130	288	3 781	8 695	11 475	19 721	474
333994	Industrial process furnace & oven mfg ..	—	3	2	c	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	8	6	395	11 578	291	615	7 906	18 747	34 243	53 046	2 337
333999	All other miscellaneous general-purpose machinery mfg	5	15	4	348	12 177	184	386	5 072	25 688	17 649	39 569	1 163
334	Computer & electronic product mfg	1	139	61	20 269	651 887	10 419	21 713	256 985	2 007 844	3 651 625	5 610 843	138 535
3341	Computer & peripheral equipment mfg	—	20	10	7 443	251 419	2 336	5 875	57 548	1 031 369	2 330 944	3 293 286	19 833
33411	Computer & peripheral equipment mfg	—	20	10	7 443	251 419	2 336	5 875	57 548	1 031 369	2 330 944	3 293 286	19 833
334111	Electronic computer mfg	—	8	5	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	8	4	f	D	D	D	D	D	D	D	4 027
3342	Communications equipment mfg	—	17	8	2 009	76 182	806	1 681	20 677	170 948	178 588	351 461	21 171
33421	Telephone apparatus mfg	—	9	5	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	9	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	c	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	c	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALABAMA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	4	60	26	6 025	173 259	4 272	8 234	98 413	417 355	662 062	1 103 573	43 763
33441	Semiconductor & other electronic component mfg	4	60	26	6 025	173 259	4 272	8 234	98 413	417 355	662 062	1 103 573	43 763
334411	Electron tube mfg	—	2	1	c	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	14	6	930	19 306	850	1 438	12 644	32 150	49 423	82 026	4 576
334416	Electronic coil, transformer, & other inductor mfg	4	3	2	c	D	D	D	D	D	D	D	94
334418	Printed circuit assembly (electronic assembly) mfg	4	8	7	3 683	121 810	2 532	5 127	72 342	300 987	534 177	859 349	32 067
334419	Other electronic component mfg	2	24	8	963	20 178	674	1 228	8 999	50 348	48 224	98 762	4 593
3345	Navigational, measuring, medical, & control instruments mfg	—	34	13	2 338	72 088	1 129	1 810	26 897	159 649	106 826	265 615	10 445
33451	Navigational, measuring, medical, & control instruments mfg	—	34	13	2 338	72 088	1 129	1 810	26 897	159 649	106 826	265 615	10 445
334511	Search, detection, navigation, & guidance instrument mfg	—	7	4	715	16 879	257	534	8 124	48 092	32 704	79 766	1 505
334512	Automatic environmental control mfg	—	2	1	c	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	—	2	1	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	1	8	1	380	17 191	90	214	2 545	20 087	13 595	33 856	965
334519	Other measuring & controlling device mfg	—	5	3	160	5 887	120	139	2 250	18 662	9 711	28 408	2 005
3346	Mfg & reproducing magnetic & optical media .	1	8	4	2 454	78 939	1 876	4 113	53 450	228 523	373 205	596 908	43 323
33461	Mfg & reproducing magnetic & optical media	1	8	4	2 454	78 939	1 876	4 113	53 450	228 523	373 205	596 908	43 323
334612	Prerecorded CD (except software), tape, & record reproducing	9	4	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	—	4	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	92	46	8 355	236 761	6 829	13 337	173 722	771 121	932 480	1 723 825	41 402
3351	Electric lighting equipment mfg	—	9	5	649	13 160	533	1 026	9 308	61 628	108 134	170 604	D
33512	Lighting fixture mfg	—	9	5	649	13 160	533	1 026	9 308	61 628	108 134	170 604	D
335121	Residential electric lighting fixture mfg ...	—	7	4	c	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	2	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	6	3	2 943	86 570	2 654	5 148	74 358	299 892	333 224	621 036	D
33522	Major appliance mfg	—	3	3	2 913	86 137	2 638	5 125	74 111	298 684	331 794	618 350	10 026
335221	Household cooking appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	35	14	1 862	62 486	1 436	2 729	39 930	198 518	172 676	393 192	5 166
33531	Electrical equipment mfg	—	35	14	1 862	62 486	1 436	2 729	39 930	198 518	172 676	393 192	5 166
335311	Power, distribution, & specialty transformer mfg	—	4	3	446	11 564	325	684	6 277	51 880	30 454	83 510	D
335312	Motor & generator mfg	—	8	3	1 029	36 336	904	1 650	28 317	114 977	112 999	248 813	D
335313	Switchgear & switchboard apparatus mfg	1	9	2	130	5 030	80	176	2 220	11 529	14 312	25 857	186
335314	Relay & industrial control mfg	5	14	6	257	9 556	127	219	3 116	20 132	14 911	35 012	716

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALABAMA—Con. Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	—	42	24	2 901	74 545	2 206	4 434	50 126	211 083	318 446	538 993	23 034
33592	Communication & energy wire & cable mfg	—	4	4	607	17 704	472	1 115	13 361	81 091	210 018	286 232	17 046
335929	Other communication & energy wire mfg	—	4	4	607	17 704	472	1 115	13 361	81 091	210 018	286 232	17 046
33593	Wiring device mfg	—	21	13	1 941	47 415	1 504	2 907	32 521	115 012	94 117	215 180	5 164
335931	Current-carrying wiring device mfg	—	12	7	1 355	33 823	1 054	1 962	23 446	91 388	55 751	151 596	3 040
335932	Noncurrent-carrying wiring device mfg	—	9	6	586	13 592	450	945	9 075	23 624	38 366	63 584	2 124
33599	All other electrical equipment & component mfg	3	16	7	e	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	2	5	2	c	D	D	D	D	D	D	D	411
335999	All other miscellaneous electrical equipment & component mfg	4	11	5	221	5 980	142	239	2 379	12 387	8 371	21 126	D
336	Transportation equipment mfg	—	220	101	26 521	1 071 056	21 317	41 798	785 939	2 234 559	2 734 598	4 961 934	170 840
3361	Motor vehicle mfg	—	6	2	g	D	D	D	D	D	D	D	248
33611	Automobile & light duty motor vehicle mfg	—	5	1	f	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	4	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	9	1	1	c	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	9	1	1	c	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	51	21	3 793	99 338	3 166	6 101	72 931	218 031	462 031	670 316	14 146
33621	Motor vehicle body & trailer mfg	—	51	21	3 793	99 338	3 166	6 101	72 931	218 031	462 031	670 316	14 146
336211	Motor vehicle body mfg	—	19	7	1 205	35 977	933	1 918	23 017	112 793	143 273	243 866	8 612
336212	Truck trailer mfg	—	19	12	2 154	51 358	1 852	3 422	40 128	88 412	219 966	310 334	5 005
336213	Motor home mfg	—	1	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	5	12	1	c	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	87	38	11 990	580 113	9 964	19 752	455 859	1 195 968	1 430 973	2 624 674	110 287
33631	Motor vehicle gasoline engine & engine parts mfg	1	9	1	275	4 930	222	203	2 992	12 448	17 662	30 294	1 483
336312	Gasoline engine & engine parts mfg	1	9	1	275	4 930	222	203	2 992	12 448	17 662	30 294	1 483
33632	Motor vehicle electrical & electronic equipment mfg	—	17	10	3 334	219 607	2 654	5 032	154 362	266 476	636 005	902 581	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	16	10	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	h	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	6	4	728	20 330	571	1 096	13 001	44 945	54 288	100 842	4 964
336340	Motor vehicle brake system mfg	—	6	4	728	20 330	571	1 096	13 001	44 945	54 288	100 842	4 964
33635	Motor vehicle transmission & power train parts mfg	—	14	4	602	16 998	430	977	11 121	82 133	62 802	145 031	753
336350	Motor vehicle transmission & power train parts mfg	—	14	4	602	16 998	430	977	11 121	82 133	62 802	145 031	753
33636	Motor vehicle seating & interior trim mfg	6	7	3	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	6	7	3	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	4	4	351	11 201	294	535	8 712	24 531	27 234	50 711	D
336370	Motor vehicle metal stamping	—	4	4	351	11 201	294	535	8 712	24 531	27 234	50 711	D
33639	Other motor vehicle parts mfg	—	28	11	2 494	78 906	1 965	3 644	57 256	219 666	336 519	555 030	32 789
336391	Motor vehicle air-conditioning mfg	—	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	27	10	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALABAMA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg.....	-	17	13	5 369	215 302	3 813	7 857	136 681	502 659	200 554	744 031	10 387
33641	Aerospace product & parts mfg.....	-	17	13	5 369	215 302	3 813	7 857	136 681	502 659	200 554	744 031	10 387
336411	Aircraft mfg.....	-	5	5	g	D	D	D	D	D	D	D	3 300
336412	Aircraft engine & engine parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	5	3	e	D	D	D	D	D	D	D	535
336414	Guided missile & space vehicle mfg....	-	2	2	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg..	-	4	3	f	D	D	D	D	D	D	D	2 773
33651	Railroad rolling stock mfg.....	-	4	3	f	D	D	D	D	D	D	D	2 773
336510	Railroad rolling stock mfg.....	-	4	3	f	D	D	D	D	D	D	D	2 773
3366	Ship & boat building.....	-	45	20	2 932	82 399	2 557	4 736	65 133	142 546	122 987	265 647	28 284
33661	Ship & boat building.....	-	45	20	2 932	82 399	2 557	4 736	65 133	142 546	122 987	265 647	28 284
336611	Ship building & repairing.....	-	27	15	2 644	77 338	2 302	4 324	61 332	133 372	107 616	240 988	26 848
336612	Boat building.....	3	18	5	288	5 061	255	412	3 801	9 174	15 371	24 659	1 436
3369	Other transportation equipment mfg.....	-	10	4	708	18 384	538	1 128	11 549	25 007	82 273	110 258	4 715
33699	Other transportation equipment mfg.....	-	10	4	708	18 384	538	1 128	11 549	25 007	82 273	110 258	4 715
336992	Military armored vehicle, tank, & tank component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg.....	-	8	3	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	471	96	14 789	313 242	12 112	23 061	219 122	820 823	658 763	1 494 617	64 339
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	402	65	10 031	185 515	8 472	15 336	127 531	416 145	346 104	776 386	27 501
33711	Wood kitchen cabinet & counter top mfg.....	2	269	17	3 702	70 844	3 027	4 845	43 384	142 567	93 538	234 585	9 964
337110	Wood kitchen cabinet & counter top mfg....	2	269	17	3 702	70 844	3 027	4 845	43 384	142 567	93 538	234 585	9 964
33712	Household & institutional furniture mfg.....	-	133	48	6 329	114 671	5 445	10 491	84 147	273 578	252 566	541 801	17 537
337121	Upholstered household furniture mfg.....	-	16	6	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg.....	-	82	26	3 573	59 608	3 133	6 112	45 067	124 540	140 961	274 427	5 857
337124	Metal household furniture mfg.....	-	9	3	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg.....	-	22	12	697	15 709	551	919	10 433	32 821	37 498	70 911	3 008
3372	Office furniture (including fixtures) mfg.....	-	49	21	4 227	116 347	3 277	7 035	84 943	365 960	269 971	636 739	29 764
33721	Office furniture (including fixtures) mfg.....	-	49	21	4 227	116 347	3 277	7 035	84 943	365 960	269 971	636 739	29 764
337211	Wood office furniture mfg.....	-	8	2	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg.....	-	15	7	e	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg.....	-	7	5	1 536	52 442	1 204	2 547	39 743	181 712	108 619	292 757	4 300
337215	Showcase, partition, shelving, & locker mfg.....	-	19	7	1 848	43 389	1 457	3 000	31 571	138 450	101 681	238 577	21 358
3379	Other furniture related product mfg.....	2	20	10	531	11 380	363	690	6 648	38 718	42 688	81 492	7 074
33791	Mattress mfg.....	1	14	8	439	9 962	307	608	5 976	36 313	39 906	76 138	6 846
337910	Mattress mfg.....	1	14	8	439	9 962	307	608	5 976	36 313	39 906	76 138	6 846
339	Miscellaneous mfg.....	2	342	59	7 506	171 752	5 711	10 395	101 005	474 616	400 649	868 206	27 313
3391	Medical equipment & supplies mfg.....	1	162	17	2 242	49 571	1 746	2 788	28 722	200 168	101 434	308 419	7 475
33911	Medical equipment & supplies mfg.....	1	162	17	2 242	49 571	1 746	2 788	28 722	200 168	101 434	308 419	7 475
339112	Surgical & medical instrument mfg.....	-	7	1	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	1	23	11	1 080	18 979	854	1 271	10 884	62 213	65 922	126 362	1 686
339114	Dental equipment & supplies mfg.....	9	11	1	c	D	D	D	D	D	D	D	D
339116	Dental laboratories...	5	120	3	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALABAMA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . .	3	180	42	5 264	122 181	3 965	7 607	72 283	274 448	299 215	559 787	19 838
33992	Sporting & athletic goods mfg	8	44	13	1 712	36 353	1 440	2 578	26 016	84 586	102 045	177 945	4 963
339920	Sporting & athletic goods mfg	8	44	13	1 712	36 353	1 440	2 578	26 016	84 586	102 045	177 945	4 963
33995	Sign mfg	2	73	13	1 595	39 366	1 147	2 327	21 199	64 437	75 405	135 066	5 727
339950	Sign mfg	2	73	13	1 595	39 366	1 147	2 327	21 199	64 437	75 405	135 066	5 727
33999	All other miscellaneous mfg	—	45	16	1 876	44 592	1 318	2 599	24 031	120 478	117 726	237 692	8 980
339991	Gasket, packing, & sealing device mfg	—	5	3	398	12 089	278	504	7 051	41 337	34 133	75 453	D
339994	Broom, brush, & mop mfg	1	4	1	162	2 879	129	227	1 774	5 366	7 478	12 773	113
339995	Burial casket mfg	—	7	4	141	4 548	105	245	3 007	13 263	14 259	27 373	407
339999	All other miscellaneous mfg	—	23	6	1 081	23 176	733	1 472	10 858	56 511	58 901	116 067	3 753

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANNISTON, AL MSA												
	Manufacturing	—	149	65	10 841	257 848	8 573	16 609	178 367	718 000	812 995	1 504 506	54 261
313	Textile mills	—	5	3	793	15 507	689	1 355	12 266	35 154	62 117	97 415	9 091
3132	Fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	3	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	6	4	1 309	28 947	1 159	2 281	23 712	80 242	86 637	158 753	2 682
3141	Textile furnishings mills	—	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	2	2	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	—	4	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	3	2	e	D	D	D	D	D	D	D	D
314991	Rope, cordage, & twine mills	—	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	8	6	870	11 567	776	1 213	9 314	16 205	7 302	23 037	630
3152	Cut & sew apparel mfg	3	8	6	870	11 567	776	1 213	9 314	16 205	7 302	23 037	630
31521	Cut & sew apparel contractors	5	5	3	553	7 833	495	819	6 466	10 174	4 181	13 856	526
315211	Men's & boys' cut & sew apparel contractors	—	1	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	3	3	317	3 734	281	394	2 848	6 031	3 121	9 181	104
323	Printing & related support activities	—	15	3	486	8 167	369	647	6 725	17 151	14 492	32 058	1 277
3231	Printing & related support activities	—	15	3	486	8 167	369	647	6 725	17 151	14 492	32 058	1 277
32311	Printing	—	14	3	e	D	D	D	D	D	D	D	1 277
323116	Manifold business form printing	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANNISTON, AL MSA— Con. Manufacturing— Con.												
331	Primary metal mfg	—	11	6	1 661	42 006	1 306	2 644	29 384	110 531	62 500	172 202	9 454
3315	Foundries	—	9	5	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	8	5	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	6	4	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	33	12	2 287	58 861	1 708	3 485	37 077	195 168	137 403	333 674	14 611
3329	Other fabricated metal product mfg	—	6	5	1 551	38 723	1 169	2 484	25 552	146 846	93 730	240 977	12 497
33291	Metal valve mfg	—	4	3	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	3	2	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	5	1 737	47 610	1 297	2 538	31 640	150 466	240 494	373 079	7 139
3362	Motor vehicle body & trailer mfg	—	2	1	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	2	1	e	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	5	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	12	6	341	6 494	303	582	4 800	21 681	21 612	43 326	663
31-33	BIRMINGHAM, AL MSA Manufacturing	—	1 120	400	47 970	1 477 977	35 030	74 584	938 560	4 094 554	5 088 533	9 235 863	279 944
311	Food mfg	1	47	29	6 048	142 691	4 047	8 652	77 588	461 923	545 247	1 005 418	38 198
3115	Dairy product mfg	5	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	1	1	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	1	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	9	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	9	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	10	7	2 162	43 439	1 888	3 911	34 685	178 110	158 826	338 968	6 744
31161	Animal slaughtering & processing	—	10	7	2 162	43 439	1 888	3 911	34 685	178 110	158 826	338 968	6 744
311615	Poultry processing	—	3	3	1 988	38 578	1 773	3 693	32 731	157 764	129 412	288 703	D
3118	Bakeries & tortilla mfg	—	21	10	1 087	26 876	577	1 378	12 874	64 987	44 138	108 830	D
31181	Bread & bakery product mfg	—	17	7	723	19 067	261	765	7 171	43 694	18 990	62 713	D
311812	Commercial bakeries	—	6	6	629	18 040	203	708	6 687	41 074	17 422	58 525	2 013
31182	Cookie, cracker, & pasta mfg	—	3	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	9	7	1 866	45 946	966	1 837	16 020	138 653	154 376	289 822	14 557
31191	Snack food mfg	—	2	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	2	1	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	1	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BIRMINGHAM, AL MSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	-	7	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	7	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	5	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	4	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	1	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	e	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	1	1	e	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	15	5	1 312	19 760	1 245	1 932	18 271	103 263	95 217	199 470	1 747
3152	Cut & sew apparel mfg	-	11	5	1 298	19 537	1 233	1 916	18 133	102 768	94 744	198 504	D
31522	Men's & boys' cut & sew apparel mfg	-	8	4	g	D	D	D	D	D	D	D	1 665
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	4	3	g	D	D	D	D	D	D	D	1 635
321	Wood product mfg	2	43	13	1 264	27 681	931	1 804	19 468	65 863	89 226	155 658	5 566
3211	Sawmills & wood preservation	3	4	2	e	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	3	4	2	e	D	D	D	D	D	D	D	D
321114	Wood preservation ...	-	1	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	2	35	9	795	17 789	538	1 024	12 154	36 722	45 942	84 835	2 284
32191	Millwork	1	12	5	460	10 480	256	466	7 053	21 278	29 606	52 930	1 514
321918	Other millwork (including flooring) ...	-	6	2	274	6 648	116	217	4 473	15 030	22 137	39 092	1 309
322	Paper mfg	-	13	10	604	18 848	445	893	11 826	43 114	85 012	127 081	4 331
3222	Converted paper product mfg	-	13	10	604	18 848	445	893	11 826	43 114	85 012	127 081	4 331
32221	Paperboard container mfg	-	6	6	435	14 425	313	624	9 186	30 177	55 386	85 415	3 384
322211	Corrugated & solid fiber box mfg	-	5	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	149	32	3 441	108 579	2 464	4 830	63 256	226 051	191 810	419 200	19 360
3231	Printing & related support activities.....	3	149	32	3 441	108 579	2 464	4 830	63 256	226 051	191 810	419 200	19 360
32311	Printing	3	137	30	3 331	104 607	2 381	4 693	60 901	218 251	189 685	409 288	19 013
323110	Commercial lithographic printing ..	4	72	17	1 874	67 418	1 329	2 686	39 343	127 937	119 241	247 705	14 234
323114	Quick printing	-	35	2	697	15 832	463	882	9 096	39 483	39 209	79 006	1 057
323118	Blankbook, looseleaf binder, & device mfg .	-	2	1	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	7	4	764	28 636	619	1 193	19 530	88 876	138 205	225 192	D
3241	Petroleum & coal products mfg	-	7	4	764	28 636	619	1 193	19 530	88 876	138 205	225 192	D
32419	Other petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	7 931
324199	All other petroleum & coal products mfg ...	-	3	2	f	D	D	D	D	D	D	D	7 931
325	Chemical mfg	1	37	15	1 094	39 307	686	1 285	20 630	171 765	153 640	321 703	20 409
3251	Basic chemical mfg	-	8	5	573	18 138	374	673	10 312	83 662	52 275	135 449	15 144
32519	Other basic organic chemical mfg	-	4	4	e	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	11	5	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	1	9	5	313	15 096	193	387	6 453	63 758	82 211	142 974	2 011
325510	Paint & coating mfg	1	9	5	313	15 096	193	387	6 453	63 758	82 211	142 974	2 011
326	Plastics & rubber products mfg	2	41	18	1 406	34 117	1 164	2 323	24 868	131 499	125 694	256 178	13 300
3261	Plastics product mfg	1	34	16	1 183	28 162	989	1 965	20 638	117 193	113 641	229 718	12 202
32619	Other plastics product mfg	-	23	12	868	19 254	731	1 460	13 999	87 196	67 713	153 741	10 146
326199	All other plastics product mfg	-	19	10	818	18 224	704	1 403	13 426	85 645	66 514	150 991	10 106

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BIRMINGHAM, AL MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg.....	1	85	42	2 943	98 123	2 239	4 802	64 732	325 069	290 480	614 284	36 865
3271	Clay product & refractory mfg.....	—	10	6	411	16 479	285	630	9 636	42 120	49 813	92 879	D
32712	Clay building material & refractories mfg.....	—	10	6	411	16 479	285	630	9 636	42 120	49 813	92 879	D
327124	Clay refractory mfg.....	—	7	5	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	2	42	21	1 497	45 893	1 183	2 563	31 876	172 522	132 021	301 397	27 291
32731	Cement mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
327310	Cement mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.....	1	17	6	332	7 570	281	570	6 248	21 118	31 431	52 716	4 587
327320	Ready-mix concrete mfg.....	1	17	6	332	7 570	281	570	6 248	21 118	31 431	52 716	4 587
32733	Concrete pipe, brick, & block mfg.....	—	8	7	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg.....	7	14	5	408	9 334	334	716	6 834	40 028	28 461	65 913	2 361
327390	Other concrete product mfg.....	7	14	5	408	9 334	334	716	6 834	40 028	28 461	65 913	2 361
3274	Lime & gypsum product mfg.....	—	10	6	e	D	D	D	D	D	D	D	D
32741	Lime mfg.....	—	8	5	413	14 662	315	707	10 962	61 978	61 616	125 047	2 923
327410	Lime mfg.....	—	8	5	413	14 662	315	707	10 962	61 978	61 616	125 047	2 923
3279	Other nonmetallic mineral product mfg.....	—	19	9	536	18 175	381	763	10 142	43 170	33 029	75 703	D
32799	All other nonmetallic mineral product mfg.....	—	18	9	f	D	D	D	D	D	D	D	4 048
331	Primary metal mfg.....	—	46	34	9 549	393 005	7 466	17 355	287 215	1 317 477	1 902 927	3 229 098	49 195
3311	Iron & steel mills & ferroalloy mfg.....	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D
33111	Iron & steel mills & ferroalloy mfg.....	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D
331111	Iron & steel mills.....	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D
3312	Steel product mfg from purchased steel.....	—	8	7	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel.....	—	3	3	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel.....	—	3	3	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel.....	1	5	4	e	D	D	D	D	D	D	D	D
3315	Foundries.....	—	27	19	5 339	208 700	4 120	9 729	146 502	304 033	575 662	896 212	D
33151	Ferrous metal foundries.....	—	15	12	4 826	191 497	3 755	9 109	137 601	285 860	564 409	867 725	D
331511	Iron foundries.....	—	9	8	3 961	158 338	3 014	7 549	110 205	199 755	503 170	719 663	18 022
331513	Steel foundries (except investment).....	—	5	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	—	12	7	513	17 203	365	620	8 901	18 173	11 253	28 487	D
332	Fabricated metal product mfg.....	—	274	105	7 708	229 477	5 708	13 469	139 333	508 337	533 442	1 059 480	35 169
3321	Forging & stamping.....	—	12	5	499	17 227	286	585	5 895	34 412	59 540	94 214	1 839
33211	Forging & stamping.....	—	12	5	499	17 227	286	585	5 895	34 412	59 540	94 214	1 839
3323	Architectural & structural metals mfg.....	—	96	39	2 755	84 052	2 013	6 374	50 768	162 235	159 662	331 289	8 441
33231	Plate work & fabricated structural product mfg.....	—	46	21	1 460	46 562	1 105	4 474	27 956	89 640	95 428	194 875	4 291
332311	Prefabricated metal building & component mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg.....	1	37	16	944	28 314	708	3 720	17 042	58 014	62 833	128 741	3 433
332313	Plate work mfg.....	—	7	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	1	50	18	1 295	37 490	908	1 900	22 812	72 595	64 234	136 414	4 150
332322	Sheet metal work mfg.....	1	22	10	637	18 789	461	958	11 660	33 807	31 461	64 868	2 254
332323	Ornamental & architectural metal work mfg.....	—	20	6	548	16 469	359	782	9 549	35 469	29 227	64 877	1 627
3324	Boiler, tank, & shipping container mfg.....	—	14	9	800	29 384	566	1 069	18 235	101 398	114 659	218 687	3 519
33241	Power boiler & heat exchanger mfg.....	1	6	3	302	8 681	202	331	4 417	17 596	18 413	35 555	D
332410	Power boiler & heat exchanger mfg.....	1	6	3	302	8 681	202	331	4 417	17 596	18 413	35 555	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	5	4	317	14 018	260	514	10 787	69 732	85 027	158 749	2 278

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	BIRMINGHAM, AL MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	89	24	1 482	39 929	1 195	2 252	27 303	81 867	66 956	145 389	10 109
33271	Machine shops	—	79	18	1 011	29 287	810	1 415	20 191	56 011	28 387	82 883	5 214
332710	Machine shops	—	79	18	1 011	29 287	810	1 415	20 191	56 011	28 387	82 883	5 214
33272	Turned product & screw, nut, & bolt mfg	1	10	6	471	10 642	385	837	7 112	25 856	38 569	62 506	4 895
332722	Bolt, nut, screw, rivet, & washer mfg	1	8	5	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	21	11	599	16 168	483	941	11 532	43 944	24 698	65 301	3 294
33281	Coating, engraving, heat treating, & allied activities	1	21	11	599	16 168	483	941	11 532	43 944	24 698	65 301	3 294
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	14	7	418	11 375	342	676	8 190	33 871	20 526	51 087	1 498
3329	Other fabricated metal product mfg	—	32	12	1 287	34 657	954	1 812	21 202	65 147	87 554	164 619	6 648
33291	Metal valve mfg	—	3	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	29	11	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	1	9	4	334	9 223	258	513	6 066	23 525	28 259	52 553	3 014
333	Machinery mfg	1	75	25	2 746	90 832	1 789	3 881	52 977	160 633	316 135	480 064	11 053
3331	Agriculture, construction, & mining machinery mfg.	—	5	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	16	8	662	24 451	428	918	12 953	39 489	43 729	83 826	2 648
33329	Other industrial machinery mfg	—	11	7	608	23 306	382	827	12 049	37 710	42 603	80 656	D
333291	Paper industry machinery mfg	—	6	4	259	9 464	198	450	6 054	10 598	17 413	28 221	D
333298	All other industrial machinery mfg	—	5	3	349	13 842	184	377	5 995	27 112	25 190	52 435	D
3333	Commercial & service industry machinery mfg ..	7	7	2	277	9 600	185	399	6 144	14 531	32 795	47 713	1 431
33331	Commercial & service industry machinery mfg	7	7	2	277	9 600	185	399	6 144	14 531	32 795	47 713	1 431
333319	Other commercial & service industry machinery mfg	7	5	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	32	10	883	30 560	571	1 244	16 238	65 631	68 589	130 379	3 084
33392	Material handling equipment mfg	2	17	6	524	16 932	368	810	10 208	41 110	49 018	90 277	1 604
33399	All other general-purpose machinery mfg	4	13	4	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	4	8	3	255	9 784	125	289	3 868	20 724	13 043	29 732	D
335	Electrical equipment, appliance, & component mfg	1	39	19	1 382	43 070	953	1 896	23 888	86 731	88 717	181 843	3 942
3353	Electrical equipment mfg ..	3	20	8	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	3	20	8	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	17	10	937	26 846	691	1 336	17 247	52 532	55 662	114 685	3 064
33593	Wiring device mfg	—	12	8	f	D	D	D	D	D	D	D	2 733
335931	Current-carrying wiring device mfg	—	4	2	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg.	—	8	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BIRMINGHAM, AL MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	30	9	2 082	66 151	1 450	2 416	41 417	95 667	97 604	215 105	5 127
3362	Motor vehicle body & trailer mfg	1	11	5	f	D	D	D	D	D	D	D	1 896
33621	Motor vehicle body & trailer mfg	1	11	5	f	D	D	D	D	D	D	D	1 896
336212	Truck trailer mfg	1	4	3	305	8 567	250	518	5 811	15 108	23 916	39 339	D
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	84	14	2 078	51 509	1 657	3 546	32 253	118 393	90 360	208 869	13 336
3371	Household & institutional furniture & kitchen cabinet mfg	1	66	5	1 065	25 640	932	2 082	17 597	67 522	53 029	122 043	8 531
33711	Wood kitchen cabinet & counter top mfg	6	48	2	312	5 730	268	417	4 441	10 573	8 393	19 020	450
337110	Wood kitchen cabinet & counter top mfg ...	6	48	2	312	5 730	268	417	4 441	10 573	8 393	19 020	450
33712	Household & institutional furniture mfg	-	18	3	753	19 910	664	1 665	13 156	56 949	44 636	103 023	8 081
337124	Metal household furniture mfg	-	4	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	14	7	901	23 117	648	1 304	13 317	45 392	28 559	72 410	4 582
33721	Office furniture (including fixtures) mfg	-	14	7	901	23 117	648	1 304	13 317	45 392	28 559	72 410	4 582
337214	Office furniture (except wood) mfg	-	2	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	6	2	474	10 906	361	740	6 568	21 857	13 830	34 076	D
339	Miscellaneous mfg	1	79	13	1 498	34 389	1 003	1 862	17 474	78 764	68 691	148 415	3 589
3391	Medical equipment & supplies mfg	3	36	2	292	6 840	211	391	3 840	15 949	12 819	28 903	500
33911	Medical equipment & supplies mfg	3	36	2	292	6 840	211	391	3 840	15 949	12 819	28 903	500
3399	Other miscellaneous mfg ..	1	43	11	1 206	27 549	792	1 471	13 634	62 815	55 872	119 512	3 089
33995	Sign mfg	6	19	4	373	8 987	268	455	4 890	13 767	11 011	24 775	682
339950	Sign mfg	6	19	4	373	8 987	268	455	4 890	13 767	11 011	24 775	682
33999	All other miscellaneous mfg	-	9	4	688	16 195	412	833	7 245	44 242	40 534	85 603	D
339999	All other miscellaneous mfg	-	4	1	f	D	D	D	D	D	D	D	D
	COLUMBUS, GA-AL MSA												
31-33	Manufacturing	1	230	99	19 930	597 036	15 017	32 427	394 338	2 171 632	2 183 278	4 357 805	221 782
	Columbus, GA-AL MSA (AL Part)	-	49	19	3 295	107 782	2 757	6 049	80 709	540 642	462 403	1 000 399	89 114
	Columbus, GA-AL MSA (GA Part)	1	181	80	16 635	489 254	12 260	26 378	313 629	1 630 990	1 720 875	3 357 406	132 668
311	Food mfg	-	17	8	3 464	90 255	2 255	4 423	54 577	446 992	264 829	707 615	15 761
3115	Dairy product mfg	-	1	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	5	3	2 137	64 801	1 183	2 576	35 850	296 278	120 719	416 729	10 002
31181	Bread & bakery product mfg	-	3	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
3121	Beverage mfg	-	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
31211	Soft drink & ice mfg	-	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
312111	Soft drink mfg	-	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D

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31-33	COLUMBUS, GA-AL MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	3	12	10	4 321	128 446	3 535	8 215	92 682	252 791	384 688	650 205	32 520
3131	Fiber, yarn, & thread mills .	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
31311	Fiber, yarn, & thread mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
313111	Yarn spinning mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
3132	Fabric mills	4	7	6	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	4	5	5	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	4	5	5	h	D	D	D	D	D	D	D	D
314	Textile product mills	—	7	6	1 327	25 086	1 148	2 635	20 579	183 005	194 777	374 961	D
3141	Textile furnishings mills....	—	5	4	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	3	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	13	5	564	14 368	494	1 079	10 696	36 311	65 437	101 189	D
3211	Sawmills & wood preservation	—	5	4	e	D	D	D	D	D	D	D	2 949
32111	Sawmills & wood preservation	—	5	4	e	D	D	D	D	D	D	D	2 949
321113	Sawmills	—	4	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	6	1 223	66 421	870	2 022	45 521	311 841	280 322	592 346	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	3	5	5	e	D	D	D	D	D	D	D	3 802
32222	Paper bag & coated & treated paper mfg	6	3	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	5	27	3	398	11 705	293	545	7 292	25 124	16 058	41 248	2 398
3231	Printing & related support activities.....	5	27	3	398	11 705	293	545	7 292	25 124	16 058	41 248	2 398
32311	Printing	5	25	3	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	6	11	2	298	9 709	219	432	5 990	20 758	12 920	33 743	1 903
327	Nonmetallic mineral product mfg	—	16	6	424	10 842	327	628	6 605	47 477	29 158	76 789	D
331	Primary metal mfg	—	7	6	1 061	32 868	866	2 078	24 641	103 549	61 030	162 783	8 551
3315	Foundries	—	5	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	5	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	32	13	1 218	32 570	871	1 535	18 937	80 013	91 101	170 302	2 825
3322	Cutlery & handtool mfg	—	3	3	312	8 092	208	309	3 549	16 612	22 763	39 012	D
33221	Cutlery & handtool mfg ..	—	3	3	312	8 092	208	309	3 549	16 612	22 763	39 012	D
332212	Hand & edge tool mfg .	—	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	3	13	5	315	9 294	215	407	5 173	21 796	25 470	47 104	1 128
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
33271	Machine shops	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
332710	Machine shops	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
333	Machinery mfg	2	12	7	1 072	32 866	807	1 769	21 975	58 904	130 623	204 224	19 649
3332	Industrial machinery mfg ..	3	4	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	3	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	3	3	e	D	D	D	D	D	D	D	D

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COLUMBUS, GA—AL MSA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	6	5	2 468	67 837	1 968	4 446	46 753	345 688	253 799	587 683	16 476
3352	Household appliance mfg...	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	5	1 110	38 052	727	1 433	20 157	85 857	96 210	180 429	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
DECATUR, AL MSA													
31-33	Manufacturing	-	243	92	16 307	609 583	13 001	27 215	426 471	2 176 886	3 439 881	5 627 057	296 078
311	Food mfg	-	14	8	1 518	33 744	1 246	2 431	23 724	125 891	489 288	604 896	24 742
3116	Meat product mfg	-	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	11	5	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	6	4	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	6	4	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	13	5	465	14 189	390	836	9 800	45 982	110 573	151 612	1 260
3219	Other wood product mfg ...	-	8	3	e	D	D	D	D	D	D	D	933
322	Paper mfg	-	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	21	4	278	5 734	189	342	3 674	13 858	11 601	25 306	782
3231	Printing & related support activities	2	21	4	278	5 734	189	342	3 674	13 858	11 601	25 306	782
32311	Printing	2	21	4	278	5 734	189	342	3 674	13 858	11 601	25 306	782
325	Chemical mfg	-	18	8	3 162	172 107	2 190	5 107	94 036	972 632	1 359 095	2 322 604	217 706
3251	Basic chemical mfg	-	6	1	f	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	6	3	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	6	3	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	10	5	458	10 117	395	697	7 619	25 136	21 258	46 365	1 019
3261	Plastics product mfg	1	6	3	312	6 880	256	515	4 801	17 899	14 743	32 645	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DECATUR, AL MSA— Con. Manufacturing— Con.												
331	Primary metal mfg	-	5	3	1 463	55 254	1 307	2 606	45 138	144 019	244 324	381 335	D
3313	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	48	19	1 451	36 804	1 103	2 119	24 669	83 218	62 511	145 774	7 056
3323	Architectural & structural metals mfg	-	11	8	468	12 437	321	644	7 819	22 421	24 119	46 321	1 261
33232	Ornamental & architectural metal products mfg	-	7	6	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	24	5	429	11 644	338	619	7 928	22 659	10 960	33 548	1 495
333	Machinery mfg	-	15	10	1 325	37 441	1 040	2 455	26 393	118 313	203 765	330 715	6 312
3332	Industrial machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	6	e	D	D	D	D	D	D	D	1 282
33399	All other general-purpose machinery mfg	-	7	6	e	D	D	D	D	D	D	D	1 282
335	Electrical equipment, appliance, & component mfg	-	6	4	2 137	66 416	1 902	3 523	56 848	171 165	343 667	501 429	7 574
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	3	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	1	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	23	6	260	5 545	197	348	3 257	11 191	8 846	19 866	1 143
	DOTHAN, AL MSA												
31-33	Manufacturing	-	151	55	10 487	254 896	8 145	16 575	170 462	699 665	839 117	1 527 766	59 797
311	Food mfg	-	8	5	1 612	32 017	1 224	2 514	18 691	113 447	179 441	293 924	1 200
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	2	1	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	1	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	1	1	e	D	D	D	D	D	D	D	D

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	DOTHAN, AL MSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	-	3	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	4	6	3	266	3 937	176	318	2 371	5 788	2 517	8 294	1 329
3149	Other textile product mills ..	4	5	3	e	D	D	D	D	D	D	D	1 329
315	Apparel mfg	-	9	8	1 486	23 378	1 191	2 011	16 511	27 348	38 862	68 085	678
3152	Cut & sew apparel mfg	-	9	8	1 486	23 378	1 191	2 011	16 511	27 348	38 862	68 085	678
31521	Cut & sew apparel contractors	-	3	3	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	5	5	1 139	17 639	929	1 612	12 281	19 300	37 329	58 402	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	3	3	f	D	D	D	D	D	D	D	421
326	Plastics & rubber products mfg	-	6	4	1 660	49 949	1 211	2 094	31 925	166 103	114 907	280 251	15 568
3262	Rubber product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	23	9	730	20 833	553	1 228	13 786	50 986	52 054	103 021	3 892
3323	Architectural & structural metals mfg	-	10	4	509	14 015	379	884	9 161	38 551	47 038	85 526	3 301
33231	Plate work & fabricated structural product mfg ..	-	4	2	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	-	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	11	5	1 041	23 469	826	1 395	16 219	48 609	23 956	67 408	2 064
3363	Motor vehicle parts mfg ...	5	5	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	5	2	2	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	5	2	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	15	2	553	13 324	408	963	7 443	20 811	22 727	40 787	548
3399	Other miscellaneous mfg ...	1	8	2	f	D	D	D	D	D	D	D	466
33995	Sign mfg	-	5	1	e	D	D	D	D	D	D	D	D
339950	Sign mfg	-	5	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLORENCE, AL MSA													
31-33	Manufacturing	-	233	72	13 126	375 649	10 537	21 979	265 075	607 549	1 610 941	2 376 692	86 539
311	Food mfg	-	5	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	19	10	3 151	67 583	2 816	5 879	50 829	124 416	152 767	277 543	6 236
3151	Apparel knitting mills	2	7	4	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	2	7	4	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	2	6	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	12	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	2	2	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	2	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	16	8	624	14 657	487	1 066	9 980	32 400	78 946	110 121	5 692
3219	Other wood product mfg	-	10	6	499	11 875	389	856	7 900	27 667	61 930	88 323	D
32191	Millwork	-	5	3	343	8 792	262	594	5 571	15 460	50 604	64 935	D
325	Chemical mfg	-	10	5	452	21 696	315	714	14 183	82 386	88 135	171 676	13 177
3251	Basic chemical mfg	-	5	3	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	19	8	1 398	36 855	1 094	1 965	21 083	65 561	62 468	138 245	6 537
3261	Plastics product mfg	1	10	5	1 113	27 161	870	1 587	16 940	60 547	51 366	118 052	5 099
32619	Other plastics product mfg	1	5	4	963	23 088	779	1 395	14 864	58 026	41 842	95 537	4 462
326192	Resilient floor covering mfg	-	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	3	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	9	3	285	9 694	224	378	4 143	5 014	11 102	20 193	1 438
327	Nonmetallic mineral product mfg	1	10	2	557	9 918	494	879	8 064	16 257	19 153	35 181	1 466
3271	Clay product & refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	1	1	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	6	h	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	3	3	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	42	8	752	19 907	419	854	10 102	39 448	67 562	117 562	4 860
3323	Architectural & structural metals mfg	-	12	4	351	9 149	132	269	3 071	16 711	33 547	50 271	1 711
33231	Plate work & fabricated structural product mfg	-	5	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	23	10	739	23 660	578	1 323	16 443	47 019	13 961	59 980	3 031
3335	Metalworking machinery mfg	2	17	9	693	22 007	546	1 253	15 391	42 420	11 019	53 019	2 701
33351	Metalworking machinery mfg	2	17	9	693	22 007	546	1 253	15 391	42 420	11 019	53 019	2 701
333514	Special die & tool, die set, jig, & fixture mfg	2	9	4	459	12 462	373	826	9 249	26 623	6 307	32 261	1 679
337	Furniture & related product mfg	-	23	5	1 232	25 562	934	2 099	17 850	46 996	73 243	123 127	D
3372	Office furniture (including fixtures) mfg	-	5	3	1 060	22 992	782	1 868	15 785	42 600	68 812	114 337	D
33721	Office furniture (including fixtures) mfg	-	5	3	1 060	22 992	782	1 868	15 785	42 600	68 812	114 337	D
337211	Wood office furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GADSDEN, AL MSA													
31-33	Manufacturing	1	136	47	8 775	276 968	6 778	13 997	184 542	679 026	900 527	1 577 010	59 507
311	Food mfg	3	8	5	1 682	31 239	1 428	3 035	25 261	62 000	290 045	353 915	5 053
3116	Meat product mfg	4	4	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	4	4	4	g	D	D	D	D	D	D	D	D
311615	Poultry processing	4	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	7	10	4	301	6 012	257	453	4 529	11 624	16 585	28 601	641
326	Plastics & rubber products mfg	-	8	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	41	18	963	26 589	743	1 467	17 470	66 719	59 234	122 761	4 541
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	20	7	452	12 409	345	758	7 891	27 104	14 758	41 183	D
33271	Machine shops	-	16	5	362	10 267	281	634	6 618	22 189	9 911	31 468	1 262
332710	Machine shops	-	16	5	362	10 267	281	634	6 618	22 189	9 911	31 468	1 262
333	Machinery mfg	3	13	5	991	22 413	822	1 606	14 549	25 337	51 833	76 575	3 609
3333	Commercial & service industry machinery mfg	4	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	4	2	2	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	9	1	1	e	D	D	D	D	D	D	D	D
HUNTSVILLE, AL MSA													
31-33	Manufacturing	-	404	143	35 060	1 388 099	23 933	47 493	878 878	3 671 791	4 754 692	8 312 731	259 852
311	Food mfg	2	13	6	1 565	32 248	1 061	1 332	19 593	147 379	102 578	246 560	4 572
3115	Dairy product mfg	5	3	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	5	3	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	5	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	7	2	283	6 371	116	210	2 157	17 997	6 026	24 058	382
31181	Bread & bakery product mfg	-	7	2	283	6 371	116	210	2 157	17 997	6 026	24 058	382
314	Textile product mills	-	6	3	407	7 517	338	694	4 203	12 837	12 876	25 642	236
3141	Textile furnishings mills	-	3	2	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	3	2	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	3	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	4	372	11 345	282	606	6 789	25 761	58 652	84 333	1 702
3222	Converted paper product mfg	-	5	4	372	11 345	282	606	6 789	25 761	58 652	84 333	1 702
32221	Paperboard container mfg	-	5	4	372	11 345	282	606	6 789	25 761	58 652	84 333	1 702
322211	Corrugated & solid fiber box mfg	-	5	4	372	11 345	282	606	6 789	25 761	58 652	84 333	1 702
323	Printing & related support activities	1	38	4	365	9 836	270	470	5 933	19 771	15 311	35 492	826
3231	Printing & related support activities	1	38	4	365	9 836	270	470	5 933	19 771	15 311	35 492	826
32311	Printing	1	36	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	12	5	291	9 338	204	340	5 906	32 702	13 939	46 532	2 907

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HUNTSVILLE, AL MSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	19	10	2 624	107 091	2 293	4 626	90 457	285 138	236 483	517 984	24 342
3261	Plastics product mfg	-	15	8	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	6	4	288	7 297	238	471	5 024	21 310	26 743	46 118	229
326122	Plastics pipe & pipe fitting mfg	-	4	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	3	e	D	D	D	D	D	D	D	D
326191	Plastics plumbing fixture mfg	-	1	1	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	4	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	16	7	1 087	41 415	846	1 825	28 501	138 359	70 457	189 906	6 308
3272	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	678	21 623	450	991	13 514	51 964	75 930	130 589	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	3	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	2	2	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	87	24	2 656	76 170	2 086	4 019	52 068	157 998	116 235	275 756	22 274
3323	Architectural & structural metals mfg	1	16	4	481	11 144	398	788	7 623	27 516	18 800	45 962	3 041
33232	Ornamental & architectural metal products mfg	-	14	4	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	9	3	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	46	10	818	21 657	576	917	13 621	36 927	28 556	65 935	3 348
33271	Machine shops	1	43	10	783	20 756	545	862	12 977	34 935	27 577	62 649	2 911
332710	Machine shops	1	43	10	783	20 756	545	862	12 977	34 935	27 577	62 649	2 911
3329	Other fabricated metal product mfg	-	7	3	734	22 682	577	1 161	15 440	43 753	28 461	73 061	10 768
33291	Metal valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	23	12	1 172	30 248	919	1 616	18 489	78 322	61 552	134 614	4 347
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	e	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	5	4	307	6 603	256	313	3 048	8 483	9 972	18 106	1 237
334	Computer & electronic product mfg	1	55	26	12 547	423 206	5 908	12 465	154 414	1 477 845	2 726 519	4 095 310	77 643
3341	Computer & peripheral equipment mfg	-	13	5	i	D	D	D	D	D	D	D	16 299
33411	Computer & peripheral equipment mfg	-	13	5	i	D	D	D	D	D	D	D	16 299
334111	Electronic computer mfg	-	5	3	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	7	4	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	6	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	6	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HUNTSVILLE, AL MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	4	22	10	3 499	114 136	2 492	5 066	70 144	346 155	522 687	839 789	33 767
33441	Semiconductor & other electronic component mfg	4	22	10	3 499	114 136	2 492	5 066	70 144	346 155	522 687	839 789	33 767
334412	Bare printed circuit board mfg	—	3	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	4	4	4	h	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	7	2	344	6 507	287	549	4 098	11 400	12 036	23 024	421
3345	Navigational, measuring, medical, & control instruments mfg	—	11	5	f	D	D	D	D	D	D	D	2 513
33451	Navigational, measuring, medical, & control instruments mfg	—	11	5	f	D	D	D	D	D	D	D	2 513
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	5	1	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	9	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	9	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	17	8	1 247	37 109	978	1 515	23 972	107 014	118 134	252 564	2 928
3353	Electrical equipment mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	3	11	5	337	7 528	230	415	3 962	15 438	16 404	39 610	D
336	Transportation equipment mfg	—	19	13	8 026	515 111	6 668	13 767	406 877	900 473	954 514	1 851 233	91 783
3363	Motor vehicle parts mfg ...	—	9	7	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	4	4	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	4	4	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	—	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	30	3	865	37 273	734	1 565	30 847	158 025	81 752	239 160	3 666
3372	Office furniture (including fixtures) mfg	—	6	3	f	D	D	D	D	D	D	D	3 457
33721	Office furniture (including fixtures) mfg	—	6	3	f	D	D	D	D	D	D	D	3 457
337214	Office furniture (except wood) mfg	—	3	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	HUNTSVILLE, AL MSA—Con.													
31-33	Manufacturing—Con.													
339	Miscellaneous mfg.....	1	34	5	567	15 053	434	700	8 798	41 300	34 276	75 543	4 455	
3391	Medical equipment & supplies mfg.....	4	24	3	e	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg.....	4	24	3	e	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg..	—	10	2	e	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	
339991	Gasket, packing, & sealing device mfg...	—	1	1	e	D	D	D	D	D	D	D	D	
	MOBILE, AL MSA													
31-33	Manufacturing	—	583	179	27 280	962 342	19 513	40 258	603 035	2 915 990	3 345 180	6 304 365	363 772	
311	Food mfg.....	2	46	19	f	1 560	28 597	1 043	1 841	15 936	67 670	143 103	210 957	3 814
3117	Seafood product preparation & packaging..	3	18	10	f	D	D	D	D	D	D	D	D	
31171	Seafood product preparation & packaging.....	3	18	10	f	D	D	D	D	D	D	D	D	
311712	Fresh & frozen seafood processing..	3	17	10	f	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg.....	—	13	4	e	448	9 370	281	711	5 014	17 461	22 011	39 460	1 280
31181	Bread & bakery product mfg.....	—	13	4	e	448	9 370	281	711	5 014	17 461	22 011	39 460	1 280
311812	Commercial bakeries ..	—	4	2	e	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg.....	9	2	1	e	D	D	D	D	D	D	D	D	
3121	Beverage mfg.....	9	2	1	e	D	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg.....	9	2	1	e	D	D	D	D	D	D	D	D	
312111	Soft drink mfg.....	9	1	1	e	D	D	D	D	D	D	D	D	
313	Textile mills.....	—	3	1	e	D	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills.....	—	2	1	e	D	D	D	D	D	D	D	D	
31331	Textile & fabric finishing mills.....	—	2	1	e	D	D	D	D	D	D	D	D	
313312	Textile & fabric finishing mills.....	—	2	1	e	D	D	D	D	D	D	D	D	
315	Apparel mfg.....	2	7	2	f	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg....	2	6	2	f	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg.....	—	1	1	e	D	D	D	D	D	D	D	D	
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	—	1	1	e	D	D	D	D	D	D	D	D	
321	Wood product mfg.....	—	42	14	f	1 468	37 961	1 099	2 281	21 212	114 397	199 882	313 722	7 789
3211	Sawmills & wood preservation.....	—	10	6	f	527	17 697	434	982	10 527	67 004	129 488	195 781	5 298
32111	Sawmills & wood preservation.....	—	10	6	f	527	17 697	434	982	10 527	67 004	129 488	195 781	5 298
321113	Sawmills.....	—	7	4	e	D	D	D	D	D	D	D	D	
3219	Other wood product mfg....	1	29	7	f	884	18 967	621	1 218	9 960	44 009	67 837	111 923	D
32191	Millwork.....	1	12	4	f	664	15 112	456	891	7 422	36 036	57 018	93 069	1 998
321911	Wood window & door mfg.....	1	9	4	f	645	14 675	441	862	7 104	35 298	56 049	91 349	D
322	Paper mfg.....	—	13	10	f	3 881	219 319	3 203	7 509	173 227	476 274	602 836	1 097 135	86 259
3221	Pulp, paper, & paperboard mills.....	—	4	4	h	D	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	3	3	f	3 026	194 573	2 493	6 001	154 241	418 290	487 251	924 808	81 445
322121	Paper (except newsprint) mills.....	—	3	3	f	3 026	194 573	2 493	6 001	154 241	418 290	487 251	924 808	81 445
3222	Converted paper product mfg.....	—	9	6	f	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	7	5	e	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg....	—	1	1	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	66	8	f	622	15 491	431	778	9 860	31 746	21 091	52 803	1 433
3231	Printing & related support activities.....	2	66	8	f	622	15 491	431	778	9 860	31 746	21 091	52 803	1 433
32311	Printing.....	2	62	8	f	601	14 938	412	744	9 390	30 590	20 943	51 503	1 376
324	Petroleum & coal products mfg.....	—	3	3	e	D	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	3	3	e	D	D	D	D	D	D	D	D	D

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31-33	MOBILE, AL MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	-	43	19	4 343	207 248	2 563	5 807	114 194	1 037 788	781 921	1 796 337	170 578
3251	Basic chemical mfg	-	24	12	2 336	124 442	1 405	3 270	70 532	752 157	402 845	1 149 787	77 094
32518	Other basic inorganic chemical mfg	-	11	8	1 152	56 831	671	1 590	31 729	394 924	192 653	584 232	D
325188	All other basic inorganic chemical mfg	-	10	7	g	D	D	D	D	D	D	D	25 392
32519	Other basic organic chemical mfg	-	7	3	1 122	65 532	679	1 569	37 235	342 590	206 104	546 996	D
325199	All other basic organic chemical mfg	-	7	3	1 122	65 532	679	1 569	37 235	342 590	206 104	546 996	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	3	3	f	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	-	2	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	5	1	402	13 831	63	134	2 020	11 746	39 353	52 852	414
32551	Paint & coating mfg	-	3	1	e	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	3	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	25	10	588	14 736	434	764	8 631	28 812	15 635	44 809	1 869
3261	Plastics product mfg	3	22	10	577	14 336	423	742	8 322	27 619	14 552	42 523	D
32619	Other plastics product mfg	2	10	5	252	7 568	207	412	4 178	11 278	7 293	18 944	955
327	Nonmetallic mineral product mfg	-	26	8	852	30 252	660	1 331	19 873	170 698	124 340	292 399	8 507
3273	Cement & concrete product mfg	-	19	7	f	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	-	10	3	281	9 446	198	312	4 615	33 728	32 179	62 295	3 423
327320	Ready-mix concrete mfg	-	10	3	281	9 446	198	312	4 615	33 728	32 179	62 295	3 423
331	Primary metal mfg	-	5	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	105	28	2 333	66 454	1 756	3 438	44 705	155 775	139 668	295 807	6 463
3323	Architectural & structural metals mfg	3	32	10	519	13 494	361	664	7 750	26 539	33 228	59 685	1 082
33231	Plate work & fabricated structural product mfg	2	22	9	452	11 827	310	588	6 703	23 117	29 587	52 621	870
332312	Fabricated structural metal mfg	3	13	6	264	7 092	169	321	3 893	14 949	20 625	35 652	623
3324	Boiler, tank, & shipping container mfg	-	13	8	1 032	32 862	761	1 630	23 661	84 266	75 979	160 874	2 616
33242	Metal tank (heavy gauge) mfg	-	9	8	1 007	32 270	743	1 604	23 260	82 629	73 981	156 979	2 576
332420	Metal tank (heavy gauge) mfg	-	9	8	1 007	32 270	743	1 604	23 260	82 629	73 981	156 979	2 576
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	43	5	384	10 061	305	498	7 140	18 927	7 148	26 309	999
33271	Machine shops	2	39	5	349	9 214	280	450	6 537	17 078	6 430	23 724	727
332710	Machine shops	2	39	5	349	9 214	280	450	6 537	17 078	6 430	23 724	727
3329	Other fabricated metal product mfg	2	11	2	282	7 377	239	475	4 483	18 703	18 946	37 133	896
333	Machinery mfg	-	24	8	705	23 312	500	984	13 426	56 394	59 400	115 717	6 554
3339	Other general-purpose machinery mfg	-	5	3	274	11 366	199	393	6 462	38 415	42 783	80 859	D

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31-33	MOBILE, AL MSA—Con. Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	14	6	1 793	62 283	547	1 138	11 111	96 735	92 915	199 190	4 659
3341	Computer & peripheral equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	5	5	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	5	5	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	9	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	49	27	4 913	151 353	3 893	7 921	102 683	379 473	225 300	644 235	32 431
3363	Motor vehicle parts mfg....	—	7	5	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	4	4	1 675	63 926	1 145	2 927	34 970	214 858	88 397	342 523	4 724
33641	Aerospace product & parts mfg.....	—	4	4	1 675	63 926	1 145	2 927	34 970	214 858	88 397	342 523	4 724
336411	Aircraft mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	—	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	—	36	18	2 756	79 411	2 402	4 475	62 783	138 674	111 712	250 133	D
33661	Ship & boat building.....	—	36	18	2 756	79 411	2 402	4 475	62 783	138 674	111 712	250 133	D
336611	Ship building & repairing.....	—	26	15	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	53	9	1 260	24 960	1 095	2 114	18 892	52 473	56 448	116 388	3 333
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	46	8	1 197	23 467	1 043	2 032	17 941	49 901	53 623	110 901	3 038
33712	Household & institutional furniture mfg.....	—	12	5	973	19 293	850	1 723	14 800	40 747	47 136	95 353	2 754
337122	Nonupholstered wood household furniture mfg.....	—	7	3	885	16 971	775	1 592	13 127	36 784	44 840	89 145	D
339	Miscellaneous mfg.....	3	43	3	502	13 276	360	679	7 596	30 311	39 370	68 213	3 028
3399	Other miscellaneous mfg....	2	24	2	366	10 444	255	484	5 522	21 120	33 674	54 857	2 635
33995	Sign mfg.....	1	14	2	293	8 742	201	387	4 452	17 144	30 665	47 831	2 390
339950	Sign mfg.....	1	14	2	293	8 742	201	387	4 452	17 144	30 665	47 831	2 390
31-33	MONTGOMERY, AL MSA Manufacturing....	—	303	110	15 813	425 747	11 366	21 063	259 280	1 325 071	1 334 455	2 671 327	90 576
311	Food mfg.....	—	21	13	1 940	40 691	1 118	2 103	21 035	177 958	194 140	372 793	6 842
3116	Meat product mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	3	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	7	3	445	11 571	252	502	5 542	41 706	31 082	72 782	180
31181	Bread & bakery product mfg.....	—	7	3	445	11 571	252	502	5 542	41 706	31 082	72 782	180
311812	Commercial bakeries..	—	3	3	433	11 482	243	495	5 490	41 466	30 930	72 390	D
3119	Other food mfg.....	—	4	3	373	9 437	236	421	4 752	7 313	15 334	22 588	D
312	Beverage & tobacco product mfg.....	—	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	—	4	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	—	7	5	464	14 081	397	809	10 699	57 807	43 002	100 277	1 451
3132	Fabric mills.....	—	4	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTGOMERY, AL MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	-	7	5	632	8 011	600	792	6 810	36 593	61 808	94 081	D
3152	Cut & sew apparel mfg	-	3	3	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	32	13	791	18 041	653	1 280	12 330	35 467	72 069	109 432	1 689
3219	Other wood product mfg ...	-	25	8	452	8 872	369	625	6 376	16 669	27 075	44 304	651
32191	Millwork	-	14	4	287	5 012	247	416	3 587	11 741	16 639	29 005	312
322	Paper mfg	-	5	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	41	5	519	13 339	361	652	7 811	24 335	18 675	43 035	1 509
3231	Printing & related support activities.....	2	41	5	519	13 339	361	652	7 811	24 335	18 675	43 035	1 509
32311	Printing	3	37	5	474	12 139	329	588	6 928	22 248	18 177	40 455	1 450
323110	Commercial lithographic printing ..	3	19	4	349	9 710	225	452	5 557	16 201	15 062	31 304	1 218
326	Plastics & rubber products mfg	2	13	10	1 525	36 560	1 265	2 459	23 632	94 421	98 429	193 380	9 062
3261	Plastics product mfg	3	12	9	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	7	4	760	19 462	585	1 030	9 594	34 915	19 080	55 761	4 361
326199	All other plastics product mfg	7	6	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	19	7	481	12 335	354	683	7 879	28 523	31 749	60 713	3 031
331	Primary metal mfg	-	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	13	1 999	56 059	1 507	2 919	37 404	164 175	136 792	302 746	6 916
3323	Architectural & structural metals mfg	-	19	10	1 045	32 029	773	1 423	19 177	86 063	75 658	162 714	5 071
33231	Plate work & fabricated structural product mfg ..	-	9	7	472	11 793	381	645	7 569	26 575	30 354	56 887	1 258
332312	Fabricated structural metal mfg	-	7	6	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	10	3	573	20 236	392	778	11 608	59 488	45 304	105 827	3 813
332323	Ornamental & architectural metal work mfg	-	4	2	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	3	18	7	1 118	33 961	704	1 284	17 353	80 166	77 702	156 307	4 082
3332	Industrial machinery mfg ..	8	5	3	503	14 618	308	523	6 870	41 981	21 604	63 471	2 462
33329	Other industrial machinery mfg	8	5	3	503	14 618	308	523	6 870	41 981	21 604	63 471	2 462
333298	All other industrial machinery mfg	8	4	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	MONTGOMERY, AL MSA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	
334514	Totalizing fluid meter & counting device mfg..	-	1	1	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D	
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D	
33522	Major appliance mfg....	-	1	1	g	D	D	D	D	D	D	D	D	
335228	Other major household appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg.....	-	9	7		1 070	33 254	796	1 403	20 494	64 792	99 696	168 351	4 342
3363	Motor vehicle parts mfg....	-	6	5	f	D	D	D	D	D	D	D	D	3 425
33634	Motor vehicle brake system mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg..	-	1	1	e	D	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	39	6		575	12 451	439	775	7 307	24 377	20 025	44 245	857
3371	Household & institutional furniture & kitchen cabinet mfg.....	2	30	3		415	9 689	333	617	5 694	18 377	12 753	30 980	602
339	Miscellaneous mfg.....	-	28	3		610	18 387	487	830	10 077	109 536	27 846	146 913	4 651
3391	Medical equipment & supplies mfg.....	-	13	2	e	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	13	2	e	D	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	2	1	e	D	D	D	D	D	D	D	D	D
	TUSCALOOSA, AL MSA													
31-33	Manufacturing	-	160	57		10 738	378 928	8 500	17 163	266 241	926 357	1 663 679	2 557 859	232 117
311	Food mfg.....	-	8	2		1 007	16 923	863	1 716	11 239	36 712	26 410	63 094	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	24	13		794	18 387	689	1 409	14 396	48 214	78 439	127 013	4 310
3211	Sawmills & wood preservation.....	2	13	8		461	11 784	404	801	9 672	31 470	58 021	89 872	3 158
32111	Sawmills & wood preservation.....	2	13	8		461	11 784	404	801	9 672	31 470	58 021	89 872	3 158
321113	Sawmills.....	2	11	6	e	D	D	D	D	D	D	D	D	D
3219	Other wood product mfg....	-	10	5	e	D	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	2	9	5		758	31 087	522	1 024	18 103	150 399	388 526	543 157	10 421
3241	Petroleum & coal products mfg.....	2	9	5		758	31 087	522	1 024	18 103	150 399	388 526	543 157	10 421
32411	Petroleum refineries....	-	1	1	e	D	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	-	1	1	e	D	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg.....	6	7	4	e	D	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg.....	6	6	4	e	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TUSCALOOSA, AL MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	6	4	3 457	134 263	2 895	5 650	107 816	214 303	387 692	603 616	31 059
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	715	22 633	576	1 212	14 983	69 772	148 549	224 371	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	8	608	18 806	455	901	10 667	44 881	47 622	91 776	2 844
334	Computer & electronic product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUTAUGA COUNTY, AL												
	Manufacturing	1	38	14	2 130	69 219	1 582	2 930	45 065	152 499	213 191	366 446	28 412
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BALDWIN COUNTY, AL													
31-33	Manufacturing	1	138	30	5 150	127 054	4 130	7 790	79 962	366 365	412 327	809 523	22 906
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	21	3	862	16 721	770	1 537	13 139	32 686	43 556	85 311	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	7	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	2	f	D	D	D	D	D	D	D	D
BARBOUR COUNTY, AL													
31-33	Manufacturing	-	41	22	3 680	92 988	2 783	5 655	58 806	276 318	412 795	689 729	19 263
313	Textile mills	-	4	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills ..	-	4	4	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	13	7	704	15 970	596	1 287	11 169	46 473	92 270	135 584	2 692
332	Fabricated metal product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
BIBB COUNTY, AL													
31-33	Manufacturing	1	27	17	1 218	23 921	975	2 092	19 371	130 472	113 973	244 267	2 960
BLOUNT COUNTY, AL													
31-33	Manufacturing	1	60	13	2 742	49 474	2 451	4 505	41 997	272 455	130 132	403 498	6 620
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	2	f	D	D	D	D	D	D	D	D
BULLOCK COUNTY, AL													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
BUTLER COUNTY, AL													
31-33	Manufacturing	3	27	15	2 044	41 904	1 799	3 570	33 577	142 677	162 214	305 492	7 811
321	Wood product mfg	-	6	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CALHOUN COUNTY, AL													
31-33	Manufacturing	-	149	65	10 841	257 848	8 573	16 609	178 367	718 000	812 995	1 504 506	54 261
313	Textile mills	-	5	3	793	15 507	689	1 355	12 266	35 154	62 117	97 415	9 091
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	3	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	6	4	1 309	28 947	1 159	2 281	23 712	80 242	86 637	158 753	2 682
3141	Textile furnishings mills	-	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	8	6	870	11 567	776	1 213	9 314	16 205	7 302	23 037	630
3152	Cut & sew apparel mfg	3	8	6	870	11 567	776	1 213	9 314	16 205	7 302	23 037	630
31521	Cut & sew apparel contractors	5	5	3	553	7 833	495	819	6 466	10 174	4 181	13 856	526
331	Primary metal mfg	-	11	6	1 661	42 006	1 306	2 644	29 384	110 531	62 500	172 202	9 454
3315	Foundries	-	9	5	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	8	5	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	6	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	33	12	2 287	58 861	1 708	3 485	37 077	195 168	137 403	333 674	14 611
3329	Other fabricated metal product mfg	-	6	5	1 551	38 723	1 169	2 484	25 552	146 846	93 730	240 977	12 497
33291	Metal valve mfg	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	5	1 737	47 610	1 297	2 538	31 640	150 466	240 494	373 079	7 139
3363	Motor vehicle parts mfg ...	-	5	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
CHAMBERS COUNTY, AL													
31-33	Manufacturing	-	40	23	5 612	147 189	4 947	9 945	121 749	266 416	502 414	765 769	48 482
313	Textile mills	-	11	10	h	D	D	D	D	D	D	D	D
3132	Fabric mills	-	6	6	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	6	6	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	6	6	h	D	D	D	D	D	D	D	D
CHEROKEE COUNTY, AL													
31-33	Manufacturing	1	21	6	1 194	25 361	1 048	2 023	20 749	41 124	77 356	121 248	1 876
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	f	D	D	D	D	D	D	D	D
CHILTON COUNTY, AL													
31-33	Manufacturing	1	54	20	1 488	30 279	1 181	1 976	21 399	66 043	95 935	162 096	3 987
CHOCTAW COUNTY, AL													
31-33	Manufacturing	-	12	6	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARKE COUNTY, AL													
31-33	Manufacturing	-	32	15	2 888	82 685	2 391	5 074	58 974	198 511	361 396	540 149	D
315	Apparel mfg	1	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	2	2	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	8	944	24 921	772	1 809	19 203	50 334	134 480	184 632	D
3211	Sawmills & wood preservation	-	5	5	648	16 242	506	1 204	12 009	27 067	77 981	104 061	2 105
32111	Sawmills & wood preservation	-	5	5	648	16 242	506	1 204	12 009	27 067	77 981	104 061	2 105
321113	Sawmills	-	5	5	648	16 242	506	1 204	12 009	27 067	77 981	104 061	2 105
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
CLAY COUNTY, AL													
31-33	Manufacturing	-	15	6	2 789	49 649	2 365	3 790	33 400	96 357	118 590	212 354	4 234
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	4	3	g	D	D	D	D	D	D	D	1 827
3371	Household & institutional furniture & kitchen cabinet mfg	1	4	3	g	D	D	D	D	D	D	D	1 827
33711	Wood kitchen cabinet & counter top mfg	1	4	3	g	D	D	D	D	D	D	D	1 827
337110	Wood kitchen cabinet & counter top mfg ...	1	4	3	g	D	D	D	D	D	D	D	1 827
CLEBURNE COUNTY, AL													
31-33	Manufacturing	-	10	5	1 108	19 885	850	2 017	15 309	48 052	125 966	175 147	16 565
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
COFFEE COUNTY, AL													
31-33	Manufacturing	-	39	14	4 725	89 846	3 828	6 695	63 558	279 034	395 931	679 798	8 240
311	Food mfg	-	6	5	1 855	32 238	1 559	2 711	23 368	157 497	190 340	352 898	3 341
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	3	1 336	21 673	935	1 727	12 510	46 576	72 404	118 213	D
3152	Cut & sew apparel mfg	-	4	3	g	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLBERT COUNTY, AL													
31-33	Manufacturing	-	118	33	5 581	205 794	4 236	8 910	140 964	195 019	1 145 921	1 491 610	61 823
326	Plastics & rubber products mfg	2	13	5	885	23 731	668	1 153	11 102	25 251	34 006	73 720	D
3261	Plastics product mfg	2	6	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	6	525	14 274	290	555	7 151	27 746	52 178	76 986	D
CONECUH COUNTY, AL													
31-33	Manufacturing	1	21	10	821	17 033	642	1 329	10 073	39 579	58 905	98 769	4 264
COOSA COUNTY, AL													
31-33	Manufacturing	-	11	6	978	22 256	824	1 712	18 394	54 003	67 768	123 132	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
COVINGTON COUNTY, AL													
31-33	Manufacturing	-	30	15	3 872	83 451	3 504	7 155	71 207	162 195	222 485	388 015	10 300
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	4	4	945	11 225	818	1 520	8 629	10 558	9 880	21 318	D
3152	Cut & sew apparel mfg	2	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Nocellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
CRENSHAW COUNTY, AL													
31-33	Manufacturing	4	15	7	830	9 586	684	934	6 596	16 833	9 143	26 142	426
315	Apparel mfg	4	6	4	672	6 634	558	705	4 516	8 879	1 129	10 109	D
3152	Cut & sew apparel mfg	4	6	4	672	6 634	558	705	4 516	8 879	1 129	10 109	D
31521	Cut & sew apparel contractors	4	5	3	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	5	2	2	f	D	D	D	D	D	D	D	D

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CULLMAN COUNTY, AL													
31-33	Manufacturing	-	123	39	5 994	147 412	4 778	8 511	99 788	338 367	616 597	964 101	26 911
311	Food mfg.....	1	11	4	809	13 843	726	1 146	10 030	31 882	194 950	228 075	2 299
3116	Meat product mfg.....	1	3	2	f	D	D	D	D	D	D	D	1 372
31161	Animal slaughtering & processing.....	1	3	2	f	D	D	D	D	D	D	D	1 372
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	7	5	1 046	15 416	951	1 375	12 699	12 237	17 124	29 160	136
3152	Cut & sew apparel mfg....	-	5	4	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	31	6	1 071	33 715	818	1 644	24 131	87 646	93 392	181 833	5 228
333	Machinery mfg.....	-	7	4	g	D	D	D	D	D	D	D	5 891
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	7	3	f	D	D	D	D	D	D	D	1 939
3363	Motor vehicle parts mfg....	-	3	2	f	D	D	D	D	D	D	D	D
DALE COUNTY, AL													
31-33	Manufacturing	1	26	8	1 254	22 981	891	1 485	14 170	32 000	38 873	70 046	2 480
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
DALLAS COUNTY, AL													
31-33	Manufacturing	1	53	27	5 336	137 608	4 240	8 613	92 493	457 383	611 466	1 064 846	39 968
311	Food mfg.....	6	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	9	6	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

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DEKALB COUNTY, AL													
31-33	Manufacturing	2	216	100	11 774	237 287	10 267	18 680	177 258	537 878	745 951	1 285 968	45 019
311	Food mfg	4	6	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	3	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	138	74	7 488	119 956	6 684	11 694	93 836	240 075	355 049	597 461	25 661
3151	Apparel knitting mills	2	129	68	i	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	2	127	66	7 029	113 988	6 261	10 958	88 717	222 230	345 607	570 175	25 324
315119	Other hosiery & sock mills	2	119	63	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	8	1 001	34 658	749	1 366	23 467	96 782	130 207	223 078	7 314
3323	Architectural & structural metals mfg	-	12	7	f	D	D	D	D	D	D	D	5 746
33231	Plate work & fabricated structural product mfg ..	-	8	4	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	7	4	618	24 544	425	818	16 229	59 153	74 703	131 837	D
ELMORE COUNTY, AL													
31-33	Manufacturing	1	51	14	2 340	57 084	1 765	2 674	31 111	131 358	151 706	280 257	11 684
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
ESCAMBIA COUNTY, AL													
31-33	Manufacturing	1	53	17	3 145	79 542	2 666	5 484	59 573	362 406	325 126	689 500	60 513
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	6	10	6	630	14 115	523	1 060	10 687	31 897	65 516	97 165	3 883
3211	Sawmills & wood preservation	6	7	5	f	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	6	7	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
ETOWAH COUNTY, AL													
31-33	Manufacturing	1	136	47	8 775	276 968	6 778	13 997	184 542	679 026	900 527	1 577 010	59 507
311	Food mfg	3	8	5	1 682	31 239	1 428	3 035	25 261	62 000	290 045	353 915	5 053
3116	Meat product mfg	4	4	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	4	4	4	g	D	D	D	D	D	D	D	D
311615	Poultry processing	4	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ETOWAH COUNTY, AL													
—Con.													
31-33	Manufacturing—												
	Con.												
332	Fabricated metal product mfg	1	41	18	963	26 589	743	1 467	17 470	66 719	59 234	122 761	4 541
333	Machinery mfg	3	13	5	991	22 413	822	1 606	14 549	25 337	51 833	76 575	3 609
3333	Commercial & service industry machinery mfg ..	4	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	4	2	2	f	D	D	D	D	D	D	D	D
FAYETTE COUNTY, AL													
31-33	Manufacturing	2	33	14	2 617	55 891	2 246	4 199	44 922	126 785	220 839	371 965	11 929
315	Apparel mfg	9	5	4	775	10 839	623	1 101	8 263	17 513	41 795	83 580	D
3152	Cut & sew apparel mfg	9	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, AL													
31-33	Manufacturing	1	64	23	5 348	96 984	4 532	7 813	73 234	174 737	464 098	645 846	7 827
311	Food mfg	—	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	6	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	11	5	1 360	25 575	1 139	2 000	18 172	43 207	81 164	125 369	1 731
3219	Other wood product mfg ...	4	7	4	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	4	5	4	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	4	4	4	g	D	D	D	D	D	D	D	D
GENEVA COUNTY, AL													
31-33	Manufacturing	1	26	8	2 123	34 106	1 933	3 400	28 941	79 236	92 369	171 115	2 357
315	Apparel mfg	1	3	3	989	11 804	909	1 486	10 174	24 457	39 849	64 236	312
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	2	2	f	D	D	D	D	D	D	D	D
HALE COUNTY, AL													
31-33	Manufacturing	1	16	9	1 443	28 450	1 246	2 407	19 815	82 067	130 363	210 025	18 139
311	Food mfg	—	2	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	—	1	1	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	—	1	1	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	—	1	1	f	D	D	D	D	D	D	D	D
HENRY COUNTY, AL													
31-33	Manufacturing	—	18	8	1 410	33 869	1 196	2 658	24 493	142 617	274 416	382 545	8 258
314	Textile product mills	—	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	—	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	1	1	f	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOUSTON COUNTY, AL													
31-33	Manufacturing	-	125	47	9 233	231 915	7 254	15 090	156 292	667 665	800 244	1 457 720	57 317
311	Food mfg	-	7	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	8	7	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	8	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	7	3	f	D	D	D	D	D	D	D	1 416
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	15	2	553	13 324	408	963	7 443	20 811	22 727	40 787	548
3399	Other miscellaneous mfg	1	8	2	f	D	D	D	D	D	D	D	466
JACKSON COUNTY, AL													
31-33	Manufacturing	1	83	26	6 557	182 400	5 319	10 924	136 141	479 891	779 656	1 253 523	184 616
313	Textile mills	-	3	2	f	D	D	D	D	D	D	D	457
3131	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	4	3	2 098	50 320	1 650	3 552	33 046	124 392	171 664	288 587	D
3141	Textile furnishings mills	6	2	2	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	6	2	2	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	6	2	2	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	6	14	6	595	7 805	400	527	3 762	13 255	6 336	19 958	199
3152	Cut & sew apparel mfg	7	7	5	529	6 746	342	430	2 994	11 511	3 812	15 653	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)		
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)	
JACKSON COUNTY, AL—Con.														
31-33	Manufacturing—Con.													
337	Furniture & related product mfg	—	2	1	f	D	D	D	D	D	D	D		
3372	Office furniture (including fixtures) mfg	—	1	1	f	D	D	D	D	D	D	D		
33721	Office furniture (including fixtures) mfg	—	1	1	f	D	D	D	D	D	D	D		
337215	Showcase, partition, shelving, & locker mfg	—	1	1	f	D	D	D	D	D	D	D		
JEFFERSON COUNTY, AL														
31-33	Manufacturing	—	817	290		35 972	1 168 654	25 373	55 305	723 643	3 194 684	4 237 355	7 475 584	205 995
311	Food mfg	1	39	24	h	D	D	D	D	D	D	D	D	
3115	Dairy product mfg	5	2	2	f	D	D	D	D	D	D	D	D	
3116	Meat product mfg	—	5	4	f	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	—	5	4	f	D	D	D	D	D	D	D	D	
311615	Poultry processing	—	2	2	f	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	—	18	8	f	D	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	—	16	7	f	D	D	D	D	D	D	D	D	
311812	Commercial bakeries	—	6	6	629	18 040	203	708	6 687	41 074	17 422	58 525	2 013	
3119	Other food mfg	—	9	7	1 866	45 946	966	1 837	16 020	138 653	154 376	289 822	14 557	
31191	Snack food mfg	—	2	1	g	D	D	D	D	D	D	D	D	
311919	Other snack food mfg	—	2	1	g	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg	—	7	2	f	D	D	D	D	D	D	D	D	
3121	Beverage mfg	—	7	2	f	D	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg	—	5	2	f	D	D	D	D	D	D	D	D	
312111	Soft drink mfg	—	3	2	f	D	D	D	D	D	D	D	D	
322	Paper mfg	—	11	9	f	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	—	11	9	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	3	134	31	3 051	99 214	2 162	4 194	58 661	207 336	175 602	383 981	D	
3231	Printing & related support activities	3	134	31	3 051	99 214	2 162	4 194	58 661	207 336	175 602	383 981	D	
32311	Printing	3	122	29	2 941	95 242	2 079	4 057	56 306	199 536	173 477	374 069	D	
323110	Commercial lithographic printing	4	64	17	g	D	D	D	D	D	D	D	D	
323114	Quick printing	—	31	2	f	D	D	D	D	D	D	D	D	
324	Petroleum & coal products mfg	—	6	3	f	D	D	D	D	D	D	D	D	
3241	Petroleum & coal products mfg	—	6	3	f	D	D	D	D	D	D	D	D	
32419	Other petroleum & coal products mfg	—	3	2	f	D	D	D	D	D	D	D	7 931	
324199	All other petroleum & coal products mfg	—	3	2	f	D	D	D	D	D	D	D	7 931	
325	Chemical mfg	1	30	11	925	32 104	572	1 108	17 128	137 634	119 912	255 957	19 675	
3251	Basic chemical mfg	—	7	4	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	25	11	f	D	D	D	D	D	D	D	D	
3261	Plastics product mfg	—	19	10	f	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	—	13	8	554	12 443	480	971	9 744	64 766	54 510	117 757	D	
326199	All other plastics product mfg	—	9	6	504	11 413	453	914	9 171	63 215	53 311	115 007	D	
327	Nonmetallic mineral product mfg	1	54	24	1 654	53 475	1 247	2 540	33 343	162 152	166 665	327 302	13 555	
3273	Cement & concrete product mfg	3	22	9	722	19 292	558	1 114	12 550	78 894	77 649	154 649	D	
3279	Other nonmetallic mineral product mfg	—	18	9	f	D	D	D	D	D	D	D	D	
32799	All other nonmetallic mineral product mfg	—	17	9	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	—	34	26	8 589	360 628	6 628	15 605	259 953	1 255 607	1 756 842	3 022 305	D	
3311	Iron & steel mills & ferroalloy mfg	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D	
33111	Iron & steel mills & ferroalloy mfg	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D	
331111	Iron & steel mills	—	5	5	3 449	158 507	2 759	6 325	123 871	941 215	1 115 199	2 052 259	D	
3315	Foundries	—	18	13	h	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries	—	10	8	h	D	D	D	D	D	D	D	D	
331511	Iron foundries	—	6	6	h	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JEFFERSON COUNTY, AL—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	201	82	5 979	185 548	4 385	10 804	111 566	416 086	417 757	843 489	23 221
3323	Architectural & structural metals mfg	-	65	28	2 137	67 540	1 548	5 435	40 256	139 422	128 639	266 041	6 586
33231	Plate work & fabricated structural product mfg ..	-	29	11	987	34 073	743	3 739	19 989	75 134	71 864	145 351	3 149
332312	Fabricated structural metal mfg	1	24	9	f	D	D	D	D	D	D	D	2 596
33232	Ornamental & architectural metal products mfg	1	36	17	1 150	33 467	805	1 696	20 267	64 288	56 775	120 690	3 437
332322	Sheet metal work mfg .	1	17	10	605	17 682	440	918	10 961	31 041	28 224	58 904	D
3324	Boiler, tank, & shipping container mfg	-	12	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	70	20	g	D	D	D	D	D	D	D	D
33271	Machine shops	-	62	15	832	24 758	663	1 148	16 873	47 884	20 942	66 058	D
332710	Machine shops	-	62	15	832	24 758	663	1 148	16 873	47 884	20 942	66 058	D
3329	Other fabricated metal product mfg	-	23	10	1 072	28 848	789	1 475	17 504	46 563	67 805	126 540	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	42	14	1 706	52 954	1 081	2 381	31 694	97 809	241 504	341 610	6 663
3331	Agriculture, construction, & mining machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	28	12	903	30 869	586	1 207	16 725	65 423	65 371	135 399	1 829
3359	Other electrical equipment & component mfg	-	11	5	572	18 043	398	810	11 789	38 334	38 847	82 024	1 343
33593	Wiring device mfg	-	7	4	500	16 364	348	725	10 830	32 940	36 183	73 870	D
336	Transportation equipment mfg	-	24	8	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	54	11	1 617	40 946	1 280	2 844	25 444	99 503	77 121	177 662	9 867
3371	Household & institutional furniture & kitchen cabinet mfg	1	42	4	936	23 433	821	1 935	15 945	62 832	49 462	113 741	8 370
33712	Household & institutional furniture mfg	-	12	3	715	19 407	631	1 629	12 803	55 804	43 510	100 745	D
337124	Metal household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	9	5	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	9	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	70	12	1 332	30 503	899	1 678	15 223	65 906	62 778	129 560	D
3399	Other miscellaneous mfg ..	1	37	10	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	7	3	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
	LAMAR COUNTY, AL												
31-33	Manufacturing	-	22	12	2 589	61 259	2 100	4 511	46 051	142 106	174 983	313 422	12 857
315	Apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	4	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAUDERDALE COUNTY, AL													
31-33	Manufacturing	1	115	39	7 545	169 855	6 301	13 069	124 111	412 530	465 020	885 082	24 716
311	Food mfg	-	4	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	15	9	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	2	6	4	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	2	6	4	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	2	5	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg . . .	-	9	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	3	513	13 124	426	812	9 981	40 310	28 462	64 525	D
327	Nonmetallic mineral product mfg	-	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	4	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAWRENCE COUNTY, AL													
31-33	Manufacturing	-	29	9	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
LEE COUNTY, AL													
31-33	Manufacturing	1	88	39	7 016	194 945	5 906	10 910	146 775	665 568	575 718	1 232 868	66 131
313	Textile mills	-	7	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	5	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	15	7	645	15 923	509	906	10 197	39 077	29 197	71 384	1 433
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	5	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg . .	9	4	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	9	2	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	2	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LIMESTONE COUNTY, AL													
31-33	Manufacturing	-	69	30	6 780	308 974	5 999	11 746	270 207	858 747	474 468	1 321 007	D
311	Food mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	3	f	D	D	D	D	D	D	D	1 955
336	Transportation equipment mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	12	2	f	D	D	D	D	D	D	D	3 536
3372	Office furniture (including fixtures) mfg	-	4	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	4	2	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
LOWNDES COUNTY, AL													
31-33	Manufacturing	-	10	4	f	D	D	D	D	D	D	D	D
MADISON COUNTY, AL													
31-33	Manufacturing	-	335	113	28 280	1 079 125	17 934	35 747	608 671	2 813 044	4 280 224	6 991 724	D
311	Food mfg.....	4	10	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	17	8	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	13	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	4	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	13	6	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	3	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	678	21 623	450	991	13 514	51 964	75 930	130 589	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	73	20	2 429	68 927	1 904	3 687	46 486	143 821	104 410	249 286	21 352
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	40	8	727	19 240	513	797	11 953	32 639	26 557	59 247	2 996
33271	Machine shops.....	2	37	8	692	18 339	482	742	11 309	30 647	25 578	55 961	2 559
332710	Machine shops.....	2	37	8	692	18 339	482	742	11 309	30 647	25 578	55 961	2 559
3329	Other fabricated metal product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	18	9	f	D	D	D	D	D	D	D	2 392

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MADISON COUNTY, AL —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg	1	51	23	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	11	4	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	11	4	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	5	3	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	7	4	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	6	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	6	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	21	9	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	21	9	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	4	3	3	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	10	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	10	4	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	9	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	9	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	13	4	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	18	12	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	8	6	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	4	4	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	4	4	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	—	2	2	g	D	D	D	D	D	D	D	D
	MARENGO COUNTY, AL												
31-33	Manufacturing	1	18	11	1 701	54 083	1 366	2 341	38 623	201 370	193 752	404 819	28 318
321	Wood product mfg	—	6	4	721	15 784	646	1 025	12 179	37 296	35 011	74 508	2 218
3219	Other wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32191	Millwork	—	2	2	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION COUNTY, AL													
31-33	Manufacturing	-	53	31	6 423	154 791	5 103	10 329	104 859	458 731	508 461	964 161	21 566
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	20	10	2 572	55 106	2 051	3 783	36 738	106 333	196 667	302 862	6 157
3219	Other wood product mfg ...	1	14	9	2 460	53 245	1 947	3 609	35 088	100 843	179 755	280 560	D
32199	All other wood product mfg	1	10	8	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	1	8	8	g	D	D	D	D	D	D	D	4 694
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	3 372
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	7	673	11 074	608	1 231	8 136	23 526	30 032	54 212	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	6	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	9	6	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	6	5	f	D	D	D	D	D	D	D	1 441
MARSHALL COUNTY, AL													
31-33	Manufacturing	1	152	74	15 773	338 526	13 341	22 126	244 600	1 002 485	1 602 539	2 616 683	46 540
311	Food mfg	2	15	9	5 679	88 942	5 085	6 903	72 897	318 195	662 347	984 190	9 444
3116	Meat product mfg	5	5	5	5 355	80 635	4 856	6 434	67 844	291 802	192 924	485 788	7 153
31161	Animal slaughtering & processing	5	5	5	5 355	80 635	4 856	6 434	67 844	291 802	192 924	485 788	7 153
311615	Poultry processing	5	5	5	5 355	80 635	4 856	6 434	67 844	291 802	192 924	485 788	7 153
313	Textile mills	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	11	9	1 892	29 554	1 731	2 857	25 487	72 837	53 138	125 246	D
3152	Cut & sew apparel mfg	-	6	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	6	1 742	54 952	1 565	2 871	37 982	123 737	189 615	313 353	2 215
3219	Other wood product mfg ...	-	8	5	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	6	5	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	9	1 016	30 808	804	1 581	20 541	96 048	63 445	159 922	5 232
3329	Other fabricated metal product mfg	-	7	5	813	25 672	647	1 286	17 340	86 081	59 612	146 180	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	7	640	20 173	377	822	11 375	31 094	66 405	98 414	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARSHALL COUNTY, AL—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	5	4	1 436	31 281	1 101	1 957	19 140	126 146	329 881	464 267	D
3341	Computer & peripheral equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
MOBILE COUNTY, AL													
31-33	Manufacturing....	-	445	149	22 130	835 288	15 383	32 468	523 073	2 549 625	2 932 853	5 494 842	340 866
311	Food mfg.....	2	38	18	g	D	D	D	D	D	D	D	3 687
3117	Seafood product preparation & packaging..	6	16	9	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging.....	6	16	9	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing..	6	15	9	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	32	10	1 323	33 505	983	2 050	18 506	104 338	186 849	290 387	7 217
3219	Other wood product mfg...	1	24	6	853	18 141	595	1 158	9 320	41 941	65 689	107 696	D
32191	Millwork.....	1	10	4	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg.....	1	9	4	645	14 675	441	862	7 104	35 298	56 049	91 349	D
322	Paper mfg.....	-	10	7	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	4	4	h	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	3	3	3 026	194 573	2 493	6 001	154 241	418 290	487 251	924 808	81 445
322121	Paper (except newsprint) mills.....	-	3	3	3 026	194 573	2 493	6 001	154 241	418 290	487 251	924 808	81 445
325	Chemical mfg.....	-	34	19	4 294	205 507	2 527	5 737	113 174	1 025 339	767 153	1 769 225	D
3251	Basic chemical mfg.....	-	21	12	2 324	123 891	1 395	3 247	70 144	745 964	398 002	1 138 720	D
32518	Other basic inorganic chemical mfg.....	-	10	8	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.....	-	9	7	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg..	-	3	3	f	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg..	-	3	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	3	19	9	f	D	D	D	D	D	D	D	1 657
3261	Plastics product mfg.....	3	17	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	18	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MOBILE COUNTY, AL—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	83	26	2 141	60 937	1 619	3 181	41 427	145 198	131 431	277 029	5 762
3324	Boiler, tank, & shipping container mfg	—	12	8	g	D	D	D	D	D	D	D	2 616
33242	Metal tank (heavy gauge) mfg	—	8	8	f	D	D	D	D	D	D	D	2 576
332420	Metal tank (heavy gauge) mfg	—	8	8	f	D	D	D	D	D	D	D	2 576
334	Computer & electronic product mfg	—	11	5	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	41	24	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	32	18	h	D	D	D	D	D	D	D	26 857
33661	Ship & boat building	—	32	18	h	D	D	D	D	D	D	D	26 857
336611	Ship building & repairing	—	25	15	h	D	D	D	D	D	D	D	D
MONROE COUNTY, AL													
31-33	Manufacturing	2	28	15	4 748	164 950	3 718	8 196	115 016	514 749	575 139	1 094 005	36 779
314	Textile product mills	9	1	1	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	9	1	1	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	9	1	1	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	9	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	7	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	7	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	7	3	3	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	7	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	6	4	730	24 928	619	1 441	19 397	68 914	146 051	214 902	14 837
3212	Veneer, plywood, & engineered wood product mfg	—	3	3	573	19 052	496	1 125	15 861	47 633	84 425	131 662	D
32121	Veneer, plywood, & engineered wood product mfg	—	3	3	573	19 052	496	1 125	15 861	47 633	84 425	131 662	D
322	Paper mfg	—	3	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
32211	Pulp mills	—	2	2	f	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	f	D	D	D	D	D	D	D	D
MONTGOMERY COUNTY, AL													
31-33	Manufacturing	—	214	82	11 343	299 444	8 019	15 459	183 104	1 041 214	969 558	2 024 624	50 480
311	Food mfg	—	18	13	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	4	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	22	11	692	14 988	576	1 137	10 132	31 911	63 386	97 242	D
326	Plastics & rubber products mfg	1	8	6	f	D	D	D	D	D	D	D	4 499
3261	Plastics product mfg	1	7	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTGOMERY COUNTY, AL—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	28	11	1 861	52 491	1 405	2 727	35 058	156 398	129 670	287 775	D
3323	Architectural & structural metals mfg	-	15	8	937	29 047	693	1 271	17 229	79 308	68 939	149 178	D
33232	Ornamental & architectural metal products mfg	-	8	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	26	6	509	11 596	386	724	6 711	22 557	18 567	40 962	765
	MORGAN COUNTY, AL												
31-33	Manufacturing	-	214	83	j	D	D	D	D	D	D	D	D
311	Food mfg	-	14	8	1 518	33 744	1 246	2 431	23 724	125 891	489 288	604 896	24 742
3116	Meat product mfg	-	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	7	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	4	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	17	8	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	1	f	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	6	3	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	6	3	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	4	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	3	1 463	55 254	1 307	2 606	45 138	144 019	244 324	381 335	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	44	17	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	10	1 325	37 441	1 040	2 455	26 393	118 313	203 765	330 715	6 312
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORGAN COUNTY, AL													
—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	—	6	4	2 137	66 416	1 902	3 523	56 848	171 165	343 667	501 429	7 574
3352	Household appliance mfg...	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg...	—	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	4	3	f	D	D	D	D	D	D	D	D
PERRY COUNTY, AL													
31-33	Manufacturing	1	8	5	926	21 748	775	1 745	16 180	46 159	49 985	96 922	3 797
PICKENS COUNTY, AL													
31-33	Manufacturing	1	21	11	1 051	18 316	958	1 697	15 117	46 067	68 272	113 672	2 537
PIKE COUNTY, AL													
31-33	Manufacturing	—	32	16	2 302	47 129	1 991	3 659	36 603	126 399	226 472	356 111	19 586
331	Primary metal mfg	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	—	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	1	1	f	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	1	1	f	D	D	D	D	D	D	D	D
RANDOLPH COUNTY, AL													
31-33	Manufacturing	1	28	10	2 322	39 014	1 998	3 485	32 649	97 454	114 182	218 518	2 566
313	Textile mills	—	3	3	1 000	18 704	801	1 562	15 998	39 838	65 997	107 149	869
3132	Fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	—	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	4	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	4	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
RUSSELL COUNTY, AL													
31-33	Manufacturing	—	49	19	3 295	107 782	2 757	6 049	80 709	540 642	462 403	1 000 399	89 114
313	Textile mills	—	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	—	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	4	4	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	—	3	3	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	—	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
ST. CLAIR COUNTY, AL													
31-33	Manufacturing	1	85	32	3 180	85 059	2 536	5 098	56 094	190 795	280 414	480 163	22 367

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBY COUNTY, AL													
31-33	Manufacturing	1	158	65	6 076	174 790	4 670	9 676	116 826	436 620	440 632	876 618	44 962
321	Wood product mfg	1	11	6	704	15 738	487	982	11 353	43 530	63 303	107 152	D
327	Nonmetallic mineral product mfg	-	23	13	928	30 798	723	1 693	21 974	122 878	88 348	210 963	14 413
3273	Cement & concrete product mfg	-	15	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	f	D	D	D	D	D	D	D	D
3315	Foundries	-	6	6	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	39	15	1 090	27 656	837	1 709	17 067	61 037	76 272	133 020	7 839
333	Machinery mfg	1	19	6	635	25 277	398	848	12 661	45 689	48 030	94 177	3 453
SUMTER COUNTY, AL													
31-33	Manufacturing	2	15	8	832	17 408	618	1 258	12 559	38 457	51 265	89 384	1 352
TALLADEGA COUNTY, AL													
31-33	Manufacturing	-	100	44	7 160	201 133	5 984	12 214	150 079	582 093	840 192	1 420 596	71 697
313	Textile mills	-	12	9	1 539	39 306	1 447	3 444	34 351	162 818	261 611	423 405	D
3131	Fiber, yarn, & thread mills .	-	6	5	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	6	5	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	5	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	593	18 563	533	1 307	15 114	48 501	84 006	132 879	946
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	5	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	3	5	2	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	3	5	2	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	3	5	2	f	D	D	D	D	D	D	D	D
TALLAPOOSA COUNTY, AL													
31-33	Manufacturing	-	53	34	5 868	112 804	5 278	9 357	90 995	343 774	778 263	1 074 775	22 104
313	Textile mills	-	16	16	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	7	7	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	7	7	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	7	7	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	6	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	3	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	2	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	3	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	3	3	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
TALLAPOOSA COUNTY, AL—Con.														
31-33	Manufacturing—Con.													
315	Apparel mfg	-	8	7	g	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg	-	6	5	g	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D	
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	3	3	f	D	D	D	D	D	D	D	D	
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D	
315299	All other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D	
TUSCALOOSA COUNTY, AL														
31-33	Manufacturing	-	160	57		10 738	378 928	8 500	17 163	266 241	926 357	1 663 679	2 557 859	232 117
311	Food mfg	-	8	2		1 007	16 923	863	1 716	11 239	36 712	26 410	63 094	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg	2	24	13		794	18 387	689	1 409	14 396	48 214	78 439	127 013	4 310
324	Petroleum & coal products mfg	2	9	5		758	31 087	522	1 024	18 103	150 399	388 526	543 157	10 421
3241	Petroleum & coal products mfg	2	9	5		758	31 087	522	1 024	18 103	150 399	388 526	543 157	10 421
326	Plastics & rubber products mfg	-	6	4		3 457	134 263	2 895	5 650	107 816	214 303	387 692	603 616	31 059
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4		715	22 633	576	1 212	14 983	69 772	148 549	224 371	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	8		608	18 806	455	901	10 667	44 881	47 622	91 776	2 844
334	Computer & electronic product mfg	-	4	1	f	D	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
WALKER COUNTY, AL														
31-33	Manufacturing	2	72	18		1 709	32 821	1 376	2 744	21 818	126 839	257 197	381 328	6 935
311	Food mfg	-	3	2		500	5 808	457	970	3 704	23 936	48 160	71 996	1 075
WASHINGTON COUNTY, AL														
31-33	Manufacturing	8	12	5	g	D	D	D	D	D	D	D	D	D
325	Chemical mfg	8	6	2	g	D	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	8	4	2	g	D	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	2	1	g	D	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	2	1	g	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILCOX COUNTY, AL													
31-33	Manufacturing	-	12	5	g	D	D	D	D	D	D	D	5 113
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
WINSTON COUNTY, AL													
31-33	Manufacturing	1	87	42	6 573	135 799	5 465	10 339	95 364	301 342	537 209	838 671	13 521
321	Wood product mfg	1	21	14	3 468	78 997	2 887	5 647	54 398	179 409	332 577	511 996	6 982
3219	Other wood product mfg ...	-	16	12	3 322	75 581	2 756	5 372	51 436	170 555	316 782	487 326	6 077
32199	All other wood product mfg	-	8	7	2 845	66 001	2 384	4 632	45 676	133 545	227 527	361 334	5 144
321991	Manufactured home (mobile home) mfg ..	-	7	7	h	D	D	D	D	D	D	D	5 144
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	649
3362	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	31	14	1 606	27 418	1 322	2 504	19 841	64 279	61 079	125 524	3 374
3371	Household & institutional furniture & kitchen cabinet mfg	1	25	11	1 467	24 973	1 224	2 359	18 389	58 122	52 760	111 084	2 792
33712	Household & institutional furniture mfg	1	22	10	1 442	24 341	1 203	2 318	17 925	56 943	51 919	109 063	D
337122	Nonupholstered wood household furniture mfg	2	20	8	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABBEVILLE, AL													
31-33	Manufacturing	-	9	6	1 296	30 750	1 101	2 457	22 504	137 164	269 038	371 907	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
ALABASTER, AL													
31-33	Manufacturing	2	24	13	941	24 952	749	1 438	17 210	55 809	52 604	109 218	6 058

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALBERTVILLE, AL													
31-33	Manufacturing	2	46	25	4 391	99 848	3 745	7 150	77 065	311 632	251 660	562 984	27 040
311	Food mfg	4	8	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	5	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	5	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
ALEXANDER CITY, AL													
31-33	Manufacturing	-	27	19	3 778	75 002	3 431	6 185	60 978	241 535	596 885	803 248	17 782
313	Textile mills	-	11	11	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	5	5	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	5	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	3	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	3	3	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
ANDALUSIA, AL													
31-33	Manufacturing	-	16	9	1 899	45 106	1 799	3 638	41 343	76 697	160 831	238 472	4 591
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
ANNISTON, AL													
31-33	Manufacturing	-	61	32	4 995	122 039	3 907	7 765	84 093	355 623	413 736	749 177	24 449
315	Apparel mfg	-	5	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	3	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	5	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	4	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARAB, AL *													
31-33	Manufacturing	-	26	13	2 661	49 789	2 139	3 801	33 825	199 742	374 770	578 793	5 571
334	Computer & electronic product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
ATHENS, AL													
31-33	Manufacturing	-	34	15	2 949	83 905	2 574	4 151	66 121	349 716	198 973	539 180	13 637
311	Food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
ATMORE, AL													
31-33	Manufacturing	-	12	7	1 322	23 695	1 164	2 367	18 209	161 002	99 329	262 679	D
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
AUBURN, AL													
31-33	Manufacturing	-	28	12	1 708	34 841	1 468	2 698	22 909	149 929	117 713	270 320	D
333	Machinery mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
BAY MINETTE, AL													
31-33	Manufacturing	-	21	8	1 596	38 378	1 357	2 643	26 768	92 361	141 112	241 039	7 382
337	Furniture & related product mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
BESSEMER, AL													
31-33	Manufacturing	1	45	19	2 164	70 011	1 759	3 862	52 794	162 160	189 772	367 915	12 883
331	Primary metal mfg.....	-	3	3	927	34 699	811	2 206	29 997	94 267	85 223	184 687	D
3315	Foundries.....	-	3	3	927	34 699	811	2 206	29 997	94 267	85 223	184 687	D
33151	Ferrous metal foundries..	-	3	3	927	34 699	811	2 206	29 997	94 267	85 223	184 687	D
331511	Iron foundries.....	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BIRMINGHAM, AL *												
31-33	Manufacturing	-	382	156	19 057	620 952	13 056	30 114	366 417	1 239 064	1 911 719	3 179 467	D
311	Food mfg.....	-	15	12	2 422	60 826	1 461	3 501	28 036	190 611	211 219	401 878	19 292
3118	Bakeries & tortilla mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	4	4	g	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	76	27	2 582	88 072	1 817	3 682	51 240	179 559	147 943	328 292	14 208
3231	Printing & related support activities.....	3	76	27	2 582	88 072	1 817	3 682	51 240	179 559	147 943	328 292	14 208
32311	Printing.....	3	67	25	2 493	84 834	1 751	3 576	49 359	173 204	146 211	320 204	13 899
323110	Commercial lithographic printing ..	4	38	15	g	D	D	D	D	D	D	D	11 830
323114	Quick printing.....	-	12	2	f	D	D	D	D	D	D	D	631
326	Plastics & rubber products mfg.....	-	13	6	632	15 583	550	1 183	12 858	84 517	85 642	169 770	D
3261	Plastics product mfg	-	10	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	23	10	506	15 582	367	640	8 283	43 452	38 101	81 405	3 647
331	Primary metal mfg.....	-	18	13	4 233	174 908	3 126	7 528	119 368	220 221	717 148	952 751	17 507
3311	Iron & steel mills & ferroalloy mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	12	8	3 397	136 186	2 438	5 789	88 871	157 547	430 147	599 011	D
33151	Ferrous metal foundries ..	-	7	5	h	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	4	4	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	88	42	3 384	105 722	2 462	7 074	59 661	214 228	222 766	443 849	14 326
3323	Architectural & structural metals mfg.....	-	32	16	1 171	38 048	886	4 083	23 544	84 257	78 130	160 932	3 187
33231	Plate work & fabricated structural product mfg..	-	15	7	643	24 027	480	3 241	13 787	51 739	53 830	103 817	D
33232	Ornamental & architectural metal products mfg.....	1	17	9	528	14 021	406	842	9 757	32 518	24 300	57 115	D
3329	Other fabricated metal product mfg.....	-	8	5	805	21 330	576	1 070	12 304	31 140	45 963	88 384	3 022
33291	Metal valve mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	21	9	1 267	40 896	838	1 959	26 228	66 331	219 693	286 325	D
3331	Agriculture, construction, & mining machinery mfg.	-	3	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	10	4	g	D	D	D	D	D	D	D	535
3364	Aerospace product & parts mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	4	38	7	558	13 615	405	762	7 554	24 344	22 983	47 255	849

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOAZ, AL *													
31-33	Manufacturing	3	20	11	4 488	91 619	3 953	5 665	68 665	310 395	168 615	481 532	4 574
311	Food mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	9	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	9	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	3	3	1 256	21 025	1 155	2 003	18 085	59 648	44 060	102 681	D
3152	Cut & sew apparel mfg....	-	3	3	1 256	21 025	1 155	2 003	18 085	59 648	44 060	102 681	D
31523	Women's & girls' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	-	3	2	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
BREWTON, AL													
31-33	Manufacturing	4	20	6	990	22 715	846	1 528	16 923	66 344	47 236	113 347	D
BRIDGEPORT, AL													
31-33	Manufacturing	-	6	4	883	24 025	752	1 803	20 817	61 736	138 467	198 656	D
325	Chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
CENTREVILLE, AL													
31-33	Manufacturing	1	10	5	587	10 512	427	934	9 131	94 460	36 170	130 846	889
CHICKASAW, AL													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
CLANTON, AL													
31-33	Manufacturing	3	29	10	584	8 723	472	493	5 319	18 121	12 898	30 959	1 768
COLUMBIANA, AL													
31-33	Manufacturing	-	7	4	569	12 850	453	983	8 768	29 101	23 074	53 600	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CULLMAN, AL													
31-33	Manufacturing	-	61	25	4 196	114 473	3 238	5 895	75 970	281 334	473 092	755 861	22 287
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	5	926	29 651	701	1 423	21 157	75 580	86 976	163 538	D
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
DECATUR, AL *													
31-33	Manufacturing	-	124	50	8 495	291 139	6 713	13 724	196 389	1 218 480	1 995 469	3 218 977	245 426
311	Food mfg	-	11	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	5	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	3	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	16	7	2 161	115 249	1 459	3 405	63 998	809 543	1 002 370	1 808 493	204 746
3251	Basic chemical mfg	-	6	1	f	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	5	3	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	5	3	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	11	910	23 028	684	1 406	15 738	50 270	25 869	75 679	4 054
335	Electrical equipment, appliance, & component mfg	-	4	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
DEMOPOLIS, AL													
31-33	Manufacturing	3	10	7	540	11 285	423	604	7 770	63 354	44 749	113 478	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DOTHAN, AL *												
31-33	Manufacturing	-	102	39	8 269	212 798	6 600	13 986	145 879	622 171	699 181	1 311 008	55 203
311	Food mfg	-	5	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	5	f	D	D	D	D	D	D	D	257
3152	Cut & sew apparel mfg	-	6	5	f	D	D	D	D	D	D	D	257
326	Plastics & rubber products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	5	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	12	1	f	D	D	D	D	D	D	D	D
	ELBA, AL												
31-33	Manufacturing	-	11	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
	ENTERPRISE, AL *												
31-33	Manufacturing	-	21	9	1 327	28 403	1 004	1 681	17 283	102 743	130 068	230 195	4 525
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
	EUFAULA, AL												
31-33	Manufacturing	-	31	18	3 159	82 489	2 338	4 718	51 244	244 331	350 346	596 609	18 108
313	Textile mills	-	4	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
	EVERGREEN, AL												
31-33	Manufacturing	2	14	8	f	D	D	D	D	D	D	D	3 627

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FAIRFIELD, AL													
31-33	Manufacturing	—	20	10	h	D	D	D	D	D	D	D	14 652
331	Primary metal mfg	—	3	3	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	g	D	D	D	D	D	D	D	D
FAYETTE, AL													
31-33	Manufacturing	3	22	8	g	D	D	D	D	D	D	D	D
315	Apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
FLORENCE, AL													
31-33	Manufacturing	1	83	30	6 049	140 856	5 078	10 544	102 751	345 750	393 040	743 840	20 688
311	Food mfg	—	4	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	—	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	7	5	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	2	3	3	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	2	3	3	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	2	3	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	4	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	3	f	D	D	D	D	D	D	D	D
FOLEY, AL													
31-33	Manufacturing	—	11	3	f	D	D	D	D	D	D	D	3 545
FORT PAYNE, AL													
31-33	Manufacturing	2	128	72	8 626	180 385	7 500	13 432	130 478	434 824	510 290	946 389	31 341
311	Food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	96	58	6 166	98 500	5 539	9 665	76 611	217 282	239 131	457 220	19 115
3151	Apparel knitting mills	2	95	57	i	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	2	94	56	i	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	2	88	53	5 681	90 092	5 088	8 822	69 593	208 147	229 804	437 494	18 040
332	Fabricated metal product mfg	—	13	5	728	27 977	525	924	18 620	75 301	112 134	183 579	5 601
3323	Architectural & structural metals mfg	—	7	5	700	27 373	507	891	18 219	74 399	111 360	181 915	5 543
33231	Plate work & fabricated structural product mfg	—	5	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	5	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GADSDEN, AL													
31-33	Manufacturing	-	67	21	6 067	217 532	4 638	9 874	141 267	568 276	672 153	1 240 963	51 077
326	Plastics & rubber products mfg	-	5	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	5	6	3	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	4	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	4	2	2	f	D	D	D	D	D	D	D	D
GENEVA, AL													
31-33	Manufacturing	-	9	4	1 752	29 508	1 608	2 798	25 601	64 863	71 573	136 242	1 198
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
GREENSBORO, AL													
31-33	Manufacturing	-	7	4	1 037	16 928	905	1 626	10 798	42 034	54 632	96 674	D
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging ..	-	1	1	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	1	1	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	-	1	1	f	D	D	D	D	D	D	D	D
GREENVILLE, AL													
31-33	Manufacturing	4	18	10	g	D	D	D	D	D	D	D	D
GUNTERSVILLE, AL													
31-33	Manufacturing	-	27	15	2 891	56 916	2 364	3 311	37 490	82 646	669 923	758 931	5 594
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
HALEYVILLE, AL *													
31-33	Manufacturing	-	36	19	2 584	45 811	2 196	4 267	31 983	122 047	207 060	328 214	6 903
321	Wood product mfg	-	6	5	643	13 215	518	976	8 465	44 132	97 403	141 696	D
3219	Other wood product mfg ...	-	6	5	643	13 215	518	976	8 465	44 132	97 403	141 696	D
337	Furniture & related product mfg	1	18	9	1 451	25 041	1 252	2 544	17 759	59 141	51 458	110 464	3 640
3371	Household & institutional furniture & kitchen cabinet mfg	1	16	8	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	15	7	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	1	14	6	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMILTON, AL													
31-33	Manufacturing	-	14	9	2 350	55 284	1 981	3 971	40 797	116 281	145 751	260 648	4 516
321	Wood product mfg	-	5	4	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	3	3	1 307	26 928	1 099	2 129	18 791	52 586	80 463	132 220	1 176
32199	All other wood product mfg	-	3	3	1 307	26 928	1 099	2 129	18 791	52 586	80 463	132 220	1 176
321991	Manufactured home (mobile home) mfg ..	-	3	3	1 307	26 928	1 099	2 129	18 791	52 586	80 463	132 220	1 176
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
HARTSELLE, AL													
31-33	Manufacturing	-	25	11	1 643	45 978	1 319	3 080	33 815	182 895	367 774	557 015	7 690
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
HEFLIN, AL													
31-33	Manufacturing	-	7	5	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
HOMEWOOD, AL													
31-33	Manufacturing	2	40	11	1 472	43 634	918	1 775	21 569	103 797	298 623	403 130	10 711
311	Food mfg	5	4	4	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	5	2	2	f	D	D	D	D	D	D	D	D
HUEYTOWN, AL													
31-33	Manufacturing	-	17	6	f	D	D	D	D	D	D	D	D
HUNTSVILLE, AL *													
31-33	Manufacturing	-	240	88	25 793	1 014 594	16 081	32 009	568 304	2 668 556	4 127 973	6 694 327	D
311	Food mfg	4	10	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	6	2 366	100 699	2 098	4 193	85 747	262 995	207 295	467 911	D
3261	Plastics product mfg	-	10	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	10	4	851	34 158	642	1 366	22 021	116 553	41 931	140 808	2 449
3272	Glass & glass product mfg .	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	3	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	13	1 991	57 415	1 562	3 081	38 386	122 074	85 492	207 243	19 036
3329	Other fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HUNTSVILLE, AL *— Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg	1	42	20	11 602	397 841	5 238	11 071	140 488	1 432 137	2 669 550	3 991 938	74 176
3341	Computer & peripheral equipment mfg	—	10	4	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	10	4	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	5	3	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	6	3	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	5	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	5	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	16	7	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	16	7	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	4	2	2	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	8	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	4	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	9	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	9	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	9	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	—	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	9	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	6	4	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	2	2	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	2	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	4	g	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	—	2	2	g	D	D	D	D	D	D	D	D
	IRONDALE, AL												
31-33	Manufacturing	2	25	9	529	16 329	394	635	10 455	50 120	53 357	102 767	3 190
	JACKSON, AL												
31-33	Manufacturing	—	8	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JASPER, AL													
31-33	Manufacturing	3	32	11	1 243	21 381	1 035	2 158	14 145	57 480	151 170	206 608	4 919
311	Food mfg.....	-	3	2	500	5 808	457	970	3 704	23 936	48 160	71 996	1 075
LAFAYETTE, AL													
31-33	Manufacturing	1	6	6	756	13 097	703	1 201	11 256	29 803	81 565	111 600	D
LANETT, AL													
31-33	Manufacturing	-	8	3	946	26 345	868	1 480	22 678	56 964	92 696	148 493	D
313	Textile mills.....	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
LEEDS, AL *													
31-33	Manufacturing	-	36	12	1 568	49 839	1 082	1 918	28 539	112 426	95 753	212 375	7 677
MADISON, AL *													
31-33	Manufacturing	-	28	11	g	D	D	D	D	D	D	D	D
MOBILE, AL													
31-33	Manufacturing	1	213	66	11 631	444 996	8 713	19 344	306 988	968 844	925 714	1 907 393	133 635
321	Wood product mfg.....	-	13	6	747	19 564	565	1 190	10 140	68 373	72 403	140 455	5 404
322	Paper mfg.....	-	5	5	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	3	3	h	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	29	8	781	21 622	629	1 220	14 302	45 052	42 157	87 049	2 043
336	Transportation equipment mfg.....	-	17	10	h	D	D	D	D	D	D	D	30 181
3364	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	11	5	g	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	-	11	5	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	-	9	5	g	D	D	D	D	D	D	D	D
MONROEVILLE, AL													
31-33	Manufacturing	5	14	8	3 421	100 969	2 659	5 540	68 057	183 387	236 997	426 003	29 071
314	Textile product mills.....	9	1	1	g	D	D	D	D	D	D	D	D
3149	Other textile product mills..	9	1	1	g	D	D	D	D	D	D	D	D
31499	All other textile product mills.....	9	1	1	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills..	9	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	7	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	7	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	7	3	3	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	7	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTGOMERY, AL													
31-33	Manufacturing	-	190	74	10 312	268 965	7 234	13 893	165 047	901 160	893 691	1 798 704	D
311	Food mfg	-	16	13	1 926	40 557	1 107	2 094	20 948	177 544	193 186	371 427	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	4	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	17	9	552	11 771	456	844	7 703	22 199	50 453	74 234	D
326	Plastics & rubber products mfg	-	7	5	716	15 777	635	1 330	12 959	54 906	73 525	127 247	D
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	11	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	14	8	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	7	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	5	646	22 115	401	738	11 026	40 414	54 128	93 029	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
MUSCLE SHOALS, AL													
31-33	Manufacturing	-	29	8	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	1	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
ONEONTA, AL													
31-33	Manufacturing	-	14	4	1 018	16 907	973	1 544	15 406	104 566	96 621	201 959	1 806
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
OPELIKA, AL													
31-33	Manufacturing	1	46	24	5 075	155 288	4 262	7 935	120 510	502 652	438 193	929 647	32 932
313	Textile mills	-	5	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	2	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OPP, AL													
31-33	Manufacturing	-	9	5	1 874	36 021	1 619	3 292	28 041	79 986	53 142	135 266	D
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
OXFORD, AL *													
31-33	Manufacturing	-	19	6	1 052	24 460	689	1 411	14 060	56 671	79 494	137 726	2 737
OZARK, AL													
31-33	Manufacturing	-	8	3	721	12 389	496	839	6 996	16 956	13 033	30 374	622
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
PELHAM, AL													
31-33	Manufacturing	1	44	19	1 446	38 727	1 080	2 237	23 393	80 754	99 643	179 104	9 754
332	Fabricated metal product mfg	-	13	7	637	15 833	488	1 000	9 688	34 327	55 042	87 309	5 278
PELL CITY, AL													
31-33	Manufacturing	1	30	13	1 187	33 092	956	1 914	21 503	74 879	105 575	187 438	4 885
PHENIX CITY, AL *													
31-33	Manufacturing	-	34	14	2 566	91 582	2 128	4 828	68 458	477 147	389 652	864 189	86 167
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	3	3	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
PIEDMONT, AL *													
31-33	Manufacturing	-	10	9	g	D	D	D	D	D	D	D	1 970
314	Textile product mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
PRATTVILLE, AL *													
31-33	Manufacturing	3	28	11	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PRICHARD, AL													
31-33	Manufacturing	-	22	7	1 038	40 204	778	1 505	29 656	129 060	202 253	340 056	D
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
RED BAY, AL													
31-33	Manufacturing	-	11	5	1 382	32 911	1 166	2 094	24 634	55 919	154 156	215 596	1 940
ROANOKE, AL													
31-33	Manufacturing	2	14	6	1 408	24 796	1 161	2 125	20 784	54 661	78 795	134 910	1 773
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
RUSSELLVILLE, AL													
31-33	Manufacturing	-	20	9	1 085	23 069	896	1 606	16 585	49 104	136 726	185 835	3 277
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
SCOTTSBORO, AL													
31-33	Manufacturing	1	34	12	3 819	101 347	3 025	6 263	68 581	307 570	462 322	763 938	D
314	Textile product mills	3	3	3	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	6	2	2	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	6	2	2	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	6	2	2	g	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
SELMA, AL													
31-33	Manufacturing	1	31	19	4 615	121 658	3 630	7 501	80 683	405 078	527 148	927 596	35 259
311	Food mfg	6	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SYLACAUGA, AL													
31-33	Manufacturing	-	24	10	1 611	35 567	1 376	2 330	26 159	104 960	242 195	346 136	15 975
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
TALLADEGA, AL													
31-33	Manufacturing	1	31	15	1 797	42 614	1 470	3 048	31 316	91 562	111 010	202 070	6 574
TALLASSEE, AL *													
31-33	Manufacturing	1	11	6	1 847	44 488	1 375	2 137	22 827	111 944	81 663	194 039	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	-	1	1	f	D	D	D	D	D	D	D	D
TARRANT, AL													
31-33	Manufacturing	-	28	11	973	31 272	708	1 397	20 073	92 728	121 840	212 518	10 750
TROY, AL													
31-33	Manufacturing	-	25	14	1 677	37 683	1 384	2 790	28 438	119 304	190 531	312 214	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
TRUSSVILLE, AL *													
31-33	Manufacturing	-	24	11	1 803	44 349	1 371	2 859	26 452	74 993	163 068	241 024	4 335
311	Food mfg	-	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
TUSCALOOSA, AL													
31-33	Manufacturing	1	89	33	6 020	179 073	4 763	9 994	124 032	415 687	633 721	1 058 889	198 133
311	Food mfg	-	7	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TUSCUMBIA, AL													
31-33	Manufacturing	2	23	9	948	25 350	777	1 526	13 748	31 444	41 373	75 466	2 796
326	Plastics & rubber products mfg	-	5	3	527	16 718	410	787	7 114	16 263	19 151	39 345	D
UNION SPRINGS, AL													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
VALLEY, AL													
31-33	Manufacturing	1	13	9	g	D	D	D	D	D	D	D	D
313	Textile mills	1	6	6	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	4	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	4	4	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	4	4	g	D	D	D	D	D	D	D	D
WINFIELD, AL *													
31-33	Manufacturing	-	6	4	1 211	34 218	799	1 828	19 885	43 320	141 648	186 451	3 417
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	3 372
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
ALABAMA		ALABAMA—Con.	
Companies ¹ number..	4 912	Quantity of electricity purchased for heat and power 1,000 kWh..	26 319 826
		Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	5 117 721
All establishments number..	5 444	Total value of shipments \$1,000..	67 970 076
Establishments with 1 to 19 employees number..	3 355	Value of resales \$1,000..	1 544 616
Establishments with 20 to 99 employees number..	1 317	Value added \$1,000..	29 221 522
Establishments with 100 employees or more number..	772	Total inventories, beginning of year \$1,000..	7 097 322
All employees number..	352 618	Finished goods inventories, beginning of year \$1,000..	2 590 033
Total compensation ² \$1,000..	12 856 384	Work-in-process inventories, beginning of year \$1,000..	2 000 857
Annual payroll \$1,000..	10 187 756	Materials and supplies inventories, beginning of year \$1,000..	2 506 432
Total fringe benefits \$1,000..	2 668 628	Total inventories, end of year \$1,000..	7 248 703
Production workers, average for year number..	275 637	Finished goods inventories, end of year \$1,000..	2 660 789
Production workers on March 12 number..	274 881	Work-in-process inventories, end of year \$1,000..	1 911 006
Production workers on May 12 number..	275 676	Materials and supplies inventories, end of year \$1,000..	2 676 908
Production workers on August 12 number..	274 733	Gross book value of total assets at beginning of year \$1,000..	34 738 247
Production workers on November 12 number..	277 258	Total capital expenditures (new and used) \$1,000..	3 058 564
Production-worker hours 1,000..	545 980	Capital expenditures for buildings and other structures (new and used) \$1,000..	437 566
Production-worker wages \$1,000..	6 928 393	Capital expenditures for machinery and equipment (new and used) \$1,000..	2 620 998
Total cost of materials \$1,000..	38 723 397	Total retirements ² \$1,000..	638 514
Cost of materials, parts, containers, etc., consumed \$1,000..	34 854 253	Gross book value of total assets at end of year \$1,000..	37 158 297
Cost of resales \$1,000..	1 256 422	Total depreciation during year ² \$1,000..	2 161 692
Cost of fuels \$1,000..	807 272	Total rental payments ² \$1,000..	520 498
Cost of purchased electricity \$1,000..	1 023 980	Buildings and other structures rental payments ² \$1,000..	286 382
Cost of contract work \$1,000..	781 470	Machinery and equipment rental payments ² \$1,000..	234 116

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

ALABAMA

Arab is in Cullman and Marshall Counties.

Birmingham is in Jefferson and Shelby Counties.

Boaz is in Etowah and Marshall Counties.

Childersburg is in Shelby and Talladega Counties.

Decatur is in Limestone and Morgan Counties.

Dothan is in Dale, Henry, and Houston Counties.

Enterprise is in Coffee and Dale Counties.

Glencoe is in Calhoun and Etowah Counties.

Haleyville is in Marion and Winston Counties.

Hoover is in Jefferson and Shelby Counties.

Huntsville is in Limestone and Madison Counties.

Leeds is in Jefferson, St. Clair, and Shelby Counties.

Madison is in Limestone and Madison Counties.

Oxford is in Calhoun and Talladega Counties.

Phenix City is in Lee and Russell Counties.

Piedmont is in Calhoun and Cherokee Counties.

Prattville is in Autauga and Elmore Counties.

Southside is in Calhoun and Etowah Counties.

Spanish Fort was incorporated in July 1993.

Sumiton is in Jefferson and Walker Counties.

Tallassee is in Elmore and Tallapoosa Counties.

Trussville is in Jefferson and St. Clair Counties; it annexed into St. Clair County in May 1992.

Vestavia Hills is in Jefferson and Shelby Counties.

Winfield is in Fayette and Marion Counties.

Appendix E. Metropolitan Areas

ALABAMA

Anniston, AL MSA

Calhoun County, AL

Birmingham, AL MSA

Blount County, AL

Jefferson County, AL

St. Clair County, AL

Shelby County, AL

Columbus, GA—AL MSA

Russell County, AL

Chattahoochee County, GA

Harris County, GA

Muscogee County, GA

Decatur, AL MSA

Lawrence County, AL

Morgan County, AL

Dothan, AL MSA

Dale County, AL

Houston County, AL

Florence, AL MSA

Colbert County, AL

Lauderdale County, AL

Gadsden, AL MSA

Etowah County, AL

Huntsville, AL MSA

Limestone County, AL

Mobile, AL MSA

Baldwin County, AL

Mobile County, AL

Montgomery, AL MSA

Autauga County, AL

Elmore County, AL

Montgomery County, AL

Tuscaloosa, AL MSA

Tuscaloosa County, AL

Arkansas

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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
ARKANSAS													
31-33	Manufacturing	-	3 316	1 248	230 153	5 778 437	187 493	369 134	4 192 705	19 346 813	25 868 348	45 185 963	1 492 968
311	Food mfg	-	280	146	50 627	981 435	43 870	86 852	795 352	3 604 598	7 073 049	10 656 622	222 865
3111	Animal food mfg	-	49	19	1 108	29 420	734	1 416	17 777	133 357	1 179 415	1 312 789	19 275
31111	Animal food mfg	-	49	19	1 108	29 420	734	1 416	17 777	133 357	1 179 415	1 312 789	19 275
311119	Other animal food mfg	-	45	19	1 085	28 757	715	1 377	17 279	130 172	1 174 741	1 304 832	19 066
3112	Grain & oilseed milling	1	27	15	2 251	59 208	1 788	3 534	41 072	147 414	1 396 083	1 541 032	28 978
31121	Flour milling & malt mfg	2	20	8	1 450	36 819	1 174	2 257	26 531	97 159	684 677	759 806	15 651
311212	Rice milling	2	14	8	1 400	35 935	1 136	2 212	25 899	92 726	669 928	740 571	15 357
31122	Starch & vegetable fats & oils mfg	-	7	7	801	22 389	614	1 277	14 541	50 255	711 406	781 226	13 327
311222	Soybean processing	-	3	3	e	D	D	D	D	D	D	D	D
311223	Other oilseed processing	-	2	2	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	1	1	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	20	16	4 493	98 388	3 932	7 174	81 586	613 377	557 891	1 171 828	41 107
31141	Frozen food mfg	-	8	6	2 790	58 943	2 548	4 114	49 033	329 816	310 217	640 541	23 471
311411	Frozen fruit, juice, & vegetable mfg	-	3	2	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	5	4	h	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	3	12	10	1 703	39 445	1 384	3 060	32 553	283 561	247 674	531 287	17 636
311421	Fruit & vegetable canning	9	8	6	787	14 518	680	1 486	12 519	72 978	82 655	155 784	3 529
311422	Specialty canning	-	4	4	916	24 927	704	1 574	20 034	210 583	165 019	375 503	14 107
3115	Dairy product mfg	-	15	7	844	22 874	453	718	8 586	90 069	166 714	257 400	4 103
31151	Dairy product (except frozen) mfg	-	11	4	512	15 180	367	558	6 422	64 063	142 884	206 681	3 075
311511	Fluid milk mfg	-	5	3	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	1	4	3	332	7 694	86	160	2 164	26 006	23 830	50 719	1 028
311520	Ice cream & frozen dessert mfg	1	4	3	332	7 694	86	160	2 164	26 006	23 830	50 719	1 028
3116	Meat product mfg	-	78	56	35 487	646 612	31 494	64 814	552 562	2 198 752	3 289 154	5 467 194	102 141
31161	Animal slaughtering & processing	-	78	56	35 487	646 612	31 494	64 814	552 562	2 198 752	3 289 154	5 467 194	102 141
311611	Animal (except poultry) slaughtering	1	21	5	472	6 004	420	465	4 427	14 681	30 275	44 953	D
311612	Meat processed from carcasses	3	9	6	1 214	27 468	1 035	2 076	22 815	84 223	197 906	280 897	3 819
311613	Rendering & meat byproduct processing	-	5	3	392	11 245	307	500	7 708	83 663	90 773	173 253	D
311615	Poultry processing	-	43	42	33 409	601 895	29 732	61 773	517 612	2 016 185	2 970 200	4 968 091	92 906
3117	Seafood product preparation & packaging	-	6	3	595	8 243	550	968	7 041	18 099	48 334	66 433	265
31171	Seafood product preparation & packaging	-	6	3	595	8 243	550	968	7 041	18 099	48 334	66 433	265
311712	Fresh & frozen seafood processing	-	6	3	595	8 243	550	968	7 041	18 099	48 334	66 433	265
3118	Bakeries & tortilla mfg	1	62	17	2 551	56 316	1 888	3 389	35 298	151 141	146 932	298 396	16 426
31181	Bread & bakery product mfg	-	50	10	g	D	D	D	D	D	D	D	D
311811	Retail bakeries	7	34	1	143	1 797	105	111	913	3 514	2 095	5 618	216
311812	Commercial bakeries	-	14	7	1 203	28 683	739	1 522	15 977	75 526	50 612	126 272	5 308
311813	Frozen cakes, pies, & other pastries mfg	-	2	2	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	1	10	6	f	D	D	D	D	D	D	D	8 230
311821	Cookie & cracker mfg	4	4	4	315	7 050	240	388	4 758	25 968	20 207	46 321	D
311822	Flour mixes & dough mfg from purchased flour	-	5	2	205	6 613	187	392	3 953	27 562	46 766	74 265	D
31183	Tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	16	13	3 272	60 001	3 010	4 813	51 163	251 251	287 309	538 973	10 491
31191	Snack food mfg	-	3	3	578	17 365	484	920	12 750	180 214	240 203	420 701	6 582
311911	Roasted nuts & peanut butter mfg	-	2	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	c	D	D	D	D	D	D	D	D
31199	All other food mfg	3	8	7	2 612	41 072	2 451	3 763	37 220	63 622	39 124	102 874	3 709
311999	All other miscellaneous food mfg	3	7	6	h	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	20	11	876	25 480	421	889	10 769	270 043	421 264	691 163	18 564
3121	Beverage mfg	-	20	11	876	25 480	421	889	10 769	270 043	421 264	691 163	18 564
31211	Soft drink & ice mfg	-	16	9	f	D	D	D	D	D	D	D	16 912
312111	Soft drink mfg	-	7	7	f	D	D	D	D	D	D	D	16 148
31214	Distilleries	-	1	1	c	D	D	D	D	D	D	D	D
312140	Distilleries	-	1	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARKANSAS—Con.													
31-33	Manufacturing—Con.												
313	Textile mills	-	12	4	1 158	26 797	1 057	1 928	22 256	35 492	65 845	103 498	4 738
3132	Fabric mills	-	6	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	-	1	1	c	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	-	1	1	c	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	66	14	2 297	54 823	1 909	3 625	40 070	144 095	119 481	262 977	17 189
3141	Textile furnishings mills	-	32	4	1 146	23 728	1 024	1 819	17 827	45 552	43 159	86 320	D
31411	Carpet & rug mills	-	2	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	1	30	3	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	8	3	c	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	34	10	1 151	31 095	885	1 806	22 243	98 543	76 322	176 657	D
31491	Textile bag & canvas mills	5	17	3	209	3 297	159	213	2 031	6 112	5 459	11 796	D
314911	Textile bag mills	5	3	2	108	1 406	79	90	761	3 021	2 605	5 851	D
314912	Canvas & related product mills	5	14	1	101	1 891	80	123	1 270	3 091	2 854	5 945	224
31499	All other textile product mills	-	17	7	942	27 798	726	1 593	20 212	92 431	70 863	164 861	14 340
314992	Tire cord & tire fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	2	14	5	e	D	D	D	D	D	D	D	D
315	Apparel mfg	1	82	50	8 589	126 647	7 887	14 168	110 497	287 222	184 351	472 809	5 509
3151	Apparel knitting mills	-	4	2	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	3	1	e	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	3	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	60	41	6 963	98 072	6 377	11 004	86 388	215 139	119 123	332 967	3 976
31521	Cut & sew apparel contractors	8	22	15	2 238	29 071	2 085	3 635	25 725	49 350	4 828	54 147	881
315211	Men's & boys' cut & sew apparel contractors	8	14	13	1 778	23 731	1 645	2 843	21 498	47 377	3 477	50 845	813
315212	Women's, girls', & infants' cut & sew apparel contractors	1	8	2	460	5 340	440	792	4 227	1 973	1 351	3 302	68
31522	Men's & boys' cut & sew apparel mfg	-	25	21	4 345	64 176	3 972	6 798	56 936	155 784	108 584	263 078	2 795
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	4	3	803	8 879	707	971	7 069	21 591	17 693	38 699	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	9	9	2 500	41 167	2 373	4 266	38 784	112 660	74 565	187 056	1 777
315225	Men's & boys' cut & sew work clothing mfg	-	6	5	662	8 978	582	936	6 905	14 636	9 727	24 422	D
315228	Men's & boys' cut & sew other outerwear mfg	7	5	4	380	5 152	310	604	4 178	6 898	6 599	12 901	369
31523	Women's & girls' cut & sew apparel mfg	2	11	5	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	1	2	1	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	3	18	7	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	3	18	7	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	9	3	1	c	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	-	4	4	314	4 627	286	536	3 985	10 280	9 703	19 718	D
315999	Other apparel accessories & other apparel mfg	5	10	2	121	2 651	92	148	1 164	1 893	4 192	6 872	164
316	Leather & allied product mfg	1	28	17	3 128	46 158	2 842	4 495	33 429	94 649	88 191	184 592	899
3162	Footwear mfg	1	14	12	2 741	39 971	2 539	3 972	29 488	75 931	76 833	154 824	409
31621	Footwear mfg	1	14	12	2 741	39 971	2 539	3 972	29 488	75 931	76 833	154 824	409
316213	Men's footwear (except athletic) mfg	-	5	4	g	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	2	7	6	g	D	D	D	D	D	D	D	220
3169	Other leather & allied product mfg	-	11	4	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	11	4	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	-	7	2	210	3 958	166	259	2 287	13 579	8 478	21 866	260

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARKANSAS—Con.													
31-33	Manufacturing—Con.												
321	Wood product mfg	-	390	140	14 436	353 015	12 559	26 270	287 809	893 980	1 698 588	2 562 165	136 444
3211	Sawmills & wood preservation	-	175	63	6 099	156 522	5 400	11 798	129 608	487 995	972 089	1 438 483	88 703
32111	Sawmills & wood preservation	-	175	63	6 099	156 522	5 400	11 798	129 608	487 995	972 089	1 438 483	88 703
321113	Sawmills	-	164	55	5 521	143 722	4 902	10 870	120 047	437 403	810 630	1 229 150	84 516
321114	Wood preservation	-	11	8	578	12 800	498	928	9 561	50 592	161 459	209 333	4 187
3212	Veneer, plywood, & engineered wood product mfg	-	42	23	3 832	114 670	3 336	7 587	96 452	233 122	507 451	737 902	35 469
32121	Veneer, plywood, & engineered wood product mfg	-	42	23	3 832	114 670	3 336	7 587	96 452	233 122	507 451	737 902	35 469
321211	Hardwood veneer & plywood mfg	1	10	8	518	10 401	447	843	8 041	26 894	70 929	98 049	1 138
321212	Softwood veneer & plywood mfg	-	7	6	2 395	79 780	2 226	5 371	71 692	147 012	339 959	483 781	29 001
321213	Engineered wood member (except truss) mfg	-	2	2	c	D	D	D	D	D	D	D	D
321214	Truss mfg	1	18	4	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	5	3	452	13 883	338	737	10 077	36 883	65 767	103 107	4 082
3219	Other wood product mfg	2	173	54	4 505	81 823	3 823	6 885	61 749	172 863	219 048	385 780	12 272
32191	Millwork	2	74	27	2 535	45 193	2 170	3 973	34 801	105 900	132 543	232 811	8 095
321911	Wood window & door mfg	3	14	6	506	7 716	413	718	5 986	15 318	29 476	44 858	992
321912	Cut stock, resawing lumber, & planing	2	38	11	752	14 512	641	1 256	10 946	26 624	42 456	69 275	1 579
321918	Other millwork (including flooring)	2	22	10	1 277	22 965	1 116	1 999	17 869	63 958	60 611	118 678	5 524
32192	Wood container & pallet mfg	1	58	19	1 150	20 771	1 003	1 806	15 846	40 768	46 803	87 142	2 584
321920	Wood container & pallet mfg	1	58	19	1 150	20 771	1 003	1 806	15 846	40 768	46 803	87 142	2 584
32199	All other wood product mfg	1	41	8	820	15 859	650	1 106	11 102	26 195	39 702	65 827	1 593
321991	Manufactured home (mobile home) mfg	-	3	2	e	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	2	31	6	303	5 002	253	412	3 702	11 731	11 117	22 742	1 338
322	Paper mfg	-	85	63	13 026	495 841	10 644	22 643	377 154	1 770 290	1 967 612	3 735 035	238 007
3221	Pulp, paper, & paperboard mills	-	8	8	5 968	289 260	4 821	10 574	226 876	1 071 437	1 171 934	2 245 100	192 243
32212	Paper mills	-	5	5	3 739	182 925	3 118	6 917	145 222	599 226	729 843	1 324 940	D
322121	Paper (except newsprint) mills	-	5	5	3 739	182 925	3 118	6 917	145 222	599 226	729 843	1 324 940	D
32213	Paperboard mills	-	3	3	2 229	106 335	1 703	3 657	81 654	472 211	442 091	920 160	D
322130	Paperboard mills	-	3	3	2 229	106 335	1 703	3 657	81 654	472 211	442 091	920 160	D
3222	Converted paper product mfg	1	77	55	7 058	206 581	5 823	12 069	150 278	698 853	795 678	1 489 935	45 764
32221	Paperboard container mfg	-	48	32	3 688	110 524	2 975	6 238	77 647	341 784	415 558	748 952	20 537
322211	Corrugated & solid fiber box mfg	-	32	22	2 401	71 098	1 856	3 816	46 302	203 197	285 835	487 393	9 220
322212	Folding paperboard box mfg	-	8	6	737	22 717	641	1 498	18 011	58 496	66 312	123 053	8 993
322214	Fiber can, tube, drum, & similar products mfg	-	5	2	c	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	1	1	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	1	17	14	2 224	60 826	1 883	3 960	45 220	149 868	211 403	361 603	9 950
322224	Uncoated paper & multiwall bag mfg	1	14	13	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg	-	6	4	149	2 466	118	173	1 604	3 831	3 926	7 800	79
322231	Die-cut paper & paperboard office supplies mfg	-	4	3	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	6	5	997	32 765	847	1 698	25 807	203 370	164 791	371 580	15 198
322291	Sanitary paper product mfg	2	3	3	918	31 452	782	1 631	24 950	201 894	160 145	365 445	14 798

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARKANSAS—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	287	50	4 841	131 260	3 596	6 635	85 360	325 860	209 318	529 956	34 490
3231	Printing & related support activities.....	1	287	50	4 841	131 260	3 596	6 635	85 360	325 860	209 318	529 956	34 490
32311	Printing	1	270	48	4 596	123 989	3 413	6 327	80 612	308 681	204 718	508 204	33 265
323110	Commercial lithographic printing ..	1	129	32	2 660	72 076	1 991	3 754	45 526	169 848	128 189	292 918	23 806
323112	Commercial flexographic printing .	2	5	3	492	17 931	354	803	12 362	33 281	20 598	53 844	2 988
323113	Commercial screen printing	3	35	1	197	3 772	134	207	1 920	8 595	5 955	14 705	389
323114	Quick printing	4	55	1	272	4 873	202	257	3 067	8 674	5 289	13 951	594
323116	Manifold business form printing	—	9	5	571	18 135	449	862	13 363	72 516	35 245	107 549	2 966
323119	Other commercial printing	7	28	5	323	5 377	224	348	3 281	12 420	6 854	19 293	1 749
32312	Support activities for printing	—	17	2	245	7 271	183	308	4 748	17 179	4 600	21 752	1 225
323122	Prepress services	—	13	2	223	6 840	162	266	4 343	16 242	4 359	20 573	D
324	Petroleum & coal products mfg	—	27	16	1 257	41 970	728	1 428	20 696	343 757	884 510	1 246 180	7 738
3241	Petroleum & coal products mfg	—	27	16	1 257	41 970	728	1 428	20 696	343 757	884 510	1 246 180	7 738
32411	Petroleum refineries	—	3	3	544	23 203	190	349	8 351	219 910	675 382	912 940	D
324110	Petroleum refineries ..	—	3	3	544	23 203	190	349	8 351	219 910	675 382	912 940	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	17	9	463	14 186	347	740	9 196	69 633	97 647	167 721	4 481
324121	Asphalt paving mixture & block mfg	—	12	4	169	5 112	125	266	3 385	14 175	29 577	43 602	D
324122	Asphalt shingle & coating materials mfg	—	5	5	294	9 074	222	474	5 811	55 458	68 070	124 119	D
32419	Other petroleum & coal products mfg	1	7	4	250	4 581	191	339	3 149	54 214	111 481	165 519	D
324191	Petroleum lubricating oil & grease mfg	1	7	4	250	4 581	191	339	3 149	54 214	111 481	165 519	D
325	Chemical mfg	1	118	44	7 320	273 761	4 897	9 930	161 611	1 731 969	1 317 400	3 014 019	213 520
3251	Basic chemical mfg	—	31	11	2 594	116 523	1 772	3 986	74 487	642 491	548 117	1 164 595	141 482
32518	Other basic inorganic chemical mfg	—	10	4	216	8 082	146	366	4 901	40 022	39 563	79 776	D
325188	All other basic inorganic chemical mfg	—	9	3	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	15	6	2 314	106 411	1 604	3 576	68 609	579 454	497 250	1 050 581	98 041
325199	All other basic organic chemical mfg	—	7	5	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	6	4	c	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	3	5	4	232	7 917	144	285	4 478	61 167	96 826	157 971	4 146
325211	Plastics material & resin mfg	3	5	4	232	7 917	144	285	4 478	61 167	96 826	157 971	4 146
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	1	17	8	807	25 939	488	1 043	15 291	428 351	231 384	660 559	13 296
32531	Fertilizer mfg	—	12	4	364	15 180	239	589	9 557	96 707	102 978	200 873	8 521
325311	Nitrogenous fertilizer mfg	—	5	3	287	13 393	181	453	8 532	88 505	88 281	178 090	8 165
32532	Pesticide & other agricultural chemical mfg	2	5	4	443	10 759	249	454	5 734	331 644	128 406	459 686	4 775
325320	Pesticide & other agricultural chemical mfg	2	5	4	443	10 759	249	454	5 734	331 644	128 406	459 686	4 775
3254	Pharmaceutical & medicine mfg	6	8	4	c	D	D	D	D	D	D	D	1 632
32541	Pharmaceutical & medicine mfg	6	8	4	c	D	D	D	D	D	D	D	1 632
3255	Paint, coating, & adhesive mfg	—	10	5	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	4	669	22 600	274	515	6 505	136 933	40 124	168 165	2 764
325510	Paint & coating mfg	—	8	4	669	22 600	274	515	6 505	136 933	40 124	168 165	2 764
3256	Soap, cleaning compound, & toilet preparation mfg .	—	19	5	1 904	63 374	1 512	2 744	42 266	333 274	233 771	569 156	37 710
32562	Toilet preparation mfg ..	—	9	3	1 810	61 175	1 460	2 655	41 149	325 765	227 421	554 993	37 107
325620	Toilet preparation mfg .	—	9	3	1 810	61 175	1 460	2 655	41 149	325 765	227 421	554 993	37 107

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ARKANSAS—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	1	27	7	868	28 148	565	1 062	13 635	94 850	143 950	234 799	12 339
32591	Printing ink mfg	2	5	1	c	D	D	D	D	D	D	D	D
325910	Printing ink mfg	2	5	1	c	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	3	3	e	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	3	3	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	19	3	442	14 544	271	536	6 585	50 092	95 738	144 753	10 153
325998	All other miscellaneous chemical product & preparation mfg	1	11	3	389	13 417	234	486	5 912	46 486	90 141	135 516	9 889
326	Plastics & rubber products mfg	—	183	102	14 469	400 055	11 513	22 072	286 382	1 212 587	1 276 442	2 487 128	94 803
3261	Plastics product mfg	—	137	79	8 823	207 568	7 123	13 643	145 748	635 632	735 917	1 371 606	57 608
32611	Unsupported plastics film, sheet, & bag mfg ..	—	9	7	1 528	42 123	1 314	2 440	34 974	162 836	203 944	369 874	7 790
326111	Unsupported plastics bag mfg	—	2	2	f	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	5	2	2	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	5	3	403	7 667	300	493	5 690	34 414	48 749	85 877	1 258
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	10	6	532	12 480	413	867	8 354	46 345	128 103	173 942	4 384
326121	Unsupported plastics profile shape mfg	—	4	1	c	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	1	6	5	e	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	1	11	7	615	13 949	478	955	10 049	47 748	45 894	93 803	6 557
326140	Polystyrene foam product mfg	1	11	7	615	13 949	478	955	10 049	47 748	45 894	93 803	6 557
32615	Urethane & other foam product (except polystyrene) mfg	—	11	6	576	12 355	452	726	7 613	26 012	41 060	66 026	2 750
326150	Urethane & other foam product (except polystyrene) mfg	—	11	6	576	12 355	452	726	7 613	26 012	41 060	66 026	2 750
32619	Other plastics product mfg	—	91	52	5 514	125 068	4 424	8 585	83 732	347 939	311 401	657 827	35 966
326191	Plastics plumbing fixture mfg	—	11	3	247	5 818	155	307	2 908	9 407	14 053	23 447	346
326199	All other plastics product mfg	—	80	49	5 267	119 250	4 269	8 278	80 824	338 532	297 348	634 380	35 620
3262	Rubber product mfg	—	46	23	5 646	192 487	4 390	8 429	140 634	576 955	540 525	1 115 522	37 195
32621	Tire mfg	—	22	7	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	3	3	2 248	99 009	1 713	3 175	70 937	226 612	205 665	429 768	D
326212	Tire retreading	1	19	4	c	D	D	D	D	D	D	D	508
32622	Rubber & plastics hoses & belting mfg	—	2	2	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	22	14	2 219	60 947	1 755	3 338	43 821	178 270	250 636	433 446	10 974
326291	Rubber product mfg for mechanical use	—	11	7	1 004	25 278	813	1 518	18 521	69 108	48 977	117 046	7 915
326299	All other rubber product mfg	1	11	7	1 215	35 669	942	1 820	25 300	109 162	201 659	316 400	3 059
327	Nonmetallic mineral product mfg	—	213	60	4 523	120 436	3 491	6 943	85 504	392 599	335 835	729 852	36 878
3271	Clay product & refractory mfg	1	24	9	630	13 556	500	1 005	9 534	37 275	15 242	51 093	1 828
32711	Pottery, ceramics, & plumbing fixture mfg ...	8	15	1	123	1 721	96	133	1 169	3 924	1 404	5 298	251
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	8	15	1	123	1 721	96	133	1 169	3 924	1 404	5 298	251
32712	Clay building material & refractories mfg	—	9	8	507	11 835	404	872	8 365	33 351	13 838	45 795	1 577
327121	Brick & structural clay tile mfg	—	8	7	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	1	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARKANSAS—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3272	Glass & glass product mfg.	—	18	7	765	19 026	633	1 440	14 884	41 509	25 894	67 475	3 958
32721	Glass & glass product mfg	—	18	7	765	19 026	633	1 440	14 884	41 509	25 894	67 475	3 958
327212	Other pressed & blown glass & glassware mfg	2	8	4	e	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	9	2	202	4 880	150	416	3 597	8 982	13 373	22 220	898
3273	Cement & concrete product mfg	1	137	34	2 210	58 703	1 640	3 058	40 431	166 173	162 994	330 851	23 158
32731	Cement mfg	—	2	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	—	77	17	1 091	27 741	852	1 536	19 846	69 099	85 490	154 771	13 215
327320	Ready-mix concrete mfg	—	77	17	1 091	27 741	852	1 536	19 846	69 099	85 490	154 771	13 215
32733	Concrete pipe, brick, & block mfg	1	26	9	e	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg	3	21	5	323	7 113	203	398	4 331	15 532	15 187	30 329	1 873
327332	Concrete pipe mfg	—	5	4	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	32	7	471	10 923	330	554	6 641	24 272	35 636	59 360	3 494
327390	Other concrete product mfg	1	32	7	471	10 923	330	554	6 641	24 272	35 636	59 360	3 494
3274	Lime & gypsum product mfg	—	3	3	456	14 959	362	769	11 580	79 821	74 269	155 884	3 361
32741	Lime mfg	—	1	1	c	D	D	D	D	D	D	D	D
327410	Lime mfg	—	1	1	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	2	2	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	31	7	462	14 192	356	671	9 075	67 821	57 436	124 549	4 573
32799	All other nonmetallic mineral product mfg	—	28	6	409	13 294	314	620	8 432	64 793	55 341	119 380	4 393
327992	Ground or treated mineral & earth mfg	—	6	3	219	8 356	167	382	5 141	42 292	36 662	77 886	3 777
331	Primary metal mfg	—	49	41	8 718	320 543	7 231	15 431	250 776	1 374 177	2 283 024	3 671 440	116 367
3311	Iron & steel mills & ferroalloy mfg	—	7	6	1 907	113 898	1 547	3 680	94 216	774 906	1 109 282	1 900 084	70 182
33111	Iron & steel mills & ferroalloy mfg	—	7	6	1 907	113 898	1 547	3 680	94 216	774 906	1 109 282	1 900 084	70 182
331111	Iron & steel mills	—	6	5	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	9	8	2 100	64 068	1 745	3 791	45 733	207 639	272 671	478 782	12 857
33121	Iron & steel pipes & tubes mfg from purchased steel	—	6	5	1 574	44 692	1 287	2 810	30 922	141 499	202 359	339 878	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	6	5	1 574	44 692	1 287	2 810	30 922	141 499	202 359	339 878	D
33122	Rolling & drawing of purchased steel	—	3	3	526	19 376	458	981	14 811	66 140	70 312	138 904	D
331222	Steel wire drawing	—	3	3	526	19 376	458	981	14 811	66 140	70 312	138 904	D
3313	Alumina & aluminum production & processing	—	8	8	1 327	50 788	1 032	2 126	36 106	137 334	483 028	627 166	12 539
33131	Alumina & aluminum production & processing	—	8	8	1 327	50 788	1 032	2 126	36 106	137 334	483 028	627 166	12 539
331311	Alumina refining	—	1	1	e	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum	—	3	3	272	9 216	207	434	5 580	31 962	118 951	149 081	D
331315	Aluminum sheet, plate, & foil mfg	—	2	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	4	1 754	44 777	1 505	3 172	35 791	97 438	266 175	365 547	7 385
33142	Copper rolling, drawing, extruding, & alloying	—	3	3	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	2	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	2	1	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ARKANSAS—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	—	20	15	1 630	47 012	1 402	2 662	38 930	156 860	151 868	299 861	13 404
33151	Ferrous metal foundries ..	2	8	4	274	6 827	235	445	4 742	17 415	8 897	26 371	561
331511	Iron foundries	2	6	4	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	12	11	1 356	40 185	1 167	2 217	34 188	139 445	142 971	273 490	12 843
331521	Aluminum die-casting foundries	—	4	4	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	4	3	e	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting) ..	—	3	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	498	144	22 651	621 957	17 968	36 093	423 098	1 704 445	1 529 424	3 204 627	93 409
3321	Forging & stamping	—	19	6	1 104	31 695	952	2 054	25 828	91 015	69 945	159 867	5 461
33211	Forging & stamping	—	19	6	1 104	31 695	952	2 054	25 828	91 015	69 945	159 867	5 461
332111	Iron & steel forging	—	3	2	c	D	D	D	D	D	D	D	D
332116	Metal stamping	—	8	2	715	21 034	629	1 320	17 696	61 007	49 583	109 808	3 181
332117	Powder metallurgy part mfg	—	3	1	176	4 788	151	344	3 709	12 396	5 586	17 957	D
3322	Cutlery & handtool mfg	—	19	9	2 032	46 939	1 804	3 695	38 101	114 222	90 641	207 163	6 766
33221	Cutlery & handtool mfg ..	—	19	9	2 032	46 939	1 804	3 695	38 101	114 222	90 641	207 163	6 766
332211	Cutlery & flatware (except precious) mfg	1	7	2	c	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	—	10	6	1 342	32 826	1 184	2 293	26 460	85 131	51 004	138 341	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	123	43	4 740	138 445	3 310	6 523	77 251	357 833	412 464	773 307	12 246
33231	Plate work & fabricated structural product mfg ..	—	51	18	2 111	64 400	1 428	2 586	33 501	165 329	205 596	375 207	5 476
332311	Prefabricated metal building & component mfg	—	11	4	473	15 372	276	556	7 809	36 361	47 299	83 318	1 383
332312	Fabricated structural metal mfg	—	33	13	1 548	46 184	1 088	1 928	23 941	125 850	154 277	284 879	3 429
33232	Ornamental & architectural metal products mfg	—	72	25	2 629	74 045	1 882	3 937	43 750	192 504	206 868	398 100	6 770
332321	Metal window & door mfg	—	25	10	1 752	47 926	1 231	2 692	29 074	123 466	151 871	273 411	4 208
332322	Sheet metal work mfg ..	1	33	11	705	22 655	540	1 045	12 587	62 163	48 138	111 005	2 131
332323	Ornamental & architectural metal work mfg	—	14	4	172	3 464	111	200	2 089	6 875	6 859	13 684	431
3324	Boiler, tank, & shipping container mfg	—	19	11	1 232	37 235	977	1 881	25 536	85 222	118 641	203 047	D
33241	Power boiler & heat exchanger mfg	—	6	3	392	13 072	307	575	9 190	24 772	19 675	45 927	1 260
332410	Power boiler & heat exchanger mfg	—	6	3	392	13 072	307	575	9 190	24 772	19 675	45 927	1 260
33242	Metal tank (heavy gauge) mfg	1	8	5	420	10 611	331	607	6 510	26 183	25 410	51 451	883
332420	Metal tank (heavy gauge) mfg	1	8	5	420	10 611	331	607	6 510	26 183	25 410	51 451	883
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	3	420	13 552	339	699	9 836	34 267	73 556	105 669	D
332431	Metal can mfg	—	2	1	e	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	3	2	c	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	7	3	615	17 125	468	881	9 429	49 523	30 390	80 889	D
33251	Hardware mfg	—	7	3	615	17 125	468	881	9 429	49 523	30 390	80 889	D
332510	Hardware mfg	—	7	3	615	17 125	468	881	9 429	49 523	30 390	80 889	D
3326	Spring & wire product mfg ..	—	17	10	1 148	25 413	986	2 189	19 985	52 390	66 412	115 622	2 872
33261	Spring & wire product mfg	—	17	10	1 148	25 413	986	2 189	19 985	52 390	66 412	115 622	2 872
332618	Other fabricated wire product mfg	—	16	10	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	198	25	2 167	58 059	1 677	3 139	40 594	103 171	76 855	180 022	12 015
33271	Machine shops	2	176	18	1 442	36 387	1 144	1 960	25 340	66 869	31 927	99 127	9 464
332710	Machine shops	2	176	18	1 442	36 387	1 144	1 960	25 340	66 869	31 927	99 127	9 464
33272	Turned product & screw, nut, & bolt mfg	2	22	7	725	21 672	533	1 179	15 254	36 302	44 928	80 895	2 551
332721	Precision turned product mfg	5	14	3	312	8 669	222	462	6 117	17 619	11 215	28 338	1 265
332722	Bolt, nut, screw, rivet, & washer mfg	—	8	4	413	13 003	311	717	9 137	18 683	33 713	52 557	1 286

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ARKANSAS—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	2	31	7	731	16 273	607	1 161	12 162	35 489	19 963	56 117	2 942
33281	Coating, engraving, heat treating, & allied activities	2	31	7	731	16 273	607	1 161	12 162	35 489	19 963	56 117	2 942
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	4	16	4	e	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	13	2	418	9 060	366	733	7 307	18 430	12 398	31 439	1 810
3329	Other fabricated metal product mfg	—	65	30	8 882	250 773	7 187	14 570	174 212	815 580	644 113	1 428 593	45 045
33291	Metal valve mfg	—	11	9	3 515	101 162	2 914	6 018	74 657	307 677	245 204	541 776	21 684
332911	Industrial valve mfg	—	5	5	2 236	59 787	1 879	3 835	44 985	171 893	107 644	270 362	13 273
332912	Fluid power valve & hose fitting mfg	—	3	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	54	21	5 367	149 611	4 273	8 552	99 555	507 903	398 909	886 817	23 361
332992	Small arms ammunition mfg	—	2	1	f	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	3	1	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	14	9	934	24 987	715	1 435	16 337	90 646	65 637	154 270	6 437
332998	Enameled iron & metal sanitary ware mfg	—	2	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	25	8	1 397	38 864	1 081	1 997	22 615	67 597	59 256	125 763	4 974
333	Machinery mfg	—	254	93	17 056	449 633	12 992	24 176	285 930	1 431 901	1 651 310	3 065 460	68 794
3331	Agriculture, construction, & mining machinery mfg	—	34	16	2 694	49 575	2 325	3 778	36 273	202 291	354 634	556 506	8 010
33311	Agricultural implement mfg	—	29	13	2 417	41 399	2 136	3 378	31 967	183 282	341 411	524 592	7 128
333111	Farm machinery & equipment mfg	1	27	11	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	4	2	c	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	4	2	c	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	1	1	c	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	1	27	9	764	22 375	436	811	11 308	74 026	40 081	113 379	1 578
33321	Sawmill & woodworking machinery mfg	—	7	3	430	11 937	219	436	5 420	56 582	21 960	76 815	880
333210	Sawmill & woodworking machinery mfg	—	7	3	430	11 937	219	436	5 420	56 582	21 960	76 815	880
33329	Other industrial machinery mfg	3	18	6	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	5	3	125	2 921	85	141	1 954	5 987	5 768	11 825	139
333298	All other industrial machinery mfg	5	7	3	140	5 462	92	159	2 815	7 987	7 383	15 791	376
3333	Commercial & service industry machinery mfg	—	26	12	1 897	51 162	1 151	2 261	25 808	218 027	300 785	513 680	8 375
33331	Commercial & service industry machinery mfg	—	26	12	1 897	51 162	1 151	2 261	25 808	218 027	300 785	513 680	8 375
333311	Automatic vending machine mfg	2	4	1	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	20	10	1 585	43 458	922	1 912	21 824	202 545	290 843	488 277	7 699

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ARKANSAS—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	22	12	4 699	135 158	3 652	6 755	91 175	365 923	471 448	834 978	16 494
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	22	12	4 699	135 158	3 652	6 755	91 175	365 923	471 448	834 978	16 494
333411	Air purification equipment mfg	—	3	1	c	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	—	5	3	206	5 665	150	263	3 506	8 306	13 570	22 088	527
333415	AC & warm air heating & commercial/ industrial refriger equip mfg	—	12	8	4 346	125 469	3 374	6 239	84 787	353 756	455 784	807 517	15 940
3335	Metalworking machinery mfg	1	82	13	1 970	54 459	1 479	2 449	32 681	113 809	68 151	176 814	11 185
33351	Metalworking machinery mfg	1	82	13	1 970	54 459	1 479	2 449	32 681	113 809	68 151	176 814	11 185
333511	Industrial mold mfg	3	20	2	241	6 836	188	395	4 737	11 660	6 489	17 579	D
333514	Special die & tool, die set, jig, & fixture mfg	3	45	5	375	11 569	272	508	7 401	20 045	7 977	27 885	1 842
333515	Cutting tool & machine tool accessory mfg	—	11	4	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	1	7	4	434	11 301	368	802	7 434	18 807	44 139	63 003	5 598
33361	Engine, turbine, & power transmission equipment mfg	1	7	4	434	11 301	368	802	7 434	18 807	44 139	63 003	5 598
333613	Mechanical power transmission equipment mfg	2	3	1	130	3 059	111	235	2 160	7 444	4 382	11 912	D
333618	Other engine equipment mfg	1	4	3	304	8 242	257	567	5 274	11 363	39 757	51 091	D
3339	Other general-purpose machinery mfg	—	56	27	4 598	125 603	3 581	7 320	81 251	439 018	372 072	807 100	17 554
33391	Pump & compressor mfg	1	2	2	c	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	1	2	2	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	24	14	g	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	13	6	1 386	39 763	1 008	2 213	23 519	83 733	73 809	157 502	3 341
333923	Overhead traveling crane, hoist, & monorail system mfg	—	3	2	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	7	5	439	13 827	338	743	9 740	15 112	41 499	57 286	D
33399	All other general-purpose machinery mfg	—	30	11	2 170	53 301	1 884	3 594	38 316	277 535	210 966	488 844	11 641
333991	Power-driven handtool mfg	—	4	3	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	18	4	562	15 880	424	780	10 296	62 552	53 576	118 388	2 370
334	Computer & electronic product mfg	—	58	26	4 672	101 406	3 285	5 904	57 765	314 260	682 848	999 133	35 962
3343	Audio & video equipment mfg	—	8	7	964	24 274	644	1 173	11 981	56 583	494 207	546 340	4 995
33431	Audio & video equipment mfg	—	8	7	964	24 274	644	1 173	11 981	56 583	494 207	546 340	4 995
334310	Audio & video equipment mfg	—	8	7	964	24 274	644	1 173	11 981	56 583	494 207	546 340	4 995
3344	Semiconductor & other electronic component mfg	1	22	10	2 080	34 312	1 470	2 641	21 588	72 417	84 927	160 189	D
33441	Semiconductor & other electronic component mfg	1	22	10	2 080	34 312	1 470	2 641	21 588	72 417	84 927	160 189	D
334415	Electronic resistor mfg	—	2	1	c	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	2	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	3	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	8	4	829	9 939	488	672	5 425	16 417	17 852	35 345	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	ARKANSAS—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3345	Navigational, measuring, medical, & control instruments mfg	1	13	7	f	D	D	D	D	D	D	D	3 459	
33451	Navigational, measuring, medical, & control instruments mfg	1	13	7	f	D	D	D	D	D	D	D	3 459	
334514	Totalizing fluid meter & counting device mfg	—	2	2	c	D	D	D	D	D	D	D	D	
334518	Watch, clock, & part mfg	—	2	1	e	D	D	D	D	D	D	D	D	
334519	Other measuring & controlling device mfg	1	4	2		129	5 778	64	102	2 042	3 642	6 275	9 934	423
3346	Mfg & reproducing magnetic & optical media	—	3	1	f	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	—	3	1	f	D	D	D	D	D	D	D	D	
334612	Prerecorded CD (except software), tape, & record reproducing	—	3	1	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	75	55		16 214	415 999	13 363	27 574	312 477	1 276 948	1 510 824	2 809 280	43 943
3351	Electric lighting equipment mfg	—	18	10		1 671	43 911	1 332	2 866	31 599	122 327	116 129	233 934	D
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	17	9	g	D	D	D	D	D	D	D	D	2 566
335121	Residential electric lighting fixture mfg	—	11	6		728	15 866	556	1 264	10 607	35 366	65 049	97 806	753
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	5	2	e	D	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	7	5		3 483	103 625	3 133	6 787	85 400	190 352	401 288	618 035	D
33521	Small electrical appliance mfg	—	4	3	c	D	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	3	2	c	D	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	3	2	h	D	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	29	22		7 484	180 075	6 113	12 114	134 747	665 971	531 863	1 194 610	13 833
33531	Electrical equipment mfg	—	29	22		7 484	180 075	6 113	12 114	134 747	665 971	531 863	1 194 610	13 833
335311	Power, distribution, & specialty transformer mfg	—	6	4		1 126	27 694	924	2 025	20 877	58 880	77 734	136 820	1 951
335312	Motor & generator mfg	—	16	14		6 094	145 586	5 038	9 764	111 067	580 386	428 463	1 005 438	11 094
335313	Switchgear & switchboard apparatus mfg	—	2	2	c	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	21	18		3 576	88 388	2 785	5 807	60 731	298 298	461 544	762 701	21 547
33591	Battery mfg	—	1	1	c	D	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	1	1	c	D	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	6	6		1 076	30 656	848	1 851	20 554	61 045	235 193	297 087	4 101
335929	Other communication & energy wire mfg	—	6	6		1 076	30 656	848	1 851	20 554	61 045	235 193	297 087	4 101
33593	Wiring device mfg	—	7	6		1 861	39 566	1 462	2 925	28 508	137 240	166 206	306 233	5 243
335931	Current-carrying wiring device mfg	—	4	3		1 073	16 956	780	1 547	10 754	36 862	85 961	123 814	D
335932	Noncurrent-carrying wiring device mfg	—	3	3		788	22 610	682	1 378	17 754	100 378	80 245	182 419	D
33599	All other electrical equipment & component mfg	—	7	5	e	D	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	—	2	2	c	D	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	5	5	3		244	5 813	155	310	2 297	5 497	9 275	15 884	602

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARKANSAS—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	153	65	15 477	391 610	12 393	25 218	278 521	1 165 146	1 723 823	2 931 443	63 330
3361	Motor vehicle mfg	8	9	2	195	4 094	164	335	3 301	8 965	16 500	23 973	D
33611	Automobile & light duty motor vehicle mfg	8	6	2	189	3 941	158	329	3 172	8 147	14 927	21 650	467
336111	Automobile mfg	8	6	2	189	3 941	158	329	3 172	8 147	14 927	21 650	467
3362	Motor vehicle body & trailer mfg	-	35	12	2 279	50 737	1 912	3 351	36 441	117 230	364 517	476 219	7 691
33621	Motor vehicle body & trailer mfg	-	35	12	2 279	50 737	1 912	3 351	36 441	117 230	364 517	476 219	7 691
336211	Motor vehicle body mfg	-	6	3	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	12	6	820	18 585	711	1 360	14 338	61 420	130 028	187 289	5 612
336214	Travel trailer & camper mfg	1	17	3	c	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	55	27	7 759	171 705	6 464	13 381	130 504	582 960	603 069	1 161 395	32 535
33631	Motor vehicle gasoline engine & engine parts mfg	1	13	4	1 228	22 665	1 045	2 312	14 909	77 053	84 957	162 321	7 035
336312	Gasoline engine & engine parts mfg	1	13	4	1 228	22 665	1 045	2 312	14 909	77 053	84 957	162 321	7 035
33632	Motor vehicle electrical & electronic equipment mfg	-	8	4	1 181	18 714	920	1 750	13 435	57 285	62 257	114 287	1 602
336322	Other motor vehicle electrical & electronic equipment mfg	-	8	4	1 181	18 714	920	1 750	13 435	57 285	62 257	114 287	1 602
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	4	2	c	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	4	2	c	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	5	3	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	5	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	2	18	11	3 292	78 005	2 655	5 568	58 308	235 338	284 685	522 851	13 916
336399	All other motor vehicle parts mfg	2	18	11	3 292	78 005	2 655	5 568	58 308	235 338	284 685	522 851	13 916
3364	Aerospace product & parts mfg	-	26	13	3 622	132 575	2 601	5 650	88 042	359 521	569 316	1 004 032	20 424
33641	Aerospace product & parts mfg	-	26	13	3 622	132 575	2 601	5 650	88 042	359 521	569 316	1 004 032	20 424
336411	Aircraft mfg	-	5	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	4	2	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	16	7	g	D	D	D	D	D	D	D	3 351
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ...	-	3	2	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	3	2	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	3	2	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	18	8	1 228	24 156	922	1 913	14 912	60 800	69 241	131 574	1 210
33661	Ship & boat building	1	18	8	1 228	24 156	922	1 913	14 912	60 800	69 241	131 574	1 210
336612	Boat building	1	18	8	1 228	24 156	922	1 913	14 912	60 800	69 241	131 574	1 210
3369	Other transportation equipment mfg	2	7	1	c	D	D	D	D	D	D	D	381
33699	Other transportation equipment mfg	2	7	1	c	D	D	D	D	D	D	D	381

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARKANSAS—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	—	210	54	10 530	213 720	8 773	15 438	158 443	443 497	453 988	892 978	22 305
3371	Household & institutional furniture & kitchen cabinet mfg	—	170	39	7 818	152 475	6 621	10 986	117 210	315 054	347 579	657 495	16 518
33711	Wood kitchen cabinet & counter top mfg	2	92	5	689	11 221	585	906	8 559	23 604	16 558	40 380	1 487
337110	Wood kitchen cabinet & counter top mfg	2	92	5	689	11 221	585	906	8 559	23 604	16 558	40 380	1 487
33712	Household & institutional furniture mfg	—	78	34	7 129	141 254	6 036	10 080	108 651	291 450	331 021	617 115	15 031
337121	Upholstered household furniture mfg	—	11	4	1 080	21 843	931	2 038	17 677	45 986	44 562	90 281	D
337122	Nonupholstered wood household furniture mfg	—	32	10	2 610	46 227	2 278	3 631	35 209	73 690	107 365	180 914	3 313
337124	Metal household furniture mfg	—	9	5	634	13 219	502	946	9 113	28 512	24 543	52 983	912
337125	Household furniture (except wood & metal) mfg	—	3	3	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	22	11	2 569	55 757	2 121	3 077	43 352	130 788	137 761	264 603	5 582
3372	Office furniture (including fixtures) mfg	—	33	12	2 357	53 798	1 887	3 920	36 366	113 248	87 768	201 144	5 045
33721	Office furniture (including fixtures) mfg	—	33	12	2 357	53 798	1 887	3 920	36 366	113 248	87 768	201 144	5 045
337211	Wood office furniture mfg	—	9	3	443	7 713	374	698	6 055	22 959	22 506	44 919	1 061
337212	Custom architectural woodwork & millwork mfg	—	5	1	c	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	—	1	1	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	1	18	7	1 603	39 760	1 257	2 751	25 823	63 474	47 757	111 919	3 526
3379	Other furniture related product mfg	7	7	3	355	7 447	265	532	4 867	15 195	18 641	34 339	742
33791	Mattress mfg	—	6	2	c	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	6	2	c	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	9	1	1	c	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	9	1	1	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	228	53	8 288	185 891	6 074	11 422	108 806	529 298	391 221	935 606	17 214
3391	Medical equipment & supplies mfg	—	70	8	2 381	61 535	1 662	2 745	34 855	183 161	105 625	289 725	2 541
33911	Medical equipment & supplies mfg	—	70	8	2 381	61 535	1 662	2 745	34 855	183 161	105 625	289 725	2 541
339111	Laboratory apparatus & furniture mfg	—	2	1	c	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	4	2	g	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg	—	4	1	c	D	D	D	D	D	D	D	D
339116	Dental laboratories	5	48	1	330	8 805	233	416	4 964	16 441	5 518	22 089	1 600
3399	Other miscellaneous mfg	1	158	45	5 907	124 356	4 412	8 677	73 951	346 137	285 596	645 881	14 673
33992	Sporting & athletic goods mfg	4	38	12	1 209	27 075	878	1 509	14 236	72 324	62 964	144 909	3 445
339920	Sporting & athletic goods mfg	4	38	12	1 209	27 075	878	1 509	14 236	72 324	62 964	144 909	3 445
33993	Doll, toy, & game mfg	—	10	4	520	10 244	394	814	6 495	29 252	17 573	47 813	1 580
339932	Game, toy, & children's vehicle mfg	—	10	4	520	10 244	394	814	6 495	29 252	17 573	47 813	1 580
33994	Office supplies (except paper) mfg	—	6	2	e	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	—	2	1	e	D	D	D	D	D	D	D	D
33995	Sign mfg	—	49	9	650	13 810	439	818	6 952	32 293	26 912	58 869	1 408
339950	Sign mfg	—	49	9	650	13 810	439	818	6 952	32 293	26 912	58 869	1 408
33999	All other miscellaneous mfg	—	46	18	3 050	59 581	2 334	4 735	39 160	182 057	157 973	344 030	7 836
339991	Gasket, packing, & sealing device mfg	—	3	2	e	D	D	D	D	D	D	D	D
339992	Musical instrument mfg	—	4	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	—	32	13	2 221	39 985	1 644	3 247	23 554	115 076	81 120	198 747	4 159

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FAYETTEVILLE- SPRINGDALE- ROGERS, AR MSA												
31-33	Manufacturing	-	387	150	29 015	703 610	23 563	46 895	519 367	2 251 144	2 657 949	4 880 667	133 747
311	Food mfg	-	54	32	10 639	208 419	9 123	18 633	168 471	650 488	1 251 316	1 883 443	51 093
3114	Fruit & vegetable preserving & specialty food mfg	1	8	7	1 695	37 038	1 542	3 057	31 371	152 420	236 099	388 612	D
31141	Frozen food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	9	6	5	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	9	5	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	15	12	6 785	128 713	5 771	12 468	106 462	360 789	703 264	1 045 768	19 063
31161	Animal slaughtering & processing	-	15	12	6 785	128 713	5 771	12 468	106 462	360 789	703 264	1 045 768	19 063
311615	Poultry processing	-	12	11	i	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	11	4	762	17 065	625	1 106	10 797	39 412	55 520	94 870	D
31183	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	5	6	6	g	D	D	D	D	D	D	D	D
31199	All other food mfg	6	4	4	g	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	6	3	3	991	15 710	931	1 509	14 123	31 810	18 647	50 470	D
314	Textile product mills	-	11	4	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	6	3	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	5	3	e	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	7	2	e	D	D	D	D	D	D	D	196
3152	Cut & sew apparel mfg	-	4	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	22	6	417	9 363	331	652	7 027	17 217	19 001	36 164	1 617
3219	Other wood product mfg ...	1	15	3	266	6 358	208	409	4 873	10 539	8 950	19 566	856
323	Printing & related support activities	2	35	9	826	22 990	652	1 132	15 248	84 024	47 475	131 556	3 597
3231	Printing & related support activities	2	35	9	826	22 990	652	1 132	15 248	84 024	47 475	131 556	3 597
32311	Printing	2	35	9	826	22 990	652	1 132	15 248	84 024	47 475	131 556	3 597
323110	Commercial lithographic printing ..	3	14	5	351	9 158	292	471	5 596	21 079	19 762	40 782	1 314
325	Chemical mfg	3	16	3	640	21 966	520	1 106	14 467	76 895	72 484	148 600	6 751
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	1	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	19	13	2 515	70 551	2 099	4 137	56 237	311 557	258 346	567 600	12 755
3261	Plastics product mfg	-	16	10	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	6	594	13 787	483	852	8 718	50 121	43 242	95 483	3 060
326199	All other plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	24	9	445	10 774	317	582	8 120	19 033	22 513	41 513	1 818
3273	Cement & concrete product mfg	-	14	6	279	7 061	186	337	5 171	13 600	16 531	30 043	1 219

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FAYETTEVILLE—SPRINGDALE—ROGERS, AR MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	65	22	3 718	97 160	3 017	5 971	71 466	247 002	253 101	494 410	11 310
3322	Cutlery & handtool mfg	-	5	4	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	5	4	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	4	4	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	11	4	725	22 216	481	1 096	13 789	54 660	50 137	103 215	1 147
33232	Ornamental & architectural metal products mfg	-	6	3	655	20 416	436	1 036	12 680	52 288	46 843	97 664	D
332321	Metal window & door mfg	-	2	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	3	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	1	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	1	1	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	-	9	2	393	7 926	351	705	6 655	18 053	12 040	30 707	1 770
33281	Coating, engraving, heat treating, & allied activities	-	9	2	393	7 926	351	705	6 655	18 053	12 040	30 707	1 770
332813	Electroplating, plating, polishing, anodizing, & coloring	-	4	1	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	8	4	474	12 813	371	698	9 378	36 275	50 091	82 401	2 142
33291	Metal valve mfg	-	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	35	15	2 447	67 946	1 782	3 057	38 808	215 929	266 057	477 464	13 755
3333	Commercial & service industry machinery mfg ..	-	7	5	785	21 320	560	1 104	12 651	113 539	199 828	312 348	4 532
33331	Commercial & service industry machinery mfg	-	7	5	785	21 320	560	1 104	12 651	113 539	199 828	312 348	4 532
333319	Other commercial & service industry machinery mfg	-	7	5	785	21 320	560	1 104	12 651	113 539	199 828	312 348	4 532
3335	Metalworking machinery mfg	-	14	4	1 272	35 121	933	1 360	19 068	78 372	48 791	125 317	8 482
33351	Metalworking machinery mfg	-	14	4	1 272	35 121	933	1 360	19 068	78 372	48 791	125 317	8 482
333515	Cutting tool & machine tool accessory mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	4	566	14 662	410	854	8 244	30 867	37 471	69 772	D
3344	Semiconductor & other electronic component mfg	-	4	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	10	6	2 089	48 740	1 727	3 140	38 527	213 684	103 912	316 050	5 185
3353	Electrical equipment mfg ..	-	5	5	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	5	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	4	4	1 623	36 501	1 356	2 607	29 954	129 743	82 021	210 151	D
3359	Other electrical equipment & component mfg	-	3	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	16	8	g	D	D	D	D	D	D	D	13 491
3363	Motor vehicle parts mfg ...	2	4	4	1 585	42 239	1 182	2 569	30 535	138 021	129 823	269 497	D
33639	Other motor vehicle parts mfg	2	4	4	1 585	42 239	1 182	2 569	30 535	138 021	129 823	269 497	D
336399	All other motor vehicle parts mfg	2	4	4	1 585	42 239	1 182	2 569	30 535	138 021	129 823	269 497	D
3364	Aerospace product & parts mfg	-	6	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	4	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	3	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	FAYETTEVILLE— SPRINGDALE— ROGERS, AR MSA— Con.													
	Manufacturing— Con.													
337	Furniture & related product mfg	1	29	6	f	D	D	D	D	D	D	D	689	
3371	Household & institutional furniture & kitchen cabinet mfg	—	24	5	f	D	D	D	D	D	D	D	660	
33712	Household & institutional furniture mfg	—	5	3	e	D	D	D	D	D	D	D	193	
337121	Upholstered household furniture mfg	—	1	1	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	6	25	6	e	D	D	D	D	D	D	D	1 581	
3399	Other miscellaneous mfg ..	6	14	5	e	D	D	D	D	D	D	D	D	
	FORT SMITH, AR—OK MSA													
31-33	Manufacturing	—	314	130		27 144	675 334	22 339	43 626	494 740	2 235 626	2 747 430	5 010 015	148 004
	Fort Smith, AR—OK MSA (AR Part)	—	295	125	k	D	D	D	D	D	D	D	146 120	
	Fort Smith, AR—OK MSA (OK Part)	—	19	5	e	D	D	D	D	D	D	D	1 884	
311	Food mfg	—	31	19		8 112	157 420	6 970	13 406	126 652	547 671	912 759	1 463 379	42 111
3114	Fruit & vegetable preserving & specialty food mfg	2	5	3	f	D	D	D	D	D	D	D	D	
31142	Fruit & vegetable canning, pickling, & drying	2	4	3	f	D	D	D	D	D	D	D	D	
311422	Specialty canning.....	—	2	2	f	D	D	D	D	D	D	D	D	
3116	Meat product mfg	—	9	7		6 099	106 409	5 659	10 740	93 279	187 036	462 635	651 105	26 794
31161	Animal slaughtering & processing	—	9	7		6 099	106 409	5 659	10 740	93 279	187 036	462 635	651 105	26 794
311615	Poultry processing	—	6	6		6 050	105 481	5 613	10 661	92 471	185 279	456 198	642 916	26 737
3118	Bakeries & tortilla mfg	5	7	3		497	9 863	234	372	4 264	24 152	17 163	41 474	1 763
31181	Bread & bakery product mfg	—	4	1	e	D	D	D	D	D	D	D	D	
311812	Commercial bakeries ..	—	1	1	e	D	D	D	D	D	D	D	D	
3119	Other food mfg	—	1	1	e	D	D	D	D	D	D	D	D	
31191	Snack food mfg	—	1	1	e	D	D	D	D	D	D	D	D	
311911	Roasted nuts & peanut butter mfg	—	1	1	e	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg	—	4	3	e	D	D	D	D	D	D	D	D	
3121	Beverage mfg	—	4	3	e	D	D	D	D	D	D	D	D	
315	Apparel mfg	5	6	4		422	5 464	336	524	3 960	11 770	9 394	21 205	518
3152	Cut & sew apparel mfg	5	5	4	e	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg	4	3	3	e	D	D	D	D	D	D	D	D	
321	Wood product mfg	2	11	4		284	4 964	241	455	3 769	8 139	13 668	21 776	754
322	Paper mfg	—	14	10		1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
3222	Converted paper product mfg	—	14	10		1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
32221	Paperboard container mfg	—	12	9	g	D	D	D	D	D	D	D	D	
322211	Corrugated & solid fiber box mfg	—	9	6	f	D	D	D	D	D	D	D	D	
322215	Nonfolding sanitary food container mfg ...	—	1	1	e	D	D	D	D	D	D	D	D	
323	Printing & related support activities	—	27	6		880	27 861	637	1 263	19 027	55 893	37 261	92 958	5 131
3231	Printing & related support activities	—	27	6		880	27 861	637	1 263	19 027	55 893	37 261	92 958	5 131
32311	Printing	—	26	6	f	D	D	D	D	D	D	D	D	
323112	Commercial flexographic printing ..	—	1	1	e	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	—	24	15		1 563	34 364	1 156	2 216	24 382	95 769	104 816	201 127	6 453
3261	Plastics product mfg	—	20	12	g	D	D	D	D	D	D	D	D	
32615	Urethane & other foam product (except polystyrene) mfg	—	6	4	e	D	D	D	D	D	D	D	D	
326150	Urethane & other foam product (except polystyrene) mfg	—	6	4	e	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	—	11	6		877	19 901	596	1 282	14 042	66 135	58 991	125 164	D
326199	All other plastics product mfg	—	9	6	f	D	D	D	D	D	D	D	D	

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT SMITH, AR—OK MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	20	7	577	16 056	491	1 017	11 657	59 157	49 345	107 119	3 781
331	Primary metal mfg	-	4	4	888	38 049	668	1 303	23 112	165 761	152 888	322 369	21 467
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	1	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	48	14	1 597	39 169	1 339	2 901	28 019	102 973	111 315	215 408	4 610
3323	Architectural & structural metals mfg	-	19	5	428	11 497	351	745	8 016	45 244	69 049	114 817	2 003
33232	Ornamental & architectural metal products mfg	-	14	4	360	9 824	289	626	6 507	41 795	67 756	110 069	D
3325	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
33261	Spring & wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
332618	Other fabricated wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
333	Machinery mfg	-	20	8	2 604	80 136	2 077	3 825	53 465	270 433	250 591	520 964	8 083
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	4	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	6	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	14	5	625	17 042	513	1 083	12 497	41 075	64 478	105 712	2 076
3363	Motor vehicle parts mfg	-	8	3	e	D	D	D	D	D	D	D	1 662
337	Furniture & related product mfg	-	41	15	2 717	53 208	2 309	4 029	39 988	93 416	118 279	211 504	5 353
3371	Household & institutional furniture & kitchen cabinet mfg	-	29	10	2 400	46 642	2 038	3 538	34 991	80 297	105 069	185 055	4 607
33712	Household & institutional furniture mfg	-	24	10	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	6	3	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	8	4	387	8 838	313	554	6 396	22 553	16 194	38 919	1 279
3372	Office furniture (including fixtures) mfg	-	10	3	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	10	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	8	22	4	e	D	D	D	D	D	D	D	1 189
3399	Other miscellaneous mfg	8	15	4	462	9 524	388	686	5 663	26 189	8 828	38 009	1 131
33992	Sporting & athletic goods mfg	9	5	3	377	7 977	323	579	4 713	23 658	7 400	34 025	D
339920	Sporting & athletic goods mfg	9	5	3	377	7 977	323	579	4 713	23 658	7 400	34 025	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JONESBORO, AR MSA												
31-33	Manufacturing	-	122	45	6 886	184 942	5 474	11 083	125 946	507 570	758 253	1 257 594	39 684
311	Food mfg	-	6	3	548	13 169	466	974	10 096	19 438	306 526	314 919	3 103
3112	Grain & oilseed milling	-	2	2	e	D	D	D	D	D	D	D	D
31121	Flour milling & malt mfg	-	2	2	e	D	D	D	D	D	D	D	D
311212	Rice milling	-	2	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	2	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	13	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	13	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	13	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	6	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	5	382	9 961	306	567	6 366	33 096	36 672	69 274	1 841
3261	Plastics product mfg	-	7	5	382	9 961	306	567	6 366	33 096	36 672	69 274	1 841
32619	Other plastics product mfg	-	6	5	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	14	4	480	14 441	382	850	10 575	35 580	19 621	55 351	3 749
3272	Glass & glass product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	e	D	D	D	D	D	D	D	D
327213	Glass container mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	2	465	13 463	331	693	7 798	42 040	15 661	58 669	5 211
3325	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	6	1 330	40 047	955	1 936	24 350	120 701	95 376	217 992	5 249
3339	Other general-purpose machinery mfg	-	6	3	1 191	36 421	852	1 762	22 305	113 737	90 714	206 339	4 022
33392	Material handling equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	4	829	24 020	708	1 554	19 276	58 595	58 981	118 864	3 668
3353	Electrical equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	7	3	757	21 908	630	1 272	15 536	69 296	85 925	158 963	4 289
3363	Motor vehicle parts mfg	2	6	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	12	6	e	D	D	D	D	D	D	D	943
3399	Other miscellaneous mfg	-	9	5	e	D	D	D	D	D	D	D	906

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LITTLE ROCK—NORTH LITTLE ROCK, AR MSA												
31-33	Manufacturing	—	635	217	31 679	863 970	23 947	46 373	559 718	2 837 286	3 342 657	6 195 355	212 650
311	Food mfg	1	41	18	2 253	52 192	1 749	3 074	35 574	217 650	458 559	678 068	12 056
3116	Meat product mfg	5	7	5	1 101	22 474	877	1 645	18 808	49 683	120 476	170 416	3 412
31161	Animal slaughtering & processing	5	7	5	1 101	22 474	877	1 645	18 808	49 683	120 476	170 416	3 412
311611	Animal (except poultry) slaughtering	—	4	3	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	19	5	374	6 969	278	395	4 364	22 872	23 534	46 475	1 176
316	Leather & allied product mfg	8	5	2	e	D	D	D	D	D	D	D	259
3162	Footwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	9	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	29	15	1 400	31 676	1 178	2 331	24 075	56 264	99 192	156 141	5 054
3211	Sawmills & wood preservation	1	6	3	282	6 472	247	513	5 094	15 661	37 798	53 721	2 482
32111	Sawmills & wood preservation	1	6	3	282	6 472	247	513	5 094	15 661	37 798	53 721	2 482
3212	Veneer, plywood, & engineered wood product mfg	2	6	5	299	7 516	258	544	5 883	13 977	16 653	30 934	1 526
32121	Veneer, plywood, & engineered wood product mfg	2	6	5	299	7 516	258	544	5 883	13 977	16 653	30 934	1 526
3219	Other wood product mfg	1	17	7	819	17 688	673	1 274	13 098	26 626	44 741	71 486	1 046
32191	Millwork	2	7	4	274	5 052	235	443	4 099	10 169	20 014	30 234	709
32199	All other wood product mfg	—	4	1	e	D	D	D	D	D	D	D	149
321991	Manufactured home (mobile home) mfg	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	21	15	2 320	75 274	1 895	3 977	53 780	274 949	246 543	522 366	15 116
3222	Converted paper product mfg	—	21	15	2 320	75 274	1 895	3 977	53 780	274 949	246 543	522 366	15 116
32221	Paperboard container mfg	2	16	11	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	3	10	7	778	23 815	604	1 223	14 772	40 315	57 491	98 333	D
322212	Folding paperboard box mfg	1	5	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	1	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	2	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	104	21	g	D	D	D	D	D	D	D	12 106
3231	Printing & related support activities	1	104	21	g	D	D	D	D	D	D	D	12 106
32311	Printing	1	92	19	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	45	12	f	D	D	D	D	D	D	D	8 858
325	Chemical mfg	—	32	11	2 379	82 645	1 514	2 675	43 793	740 993	395 128	1 127 899	44 346
3255	Paint, coating, & adhesive mfg	—	6	3	628	21 729	249	443	6 028	134 848	39 306	165 804	D
32551	Paint & coating mfg	—	5	3	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	5	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	8	3	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	4	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	4	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	31	13	1 276	30 576	878	1 607	16 660	91 345	66 128	154 645	8 183
3261	Plastics product mfg	—	25	10	g	D	D	D	D	D	D	D	7 807
32619	Other plastics product mfg	—	18	8	683	20 212	434	794	9 545	46 053	31 550	76 956	5 561
326199	All other plastics product mfg	—	15	6	548	17 139	363	656	8 473	41 556	26 055	66 993	D
3262	Rubber product mfg	—	6	3	e	D	D	D	D	D	D	D	376
327	Nonmetallic mineral product mfg	1	35	13	808	20 348	561	1 227	13 127	49 606	47 822	97 102	9 961
3273	Cement & concrete product mfg	—	24	10	530	14 562	360	732	9 144	35 492	34 414	69 762	8 691

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31-33	LITTLE ROCK-NORTH LITTLE ROCK, AR MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	-	4	3	722	30 653	596	1 308	23 177	82 947	143 838	236 033	D
3313	Alumina & aluminum production & processing . .	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331311	Alumina refining	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	98	33	5 626	163 267	4 408	9 377	106 958	393 054	359 909	761 903	22 867
3322	Cutlery & handtool mfg	-	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg . .	-	3	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	30	17	1 593	48 742	1 085	2 194	24 681	141 781	126 288	273 372	2 981
33231	Plate work & fabricated structural product mfg . .	-	15	7	678	21 783	433	937	10 938	80 675	78 312	164 292	852
332312	Fabricated structural metal mfg	-	10	5	520	16 405	350	759	9 175	70 526	64 800	140 860	D
33232	Ornamental & architectural metal products mfg	-	15	10	915	26 959	652	1 257	13 743	61 106	47 976	109 080	2 129
332321	Metal window & door mfg	-	5	5	601	16 409	419	824	8 504	28 679	27 779	55 943	1 306
332322	Sheet metal work mfg . .	-	7	4	286	10 158	208	402	4 867	31 835	19 668	52 014	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	34	6	558	17 618	430	886	13 380	25 639	29 585	54 441	2 421
33272	Turned product & screw, nut, & bolt mfg	3	7	3	314	10 824	242	528	8 753	15 840	23 138	38 226	936
3329	Other fabricated metal product mfg	-	14	5	2 723	81 035	2 240	4 865	56 743	193 262	160 958	358 845	13 829
33291	Metal valve mfg	-	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg . . .	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	12	4	g	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	f	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg . . .	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	49	22	2 272	64 005	1 450	2 841	32 912	180 776	193 905	365 012	10 423
3333	Commercial & service industry machinery mfg . .	-	9	5	893	24 388	464	948	10 831	91 948	93 142	180 991	2 540
33331	Commercial & service industry machinery mfg	-	9	5	893	24 388	464	948	10 831	91 948	93 142	180 991	2 540
333319	Other commercial & service industry machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	613	15 872	441	786	8 556	34 754	37 348	70 450	4 602
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . .	-	5	4	613	15 872	441	786	8 556	34 754	37 348	70 450	4 602
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	12	6	396	12 836	251	480	6 431	32 168	42 246	71 702	723
334	Computer & electronic product mfg	-	16	5	1 419	35 608	1 085	1 992	22 442	170 861	93 629	264 933	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	-	2	1	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LITTLE ROCK—NORTH LITTLE ROCK, AR MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	16	13	2 410	56 224	1 797	3 979	37 319	138 487	239 192	376 233	4 059
3351	Electric lighting equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	3	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	4	2	e	D	D	D	D	D	D	D	1 141
33531	Electrical equipment mfg	-	4	2	e	D	D	D	D	D	D	D	1 141
3359	Other electrical equipment & component mfg	-	6	5	1 286	24 347	912	1 923	13 980	46 087	139 581	187 860	2 165
33593	Wiring device mfg	-	3	3	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	27	7	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	8	2	g	D	D	D	D	D	D	D	1 861
33621	Motor vehicle body & trailer mfg	-	8	2	g	D	D	D	D	D	D	D	1 861
336211	Motor vehicle body mfg	-	2	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	3	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	42	10	2 583	55 898	2 086	3 059	42 759	122 381	134 491	252 798	5 459
3371	Household & institutional furniture & kitchen cabinet mfg	-	33	6	2 183	47 835	1 785	2 467	37 153	105 502	119 909	221 509	4 529
33712	Household & institutional furniture mfg	-	11	4	1 957	43 713	1 598	2 140	34 211	97 770	113 105	207 099	4 008
337127	Institutional furniture mfg	-	3	2	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	48	8	g	D	D	D	D	D	D	D	3 864
3399	Other miscellaneous mfg ..	-	31	6	g	D	D	D	D	D	D	D	3 619
33995	Sign mfg	-	15	2	e	D	D	D	D	D	D	D	D
339950	Sign mfg	-	15	2	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	9	4	f	D	D	D	D	D	D	D	3 073
339991	Gasket, packing, & sealing device mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
	MEMPHIS, TN-AR-MS MSA												
31-33	Manufacturing	1	1 156	477	58 220	1 868 363	40 561	81 917	1 076 050	6 082 711	8 462 352	14 625 342	505 509
	Memphis, TN-AR-MS MSA (AR Part)	-	45	23	2 323	56 172	1 824	3 584	36 590	224 511	401 064	620 626	21 399
	Memphis, TN-AR-MS MSA (MS Part)	1	131	63	7 232	213 445	5 374	11 549	137 729	565 089	805 064	1 369 616	43 345
	Memphis, TN-AR-MS MSA (TN Part)	-	980	391	48 665	1 598 746	33 363	66 784	901 731	5 293 111	7 256 224	12 635 100	440 765
311	Food mfg	-	60	34	5 398	194 011	3 669	7 623	123 463	847 366	1 129 076	1 976 901	D
3112	Grain & oilseed milling	-	7	6	g	D	D	D	D	D	D	D	45 119
31122	Starch & vegetable fats & oils mfg	-	4	4	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	1	1	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	2	f	D	D	D	D	D	D	D	D

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	MEMPHIS, TN—AR—MS MSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3114	Fruit & vegetable preserving & specialty food mfg	1	8	5	f	D	D	D	D	D	D	D	8 715
31141	Frozen food mfg	—	4	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	3	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	4	8	5	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
31161	Animal slaughtering & processing	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
3118	Bakeries & tortilla mfg	1	15	5	1 536	50 692	705	1 287	22 416	123 442	58 008	181 368	4 646
31181	Bread & bakery product mfg	—	14	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	6	5	1 461	49 244	655	1 193	21 472	119 305	53 765	172 981	D
3119	Other food mfg	—	8	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	9	6	991	41 169	698	1 479	28 329	318 813	347 180	667 829	19 719
3121	Beverage mfg	—	8	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	7	4	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	3	e	D	D	D	D	D	D	D	D
31212	Breweries	—	1	1	e	D	D	D	D	D	D	D	D
312120	Breweries	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	28	12	f	D	D	D	D	D	D	D	1 441
3141	Textile furnishings mills	—	13	4	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	13	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	2	2	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	15	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	7	4	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	—	4	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	2	22	11	1 944	63 971	966	2 004	15 571	77 889	84 177	157 123	4 124
3152	Cut & sew apparel mfg	2	15	8	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	4	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
315299	All other cut & sew apparel mfg	—	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
321	Wood product mfg	3	50	17	g	D	D	D	D	D	D	D	3 433
3219	Other wood product mfg	3	41	15	1 045	21 559	908	1 716	17 017	41 860	47 574	90 752	2 723
32191	Millwork	3	16	7	674	14 841	591	1 169	12 102	30 271	33 180	64 616	1 438
321918	Other millwork (including flooring) ..	3	9	5	580	11 756	512	1 010	9 487	24 214	26 574	51 999	814
322	Paper mfg	—	36	28	4 348	139 135	3 247	6 988	84 890	326 763	405 708	730 699	34 887
3221	Pulp, paper, & paperboard mills	—	5	5	1 138	49 089	804	1 640	27 237	127 912	154 127	281 982	8 645
32211	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	31	23	3 210	90 046	2 443	5 348	57 653	198 851	251 581	448 717	26 242
32221	Paperboard container mfg	—	20	16	1 849	50 965	1 464	3 119	34 715	106 567	156 015	259 541	D
322211	Corrugated & solid fiber box mfg	—	14	12	1 454	37 940	1 184	2 449	24 677	80 828	132 547	211 987	8 740
322212	Folding paperboard box mfg	—	4	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	7	5	1 180	32 933	830	1 919	18 337	81 389	80 575	163 341	D
322222	Coated & laminated paper mfg	—	3	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	4	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN-AR-MS MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	186	47	4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589	26 874
3231	Printing & related support activities.....	1	186	47	4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589	26 874
32311	Printing	1	160	41	4 392	135 055	3 305	6 447	87 620	318 735	248 470	564 708	25 616
323110	Commercial lithographic printing ..	1	78	26	2 742	84 692	2 140	4 161	55 809	174 130	138 788	310 603	18 882
323114	Quick printing	2	34	3	287	7 118	183	311	3 767	14 478	7 437	22 226	1 243
323116	Manifold business form printing.....	—	9	4	411	12 681	278	565	7 279	60 139	40 210	100 187	1 224
323119	Other commercial printing.....	7	12	2	285	9 055	217	465	6 539	20 921	18 008	38 879	1 356
32312	Support activities for printing.....	3	26	6	359	13 411	274	557	7 377	22 358	5 464	27 881	1 258
323122	Prepress services	3	20	4	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	88	49	7 690	280 830	4 190	8 265	126 180	1 521 772	1 220 295	2 743 960	151 286
3251	Basic chemical mfg	2	15	11	1 905	85 631	945	1 932	39 289	471 166	455 059	941 909	95 576
32518	Other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	5	9	6	1 054	42 249	639	1 320	25 590	187 659	325 241	524 537	D
325199	All other basic organic chemical mfg	5	7	6	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
32521	Resin & synthetic rubber mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
325211	Plastics material & resin mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	6	3	376	14 242	274	564	8 733	44 988	66 841	112 151	D
3254	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
32541	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
325412	Pharmaceutical preparation mfg	1	5	4	2 161	74 981	1 101	1 870	30 454	626 485	82 135	693 915	D
3255	Paint, coating, & adhesive mfg	1	18	11	g	D	D	D	D	D	D	D	6 736
32551	Paint & coating mfg	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
325510	Paint & coating mfg	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	16	8	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	5	13	6	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	8	4	3	512	16 644	224	520	5 429	50 067	32 493	82 025	D
325612	Polish & other sanitation good mfg ..	1	7	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	19	7	610	20 005	349	714	8 131	54 349	166 165	218 304	14 159
32599	All other chemical product & preparation mfg	—	12	6	517	16 892	281	572	5 873	44 981	139 610	183 733	13 566
325998	All other miscellaneous chemical product & preparation mfg	—	8	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	49	31	2 664	76 739	2 087	4 308	54 678	241 292	253 420	496 519	18 570
3261	Plastics product mfg	—	40	28	h	D	D	D	D	D	D	D	17 983
32611	Unsupported plastics film, sheet, & bag mfg ..	—	4	3	e	D	D	D	D	D	D	D	1 412
326112	Unsupported plastics packaging film & sheet mfg	—	2	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
326160	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
32619	Other plastics product mfg	—	26	18	1 534	41 626	1 153	2 228	27 816	128 475	127 072	253 976	14 246
326199	All other plastics product mfg	—	21	15	1 406	38 349	1 058	2 001	26 048	122 765	123 123	244 316	14 183

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	2	56	21	1 492	44 912	1 103	2 094	29 575	139 298	108 934	247 656	10 884
3271	Clay product & refractory mfg	3	7	3	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	3	7	3	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	7	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	32	14	838	25 853	569	1 098	14 453	60 483	58 898	118 803	8 097
32732	Ready-mix concrete mfg.	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
327320	Ready-mix concrete mfg	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
3279	Other nonmetallic mineral product mfg	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D
32799	All other nonmetallic mineral product mfg ...	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D
331	Primary metal mfg	—	14	9	907	29 740	749	1 753	23 716	76 102	122 174	198 928	7 491
3312	Steel product mfg from purchased steel	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
33122	Rolling & drawing of purchased steel	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
331222	Steel wire drawing	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
3313	Alumina & aluminum production & processing ..	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	195	81	6 253	184 820	4 704	9 993	118 581	483 285	587 340	1 067 499	29 381
3321	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
33211	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
3323	Architectural & structural metals mfg	—	68	35	2 637	70 865	1 947	4 131	41 220	166 734	243 084	412 063	8 362
33231	Plate work & fabricated structural product mfg ..	—	24	11	594	17 602	429	1 024	10 744	41 242	66 856	108 688	1 719
332312	Fabricated structural metal mfg	1	21	10	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	44	24	2 043	53 263	1 518	3 107	30 476	125 492	176 228	303 375	6 643
332321	Metal window & door mfg	—	15	10	987	24 748	725	1 624	13 870	50 925	60 373	112 016	2 395
332322	Sheet metal work mfg.	—	24	13	1 015	27 308	762	1 425	16 013	72 119	113 614	186 682	4 101
3324	Boiler, tank, & shipping container mfg	—	14	10	851	30 968	652	1 428	22 504	84 987	153 663	232 685	5 971
33241	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	4	301	12 807	256	584	10 946	47 505	120 863	163 938	4 256
332431	Metal can mfg	—	3	3	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	52	11	669	21 852	544	965	13 403	40 468	15 302	55 550	3 226
33271	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
332710	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
3329	Other fabricated metal product mfg	1	17	10	1 054	28 910	730	1 590	19 296	115 311	76 310	190 565	8 724
33291	Metal valve mfg	1	4	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	13	7	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	4	4	386	10 040	261	583	6 172	56 037	38 576	94 073	4 583
332999	All other miscellaneous fabricated metal product mfg	3	8	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN-AR-MS MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	76	36	6 189	189 340	4 640	9 868	115 659	313 144	875 089	1 209 212	22 702
3333	Commercial & service industry machinery mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
333411	Air purification equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	8	5	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	30	16	2 177	81 431	1 342	3 136	39 612	116 455	263 222	378 703	8 291
33392	Material handling equipment mfg	-	16	10	1 822	70 633	1 105	2 661	34 169	96 171	236 820	331 287	D
333921	Elevator & moving stairway mfg	-	4	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	10	8	705	27 961	392	801	10 861	69 481	129 424	199 099	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	31	14	2 634	83 588	1 820	3 595	47 464	197 520	557 568	758 628	21 098
3342	Communications equipment mfg	8	6	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	8	4	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	8	4	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
33451	Navigational, measuring, medical, & control instruments mfg	-	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
335	Electrical equipment, appliance, & component mfg	-	30	14	2 438	65 655	1 557	3 434	40 755	205 229	231 666	431 842	5 724
3351	Electric lighting equipment mfg	-	12	8	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	11	7	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	-	5	2	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	-	4	3	e	D	D	D	D	D	D	D	2 440
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MEMPHIS, TN-AR-MS MSA—Con.													
	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg—Con.													
3353	Electrical equipment mfg ..	2	14	4	e	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	2	14	4	e	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	1	34	16		1 661	46 199	1 290	2 347	24 852	127 936	148 966	271 725	5 809
3362	Motor vehicle body & trailer mfg	3	7	3		563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
33621	Motor vehicle body & trailer mfg	3	7	3		563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
336211	Motor vehicle body mfg	8	5	2	e	D	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	1	e	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	22	10		963	28 821	692	1 337	13 641	92 606	93 044	180 102	D
33634	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	69	24		1 766	41 058	1 432	2 685	28 910	84 619	90 180	182 497	3 960
3371	Household & institutional furniture & kitchen cabinet mfg	2	40	13		680	15 234	571	1 041	11 251	27 910	26 657	55 366	608
33711	Wood kitchen cabinet & counter top mfg	1	23	8		312	6 271	256	492	4 492	12 454	10 379	22 983	299
337110	Wood kitchen cabinet & counter top mfg ...	1	23	8		312	6 271	256	492	4 492	12 454	10 379	22 983	299
33712	Household & institutional furniture mfg	4	17	5		368	8 963	315	549	6 759	15 456	16 278	32 383	309
3372	Office furniture (including fixtures) mfg	—	21	5		490	10 547	378	659	6 980	13 631	21 171	39 389	939
33721	Office furniture (including fixtures) mfg	—	21	5		490	10 547	378	659	6 980	13 631	21 171	39 389	939
337215	Showcase, partition, shelving, & locker mfg	—	6	2		282	5 359	231	369	3 829	4 899	15 043	24 572	D
3379	Other furniture related product mfg	—	8	6		596	15 277	483	985	10 679	43 078	42 352	87 742	2 413
33791	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	5	4	e	D	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	5	4	e	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	99	19		4 073	158 749	2 405	3 757	64 471	469 355	220 678	750 730	32 445
3391	Medical equipment & supplies mfg	—	48	8		2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
33911	Medical equipment & supplies mfg	—	48	8		2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
339112	Surgical & medical instrument mfg	—	8	2	e	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	7	4	g	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	3	51	11		1 146	24 299	861	1 483	15 067	59 199	51 044	110 831	3 698
33992	Sporting & athletic goods mfg	3	8	3		268	7 265	178	368	4 195	23 401	15 228	39 749	D
339920	Sporting & athletic goods mfg	3	8	3		268	7 265	178	368	4 195	23 401	15 228	39 749	D
33995	Sign mfg	2	21	5	e	D	D	D	D	D	D	D	D	D
339950	Sign mfg	2	21	5	e	D	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	8	12	2		406	6 318	333	478	4 397	12 279	11 387	23 769	811
339999	All other miscellaneous mfg	9	10	1	e	D	D	D	D	D	D	D	D	D
	PINE BLUFF, AR MSA													
31-33	Manufacturing	—	84	37		7 774	218 758	6 471	13 528	167 080	741 075	965 661	1 741 545	43 753
311	Food mfg	—	6	5	g	D	D	D	D	D	D	D	D	7 053
3116	Meat product mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	g	D	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	g	D	D	D	D	D	D	D	D	D
314	Textile product mills	—	3	1	e	D	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	2	1	e	D	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	2	1	e	D	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	—	1	1	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PINE BLUFF, AR MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	7	6	2 033	86 953	1 616	3 452	68 860	376 521	341 999	724 696	11 894
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	4	3	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	3	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	5	568	16 906	414	837	11 305	39 934	53 911	96 557	2 516
3323	Architectural & structural metals mfg	-	6	1	271	8 685	186	354	5 770	21 544	27 052	48 454	741
333	Machinery mfg	3	12	5	287	6 355	154	315	3 302	13 343	11 828	23 420	1 137
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
31-33	TEXARKANA, TX—TEXARKANA, AR MSA		100	33	6 330	227 682	4 665	9 383	152 714	622 529	855 184	1 471 136	57 204
	Texarkana, TX—Texarkana, AR MSA (AR Part)	-	25	8	2 274	99 726	1 648	3 092	68 033	263 404	236 887	495 614	25 144
	Texarkana, TX—Texarkana, AR MSA (TX Part)	-	75	25	4 056	127 956	3 017	6 291	84 681	359 125	618 297	975 522	32 060
321	Wood product mfg	-	9	5	638	12 405	515	1 101	10 228	26 210	62 894	89 399	3 027
3211	Sawmills & wood preservation	-	5	3	340	7 586	241	578	6 303	21 820	40 823	62 362	D
32111	Sawmills & wood preservation	-	5	3	340	7 586	241	578	6 303	21 820	40 823	62 362	D
321113	Sawmills	1	4	2	e	D	D	D	D	D	D	D	1 535
3219	Other wood product mfg ...	-	3	2	e	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	-	3	2	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg	-	3	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	7	6	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TEXARKANA, TX—TEXARKANA, AR MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	7	1 165	36 091	825	1 742	18 158	83 394	67 259	148 657	5 115
3329	Other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	3	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARKANSAS COUNTY, AR												
	Manufacturing	2	28	13	2 768	66 421	2 160	3 867	48 395	140 926	785 857	916 228	17 648
311	Food mfg	2	6	4	g	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	2	6	4	g	D	D	D	D	D	D	D	D
31121	Flour milling & malt mfg .	4	5	3	f	D	D	D	D	D	D	D	D
311212	Rice milling	4	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	3	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ASHLEY COUNTY, AR													
31-33	Manufacturing	—	24	17	3 792	141 675	3 247	6 895	114 397	371 517	554 350	921 378	D
321	Wood product mfg	—	3	3	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	1	1	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	4	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
BAXTER COUNTY, AR													
31-33	Manufacturing	1	56	13	3 185	74 053	2 408	4 024	47 739	209 326	140 498	350 834	2 659
315	Apparel mfg	9	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	1	1	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	1	1	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	9	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	3	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	3	2	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D
BENTON COUNTY, AR													
31-33	Manufacturing	1	194	73	14 220	346 469	11 438	22 227	257 862	1 179 580	1 317 873	2 491 796	52 567
311	Food mfg	1	21	15	4 539	87 421	3 675	7 658	70 771	248 612	505 653	753 932	6 161
3116	Meat product mfg	—	7	6	h	D	D	D	D	D	D	D	3 670
31161	Animal slaughtering & processing	—	7	6	h	D	D	D	D	D	D	D	3 670
311615	Poultry processing	—	6	6	h	D	D	D	D	D	D	D	D
3119	Other food mfg	1	3	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	14	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	12	8	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	27	9	630	15 619	444	782	9 335	41 572	52 081	91 134	2 866
333	Machinery mfg	—	17	5	1 544	40 976	1 177	1 805	24 212	121 899	168 377	287 362	D
3335	Metalworking machinery mfg	—	9	3	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	9	3	g	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg	—	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	4	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	3	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BENTON COUNTY, AR													
—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	4	7	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	4	3	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	3	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	4	3	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	20	6	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	15	5	f	D	D	D	D	D	D	D	D
BOONE COUNTY, AR													
31-33	Manufacturing	—	67	18	2 808	70 435	2 361	4 702	53 005	221 404	274 455	494 974	16 754
332	Fabricated metal product mfg	—	10	3	509	10 643	445	889	8 470	32 724	19 390	51 469	D
339	Miscellaneous mfg	—	12	2	504	13 769	395	797	7 152	31 161	19 664	50 694	450
BRADLEY COUNTY, AR													
31-33	Manufacturing	3	9	3	594	12 485	519	897	10 327	38 061	52 053	89 986	D
321	Wood product mfg	3	5	3	f	D	D	D	D	D	D	D	D
CARROLL COUNTY, AR													
31-33	Manufacturing	—	41	6	3 408	62 825	2 548	6 026	53 733	283 889	143 448	426 457	4 675
311	Food mfg	—	7	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	h	D	D	D	D	D	D	D	D
CHICOT COUNTY, AR													
31-33	Manufacturing	—	11	5	1 019	12 785	968	1 766	10 776	21 234	45 961	67 148	257
315	Apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	—	3	2	f	D	D	D	D	D	D	D	D
CLARK COUNTY, AR													
31-33	Manufacturing	—	31	16	2 960	64 206	2 659	4 846	52 743	153 790	247 903	401 064	18 098
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	9	7	f	D	D	D	D	D	D	D	11 966
3212	Veneer, plywood, & engineered wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CLAY COUNTY, AR													
31-33	Manufacturing	-	23	12	2 475	41 986	2 256	3 971	33 470	97 810	94 002	188 641	3 965
337	Furniture & related product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	2	2	f	D	D	D	D	D	D	D	D
CLEBURNE COUNTY, AR													
31-33	Manufacturing	-	34	10	1 687	39 051	1 225	2 387	22 146	242 688	102 579	366 993	6 762
339	Miscellaneous mfg	-	5	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
COLUMBIA COUNTY, AR													
31-33	Manufacturing	-	39	18	2 957	96 581	2 210	4 664	65 538	291 308	320 114	602 251	46 827
321	Wood product mfg	-	8	6	673	17 488	559	1 373	13 782	36 150	88 332	121 952	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	4	851	24 408	637	1 238	16 680	46 058	54 558	101 354	4 873
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
CONWAY COUNTY, AR													
31-33	Manufacturing	-	23	9	2 108	49 376	1 763	3 459	37 636	164 270	178 248	334 831	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAIGHEAD COUNTY, AR													
31-33	Manufacturing	-	122	45	6 886	184 942	5 474	11 083	125 946	507 570	758 253	1 257 594	39 684
311	Food mfg	-	6	3	548	13 169	466	974	10 096	19 438	306 526	314 919	3 103
323	Printing & related support activities	-	13	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	13	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	13	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	6	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	6	1 330	40 047	955	1 936	24 350	120 701	95 376	217 992	5 249
3339	Other general-purpose machinery mfg	-	6	3	1 191	36 421	852	1 762	22 305	113 737	90 714	206 339	4 022
33392	Material handling equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	4	829	24 020	708	1 554	19 276	58 595	58 981	118 864	3 668
336	Transportation equipment mfg	2	7	3	757	21 908	630	1 272	15 536	69 296	85 925	158 963	4 289
3363	Motor vehicle parts mfg ...	2	6	3	f	D	D	D	D	D	D	D	D
CRAWFORD COUNTY, AR													
31-33	Manufacturing	1	62	24	h	D	D	D	D	D	D	D	25 999
311	Food mfg	2	11	6	2 286	40 444	2 031	4 182	35 319	103 222	226 781	328 525	2 446
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
CRITTENDEN COUNTY, AR													
31-33	Manufacturing	-	45	23	2 323	56 172	1 824	3 584	36 590	224 511	401 064	620 626	21 399
CROSS COUNTY, AR													
31-33	Manufacturing	-	17	6	1 698	37 760	1 500	2 884	29 515	78 578	207 383	286 024	5 526
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
DALLAS COUNTY, AR													
31-33	Manufacturing	-	15	7	786	21 929	710	1 648	18 560	51 512	78 682	131 344	2 119
321	Wood product mfg	-	9	5	f	D	D	D	D	D	D	D	1 906
DESHA COUNTY, AR													
31-33	Manufacturing	-	16	9	1 611	45 131	1 317	2 682	32 598	128 790	190 471	319 167	D
DREW COUNTY, AR													
31-33	Manufacturing	2	33	16	2 429	51 232	2 098	4 022	38 692	102 350	123 966	222 015	7 049
314	Textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	2	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	8	14	7	586	9 979	520	945	8 271	21 974	34 973	56 384	2 423

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FAULKNER COUNTY, AR													
31-33	Manufacturing	-	93	32	7 556	188 956	5 902	10 176	133 223	582 615	657 449	1 230 463	29 756
322	Paper mfg	-	6	6	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	6	6	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	5	5	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	5	g	D	D	D	D	D	D	D	3 882
3333	Commercial & service industry machinery mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	5	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	5	1	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	9	3	1 906	42 878	1 541	2 079	34 204	101 226	110 092	207 266	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	2	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	2	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	2	2	g	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, AR													
31-33	Manufacturing	-	16	9	1 284	24 212	1 132	2 047	18 706	105 912	113 040	216 016	4 407
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	f	D	D	D	D	D	D	D	D
GARLAND COUNTY, AR													
31-33	Manufacturing	-	108	25	3 827	99 964	2 823	5 317	65 699	258 082	535 229	795 457	26 498
321	Wood product mfg	-	13	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	11	3	524	9 751	427	733	7 022	30 045	24 888	54 185	D
336	Transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
GRANT COUNTY, AR													
31-33	Manufacturing	-	25	9	1 481	42 016	1 229	2 721	30 848	142 215	155 049	314 636	8 335

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENE COUNTY, AR													
31-33	Manufacturing	-	47	19	5 223	126 552	4 440	8 723	94 981	467 906	520 035	961 325	12 846
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	1 679	42 030	1 522	2 939	34 519	195 567	229 895	390 787	4 710
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
HEMPSTEAD COUNTY, AR													
31-33	Manufacturing	-	32	15	3 565	75 937	2 849	5 858	51 190	203 596	357 081	558 917	12 330
311	Food mfg	-	6	2	1 957	39 896	1 816	4 145	33 353	106 864	189 196	296 140	8 635
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
HOT SPRING COUNTY, AR													
31-33	Manufacturing	-	47	17	1 764	45 305	1 457	2 806	34 707	136 084	185 717	315 155	22 158
HOWARD COUNTY, AR													
31-33	Manufacturing	-	26	15	5 067	94 546	4 723	8 540	82 824	452 588	669 582	1 120 203	33 135
311	Food mfg	-	3	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
INDEPENDENCE COUNTY, AR													
31-33	Manufacturing	-	54	20	5 168	123 322	4 318	8 328	88 279	468 120	570 143	1 013 337	48 941
311	Food mfg	-	8	7	2 348	41 868	2 068	4 076	33 841	223 018	360 380	583 874	5 363
3116	Meat product mfg	-	4	4	g	D	D	D	D	D	D	D	4 452
31161	Animal slaughtering & processing	-	4	4	g	D	D	D	D	D	D	D	4 452
311615	Poultry processing	-	4	4	g	D	D	D	D	D	D	D	4 452
325	Chemical mfg	-	5	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	1	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
JACKSON COUNTY, AR													
31-33	Manufacturing	-	23	9	1 129	31 487	930	1 900	22 171	75 233	122 965	199 910	5 520
JEFFERSON COUNTY, AR													
31-33	Manufacturing	-	84	37	7 774	218 758	6 471	13 528	167 080	741 075	965 661	1 741 545	43 753
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	7 053
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	6	2 033	86 953	1 616	3 452	68 860	376 521	341 999	724 696	11 894
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	5	568	16 906	414	837	11 305	39 934	53 911	96 557	2 516
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
JOHNSON COUNTY, AR													
31-33	Manufacturing	-	39	18	3 318	65 098	2 899	5 957	52 966	237 621	168 492	409 419	10 701
311	Food mfg	-	4	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
LAWRENCE COUNTY, AR													
31-33	Manufacturing	1	37	12	1 615	31 245	1 412	2 439	23 081	127 232	85 884	215 503	6 100
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINCOLN COUNTY, AR													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	1 312
LITTLE RIVER COUNTY, AR													
31-33	Manufacturing	-	16	4	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
LOGAN COUNTY, AR													
31-33	Manufacturing	-	36	11	2 569	44 777	2 084	3 957	32 565	162 404	232 742	393 039	10 429
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
LONOKE COUNTY, AR													
31-33	Manufacturing	-	39	10	1 739	45 431	1 376	2 606	31 887	143 185	123 584	269 831	5 431
332	Fabricated metal product mfg	-	13	5	g	D	D	D	D	D	D	D	4 148
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	f	D	D	D	D	D	D	D	D
MADISON COUNTY, AR													
31-33	Manufacturing	-	19	5	738	12 833	608	1 322	8 727	38 818	135 394	170 736	1 693
MARION COUNTY, AR													
31-33	Manufacturing	1	23	7	1 847	29 467	1 394	2 611	18 709	68 600	63 642	133 676	3 294
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	f	D	D	D	D	D	D	D	D
MILLER COUNTY, AR													
31-33	Manufacturing	-	25	8	2 274	99 726	1 648	3 092	68 033	263 404	236 887	495 614	25 144
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSISSIPPI COUNTY, AR													
31-33	Manufacturing	-	62	35	7 644	252 681	6 425	13 297	201 247	1 123 873	1 676 531	2 801 711	101 428
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	869	21 037	704	1 550	15 711	45 884	120 687	166 094	4 155
3261	Plastics product mfg	-	4	3	869	21 037	704	1 550	15 711	45 884	120 687	166 094	4 155
32619	Other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	5	898	30 058	704	1 418	18 680	53 748	56 357	108 432	2 804
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	1 752
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
NEVADA COUNTY, AR													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
OUACHITA COUNTY, AR													
31-33	Manufacturing	1	33	17	2 961	96 043	2 358	4 960	70 386	418 314	458 228	854 346	42 000
322	Paper mfg	4	7	6	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	9	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	2	1	f	D	D	D	D	D	D	D	D
PHILLIPS COUNTY, AR													
31-33	Manufacturing	2	19	11	983	24 140	647	1 294	14 309	95 491	304 598	411 769	12 181
PIKE COUNTY, AR													
31-33	Manufacturing	-	13	5	596	11 956	529	892	10 203	47 367	75 810	121 452	3 897

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POINSETT COUNTY, AR													
31-33	Manufacturing	1	27	12	1 895	42 507	1 586	3 512	32 186	125 374	233 264	367 147	6 548
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	2	2	f	D	D	D	D	D	D	D	D
POLK COUNTY, AR													
31-33	Manufacturing	3	29	11	1 933	38 239	1 632	3 203	30 546	138 841	184 309	322 201	5 088
335	Electrical equipment, appliance, & component mfg	—	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . .	—	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	1	f	D	D	D	D	D	D	D	D
POPE COUNTY, AR													
31-33	Manufacturing	—	82	31	4 940	118 366	4 059	7 259	84 381	507 910	714 558	1 222 097	29 388
311	Food mfg	1	12	8	g	D	D	3 066	35 801	276 397	429 938	705 258	9 451
3114	Fruit & vegetable preserving & specialty food mfg	1	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	6	3	g	506	16 057	435	12 173	43 456	38 825	84 216	1 862
PULASKI COUNTY, AR													
31-33	Manufacturing	—	431	155	20 557	572 819	15 210	30 694	354 058	1 971 243	2 356 526	4 342 380	156 694
311	Food mfg	1	32	15	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	6	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	5	6	4	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	14	9	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	13	8	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	13	8	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	9	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	81	19	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	81	19	g	D	D	D	D	D	D	D	D
32311	Printing	1	73	17	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	37	11	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	24	10	g	2 286	80 540	1 462	2 577	42 749	731 648	379 948	1 103 335
3255	Paint, coating, & adhesive mfg	—	6	3	f	628	21 729	249	443	6 028	134 848	39 306	165 804
32551	Paint & coating mfg	—	5	3	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	5	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	7	2	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	4	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	4	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	20	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	15	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	10	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	28	11	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PULASKI COUNTY, AR													
—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	54	22	3 811	111 378	2 943	6 540	69 398	262 439	238 812	507 833	17 594
3322	Cutlery & handtool mfg	-	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg . .	-	3	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	16	12	g	D	D	D	D	D	D	D	2 024
33232	Ornamental & architectural metal products mfg	-	10	8	f	D	D	D	D	D	D	D	1 725
3329	Other fabricated metal product mfg	-	11	4	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	9	3	g	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	32	15	g	D	D	D	D	D	D	D	6 382
334	Computer & electronic product mfg	-	13	5	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	15	13	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	6	5	1 286	24 347	912	1 923	13 980	46 087	139 581	187 860	2 165
33593	Wiring device mfg	-	3	3	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	37	5	f	D	D	D	D	D	D	D	1 020
RANDOLPH COUNTY, AR													
31-33	Manufacturing	-	32	9	1 688	37 585	1 356	2 731	26 875	93 304	97 118	190 498	7 238
332	Fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	3	678	10 163	535	1 045	5 778	21 308	26 698	48 255	2 021
3399	Other miscellaneous mfg ..	-	4	3	678	10 163	535	1 045	5 778	21 308	26 698	48 255	2 021
33999	All other miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
ST. FRANCIS COUNTY, AR													
31-33	Manufacturing	-	27	12	1 606	41 132	1 227	2 339	26 505	119 441	515 218	628 196	10 219

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
SALINE COUNTY, AR													
31-33	Manufacturing	1	72	20	1 827	56 764	1 459	2 897	40 550	140 243	205 098	352 681	20 769
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
SCOTT COUNTY, AR													
31-33	Manufacturing	-	19	6	1 367	27 129	1 158	2 399	21 221	55 209	165 781	220 653	2 532
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
SEBASTIAN COUNTY, AR													
31-33	Manufacturing	-	233	101	22 891	582 002	18 649	36 128	421 566	1 974 208	2 316 784	4 319 262	120 121
311	Food mfg	-	20	13	5 826	116 976	4 939	9 224	91 333	444 449	685 978	1 134 854	39 665
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	4	4	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	14	10	1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
3222	Converted paper product mfg	-	14	10	1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
32221	Paperboard container mfg	-	12	9	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	9	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	23	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	23	5	f	D	D	D	D	D	D	D	D
32311	Printing	-	22	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	19	12	1 368	29 971	977	1 896	20 902	86 276	94 621	181 167	D
3261	Plastics product mfg	-	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	8	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	31	8	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	7	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	6	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	27	11	h	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	19	9	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	16	9	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SEVIER COUNTY, AR													
31-33	Manufacturing	-	15	6	1 985	37 277	1 848	4 076	32 080	127 706	275 910	401 991	2 504
311	Food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D
STONE COUNTY, AR													
31-33	Manufacturing	4	26	4	602	10 406	485	868	7 238	18 041	21 756	39 834	1 200
UNION COUNTY, AR													
31-33	Manufacturing	-	63	29	5 443	158 132	4 314	9 301	110 213	868 818	1 200 178	2 082 229	75 624
311	Food mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	12	8	f	D	D	D	D	D	D	D	7 913
3211	Sawmills & wood preservation.....	-	8	5	522	16 618	473	1 205	14 247	58 913	91 113	146 749	7 452
32111	Sawmills & wood preservation.....	-	8	5	522	16 618	473	1 205	14 247	58 913	91 113	146 749	7 452
321113	Sawmills.....	-	8	5	522	16 618	473	1 205	14 247	58 913	91 113	146 749	7 452
324	Petroleum & coal products mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries.....	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	6	3	567	15 192	457	894	10 997	40 331	44 688	83 555	3 988
335	Electrical equipment, appliance, & component mfg.....	-	4	4	746	19 227	569	1 086	11 122	54 735	65 894	121 959	D
VAN BUREN COUNTY, AR													
31-33	Manufacturing	-	15	3	638	12 537	573	1 095	10 216	24 482	87 485	111 494	967
WASHINGTON COUNTY, AR													
31-33	Manufacturing	-	193	77	14 795	357 141	12 125	24 668	261 505	1 071 564	1 340 076	2 388 871	81 180
311	Food mfg.....	-	33	17	6 100	120 998	5 448	10 975	97 700	401 876	745 663	1 129 511	44 932
3114	Fruit & vegetable preserving & specialty food mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	8	6	h	D	D	D	D	D	D	D	15 393
31161	Animal slaughtering & processing.....	-	8	6	h	D	D	D	D	D	D	D	15 393
311615	Poultry processing.....	-	6	5	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	21	5	f	D	D	D	D	D	D	D	3 129
3231	Printing & related support activities.....	2	21	5	f	D	D	D	D	D	D	D	3 129
32311	Printing.....	2	21	5	f	D	D	D	D	D	D	D	3 129

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WASHINGTON COUNTY, AR—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	38	13	3 088	81 541	2 573	5 189	62 131	205 430	201 020	403 276	8 444
3322	Cutlery & handtool mfg	-	5	4	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	5	4	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	4	4	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	5	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	10	903	26 970	605	1 252	14 596	94 030	97 680	190 102	D
336	Transportation equipment mfg	-	9	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
WHITE COUNTY, AR													
31-33	Manufacturing	-	75	32	4 149	103 327	3 326	6 394	72 074	300 386	349 536	646 456	19 159
311	Food mfg	-	6	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	5	1 054	34 537	867	1 846	25 520	110 041	80 567	191 627	5 033
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
WOODRUFF COUNTY, AR													
31-33	Manufacturing	-	9	5	796	13 988	712	1 278	11 938	39 574	38 506	78 358	975
YELL COUNTY, AR													
31-33	Manufacturing	-	22	6	2 880	52 440	2 609	4 942	44 437	99 824	237 299	337 721	9 917
311	Food mfg	-	4	4	2 637	46 056	2 412	4 476	39 800	81 210	209 025	290 850	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARKADELPHIA, AR													
31-33	Manufacturing	-	15	8	1 348	22 822	1 249	1 930	20 023	51 611	59 485	111 936	4 114
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
ASHDOWN, AR													
31-33	Manufacturing	-	9	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
AUGUSTA, AR													
31-33	Manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
BATESVILLE, AR													
31-33	Manufacturing	-	32	15	4 799	115 453	4 027	7 785	82 635	454 299	549 953	979 436	45 720
311	Food mfg	-	7	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
BENTON, AR													
31-33	Manufacturing	2	32	10	832	20 606	677	1 331	15 426	54 892	56 888	110 956	4 628
BENTONVILLE, AR													
31-33	Manufacturing	1	29	10	1 225	30 446	1 047	2 055	22 127	104 858	166 296	274 218	3 214
311	Food mfg	-	4	2	f	D	D	D	D	D	D	D	1 461
BERRYVILLE, AR													
31-33	Manufacturing	-	14	4	1 803	33 542	1 172	3 094	28 074	135 461	93 499	229 468	1 727
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
BLYTHEVILLE, AR													
31-33	Manufacturing	-	30	15	3 621	114 280	3 001	6 393	89 375	503 204	834 469	1 325 663	52 448
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	3	611	20 354	480	973	14 734	37 724	42 367	78 892	2 382
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BOONEVILLE, AR													
31-33	Manufacturing	-	9	3	g	D	D	D	D	D	D	2 743	
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	
CAMDEN, AR													
31-33	Manufacturing	1	13	6	1 573	56 680	1 325	2 882	44 256	159 485	175 287	334 210	D
322	Paper mfg.....	2	4	4	g	D	D	D	D	D	D	D	
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	
CLARKSVILLE, AR													
31-33	Manufacturing	-	22	13	2 990	58 890	2 650	5 481	49 101	224 987	155 531	384 076	10 042
311	Food mfg.....	-	4	3	g	D	D	D	D	D	D	D	
3116	Meat product mfg.....	-	2	1	g	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing.....	-	2	1	g	D	D	D	D	D	D	D	
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	
CONWAY, AR													
31-33	Manufacturing	-	67	28	7 242	183 120	5 653	9 862	129 352	570 840	645 542	1 205 948	28 441
322	Paper mfg.....	-	6	6	g	D	D	D	D	D	D	D	
3222	Converted paper product mfg.....	-	6	6	g	D	D	D	D	D	D	D	
32221	Paperboard container mfg.....	2	5	5	f	D	D	D	D	D	D	D	
32229	Other converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	
322291	Sanitary paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	
333	Machinery mfg.....	-	10	5	g	D	D	D	D	D	D	D	
3333	Commercial & service industry machinery mfg ..	-	5	3	f	D	D	D	D	D	D	D	
33331	Commercial & service industry machinery mfg.....	-	5	3	f	D	D	D	D	D	D	D	
336	Transportation equipment mfg.....	-	4	1	g	D	D	D	D	D	D	D	
3362	Motor vehicle body & trailer mfg.....	-	3	1	g	D	D	D	D	D	D	D	
33621	Motor vehicle body & trailer mfg.....	-	3	1	g	D	D	D	D	D	D	D	
336211	Motor vehicle body mfg.....	-	1	1	g	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	-	6	3	g	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	5	2	g	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg.....	-	2	2	g	D	D	D	D	D	D	D	
337127	Institutional furniture mfg.....	-	2	2	g	D	D	D	D	D	D	D	
CORNING, AR													
31-33	Manufacturing	-	6	5	1 305	20 826	1 215	1 903	17 454	46 955	50 053	96 899	2 448
337	Furniture & related product mfg.....	-	2	2	f	D	D	D	D	D	D	D	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CROSSETT, AR													
31-33	Manufacturing	-	17	10	h	D	D	D	D	D	D	D	D
321	Wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
DARDANELLE, AR													
31-33	Manufacturing	-	4	1	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
DE QUEEN, AR													
31-33	Manufacturing	-	7	4	g	D	D	D	D	D	D	D	1 235
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
DUMAS, AR													
31-33	Manufacturing	-	8	6	f	D	D	D	D	D	D	D	3 184
EL DORADO, AR													
31-33	Manufacturing	-	34	16	4 066	112 324	3 211	6 679	78 896	739 456	940 408	1 693 999	59 381
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
EUDORA, AR													
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	69

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FAYETTEVILLE, AR												
31-33	Manufacturing	-	68	29	5 962	144 163	4 791	9 594	105 017	449 049	499 266	948 862	36 348
311	Food mfg	-	10	6	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	6	1 000	24 210	869	1 783	18 680	76 709	66 635	144 258	4 161
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	FORREST CITY, AR												
31-33	Manufacturing	-	16	9	g	D	D	D	D	D	D	D	9 663
	FORT SMITH, AR												
31-33	Manufacturing	-	206	93	20 817	521 454	17 070	33 349	384 695	1 786 206	2 135 389	3 949 758	115 670
311	Food mfg	-	19	13	i	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	4	4	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	13	9	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	13	9	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	8	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	8	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	22	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	22	5	f	D	D	D	D	D	D	D	D
32311	Printing	-	21	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	11	g	D	D	D	D	D	D	D	6 217
3261	Plastics product mfg	-	12	8	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	30	8	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	6	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	5	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	5	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORT SMITH, AR—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	20	9	2 347	46 475	1 989	3 482	34 814	80 238	107 417	187 283	4 059
3371	Household & institutional furniture & kitchen cabinet mfg	-	17	8	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	15	8	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	3	g	D	D	D	D	D	D	D	D
GREEN FOREST, AR													
31-33	Manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
HARRISON, AR													
31-33	Manufacturing	-	38	16	2 589	66 332	2 199	4 482	50 193	210 623	167 618	377 103	13 807
HEBER SPRINGS, AR													
31-33	Manufacturing	-	16	7	1 325	29 806	960	1 878	16 467	228 274	91 727	341 767	4 985
HOPE, AR													
31-33	Manufacturing	-	27	12	1 553	34 003	1 100	2 225	21 889	101 662	158 054	258 343	D
311	Food mfg	-	5	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	D
HOT SPRINGS, AR													
31-33	Manufacturing	1	66	18	2 756	68 152	1 914	3 405	40 499	180 271	426 823	609 972	D
326	Plastics & rubber products mfg	4	8	3	516	9 572	421	723	6 901	29 557	24 474	53 281	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
JACKSONVILLE, AR													
31-33	Manufacturing	-	32	16	1 995	53 701	1 553	3 336	33 595	127 726	180 656	309 496	8 240
332	Fabricated metal product mfg	-	7	5	778	20 746	676	1 506	13 914	53 778	55 888	109 947	3 838
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JONESBORO, AR													
31-33	Manufacturing	—	97	39	6 234	170 729	4 922	10 002	115 785	469 336	664 567	1 126 917	37 452
323	Printing & related support activities	—	12	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	12	2	f	D	D	D	D	D	D	D	D
32311	Printing	—	12	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	5	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	12	6	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	5	3	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	5	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	2	5	3	f	D	D	D	D	D	D	D	D
LITTLE ROCK, AR													
31-33	Manufacturing	—	251	95	12 570	365 923	9 303	19 334	223 659	977 106	1 470 153	2 457 950	77 967
311	Food mfg	2	19	8	1 388	33 655	1 193	1 897	23 525	157 747	315 596	474 952	8 916
3116	Meat product mfg	7	5	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	7	5	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	10	6	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	10	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	8	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	59	14	g	D	D	D	D	D	D	D	7 921
3231	Printing & related support activities	—	59	14	g	D	D	D	D	D	D	D	7 921
32311	Printing	1	52	12	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	28	8	f	D	D	D	D	D	D	D	5 519
325	Chemical mfg	2	10	4	665	23 250	275	483	6 673	150 970	59 590	201 493	4 704
3255	Paint, coating, & adhesive mfg	—	4	2	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	3	2	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	11	6	861	23 057	595	1 230	12 623	63 705	42 848	104 145	5 133
3261	Plastics product mfg	—	7	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	32	14	2 808	84 230	2 118	4 732	52 102	196 833	166 027	369 181	13 360
3323	Architectural & structural metals mfg	—	13	9	f	D	D	D	D	D	D	D	1 493
33232	Ornamental & architectural metal products mfg	—	8	6	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	4	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	3	2	g	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	19	11	f	D	D	D	D	D	D	D	5 133
335	Electrical equipment, appliance, & component mfg	—	10	8	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	—	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	28	5	f	D	D	D	D	D	D	D	982

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAGNOLIA, AR													
31-33	Manufacturing	-	29	15	2 302	78 451	1 664	3 260	51 195	248 206	222 329	462 905	33 931
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	822	23 609	622	1 213	16 158	44 572	53 458	98 762	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
MALVERN, AR													
31-33	Manufacturing	-	25	13	1 376	35 326	1 162	2 248	28 319	104 676	112 443	210 435	D
MAUMELLE, AR													
31-33	Manufacturing	-	7	4	1 270	26 685	917	1 876	16 035	250 827	156 177	413 564	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
MENA, AR													
31-33	Manufacturing	1	14	7	1 234	26 871	1 078	2 111	21 666	106 369	79 262	184 500	3 615
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONTICELLO, AR													
31-33	Manufacturing	2	26	14	2 263	48 550	1 938	3 729	36 258	95 509	118 423	210 342	6 349
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
MORRILTON, AR													
31-33	Manufacturing	-	13	6	1 843	43 358	1 552	3 041	33 119	143 333	148 628	286 949	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MOUNTAIN HOME, AR													
31-33	Manufacturing	-	22	5	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	3	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	3	2	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NASHVILLE, AR													
31-33	Manufacturing	-	20	12	h	D	D	D	D	D	D	D	D
311	Food mfg	-	3	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
NEWPORT, AR													
31-33	Manufacturing	-	17	8	990	29 007	809	1 724	20 189	71 048	120 199	193 117	5 438
NORTH LITTLE ROCK, AR													
31-33	Manufacturing	-	91	33	4 073	110 402	2 975	5 427	71 219	582 299	517 756	1 095 797	48 592
311	Food mfg	-	8	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	3	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	3	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
OSCEOLA, AR													
31-33	Manufacturing	-	10	7	1 691	39 087	1 424	2 603	30 454	90 214	188 705	278 102	5 706
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
OZARK, AR													
31-33	Manufacturing	-	4	4	714	12 659	641	1 115	10 081	42 426	28 591	70 009	D
PARAGOULD, AR													
31-33	Manufacturing	-	37	15	4 493	110 690	3 780	7 537	82 647	390 803	340 228	709 332	11 630
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PARAGOULD, AR—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
PARIS, AR													
31-33	Manufacturing	-	9	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PIGGOTT, AR													
31-33	Manufacturing	-	8	4	667	13 954	579	1 375	10 220	36 444	31 483	65 169	1 179
PINE BLUFF, AR													
31-33	Manufacturing	-	75	36	i	D	D	D	D	D	D	D	43 437
311	Food mfg	-	5	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	5	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
POCAHONTAS, AR													
31-33	Manufacturing	-	19	8	1 596	35 580	1 279	2 609	25 375	88 745	90 369	179 181	6 825
332	Fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
PRESCOTT, AR													
31-33	Manufacturing	-	7	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROGERS, AR													
31-33	Manufacturing	-	71	31	7 083	181 409	5 551	10 373	132 325	533 180	513 343	1 047 772	32 833
311	Food mfg.....	-	7	6	1 689	32 703	1 190	2 505	27 541	52 963	100 178	153 155	837
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	2	2	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg..	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
RUSSELLVILLE, AR													
31-33	Manufacturing	-	59	25	4 358	105 802	3 585	6 247	74 974	457 849	518 464	975 754	26 124
311	Food mfg.....	-	7	5	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	3	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
SEARCY, AR													
31-33	Manufacturing	-	39	21	3 332	87 226	2 624	5 161	61 334	260 338	311 822	569 849	17 858
311	Food mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	9	4	947	31 088	785	1 689	23 696	102 365	74 519	178 035	D
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
SHERIDAN, AR													
31-33	Manufacturing	-	11	6	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
SILOAM SPRINGS, AR														
31-33	Manufacturing	-	21	13	3 473	83 733	2 921	6 353	70 237	360 868	334 927	687 242	9 679	
311	Food mfg	3	3	3	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D	
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	3	3		851	24 650	677	1 414	19 466	152 420	81 138	228 817	4 209
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D	
326220	Rubber & plastics hoses & belting mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D	
SPRINGDALE, AR *														
31-33	Manufacturing	-	106	39	i	D	D	D	D	D	D	D	41 848	
311	Food mfg	-	23	10		2 825	58 313	2 513	5 344	46 030	218 600	414 834	615 540	21 352
3116	Meat product mfg	-	6	5	g	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	6	5	g	D	D	D	D	D	D	D	D	
311615	Poultry processing	-	5	4	g	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	21	6	g	D	D	D	D	D	D	D	D	
3322	Cutlery & handtool mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33221	Cutlery & handtool mfg ..	-	2	1	f	D	D	D	D	D	D	D	D	
332212	Hand & edge tool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
3323	Architectural & structural metals mfg	-	3	2	f	D	D	D	D	D	D	D	D	
33232	Ornamental & architectural metal products mfg	-	2	2	f	D	D	D	D	D	D	D	D	
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	-	11	6		649	19 452	428	887	10 365	80 113	88 360	168 700	3 373
336	Transportation equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D	
STUTT GART, AR														
31-33	Manufacturing	2	19	10	2 272	58 157	1 716	3 141	42 735	120 229	750 322	858 478	17 442	
311	Food mfg	2	5	3	g	D	D	D	D	D	D	D	D	
3112	Grain & oilseed milling	2	5	3	g	D	D	D	D	D	D	D	D	
31121	Flour milling & malt mfg ..	4	4	2	f	D	D	D	D	D	D	D	D	
311212	Rice milling	4	4	2	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D	
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D	
TEXARKANA, AR														
31-33	Manufacturing	-	20	8	2 230	98 746	1 613	3 033	67 384	261 331	234 864	491 510	25 013	
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D	
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D	
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D	
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D	
TRUMANN, AR														
31-33	Manufacturing	1	11	7	1 165	22 637	994	2 065	16 752	56 531	141 480	198 262	2 193	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VAN BUREN, AR													
31-33	Manufacturing	-	41	21	3 379	74 191	3 059	6 226	59 823	201 810	368 745	570 731	D
311	Food mfg.....	1	6	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	2	g	D	D	D	D	D	D	D	D
WALDRON, AR													
31-33	Manufacturing	-	11	5	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
WALNUT RIDGE, AR													
31-33	Manufacturing	-	13	9	1 297	26 248	1 155	2 070	19 151	116 726	74 259	192 616	5 877
333	Machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WARREN, AR													
31-33	Manufacturing	3	7	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	3	3	3	f	D	D	D	D	D	D	D	D
WEST HELENA, AR													
31-33	Manufacturing	6	7	7	608	14 352	354	670	7 583	67 133	50 505	128 454	3 670
WEST MEMPHIS, AR													
31-33	Manufacturing	-	33	17	g	D	D	D	D	D	D	D	D
WYNNE, AR													
31-33	Manufacturing	-	11	5	1 623	36 231	1 450	2 800	28 538	74 401	203 652	278 190	D
316	Leather & allied product mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg.	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding.	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
ARKANSAS		ARKANSAS—Con.	
Companies ¹ number..	2 967	Quantity of electricity purchased for heat and power 1,000 kWh..	13 532 511
All establishments number..	3 316	Quantity of electricity generated less sold for heat and power 1,000 kWh..	1 873 943
Establishments with 1 to 19 employees number..	2 068	Total value of shipments \$1,000..	45 185 963
Establishments with 20 to 99 employees number..	724	Value of resales \$1,000..	1 975 839
Establishments with 100 employees or more number..	524	Value added \$1,000..	19 346 813
All employees number..	230 153	Total inventories, beginning of year \$1,000..	4 815 070
Total compensation ² \$1,000..	7 305 028	Finished goods inventories, beginning of year \$1,000..	2 035 618
Annual payroll \$1,000..	5 778 437	Work-in-process inventories, beginning of year \$1,000..	823 761
Total fringe benefits \$1,000..	1 526 591	Materials and supplies inventories, beginning of year \$1,000..	1 955 691
Production workers, average for year number..	187 493	Total inventories, end of year \$1,000..	5 013 687
Production workers on March 12 number..	187 081	Finished goods inventories, end of year \$1,000..	2 097 983
Production workers on May 12 number..	187 949	Work-in-process inventories, end of year \$1,000..	807 112
Production workers on August 12 number..	187 846	Materials and supplies inventories, end of year \$1,000..	2 108 592
Production workers on November 12 number..	187 096	Gross book value of total assets at beginning of year \$1,000..	17 585 360
Production-worker hours 1,000..	369 134	Total capital expenditures (new and used) \$1,000..	1 492 968
Production-worker wages \$1,000..	4 192 705	Capital expenditures for buildings and other structures (new and used) \$1,000..	182 795
Total cost of materials \$1,000..	25 868 348	Capital expenditures for machinery and equipment (new and used) \$1,000..	1 310 173
Cost of materials, parts, containers, etc., consumed \$1,000..	23 062 898	Total retirements ² \$1,000..	370 431
Cost of resales \$1,000..	1 558 231	Gross book value of total assets at end of year \$1,000..	18 707 897
Cost of fuels \$1,000..	370 026	Total depreciation during year ² \$1,000..	1 144 086
Cost of purchased electricity \$1,000..	565 469	Total rental payments ² \$1,000..	222 796
Cost of contract work \$1,000..	311 724	Buildings and other structures rental payments ² \$1,000..	82 636
		Machinery and equipment rental payments ² \$1,000..	140 160

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

ARKANSAS

Fairfield Bay is in Cleburne and Van Buren Counties; it was incorporated in July 1993.

Springdale is in Benton and Washington Counties.

Appendix E. Metropolitan Areas

ARKANSAS

Fayetteville—Springdale—Rogers, AR MSA

Benton County, AR
Washington County, AR

Fort Smith, AR—OK MSA

Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Jonesboro, AR MSA

Craighead County, AR

Little Rock—North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Pine Bluff, AR MSA

Jefferson County, AR

Texarkana, TX—Texarkana, AR MSA

Miller County, AR
Bowie County, TX

Arizona

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARIZONA													
31-33	Manufacturing	-	4 917	1 370	193 616	6 753 601	121 994	247 489	3 000 055	26 898 948	15 878 330	43 030 348	2 504 585
311	Food mfg	1	243	67	8 576	215 806	6 026	11 933	127 060	1 002 607	1 511 895	2 523 096	101 437
3111	Animal food mfg	1	12	4	315	10 505	210	475	6 448	94 380	210 580	305 836	3 296
31111	Animal food mfg	1	12	4	315	10 505	210	475	6 448	94 380	210 580	305 836	3 296
311111	Dog & cat food mfg	-	4	2	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg	7	8	2	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	9	6	2	142	3 365	104	227	2 313	12 169	46 904	61 796	D
3114	Fruit & vegetable preserving & specialty food mfg	7	21	6	576	13 023	428	767	7 150	78 443	60 484	138 984	4 298
31141	Frozen food mfg	-	3	1	c	D	D	D	D	D	D	D	372
311412	Frozen specialty food mfg	-	3	1	c	D	D	D	D	D	D	D	372
31142	Fruit & vegetable canning, pickling, & drying	8	18	5	e	D	D	D	D	D	D	D	3 926
311421	Fruit & vegetable canning	6	12	3	c	D	D	D	D	D	D	D	D
311422	Specialty canning	9	6	2	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	13	9	1 656	54 769	828	2 024	27 573	364 958	546 221	913 656	65 059
31151	Dairy product (except frozen) mfg	-	11	8	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	5	940	33 321	381	966	14 658	102 192	251 280	357 757	D
311513	Cheese mfg	-	3	1	c	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	25	8	1 487	33 777	1 289	3 000	26 461	58 049	431 174	490 396	8 175
31161	Animal slaughtering & processing	-	25	8	1 487	33 777	1 289	3 000	26 461	58 049	431 174	490 396	8 175
311611	Animal (except poultry) slaughtering	-	13	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	8	2	159	3 670	126	202	2 092	7 550	18 004	25 785	611
311613	Rendering & meat byproduct processing	9	3	3	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	118	28	3 271	72 362	2 226	3 825	40 026	239 709	134 172	375 072	8 488
31181	Bread & bakery product mfg	2	97	22	2 334	55 009	1 464	2 567	29 059	169 573	81 862	251 441	5 817
311811	Retail bakeries	6	54	3	357	4 157	229	248	2 104	9 794	6 722	16 533	501
311812	Commercial bakeries	2	39	19	1 966	50 578	1 226	2 301	26 730	159 001	74 333	233 323	5 256
31182	Cookie, cracker, & pasta mfg	-	6	1	e	D	D	D	D	D	D	D	934
311823	Dry pasta mfg	-	2	1	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	15	5	f	D	D	D	D	D	D	D	1 737
311830	Tortilla mfg	-	15	5	f	D	D	D	D	D	D	D	1 737
3119	Other food mfg	1	33	10	1 063	27 114	886	1 552	16 449	149 017	80 223	229 060	10 403
31191	Snack food mfg	-	10	4	582	16 067	495	905	10 069	120 373	46 538	166 613	7 727
311919	Other snack food mfg	-	9	3	f	D	D	D	D	D	D	D	7 727
31199	All other food mfg	4	12	4	407	9 636	343	587	5 843	24 832	29 862	54 781	2 449
311991	Perishable prepared food mfg	4	5	2	275	5 917	221	314	3 439	18 791	21 652	40 507	2 002
311999	All other miscellaneous food mfg	5	7	2	132	3 719	122	273	2 404	6 041	8 210	14 274	447
312	Beverage & tobacco product mfg	-	41	16	1 754	48 366	759	1 528	16 647	187 824	396 474	582 678	26 388
3121	Beverage mfg	-	41	16	1 754	48 366	759	1 528	16 647	187 824	396 474	582 678	26 388
31211	Soft drink & ice mfg	-	28	15	1 687	47 267	714	1 486	15 840	181 435	390 984	570 863	25 946
312111	Soft drink mfg	-	10	9	1 331	39 476	531	1 095	12 377	157 539	384 100	540 245	23 221
312112	Bottled water mfg	-	4	3	149	3 873	48	105	1 620	7 841	2 824	10 569	348
312113	Ice mfg	1	14	3	207	3 918	135	286	1 843	16 055	4 060	20 049	2 377
313	Textile mills	-	29	3	592	12 004	536	1 139	10 155	29 421	85 805	115 065	2 535
3131	Fiber, yarn, & thread mills	-	2	2	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	e	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	2	2	e	D	D	D	D	D	D	D	D
3132	Fabric mills	2	9	1	c	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	2	8	1	118	2 475	101	186	2 111	6 372	7 078	13 324	290
313210	Broadwoven fabric mills	2	8	1	118	2 475	101	186	2 111	6 372	7 078	13 324	290

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARIZONA—Con.												
	Manufacturing—Con.												
314	Textile product mills.....	4	100	15	1 168	23 685	929	1 683	14 997	59 794	42 902	102 223	3 322
3141	Textile furnishings mills....	4	46	1	229	3 734	190	327	2 330	11 235	10 426	21 541	141
31412	Curtain & linen mills.....	4	44	1	c	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	4	34	—	151	2 297	123	213	1 403	5 979	3 960	9 846	83
3149	Other textile product mills..	4	54	14	939	19 951	739	1 356	12 667	48 559	32 476	80 682	3 181
31491	Textile bag & canvas mills	6	23	5	380	10 061	309	569	5 960	13 111	12 112	24 937	1 346
314912	Canvas & related product mills	6	18	4	338	9 534	273	517	5 581	12 061	11 099	22 907	1 311
31499	All other textile product mills	3	31	9	559	9 890	430	787	6 707	35 448	20 364	55 745	1 835
314999	All other miscellaneous textile product mills ..	3	29	8	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	83	15	1 642	23 302	1 211	2 117	16 048	29 947	34 551	67 224	1 511
3152	Cut & sew apparel mfg	5	59	12	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	6	27	4	e	D	D	D	D	D	D	D	301
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	24	4	258	3 082	235	369	2 520	4 600	1 285	5 854	267
31522	Men's & boys' cut & sew apparel mfg	4	9	3	178	2 202	157	202	1 763	3 913	2 848	7 147	D
315228	Men's & boys' cut & sew other outerwear mfg	4	5	2	118	1 535	102	154	1 184	2 971	1 930	5 294	88
31523	Women's & girls' cut & sew apparel mfg	5	22	5	715	9 870	399	740	5 529	9 956	13 214	25 709	494
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	2	2	c	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	6	8	2	443	5 791	144	277	2 202	3 631	11 596	17 949	D
3159	Apparel accessories & other apparel mfg	1	23	2	443	7 599	375	734	5 795	10 384	16 482	26 684	587
31599	Apparel accessories & other apparel mfg	1	23	2	443	7 599	375	734	5 795	10 384	16 482	26 684	587
315991	Hat, cap, & millinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	19	1	165	3 250	124	199	2 110	7 947	9 012	16 810	D
316	Leather & allied product mfg .	1	25	2	208	4 503	156	270	2 248	14 863	10 722	26 020	111
3169	Other leather & allied product mfg	1	19	1	158	3 959	112	220	1 853	13 689	9 502	23 639	77
31699	Other leather & allied product mfg	1	19	1	158	3 959	112	220	1 853	13 689	9 502	23 639	77
321	Wood product mfg	1	204	86	7 861	178 093	6 637	12 934	130 762	389 558	553 520	947 117	14 893
3211	Sawmills & wood preservation	1	15	6	505	11 774	463	957	10 398	18 820	38 629	60 895	2 194
32111	Sawmills & wood preservation	1	15	6	505	11 774	463	957	10 398	18 820	38 629	60 895	2 194
321113	Sawmills	1	13	5	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	2	32	20	1 453	34 630	1 200	2 478	24 326	73 146	104 648	177 309	2 750
32121	Veneer, plywood, & engineered wood product mfg	2	32	20	1 453	34 630	1 200	2 478	24 326	73 146	104 648	177 309	2 750
321214	Truss mfg	1	29	20	1 423	33 863	1 175	2 434	23 745	70 384	101 924	171 750	2 393
3219	Other wood product mfg ...	—	157	60	5 903	131 689	4 974	9 499	96 038	297 592	410 243	708 913	9 949
32191	Millwork	1	79	32	1 835	38 099	1 491	2 623	27 773	70 027	117 819	189 410	4 216
321911	Wood window & door mfg	1	35	14	855	20 203	692	1 207	14 030	37 602	39 673	79 416	2 063
321912	Cut stock, resawing lumber, & planing....	—	5	2	197	3 510	172	291	2 699	6 066	40 381	46 095	D
321918	Other millwork (including flooring) ...	1	39	16	783	14 386	627	1 125	11 044	26 359	37 765	63 899	D
32192	Wood container & pallet mfg	2	25	9	508	9 666	394	785	5 921	16 882	23 116	39 393	800
321920	Wood container & pallet mfg	2	25	9	508	9 666	394	785	5 921	16 882	23 116	39 393	800
32199	All other wood product mfg	—	53	19	3 560	83 924	3 089	6 091	62 344	210 683	269 308	480 110	4 933
321991	Manufactured home (mobile home) mfg ..	—	11	9	2 099	51 049	1 853	3 795	41 484	138 086	166 274	304 139	2 868
321992	Prefabricated wood building mfg	—	12	4	1 081	24 572	945	1 729	15 727	54 732	85 654	140 261	1 311
321999	All other miscellaneous wood product mfg ...	1	30	6	380	8 303	291	567	5 133	17 865	17 380	35 710	754

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARIZONA—Con.												
	Manufacturing—Con.												
322	Paper mfg	—	39	26	2 948	105 276	2 347	5 100	71 182	317 538	409 832	727 185	32 099
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	37	24	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	17	13	1 027	34 070	776	1 684	20 591	78 999	126 628	203 975	6 454
322211	Corrugated & solid fiber box mfg	—	13	10	880	30 047	653	1 439	17 997	70 406	118 845	187 856	6 208
322212	Folding paperboard box mfg	2	2	2	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	2	1	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	8	5	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	3	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	10	5	791	27 959	662	1 513	18 645	111 347	107 300	217 860	13 299
322291	Sanitary paper product mfg	1	4	4	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	6	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	703	113	9 222	245 125	6 624	12 082	152 741	529 704	318 230	848 607	54 813
3231	Printing & related support activities	1	703	113	9 222	245 125	6 624	12 082	152 741	529 704	318 230	848 607	54 813
32311	Printing	2	636	100	8 122	213 136	5 792	10 477	130 421	469 082	307 887	777 463	51 847
323110	Commercial lithographic printing	1	278	60	4 329	119 106	2 962	5 601	71 880	252 810	163 696	416 949	34 220
323111	Commercial gravure printing	1	7	2	188	9 496	148	335	7 119	16 093	15 775	32 144	1 765
323112	Commercial flexographic printing	1	10	2	188	4 962	148	269	3 202	7 897	9 781	17 581	1 172
323113	Commercial screen printing	3	78	9	738	14 329	552	886	7 792	29 033	22 640	51 587	3 869
323114	Quick printing	2	168	9	1 286	28 119	962	1 406	17 456	67 311	33 964	101 253	3 396
323116	Manifold business form printing	—	23	9	644	18 905	459	919	12 144	55 348	36 447	91 845	5 042
323118	Blankbook, looseleaf binder, & device mfg	4	8	5	302	7 515	261	602	5 031	15 120	8 316	23 147	350
323119	Other commercial printing	3	50	2	318	6 861	202	294	3 497	17 057	12 639	29 921	1 595
32312	Support activities for printing	1	67	13	1 100	31 989	832	1 605	22 320	60 622	10 343	71 144	2 966
323121	Tradebinding & related work	3	20	6	380	8 994	316	626	6 272	15 573	3 853	19 447	1 115
323122	Prepress services	1	47	7	720	22 995	516	979	16 048	45 049	6 490	51 697	1 851
324	Petroleum & coal products mfg	5	22	1	298	11 684	210	444	7 279	31 039	75 597	107 810	2 430
3241	Petroleum & coal products mfg	5	22	1	298	11 684	210	444	7 279	31 039	75 597	107 810	2 430
32412	Asphalt paving, roofing, & saturated materials mfg	6	18	1	259	10 134	182	384	6 409	24 910	64 470	89 606	D
324121	Asphalt paving mixture & block mfg	6	11	1	211	8 266	148	314	5 203	17 052	50 481	67 821	D
325	Chemical mfg	—	174	51	6 666	190 246	4 789	9 211	105 016	1 383 957	667 119	2 039 246	63 519
3251	Basic chemical mfg	1	22	9	887	26 373	453	881	10 729	100 226	75 684	175 128	29 259
32512	Industrial gas mfg	—	7	4	152	5 705	107	236	3 863	49 796	14 701	62 760	16 761
325120	Industrial gas mfg	—	7	4	152	5 705	107	236	3 863	49 796	14 701	62 760	16 761
32518	Other basic inorganic chemical mfg	—	8	2	424	11 356	129	228	2 726	19 921	34 271	56 665	8 087
325188	All other basic inorganic chemical mfg	—	8	2	424	11 356	129	228	2 726	19 921	34 271	56 665	8 087
32519	Other basic organic chemical mfg	—	4	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	4	7	1	160	4 037	129	286	2 878	15 302	9 511	24 301	1 187
32521	Resin & synthetic rubber mfg	3	6	1	c	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	1	2	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARIZONA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3253	Pesticide, fertilizer, & other agricultural chemical mfg	2	15	6	332	11 559	196	363	4 952	36 925	59 475	95 816	2 909
32531	Fertilizer mfg	1	8	3	199	6 517	129	264	3 468	19 798	46 382	65 591	1 866
325314	Fertilizer (mixing only) mfg	—	3	2	159	5 462	96	194	2 616	13 512	42 836	55 837	D
32532	Pesticide & other agricultural chemical mfg	4	7	3	133	5 042	67	99	1 484	17 127	13 093	30 225	1 043
325320	Pesticide & other agricultural chemical mfg	4	7	3	133	5 042	67	99	1 484	17 127	13 093	30 225	1 043
3254	Pharmaceutical & medicine mfg	—	24	11	1 250	45 764	915	1 765	26 571	267 108	155 790	415 835	13 064
32541	Pharmaceutical & medicine mfg	—	24	11	1 250	45 764	915	1 765	26 571	267 108	155 790	415 835	13 064
325411	Medicinal & botanical mfg	1	9	2	130	4 327	69	125	1 392	13 417	12 352	25 799	D
325412	Pharmaceutical preparation mfg	—	9	7	1 033	39 467	794	1 540	23 968	246 037	136 537	375 635	11 500
3255	Paint, coating, & adhesive mfg	4	32	4	216	6 067	127	218	2 865	33 856	40 616	73 471	1 730
32551	Paint & coating mfg	5	24	3	172	4 650	107	186	2 564	28 557	35 121	62 161	1 546
325510	Paint & coating mfg	5	24	3	172	4 650	107	186	2 564	28 557	35 121	62 161	1 546
3256	Soap, cleaning compound, & toilet preparation mfg	—	36	7	2 380	56 677	1 859	3 443	35 103	844 651	207 494	1 045 495	6 235
32561	Soap & cleaning compound mfg	8	23	4	c	D	D	D	D	D	D	D	1 310
325611	Soap & other detergent mfg	7	9	2	c	D	D	D	D	D	D	D	971
32562	Toilet preparation mfg	—	13	3	g	D	D	D	D	D	D	D	4 925
325620	Toilet preparation mfg	—	13	3	g	D	D	D	D	D	D	D	4 925
3259	Other chemical product mfg	1	38	13	1 441	39 769	1 110	2 255	21 918	85 889	118 549	209 200	9 135
32592	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	29	8	404	11 193	239	426	5 989	47 388	39 109	86 399	3 509
325991	Custom compounding of purchased resin	1	11	3	c	D	D	D	D	D	D	D	919
325998	All other miscellaneous chemical product & preparation mfg	4	14	4	205	6 205	109	202	3 300	35 396	19 382	54 750	2 270
326	Plastics & rubber products mfg	1	238	99	8 276	212 130	6 324	12 404	138 669	540 148	527 058	1 067 066	51 841
3261	Plastics product mfg	1	198	80	7 261	183 866	5 601	10 958	122 898	473 032	483 933	957 302	48 164
32611	Unsupported plastics film, sheet, & bag mfg	—	11	4	315	9 386	217	453	6 460	21 768	29 198	49 808	3 216
326111	Unsupported plastics bag mfg	1	6	2	c	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	3	16	8	390	10 934	320	689	7 673	31 636	49 110	80 577	2 924
326121	Unsupported plastics profile shape mfg	2	13	5	198	5 315	152	307	3 161	12 314	10 851	23 140	1 057
326122	Plastics pipe & pipe fitting mfg	4	3	3	192	5 619	168	382	4 512	19 322	38 259	57 437	1 867
32614	Polystyrene foam product mfg	5	10	4	307	7 695	277	595	6 247	22 456	26 356	48 336	1 946
326140	Polystyrene foam product mfg	5	10	4	307	7 695	277	595	6 247	22 456	26 356	48 336	1 946
32616	Plastics bottle mfg	—	7	5	365	8 962	275	411	5 121	27 953	23 349	50 004	D
326160	Plastics bottle mfg	—	7	5	365	8 962	275	411	5 121	27 953	23 349	50 004	D
32619	Other plastics product mfg	1	141	57	5 744	143 624	4 405	8 646	95 411	361 148	345 912	710 525	35 081
326191	Plastics plumbing fixture mfg	—	16	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	123	51	5 212	129 921	4 088	7 965	88 331	326 554	321 490	650 714	34 145
3262	Rubber product mfg	1	40	19	1 015	28 264	723	1 446	15 771	67 116	43 125	109 764	3 677
32621	Tire mfg	1	14	3	154	3 810	111	263	2 311	12 364	10 957	23 069	607
326212	Tire retreading	1	13	3	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	5	4	136	2 810	113	237	1 906	11 825	10 977	22 644	690
326220	Rubber & plastics hoses & belting mfg	—	5	4	136	2 810	113	237	1 906	11 825	10 977	22 644	690
32629	Other rubber product mfg	1	21	12	725	21 644	499	946	11 554	42 927	21 191	64 051	2 380
326291	Rubber product mfg for mechanical use	2	5	4	191	7 593	145	276	3 926	13 415	5 920	19 253	1 176
326299	All other rubber product mfg	1	16	8	534	14 051	354	670	7 628	29 512	15 271	44 798	1 204

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	ARIZONA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	262	102	7 106	200 717	5 176	10 346	134 517	636 492	503 916	1 130 520	61 013
3271	Clay product & refractory mfg	1	55	12	839	19 219	617	1 136	11 182	40 457	22 416	64 005	2 254
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	38	9	603	12 608	439	801	6 626	29 691	14 366	45 032	1 132
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	2	35	7	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	-	3	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	2	17	3	236	6 611	178	335	4 556	10 766	8 050	18 973	1 122
327121	Brick & structural clay tile mfg	-	2	1	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	2	35	9	515	13 785	389	696	8 468	39 387	24 595	63 416	2 265
32721	Glass & glass product mfg	2	35	9	515	13 785	389	696	8 468	39 387	24 595	63 416	2 265
327215	Glass product mfg made of purchased glass	1	28	8	463	12 588	343	628	7 510	34 632	21 372	55 451	1 843
3273	Cement & concrete product mfg	1	131	66	4 921	144 514	3 499	7 102	97 168	481 101	375 661	846 030	51 573
32731	Cement mfg	-	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	-	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.	2	63	31	2 517	68 817	1 768	3 346	49 576	182 546	182 847	366 048	24 715
327320	Ready-mix concrete mfg	2	63	31	2 517	68 817	1 768	3 346	49 576	182 546	182 847	366 048	24 715
32733	Concrete pipe, brick, & block mfg	-	32	19	f	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg	1	24	14	613	18 442	383	867	9 960	58 152	48 452	104 807	4 993
327332	Concrete pipe mfg	-	8	5	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	-	34	14	1 188	33 159	854	1 730	20 456	84 291	64 874	149 698	6 473
327390	Other concrete product mfg	-	34	14	1 188	33 159	854	1 730	20 456	84 291	64 874	149 698	6 473
3274	Lime & gypsum product mfg	-	5	4	220	8 146	180	411	6 414	28 571	31 730	60 305	1 561
32741	Lime mfg	-	2	2	c	D	D	D	D	D	D	D	D
327410	Lime mfg	-	2	2	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	3	36	11	611	15 053	491	1 001	11 285	46 976	49 514	96 764	3 360
32799	All other nonmetallic mineral product mfg ...	3	35	11	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	6	13	1	c	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg ..	2	6	4	139	3 971	113	253	2 684	12 711	17 024	29 661	541
327999	All other miscellaneous nonmetallic mineral product mfg	3	14	5	315	7 165	253	490	5 707	24 289	26 608	51 265	2 434
331	Primary metal mfg	-	59	30	7 037	246 120	5 566	11 702	175 921	670 502	2 074 272	2 797 609	80 337
3311	Iron & steel mills & ferroalloy mfg	-	3	1	c	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	1	c	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	6	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	c	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	c	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	4	1	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	4	1	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ...	-	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
33131	Alumina & aluminum production & processing	-	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
331316	Aluminum extruded product mfg	-	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D

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	ARIZONA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	-	19	12	3 471	145 038	2 678	5 891	104 896	356 965	1 812 492	2 215 475	63 364
33141	Nonferrous metal (except aluminum) smelting & refining.....	-	9	8	3 225	135 965	2 495	5 521	99 169	342 091	1 778 021	2 164 644	D
331411	Primary smelting & refining of copper....	-	5	5	h	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining.....	3	4	3	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	9	3	c	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	5	2	142	5 149	98	183	2 921	9 033	28 093	38 816	D
3315	Foundries.....	-	27	11	1 759	43 884	1 522	2 658	33 854	91 757	57 771	154 426	6 098
33151	Ferrous metal foundries .	-	10	4	735	21 696	617	1 188	16 480	45 315	35 736	78 597	4 618
331512	Steel investment foundries.....	-	5	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	-	3	2	c	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	-	17	7	1 024	22 188	905	1 470	17 374	46 442	22 035	75 829	1 480
331522	Nonferrous (except aluminum) die-casting foundries.....	-	2	1	f	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting) ..	-	8	3	166	4 263	135	275	2 990	6 446	4 631	10 951	250
331528	Other nonferrous foundries (except die-casting) ..	-	3	1	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	835	210	20 292	628 362	14 649	29 774	356 162	1 640 810	1 124 621	2 764 591	95 251
3321	Forging & stamping.....	1	32	15	832	28 551	634	1 278	18 128	72 336	74 329	146 295	4 975
33211	Forging & stamping.....	1	32	15	832	28 551	634	1 278	18 128	72 336	74 329	146 295	4 975
332114	Custom roll forming.....	-	5	5	180	4 653	128	230	2 927	15 277	35 111	50 696	473
332116	Metal stamping.....	2	21	10	625	23 000	485	1 003	14 532	55 250	37 443	92 000	4 347
3323	Architectural & structural metals mfg.....	-	225	67	7 390	206 523	5 181	10 760	112 426	469 853	437 008	919 064	19 381
33231	Plate work & fabricated structural product mfg ..	-	67	25	2 448	72 896	1 472	2 699	32 187	177 412	180 380	368 161	7 588
332311	Prefabricated metal building & component mfg.....	1	11	3	508	11 262	344	539	6 427	22 337	29 069	51 542	1 163
332312	Fabricated structural metal mfg.....	-	42	19	1 698	54 108	940	1 790	21 454	145 255	143 348	298 840	5 672
332313	Plate work mfg.....	1	14	3	242	7 526	188	370	4 306	9 820	7 963	17 779	753
33232	Ornamental & architectural metal products mfg.....	-	158	42	4 942	133 627	3 709	8 061	80 239	292 441	256 628	550 903	11 793
332321	Metal window & door mfg.....	-	29	12	1 812	45 320	1 214	2 729	26 093	106 710	103 534	210 194	3 151
332322	Sheet metal work mfg.....	1	77	22	2 167	65 342	1 682	3 643	37 847	131 049	117 530	251 204	7 023
332323	Ornamental & architectural metal work mfg.....	-	52	8	963	22 965	813	1 689	16 299	54 682	35 564	89 505	1 619
3324	Boiler, tank, & shipping container mfg.....	-	13	5	332	12 429	250	545	9 220	35 530	48 393	84 776	935
33243	Metal can, box, & other metal container (light gauge) mfg.....	-	5	3	213	8 567	161	362	6 650	24 351	43 888	69 104	533
332439	Other metal container mfg.....	-	4	2	c	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	-	12	3	1 069	25 701	938	1 928	18 042	66 610	49 454	113 833	D
33251	Hardware mfg.....	-	12	3	1 069	25 701	938	1 928	18 042	66 610	49 454	113 833	D
332510	Hardware mfg.....	-	12	3	1 069	25 701	938	1 928	18 042	66 610	49 454	113 833	D
3326	Spring & wire product mfg ..	2	15	4	299	6 902	243	358	4 654	17 979	18 222	36 342	653
33261	Spring & wire product mfg.....	2	15	4	299	6 902	243	358	4 654	17 979	18 222	36 342	653
332618	Other fabricated wire product mfg.....	2	11	3	250	5 573	201	288	3 662	15 877	17 250	33 371	592
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	352	73	5 093	175 368	3 938	7 878	116 296	355 783	145 642	495 514	44 544
33271	Machine shops.....	2	314	56	3 826	134 003	2 927	5 716	87 152	253 814	104 486	353 336	26 003
332710	Machine shops.....	2	314	56	3 826	134 003	2 927	5 716	87 152	253 814	104 486	353 336	26 003
33272	Turned product & screw, nut, & bolt mfg.....	1	38	17	1 267	41 365	1 011	2 162	29 144	101 969	41 156	142 178	18 541
332721	Precision turned product mfg.....	1	31	13	982	32 097	780	1 789	23 280	75 299	30 183	104 524	16 657
332722	Bolt, nut, screw, rivet, & washer mfg.....	2	7	4	285	9 268	231	373	5 864	26 670	10 973	37 654	1 884

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31-33	ARIZONA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	2	97	23	1 677	44 230	1 307	2 398	28 763	96 597	30 978	128 187	5 624
33281	Coating, engraving, heat treating, & allied activities.....	2	97	23	1 677	44 230	1 307	2 398	28 763	96 597	30 978	128 187	5 624
332811	Metal heat treating....	1	10	4	210	6 656	164	299	4 399	16 030	4 586	20 788	2 200
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	3	35	8	622	15 455	494	841	10 306	39 506	12 296	51 543	1 811
332813	Electroplating, plating, polishing, anodizing, & coloring.....	2	52	11	845	22 119	649	1 258	14 058	41 061	14 096	55 856	1 613
3329	Other fabricated metal product mfg.....	—	77	19	3 516	126 883	2 091	4 538	47 485	522 103	318 341	834 211	14 221
33291	Metal valve mfg.....	—	13	7	2 311	91 277	1 191	2 732	25 457	437 404	238 353	671 156	11 402
332912	Fluid power valve & hose fitting mfg.....	—	7	5	2 197	87 045	1 104	2 546	22 848	426 731	230 304	652 534	11 040
33299	All other fabricated metal product mfg.....	1	64	12	1 205	35 606	900	1 806	22 028	84 699	79 988	163 055	2 819
332994	Small arms mfg.....	—	8	1	287	7 006	260	573	5 595	31 592	12 640	43 703	330
332999	All other miscellaneous fabricated metal product mfg.....	1	44	7	745	22 969	521	976	12 872	41 130	59 802	100 979	1 408
333	Machinery mfg.....	1	316	93	10 588	312 211	7 349	13 701	171 924	898 126	734 682	1 627 438	61 726
3331	Agriculture, construction, & mining machinery mfg....	—	25	7	1 885	45 657	1 621	3 194	32 329	168 453	131 402	299 956	6 436
33311	Agricultural implement mfg.....	—	10	2	g	D	D	D	D	D	D	D	5 011
333111	Farm machinery & equipment mfg.....	—	9	1	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	1	5	3	c	D	D	D	D	D	D	D	781
333120	Construction machinery mfg.....	1	5	3	c	D	D	D	D	D	D	D	781
33313	Mining & oil & gas field machinery mfg.....	—	10	2	c	D	D	D	D	D	D	D	644
333131	Mining machinery & equipment mfg.....	—	8	2	144	5 489	75	153	1 846	13 552	19 426	32 961	D
3332	Industrial machinery mfg ..	1	56	19	2 167	74 992	1 139	2 267	35 785	228 093	155 351	379 427	26 416
33321	Sawmill & woodworking machinery mfg.....	—	4	3	114	3 179	86	133	1 724	6 213	5 194	11 776	230
333210	Sawmill & woodworking machinery mfg.....	—	4	3	114	3 179	86	133	1 724	6 213	5 194	11 776	230
33329	Other industrial machinery mfg.....	1	46	16	2 036	71 239	1 040	2 117	33 800	220 635	149 131	365 361	26 014
333293	Printing machinery & equipment mfg.....	3	4	2	c	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.....	—	17	8	1 436	52 849	667	1 426	23 784	181 281	122 123	300 956	23 617
333298	All other industrial machinery mfg.....	5	19	5	398	11 911	234	417	5 923	26 800	19 666	44 797	1 390
3333	Commercial & service industry machinery mfg ..	2	63	17	1 553	48 297	841	1 510	18 121	141 736	130 396	266 400	7 177
33331	Commercial & service industry machinery mfg.....	2	63	17	1 553	48 297	841	1 510	18 121	141 736	130 396	266 400	7 177
333313	Office machinery mfg ..	8	6	3	388	12 096	215	365	4 710	26 754	21 413	51 765	1 506
333314	Optical instrument & lens mfg.....	1	14	4	295	13 560	120	200	2 906	49 433	22 384	61 617	2 499
333319	Other commercial & service industry machinery mfg.....	—	25	9	714	18 865	406	770	8 446	55 959	79 527	136 290	2 413
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	22	7	1 385	35 798	1 013	2 077	21 423	93 876	103 890	202 037	3 867
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	22	7	1 385	35 798	1 013	2 077	21 423	93 876	103 890	202 037	3 867
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	13	6	1 296	33 728	943	1 954	20 075	88 451	99 488	192 106	3 694

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	ARIZONA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	2	98	26	1 748	59 949	1 271	2 395	38 196	123 093	52 837	168 967	9 965
33351	Metalworking machinery mfg	1	98	26	1 748	59 949	1 271	2 395	38 196	123 093	52 837	168 967	9 965
333511	Industrial mold mfg ...	1	25	7	442	18 590	333	636	12 161	38 400	16 054	50 342	3 809
333514	Special die & tool, die set, jig, & fixture mfg .	2	44	9	547	20 385	398	788	13 886	39 765	13 406	52 861	3 171
333515	Cutting tool & machine tool accessory mfg ..	4	22	6	381	10 003	264	490	6 342	18 494	8 892	27 314	2 027
333518	Other metalworking machinery mfg	6	3	2	287	8 517	206	335	4 160	21 816	11 102	30 369	300
3336	Engine, turbine, & power transmission equipment mfg	—	6	3	122	5 072	80	152	2 078	12 856	10 850	23 477	905
33361	Engine, turbine, & power transmission equipment mfg	—	6	3	122	5 072	80	152	2 078	12 856	10 850	23 477	905
3339	Other general-purpose machinery mfg	1	46	14	1 728	42 446	1 384	2 106	23 992	130 019	149 956	287 174	6 960
33391	Pump & compressor mfg	1	7	2	107	2 696	73	101	1 457	7 945	9 844	17 836	D
33392	Material handling equipment mfg	—	11	2	225	6 716	151	304	4 307	17 873	29 692	48 998	D
333922	Conveyor & conveying equipment mfg	—	3	2	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	28	10	1 396	33 034	1 160	1 701	18 228	104 201	110 420	220 340	2 724
333991	Power-driven handtool mfg	—	4	1	f	D	D	D	D	D	D	D	408
333999	All other miscellaneous general-purpose machinery mfg	4	14	6	488	15 640	376	741	8 127	26 146	28 621	53 776	1 782
334	Computer & electronic product mfg	—	356	166	48 384	2 095 152	23 484	50 572	663 667	13 486 186	2 845 343	16 295 240	1 570 887
3341	Computer & peripheral equipment mfg	2	50	18	1 671	68 155	608	1 392	19 223	93 253	184 635	276 928	18 043
33411	Computer & peripheral equipment mfg	2	50	18	1 671	68 155	608	1 392	19 223	93 253	184 635	276 928	18 043
334111	Electronic computer mfg	8	11	3	c	D	D	D	D	D	D	D	2 001
334113	Computer terminal mfg	—	5	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	30	12	831	28 963	273	563	7 835	55 286	80 701	135 510	10 679
3342	Communications equipment mfg	1	47	22	6 976	182 722	2 750	5 198	76 190	728 132	322 735	1 061 930	42 899
33421	Telephone apparatus mfg	3	9	6	1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
334210	Telephone apparatus mfg	3	9	6	1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	29	14	5 566	124 334	1 934	3 446	47 230	564 430	238 317	812 141	33 249
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	29	14	5 566	124 334	1 934	3 446	47 230	564 430	238 317	812 141	33 249
33429	Other communications equipment mfg	3	9	2	136	3 760	93	154	1 705	8 764	5 722	14 556	196
334290	Other communications equipment mfg	3	9	2	136	3 760	93	154	1 705	8 764	5 722	14 556	196
3343	Audio & video equipment mfg	—	8	6	583	14 512	415	730	7 644	72 950	58 284	130 185	1 945
33431	Audio & video equipment mfg	—	8	6	583	14 512	415	730	7 644	72 950	58 284	130 185	1 945
334310	Audio & video equipment mfg	—	8	6	583	14 512	415	730	7 644	72 950	58 284	130 185	1 945
3344	Semiconductor & other electronic component mfg	—	157	80	28 164	1 272 048	16 054	36 047	436 288	10 560 513	1 573 133	12 098 035	1 442 397

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	ARIZONA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg	-	157	80	28 164	1 272 048	16 054	36 047	436 288	10 560 513	1 573 133	12 098 035	1 442 397
334412	Bare printed circuit board mfg	-	40	19	3 320	92 463	2 596	5 405	61 286	310 284	179 148	482 267	44 338
334413	Semiconductor & related device mfg ...	-	47	26	18 070	957 374	8 493	19 831	243 066	9 701 750	668 781	10 329 715	1 346 376
334414	Electronic capacitor mfg	-	4	3	c	D	D	D	D	D	D	D	707
334416	Electronic coil, transformer, & other inductor mfg	-	13	8	390	7 554	324	584	4 335	15 476	10 756	26 172	D
334417	Electronic connector mfg	-	7	3	790	25 602	629	1 388	18 164	82 331	30 966	118 820	2 740
334418	Printed circuit assembly (electronic assembly) mfg	-	13	10	4 597	157 215	3 357	7 568	89 284	392 788	640 680	1 036 761	45 678
334419	Other electronic component mfg	2	31	10	717	24 252	506	974	16 054	40 522	33 721	78 030	2 082
3345	Navigational, measuring, medical, & control instruments mfg	-	83	35	10 497	534 848	3 346	6 514	114 009	1 914 545	637 672	2 544 021	63 630
33451	Navigational, measuring, medical, & control instruments mfg	-	83	35	10 497	534 848	3 346	6 514	114 009	1 914 545	637 672	2 544 021	63 630
334510	Electromedical & electrotherapeutic apparatus mfg	6	9	4	438	35 747	133	222	9 505	77 480	43 711	122 332	7 029
334511	Search, detection, navigation, & guidance instrument mfg	-	17	9	6 913	347 664	2 158	4 178	73 420	1 037 834	411 119	1 432 814	31 710
334512	Automatic environmental control mfg	1	5	2	c	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	15	5	g	D	D	D	D	D	D	D	14 252
334514	Totalizing fluid meter & counting device mfg .	2	2	1	c	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	2	14	5	387	19 924	260	464	10 768	26 304	27 163	53 519	5 438
334516	Analytical laboratory instrument mfg	1	9	2	170	7 553	50	104	1 736	18 661	17 319	36 555	810
334519	Other measuring & controlling device mfg	-	12	7	313	12 161	105	218	3 023	37 102	12 647	49 476	2 181
3346	Mfg & reproducing magnetic & optical media .	-	11	5	493	22 867	311	691	10 313	116 793	68 884	184 141	1 973
33461	Mfg & reproducing magnetic & optical media	-	11	5	493	22 867	311	691	10 313	116 793	68 884	184 141	1 973
334612	Prerecorded CD (except software), tape, & record reproducing	-	7	2	c	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	3	2	c	D	D	D	D	D	D	D	1 369
335	Electrical equipment, appliance, & component mfg	-	90	30	4 322	130 723	2 866	5 791	69 701	401 145	490 482	924 869	28 872
3351	Electric lighting equipment mfg	1	25	5	600	16 986	391	724	6 980	33 062	25 667	59 025	1 440
33512	Lighting fixture mfg	1	25	5	600	16 986	391	724	6 980	33 062	25 667	59 025	1 440
335121	Residential electric lighting fixture mfg ...	3	12	2	218	4 212	169	305	2 670	8 117	4 274	12 496	192
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	1	5	1	107	2 891	85	151	1 442	6 899	7 415	14 082	284
335129	Other lighting equipment mfg	-	8	2	275	9 883	137	268	2 868	18 046	13 978	32 447	964
3352	Household appliance mfg ..	-	4	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	3	2	c	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	6	27	8	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	6	27	8	e	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	7	10	4	203	6 494	136	244	3 395	8 079	16 639	25 345	467
335314	Relay & industrial control mfg	3	11	2	128	3 116	73	102	1 248	5 739	3 973	9 786	190

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31-33	ARIZONA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	-	34	15	3 054	94 606	2 013	4 197	51 394	312 399	405 817	750 493	25 100
33592	Communication & energy wire & cable mfg	-	6	6	2 246	69 384	1 477	3 082	38 812	258 495	341 449	630 890	19 095
335929	Other communication & energy wire mfg ...	-	6	6	2 246	69 384	1 477	3 082	38 812	258 495	341 449	630 890	19 095
33593	Wiring device mfg	9	9	1	101	3 858	80	144	2 615	-958	7 824	7 004	612
33599	All other electrical equipment & component mfg	-	19	8	707	21 364	456	971	9 967	54 862	56 544	112 599	5 393
335999	All other miscellaneous electrical equipment & component mfg	-	18	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	227	88	29 862	1 440 052	14 472	31 681	411 699	3 525 708	2 787 626	6 535 848	193 517
3361	Motor vehicle mfg	3	3	1	c	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	3	3	1	c	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	1	c	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	36	6	588	13 601	504	963	9 688	31 462	43 482	76 258	1 749
33621	Motor vehicle body & trailer mfg	2	36	6	588	13 601	504	963	9 688	31 462	43 482	76 258	1 749
336211	Motor vehicle body mfg	2	11	3	342	8 694	296	621	6 142	21 584	27 104	49 944	D
336214	Travel trailer & camper mfg	2	18	2	c	D	D	D	D	D	D	D	826
3363	Motor vehicle parts mfg ...	1	85	32	7 777	217 500	5 709	10 614	108 546	629 664	693 912	1 329 078	57 710
33631	Motor vehicle gasoline engine & engine parts mfg	1	19	4	560	10 258	437	498	6 353	19 311	24 790	44 243	2 249
336312	Gasoline engine & engine parts mfg	-	14	3	517	9 252	400	445	5 588	17 193	23 414	40 762	2 070
33632	Motor vehicle electrical & electronic equipment mfg	1	13	8	1 747	29 977	1 586	3 000	23 192	89 166	84 207	173 959	4 156
336322	Other motor vehicle electrical & electronic equipment mfg	1	12	7	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	1	c	D	D	D	D	D	D	D	61
336340	Motor vehicle brake system mfg	-	3	1	c	D	D	D	D	D	D	D	61
33635	Motor vehicle transmission & power train parts mfg	1	9	3	c	D	D	D	D	D	D	D	979
336350	Motor vehicle transmission & power train parts mfg	1	9	3	c	D	D	D	D	D	D	D	979
33636	Motor vehicle seating & interior trim mfg	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
336360	Motor vehicle seating & interior trim mfg ...	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
33637	Motor vehicle metal stamping	2	4	3	177	8 439	133	309	4 405	13 546	17 363	30 977	2 018
336370	Motor vehicle metal stamping	2	4	3	177	8 439	133	309	4 405	13 546	17 363	30 977	2 018
33639	Other motor vehicle parts mfg	-	30	8	4 051	136 430	2 551	4 935	58 261	438 676	503 490	945 222	44 560
336399	All other motor vehicle parts mfg	-	30	8	4 051	136 430	2 551	4 935	58 261	438 676	503 490	945 222	44 560
3364	Aerospace product & parts mfg	-	68	40	20 396	1 178 068	7 352	18 313	271 584	2 798 176	1 955 404	4 973 185	130 116
33641	Aerospace product & parts mfg	-	68	40	20 396	1 178 068	7 352	18 313	271 584	2 798 176	1 955 404	4 973 185	130 116
336411	Aircraft mfg	-	5	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	19	16	7 113	399 182	2 376	5 803	117 476	1 470 339	746 350	2 118 710	64 023
336413	Other aircraft part & auxiliary equipment mfg	-	38	17	2 132	77 874	1 329	2 673	33 484	177 854	104 749	276 156	14 125
336414	Guided missile & space vehicle mfg ...	-	2	2	i	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ARIZONA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3365	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	15	5	536	15 094	451	914	11 386	32 222	50 449	82 366	1 300
33661	Ship & boat building	—	15	5	536	15 094	451	914	11 386	32 222	50 449	82 366	1 300
336612	Boat building	—	14	5	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	19	3	326	7 559	262	437	3 920	12 658	32 696	42 328	1 316
33699	Other transportation equipment mfg	—	19	3	326	7 559	262	437	3 920	12 658	32 696	42 328	1 316
336991	Motorcycle, bicycle, & parts mfg	1	10	1	133	2 766	110	218	1 627	2 907	17 591	17 526	796
336999	All other transportation equipment mfg	—	9	2	193	4 793	152	219	2 293	9 751	15 105	24 802	520
337	Furniture & related product mfg	1	360	79	7 977	162 802	6 451	11 953	114 198	382 821	290 018	675 028	20 101
3371	Household & institutional furniture & kitchen cabinet mfg	1	269	53	5 780	117 928	4 878	9 406	87 712	271 404	199 102	467 562	13 034
33711	Wood kitchen cabinet & counter top mfg	1	132	24	1 957	44 327	1 529	2 854	28 074	124 276	58 870	183 083	2 490
337110	Wood kitchen cabinet & counter top mfg	1	132	24	1 957	44 327	1 529	2 854	28 074	124 276	58 870	183 083	2 490
33712	Household & institutional furniture mfg	1	137	29	3 823	73 601	3 349	6 552	59 638	147 128	140 232	284 479	10 544
337121	Upholstered household furniture mfg	3	24	7	334	7 141	293	477	5 337	9 935	13 672	23 853	559
337122	Nonupholstered wood household furniture mfg	1	87	14	2 835	50 725	2 499	5 011	42 700	100 803	99 530	198 021	6 659
337124	Metal household furniture mfg	4	10	2	129	2 247	109	215	1 524	5 402	3 057	8 211	216
337125	Household furniture (except wood & metal) mfg	—	3	2	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	3	11	3	231	6 959	177	369	4 312	17 363	6 241	23 165	2 140
3372	Office furniture (including fixtures) mfg	2	63	18	1 535	30 059	1 131	1 681	17 768	61 168	41 619	103 397	3 477
33721	Office furniture (including fixtures) mfg	2	63	18	1 535	30 059	1 131	1 681	17 768	61 168	41 619	103 397	3 477
337211	Wood office furniture mfg	1	12	4	431	7 399	374	585	5 557	15 199	15 568	30 828	561
337212	Custom architectural woodwork & millwork mfg	1	24	7	506	9 478	319	415	5 068	16 036	9 207	25 541	1 771
337214	Office furniture (except wood) mfg	2	4	2	103	2 542	54	65	841	11 304	3 782	15 104	350
337215	Showcase, partition, shelving, & locker mfg	4	23	5	495	10 640	384	616	6 302	18 629	13 062	31 924	795
3379	Other furniture related product mfg	2	28	8	662	14 815	442	866	8 718	50 249	49 297	104 069	3 590
33791	Mattress mfg	—	18	5	349	8 806	254	529	6 521	28 639	33 730	62 126	2 497
337910	Mattress mfg	—	18	5	349	8 806	254	529	6 521	28 639	33 730	62 126	2 497
33792	Blind & shade mfg	5	10	3	313	6 009	188	337	2 197	21 610	15 567	41 943	1 093
337920	Blind & shade mfg	5	10	3	313	6 009	188	337	2 197	21 610	15 567	41 943	1 093
339	Miscellaneous mfg	1	511	78	8 837	267 242	5 433	11 124	109 462	740 758	393 665	1 125 868	37 982
3391	Medical equipment & supplies mfg	1	205	21	3 400	123 153	1 719	3 136	38 777	425 470	161 315	577 669	19 485
33911	Medical equipment & supplies mfg	1	205	21	3 400	123 153	1 719	3 136	38 777	425 470	161 315	577 669	19 485
339112	Surgical & medical instrument mfg	1	17	9	963	36 273	313	477	5 452	127 938	23 313	138 776	3 144
339113	Surgical appliance & supplies mfg	—	22	4	1 544	63 161	749	1 500	17 783	245 322	117 704	364 486	14 537
339116	Dental laboratories	5	145	8	771	20 135	570	980	13 385	44 291	16 465	62 384	1 463
3399	Other miscellaneous mfg	1	306	57	5 437	144 089	3 714	7 988	70 685	315 288	232 350	548 199	18 497
33991	Jewelry & silverware mfg	4	53	1	215	4 350	156	225	2 351	14 848	10 318	25 082	395
33992	Sporting & athletic goods mfg	—	37	13	2 035	57 703	1 476	2 684	29 693	141 590	98 582	242 087	7 893
339920	Sporting & athletic goods mfg	—	37	13	2 035	57 703	1 476	2 684	29 693	141 590	98 582	242 087	7 893
33993	Doll, toy, & game mfg	5	15	5	251	5 127	169	323	2 504	12 749	9 681	21 866	636
339932	Game, toy, & children's vehicle mfg	6	12	5	234	4 836	156	300	2 311	11 841	9 283	20 516	629
33994	Office supplies (except paper) mfg	2	18	2	187	3 475	144	237	2 276	7 601	5 047	12 563	473
339943	Marking device mfg	2	11	1	118	1 837	90	131	1 218	4 191	2 389	6 507	197

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARIZONA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33995	Sign mfg	1	115	14	1 369	41 898	757	1 490	17 767	74 685	64 442	137 624	4 339
339950	Sign mfg	1	115	14	1 369	41 898	757	1 490	17 767	74 685	64 442	137 624	4 339
33999	All other miscellaneous mfg	3	68	22	1 380	31 536	1 012	3 029	16 094	63 815	44 280	108 977	4 761
339991	Gasket, packing, & sealing device mfg	9	7	2	158	3 310	132	274	2 178	7 610	5 204	12 740	1 117
339992	Musical instrument mfg	1	6	2	243	4 197	219	477	3 445	6 615	3 071	11 537	D
339999	All other miscellaneous mfg	3	52	18	949	23 283	645	2 237	10 133	48 102	34 491	81 721	3 280

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLAGSTAFF, AZ–UT MSA												
	Manufacturing	–	101	15	2 487	81 859	1 411	2 913	33 697	358 079	241 868	603 701	27 506
	Flagstaff, AZ–UT MSA (AZ Part)	–	95	13	g	D	D	D	D	D	D	D	D
	Flagstaff, AZ–UT MSA (UT Part)	–	6	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	–	13	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	–	6	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	–	6	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	–	3	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	–	7	2	e	D	D	D	D	D	D	D	D
31-33	LAS VEGAS, NV–AZ MSA												
	Manufacturing	1	990	225	21 588	636 554	16 072	31 538	410 832	2 035 961	1 872 078	3 923 949	131 869
	Las Vegas, NV–AZ MSA (AZ Part)	–	156	33	3 807	85 202	3 166	5 735	60 768	343 952	398 925	760 367	17 181
	Las Vegas, NV–AZ MSA (NV Part)	1	834	192	17 781	551 352	12 906	25 803	350 064	1 692 009	1 473 153	3 163 582	114 688
311	Food mfg	–	60	16	1 981	54 403	1 325	3 055	29 553	220 765	164 602	386 505	10 919
3113	Sugar & confectionery product mfg	–	6	2	f	D	D	D	D	D	D	D	1 453
31133	Confectionery mfg from purchased chocolate	–	3	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	–	3	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	–	5	2	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	–	3	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	–	3	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	34	6	422	11 062	295	563	6 348	20 839	12 115	32 972	3 363
31181	Bread & bakery product mfg	3	31	5	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAS VEGAS, NV—AZ MSA—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	-	12	3	374	11 966	241	563	6 795	104 459	76 640	174 499	3 083
3121	Beverage mfg	-	10	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	8	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	34	8	784	17 521	644	1 237	11 875	42 749	43 397	86 810	1 288
3212	Veneer, plywood, & engineered wood product mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
32121	Veneer, plywood, & engineered wood product mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
321214	Truss mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
322	Paper mfg	-	10	3	300	11 389	234	528	8 325	75 402	67 491	136 860	D
3222	Converted paper product mfg	-	10	3	300	11 389	234	528	8 325	75 402	67 491	136 860	D
323	Printing & related support activities	2	138	18	1 653	44 218	1 219	2 130	27 884	91 713	64 482	156 472	6 689
3231	Printing & related support activities	2	138	18	1 653	44 218	1 219	2 130	27 884	91 713	64 482	156 472	6 689
32311	Printing	2	123	17	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	45	8	772	23 002	593	1 059	15 139	51 002	38 168	89 707	D
323113	Commercial screen printing	1	21	6	412	9 126	283	519	4 753	16 985	13 604	30 741	D
325	Chemical mfg	1	41	8	774	28 841	482	946	17 532	111 855	82 633	203 986	19 283
3251	Basic chemical mfg	-	7	3	508	20 672	321	654	13 573	75 647	53 783	138 557	16 521
32518	Other basic inorganic chemical mfg	-	3	2	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	52	19	1 928	49 684	1 578	3 424	36 305	162 220	188 619	345 677	11 590
3261	Plastics product mfg	2	49	18	1 860	47 614	1 527	3 289	35 038	153 738	184 724	333 185	10 973
32611	Unsupported plastics film, sheet, & bag mfg ..	1	5	5	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	4	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	37	11	1 289	30 793	1 066	2 348	23 988	101 209	97 122	193 577	7 225
326199	All other plastics product mfg	2	34	10	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	84	44	3 153	115 312	2 521	5 294	89 291	354 837	288 867	643 256	21 583
3273	Cement & concrete product mfg	2	49	28	1 876	68 221	1 494	3 133	53 498	194 608	147 798	342 222	14 362
32732	Ready-mix concrete mfg	1	24	15	1 261	49 390	1 116	2 368	44 225	138 944	103 713	243 000	7 199
327320	Ready-mix concrete mfg	1	24	15	1 261	49 390	1 116	2 368	44 225	138 944	103 713	243 000	7 199
32739	Other concrete product mfg	4	12	6	345	10 171	193	362	4 432	31 483	20 003	52 298	1 037
327390	Other concrete product mfg	4	12	6	345	10 171	193	362	4 432	31 483	20 003	52 298	1 037
3274	Lime & gypsum product mfg	-	8	6	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	5	3	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	-	5	3	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	14	6	450	16 326	401	837	14 792	33 582	47 800	81 362	D
32799	All other nonmetallic mineral product mfg ..	-	14	6	450	16 326	401	837	14 792	33 582	47 800	81 362	D
327999	All other miscellaneous nonmetallic mineral product mfg	-	8	3	344	14 206	318	688	13 227	28 571	45 663	74 245	D
331	Primary metal mfg	-	7	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAS VEGAS, NV—AZ MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	2	126	20	1 639	45 270	1 244	2 262	27 714	95 544	87 199	182 688	6 363
3323	Architectural & structural metals mfg	2	47	9	725	17 947	560	1 033	11 302	43 599	44 640	87 460	1 555
33232	Ornamental & architectural metal products mfg.	1	38	8	660	16 096	512	947	10 128	39 754	39 593	78 552	1 369
332321	Metal window & door mfg	1	7	3	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	2	23	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	40	2	e	D	D	D	D	D	D	D	3 016
333	Machinery mfg	—	35	7	1 062	22 719	901	1 233	13 170	84 356	84 686	175 275	D
3339	Other general-purpose machinery mfg	—	9	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	5	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	42	12	1 127	33 610	788	1 464	19 461	54 760	83 073	139 943	5 610
3344	Semiconductor & other electronic component mfg	1	15	5	627	16 121	533	1 023	10 954	18 573	54 349	74 333	2 467
33441	Semiconductor & other electronic component mfg	1	15	5	627	16 121	533	1 023	10 954	18 573	54 349	74 333	2 467
334419	Other electronic component mfg	—	6	2	356	10 311	292	563	6 535	6 673	41 036	49 017	D
3345	Navigational, measuring, medical, & control instruments mfg	4	13	5	317	10 685	173	304	5 129	18 513	12 901	31 675	1 423
33451	Navigational, measuring, medical, & control instruments mfg	4	13	5	317	10 685	173	304	5 129	18 513	12 901	31 675	1 423
335	Electrical equipment, appliance, & component mfg	—	14	1	339	9 555	279	556	7 085	48 424	126 991	182 786	D
3359	Other electrical equipment & component mfg	—	7	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	6	37	7	e	D	D	D	D	D	D	D	2 016
337	Furniture & related product mfg	—	75	16	1 317	29 326	1 104	2 064	22 202	114 447	61 927	176 053	2 619
3371	Household & institutional furniture & kitchen cabinet mfg	—	54	11	1 007	21 555	872	1 681	16 778	94 382	50 192	144 138	1 892
33711	Wood kitchen cabinet & counter top mfg	—	31	9	847	18 484	738	1 450	14 407	88 298	45 347	133 207	1 490
337110	Wood kitchen cabinet & counter top mfg	—	31	9	847	18 484	738	1 450	14 407	88 298	45 347	133 207	1 490
3372	Office furniture (including fixtures) mfg	—	17	5	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	17	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	171	35	3 317	109 368	2 052	4 086	56 808	221 000	198 473	423 242	22 019
3391	Medical equipment & supplies mfg	5	62	4	489	12 985	366	650	8 717	29 640	13 238	42 846	1 529
33911	Medical equipment & supplies mfg	5	62	4	489	12 985	366	650	8 717	29 640	13 238	42 846	1 529
3399	Other miscellaneous mfg	2	109	31	2 828	96 383	1 686	3 436	48 091	191 360	185 235	380 396	20 490
33993	Doll, toy, & game mfg	1	8	5	263	7 863	196	376	4 453	17 625	15 945	33 581	D
339932	Game, toy, & children's vehicle mfg	1	8	5	263	7 863	196	376	4 453	17 625	15 945	33 581	D
33995	Sign mfg	3	40	13	1 302	50 281	850	1 811	29 415	79 484	47 671	131 094	7 048
339950	Sign mfg	3	40	13	1 302	50 281	850	1 811	29 415	79 484	47 671	131 094	7 048
33999	All other miscellaneous mfg	1	31	9	915	30 508	421	865	9 551	74 440	106 708	181 282	10 969
339999	All other miscellaneous mfg	1	29	9	f	D	D	D	D	D	D	D	D

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	PHOENIX-MESA, AZ MSA												
31-33	Manufacturing	-	3 438	1 026	148 277	5 199 813	92 462	190 348	2 314 812	23 087 446	12 327 124	35 312 730	2 239 000
311	Food mfg	1	162	54	7 386	191 920	5 219	10 657	112 965	888 267	1 309 034	2 205 604	95 925
3114	Fruit & vegetable preserving & specialty food mfg	6	11	3	396	9 882	311	565	4 951	70 711	52 256	123 021	3 653
31142	Fruit & vegetable canning, pickling, & drying	8	9	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	12	9	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	11	8	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	5	940	33 321	381	966	14 658	102 192	251 280	357 757	D
311514	Dry, condensed, & evaporated dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	17	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	17	5	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	7	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	74	23	2 799	64 872	1 931	3 443	36 033	226 133	122 655	349 998	7 837
31181	Bread & bakery product mfg	2	62	18	1 964	48 666	1 249	2 249	25 856	158 522	72 363	230 877	5 275
311812	Commercial bakeries	2	29	16	1 748	45 811	1 107	2 084	24 398	151 106	67 040	218 140	4 897
31182	Cookie, cracker, & pasta mfg	-	4	1	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	-	2	1	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	8	4	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	8	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg	1	28	9	881	23 123	739	1 349	14 165	137 085	66 212	203 109	D
31191	Snack food mfg	-	7	4	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	6	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg	7	10	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	19	12	1 088	32 117	526	1 100	11 497	135 051	294 535	428 013	20 580
3121	Beverage mfg	-	19	12	1 088	32 117	526	1 100	11 497	135 051	294 535	428 013	20 580
31211	Soft drink & ice mfg	-	13	11	1 040	31 253	490	1 069	10 835	129 853	290 119	418 413	20 215
312111	Soft drink mfg	-	6	6	f	D	D	D	D	D	D	D	18 286
314	Textile product mills	5	75	11	f	D	D	D	D	D	D	D	2 803
3149	Other textile product mills	4	41	11	f	D	D	D	D	D	D	D	2 719
31491	Textile bag & canvas mills	6	16	5	e	D	D	D	D	D	D	D	1 304
314912	Canvas & related product mills	6	14	4	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	4	25	6	e	D	D	D	D	D	D	D	1 415
314999	All other miscellaneous textile product mills	4	24	6	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	54	10	1 335	19 535	939	1 746	13 036	23 439	31 514	57 348	1 317
3152	Cut & sew apparel mfg	5	36	7	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	5	16	4	f	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	7	6	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	17	2	e	D	D	D	D	D	D	D	583
31599	Apparel accessories & other apparel mfg	1	17	2	e	D	D	D	D	D	D	D	583
315991	Hat, cap, & millinery mfg	-	3	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	126	66	6 301	144 843	5 304	10 281	105 049	329 487	450 751	779 819	10 895
3212	Veneer, plywood, & engineered wood product mfg	2	21	16	1 125	28 141	916	1 880	19 322	61 639	87 579	148 278	2 191
32121	Veneer, plywood, & engineered wood product mfg	2	21	16	1 125	28 141	916	1 880	19 322	61 639	87 579	148 278	2 191
321214	Truss mfg	1	18	16	1 095	27 374	891	1 836	18 741	58 877	84 855	142 719	1 834

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHOENIX—MESA, AZ MSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg ...	—	101	49	5 145	115 999	4 364	8 354	85 248	264 493	361 230	626 315	8 663
32191	Millwork	1	51	23	1 263	25 989	1 029	1 715	19 176	44 291	78 433	124 011	3 195
321911	Wood window & door mfg	2	21	10	553	13 088	470	766	9 514	20 895	20 181	42 839	1 387
321918	Other millwork (including flooring) ...	2	27	11	f	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	3	14	8	439	8 661	335	687	5 171	13 965	17 716	31 525	692
321920	Wood container & pallet mfg	3	14	8	439	8 661	335	687	5 171	13 965	17 716	31 525	692
32199	All other wood product mfg	—	36	18	3 443	81 349	3 000	5 952	60 901	206 237	265 081	470 779	4 776
321991	Manufactured home (mobile home) mfg ..	—	11	9	2 099	51 049	1 853	3 795	41 484	138 086	166 274	304 139	2 868
321992	Prefabricated wood building mfg	—	8	4	1 059	24 178	929	1 706	15 483	53 941	84 494	138 301	1 271
321999	All other miscellaneous wood product mfg ...	1	17	5	285	6 122	218	451	3 934	14 210	14 313	28 339	637
322	Paper mfg	—	32	19	1 960	64 462	1 556	3 390	41 153	179 557	200 660	378 691	13 857
3222	Converted paper product mfg	—	32	19	1 960	64 462	1 556	3 390	41 153	179 557	200 660	378 691	13 857
32221	Paperboard container mfg	—	14	10	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	10	7	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	—	8	5	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	3	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	8	3	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	—	6	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	505	91	7 456	206 575	5 346	10 140	130 135	440 897	264 453	705 972	44 159
3231	Printing & related support activities	1	505	91	7 456	206 575	5 346	10 140	130 135	440 897	264 453	705 972	44 159
32311	Printing	1	453	79	6 447	176 464	4 587	8 644	109 080	383 314	254 923	638 691	41 316
323110	Commercial lithographic printing ..	1	192	45	3 374	96 862	2 263	4 537	58 737	207 566	135 108	343 129	25 961
323113	Commercial screen printing	3	57	9	638	12 681	476	770	6 859	25 901	19 197	45 033	3 671
323114	Quick printing	2	116	7	975	22 376	726	1 077	13 999	46 899	26 251	73 123	2 678
323116	Manifold business form printing	—	18	8	586	17 662	421	853	11 485	52 518	33 996	86 573	4 871
323118	Blankbook, looseleaf binder, & device mfg .	4	8	5	302	7 515	261	602	5 031	15 120	8 316	23 147	350
32312	Support activities for printing	1	52	12	1 009	30 111	759	1 496	21 055	57 583	9 530	67 281	2 843
323121	Tradebinding & related work	3	17	5	e	D	D	D	D	D	D	D	D
323122	Prepress services	1	35	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	130	40	5 844	165 503	4 275	8 196	92 950	1 302 849	571 785	1 862 207	47 692
3251	Basic chemical mfg	—	13	5	548	16 306	214	367	5 165	72 287	49 744	121 281	17 560
32518	Other basic inorganic chemical mfg	—	5	1	393	10 158	108	181	1 902	16 238	25 114	43 720	D
325188	All other basic inorganic chemical mfg	—	5	1	393	10 158	108	181	1 902	16 238	25 114	43 720	D
3254	Pharmaceutical & medicine mfg	—	18	9	1 162	42 773	873	1 688	25 628	255 429	148 022	396 404	12 310
32541	Pharmaceutical & medicine mfg	—	18	9	1 162	42 773	873	1 688	25 628	255 429	148 022	396 404	12 310
325412	Pharmaceutical preparation mfg	—	8	7	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	29	7	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	10	3	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	10	3	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	32	12	1 358	37 597	1 049	2 130	20 484	70 011	111 288	185 938	8 193
32592	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	4	23	7	321	9 021	178	301	4 555	31 510	31 848	63 137	2 567

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31-33	PHOENIX—MESA, AZ MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	171	76	6 401	169 045	4 769	9 328	107 058	403 533	401 845	805 839	42 019
3261	Plastics product mfg	1	146	62	5 655	147 656	4 253	8 301	95 678	355 690	371 946	728 584	39 189
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	3	9	7	326	8 968	270	579	6 503	25 739	45 404	70 969	D
32614	Polystyrene foam product mfg	5	8	4	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	5	8	4	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	4	e	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	—	6	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	105	43	4 420	115 303	3 282	6 381	73 749	269 748	259 507	531 536	27 178
326191	Plastics plumbing fixture mfg	—	6	4	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	98	39	4 003	104 325	3 043	5 854	68 469	240 795	238 359	480 645	26 457
3262	Rubber product mfg	1	25	14	746	21 389	516	1 027	11 380	47 843	29 899	77 255	2 830
32629	Other rubber product mfg	1	15	9	558	17 427	371	714	8 878	33 796	15 061	48 796	D
326299	All other rubber product mfg	1	11	5	e	D	D	D	D	D	D	D	1 047
327	Nonmetallic mineral product mfg	1	140	51	3 883	112 458	2 942	6 138	75 863	341 966	300 302	630 496	28 967
3271	Clay product & refractory mfg	2	26	2	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	1	23	7	418	11 637	310	577	7 049	32 649	18 941	51 007	1 650
32721	Glass & glass product mfg	1	23	7	418	11 637	310	577	7 049	32 649	18 941	51 007	1 650
327215	Glass product mfg made of purchased glass	1	21	6	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	69	33	2 713	81 319	2 030	4 298	54 322	248 833	218 860	456 890	22 914
32732	Ready-mix concrete mfg .	2	25	10	1 049	31 942	796	1 646	23 283	92 295	107 647	200 216	12 493
327320	Ready-mix concrete mfg	2	25	10	1 049	31 942	796	1 646	23 283	92 295	107 647	200 216	12 493
32733	Concrete pipe, brick, & block mfg	—	18	11	605	18 535	453	1 057	12 149	78 409	49 790	116 488	4 428
327331	Concrete block & brick mfg	1	13	7	358	10 756	230	527	6 022	35 950	34 952	69 351	D
32739	Other concrete product mfg	—	26	12	1 059	30 842	781	1 595	18 890	78 129	61 423	140 186	5 993
327390	Other concrete product mfg	—	26	12	1 059	30 842	781	1 595	18 890	78 129	61 423	140 186	5 993
3279	Other nonmetallic mineral product mfg	3	19	7	400	10 220	332	718	8 007	34 649	37 265	72 035	2 844
32799	All other nonmetallic mineral product mfg ...	3	18	7	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	37	21	h	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
33131	Alumina & aluminum production & processing	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
331316	Aluminum extruded product mfg	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
3314	Nonferrous metal (except aluminum) production & processing	—	13	8	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	6	5	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	—	3	3	g	D	D	D	D	D	D	D	D
3315	Foundries	—	15	8	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	8	4	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	4	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	7	4	e	D	D	D	D	D	D	D	D

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31-33	PHOENIX—MESA, AZ MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	615	172	14 955	474 918	10 419	21 023	257 925	1 256 918	911 391	2 168 496	77 055
3321	Forging & stamping	2	27	12	745	25 882	572	1 169	16 371	65 522	71 437	136 671	4 766
33211	Forging & stamping	2	27	12	745	25 882	572	1 169	16 371	65 522	71 437	136 671	4 766
332116	Metal stamping	2	18	9	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	162	55	5 120	141 860	3 392	6 825	71 581	319 246	335 719	667 078	14 869
33231	Plate work & fabricated structural product mfg ..	—	44	19	2 030	61 044	1 172	2 165	25 398	153 381	163 848	327 716	6 580
332311	Prefabricated metal building & component mfg	1	7	2	460	9 977	313	477	5 694	20 974	27 074	48 178	D
332312	Fabricated structural metal mfg	—	31	16	1 503	48 960	812	1 594	18 738	129 432	132 203	271 997	5 129
33232	Ornamental & architectural metal products mfg	1	118	36	3 090	80 816	2 220	4 660	46 183	165 865	171 871	339 362	8 289
332321	Metal window & door mfg	—	24	10	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	1	59	19	g	D	D	D	D	D	D	D	5 355
332323	Ornamental & architectural metal work mfg	1	35	7	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	11	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	256	59	3 990	139 979	3 107	6 395	93 332	276 040	117 212	388 195	38 010
33271	Machine shops	2	227	46	2 993	108 132	2 296	4 606	69 797	205 513	83 351	284 593	21 332
332710	Machine shops	2	227	46	2 993	108 132	2 296	4 606	69 797	205 513	83 351	284 593	21 332
33272	Turned product & screw, nut, & bolt mfg	1	29	13	997	31 847	811	1 789	23 535	70 527	33 861	103 602	16 678
332721	Precision turned product mfg	—	24	10	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	78	20	1 434	37 273	1 126	2 075	23 979	78 643	27 577	106 956	5 355
33281	Coating, engraving, heat treating, & allied activities	1	78	20	1 434	37 273	1 126	2 075	23 979	78 643	27 577	106 956	5 355
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	1	30	6	493	10 785	397	675	7 135	26 064	10 542	36 502	D
332813	Electroplating, plating, polishing, anodizing, & coloring	2	38	10	731	19 832	565	1 101	12 445	36 549	12 449	49 666	D
3329	Other fabricated metal product mfg	—	54	16	2 980	109 301	1 680	3 594	37 426	458 525	290 551	740 450	12 449
33291	Metal valve mfg	—	9	5	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	6	4	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	45	11	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	31	7	f	D	D	D	D	D	D	D	1 320
333	Machinery mfg	1	234	69	7 369	223 880	5 088	9 755	129 081	644 830	496 339	1 137 354	49 669
3331	Agriculture, construction, & mining machinery mfg	—	17	5	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	7	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	47	18	2 064	72 347	1 072	2 162	34 384	223 413	150 168	369 093	25 510
33329	Other industrial machinery mfg	1	38	15	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	16	8	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	4	15	5	354	11 013	209	386	5 523	24 856	17 911	41 055	1 244
3333	Commercial & service industry machinery mfg ..	2	35	8	551	18 468	354	661	8 704	56 968	65 384	124 050	3 565
33331	Commercial & service industry machinery mfg	2	35	8	551	18 468	354	661	8 704	56 968	65 384	124 050	3 565
333319	Other commercial & service industry machinery mfg	1	16	6	314	10 190	210	402	5 364	33 602	53 193	87 489	2 044

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	PHOENIX—MESA, AZ MSA—Con.													
	Manufacturing—Con.													
333	Machinery mfg—Con.													
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	18	6	g	D	D	D	D	D	D	D	D	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	18	6	g	D	D	D	D	D	D	D	D	
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	11	5	g	D	D	D	D	D	D	D	D	
3335	Metalworking machinery mfg	3	81	20		1 349	47 636	976	1 807	29 834	102 055	40 904	136 205	7 545
33351	Metalworking machinery mfg	3	81	20		1 349	47 636	976	1 807	29 834	102 055	40 904	136 205	7 545
333511	Industrial mold mfg	1	21	5		330	14 350	252	494	9 461	30 685	13 662	40 527	D
333514	Special die & tool, die set, jig, & fixture mfg	2	40	8		500	18 149	355	693	12 097	34 871	11 475	46 178	2 607
333518	Other metalworking machinery mfg	6	2	2	e	D	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	2	31	9	f	D	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	4	17	6	e	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	274	127		43 743	1 905 715	21 175	45 865	595 784	12 887 427	2 545 509	15 410 741	1 524 089
3341	Computer & peripheral equipment mfg	2	39	12	g	D	D	D	D	D	D	D	D	13 034
33411	Computer & peripheral equipment mfg	2	39	12	g	D	D	D	D	D	D	D	D	13 034
334113	Computer terminal mfg	—	3	1	e	D	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	24	8		606	22 465	216	441	5 534	38 307	55 220	93 543	D
3342	Communications equipment mfg	1	39	18	i	D	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	3	9	6		1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
334210	Telephone apparatus mfg	3	9	6		1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	24	10		5 305	114 592	1 883	3 348	46 051	544 830	218 427	772 277	32 303
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	24	10		5 305	114 592	1 883	3 348	46 051	544 830	218 427	772 277	32 303
3343	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	122	65		25 986	1 193 556	14 847	33 378	401 668	10 265 709	1 490 545	11 726 102	1 411 607
33441	Semiconductor & other electronic component mfg	—	122	65		25 986	1 193 556	14 847	33 378	401 668	10 265 709	1 490 545	11 726 102	1 411 607
334412	Bare printed circuit board mfg	—	30	16		3 092	87 879	2 404	5 018	57 650	303 618	175 519	471 885	43 776
334413	Semiconductor & related device mfg	—	41	23		16 808	899 375	7 934	18 369	221 208	9 458 874	632 694	10 056 005	D
334416	Electronic coil, transformer, & other inductor mfg	—	9	7		303	5 196	259	466	3 472	9 585	5 533	15 164	D
334417	Electronic connector mfg	—	6	2	f	D	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	10	8	h	D	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	2	25	8		559	19 616	391	745	13 343	32 516	20 273	57 125	1 905
3345	Navigational, measuring, medical, & control instruments mfg	—	60	24		8 950	457 009	2 638	5 357	94 385	1 767 320	546 007	2 312 274	54 868

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHOENIX—MESA, AZ MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg	-	60	24	8 950	457 009	2 638	5 357	94 385	1 767 320	546 007	2 312 274	54 868
334510	Electromedical & electrotherapeutic apparatus mfg	9	7	2	e	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	14	7	i	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	10	4	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	1	12	5	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	2	8	4	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	2	8	4	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	67	23	3 577	109 793	2 308	4 654	56 242	317 933	332 346	674 854	21 837
3351	Electric lighting equipment mfg	-	18	5	561	16 225	361	673	6 482	31 003	23 679	54 923	1 357
33512	Lighting fixture mfg	-	18	5	561	16 225	361	673	6 482	31 003	23 679	54 923	1 357
335129	Other lighting equipment mfg	-	7	2	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	3	2	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	5	19	5	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	5	19	5	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	27	11	2 493	78 973	1 580	3 281	40 785	238 061	265 102	526 744	18 684
33592	Communication & energy wire & cable mfg	-	4	4	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	4	4	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	15	6	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	14	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	174	71	19 823	907 554	9 911	22 083	300 610	2 670 608	2 012 470	4 567 984	162 942
3362	Motor vehicle body & trailer mfg	2	25	4	e	D	D	D	D	D	D	D	709
33621	Motor vehicle body & trailer mfg	2	25	4	e	D	D	D	D	D	D	D	709
3363	Motor vehicle parts mfg	-	68	27	i	D	D	D	D	D	D	D	54 039
33631	Motor vehicle gasoline engine & engine parts mfg	1	15	4	553	10 126	431	491	6 265	19 095	24 571	43 808	2 216
336312	Gasoline engine & engine parts mfg	-	12	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	7	10	5	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	7	10	5	e	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
336360	Motor vehicle seating & interior trim mfg	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
33639	Other motor vehicle parts mfg	-	25	7	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	25	7	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	PHOENIX—MESA, AZ MSA—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	—	56	33	j	D	D	D	D	D	D	D	104 682	
33641	Aerospace product & parts mfg	—	56	33	j	D	D	D	D	D	D	D	104 682	
336411	Aircraft mfg	—	2	2	h	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	—	18	15	i	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	—	33	15	g	D	D	D	D	D	D	D	D	
336414	Guided missile & space vehicle mfg ...	—	1	1	f	D	D	D	D	D	D	D	D	
3366	Ship & boat building	—	5	2	e	D	D	D	D	D	D	D	911	
33661	Ship & boat building	—	5	2	e	D	D	D	D	D	D	D	911	
336612	Boat building	—	5	2	e	D	D	D	D	D	D	D	911	
3369	Other transportation equipment mfg	—	16	3		7 361	254	425	3 777	12 212	32 235	41 419	1 275	
33699	Other transportation equipment mfg	—	16	3		7 361	254	425	3 777	12 212	32 235	41 419	1 275	
337	Furniture & related product mfg	1	254	66		6 962	143 811	5 641	10 566	101 216	303 624	251 337	554 102	17 302
3371	Household & institutional furniture & kitchen cabinet mfg	1	180	42		4 893	101 480	4 157	8 132	75 993	201 279	175 848	374 384	10 638
33711	Wood kitchen cabinet & counter top mfg	1	79	15		1 340	33 097	1 038	1 991	19 886	65 892	42 363	108 273	1 728
337110	Wood kitchen cabinet & counter top mfg ...	1	79	15		1 340	33 097	1 038	1 991	19 886	65 892	42 363	108 273	1 728
33712	Household & institutional furniture mfg	1	101	27		3 553	68 383	3 119	6 141	56 107	135 387	133 485	266 111	8 910
337121	Upholstered household furniture mfg	3	20	7		325	6 959	284	461	5 191	9 613	13 336	23 195	542
337122	Nonupholstered wood household furniture mfg	1	61	14		2 722	48 891	2 399	4 862	41 273	97 477	96 513	191 677	6 486
3372	Office furniture (including fixtures) mfg	2	52	17		1 462	28 664	1 078	1 636	17 009	58 542	39 892	99 067	3 356
33721	Office furniture (including fixtures) mfg	2	52	17		1 462	28 664	1 078	1 636	17 009	58 542	39 892	99 067	3 356
337211	Wood office furniture mfg	1	10	4	e	D	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	17	6		446	8 304	277	383	4 448	13 787	7 797	21 905	1 671
337215	Showcase, partition, shelving, & locker mfg	3	21	5	e	D	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	22	7		607	13 667	406	798	8 214	43 803	35 597	80 651	3 308
33791	Mattress mfg	—	14	5	e	D	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	14	5	e	D	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	8	2	e	D	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	8	2	e	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	326	45		4 892	151 862	2 984	6 894	65 500	388 828	213 219	592 965	15 281
3391	Medical equipment & supplies mfg	2	129	8		1 202	42 224	575	975	12 674	147 278	25 008	161 309	D
33911	Medical equipment & supplies mfg	2	129	8		1 202	42 224	575	975	12 674	147 278	25 008	161 309	D
339112	Surgical & medical instrument mfg	—	8	2	f	D	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	5	101	6		541	13 879	410	667	9 113	30 839	11 204	43 337	D
3399	Other miscellaneous mfg ...	1	197	37		3 690	109 638	2 409	5 919	52 826	241 550	188 211	431 656	D
33992	Sporting & athletic goods mfg	—	21	5		1 258	39 942	920	1 832	22 164	98 441	75 286	178 717	D
339920	Sporting & athletic goods mfg	—	21	5		1 258	39 942	920	1 832	22 164	98 441	75 286	178 717	D
33995	Sign mfg	—	80	12		1 148	37 228	602	1 262	15 365	67 819	59 785	126 108	4 080
339950	Sign mfg	—	80	12		1 148	37 228	602	1 262	15 365	67 819	59 785	126 108	4 080
33999	All other miscellaneous mfg	4	43	16		873	23 101	602	2 308	10 226	48 816	34 902	82 790	4 334
339999	All other miscellaneous mfg	3	34	14		701	19 363	462	2 015	7 869	40 465	29 124	68 731	2 959

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TUCSON, AZ MSA													
31-33	Manufacturing	-	764	200	26 746	1 064 717	15 013	29 020	356 897	2 350 070	1 790 042	4 455 183	154 291
311	Food mfg	1	44	8	654	11 112	426	653	6 760	23 711	43 012	66 900	1 165
3118	Bakeries & tortilla mfg	2	27	4	399	6 711	242	336	3 593	11 706	10 301	21 988	541
31181	Bread & bakery product mfg	1	19	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	9	3	575	14 417	190	344	4 398	42 906	83 572	126 507	4 475
3121	Beverage mfg	-	9	3	575	14 417	190	344	4 398	42 906	83 572	126 507	4 475
31211	Soft drink & ice mfg	-	5	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	22	7	385	8 594	300	560	5 561	19 871	20 808	40 392	770
3219	Other wood product mfg ...	1	21	6	e	D	D	D	D	D	D	D	D
32191	Millwork	1	16	5	305	6 437	244	447	4 489	15 719	16 942	32 356	574
323	Printing & related support activities	1	111	20	1 220	28 552	905	1 400	16 665	66 268	36 734	103 010	8 350
3231	Printing & related support activities	1	111	20	1 220	28 552	905	1 400	16 665	66 268	36 734	103 010	8 350
32311	Printing	1	97	19	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	49	14	764	18 563	558	873	10 810	38 520	23 788	62 287	7 323
325	Chemical mfg	5	21	5	284	9 536	179	339	5 215	38 733	26 669	65 296	2 607
326	Plastics & rubber products mfg	-	39	17	1 100	25 788	870	1 672	17 591	63 454	55 218	119 096	5 677
3261	Plastics product mfg	-	30	13	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	22	11	804	18 025	652	1 280	12 928	45 228	37 813	83 482	D
326199	All other plastics product mfg	-	17	9	719	15 904	595	1 169	11 563	41 106	35 303	76 877	D
327	Nonmetallic mineral product mfg	1	59	25	1 796	45 108	1 177	2 189	28 270	176 645	105 860	285 484	17 891
3271	Clay product & refractory mfg	-	21	9	532	12 356	384	725	6 677	25 915	14 011	41 523	1 457
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	14	8	468	10 419	334	638	5 231	23 371	12 416	36 795	D
3273	Cement & concrete product mfg	-	20	11	1 041	27 539	626	1 177	18 182	137 846	77 901	216 925	15 621
32732	Ready-mix concrete mfg	2	8	6	f	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	2	8	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	123	27	3 768	109 668	3 037	6 086	67 053	264 655	146 070	410 225	13 877
3323	Architectural & structural metals mfg	-	39	9	1 500	44 656	1 237	2 555	26 314	102 327	66 348	168 501	3 060
33231	Plate work & fabricated structural product mfg ..	1	15	5	310	9 227	214	371	4 884	20 865	13 256	34 018	865
33232	Ornamental & architectural metal products mfg	-	24	4	1 190	35 429	1 023	2 184	21 430	81 462	53 092	134 483	2 195
332322	Sheet metal work mfg ..	-	11	3	642	22 486	522	1 066	10 882	48 713	38 566	87 596	D
332323	Ornamental & architectural metal work mfg	-	11	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	45	10	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	42	8	581	17 975	431	751	11 933	30 976	13 337	43 934	3 125
332710	Machine shops	1	42	8	581	17 975	431	751	11 933	30 976	13 337	43 934	3 125
3329	Other fabricated metal product mfg	-	16	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	52	18	1 988	64 023	1 267	2 485	28 525	156 508	123 951	271 841	9 535
3331	Agriculture, construction, & mining machinery mfg	-	5	2	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	20	7	865	27 387	435	765	8 610	76 899	52 564	122 016	3 440
33331	Commercial & service industry machinery mfg	3	20	7	865	27 387	435	765	8 610	76 899	52 564	122 016	3 440
333313	Office machinery mfg ..	7	3	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	6	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	12	5	347	10 276	248	487	6 700	16 465	10 219	26 459	D
33351	Metalworking machinery mfg	1	12	5	347	10 276	248	487	6 700	16 465	10 219	26 459	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TUCSON, AZ MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	3	7	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	4	6	3	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	4	3	3		315	11 853	261	604	5 912	19 247	24 166	42 367
334	Computer & electronic product mfg	—	56	28		3 904	174 330	1 774	3 678	58 408	551 380	250 812	786 966
3341	Computer & peripheral equipment mfg	1	8	5		330	10 553	92	202	3 345	24 151	30 875	54 680
33411	Computer & peripheral equipment mfg	1	8	5		330	10 553	92	202	3 345	24 151	30 875	54 680
3344	Semiconductor & other electronic component mfg	—	22	10		1 731	70 383	872	2 077	29 336	266 643	53 860	314 961
33441	Semiconductor & other electronic component mfg	—	22	10		1 731	70 383	872	2 077	29 336	266 643	53 860	314 961
334413	Semiconductor & related device mfg	—	5	3		g	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	17	8		g	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	17	8		g	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	1		f	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	16	6		e	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	3		e	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	4	2		e	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	4	2		e	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	19	6		i	D	D	D	D	D	D	25 547
3364	Aerospace product & parts mfg	—	7	6		i	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	7	6		i	D	D	D	D	D	D	D
336411	Aircraft mfg	—	2	2		g	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	—	1	1		i	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	54	4		385	7 893	299	537	5 073	15 932	10 267	26 217
3371	Household & institutional furniture & kitchen cabinet mfg	3	42	3		e	D	D	D	D	D	D	1 635
339	Miscellaneous mfg	1	86	17		1 607	43 405	1 063	1 500	15 853	103 916	143 577	245 331
3391	Medical equipment & supplies mfg	1	46	7		704	23 166	428	620	7 772	65 232	117 416	182 458
33911	Medical equipment & supplies mfg	1	46	7		704	23 166	428	620	7 772	65 232	117 416	182 458
339112	Surgical & medical instrument mfg	4	7	6		e	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	40	10		903	20 239	635	880	8 081	38 684	26 161	62 873
33992	Sporting & athletic goods mfg	—	5	4		513	12 523	349	448	3 796	24 881	17 311	40 472
339920	Sporting & athletic goods mfg	—	5	4		513	12 523	349	448	3 796	24 881	17 311	40 472

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YUMA, AZ MSA													
31-33	Manufacturing	—	66	17	3 041	54 607	2 701	5 266	42 916	158 034	232 735	389 463	10 278
313	Textile mills	—	4	2	e	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	—	2	2	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	2	2	e	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	—	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COCHISE COUNTY, AZ													
31-33	Manufacturing	3	53	16	921	20 892	641	1 095	12 385	62 569	87 604	153 756	4 671
COCONINO COUNTY, AZ													
31-33	Manufacturing	—	95	13	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	12	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	6	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	6	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	3	1	g	D	D	D	D	D	D	D	D
GILA COUNTY, AZ													
31-33	Manufacturing	—	34	6	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	4	4	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	3	3	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	—	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 em- ploy- ees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MARICOPA COUNTY, AZ												
31-33	Manufacturing	-	3 364	996	143 683	5 045 014	88 996	183 042	2 213 647	22 363 545	10 562 486	32 782 122	2 119 299
311	Food mfg	1	154	50	i	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	11	8	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	10	7	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	5	940	33 321	381	966	14 658	102 192	251 280	357 757	D
3116	Meat product mfg	-	17	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	17	5	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	7	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	70	22	h	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	2	60	17	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	28	15	g	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	6	4	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	6	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg	4	26	8	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	17	10	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	17	10	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	11	9	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	4	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	5	75	11	f	D	D	D	D	D	D	D	2 803
3149	Other textile product mills ..	4	41	11	f	D	D	D	D	D	D	D	2 719
315	Apparel mfg	3	52	10	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	5	34	7	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	5	15	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	122	62	6 169	142 289	5 196	10 058	103 190	317 318	441 737	758 767	10 504
3212	Veneer, plywood, & engineered wood product mfg	2	20	15	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	2	20	15	g	D	D	D	D	D	D	D	D
321214	Truss mfg	1	17	15	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	99	47	i	D	D	D	D	D	D	D	D
32191	Millwork	1	51	23	1 263	25 989	1 029	1 715	19 176	44 291	78 433	124 011	3 195
321911	Wood window & door mfg	2	21	10	553	13 088	470	766	9 514	20 895	20 181	42 839	1 387
321918	Other millwork (including flooring) ...	2	27	11	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	34	16	h	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	10	8	g	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	-	8	4	1 059	24 178	929	1 706	15 483	53 941	84 494	138 301	1 271
322	Paper mfg	-	31	18	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	31	18	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	14	10	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	10	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	498	90	7 342	201 292	5 253	9 958	126 144	433 854	256 153	690 362	D
3231	Printing & related support activities	1	498	90	7 342	201 292	5 253	9 958	126 144	433 854	256 153	690 362	D
32311	Printing	2	446	78	6 333	171 181	4 494	8 462	105 089	376 271	246 623	623 081	D
323110	Commercial lithographic printing ..	1	188	45	h	D	D	D	D	D	D	D	D
323113	Commercial screen printing	3	57	9	638	12 681	476	770	6 859	25 901	19 197	45 033	3 671
323114	Quick printing	2	115	7	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	18	8	586	17 662	421	853	11 485	52 518	33 996	86 573	4 871
32312	Support activities for printing	1	52	12	1 009	30 111	759	1 496	21 055	57 583	9 530	67 281	2 843
323122	Prepress services	1	35	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARICOPA COUNTY, AZ—Con.												
	Manufacturing—Con.												
325	Chemical mfg	—	124	39	5 798	164 335	4 246	8 153	92 185	1 295 243	561 186	1 844 169	47 315
3251	Basic chemical mfg	—	12	5	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	18	9	1 162	42 773	873	1 688	25 628	255 429	148 022	396 404	12 310
32541	Pharmaceutical & medicine mfg	—	18	9	1 162	42 773	873	1 688	25 628	255 429	148 022	396 404	12 310
325412	Pharmaceutical preparation mfg	—	8	7	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	28	7	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	10	3	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	10	3	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	31	11	g	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	167	76	6 391	168 847	4 760	9 313	106 911	403 065	401 223	804 745	41 974
3261	Plastics product mfg	1	143	62	i	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	104	43	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	97	39	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	24	14	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	15	9	558	17 427	371	714	8 878	33 796	15 061	48 796	D
327	Nonmetallic mineral product mfg	1	133	48	h	D	D	D	D	D	D	D	27 537
3273	Cement & concrete product mfg	1	66	31	g	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	2	23	9	f	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	2	23	9	f	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, & block mfg	—	18	11	605	18 535	453	1 057	12 149	78 409	49 790	116 488	4 428
32739	Other concrete product mfg	1	25	11	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	1	25	11	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	32	17	h	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
33131	Alumina & aluminum production & processing	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
331316	Aluminum extruded product mfg	—	4	4	1 226	41 089	965	2 339	27 680	168 911	90 131	258 827	D
3315	Foundries	—	15	8	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	8	4	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	605	169	14 329	460 211	9 970	20 204	249 069	1 229 693	874 303	2 101 490	68 014
3321	Forging & stamping	2	27	12	745	25 882	572	1 169	16 371	65 522	71 437	136 671	4 766
33211	Forging & stamping	2	27	12	745	25 882	572	1 169	16 371	65 522	71 437	136 671	4 766
332116	Metal stamping	2	18	9	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	158	53	h	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	—	43	18	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	31	16	1 503	48 960	812	1 594	18 738	129 432	132 203	271 997	5 129
33232	Ornamental & architectural metal products mfg	1	115	35	h	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	24	10	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	2	58	18	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	251	58	h	D	D	D	D	D	D	D	D
33271	Machine shops	2	224	46	h	D	D	D	D	D	D	D	D
332710	Machine shops	2	224	46	h	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	1	27	12	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg	—	22	9	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARICOPA COUNTY, AZ—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	1	78	20	1 434	37 273	1 126	2 075	23 979	78 643	27 577	106 956	5 355
33281	Coating, engraving, heat treating, & allied activities.....	1	78	20	1 434	37 273	1 126	2 075	23 979	78 643	27 577	106 956	5 355
332813	Electroplating, plating, polishing, anodizing, & coloring	2	38	10	731	19 832	565	1 101	12 445	36 549	12 449	49 666	D
3329	Other fabricated metal product mfg.....	—	54	16	2 980	109 301	1 680	3 594	37 426	458 525	290 551	740 450	12 449
33291	Metal valve mfg	—	9	5	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	—	6	4	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	1	45	11	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	1	31	7	f	D	D	D	D	D	D	D	1 320
333	Machinery mfg	1	232	68	i	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	—	16	4	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	7	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	47	18	2 064	72 347	1 072	2 162	34 384	223 413	150 168	369 093	25 510
33329	Other industrial machinery mfg	1	38	15	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	16	8	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	2	35	8	551	18 468	354	661	8 704	56 968	65 384	124 050	3 565
33331	Commercial & service industry machinery mfg	2	35	8	551	18 468	354	661	8 704	56 968	65 384	124 050	3 565
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	18	6	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	18	6	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	11	5	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	81	20	1 349	47 636	976	1 807	29 834	102 055	40 904	136 205	7 545
33351	Metalworking machinery mfg	3	81	20	1 349	47 636	976	1 807	29 834	102 055	40 904	136 205	7 545
333514	Special die & tool, die set, jig, & fixture mfg ..	2	40	8	500	18 149	355	693	12 097	34 871	11 475	46 178	2 607
3339	Other general-purpose machinery mfg	2	30	9	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	270	124	k	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	2	39	12	g	D	D	D	D	D	D	D	13 034
33411	Computer & peripheral equipment mfg	2	39	12	g	D	D	D	D	D	D	D	13 034
334119	Other computer peripheral equipment mfg	2	24	8	606	22 465	216	441	5 534	38 307	55 220	93 543	D
3342	Communications equipment mfg	1	39	18	i	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	3	9	6	1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
334210	Telephone apparatus mfg	3	9	6	1 274	54 628	723	1 598	27 255	154 938	78 696	235 233	9 454
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	24	10	5 305	114 592	1 883	3 348	46 051	544 830	218 427	772 277	32 303
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	24	10	5 305	114 592	1 883	3 348	46 051	544 830	218 427	772 277	32 303

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	MARICOPA COUNTY, AZ—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3343	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	
33431	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	
334310	Audio & video equipment mfg	—	6	4	f	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	—	119	63	k	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	—	119	63	k	D	D	D	D	D	D	D	
334412	Bare printed circuit board mfg	—	30	16	3 092	87 879	2 404	5 018	57 650	303 618	175 519	471 885	43 776
334413	Semiconductor & related device mfg ...	—	41	23	16 808	899 375	7 934	18 369	221 208	9 458 874	632 694	10 056 005	D
334417	Electronic connector mfg	—	5	2	f	D	D	D	D	D	D	D	
334418	Printed circuit assembly (electronic assembly) mfg	—	10	8	h	D	D	D	D	D	D	D	
334419	Other electronic component mfg	2	25	8	559	19 616	391	745	13 343	32 516	20 273	57 125	1 905
3345	Navigational, measuring, medical, & control instruments mfg	—	59	23	i	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	—	59	23	i	D	D	D	D	D	D	D	
334511	Search, detection, navigation, & guidance instrument mfg	—	13	6	i	D	D	D	D	D	D	D	
334513	Industrial process control instrument mfg	—	10	4	g	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	66	23	h	D	D	D	D	D	D	D	
3351	Electric lighting equipment mfg	—	17	5	f	D	D	D	D	D	D	D	
33512	Lighting fixture mfg	—	17	5	f	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	—	27	11	2 493	78 973	1 580	3 281	40 785	238 061	265 102	526 744	18 684
33592	Communication & energy wire & cable mfg	—	4	4	g	D	D	D	D	D	D	D	
335929	Other communication & energy wire mfg ...	—	4	4	g	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	172	70	j	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	67	27	i	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	1	15	4	553	10 126	431	491	6 265	19 095	24 571	43 808	2 216
336312	Gasoline engine & engine parts mfg	—	12	3	f	D	D	D	D	D	D	D	
33636	Motor vehicle seating & interior trim mfg	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
336360	Motor vehicle seating & interior trim mfg ...	3	5	4	588	15 245	472	858	7 916	38 954	35 955	75 302	D
33639	Other motor vehicle parts mfg	—	24	7	h	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	—	24	7	h	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	—	56	33	j	D	D	D	D	D	D	104 682	
33641	Aerospace product & parts mfg	—	56	33	j	D	D	D	D	D	D	104 682	
336411	Aircraft mfg	—	2	2	h	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg ...	—	18	15	i	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	—	33	15	g	D	D	D	D	D	D	D	
336414	Guided missile & space vehicle mfg ...	—	1	1	f	D	D	D	D	D	D	D	

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	MARICOPA COUNTY, AZ—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	246	64	6 526	134 262	5 278	9 928	94 575	278 313	235 701	511 960	15 902
3371	Household & institutional furniture & kitchen cabinet mfg	1	175	41	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	1	77	15	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	1	77	15	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	98	26	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	1	59	14	h	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	51	17	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	51	17	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	325	45	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	2	129	8	1 202	42 224	575	975	12 674	147 278	25 008	161 309	D
33911	Medical equipment & supplies mfg	2	129	8	1 202	42 224	575	975	12 674	147 278	25 008	161 309	D
339112	Surgical & medical instrument mfg	5	8	2	f	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	5	101	6	541	13 879	410	667	9 113	30 839	11 204	43 337	D
3399	Other miscellaneous mfg ...	1	196	37	h	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	—	21	5	1 258	39 942	920	1 832	22 164	98 441	75 286	178 717	D
339920	Sporting & athletic goods mfg	—	21	5	1 258	39 942	920	1 832	22 164	98 441	75 286	178 717	D
33995	Sign mfg	—	79	12	g	D	D	D	D	D	D	D	D
339950	Sign mfg	—	79	12	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	4	43	16	873	23 101	602	2 308	10 226	48 816	34 902	82 790	4 334
339999	All other miscellaneous mfg	3	34	14	701	19 363	462	2 015	7 869	40 465	29 124	68 731	2 959
	MOHAVE COUNTY, AZ												
31-33	Manufacturing	—	156	33	3 807	85 202	3 166	5 735	60 768	343 952	398 925	760 367	17 181
333	Machinery mfg	—	8	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
	NAVAJO COUNTY, AZ												
31-33	Manufacturing	—	45	8	1 346	44 190	1 130	2 383	34 654	100 891	170 844	275 919	D
321	Wood product mfg	—	12	5	539	11 789	504	1 070	10 411	17 214	39 262	59 641	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PIMA COUNTY, AZ													
31-33	Manufacturing	-	764	200	26 746	1 064 717	15 013	29 020	356 897	2 350 070	1 790 042	4 455 183	154 291
311	Food mfg	1	44	8	654	11 112	426	653	6 760	23 711	43 012	66 900	1 165
312	Beverage & tobacco product mfg	-	9	3	575	14 417	190	344	4 398	42 906	83 572	126 507	4 475
3121	Beverage mfg	-	9	3	575	14 417	190	344	4 398	42 906	83 572	126 507	4 475
31211	Soft drink & ice mfg	-	5	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	111	20	1 220	28 552	905	1 400	16 665	66 268	36 734	103 010	8 350
3231	Printing & related support activities	1	111	20	1 220	28 552	905	1 400	16 665	66 268	36 734	103 010	8 350
32311	Printing	1	97	19	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	49	14	764	18 563	558	873	10 810	38 520	23 788	62 287	7 323
326	Plastics & rubber products mfg	-	39	17	1 100	25 788	870	1 672	17 591	63 454	55 218	119 096	5 677
3261	Plastics product mfg	-	30	13	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	22	11	804	18 025	652	1 280	12 928	45 228	37 813	83 482	D
326199	All other plastics product mfg	-	17	9	719	15 904	595	1 169	11 563	41 106	35 303	76 877	D
327	Nonmetallic mineral product mfg	1	59	25	1 796	45 108	1 177	2 189	28 270	176 645	105 860	285 484	17 891
3271	Clay product & refractory mfg	-	21	9	532	12 356	384	725	6 677	25 915	14 011	41 523	1 457
3273	Cement & concrete product mfg	-	20	11	1 041	27 539	626	1 177	18 182	137 846	77 901	216 925	15 621
32732	Ready-mix concrete mfg	2	8	6	f	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	2	8	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	123	27	3 768	109 668	3 037	6 086	67 053	264 655	146 070	410 225	13 877
3323	Architectural & structural metals mfg	-	39	9	1 500	44 656	1 237	2 555	26 314	102 327	66 348	168 501	3 060
33232	Ornamental & architectural metal products mfg	-	24	4	1 190	35 429	1 023	2 184	21 430	81 462	53 092	134 483	2 195
332322	Sheet metal work mfg	-	11	3	642	22 486	522	1 066	10 882	48 713	38 566	87 596	D
332323	Ornamental & architectural metal work mfg	-	11	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	45	10	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	42	8	581	17 975	431	751	11 933	30 976	13 337	43 934	3 125
332710	Machine shops	1	42	8	581	17 975	431	751	11 933	30 976	13 337	43 934	3 125
333	Machinery mfg	2	52	18	1 988	64 023	1 267	2 485	28 525	156 508	123 951	271 841	9 535
3333	Commercial & service industry machinery mfg ..	3	20	7	865	27 387	435	765	8 610	76 899	52 564	122 016	3 440
33331	Commercial & service industry machinery mfg	3	20	7	865	27 387	435	765	8 610	76 899	52 564	122 016	3 440
334	Computer & electronic product mfg	-	56	28	3 904	174 330	1 774	3 678	58 408	551 380	250 812	786 966	43 975
3344	Semiconductor & other electronic component mfg	-	22	10	1 731	70 383	872	2 077	29 336	266 643	53 860	314 961	30 176
33441	Semiconductor & other electronic component mfg	-	22	10	1 731	70 383	872	2 077	29 336	266 643	53 860	314 961	30 176
334413	Semiconductor & related device mfg ...	-	5	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	17	8	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	17	8	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	19	6	i	D	D	D	D	D	D	D	25 547
3364	Aerospace product & parts mfg	-	7	6	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	7	6	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	2	2	g	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	i	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PIMA COUNTY, AZ—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	86	17	1 607	43 405	1 063	1 500	15 853	103 916	143 577	245 331	11 358
3391	Medical equipment & supplies mfg	1	46	7	704	23 166	428	620	7 772	65 232	117 416	182 458	8 474
33911	Medical equipment & supplies mfg	1	46	7	704	23 166	428	620	7 772	65 232	117 416	182 458	8 474
3399	Other miscellaneous mfg	—	40	10	903	20 239	635	880	8 081	38 684	26 161	62 873	2 884
33992	Sporting & athletic goods mfg	—	5	4	513	12 523	349	448	3 796	24 881	17 311	40 472	D
339920	Sporting & athletic goods mfg	—	5	4	513	12 523	349	448	3 796	24 881	17 311	40 472	D
PINAL COUNTY, AZ													
31-33	Manufacturing	—	74	30	4 594	154 799	3 466	7 306	101 165	723 901	1 764 638	2 530 608	119 701
311	Food mfg	—	8	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	5	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	4	4	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	3	3	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	—	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	10	3	626	14 707	449	819	8 856	27 225	37 088	67 006	9 041
3323	Architectural & structural metals mfg	—	4	2	f	D	D	D	D	D	D	D	D
SANTA CRUZ COUNTY, AZ													
31-33	Manufacturing	3	35	9	f	D	D	D	D	D	D	D	3 119
YAVAPAI COUNTY, AZ													
31-33	Manufacturing	1	189	36	3 511	91 255	2 625	4 979	62 653	262 364	178 830	445 811	15 848
331	Primary metal mfg	—	5	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	5	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	5	1	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	34	6	997	30 113	759	1 847	22 337	89 983	40 913	130 237	2 405
3323	Architectural & structural metals mfg	—	8	1	f	D	D	D	D	D	D	D	D
YUMA COUNTY, AZ													
31-33	Manufacturing	—	66	17	3 041	54 607	2 701	5 266	42 916	158 034	232 735	389 463	10 278
336	Transportation equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CASA GRANDE, AZ													
31-33	Manufacturing	-	27	13	1 626	52 124	1 304	2 780	33 260	141 970	162 726	307 119	16 779
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHANDLER, AZ													
31-33	Manufacturing	-	135	50	9 668	351 989	6 425	12 854	164 931	3 984 780	762 312	4 744 276	841 322
332	Fabricated metal product mfg	-	24	6	664	22 682	472	1 045	12 231	38 463	71 138	109 738	1 442
333	Machinery mfg	-	16	6	1 530	32 205	1 343	2 501	24 797	141 861	94 798	236 268	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	22	10	4 800	213 880	2 613	5 350	75 984	3 567 268	342 798	3 909 350	D
3344	Semiconductor & other electronic component mfg	-	12	8	4 463	199 735	2 444	5 019	71 623	3 535 967	312 416	3 846 744	D
33441	Semiconductor & other electronic component mfg	-	12	8	4 463	199 735	2 444	5 019	71 623	3 535 967	312 416	3 846 744	D
334412	Bare printed circuit board mfg	-	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	5	4	3 550	176 458	1 814	3 713	56 094	3 392 935	264 256	3 652 070	D
FLAGSTAFF, AZ													
31-33	Manufacturing	-	62	9	1 798	67 676	902	1 793	22 751	307 423	193 292	505 163	15 538
339	Miscellaneous mfg	-	8	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	1	g	D	D	D	D	D	D	D	D
GILBERT, AZ													
31-33	Manufacturing	1	78	19	2 228	57 446	1 771	3 756	41 467	150 797	160 477	311 534	18 546
326	Plastics & rubber products mfg	-	7	2	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	1	f	D	D	D	D	D	D	D	D
GLENDALE, AZ													
31-33	Manufacturing	-	156	39	6 398	244 023	3 598	7 302	94 835	649 555	427 943	1 075 887	23 941
321	Wood product mfg	1	11	5	797	20 987	667	1 311	12 110	52 836	83 158	135 714	1 127
3219	Other wood product mfg	-	7	2	581	16 065	479	926	8 576	37 445	62 514	99 935	937
32199	All other wood product mfg	-	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	15	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	7	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
GOODYEAR, AZ													
31-33	Manufacturing	-	17	9	1 248	29 576	1 080	2 003	23 041	64 177	99 343	164 216	6 794
KINGMAN, AZ													
31-33	Manufacturing	-	27	6	857	19 643	667	1 447	12 729	100 955	73 831	175 754	6 245
LAKE HAVASU CITY, AZ													
31-33	Manufacturing	1	82	15	1 845	37 422	1 564	2 453	26 531	139 072	128 845	274 729	4 457
333	Machinery mfg	-	7	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARANA, AZ													
31-33	Manufacturing	-	13	8	814	24 862	496	949	12 696	67 930	53 660	124 344	3 259
MESA, AZ													
31-33	Manufacturing	-	258	55	13 921	530 653	7 718	17 223	186 000	2 404 733	976 696	3 367 099	229 248
325	Chemical mfg	-	11	2	743	16 291	696	1 452	10 202	21 206	73 638	99 212	D
3259	Other chemical product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	39	13	720	22 024	535	961	13 747	58 955	44 060	102 263	4 203
334	Computer & electronic product mfg	-	24	8	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	14	5	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	14	5	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	4	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	5	h	D	D	D	D	D	D	D	34 067
3363	Motor vehicle parts mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	3	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	3	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	h	D	D	D	D	D	D	D	D
NOGALES, AZ													
31-33	Manufacturing	4	23	5	502	10 074	422	753	6 819	25 820	23 647	51 790	1 337
PEORIA, AZ													
31-33	Manufacturing	-	34	6	558	13 790	439	876	9 381	30 265	21 899	54 323	1 846

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	PHOENIX, AZ												
31-33	Manufacturing	-	1 706	557	69 401	2 532 435	43 093	87 471	1 069 292	10 283 805	4 480 619	14 649 584	569 613
311	Food mfg	2	72	27	3 265	91 730	1 943	3 792	47 066	254 130	339 926	603 099	13 096
3115	Dairy product mfg	-	5	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	4	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	31	12	1 670	42 794	1 021	1 800	21 963	139 256	62 035	201 368	D
31181	Bread & bakery product mfg	1	27	10	1 478	39 880	886	1 616	19 893	131 717	57 381	189 032	3 736
311812	Commercial bakeries	1	16	10	1 437	39 354	859	1 585	19 614	130 290	56 445	186 669	3 659
312	Beverage & tobacco product mfg	-	9	8	816	24 799	290	653	5 655	64 254	103 945	166 864	11 422
3121	Beverage mfg	-	9	8	816	24 799	290	653	5 655	64 254	103 945	166 864	11 422
31211	Soft drink & ice mfg	-	8	8	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	3	565	19 241	149	344	2 949	46 711	98 787	144 310	D
314	Textile product mills	6	39	8	598	13 579	463	865	8 251	23 996	20 487	44 150	1 939
3149	Other textile product mills	7	23	8	f	D	D	D	D	D	D	D	1 884
315	Apparel mfg	3	23	5	897	13 670	539	1 086	8 355	14 199	26 320	43 156	1 025
321	Wood product mfg	1	68	37	3 063	64 538	2 593	4 910	48 656	137 108	161 661	300 348	5 908
3219	Other wood product mfg	1	63	35	2 819	60 097	2 371	4 435	45 129	125 204	146 608	273 482	4 774
32191	Millwork	2	35	20	f	D	D	D	D	D	D	D	2 652
32199	All other wood product mfg	-	16	9	1 454	31 870	1 293	2 558	25 628	78 169	95 733	173 789	D
321991	Manufactured home (mobile home) mfg	-	4	3	f	D	D	D	D	D	D	D	396
321992	Prefabricated wood building mfg	-	5	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	18	10	734	22 184	568	1 104	14 157	51 510	55 905	106 863	3 171
3222	Converted paper product mfg	1	18	10	734	22 184	568	1 104	14 157	51 510	55 905	106 863	3 171
323	Printing & related support activities	1	275	58	4 650	134 441	3 371	6 585	85 439	281 963	163 841	445 718	29 958
3231	Printing & related support activities	1	275	58	4 650	134 441	3 371	6 585	85 439	281 963	163 841	445 718	29 958
32311	Printing	1	242	50	3 864	108 809	2 753	5 268	67 907	233 448	155 873	389 143	28 402
323110	Commercial lithographic printing	1	111	27	2 104	62 454	1 421	2 923	37 710	123 490	81 913	205 084	17 977
323114	Quick printing	2	55	5	581	13 413	454	676	8 659	29 520	17 083	46 586	1 824
323116	Manifold business form printing	-	13	7	535	15 887	385	782	10 433	46 659	32 409	79 151	4 744
32312	Support activities for printing	1	33	8	786	25 632	618	1 317	17 532	48 515	7 968	56 575	1 556
325	Chemical mfg	-	52	17	3 500	101 262	2 677	5 015	61 289	1 106 378	347 373	1 438 536	18 649
3254	Pharmaceutical & medicine mfg	-	7	6	906	36 561	708	1 375	22 549	238 408	117 201	349 742	10 144
32541	Pharmaceutical & medicine mfg	-	7	6	906	36 561	708	1 375	22 549	238 408	117 201	349 742	10 144
325412	Pharmaceutical preparation mfg	-	6	5	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	-	11	3	g	D	D	D	D	D	D	D	4 905
32562	Toilet preparation mfg	-	5	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	5	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	83	40	2 594	63 420	1 885	3 589	39 057	144 558	134 228	277 593	15 932
3261	Plastics product mfg	2	73	34	2 330	56 818	1 693	3 198	34 802	124 542	122 984	246 493	15 505
32619	Other plastics product mfg	2	49	20	1 462	34 935	992	1 835	18 942	66 305	42 349	108 074	7 496
326199	All other plastics product mfg	2	44	18	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	66	34	2 251	68 994	1 739	3 674	46 458	215 274	172 335	376 152	15 141
3273	Cement & concrete product mfg	-	34	21	1 526	47 738	1 182	2 504	31 749	147 240	120 599	256 773	10 378
32733	Concrete pipe, brick, & block mfg	-	11	10	532	16 702	404	963	11 051	74 191	44 380	106 870	4 044
32739	Other concrete product mfg	1	17	9	f	D	D	D	D	D	D	D	4 602
327390	Other concrete product mfg	1	17	9	f	D	D	D	D	D	D	D	4 602
331	Primary metal mfg	-	16	8	1 361	39 274	1 090	2 177	28 758	93 042	109 733	201 055	10 650
3315	Foundries	1	8	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	5	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHOENIX, AZ—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	346	111	8 009	247 539	5 769	11 497	145 273	549 521	420 061	976 471	36 603
3323	Architectural & structural metals mfg	—	81	36	3 111	90 523	1 966	4 141	42 699	215 755	205 508	430 619	8 989
33231	Plate work & fabricated structural product mfg ..	—	24	12	1 190	40 268	578	1 096	13 467	109 130	106 319	225 437	3 333
332312	Fabricated structural metal mfg	—	19	11	1 100	37 622	515	977	12 198	104 096	100 556	214 665	D
33232	Ornamental & architectural metal products mfg	—	57	24	1 921	50 255	1 388	3 045	29 232	106 625	99 189	205 182	5 656
332321	Metal window & door mfg	—	8	6	646	15 941	409	775	6 446	41 240	38 186	79 302	1 054
332322	Sheet metal work mfg ..	1	32	14	1 045	27 789	816	1 923	19 001	51 187	45 641	96 753	3 933
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	140	37	2 356	85 279	1 835	3 696	55 641	162 562	68 006	227 929	18 136
33271	Machine shops	2	122	28	1 881	69 990	1 445	2 940	45 292	130 614	52 357	180 304	15 047
332710	Machine shops	2	122	28	1 881	69 990	1 445	2 940	45 292	130 614	52 357	180 304	15 047
3328	Coating, engraving, heat treating, & allied activities ..	1	59	17	1 165	31 545	914	1 702	19 820	65 133	20 425	86 014	4 733
33281	Coating, engraving, heat treating, & allied activities	1	59	17	1 165	31 545	914	1 702	19 820	65 133	20 425	86 014	4 733
332813	Electroplating, plating, polishing, anodizing, & coloring	2	28	9	604	16 804	465	897	10 068	30 163	8 947	39 461	1 057
333	Machinery mfg	—	102	32	3 610	116 027	2 172	4 320	62 256	327 412	285 899	613 067	31 264
3332	Industrial machinery mfg ..	—	22	11	1 557	56 526	748	1 615	27 072	179 663	125 633	300 610	D
33329	Other industrial machinery mfg	—	20	10	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	5	4	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	9	3	939	24 512	667	1 279	14 209	64 934	62 298	131 635	2 705
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	9	3	939	24 512	667	1 279	14 209	64 934	62 298	131 635	2 705
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	7	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	98	48	13 857	797 330	5 953	12 910	162 499	4 754 084	642 658	5 364 757	261 012
3342	Communications equipment mfg	1	18	7	803	29 872	360	696	10 237	100 940	60 861	160 650	4 555
3344	Semiconductor & other electronic component mfg	—	39	23	7 423	471 469	4 216	9 444	105 971	3 291 755	254 903	3 513 871	217 661
33441	Semiconductor & other electronic component mfg	—	39	23	7 423	471 469	4 216	9 444	105 971	3 291 755	254 903	3 513 871	217 661
334412	Bare printed circuit board mfg	—	10	8	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	9	7	i	D	D	D	D	D	D	D	183 340
3345	Navigational, measuring, medical, & control instruments mfg	—	19	9	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	19	9	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	h	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	32	12	2 556	78 487	1 663	3 394	42 991	266 928	266 071	559 315	D
3359	Other electrical equipment & component mfg	—	12	4	2 029	63 734	1 304	2 700	34 337	217 503	222 014	465 053	D
33592	Communication & energy wire & cable mfg	—	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	3	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PHOENIX, AZ—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	93	38	9 978	475 257	4 428	9 384	148 693	1 613 143	926 715	2 439 951	75 965
3363	Motor vehicle parts mfg ...	2	37	13	1 528	37 175	1 172	1 932	17 569	74 473	78 384	155 695	6 458
3364	Aerospace product & parts mfg	-	30	17	7 506	412 052	2 479	5 962	114 388	1 479 922	753 357	2 133 722	67 006
33641	Aerospace product & parts mfg	-	30	17	7 506	412 052	2 479	5 962	114 388	1 479 922	753 357	2 133 722	67 006
336412	Aircraft engine & engine parts mfg	-	9	7	i	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	19	10	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	144	43	4 903	96 097	4 079	7 639	71 396	199 988	162 345	360 076	11 492
3371	Household & institutional furniture & kitchen cabinet mfg	1	99	28	3 500	69 850	3 023	6 042	54 320	143 665	115 709	256 959	8 311
33711	Wood kitchen cabinet & counter top mfg	1	48	10	731	18 037	598	1 121	11 620	40 295	19 270	59 663	1 009
337110	Wood kitchen cabinet & counter top mfg ...	1	48	10	731	18 037	598	1 121	11 620	40 295	19 270	59 663	1 009
33712	Household & institutional furniture mfg	1	51	18	2 769	51 813	2 425	4 921	42 700	103 370	96 439	197 296	7 302
337122	Nonupholstered wood household furniture mfg	1	31	10	2 357	41 986	2 086	4 284	35 918	82 573	83 340	163 814	D
3372	Office furniture (including fixtures) mfg	2	33	12	1 196	21 775	902	1 309	13 632	40 250	30 526	71 079	2 637
33721	Office furniture (including fixtures) mfg	2	33	12	1 196	21 775	902	1 309	13 632	40 250	30 526	71 079	2 637
339	Miscellaneous mfg	1	150	21	2 670	81 282	1 806	4 749	41 540	176 290	118 381	299 463	7 037
3399	Other miscellaneous mfg ..	1	97	19	2 388	73 382	1 598	4 382	36 771	157 741	110 234	272 321	6 245
33992	Sporting & athletic goods mfg	-	7	4	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	7	4	g	D	D	D	D	D	D	D	D
33995	Sign mfg	-	50	7	643	21 439	365	760	9 769	37 828	17 778	54 582	1 536
339950	Sign mfg	-	50	7	643	21 439	365	760	9 769	37 828	17 778	54 582	1 536
PRESCOTT, AZ													
31-33	Manufacturing	1	65	13	1 509	36 723	1 221	2 083	25 483	106 421	64 568	177 963	3 226
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	1	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	1	1	f	D	D	D	D	D	D	D	D
PRESCOTT VALLEY, AZ													
31-33	Manufacturing	-	30	7	852	24 610	607	1 517	17 841	64 680	47 474	110 839	D
332	Fabricated metal product mfg	-	8	2	540	16 057	376	1 034	11 966	38 738	25 309	64 469	D
QUEEN CREEK, AZ *													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SCOTTSDALE, AZ													
31-33	Manufacturing	1	257	48	8 254	192 079	3 865	6 933	87 898	756 260	366 858	1 128 229	48 154
334	Computer & electronic product mfg.....	-	36	12	5 577	118 945	2 054	3 645	47 628	555 155	214 202	777 407	D
3342	Communications equipment mfg.....	-	7	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
TEMPE, AZ													
31-33	Manufacturing	-	498	166	24 105	865 170	15 432	32 509	404 842	3 345 256	2 088 212	5 414 828	319 109
311	Food mfg.....	1	20	8	835	20 331	653	1 302	14 060	124 245	270 181	393 705	5 422
323	Printing & related support activities.....	4	77	12	1 077	28 327	790	1 501	17 374	58 710	37 943	95 566	5 486
3231	Printing & related support activities.....	4	77	12	1 077	28 327	790	1 501	17 374	58 710	37 943	95 566	5 486
32311	Printing.....	4	68	11	1 027	27 564	747	1 452	16 790	57 153	37 589	93 655	D
323110	Commercial lithographic printing ..	5	25	6	512	15 632	347	684	9 809	32 353	21 270	52 745	2 727
326	Plastics & rubber products mfg.....	1	33	14	1 090	32 225	755	1 554	18 286	64 458	38 817	102 730	5 216
3261	Plastics product mfg.....	1	28	10	778	22 085	563	1 158	13 656	47 245	30 295	77 300	D
32619	Other plastics product mfg.....	1	25	9	f	D	D	D	D	D	D	D	3 514
326199	All other plastics product mfg.....	1	24	8	705	19 802	517	1 060	12 367	42 688	26 266	68 707	3 514
332	Fabricated metal product mfg.....	-	87	21	3 587	128 033	2 188	4 822	53 107	501 070	284 819	777 355	19 906
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	44	11	f	D	D	D	D	D	D	D	7 569
33271	Machine shops.....	2	42	10	517	20 600	377	782	12 592	38 643	18 704	56 541	D
332710	Machine shops.....	2	42	10	517	20 600	377	782	12 592	38 643	18 704	56 541	D
3329	Other fabricated metal product mfg.....	-	12	4	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	4	47	16	1 148	42 348	825	1 501	23 778	91 796	51 593	138 743	5 879
3335	Metalworking machinery mfg.....	3	23	9	680	27 621	514	956	16 467	57 927	21 469	74 941	4 120
33351	Metalworking machinery mfg.....	3	23	9	680	27 621	514	956	16 467	57 927	21 469	74 941	4 120
334	Computer & electronic product mfg.....	-	62	39	10 671	421 900	6 656	14 783	190 577	2 037 726	1 047 943	3 091 087	232 604
3341	Computer & peripheral equipment mfg.....	-	4	2	f	D	D	D	D	D	D	D	5 887
33411	Computer & peripheral equipment mfg.....	-	4	2	f	D	D	D	D	D	D	D	5 887
3342	Communications equipment mfg.....	-	7	6	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	34	24	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	34	24	i	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	-	8	6	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	16	9	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	5	5	h	D	D	D	D	D	D	D	45 213
3345	Navigational, measuring, medical, & control instruments mfg.....	7	14	5	774	31 422	553	1 115	18 442	49 969	66 560	118 722	D
33451	Navigational, measuring, medical, & control instruments mfg.....	7	14	5	774	31 422	553	1 115	18 442	49 969	66 560	118 722	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEMPE, AZ—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	2	29	18	2 299	91 799	1 474	3 006	44 137	184 218	142 317	332 742	28 144
3363	Motor vehicle parts mfg	4	10	8	746	21 525	600	1 032	12 194	45 751	53 076	99 877	4 402
3364	Aerospace product & parts mfg	—	12	8	1 366	63 940	718	1 622	26 346	122 266	76 804	204 448	22 400
33641	Aerospace product & parts mfg	—	12	8	1 366	63 940	718	1 622	26 346	122 266	76 804	204 448	22 400
336414	Guided missile & space vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	35	10	1 238	45 341	496	986	10 579	145 168	50 958	184 092	4 117
3391	Medical equipment & supplies mfg	—	15	5	663	27 460	176	297	3 528	112 098	10 878	111 309	D
33911	Medical equipment & supplies mfg	—	15	5	663	27 460	176	297	3 528	112 098	10 878	111 309	D
339112	Surgical & medical instrument mfg	—	3	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	1	20	5	575	17 881	320	689	7 051	33 070	40 080	72 783	D
	TOLLESON, AZ												
31-33	Manufacturing	—	15	8	1 726	38 502	1 487	3 427	27 919	130 118	521 545	651 787	12 151
311	Food mfg	—	4	4	1 417	31 687	1 241	2 932	23 211	110 113	484 166	595 899	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	1	1	g	D	D	D	D	D	D	D	D
	TUCSON, AZ												
31-33	Manufacturing	—	520	139	20 152	841 205	10 438	20 283	237 746	1 767 480	1 390 383	3 483 559	119 245
311	Food mfg	1	36	8	602	10 548	391	620	6 427	22 441	41 819	64 432	1 013
312	Beverage & tobacco product mfg	—	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	3	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	90	14	f	D	D	D	D	D	D	D	5 029
3231	Printing & related support activities	1	90	14	f	D	D	D	D	D	D	D	5 029
32311	Printing	1	79	13	f	D	D	D	D	D	D	D	4 921
326	Plastics & rubber products mfg	—	27	14	777	17 881	617	1 159	11 945	49 353	37 364	86 753	4 032
3261	Plastics product mfg	—	20	10	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	13	8	513	10 758	418	803	7 681	33 059	23 786	56 900	D
327	Nonmetallic mineral product mfg	—	37	16	1 116	26 770	698	1 275	15 319	76 283	46 824	125 011	D
332	Fabricated metal product mfg	—	84	18	2 976	81 895	2 486	5 043	52 181	185 188	110 894	292 915	9 702
3323	Architectural & structural metals mfg	—	27	7	1 351	40 658	1 148	2 416	24 331	86 373	56 145	142 506	2 584
33232	Ornamental & architectural metal products mfg	—	18	4	1 144	34 469	993	2 139	20 842	76 451	51 757	128 142	2 113
332322	Sheet metal work mfg	—	9	3	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	—	7	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	30	11	1 085	35 695	585	1 091	13 733	87 313	56 544	136 906	4 995
3333	Commercial & service industry machinery mfg	3	14	6	723	23 912	337	590	6 595	67 399	42 974	103 151	3 121
33331	Commercial & service industry machinery mfg	3	14	6	723	23 912	337	590	6 595	67 399	42 974	103 151	3 121
334	Computer & electronic product mfg	1	37	20	2 351	101 179	886	2 089	30 310	334 023	116 527	445 349	38 000
3344	Semiconductor & other electronic component mfg	—	14	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	14	6	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	2	2	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TUCSON, AZ—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	8	2	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	66	12	1 335	37 966	854	1 185	12 791	93 636	135 947	227 853	11 041
3391	Medical equipment & supplies mfg	1	37	7	661	22 157	395	572	7 209	62 895	115 911	178 588	8 352
33911	Medical equipment & supplies mfg	1	37	7	661	22 157	395	572	7 209	62 895	115 911	178 588	8 352
3399	Other miscellaneous mfg ...	-	29	5	674	15 809	459	613	5 582	30 741	20 036	49 265	2 689
	YUMA, AZ												
31-33	Manufacturing	-	36	9	2 481	44 468	2 255	4 403	35 985	136 486	212 675	348 069	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
ARIZONA		ARIZONA—Con.	
Companies ¹	4 747	Quantity of electricity purchased for heat and power	1,000 kWh.. 6 738 924
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 427 611
All establishments	4 917	Total value of shipments	\$1,000.. 43 030 348
Establishments with 1 to 19 employees	3 547	Value of resales	\$1,000.. 923 228
Establishments with 20 to 99 employees	1 066	Value added	\$1,000.. 26 898 948
Establishments with 100 employees or more	304	Total inventories, beginning of year	\$1,000.. 5 996 885
All employees	193 616	Finished goods inventories, beginning of year	\$1,000.. 1 141 383
Total compensation ²	\$1,000.. 8 449 282	Work-in-process inventories, beginning of year	\$1,000.. 3 374 144
Annual payroll	\$1,000.. 6 753 601	Materials and supplies inventories, beginning of year	\$1,000.. 1 481 358
Total fringe benefits	\$1,000.. 1 695 681	Total inventories, end of year	\$1,000.. 5 968 719
Production workers, average for year	number.. 121 994	Finished goods inventories, end of year	\$1,000.. 1 239 536
Production workers on March 12	number.. 120 632	Work-in-process inventories, end of year	\$1,000.. 3 024 987
Production workers on May 12	number.. 121 619	Materials and supplies inventories, end of year	\$1,000.. 1 704 196
Production workers on August 12	number.. 122 630	Gross book value of total assets at beginning of year	\$1,000.. 15 549 979
Production workers on November 12	number.. 123 095	Total capital expenditures (new and used)	\$1,000.. 2 504 585
Production-worker hours	1,000.. 247 489	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 324 479
Production-worker wages	\$1,000.. 3 000 055	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 2 180 106
Total cost of materials	\$1,000.. 15 878 330	Total retirements ²	\$1,000.. 589 517
Cost of materials, parts, containers, etc., consumed	\$1,000.. 14 137 436	Gross book value of total assets at end of year	\$1,000.. 17 465 047
Cost of resales	\$1,000.. 738 795	Total depreciation during year ²	\$1,000.. 1 490 997
Cost of fuels	\$1,000.. 144 402	Total rental payments ²	\$1,000.. 332 286
Cost of purchased electricity	\$1,000.. 381 479	Buildings and other structures rental payments ²	\$1,000.. 166 244
Cost of contract work	\$1,000.. 476 218	Machinery and equipment rental payments ²	\$1,000.. 166 042

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

ARIZONA

Apache Junction is in Maricopa and Pinal Counties.

Queen Creek is in Maricopa and Pinal Counties; it annexed into Pinal County in December 1993.

Sedona is in Coconino and Yavapai Counties.

Appendix E. Metropolitan Areas

ARIZONA

Flagstaff, AZ—UT MSA

Coconino County, AZ

Kane County, UT

Las Vegas, NV—AZ MSA

Mohave County, AZ

Clark County, NV

Nye County, NV

Phoenix—Mesa, AZ MSA

Maricopa County, AZ

Pinal County, AZ

Tucson, AZ MSA

Pima County, AZ

Yuma, AZ MSA

Yuma County, AZ

California

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CALIFORNIA													
31-33	Manufacturing	1	49 418	15 266	1 809 667	65 762 848	1 181 865	2 317 867	31 140 024	195 872 810	184 701 629	379 612 443	16 422 155
311	Food mfg	1	3 499	1 159	154 473	4 250 032	115 828	226 561	2 695 012	16 831 145	23 235 276	39 975 134	1 125 583
3111	Animal food mfg	1	122	43	3 915	143 824	2 418	5 371	81 929	764 309	1 842 540	2 594 723	44 072
31111	Animal food mfg	1	122	43	3 915	143 824	2 418	5 371	81 929	764 309	1 842 540	2 594 723	44 072
311111	Dog & cat food mfg	-	19	9	1 668	63 501	1 121	2 533	44 382	491 220	440 970	920 139	23 577
311119	Other animal food mfg	1	103	34	2 247	80 323	1 297	2 838	37 547	273 089	1 401 570	1 674 584	20 495
3112	Grain & oilseed milling	1	96	49	4 208	163 285	3 066	6 609	108 368	1 052 889	1 732 349	2 792 834	74 047
31121	Flour milling & malt mfg	-	55	28	2 058	76 515	1 468	3 000	47 202	375 895	915 408	1 304 568	34 015
311211	Flour milling	-	33	14	757	28 672	507	1 074	17 374	188 626	471 201	664 391	16 511
311212	Rice milling	-	20	13	g	D	D	D	D	D	D	D	D
311213	Malt mfg	-	2	1	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	2	32	17	g	D	D	D	D	D	D	D	D
311222	Soybean processing	-	3	3	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing	4	5	2	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	1	23	11	996	36 370	709	1 389	24 168	152 746	500 505	642 567	14 211
31123	Breakfast cereal mfg	-	9	4	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	9	4	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	201	52	8 899	281 884	6 974	13 674	193 223	1 112 440	1 311 806	2 422 443	84 478
31131	Sugar mfg	-	11	8	g	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	2	1	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	7	7	g	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	3	21	6	1 929	72 137	1 527	3 193	51 989	416 572	319 242	730 827	27 933
311320	Chocolate & confectionery mfg from cacao beans	3	21	6	1 929	72 137	1 527	3 193	51 989	416 572	319 242	730 827	27 933
31133	Confectionery mfg from purchased chocolate	1	88	22	3 138	87 920	2 522	4 451	56 149	314 047	249 513	559 319	26 116
311330	Confectionery mfg from purchased chocolate	1	88	22	3 138	87 920	2 522	4 451	56 149	314 047	249 513	559 319	26 116
31134	Nonchocolate confectionery mfg	-	81	16	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	81	16	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	329	216	43 799	1 121 392	36 942	73 127	824 007	4 498 672	4 992 509	9 514 062	325 014
31141	Frozen food mfg	3	112	68	15 043	293 662	12 269	23 170	199 055	988 680	995 000	2 002 767	85 151
311411	Frozen fruit, juice, & vegetable mfg	4	45	32	8 182	146 128	6 848	12 891	107 442	503 956	577 413	1 100 911	43 701
311412	Frozen specialty food mfg	2	67	36	6 861	147 534	5 421	10 279	91 613	484 724	417 587	901 856	41 450
31142	Fruit & vegetable canning, pickling, & drying	1	217	148	28 756	827 730	24 673	49 957	624 952	3 509 992	3 997 509	7 511 295	239 863
311421	Fruit & vegetable canning	1	142	95	17 278	516 295	15 014	30 421	407 184	2 111 387	2 528 274	4 638 512	137 339
311422	Specialty canning	1	17	7	4 542	119 097	4 016	8 547	92 879	734 287	382 375	1 118 129	34 741
311423	Dried & dehydrated food mfg	1	58	46	6 936	192 338	5 643	10 989	124 889	664 318	1 086 860	1 754 654	67 783
3115	Dairy product mfg	1	203	107	12 935	473 664	8 750	18 369	288 112	1 817 924	5 584 488	7 377 576	158 581
31151	Dairy product (except frozen) mfg	1	138	87	10 825	393 807	7 118	14 753	228 687	1 559 064	5 131 027	6 661 380	135 421
311511	Fluid milk mfg	1	60	40	5 844	229 532	3 399	6 635	114 003	907 160	2 142 584	3 044 138	49 083
311512	Creamery butter mfg	4	2	2	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	2	47	30	3 215	97 702	2 499	5 432	71 825	406 330	1 500 307	1 897 956	60 591
311514	Dry, condensed, & evaporated dairy product mfg	-	29	15	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	2	65	20	2 110	79 857	1 632	3 616	59 425	258 860	453 461	716 196	23 160
311520	Ice cream & frozen dessert mfg	2	65	20	2 110	79 857	1 632	3 616	59 425	258 860	453 461	716 196	23 160
3116	Meat product mfg	2	250	120	17 520	401 758	14 691	28 080	286 867	1 427 277	2 810 420	4 223 511	75 373
31161	Animal slaughtering & processing	2	250	120	17 520	401 758	14 691	28 080	286 867	1 427 277	2 810 420	4 223 511	75 373
311611	Animal (except poultry) slaughtering	4	77	27	4 300	103 370	3 576	6 892	75 768	306 501	1 265 265	1 571 460	11 650
311612	Meat processed from carcasses	3	123	60	4 779	128 266	3 793	7 127	81 426	466 805	687 633	1 147 254	31 748
311613	Rendering & meat byproduct processing	-	21	14	770	28 121	407	704	10 508	76 848	100 910	178 189	8 160
311615	Poultry processing	-	29	19	7 671	142 001	6 915	13 357	119 165	577 123	756 612	1 326 608	23 815
3117	Seafood product preparation & packaging	1	76	32	3 561	68 377	3 025	4 915	47 720	176 585	415 971	590 995	12 155
31171	Seafood product preparation & packaging	1	76	32	3 561	68 377	3 025	4 915	47 720	176 585	415 971	590 995	12 155
311711	Seafood canning	-	15	5	1 059	22 183	889	1 517	15 592	50 684	114 348	164 629	5 092
311712	Fresh & frozen seafood processing	2	61	27	2 502	46 194	2 136	3 398	32 128	125 901	301 623	426 366	7 063

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con. Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	2	1 725	330	37 314	957 246	23 302	41 844	482 413	2 773 241	1 646 870	4 412 630	153 622
31181	Bread & bakery product mfg	3	1 527	249	28 728	742 906	17 074	30 099	356 752	1 958 652	1 077 123	3 033 070	103 813
311811	Retail bakeries	5	1 109	59	6 331	83 841	4 123	5 178	44 067	189 529	111 719	301 615	10 222
311812	Commercial bakeries	3	385	169	20 375	613 745	11 277	21 609	282 631	1 644 642	823 275	2 467 079	83 066
311813	Frozen cakes, pies, & other pastries mfg	—	33	21	2 022	45 320	1 674	3 312	30 054	124 481	142 129	264 376	10 525
31182	Cookie, cracker, & pasta mfg	1	140	42	4 328	132 540	2 998	5 344	70 510	565 615	379 170	939 398	31 345
311821	Cookie & cracker mfg	1	67	25	2 889	90 784	1 891	3 209	42 182	364 973	189 890	554 356	21 497
311822	Flour mixes & dough mfg from purchased flour	2	26	12	863	24 136	697	1 284	16 202	92 236	132 139	221 656	6 387
311823	Dry pasta mfg	1	47	5	576	17 620	410	851	12 126	108 406	57 141	163 386	3 461
31183	Tortilla mfg	1	58	39	4 258	81 800	3 230	6 401	55 151	248 974	190 577	440 162	18 464
311830	Tortilla mfg	1	58	39	4 258	81 800	3 230	6 401	55 151	248 974	190 577	440 162	18 464
3119	Other food mfg	1	497	210	22 322	638 602	16 660	34 572	382 373	3 207 808	2 898 323	6 046 360	198 241
31191	Snack food mfg	—	76	44	7 154	199 818	5 467	11 921	124 035	1 139 198	1 173 725	2 283 703	70 384
311911	Roasted nuts & peanut butter mfg	—	33	21	3 820	93 505	2 856	6 452	59 136	584 572	742 562	1 298 216	31 895
311919	Other snack food mfg	—	43	23	3 334	106 313	2 611	5 469	64 899	554 626	431 163	985 487	38 489
31192	Coffee & tea mfg	—	44	21	1 640	59 990	1 057	2 249	38 407	389 972	426 199	811 963	24 270
311920	Coffee & tea mfg	—	44	21	1 640	59 990	1 057	2 249	38 407	389 972	426 199	811 963	24 270
31193	Flavoring syrup & concentrate mfg	1	28	12	1 068	36 799	645	1 271	17 992	447 371	197 845	624 155	8 913
311930	Flavoring syrup & concentrate mfg	1	28	12	1 068	36 799	645	1 271	17 992	447 371	197 845	624 155	8 913
31194	Seasoning & dressing mfg	1	103	36	3 076	101 178	2 215	4 410	62 438	446 205	433 670	876 968	16 112
311941	Mayonnaise, dressing, & other prepared sauce mfg	2	59	20	1 724	54 835	1 346	2 646	37 871	192 196	228 324	420 270	12 148
311942	Spice & extract mfg	—	44	16	1 352	46 343	869	1 764	24 567	254 009	205 346	456 698	3 964
31199	All other food mfg	1	246	97	9 384	240 817	7 276	14 721	139 501	785 062	666 884	1 449 571	78 562
311991	Perishable prepared food mfg	—	92	46	5 488	125 861	4 566	9 676	80 128	411 664	311 873	709 460	43 210
311999	All other miscellaneous food mfg	2	154	51	3 896	114 956	2 710	5 045	59 373	373 398	355 011	740 111	35 352
312	Beverage & tobacco product mfg	1	590	236	28 096	1 027 150	13 898	27 088	460 153	5 546 106	6 259 011	11 204 637	568 586
3121	Beverage mfg	1	588	236	k	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	126	66	i	D	D	D	D	D	D	D	85 133
312111	Soft drink mfg	2	57	39	7 616	219 563	3 132	6 537	93 423	1 151 744	1 823 239	2 967 438	68 590
312112	Bottled water mfg	2	30	15	1 207	36 262	595	1 146	20 883	99 652	107 930	207 919	12 906
312113	Ice mfg	3	39	12	f	D	D	D	D	D	D	D	3 637
31212	Breweries	—	66	29	3 642	169 185	2 565	4 772	121 552	1 303 861	876 473	2 176 631	170 295
312120	Breweries	—	66	29	3 642	169 185	2 565	4 772	121 552	1 303 861	876 473	2 176 631	170 295
31213	Wineries	1	391	140	14 867	578 476	7 085	13 588	210 154	2 794 171	3 351 052	5 555 049	311 965
312130	Wineries	1	391	140	14 867	578 476	7 085	13 588	210 154	2 794 171	3 351 052	5 555 049	311 965
31214	Distilleries	—	5	1	c	D	D	D	D	D	D	D	D
312140	Distilleries	—	5	1	c	D	D	D	D	D	D	D	D
313	Textile mills	3	461	126	11 861	283 883	9 837	19 851	187 622	643 347	742 448	1 384 399	73 802
3131	Fiber, yarn, & thread mills	4	30	10	869	15 975	769	1 607	13 043	37 719	74 974	112 364	10 617
31311	Fiber, yarn, & thread mills	4	30	10	869	15 975	769	1 607	13 043	37 719	74 974	112 364	10 617
313111	Yarn spinning mills	7	18	5	488	8 752	426	931	6 974	25 017	29 501	54 495	8 164
313112	Yarn texturing, throwing, & twisting mills	1	4	3	252	5 214	227	479	4 500	8 260	27 465	35 419	1 746
313113	Thread mills	2	8	2	129	2 009	116	197	1 569	4 442	18 008	22 450	707
3132	Fabric mills	3	175	44	5 107	111 336	4 356	8 336	75 484	229 339	250 373	480 224	22 610
31321	Broadwoven fabric mills	5	82	11	1 463	27 433	1 353	2 154	23 152	52 492	65 827	119 261	4 145
313210	Broadwoven fabric mills	5	82	11	1 463	27 433	1 353	2 154	23 152	52 492	65 827	119 261	4 145
31322	Narrow fabric mills & schiffli machine embroidery	1	51	13	1 504	29 629	1 305	2 750	21 908	70 548	31 465	101 795	7 029
313221	Narrow fabric mills	1	22	6	737	16 019	620	1 324	11 830	44 186	20 772	64 789	6 297
313222	Schiffli machine embroidery	1	29	7	767	13 610	685	1 426	10 078	26 362	10 693	37 006	732
31323	Nonwoven fabric mills	6	7	2	121	1 833	97	174	1 293	5 150	6 728	11 850	731
313230	Nonwoven fabric mills	6	7	2	121	1 833	97	174	1 293	5 150	6 728	11 850	731
31324	Knit fabric mills	2	35	18	2 019	52 441	1 601	3 258	29 131	101 149	146 353	247 318	10 705
313241	Weft knit fabric mills	2	26	15	1 908	50 061	1 508	3 071	27 405	95 307	138 860	233 866	10 397
313249	Other knit fabric & lace mills	1	9	3	111	2 380	93	187	1 726	5 842	7 493	13 452	308

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
313	Textile mills—Con.												
3133	Textile & fabric finishing & fabric coating mills	3	256	72	5 885	156 572	4 712	9 908	99 095	376 289	417 101	791 811	40 575
31331	Textile & fabric finishing mills	2	224	62	5 116	128 747	4 166	8 717	83 654	319 230	306 838	619 053	34 523
313311	Broadwoven fabric finishing mills	2	173	43	3 159	79 778	2 506	5 115	47 828	214 091	202 416	413 711	20 522
313312	Textile & fabric finishing mills	2	51	19	1 957	48 969	1 660	3 602	35 826	105 139	104 422	205 342	14 001
31332	Fabric coating mills	3	32	10	769	27 825	546	1 191	15 441	57 059	110 263	172 758	6 052
313320	Fabric coating mills	3	32	10	769	27 825	546	1 191	15 441	57 059	110 263	172 758	6 052
314	Textile product mills	2	1 074	244	22 648	457 241	17 893	34 683	277 240	1 022 506	1 262 064	2 270 903	49 280
3141	Textile furnishings mills	2	433	89	10 622	238 529	8 260	15 738	139 918	587 283	851 865	1 430 259	23 838
31411	Carpet & rug mills	2	36	18	3 629	112 173	2 509	5 347	55 062	312 232	462 165	776 600	15 122
314110	Carpet & rug mills	2	36	18	3 629	112 173	2 509	5 347	55 062	312 232	462 165	776 600	15 122
31412	Curtain & linen mills	2	397	71	6 993	126 356	5 751	10 391	84 856	275 051	389 700	653 659	8 716
314121	Curtain & drapery mills	3	274	19	1 867	32 713	1 326	2 289	17 610	58 857	52 106	111 210	1 765
314129	Other household textile product mills	2	123	52	5 126	93 643	4 425	8 102	67 246	216 194	337 594	542 449	6 951
3149	Other textile product mills	3	641	155	12 026	218 712	9 633	18 945	137 322	435 223	410 199	840 644	25 442
31491	Textile bag & canvas mills	4	273	42	4 211	80 870	3 349	5 587	44 039	150 454	137 985	282 437	6 837
314911	Textile bag mills	2	65	20	2 138	34 318	1 823	2 923	17 859	56 483	62 521	115 366	1 544
314912	Canvas & related product mills	5	208	22	2 073	46 552	1 526	2 664	26 180	93 971	75 464	167 071	5 293
31499	All other textile product mills	3	368	113	7 815	137 842	6 284	13 358	93 283	284 769	272 214	558 207	18 605
314991	Rope, cordage, & twine mills	4	16	5	210	5 111	174	336	3 498	10 345	9 428	20 477	465
314999	All other miscellaneous textile product mills	3	352	108	7 605	132 731	6 110	13 022	89 785	274 424	262 786	537 730	18 140
315	Apparel mfg	2	5 112	1 637	130 120	2 259 516	109 323	187 087	1 498 863	6 161 492	6 728 192	12 776 139	226 441
3151	Apparel knitting mills	1	119	56	5 117	88 704	4 362	8 917	63 530	211 930	242 132	456 634	17 225
31511	Hosiery & sock mills	1	17	4	537	7 162	440	739	5 193	29 584	50 823	79 377	1 589
315111	Sheer hosiery mills	8	8	1	c	D	D	D	D	D	D	D	190
315119	Other hosiery & sock mills	-	9	3	e	D	D	D	D	D	D	D	1 409
31519	Other apparel knitting mills	1	102	52	4 580	81 542	3 922	8 178	58 337	182 346	191 309	377 257	15 626
315191	Outerwear knitting mills	1	97	51	4 516	80 696	3 859	8 087	57 588	180 935	190 898	375 437	15 607
3152	Cut & sew apparel mfg	2	4 614	1 498	117 341	2 019 926	98 798	167 760	1 346 080	5 602 355	6 194 077	11 684 740	194 299
31521	Cut & sew apparel contractors	5	3 094	869	58 459	663 432	54 569	85 703	578 640	1 143 195	311 703	1 442 608	42 031
315211	Men's & boys' cut & sew apparel contractors	2	157	90	6 026	78 399	5 604	9 887	67 136	149 414	24 683	173 917	4 212
315212	Women's, girls', & infants' cut & sew apparel contractors	5	2 937	779	52 433	585 033	48 965	75 816	511 504	993 781	287 020	1 268 691	37 819
31522	Men's & boys' cut & sew apparel mfg	1	338	163	16 211	318 453	13 635	26 137	213 676	1 388 541	1 754 879	3 107 500	30 907
315221	Men's & boys' cut & sew underwear & nightwear mfg	3	9	3	207	2 931	189	304	2 209	4 201	2 857	6 662	40
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	6	32	11	713	17 253	533	881	12 075	33 596	16 350	49 598	739
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	123	66	5 826	113 204	4 705	8 999	72 583	293 555	387 801	675 360	13 409
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	55	34	5 014	93 369	4 505	8 395	69 443	804 202	1 113 801	1 898 188	4 280
315225	Men's & boys' cut & sew work clothing mfg	2	25	9	1 120	18 521	1 005	2 067	13 900	46 865	46 025	91 251	858
315228	Men's & boys' cut & sew other outerwear mfg	3	94	40	3 331	73 175	2 698	5 491	43 466	206 122	188 045	386 441	11 581
31523	Women's & girls' cut & sew apparel mfg	1	1 070	434	40 323	992 764	28 720	52 372	523 798	2 960 637	4 044 579	6 942 053	117 607
315231	Women's & girls' cut & sew lingerie & nightwear mfg	2	44	22	1 627	36 267	1 192	2 269	20 145	84 405	129 875	211 763	1 861
315232	Women's & girls' cut & sew blouse & shirt mfg	2	332	135	11 445	283 426	8 356	13 632	143 247	795 888	1 206 647	1 971 062	14 705
315233	Women's & girls' cut & sew dress mfg	1	288	119	11 011	306 719	7 623	14 721	162 297	837 563	1 227 219	2 053 383	23 720
315234	Women's & girls' cut & sew suit, coat, skirt mfg	1	93	33	2 265	52 024	1 610	2 695	28 513	154 526	186 573	336 439	1 750
315239	Women's & girls' cut & sew other outerwear mfg	1	313	125	13 975	314 328	9 939	19 055	169 596	1 088 255	1 294 265	2 369 406	75 571

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31529	Other cut & sew apparel mfg	4	112	32	2 348	45 277	1 874	3 548	29 966	109 982	82 916	192 579	3 754
315291	Infants' cut & sew apparel mfg	7	8	3	267	4 822	255	568	4 267	7 104	6 779	13 933	140
315292	Fur & leather apparel mfg	5	32	5	447	10 332	377	714	7 175	26 268	16 288	42 346	1 034
315299	All other cut & sew apparel mfg	4	72	24	1 634	30 123	1 242	2 266	18 524	76 610	59 849	136 300	2 580
3159	Apparel accessories & other apparel mfg	2	379	83	7 662	150 886	6 163	10 410	89 253	347 207	291 983	634 765	14 917
31599	Apparel accessories & other apparel mfg	2	379	83	7 662	150 886	6 163	10 410	89 253	347 207	291 983	634 765	14 917
315991	Hat, cap, & millinery mfg	3	54	16	1 342	24 204	1 103	1 968	14 541	41 481	23 337	64 478	2 201
315993	Men's & boys' neckwear mfg	2	17	6	1 119	23 776	967	1 659	16 093	87 623	69 324	153 966	1 118
315999	Other apparel accessories & other apparel mfg	2	303	60	5 135	101 882	4 032	6 668	57 689	216 775	195 745	411 370	11 560
316	Leather & allied product mfg .	2	234	73	7 528	143 894	6 185	11 868	94 631	341 532	289 436	633 780	10 476
3161	Leather & hide tanning & finishing	3	29	4	435	12 078	348	703	8 919	23 714	50 274	75 320	1 567
31611	Leather & hide tanning & finishing	3	29	4	435	12 078	348	703	8 919	23 714	50 274	75 320	1 567
316110	Leather & hide tanning & finishing	3	29	4	435	12 078	348	703	8 919	23 714	50 274	75 320	1 567
3162	Footwear mfg	1	66	25	2 107	35 853	1 887	3 648	26 023	98 332	65 341	166 082	1 960
31621	Footwear mfg	1	66	25	2 107	35 853	1 887	3 648	26 023	98 332	65 341	166 082	1 960
316211	Rubber & plastics footwear mfg	—	6	4	474	7 006	456	1 118	6 357	17 124	17 436	35 830	515
316213	Men's footwear (except athletic) mfg .	1	14	5	267	8 507	177	309	3 872	39 123	23 150	63 838	684
316214	Women's footwear (except athletic) mfg .	2	27	11	979	14 547	893	1 691	11 296	30 654	17 835	48 702	D
316219	Other footwear mfg ...	1	18	5	e	D	D	D	D	D	D	D	392
3169	Other leather & allied product mfg	2	139	44	4 986	95 963	3 950	7 517	59 689	219 486	173 821	392 378	6 949
31699	Other leather & allied product mfg	2	139	44	4 986	95 963	3 950	7 517	59 689	219 486	173 821	392 378	6 949
316991	Luggage mfg	4	41	18	1 648	36 190	1 246	2 397	20 235	97 262	75 078	169 403	2 847
316992	Women's handbag & purse mfg	6	18	4	283	4 650	252	506	3 750	9 232	7 891	17 068	134
316993	Personal leather good (except women's handbag & purse) mfg	—	32	8	1 080	20 236	914	1 792	13 489	40 043	26 713	66 816	1 258
316999	All other leather good mfg	1	48	14	1 975	34 887	1 538	2 822	22 215	72 949	64 139	139 091	2 710
321	Wood product mfg	1	1 184	413	38 848	1 005 754	32 304	65 078	741 471	2 464 626	3 724 183	6 169 050	140 029
3211	Sawmills & wood preservation	1	112	52	8 191	273 647	7 110	15 610	224 709	782 203	1 283 612	2 067 497	57 012
32111	Sawmills & wood preservation	1	112	52	8 191	273 647	7 110	15 610	224 709	782 203	1 283 612	2 067 497	57 012
321113	Sawmills	1	96	47	7 949	266 891	6 915	15 204	219 977	761 404	1 238 023	1 998 574	54 282
321114	Wood preservation ...	3	16	5	242	6 756	195	406	4 732	20 799	45 589	68 923	2 730
3212	Veneer, plywood, & engineered wood product mfg	1	132	61	5 335	144 244	4 324	9 000	102 760	354 128	469 064	819 537	20 903
32121	Veneer, plywood, & engineered wood product mfg	1	132	61	5 335	144 244	4 324	9 000	102 760	354 128	469 064	819 537	20 903
321211	Hardwood veneer & plywood mfg	2	15	7	e	D	D	D	D	D	D	D	1 278
321212	Softwood veneer & plywood mfg	2	7	2	266	8 351	244	510	7 430	27 651	41 904	69 911	D
321213	Engineered wood member (except truss) mfg	—	2	2	e	D	D	D	D	D	D	D	D
321214	Truss mfg	1	85	34	2 737	63 930	2 119	4 178	41 111	129 948	164 268	293 383	6 951
321219	Reconstituted wood product mfg	—	23	16	1 534	51 586	1 307	2 878	38 873	149 871	188 810	336 567	11 270
3219	Other wood product mfg ...	2	940	300	25 322	587 863	20 870	40 468	414 002	1 328 295	1 971 507	3 282 016	62 114
32191	Millwork	1	418	135	11 280	265 164	9 314	18 342	192 968	582 034	1 025 955	1 599 727	30 360
321911	Wood window & door mfg	3	179	45	4 051	98 915	3 173	6 424	68 354	215 728	278 642	494 836	13 977
321912	Cut stock, resawing lumber, & planing....	1	88	40	2 755	61 084	2 448	4 728	48 131	151 001	333 388	485 798	10 895
321918	Other millwork (including flooring) ...	—	151	50	4 474	105 165	3 693	7 190	76 483	215 305	413 925	619 093	5 488
32192	Wood container & pallet mfg	2	261	87	5 305	101 463	4 478	8 295	69 577	244 544	307 024	549 784	11 403
321920	Wood container & pallet mfg	2	261	87	5 305	101 463	4 478	8 295	69 577	244 544	307 024	549 784	11 403

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31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	1	261	78	8 737	221 236	7 078	13 831	151 457	501 717	638 528	1 132 505	20 351
321991	Manufactured home (mobile home) mfg ..	—	16	15	2 779	78 178	2 434	4 737	54 488	175 649	226 616	403 145	2 471
321992	Prefabricated wood building mfg	6	37	11	1 311	30 602	969	1 913	20 671	75 897	106 440	183 320	2 722
321999	All other miscellaneous wood product mfg ...	1	208	52	4 647	112 456	3 675	7 181	76 298	250 171	305 472	546 040	15 158
322	Paper mfg	1	579	345	34 697	1 266 007	25 951	54 341	824 372	3 380 480	4 795 607	8 167 467	259 310
3221	Pulp, paper, & paperboard mills	—	25	24	3 893	198 209	2 917	6 320	137 034	619 437	871 125	1 472 635	49 483
32211	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
322110	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
32212	Paper mills	—	9	8	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	8	7	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	15	15	1 640	82 880	1 226	2 784	55 114	264 608	416 374	682 293	24 570
322130	Paperboard mills	—	15	15	1 640	82 880	1 226	2 784	55 114	264 608	416 374	682 293	24 570
3222	Converted paper product mfg	1	554	321	30 804	1 067 798	23 034	48 021	687 338	2 761 043	3 924 482	6 694 832	209 827
32221	Paperboard container mfg	—	264	186	19 003	705 724	14 323	30 611	450 468	1 552 208	2 630 544	4 186 820	130 722
322211	Corrugated & solid fiber box mfg	1	169	124	13 228	508 770	9 753	20 925	319 809	1 070 521	2 122 817	3 197 340	102 240
322212	Folding paperboard box mfg	—	55	39	3 941	150 159	3 068	6 704	97 659	341 246	341 755	682 964	20 875
322213	Setup paperboard box mfg	—	8	6	510	9 588	445	831	6 700	19 529	11 129	29 987	1 060
322214	Fiber can, tube, drum, & similar products mfg	—	20	11	608	19 193	499	968	13 231	54 275	58 722	112 706	1 963
322215	Nonfolding sanitary food container mfg ...	—	12	6	716	18 014	558	1 183	13 069	66 637	96 121	163 823	4 584
32222	Paper bag & coated & treated paper mfg	1	89	41	3 674	121 725	2 318	4 767	65 179	301 879	441 251	746 773	26 472
322221	Coated & laminated packaging paper & plastics film mfg	4	11	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	1	61	28	2 384	79 659	1 327	2 555	37 235	190 370	267 692	461 369	20 802
322223	Plastics, foil, & coated paper bag mfg	1	3	2	206	5 699	141	323	3 161	11 529	15 438	27 153	1 044
322224	Uncoated paper & multiwall bag mfg	—	7	5	540	15 510	447	974	10 971	40 392	67 739	107 276	1 761
322225	Laminated aluminum foil mfg for flexible packaging uses	—	5	4	357	15 192	262	577	10 150	43 719	60 821	105 668	2 256
32223	Stationery product mfg ..	2	114	48	4 390	130 142	3 362	6 908	89 746	328 444	332 872	663 125	15 678
322231	Die-cut paper & paperboard office supplies mfg	3	60	20	1 659	45 001	1 301	2 672	31 264	123 220	256 509	4 258	4 258
322232	Envelope mfg	2	35	21	2 064	67 782	1 600	3 302	47 842	138 570	175 838	313 022	10 636
322233	Stationery, tablet, & related product mfg ..	2	19	7	667	17 359	461	934	10 640	60 790	33 814	93 594	784
32229	Other converted paper product mfg	1	87	46	3 737	110 207	3 031	5 735	81 945	578 512	519 815	1 098 114	36 955
322291	Sanitary paper product mfg	—	14	8	1 178	43 413	976	1 928	34 833	369 771	338 429	706 810	25 615
322299	All other converted paper product mfg ...	2	73	38	2 559	66 794	2 055	3 807	47 112	208 741	181 386	391 304	11 340
323	Printing & related support activities	2	5 441	947	85 830	2 701 462	61 707	117 774	1 643 058	5 935 538	3 952 458	9 897 815	476 188
3231	Printing & related support activities	2	5 441	947	85 830	2 701 462	61 707	117 774	1 643 058	5 935 538	3 952 458	9 897 815	476 188
32311	Printing	2	4 835	825	75 923	2 379 873	54 453	104 045	1 438 385	5 321 714	3 791 879	9 122 267	430 907
323110	Commercial lithographic printing ..	2	2 297	439	39 454	1 389 270	27 807	55 856	844 908	2 997 976	2 102 999	5 111 977	270 333
323111	Commercial gravure printing	5	54	6	949	33 085	773	1 181	26 141	74 006	65 958	139 963	12 909
323112	Commercial flexographic printing ..	—	112	33	3 019	101 025	2 007	4 498	56 193	225 631	214 956	436 115	15 400
323113	Commercial screen printing	2	569	148	12 700	299 679	9 818	17 599	166 134	594 061	478 681	1 072 321	39 916
323114	Quick printing	3	1 146	44	6 185	147 828	4 428	6 914	91 641	325 925	177 935	503 730	22 331
323115	Digital printing	2	49	7	569	16 762	378	605	9 281	36 670	16 227	52 940	6 503
323116	Manifold business form printing	1	116	60	5 426	161 471	3 771	7 258	104 548	523 068	368 669	892 247	25 767
323117	Book printing	2	90	33	2 606	92 187	2 070	3 954	57 152	206 810	117 393	327 461	18 286
323118	Blankbook, looseleaf binder, & device mfg .	1	31	12	1 596	40 788	1 063	2 086	21 812	151 254	128 740	278 840	7 684
323119	Other commercial printing	4	371	43	3 419	97 778	2 338	4 094	60 575	186 313	120 321	306 673	11 778

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con. Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32312	Support activities for printing.....	3	606	122	9 907	321 589	7 254	13 729	204 673	613 824	160 579	775 548	45 281
323121	Tradebinding & related work.....	3	177	50	3 853	80 950	3 308	6 089	61 378	155 981	33 855	189 707	9 805
323122	Prepress services.....	3	429	72	6 054	240 639	3 946	7 640	143 295	457 843	126 724	585 841	35 476
324	Petroleum & coal products mfg.....	2	205	65	12 755	723 948	8 295	18 697	456 571	5 609 880	15 354 642	20 913 779	764 655
3241	Petroleum & coal products mfg.....	2	205	65	12 755	723 948	8 295	18 697	456 571	5 609 880	15 354 642	20 913 779	764 655
32411	Petroleum refineries.....	2	31	26	9 674	589 456	6 149	14 119	369 628	4 999 046	14 356 008	19 296 030	725 370
324110	Petroleum refineries..	2	31	26	9 674	589 456	6 149	14 119	369 628	4 999 046	14 356 008	19 296 030	725 370
32412	Asphalt paving, roofing, & saturated materials mfg.....	3	137	26	2 244	98 266	1 664	3 457	68 210	352 524	684 311	1 040 820	31 848
324121	Asphalt paving mixture & block mfg.....	4	106	10	894	45 383	652	1 309	30 418	145 164	352 454	498 261	18 557
324122	Asphalt shingle & coating materials mfg.....	2	31	16	1 350	52 883	1 012	2 148	37 792	207 360	331 857	542 559	13 291
32419	Other petroleum & coal products mfg.....	2	37	13	837	36 226	482	1 121	18 733	258 310	314 323	576 929	7 437
324191	Petroleum lubricating oil & grease mfg.....	2	32	10	722	30 319	406	959	14 988	187 002	278 183	469 000	D
324199	All other petroleum & coal products mfg.....	1	5	3	115	5 907	76	162	3 745	71 308	36 140	107 929	D
325	Chemical mfg.....	1	1 544	566	63 239	2 734 122	35 190	70 112	1 064 825	11 498 650	8 179 724	19 604 509	975 497
3251	Basic chemical mfg.....	1	168	69	5 795	264 165	3 494	7 415	147 410	1 488 794	1 162 404	2 653 990	133 923
32512	Industrial gas mfg.....	2	50	21	1 201	50 197	633	1 495	24 322	289 660	100 926	394 167	39 051
325120	Industrial gas mfg.....	2	50	21	1 201	50 197	633	1 495	24 322	289 660	100 926	394 167	39 051
32513	Dye & pigment mfg.....	1	14	8	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg.....	1	6	5	656	25 297	354	718	12 411	100 601	71 898	164 290	7 296
325132	Synthetic organic dye & pigment mfg.....	1	8	3	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	57	22	2 146	97 841	1 405	2 898	58 767	578 133	369 472	965 870	61 449
325188	All other basic inorganic chemical mfg.....	—	54	22	2 114	96 360	1 385	2 859	57 928	570 657	366 068	954 971	D
32519	Other basic organic chemical mfg.....	1	46	18	1 662	85 813	1 017	2 118	49 258	501 916	605 372	1 095 910	25 188
325199	All other basic organic chemical mfg.....	1	38	16	1 537	81 660	924	1 895	46 862	470 491	575 607	1 038 895	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	1	62	38	2 182	96 752	1 358	2 969	50 522	347 657	735 752	1 097 972	40 915
32521	Resin & synthetic rubber mfg.....	1	62	38	2 182	96 752	1 358	2 969	50 522	347 657	735 752	1 097 972	40 915
325211	Plastics material & resin mfg.....	1	48	34	1 804	81 439	1 159	2 635	44 064	306 351	692 131	1 013 000	37 528
325212	Synthetic rubber mfg..	2	14	4	378	15 313	199	334	6 458	41 306	43 621	84 972	3 387
3253	Pesticide, fertilizer, & other agricultural chemical mfg.....	2	85	23	1 556	49 708	899	1 809	25 101	256 530	247 716	502 108	17 794
32531	Fertilizer mfg.....	1	53	16	1 005	30 105	583	1 191	15 700	167 432	174 293	339 222	10 915
325311	Nitrogenous fertilizer mfg.....	4	18	4	156	4 677	114	185	3 111	35 215	26 350	61 985	D
325312	Phosphatic fertilizer mfg.....	—	6	3	372	11 014	138	349	4 588	86 219	46 247	128 757	D
325314	Fertilizer (mixing only) mfg.....	2	29	9	477	14 414	331	657	8 001	45 998	101 696	148 480	4 214
32532	Pesticide & other agricultural chemical mfg.....	3	32	7	551	19 603	316	618	9 401	89 098	73 423	162 886	6 879
325320	Pesticide & other agricultural chemical mfg.....	3	32	7	551	19 603	316	618	9 401	89 098	73 423	162 886	6 879
3254	Pharmaceutical & medicine mfg.....	1	305	141	27 022	1 387 911	13 253	26 861	419 161	5 564 981	2 783 369	8 248 204	601 491
32541	Pharmaceutical & medicine mfg.....	1	305	141	27 022	1 387 911	13 253	26 861	419 161	5 564 981	2 783 369	8 248 204	601 491
325411	Medicinal & botanical mfg.....	3	68	23	2 673	113 267	1 332	2 947	43 512	401 480	333 775	743 905	57 135
325412	Pharmaceutical preparation mfg.....	1	120	62	11 955	597 821	6 698	13 448	173 827	3 233 222	1 564 965	4 742 382	301 053
325413	In-vitro diagnostic substance mfg.....	—	57	35	5 904	301 599	2 360	4 729	89 130	875 259	284 290	1 156 744	133 065
325414	Biological product (except diagnostic) mfg.....	—	60	21	6 490	375 224	2 863	5 737	112 692	1 055 020	600 339	1 605 173	110 238

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con. Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	1	251	82	6 445	255 472	3 642	7 057	107 463	1 102 190	1 168 607	2 271 860	40 794
32551	Paint & coating mfg	1	181	61	4 717	184 321	2 760	5 353	83 049	840 630	941 357	1 785 729	30 287
325510	Paint & coating mfg ...	1	181	61	4 717	184 321	2 760	5 353	83 049	840 630	941 357	1 785 729	30 287
32552	Adhesive mfg	—	70	21	1 728	71 151	882	1 704	24 414	261 560	227 250	486 131	10 507
325520	Adhesive mfg	—	70	21	1 728	71 151	882	1 704	24 414	261 560	227 250	486 131	10 507
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	353	116	12 414	410 285	7 550	14 057	172 910	1 845 583	1 173 786	3 028 853	74 956
32561	Soap & cleaning compound mfg	2	199	51	3 758	118 974	2 339	4 506	57 625	706 947	500 411	1 209 107	27 607
325611	Soap & other detergent mfg	2	98	24	1 744	54 927	1 005	1 740	25 116	363 741	179 297	546 690	9 273
325612	Polish & other sanitation good mfg ..	2	83	23	1 670	51 217	1 186	2 511	28 234	294 572	240 724	534 673	12 807
325613	Surface active agent mfg	3	18	4	344	12 830	148	255	4 275	48 634	80 390	127 744	5 527
32562	Toilet preparation mfg ...	1	154	65	8 656	291 311	5 211	9 551	115 285	1 138 636	673 375	1 819 746	47 349
325620	Toilet preparation mfg .	1	154	65	8 656	291 311	5 211	9 551	115 285	1 138 636	673 375	1 819 746	47 349
3259	Other chemical product mfg	2	320	97	7 825	269 829	4 994	9 944	142 258	892 915	908 090	1 801 522	65 624
32591	Printing ink mfg	2	54	25	1 215	52 300	555	1 230	21 870	139 095	195 016	333 088	4 731
325910	Printing ink mfg	2	54	25	1 215	52 300	555	1 230	21 870	139 095	195 016	333 088	4 731
32592	Explosives mfg	—	10	6	1 134	37 068	940	2 129	24 823	51 701	69 949	123 967	10 017
325920	Explosives mfg	—	10	6	1 134	37 068	940	2 129	24 823	51 701	69 949	123 967	10 017
32599	All other chemical product & preparation mfg	2	256	66	5 476	180 461	3 499	6 585	95 565	702 119	643 125	1 344 467	50 876
325991	Custom compounding of purchased resin ...	2	92	25	2 075	68 186	1 337	2 439	35 001	186 671	280 870	468 199	20 911
325992	Photographic film, paper, plate, & chemical mfg	3	50	11	1 092	32 112	819	1 528	18 598	84 190	61 312	147 282	5 216
325998	All other miscellaneous chemical product & preparation mfg	2	114	30	2 309	80 163	1 343	2 618	41 966	431 258	300 943	728 986	24 749
326	Plastics & rubber products mfg	2	2 007	940	89 712	2 565 650	69 318	135 237	1 529 882	6 944 163	6 027 805	12 944 460	598 253
3261	Plastics product mfg	2	1 708	835	79 604	2 288 322	61 456	119 722	1 357 247	6 225 160	5 343 984	11 531 492	552 813
32611	Unsupported plastics film, sheet, & bag mfg ..	1	183	97	7 528	215 111	6 019	12 028	135 480	599 369	771 641	1 363 865	59 480
326111	Unsupported plastics bag mfg	—	81	49	4 153	99 375	3 509	7 003	66 242	254 041	346 151	594 594	31 399
326112	Unsupported plastics packaging film & sheet mfg	2	14	10	653	23 310	458	1 003	14 892	58 832	78 694	141 484	11 420
326113	Unsupported plastics film & sheet (except packaging) mfg	2	88	38	2 722	92 426	2 052	4 022	54 346	286 496	346 796	627 787	16 661
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	134	52	4 064	119 259	3 065	5 812	70 328	345 654	400 721	740 850	39 012
326121	Unsupported plastics profile shape mfg	2	87	27	1 914	56 992	1 457	2 855	33 712	152 502	108 845	260 749	8 669
326122	Plastics pipe & pipe fitting mfg	—	47	25	2 150	62 267	1 608	2 957	36 616	193 152	291 876	480 101	30 343
32613	Laminated plastics plate, sheet, & shape mfg	1	50	14	1 824	54 228	1 342	2 666	32 874	149 545	138 909	287 782	9 576
326130	Laminated plastics plate, sheet, & shape mfg	1	50	14	1 824	54 228	1 342	2 666	32 874	149 545	138 909	287 782	9 576
32614	Polystyrene foam product mfg	2	71	41	3 406	89 726	2 731	5 633	62 507	306 907	268 552	578 251	29 303
326140	Polystyrene foam product mfg	2	71	41	3 406	89 726	2 731	5 633	62 507	306 907	268 552	578 251	29 303
32615	Urethane & other foam product (except polystyrene) mfg	3	89	48	4 464	109 548	3 534	6 835	75 060	320 454	451 609	763 726	26 057
326150	Urethane & other foam product (except polystyrene) mfg	3	89	48	4 464	109 548	3 534	6 835	75 060	320 454	451 609	763 726	26 057
32616	Plastics bottle mfg	1	63	41	4 390	120 771	3 406	7 207	86 660	366 754	398 388	766 128	58 696
326160	Plastics bottle mfg	1	63	41	4 390	120 771	3 406	7 207	86 660	366 754	398 388	766 128	58 696
32619	Other plastics product mfg	2	1 118	542	53 928	1 579 679	41 359	79 541	894 338	4 136 477	2 914 164	7 030 890	330 689
326191	Plastics plumbing fixture mfg	1	71	30	3 810	91 312	2 964	6 216	57 391	285 371	256 786	544 343	7 780
326192	Resilient floor covering mfg	3	7	2	371	18 828	278	563	14 650	71 407	45 002	117 148	4 018
326199	All other plastics product mfg	2	1 040	510	49 747	1 469 539	38 117	72 762	822 297	3 779 699	2 612 376	6 369 399	318 891

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CALIFORNIA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	1	299	105	10 108	277 328	7 862	15 515	172 635	719 003	683 821	1 412 968	45 440
32621	Tire mfg	—	78	15	1 855	63 328	1 364	2 895	43 620	166 409	245 606	415 452	19 686
326211	Tire mfg (except retreading)	—	10	5	962	42 357	798	1 715	32 292	128 124	172 727	304 305	D
326212	Tire retreading	1	68	10	893	20 971	566	1 180	11 328	38 285	72 879	111 147	D
32622	Rubber & plastics hoses & belting mfg	—	22	10	832	22 871	691	1 342	15 256	64 559	63 828	131 795	4 888
326220	Rubber & plastics hoses & belting mfg ..	—	22	10	832	22 871	691	1 342	15 256	64 559	63 828	131 795	4 888
32629	Other rubber product mfg	2	199	80	7 421	191 129	5 807	11 278	113 759	488 035	374 387	865 721	20 866
326291	Rubber product mfg for mechanical use	1	78	32	3 118	80 422	2 549	5 148	50 964	196 139	89 902	285 770	6 797
326299	All other rubber product mfg	2	121	48	4 303	110 707	3 258	6 130	62 795	291 896	284 485	579 951	14 069
327	Nonmetallic mineral product mfg	1	1 565	527	42 748	1 409 102	32 856	66 491	986 415	4 123 989	3 352 041	7 490 412	344 969
3271	Clay product & refractory mfg	2	273	95	6 967	167 806	5 340	10 330	110 495	375 728	173 159	552 088	26 427
32711	Pottery, ceramics, & plumbing fixture mfg ...	2	204	69	5 497	129 795	4 180	8 180	85 684	285 399	125 774	409 818	21 601
327111	Vitreous china plumbing fixture & bathroom accessories mfg	1	11	5	652	16 557	512	1 113	13 659	35 441	14 927	50 233	2 805
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	168	52	3 984	78 971	2 960	5 491	50 095	184 701	84 042	267 379	12 837
327113	Porcelain electrical supply mfg	—	25	12	861	34 267	708	1 576	21 930	65 257	26 805	92 206	5 959
32712	Clay building material & refractories mfg	2	69	26	1 470	38 011	1 160	2 150	24 811	90 329	47 385	142 270	4 826
327121	Brick & structural clay tile mfg	—	15	6	461	13 794	349	657	8 279	37 048	11 061	47 753	1 653
327122	Ceramic wall & floor tile mfg	8	32	8	471	9 989	400	655	7 318	17 710	8 844	26 878	2 050
327123	Other structural clay product mfg	—	11	8	413	10 732	314	671	6 961	26 123	16 643	46 892	872
327124	Clay refractory mfg ...	1	10	4	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	320	72	9 791	343 678	7 946	16 086	258 126	1 034 750	683 654	1 715 670	65 312
32721	Glass & glass product mfg	—	320	72	9 791	343 678	7 946	16 086	258 126	1 034 750	683 654	1 715 670	65 312
327211	Flat glass mfg	—	5	5	1 189	53 025	970	2 184	41 044	242 014	111 207	354 500	2 986
327212	Other pressed & blown glass & glassware mfg	3	83	4	830	25 313	665	1 217	18 905	86 513	27 330	113 422	7 324
327213	Glass container mfg ..	—	8	8	3 348	136 544	3 011	6 182	117 144	428 602	297 986	724 192	30 582
327215	Glass product mfg made of purchased glass	1	224	55	4 424	128 796	3 300	6 503	81 033	277 621	247 131	523 556	24 420
3273	Cement & concrete product mfg	1	673	271	18 306	640 391	13 769	28 014	443 681	1 894 136	1 787 110	3 686 150	190 441
32731	Cement mfg	—	31	15	1 927	93 795	1 461	3 118	66 434	486 760	354 774	846 898	66 207
327310	Cement mfg	—	31	15	1 927	93 795	1 461	3 118	66 434	486 760	354 774	846 898	66 207
32732	Ready-mix concrete mfg .	2	387	145	8 157	296 490	6 216	12 460	216 791	786 002	982 105	1 770 250	69 065
327320	Ready-mix concrete mfg	2	387	145	8 157	296 490	6 216	12 460	216 791	786 002	982 105	1 770 250	69 065
32733	Concrete pipe, brick, & block mfg	2	84	42	2 449	76 108	1 726	3 462	45 375	179 000	150 260	328 010	10 940
327331	Concrete block & brick mfg	3	49	21	1 177	34 015	754	1 603	17 841	93 746	82 192	176 146	4 366
327332	Concrete pipe mfg	1	35	21	1 272	42 093	972	1 859	27 534	85 254	68 068	151 864	6 574
32739	Other concrete product mfg	1	171	69	5 773	173 998	4 366	8 974	115 081	442 374	299 971	740 992	44 229
327390	Other concrete product mfg	1	171	69	5 773	173 998	4 366	8 974	115 081	442 374	299 971	740 992	44 229
3274	Lime & gypsum product mfg	—	48	19	1 714	66 414	1 358	3 000	43 779	190 403	262 570	459 229	17 237
32741	Lime mfg	—	4	1	122	4 911	103	205	3 929	11 412	7 400	18 477	D
327410	Lime mfg	—	4	1	122	4 911	103	205	3 929	11 412	7 400	18 477	D
32742	Gypsum product mfg	—	44	18	1 592	61 503	1 255	2 795	39 850	178 991	255 170	440 752	D
327420	Gypsum product mfg ..	—	44	18	1 592	61 503	1 255	2 795	39 850	178 991	255 170	440 752	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	1	251	70	5 970	190 813	4 443	9 061	130 334	628 972	445 548	1 077 275	45 552
32791	Abrasive product mfg	2	40	21	1 271	36 173	903	1 778	19 897	126 444	77 929	203 848	4 840
327910	Abrasive product mfg	2	40	21	1 271	36 173	903	1 778	19 897	126 444	77 929	203 848	4 840
32799	All other nonmetallic mineral product mfg	1	211	49	4 699	154 640	3 540	7 283	110 437	502 528	367 619	873 427	40 712
327991	Cut stone & stone product mfg	4	88	9	726	18 446	546	1 126	13 210	35 300	21 899	57 829	1 602
327992	Ground or treated mineral & earth mfg	3	31	10	635	20 303	474	899	14 078	71 343	46 168	117 316	6 654
327993	Mineral wool mfg	1	28	13	2 090	80 776	1 695	3 584	62 043	308 419	202 187	513 739	17 312
327999	All other miscellaneous nonmetallic mineral product mfg	1	64	17	1 248	35 115	825	1 674	21 106	87 466	97 365	184 543	15 144
331	Primary metal mfg	—	467	239	24 338	836 199	19 378	40 867	569 143	2 479 014	3 643 248	6 105 773	215 662
3311	Iron & steel mills & ferroalloy mfg	—	17	9	1 735	93 880	1 383	2 793	70 415	331 605	698 779	1 030 515	66 772
33111	Iron & steel mills & ferroalloy mfg	—	17	9	1 735	93 880	1 383	2 793	70 415	331 605	698 779	1 030 515	66 772
331111	Iron & steel mills	—	15	7	g	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	2	2	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	62	35	4 135	176 956	3 131	6 970	120 467	594 851	1 259 409	1 836 222	58 468
33121	Iron & steel pipes & tubes mfg from purchased steel	—	19	11	1 255	54 060	930	1 959	32 742	117 602	319 784	432 244	18 719
331210	Iron & steel pipes & tubes mfg from purchased steel	—	19	11	1 255	54 060	930	1 959	32 742	117 602	319 784	432 244	18 719
33122	Rolling & drawing of purchased steel	—	43	24	2 880	122 896	2 201	5 011	87 725	477 249	939 625	1 403 978	39 749
331221	Cold-rolled steel shape mfg	—	16	5	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	27	19	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	42	34	3 632	118 201	2 968	6 869	79 536	335 115	657 154	989 554	27 421
33131	Alumina & aluminum production & processing	—	42	34	3 632	118 201	2 968	6 869	79 536	335 115	657 154	989 554	27 421
331314	Secondary smelting & alloying of aluminum	—	11	11	575	20 674	463	1 039	12 609	90 576	250 705	335 243	4 026
331315	Aluminum sheet, plate, & foil mfg	—	8	5	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	22	17	2 351	74 272	1 953	4 589	51 947	189 069	290 940	476 404	19 621
331319	Other aluminum rolling & drawing	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	74	29	3 441	116 169	2 469	5 176	63 242	410 667	574 638	997 343	23 776
33141	Nonferrous metal (except aluminum) smelting & refining	—	13	4	237	10 707	135	272	3 992	58 882	109 899	168 678	4 166
331419	Other nonferrous metal primary smelting & refining	—	13	4	237	10 707	135	272	3 992	58 882	109 899	168 678	4 166
33142	Copper rolling, drawing, extruding, & alloying	—	8	3	671	18 666	506	852	8 135	41 551	91 775	129 433	2 379
331421	Copper rolling, drawing, & extruding	—	5	2	203	6 914	163	349	5 144	24 020	55 381	77 936	D
331422	Copper wire (except mechanical) drawing	—	2	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	53	22	2 533	86 796	1 828	4 052	51 115	310 234	372 964	699 232	17 231
331491	Other nonferrous metal rolling, drawing, & extruding	—	21	10	1 427	41 676	1 112	2 345	25 445	135 803	145 746	289 559	7 298
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	32	12	1 106	45 120	716	1 707	25 670	174 431	227 218	409 673	9 933
3315	Foundries	—	272	132	11 395	330 993	9 427	19 059	235 483	806 776	453 268	1 252 139	39 225
33151	Ferrous metal foundries	—	77	41	5 175	149 345	4 408	8 838	113 606	412 779	209 536	612 882	15 586
331511	Iron foundries	—	34	16	1 818	55 462	1 534	3 169	41 729	162 997	76 812	238 897	7 920
331512	Steel investment foundries	—	19	14	2 388	61 965	2 052	4 015	46 696	181 466	86 299	260 207	2 769
331513	Steel foundries (except investment)	—	24	11	969	31 918	822	1 654	25 181	68 316	46 425	113 778	4 897

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries—Con.												
33152	Nonferrous metal foundries	1	195	91	6 220	181 648	5 019	10 221	121 877	393 997	243 732	639 257	23 639
331521	Aluminum die-casting foundries	1	46	29	1 640	50 337	1 297	2 617	34 622	95 625	67 973	164 632	6 153
331522	Nonferrous (except aluminum) die-casting foundries	—	29	15	1 164	33 041	900	1 761	22 260	102 151	56 244	156 856	9 253
331524	Aluminum foundries (except die-casting) ..	1	81	36	2 676	77 657	2 202	4 585	51 008	160 787	89 906	250 331	6 963
331525	Copper foundries (except die-casting) ..	—	31	9	566	15 600	470	945	10 412	32 098	20 299	52 040	909
331528	Other nonferrous foundries (except die-casting)	—	8	2	174	5 013	150	313	3 575	3 336	9 310	15 398	361
332	Fabricated metal product mfg	1	8 127	2 287	187 055	6 205 949	139 868	281 380	3 858 123	13 939 525	10 363 333	24 137 103	1 041 069
3321	Forging & stamping	1	374	172	13 375	476 768	10 324	22 757	309 621	1 077 312	1 037 148	2 096 780	89 245
33211	Forging & stamping	1	374	172	13 375	476 768	10 324	22 757	309 621	1 077 312	1 037 148	2 096 780	89 245
332111	Iron & steel forging	3	34	12	1 620	72 376	1 261	3 046	46 982	154 737	245 973	391 185	11 821
332112	Nonferrous forging	—	16	14	2 167	88 040	1 741	4 085	62 502	234 849	178 070	403 447	20 893
332114	Custom roll forming	—	42	21	1 073	35 412	728	1 523	20 541	73 300	110 777	183 826	3 126
332115	Crown & closure mfg	—	9	6	554	15 495	471	780	11 704	26 433	36 246	66 288	7 300
332116	Metal stamping	1	264	115	7 718	258 092	5 943	12 999	164 036	572 489	458 108	1 028 573	44 236
332117	Powder metallurgy part mfg	1	9	4	243	7 353	180	324	3 856	15 504	7 974	23 461	1 869
3322	Cutlery & handtool mfg	2	222	58	5 351	184 438	3 537	6 415	85 492	460 288	270 386	732 704	27 164
33221	Cutlery & handtool mfg ..	2	222	58	5 351	184 438	3 537	6 415	85 492	460 288	270 386	732 704	27 164
332211	Cutlery & flatware (except precious) mfg	5	17	5	757	25 841	531	834	12 882	73 532	34 057	109 465	4 116
332212	Hand & edge tool mfg ..	1	179	44	3 901	135 765	2 558	4 767	61 745	327 166	182 501	509 191	18 465
332213	Saw blade & handsaw mfg	—	20	7	552	18 915	356	674	9 269	53 223	45 506	99 244	4 390
332214	Kitchen utensil, pot, & pan mfg	—	6	2	141	3 917	92	140	1 596	6 367	8 322	14 804	193
3323	Architectural & structural metals mfg	1	1 424	528	42 797	1 313 136	30 886	62 314	786 157	2 912 377	2 503 577	5 384 756	134 321
33231	Plate work & fabricated structural product mfg ..	1	385	133	10 673	365 263	7 537	15 414	220 080	918 219	769 239	1 680 928	30 598
332311	Prefabricated metal building & component mfg	1	53	22	1 769	50 905	1 152	2 373	27 515	119 305	138 472	259 224	4 112
332312	Fabricated structural metal mfg	1	263	88	7 401	260 848	5 244	10 789	159 793	680 106	538 228	1 208 711	21 949
332313	Plate work mfg	1	69	23	1 503	53 510	1 141	2 252	32 772	118 808	92 539	212 993	4 537
33232	Ornamental & architectural metal products mfg	1	1 039	395	32 124	947 873	23 349	46 900	566 077	1 994 158	1 734 338	3 703 828	103 723
332321	Metal window & door mfg	—	179	85	8 328	219 583	6 012	12 173	123 090	490 075	522 218	1 006 244	17 971
332322	Sheet metal work mfg ..	1	654	276	21 228	653 861	15 528	31 192	398 662	1 347 407	1 045 584	2 371 269	80 975
332323	Ornamental & architectural metal work mfg	1	206	34	2 568	74 429	1 809	3 535	44 325	156 676	166 536	326 315	4 777
3324	Boiler, tank, & shipping container mfg	—	200	99	9 852	379 681	7 315	15 275	266 572	951 741	1 770 129	2 690 107	77 361
33241	Power boiler & heat exchanger mfg	1	39	17	1 334	49 408	940	1 692	29 240	102 059	78 031	178 982	7 758
332410	Power boiler & heat exchanger mfg	1	39	17	1 334	49 408	940	1 692	29 240	102 059	78 031	178 982	7 758
33242	Metal tank (heavy gauge) mfg	—	55	32	2 928	97 465	1 759	3 749	52 941	203 412	187 283	385 759	14 074
332420	Metal tank (heavy gauge) mfg	—	55	32	2 928	97 465	1 759	3 749	52 941	203 412	187 283	385 759	14 074
33243	Metal can, box, & other metal container (light gauge) mfg	—	106	50	5 590	232 808	4 616	9 834	184 391	646 270	1 504 815	2 125 366	55 529
332431	Metal can mfg	—	42	33	4 082	188 641	3 449	7 277	155 791	547 916	1 395 497	1 916 124	50 621
332439	Other metal container mfg	3	64	17	1 508	44 167	1 167	2 557	28 600	98 354	109 318	209 242	4 908
3325	Hardware mfg	1	153	72	8 604	280 070	6 364	12 594	164 658	665 309	504 090	1 152 854	49 428
33251	Hardware mfg	1	153	72	8 604	280 070	6 364	12 594	164 658	665 309	504 090	1 152 854	49 428
332510	Hardware mfg	1	153	72	8 604	280 070	6 364	12 594	164 658	665 309	504 090	1 152 854	49 428
3326	Spring & wire product mfg ..	1	202	62	4 160	108 158	3 064	5 998	65 114	267 507	197 888	462 306	19 518
33261	Spring & wire product mfg	1	202	62	4 160	108 158	3 064	5 998	65 114	267 507	197 888	462 306	19 518
332611	Spring (heavy gauge) mfg	1	14	7	366	11 447	227	475	5 860	19 474	11 252	29 594	6 067
332612	Spring (light gauge) mfg	—	45	16	882	28 456	631	1 302	17 307	79 892	37 273	116 371	2 715
332618	Other fabricated wire product mfg	1	143	39	2 912	68 255	2 206	4 221	41 947	168 141	149 363	316 341	10 736

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg			696	54 855	1 968 249	42 994	87 037	1 300 070	3 995 992	1 795 271	5 755 942	330 886
33271	Machine shops	1	3 818	513	37 721	1 321 944	29 764	57 491	886 561	2 652 430	1 100 880	3 734 400	218 840
332710	Machine shops	1	3 358	513	37 721	1 321 944	29 764	57 491	886 561	2 652 430	1 100 880	3 734 400	218 840
33272	Turned product & screw, nut, & bolt mfg	—	460	183	17 134	646 305	13 230	29 546	413 509	1 343 562	694 391	2 021 542	112 046
332721	Precision turned product mfg	1	329	118	7 337	244 965	5 854	12 284	175 560	493 269	218 827	706 137	39 032
332722	Bolt, nut, screw, rivet, & washer mfg	—	131	65	9 797	401 340	7 376	17 262	237 949	850 293	475 564	1 315 405	73 014
3328	Coating, engraving, heat treating, & allied activities.												
33281	Coating, engraving, heat treating, & allied activities	1	1 007	370	23 378	651 267	18 682	36 711	422 410	1 360 387	788 695	2 144 815	199 377
332811	Metal heat treating	1	1 007	370	23 378	651 267	18 682	36 711	422 410	1 360 387	788 695	2 144 815	199 377
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	78	42	2 004	72 200	1 529	3 097	44 520	176 342	37 444	213 858	11 302
332813	Electroplating, plating, polishing, anodizing, & coloring	2	303	115	6 679	196 770	5 369	10 807	127 734	459 273	482 982	934 415	149 381
3329	Other fabricated metal product mfg												
33291	Metal valve mfg	—	167	88	12 828	481 914	7 833	15 260	239 409	1 345 158	874 797	2 202 227	70 698
332911	Industrial valve mfg	1	60	32	4 147	164 210	2 572	4 935	80 178	351 626	293 733	651 087	19 676
332912	Fluid power valve & hose fitting mfg	—	64	25	3 831	168 801	2 347	4 838	82 493	418 946	200 211	609 678	19 982
332913	Plumbing fixture fitting & trim mfg	—	28	24	4 183	124 723	2 585	4 889	68 502	521 113	353 909	863 174	28 818
332919	Other metal valve & pipe fitting mfg	1	15	7	667	24 180	329	598	8 236	53 473	26 944	78 288	2 222
33299	All other fabricated metal product mfg	1	560	142	11 855	362 268	8 869	17 019	218 620	903 454	621 352	1 514 612	43 071
332991	Ball & roller bearing mfg	—	12	4	512	14 221	436	808	11 054	58 565	15 243	73 611	1 538
332993	Ammunition (except small arms) mfg	—	7	3	441	18 556	242	507	7 757	48 977	17 279	64 499	1 693
332994	Small arms mfg	1	16	7	340	9 806	282	572	6 129	25 909	9 669	34 362	818
332995	Other ordnance & accessories mfg	—	7	5	277	12 470	183	335	7 008	33 095	8 592	41 560	302
332996	Fabricated pipe & pipe fitting mfg	1	88	23	1 645	48 205	1 255	2 462	30 397	130 304	94 014	225 264	5 548
332997	Industrial pattern mfg	3	43	2	322	9 374	255	421	6 962	15 482	5 946	21 419	715
332998	Enameled iron & metal sanitary ware mfg	—	17	7	1 555	41 436	1 155	2 068	23 583	130 109	97 003	223 938	4 231
332999	All other miscellaneous fabricated metal product mfg	1	360	91	6 735	207 277	5 038	9 800	125 118	459 085	372 220	826 650	28 111
333	Machinery mfg	1	3 112	966	105 872	4 161 175	62 601	124 533	1 863 498	9 935 742	9 336 888	19 128 452	898 135
3331	Agriculture, construction, & mining machinery mfg												
33311	Agricultural implement mfg	3	121	36	2 468	73 302	1 654	3 205	38 195	157 166	177 338	321 625	15 489
333111	Farm machinery & equipment mfg	4	114	33	1 984	60 680	1 384	2 643	33 329	124 518	128 038	235 752	13 689
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	7	3	484	12 622	270	562	4 866	32 648	49 300	85 873	1 800
33312	Construction machinery mfg	4	56	17	1 065	37 125	657	1 297	18 358	69 738	84 276	159 301	6 394
333120	Construction machinery mfg	4	56	17	1 065	37 125	657	1 297	18 358	69 738	84 276	159 301	6 394
33313	Mining & oil & gas field machinery mfg	—	46	16	1 558	60 175	839	1 402	21 653	186 533	147 156	328 285	5 696
333131	Mining machinery & equipment mfg	2	14	6	312	10 185	194	360	5 519	24 101	38 330	62 605	611
333132	Oil & gas field machinery & equipment mfg	—	32	10	1 246	49 990	645	1 042	16 134	162 432	108 826	265 680	5 085
3332	Industrial machinery mfg												
33321	Sawmill & woodworking machinery mfg	3	25	6	540	19 628	360	806	11 438	35 094	34 678	69 279	1 528
333210	Sawmill & woodworking machinery mfg	3	25	6	540	19 628	360	806	11 438	35 094	34 678	69 279	1 528
33322	Plastics & rubber industry machinery mfg	3	43	7	681	22 576	417	826	11 273	36 791	46 539	84 124	2 611
333220	Plastics & rubber industry machinery mfg	3	43	7	681	22 576	417	826	11 273	36 791	46 539	84 124	2 611

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CALIFORNIA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg—Con.												
33329	Other industrial machinery mfg	1	475	186	27 482	1 160 806	14 166	28 384	443 568	3 226 531	3 534 724	6 683 503	450 481
333291	Paper industry machinery mfg	4	17	—	102	3 783	60	118	1 868	5 600	7 161	12 655	339
333292	Textile machinery mfg	2	13	4	196	4 855	109	178	2 408	7 365	7 952	15 310	162
333293	Printing machinery & equipment mfg	1	50	9	1 031	41 303	496	981	14 118	95 077	74 196	171 173	3 751
333294	Food product machinery mfg	2	89	32	2 059	70 559	1 261	2 323	36 547	135 846	129 415	266 346	6 747
333295	Semiconductor machinery mfg	1	121	69	17 883	807 554	8 504	17 005	283 456	2 450 113	2 830 855	5 220 586	404 343
333298	All other industrial machinery mfg	3	185	72	6 211	232 752	3 736	7 779	105 171	532 530	485 145	997 433	35 139
3333	Commercial & service industry machinery mfg ..	1	485	158	16 322	643 957	9 450	19 147	263 105	1 277 536	1 207 206	2 482 865	106 841
33331	Commercial & service industry machinery mfg	1	485	158	16 322	643 957	9 450	19 147	263 105	1 277 536	1 207 206	2 482 865	106 841
333311	Automatic vending machine mfg	—	18	5	1 144	32 345	894	1 774	19 395	61 587	120 658	183 580	D
333313	Office machinery mfg ..	6	24	10	721	25 133	388	769	11 114	51 570	34 577	86 911	3 802
333314	Optical instrument & lens mfg	1	116	48	5 407	261 267	2 798	5 754	93 255	416 860	284 400	700 446	49 206
333315	Photographic & photocopying equipment mfg	1	101	32	3 213	132 621	1 712	3 679	51 762	270 817	332 771	600 396	26 291
333319	Other commercial & service industry machinery mfg	1	219	62	5 771	190 334	3 607	7 059	86 124	472 094	430 639	902 589	24 604
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	194	79	8 315	266 736	5 987	12 535	147 107	604 327	546 125	1 152 905	27 773
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	194	79	8 315	266 736	5 987	12 535	147 107	604 327	546 125	1 152 905	27 773
333411	Air purification equipment mfg	3	38	15	1 175	41 580	844	1 725	21 765	84 061	82 191	168 745	3 233
333412	Industrial & commercial fan & blower mfg	3	22	10	561	18 774	361	659	9 061	41 482	39 683	81 287	1 151
333414	Heating equipment (except warm air furnaces) mfg	2	59	18	2 687	85 154	1 769	3 595	37 526	212 328	153 103	362 207	6 855
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	75	36	3 892	121 228	3 013	6 556	78 755	266 456	271 148	540 666	16 534
3335	Metalworking machinery mfg	1	828	180	13 637	507 246	10 144	19 531	323 355	1 100 572	697 681	1 797 665	71 104
33351	Metalworking machinery mfg	1	828	180	13 637	507 246	10 144	19 531	323 355	1 100 572	697 681	1 797 665	71 104
333511	Industrial mold mfg ...	1	234	47	3 378	134 075	2 689	4 976	92 277	244 500	96 747	338 756	18 134
333512	Machine tool (metal cutting types) mfg ...	—	30	13	1 831	81 171	1 303	2 729	45 535	260 887	304 538	561 065	6 952
333513	Machine tool (metal forming types) mfg ...	1	17	8	717	29 902	438	807	16 122	62 562	69 959	138 623	2 779
333514	Special die & tool, die set, jig, & fixture mfg ..	2	332	62	3 923	140 069	3 077	5 842	96 769	287 486	99 736	385 040	17 900
333515	Cutting tool & machine tool accessory mfg ..	2	178	39	3 098	94 967	2 231	4 427	59 703	192 098	86 611	281 753	23 153
333518	Other metalworking machinery mfg	4	35	11	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	83	31	7 444	380 882	3 776	7 641	145 090	1 034 035	784 175	1 799 652	73 748
33361	Engine, turbine, & power transmission equipment mfg	—	83	31	7 444	380 882	3 776	7 641	145 090	1 034 035	784 175	1 799 652	73 748
333611	Turbine & turbine generator set unit mfg	—	7	6	h	D	D	D	D	D	D	D	45 738
333612	Speed changer, industrial high-speed drive, & gear mfg	3	22	6	e	D	D	D	D	D	D	D	2 753
333613	Mechanical power transmission equipment mfg	2	29	9	762	25 345	536	992	15 112	65 701	41 485	104 433	2 648
333618	Other engine equipment mfg	1	25	10	1 765	82 986	1 191	2 420	39 910	227 825	190 926	420 750	22 609
3339	Other general-purpose machinery mfg	1	756	250	26 360	988 742	15 151	29 759	440 356	2 207 419	2 076 990	4 249 248	136 470

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CALIFORNIA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33391	Pump & compressor mfg	1	103	46	5 113	195 757	2 704	5 602	81 782	461 101	566 216	1 003 898	46 326
333911	Pump & pumping equipment mfg	—	64	31	3 821	149 631	2 060	4 339	62 037	340 305	391 036	721 890	19 248
333912	Air & gas compressor mfg	2	27	9	926	33 010	437	805	13 107	89 368	150 105	227 237	25 936
333913	Measuring & dispensing pump mfg	4	12	6	366	13 116	207	458	6 638	31 428	25 075	54 771	1 142
33392	Material handling equipment mfg	1	151	49	4 322	148 607	2 823	5 575	78 596	283 756	401 943	696 037	18 318
333921	Elevator & moving stairway mfg	7	16	2	181	5 474	108	217	3 017	12 380	10 981	23 374	416
333922	Conveyor & conveying equipment mfg	1	75	29	2 241	83 738	1 396	2 639	40 405	140 508	145 433	287 262	8 633
333923	Overhead traveling crane, hoist, & monorail system mfg	1	19	4	842	23 264	604	1 207	14 245	63 341	101 367	164 369	4 006
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	41	14	1 058	36 131	715	1 512	20 929	67 527	144 162	221 032	5 263
33399	All other general-purpose machinery mfg	1	502	155	16 925	644 378	9 624	18 582	279 978	1 462 562	1 108 831	2 549 313	71 826
333991	Power-driven handtool mfg	2	24	4	404	12 913	303	605	8 366	34 347	19 575	53 455	1 995
333992	Welding & soldering equipment mfg	—	31	15	1 285	49 829	750	1 392	22 585	115 034	97 024	209 742	4 168
333993	Packaging machinery mfg	1	95	30	3 504	134 826	1 870	3 528	56 141	284 327	240 809	515 115	11 385
333994	Industrial process furnace & oven mfg ..	—	47	13	2 057	75 317	1 144	2 346	26 145	230 062	210 145	453 464	10 728
333995	Fluid power cylinder & actuator mfg	—	47	15	2 937	124 754	1 599	3 393	64 836	263 913	122 004	364 299	8 497
333996	Fluid power pump & motor mfg	1	19	7	646	33 759	334	708	9 928	64 889	35 416	101 750	3 077
333997	Scale & balance (except laboratory) mfg	1	22	7	356	12 174	152	285	4 764	24 650	17 863	42 470	497
333999	All other miscellaneous general-purpose machinery mfg	1	217	64	5 736	200 806	3 472	6 325	87 213	445 340	365 995	809 018	31 479
334	Computer & electronic product mfg	—	4 277	1 904	396 482	19 874 023	184 005	377 522	6 075 101	65 716 477	48 157 521	113 493 563	6 256 804
3341	Computer & peripheral equipment mfg	—	590	220	68 527	3 731 820	25 285	57 505	966 789	15 975 024	19 330 384	35 197 306	1 369 197
33411	Computer & peripheral equipment mfg	—	590	220	68 527	3 731 820	25 285	57 505	966 789	15 975 024	19 330 384	35 197 306	1 369 197
334111	Electronic computer mfg	—	162	65	31 835	1 830 233	9 913	23 526	339 570	11 463 543	9 722 351	21 140 292	627 272
334112	Computer storage device mfg	—	81	34	14 090	663 561	6 283	14 218	224 586	2 177 503	3 174 217	5 371 171	477 856
334113	Computer terminal mfg	—	30	11	1 002	57 179	439	955	14 877	142 487	222 762	360 051	6 053
334119	Other computer peripheral equipment mfg	—	317	110	21 600	1 180 847	8 650	18 806	387 756	2 191 491	6 211 054	8 325 792	258 016
3342	Communications equipment mfg	1	550	302	71 160	3 886 957	23 041	43 696	825 554	15 054 319	8 477 272	23 376 973	752 554
33421	Telephone apparatus mfg	1	152	94	33 339	1 974 144	7 548	15 228	330 094	9 372 296	5 150 836	14 368 162	391 269
334210	Telephone apparatus mfg	1	152	94	33 339	1 974 144	7 548	15 228	330 094	9 372 296	5 150 836	14 368 162	391 269
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	309	173	34 937	1 808 285	14 205	26 182	467 506	5 386 202	3 068 362	8 445 990	348 924
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	309	173	34 937	1 808 285	14 205	26 182	467 506	5 386 202	3 068 362	8 445 990	348 924
33429	Other communications equipment mfg	2	89	35	2 884	104 528	1 288	2 286	27 954	295 821	258 074	562 821	12 361
334290	Other communications equipment mfg	2	89	35	2 884	104 528	1 288	2 286	27 954	295 821	258 074	562 821	12 361
3343	Audio & video equipment mfg	2	153	56	5 635	184 027	3 513	6 894	71 066	392 151	594 944	985 682	23 691
33431	Audio & video equipment mfg	2	153	56	5 635	184 027	3 513	6 894	71 066	392 151	594 944	985 682	23 691
334310	Audio & video equipment mfg	2	153	56	5 635	184 027	3 513	6 894	71 066	392 151	594 944	985 682	23 691

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	1 677	782	140 480	6 254 547	83 623	172 742	2 396 588	18 996 711	11 667 483	30 536 457	3 050 203
33441	Semiconductor & other electronic component mfg	1	1 677	782	140 480	6 254 547	83 623	172 742	2 396 588	18 996 711	11 667 483	30 536 457	3 050 203
334411	Electron tube mfg	—	38	15	3 452	158 430	2 608	5 492	110 874	290 818	180 604	463 646	24 406
334412	Bare printed circuit board mfg	—	392	174	22 258	747 137	16 241	33 296	411 914	2 108 724	1 376 576	3 507 457	286 675
334413	Semiconductor & related device mfg	—	410	186	54 377	3 319 676	25 253	49 952	936 657	10 988 501	5 277 059	16 040 142	2 417 514
334414	Electronic capacitor mfg	1	27	19	2 647	81 148	1 834	3 737	45 354	173 333	93 553	266 720	9 786
334415	Electronic resistor mfg	—	21	16	1 522	50 116	958	1 768	22 896	112 014	75 482	186 862	6 928
334416	Electronic coil, transformer, & other inductor mfg	2	84	29	2 128	58 576	1 649	3 538	33 458	121 848	75 689	196 903	3 873
334417	Electronic connector mfg	—	80	52	9 170	286 025	7 125	15 410	149 663	693 843	281 943	978 187	44 171
334418	Printed circuit assembly (electronic assembly) mfg	—	178	132	26 345	883 680	16 535	36 959	414 228	3 041 590	3 391 678	6 523 243	153 297
334419	Other electronic component mfg	2	447	159	18 581	669 759	11 420	22 590	271 544	1 466 040	914 899	2 373 297	103 553
3345	Navigational, measuring, medical, & control instruments mfg	—	1 044	455	93 509	5 181 317	36 440	72 661	1 496 517	13 360 882	6 519 547	19 894 826	680 263
33451	Navigational, measuring, medical, & control instruments mfg	—	1 044	455	93 509	5 181 317	36 440	72 661	1 496 517	13 360 882	6 519 547	19 894 826	680 263
334510	Electromedical & electrotherapeutic apparatus mfg	—	95	50	8 620	525 095	3 641	7 103	146 453	1 547 875	693 302	2 204 458	76 322
334511	Search, detection, navigation, & guidance instrument mfg	—	136	71	32 065	1 969 584	10 072	19 256	495 571	4 647 113	1 395 101	6 222 809	214 587
334512	Automatic environmental control mfg	1	43	12	1 526	52 680	851	1 789	23 134	208 064	133 571	341 240	9 570
334513	Industrial process control instrument mfg	1	174	71	7 852	302 032	3 318	6 656	101 464	639 342	349 507	997 276	31 723
334514	Totalizing fluid meter & counting device mfg	—	31	12	980	43 379	687	1 278	25 758	177 195	79 646	252 404	1 296
334515	Electricity measuring & testing instrument mfg	1	231	106	23 059	1 294 600	10 595	21 947	441 495	3 706 634	2 087 814	5 687 493	230 220
334516	Analytical laboratory instrument mfg	—	135	52	9 491	542 549	3 149	6 397	135 205	1 386 856	886 726	2 259 041	63 630
334517	Irradiation apparatus mfg	—	30	17	3 960	204 444	1 234	2 540	50 126	432 382	560 730	981 384	29 389
334518	Watch, clock, & part mfg	—	19	7	538	13 183	415	808	7 473	41 936	35 303	75 985	848
334519	Other measuring & controlling device mfg	1	150	57	5 418	233 771	2 478	4 887	69 838	573 485	297 847	872 736	22 678
3346	Mfg & reproducing magnetic & optical media	2	263	89	17 171	635 355	12 103	24 024	318 587	1 937 390	1 567 891	3 502 319	380 896
33461	Mfg & reproducing magnetic & optical media	2	263	89	17 171	635 355	12 103	24 024	318 587	1 937 390	1 567 891	3 502 319	380 896
334611	Software reproducing	3	34	19	1 265	43 789	923	2 097	27 366	175 636	85 036	261 672	31 163
334612	Prerecorded CD (except software), tape, & record reproducing	2	140	42	5 751	162 379	4 717	9 473	120 725	602 727	365 428	973 586	56 593
334613	Magnetic & optical recording media mfg	2	89	28	10 155	429 187	6 463	12 454	170 496	1 159 027	1 117 427	2 267 061	293 140
335	Electrical equipment, appliance, & component mfg	1	955	406	41 589	1 481 241	27 313	54 434	700 271	4 036 900	3 247 027	7 207 434	248 342
3351	Electric lighting equipment mfg	1	271	109	9 828	273 578	6 627	13 270	131 826	873 005	647 874	1 513 772	27 550
33511	Electric lamp bulb & part mfg	2	10	5	393	9 525	313	568	6 123	30 677	8 438	35 922	633
335110	Electric lamp bulb & part mfg	2	10	5	393	9 525	313	568	6 123	30 677	8 438	35 922	633
33512	Lighting fixture mfg	1	261	104	9 435	264 053	6 314	12 702	125 703	842 328	639 436	1 477 850	26 917
335121	Residential electric lighting fixture mfg	1	122	33	2 670	56 734	1 879	3 661	29 560	165 568	149 490	316 343	4 092
335122	Commercial/industrial/institutional electric lighting fixture mfg	1	71	38	3 122	97 317	1 977	3 879	43 991	322 163	231 290	552 928	11 378
335129	Other lighting equipment mfg	—	68	33	3 643	110 002	2 458	5 162	52 152	354 597	258 656	608 579	11 447

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3352	Household appliance mfg. . .	-	35	15	2 030	51 172	1 567	3 115	28 079	228 620	237 637	461 020	11 503
33521	Small electrical appliance mfg.	1	14	6	603	12 835	542	1 062	8 760	21 610	56 266	75 402	462
335211	Electric housewares & household fan mfg. . . .	2	12	5	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.	-	2	1	c	D	D	D	D	D	D	D	D
33522	Major appliance mfg.	-	21	9	1 427	38 337	1 025	2 053	19 319	207 010	181 371	385 618	11 041
335221	Household cooking appliance mfg.	-	11	4	992	25 803	732	1 498	12 757	141 196	75 132	216 093	8 095
335222	Household refrigerator & home freezer mfg. . . .	-	4	2	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.	-	6	3	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg. . .	1	321	110	11 012	380 838	7 128	13 968	179 295	927 248	636 295	1 539 582	46 312
33531	Electrical equipment mfg.	1	321	110	11 012	380 838	7 128	13 968	179 295	927 248	636 295	1 539 582	46 312
335311	Power, distribution, & specialty transformer mfg.	2	39	12	1 309	47 365	965	1 855	30 908	131 881	79 102	191 773	4 049
335312	Motor & generator mfg.	2	68	26	2 387	74 130	1 712	3 527	38 096	177 877	139 499	319 106	18 261
335313	Switchgear & switchboard apparatus mfg.	1	63	24	2 012	64 743	1 431	2 657	33 310	156 116	131 170	288 302	5 161
335314	Relay & industrial control mfg.	1	151	48	5 304	194 600	3 020	5 929	76 981	461 374	286 524	740 401	18 841
3359	Other electrical equipment & component mfg.	1	328	172	18 719	775 653	11 991	24 081	361 071	2 008 027	1 725 221	3 693 060	162 977
33591	Battery mfg.	-	21	11	1 726	63 341	1 444	2 872	48 204	180 259	178 106	356 601	9 032
335911	Storage battery mfg.	-	19	11	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.	-	31	29	2 316	95 400	1 589	3 250	43 362	243 597	336 110	578 904	18 493
335921	Fiber optic cable mfg.	-	3	3	201	12 648	74	173	2 682	28 724	43 203	72 479	D
335929	Other communication & energy wire mfg. . . .	-	28	26	2 115	82 752	1 515	3 077	40 680	214 873	292 907	506 425	D
33593	Wiring device mfg.	1	91	42	4 515	145 382	3 258	6 565	80 513	435 832	375 829	817 128	24 047
335931	Current-carrying wiring device mfg.	2	62	29	2 977	97 086	2 076	4 108	49 696	254 309	138 502	394 168	11 994
335932	Noncurrent-carrying wiring device mfg.	-	29	13	1 538	48 296	1 182	2 457	30 817	181 523	237 327	422 960	12 053
33599	All other electrical equipment & component mfg.	1	185	90	10 162	471 530	5 700	11 394	188 992	1 148 339	835 176	1 940 427	111 405
335991	Carbon & graphite product mfg.	-	12	6	702	22 293	440	976	13 298	75 463	69 341	146 260	9 938
335999	All other miscellaneous electrical equipment & component mfg.	1	173	84	9 460	449 237	5 260	10 418	175 694	1 072 876	765 835	1 794 167	101 467
336	Transportation equipment mfg.	-	1 705	653	167 087	7 557 133	93 627	181 704	3 128 832	16 187 271	17 771 250	34 817 993	1 495 380
3361	Motor vehicle mfg.	-	45	14	6 697	365 432	6 016	10 868	320 714	737 635	2 476 207	3 215 675	D
33611	Automobile & light duty motor vehicle mfg.	-	35	10	5 790	330 904	5 288	9 429	296 637	621 317	2 214 815	2 837 105	D
336111	Automobile mfg.	-	26	10	5 718	328 630	5 236	9 336	295 086	613 642	2 200 306	2 815 072	D
33612	Heavy duty truck mfg.	2	10	4	907	34 528	728	1 439	24 077	116 318	261 392	378 570	D
336120	Heavy duty truck mfg.	2	10	4	907	34 528	728	1 439	24 077	116 318	261 392	378 570	D
3362	Motor vehicle body & trailer mfg.	-	211	93	10 200	266 993	8 133	15 884	179 876	1 045 906	2 714 438	3 735 983	61 812
33621	Motor vehicle body & trailer mfg.	-	211	93	10 200	266 993	8 133	15 884	179 876	1 045 906	2 714 438	3 735 983	61 812
336211	Motor vehicle body mfg.	-	99	41	3 083	89 546	2 446	4 684	60 785	628 492	1 949 812	2 582 319	40 333
336212	Truck trailer mfg.	2	24	13	1 158	39 900	754	1 529	19 404	59 572	101 299	155 561	5 743
336213	Motor home mfg.	-	9	6	2 528	57 783	2 150	4 442	45 147	171 395	389 074	554 229	10 033
336214	Travel trailer & camper mfg.	1	79	33	3 431	79 764	2 783	5 229	54 540	186 447	274 253	443 874	5 703
3363	Motor vehicle parts mfg.	3	745	274	30 487	816 665	23 600	46 401	507 528	1 795 630	1 917 461	3 727 234	155 458
33631	Motor vehicle gasoline engine & engine parts mfg.	2	151	44	3 804	97 386	2 914	4 943	54 707	212 950	195 306	405 631	18 716
336311	Carburetor, piston, piston ring, & valve mfg.	1	25	12	1 153	27 456	950	1 718	17 041	49 516	30 578	79 848	2 727
336312	Gasoline engine & engine parts mfg.	3	126	32	2 651	69 930	1 964	3 225	37 666	163 434	164 728	325 783	15 989
33632	Motor vehicle electrical & electronic equipment mfg.	4	170	64	6 951	183 924	5 313	10 700	111 134	346 159	299 315	649 369	33 101
336321	Vehicular lighting equipment mfg.	5	14	5	411	13 767	309	561	9 501	32 870	29 220	62 528	1 662
336322	Other motor vehicle electrical & electronic equipment mfg.	4	156	59	6 540	170 157	5 004	10 139	101 633	313 289	270 095	586 841	31 439

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CALIFORNIA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33633	Motor vehicle steering & suspension component (except spring) mfg	4	21	6	355	10 055	270	477	5 704	26 241	27 614	53 787	1 628
336330	Motor vehicle steering & suspension component (except spring) mfg	4	21	6	355	10 055	270	477	5 704	26 241	27 614	53 787	1 628
33634	Motor vehicle brake system mfg	—	22	9	1 175	29 382	949	1 958	19 502	36 411	126 574	166 381	3 637
336340	Motor vehicle brake system mfg	—	22	9	1 175	29 382	949	1 958	19 502	36 411	126 574	166 381	3 637
33635	Motor vehicle transmission & power train parts mfg	3	74	17	1 447	44 753	1 027	1 906	22 355	100 844	102 924	204 020	7 604
336350	Motor vehicle transmission & power train parts mfg	3	74	17	1 447	44 753	1 027	1 906	22 355	100 844	102 924	204 020	7 604
33636	Motor vehicle seating & interior trim mfg	—	54	17	2 157	53 674	1 723	3 412	35 563	113 460	180 390	294 621	7 066
336360	Motor vehicle seating & interior trim mfg	—	54	17	2 157	53 674	1 723	3 412	35 563	113 460	180 390	294 621	7 066
33637	Motor vehicle metal stamping	4	30	13	1 902	50 086	1 551	3 711	34 493	101 708	101 332	201 563	10 577
336370	Motor vehicle metal stamping	4	30	13	1 902	50 086	1 551	3 711	34 493	101 708	101 332	201 563	10 577
33639	Other motor vehicle parts mfg	3	223	104	12 696	347 405	9 853	19 294	224 070	857 857	884 006	1 751 862	73 129
336391	Motor vehicle air-conditioning mfg	—	6	2	c	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	217	102	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	343	165	102 956	5 566 864	43 791	83 146	1 789 722	11 458 036	9 724 440	22 060 118	937 764
33641	Aerospace product & parts mfg	—	343	165	102 956	5 566 864	43 791	83 146	1 789 722	11 458 036	9 724 440	22 060 118	937 764
336411	Aircraft mfg	—	20	11	27 628	1 586 384	16 878	28 139	674 889	2 096 510	4 118 524	6 886 107	101 041
336412	Aircraft engine & engine parts mfg	—	40	21	3 902	167 459	2 780	5 588	115 382	374 905	485 505	842 783	41 328
336413	Other aircraft part & auxiliary equipment mfg	—	250	109	30 395	1 339 695	14 937	29 511	605 546	3 037 957	1 800 715	4 675 069	220 857
336414	Guided missile & space vehicle mfg	—	8	8	31 286	1 904 029	6 299	13 747	270 330	4 864 244	2 812 134	8 092 229	519 547
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	8	6	8 090	503 486	1 751	3 591	83 104	963 211	395 390	1 333 392	34 133
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	1	17	10	1 655	65 811	1 146	2 570	40 471	121 209	112 172	230 538	20 858
3365	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	153	43	9 924	315 012	7 907	17 335	217 535	602 108	531 136	1 133 881	D
33661	Ship & boat building	1	153	43	9 924	315 012	7 907	17 335	217 535	602 108	531 136	1 133 881	D
336611	Ship building & repairing	1	74	25	8 179	267 381	6 506	14 384	183 714	511 281	412 496	923 777	D
336612	Boat building	4	79	18	1 745	47 631	1 401	2 951	33 821	90 827	118 640	210 104	D
3369	Other transportation equipment mfg	2	203	61	i	D	D	D	D	D	D	D	25 539
33699	Other transportation equipment mfg	2	203	61	i	D	D	D	D	D	D	D	25 539
336991	Motorcycle, bicycle, & parts mfg	3	160	42	3 353	94 392	2 422	4 496	52 566	261 397	215 490	474 642	16 918
336992	Military armored vehicle, tank, & tank component mfg	—	7	5	2 129	90 599	820	1 739	38 297	182 319	75 224	291 925	5 330
336999	All other transportation equipment mfg	1	36	14	g	D	D	D	D	D	D	D	3 291

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CALIFORNIA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	2 741	682	65 654	1 569 380	52 193	98 829	1 030 955	3 628 889	3 044 811	6 669 318	133 642
3371	Household & institutional furniture & kitchen cabinet mfg	2	1 994	389	40 634	897 207	33 265	62 984	613 575	1 883 522	1 748 077	3 633 464	70 509
33711	Wood kitchen cabinet & counter top mfg	3	912	72	7 991	198 641	6 083	11 532	127 736	405 488	288 815	695 407	16 170
337110	Wood kitchen cabinet & counter top mfg ...	3	912	72	7 991	198 641	6 083	11 532	127 736	405 488	288 815	695 407	16 170
33712	Household & institutional furniture mfg	2	1 082	317	32 643	698 566	27 182	51 452	485 839	1 478 034	1 459 262	2 938 057	54 339
337121	Upholstered household furniture mfg	1	294	88	8 792	194 154	7 508	14 664	144 771	425 216	452 779	880 638	7 745
337122	Nonupholstered wood household furniture mfg	2	511	134	13 736	250 728	11 914	21 336	183 761	499 745	550 071	1 058 702	25 492
337124	Metal household furniture mfg	1	95	34	4 090	94 910	3 189	6 686	60 744	212 761	186 824	392 988	10 978
337125	Household furniture (except wood & metal) mfg	2	40	9	930	25 463	663	1 367	15 100	56 220	56 125	112 196	2 392
337127	Institutional furniture mfg	1	123	43	4 451	121 117	3 339	6 365	72 680	257 542	182 327	435 327	6 433
337129	Wood television, radio, & sewing machine cabinet mfg	1	19	9	644	12 194	569	1 034	8 783	26 550	31 136	58 206	1 299
3372	Office furniture (including fixtures) mfg	1	582	230	18 621	517 519	14 225	26 539	327 587	1 256 160	805 608	2 056 525	42 760
33721	Office furniture (including fixtures) mfg	1	582	230	18 621	517 519	14 225	26 539	327 587	1 256 160	805 608	2 056 525	42 760
337211	Wood office furniture mfg	2	106	47	3 705	86 813	3 000	5 526	55 876	177 163	120 042	290 778	6 932
337212	Custom architectural woodwork & millwork mfg	1	117	37	2 589	77 428	1 849	3 155	45 920	140 493	71 501	214 050	3 764
337214	Office furniture (except wood) mfg	2	68	37	4 192	121 845	3 077	6 637	91 014	443 839	235 953	679 966	12 819
337215	Showcase, partition, shelving, & locker mfg	1	291	109	8 135	231 433	6 299	11 221	134 777	494 665	378 112	871 731	19 245
3379	Other furniture related product mfg	1	165	63	6 399	154 654	4 703	9 306	89 793	489 207	491 126	979 329	20 373
33791	Mattress mfg	1	104	35	2 979	78 576	2 314	4 521	48 363	268 077	259 733	524 470	12 695
337910	Mattress mfg	1	104	35	2 979	78 576	2 314	4 521	48 363	268 077	259 733	524 470	12 695
33792	Blind & shade mfg	2	61	28	3 420	76 078	2 389	4 785	41 430	221 130	231 393	454 859	7 678
337920	Blind & shade mfg	2	61	28	3 420	76 078	2 389	4 785	41 430	221 130	231 393	454 859	7 678
339	Miscellaneous mfg	1	4 539	851	99 035	3 249 987	64 295	123 730	1 453 986	9 445 538	5 234 664	14 620 323	520 052
3391	Medical equipment & supplies mfg	1	1 983	331	47 395	1 835 915	27 489	52 572	713 659	5 687 992	2 475 826	8 135 689	302 337
33911	Medical equipment & supplies mfg	1	1 983	331	47 395	1 835 915	27 489	52 572	713 659	5 687 992	2 475 826	8 135 689	302 337
339111	Laboratory apparatus & furniture mfg	-	68	31	3 058	123 119	1 406	2 746	41 083	279 502	182 090	468 524	17 522
339112	Surgical & medical instrument mfg	1	329	116	17 620	808 932	8 432	16 616	236 350	2 519 215	944 042	3 436 248	140 534
339113	Surgical appliance & supplies mfg	-	239	85	12 006	432 766	7 735	14 758	179 768	1 394 459	716 011	2 108 213	80 865
339114	Dental equipment & supplies mfg	-	168	32	4 017	150 532	2 528	4 457	70 459	490 389	226 749	717 498	16 824
339115	Ophthalmic goods mfg	-	81	26	4 765	164 422	3 076	6 481	90 302	702 242	295 990	987 458	36 638
339116	Dental laboratories ...	5	1 098	41	5 929	156 144	4 312	7 514	95 697	302 185	110 944	417 748	9 954
3399	Other miscellaneous mfg ..	2	2 556	520	51 640	1 414 072	36 806	71 158	740 327	3 757 546	2 758 838	6 484 634	217 715
33991	Jewelry & silverware mfg	2	557	66	6 895	152 464	5 095	8 895	85 252	419 232	394 600	808 126	11 496
339911	Jewelry (except costume) mfg	3	398	48	4 249	95 403	3 211	4 763	51 706	264 960	317 621	582 533	8 392
339912	Silverware & plated ware mfg	-	18	3	372	9 959	228	468	3 851	21 634	9 659	31 299	866
339913	Jewelers' material & lapidary work mfg ...	3	39	4	260	5 079	186	233	2 590	12 674	29 964	42 150	643
339914	Costume jewelry & novelty mfg	1	102	11	2 014	42 023	1 470	3 431	27 105	119 964	37 356	152 144	1 595
33992	Sporting & athletic goods mfg	1	471	107	14 246	424 202	9 970	20 812	194 947	1 398 520	1 020 601	2 390 046	86 884
339920	Sporting & athletic goods mfg	1	471	107	14 246	424 202	9 970	20 812	194 947	1 398 520	1 020 601	2 390 046	86 884
33993	Doll, toy, & game mfg ...	3	136	24	2 185	56 296	1 699	3 252	31 810	148 624	104 131	258 317	4 671
339931	Doll & stuffed toy mfg .	3	30	1	156	2 438	118	227	1 687	6 340	3 732	10 360	71
339932	Game, toy, & children's vehicle mfg	3	106	23	2 029	53 858	1 581	3 025	30 123	142 284	100 399	247 957	4 600

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CALIFORNIA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33994	Office supplies (except paper) mfg	1	147	31	3 345	93 268	2 345	4 601	61 815	240 698	191 035	421 683	19 579
339941	Pen & mechanical pencil mfg	—	13	3	906	39 108	750	1 639	32 448	108 284	99 628	198 636	D
339942	Lead pencil & art good mfg	4	31	6	482	11 167	266	427	4 414	27 965	21 045	48 946	D
339943	Marking device mfg . . .	1	89	16	1 465	32 782	962	2 015	18 944	78 178	34 851	112 509	2 266
339944	Carbon paper & inked ribbon mfg	—	14	6	492	10 211	367	520	6 009	26 271	35 511	61 592	2 605
33995	Sign mfg	2	582	85	6 877	205 921	4 444	8 244	99 485	410 295	231 623	647 684	13 055
339950	Sign mfg	2	582	85	6 877	205 921	4 444	8 244	99 485	410 295	231 623	647 684	13 055
33999	All other miscellaneous mfg	2	663	207	18 092	481 921	13 253	25 354	267 018	1 140 177	816 848	1 958 778	82 030
339991	Gasket, packing, & sealing device mfg . . .	2	85	43	4 023	126 127	2 853	6 232	70 881	273 669	153 318	424 290	13 389
339992	Musical instrument mfg	—	101	20	2 595	69 204	2 029	3 786	40 928	159 007	100 638	260 682	12 253
339993	Fastener, button, needle, & pin mfg	2	33	8	397	8 815	293	588	5 582	18 256	17 977	35 903	1 509
339994	Broom, brush, & mop mfg	—	23	11	591	18 146	447	870	9 706	33 232	30 319	64 321	944
339995	Burial casket mfg	3	11	1	110	2 921	86	180	1 959	7 357	3 089	10 496	137
339999	All other miscellaneous mfg	2	410	124	10 376	256 708	7 545	13 698	137 962	648 656	511 507	1 163 086	53 798

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BAKERSFIELD, CA MSA												
	Manufacturing	1	390	88	14 306	379 246	11 322	24 464	250 987	1 608 492	1 189 154	2 824 572	145 184
311	Food mfg	—	39	17	7 192	165 788	6 130	14 619	115 874	571 052	515 956	1 100 368	67 272
3114	Fruit & vegetable preserving & specialty food mfg	—	5	5	2 813	54 529	2 633	6 097	42 577	195 309	129 709	347 409	D
31141	Frozen food mfg	9	1	1	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	1	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	4	4	g	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	2	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	—	2	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	2	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	9	7	3 755	91 360	3 024	7 570	59 183	334 238	332 010	652 181	45 420
31191	Snack food mfg	—	2	2	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg . .	—	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	6	4	g	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	—	2	2	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BAKERSFIELD, CA MSA—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	4	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	15	3	646	5 555	482	831	3 958	8 407	26 594	35 011	1 310
3219	Other wood product mfg ...	3	10	1	e	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	1	5	1	376	1 426	350	563	1 228	1 732	848	2 700	64
321920	Wood container & pallet mfg	1	5	1	376	1 426	350	563	1 228	1 732	848	2 700	64
324	Petroleum & coal products mfg	1	12	5	447	24 862	273	514	13 813	297 438	229 082	534 570	15 516
3241	Petroleum & coal products mfg	1	12	5	447	24 862	273	514	13 813	297 438	229 082	534 570	15 516
32411	Petroleum refineries	—	5	4	334	21 413	189	370	11 569	287 234	201 849	497 056	14 544
324110	Petroleum refineries ..	—	5	4	334	21 413	189	370	11 569	287 234	201 849	497 056	14 544
325	Chemical mfg	—	22	9	1 216	47 858	904	1 769	31 287	379 576	133 351	513 488	26 981
3251	Basic chemical mfg	—	4	3	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	15	4	480	14 224	364	694	8 903	49 224	36 262	86 415	11 356
3261	Plastics product mfg	—	14	4	e	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	—	1	1	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	28	11	823	28 456	637	1 279	20 030	104 070	81 472	187 135	8 512
3273	Cement & concrete product mfg	1	22	8	622	23 343	471	959	16 192	90 212	72 128	164 621	7 186
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	81	13	1 025	27 082	777	1 406	18 337	63 686	34 170	98 025	4 566
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	45	5	468	11 461	367	594	8 198	22 701	10 047	32 907	2 319
33271	Machine shops	2	40	5	425	10 381	335	545	7 432	19 488	9 013	28 593	2 069
332710	Machine shops	2	40	5	425	10 381	335	545	7 432	19 488	9 013	28 593	2 069
333	Machinery mfg	4	40	9	542	16 097	344	580	8 618	35 169	33 052	67 831	2 337
337	Furniture & related product mfg	—	27	4	491	11 068	420	864	8 070	21 058	15 478	36 060	689
3371	Household & institutional furniture & kitchen cabinet mfg	1	26	3	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	11	3	364	8 934	321	673	6 370	15 650	10 983	26 126	497
337122	Nonupholstered wood household furniture mfg	—	5	3	326	8 251	289	617	5 845	14 169	9 848	23 500	421
339	Miscellaneous mfg	1	34	3	454	14 017	328	617	7 389	37 245	14 909	52 118	662
3391	Medical equipment & supplies mfg	1	21	2	371	10 811	275	523	6 280	31 556	11 732	43 266	563
33911	Medical equipment & supplies mfg	1	21	2	371	10 811	275	523	6 280	31 556	11 732	43 266	563
339113	Surgical appliance & supplies mfg	—	5	2	311	9 582	228	454	5 667	28 425	10 135	38 483	422
31-33	CHICO—PARADISE, CA MSA												
	Manufacturing	2	232	53	4 944	128 396	3 939	7 703	89 668	377 262	397 132	771 554	41 327
311	Food mfg	3	25	10	1 283	33 615	1 149	2 177	26 795	121 956	132 075	255 136	5 279
3114	Fruit & vegetable preserving & specialty food mfg	3	7	5	f	D	D	D	D	D	D	D	2 299
31142	Fruit & vegetable canning, pickling, & drying	3	6	5	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	3	4	4	787	20 973	726	1 370	18 131	78 889	81 095	159 889	2 265

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICO-PARADISE, CA MSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg	2	19	7	726	19 071	626	1 403	15 458	48 340	76 938	125 570	3 093
3219	Other wood product mfg . . .	2	15	4	519	12 321	454	1 016	10 172	22 869	48 313	72 923	D
32191	Millwork	2	8	4	470	11 515	414	958	9 612	21 405	46 670	69 780	833
321911	Wood window & door mfg	3	5	3	e	D	D	D	D	D	D	D	604
326	Plastics & rubber products mfg	1	10	4	313	7 677	268	525	5 492	20 452	13 341	34 002	2 269
3261	Plastics product mfg	1	10	4	313	7 677	268	525	5 492	20 452	13 341	34 002	2 269
333	Machinery mfg	3	24	7	457	14 217	343	706	9 803	29 952	25 266	55 050	1 922
336	Transportation equipment mfg	—	9	2	523	14 091	431	1 089	10 344	29 196	84 124	109 888	D
3362	Motor vehicle body & trailer mfg	—	1	1	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	e	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	32	6	446	10 985	324	470	5 436	27 174	11 173	37 182	677
3399	Other miscellaneous mfg . . .	1	18	5	280	6 366	203	343	4 050	16 037	9 249	24 788	570
	FRESNO, CA MSA												
31-33	Manufacturing	1	790	263	31 465	825 040	22 927	44 934	512 787	2 798 199	3 992 278	6 619 922	197 782
311	Food mfg	2	129	71	11 742	279 879	9 254	18 137	186 103	1 106 609	2 120 754	3 147 244	67 715
3111	Animal food mfg	3	10	6	330	12 378	185	447	6 142	7 237	238 024	244 787	3 181
31111	Animal food mfg	3	10	6	330	12 378	185	447	6 142	7 237	238 024	244 787	3 181
311119	Other animal food mfg	3	10	6	330	12 378	185	447	6 142	7 237	238 024	244 787	3 181
3112	Grain & oilseed milling	2	7	5	e	D	D	D	D	D	D	D	9 876
3113	Sugar & confectionery product mfg	—	2	1	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	—	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	—	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	25	20	h	D	D	D	D	D	D	D	D
31141	Frozen food mfg	5	2	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	5	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	23	18	h	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	10	8	1 462	34 554	1 335	2 689	27 494	193 577	224 562	420 011	17 704
311423	Dried & dehydrated food mfg	—	12	10	1 569	36 544	1 323	2 571	26 145	156 505	267 968	405 672	9 043
3115	Dairy product mfg	—	4	3	524	20 947	244	542	9 716	131 367	309 890	438 251	2 778
31151	Dairy product (except frozen) mfg	—	3	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	16	12	3 452	65 945	2 983	5 312	50 354	187 013	677 612	856 696	11 677
31161	Animal slaughtering & processing	5	16	12	3 452	65 945	2 983	5 312	50 354	187 013	677 612	856 696	11 677
311611	Animal (except poultry) slaughtering	9	7	4	930	21 718	770	983	14 896	50 609	387 890	438 401	3 073
311615	Poultry processing	—	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	47	13	1 779	49 811	1 154	2 324	28 685	182 763	109 622	290 239	3 360
31181	Bread & bakery product mfg	1	37	5	676	20 286	400	683	7 481	41 536	24 046	65 637	569
311812	Commercial bakeries	—	10	5	553	18 904	314	585	6 681	38 223	22 094	60 360	417
31182	Cookie, cracker, & pasta mfg	—	7	5	421	15 114	314	676	10 660	102 301	47 833	147 768	1 857
31183	Tortilla mfg	—	3	3	682	14 411	440	965	10 544	38 926	37 743	76 834	934
311830	Tortilla mfg	—	3	3	682	14 411	440	965	10 544	38 926	37 743	76 834	934
3119	Other food mfg	2	17	11	874	25 613	577	1 075	13 137	168 029	101 209	216 748	4 525
31191	Snack food mfg	2	7	6	394	9 790	319	563	6 270	84 673	44 684	101 634	1 939
31193	Flavoring syrup & concentrate mfg	1	3	3	387	13 700	195	364	5 708	75 662	48 005	98 974	2 031
311930	Flavoring syrup & concentrate mfg	1	3	3	387	13 700	195	364	5 708	75 662	48 005	98 974	2 031
312	Beverage & tobacco product mfg	—	18	12	2 241	51 181	1 081	2 338	31 260	338 024	534 228	777 526	44 411
3121	Beverage mfg	—	18	12	2 241	51 181	1 081	2 338	31 260	338 024	534 228	777 526	44 411
31211	Soft drink & ice mfg	—	3	3	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	g	D	D	D	D	D	D	D	D
31213	Wineries	—	15	9	g	D	D	D	D	D	D	D	D
312130	Wineries	—	15	9	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FRESNO, CA MSA— Con. Manufacturing— Con.												
313	Textile mills	-	5	3	349	9 450	326	701	7 701	21 983	24 732	47 903	D
3132	Fabric mills	-	2	2	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	40	11	578	11 594	480	878	7 500	25 010	36 734	60 224	2 481
3219	Other wood product mfg ...	4	36	10	514	10 491	431	809	6 803	22 766	33 627	54 858	2 322
32192	Wood container & pallet mfg	2	18	7	311	5 974	266	464	4 009	12 143	18 139	29 897	1 686
321920	Wood container & pallet mfg	2	18	7	311	5 974	266	464	4 009	12 143	18 139	29 897	1 686
322	Paper mfg	-	14	11	1 238	34 771	829	1 833	21 686	78 330	142 299	222 132	5 329
3222	Converted paper product mfg	-	13	10	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	12	9	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	7	7	680	20 919	454	971	12 966	49 766	114 828	165 693	3 912
32223	Stationery product mfg ..	9	1	1	e	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	9	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	84	12	1 092	27 360	721	1 279	15 665	54 473	35 680	90 500	2 788
3231	Printing & related support activities	2	84	12	1 092	27 360	721	1 279	15 665	54 473	35 680	90 500	2 788
32311	Printing	2	78	12	1 075	27 085	706	1 261	15 458	53 939	35 578	89 859	2 767
323110	Commercial lithographic printing ..	1	41	7	674	17 381	403	765	9 938	34 481	22 147	56 498	1 550
325	Chemical mfg	5	22	5	521	18 056	268	572	7 288	63 061	60 272	122 324	4 710
3251	Basic chemical mfg	7	6	2	316	10 970	131	286	3 442	21 766	13 635	31 750	2 010
32513	Dye & pigment mfg	9	1	1	e	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	9	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	30	16	1 208	31 415	970	1 959	21 672	118 009	98 206	217 309	13 104
3261	Plastics product mfg	1	26	15	1 063	28 120	850	1 705	19 077	115 854	92 077	207 457	D
32619	Other plastics product mfg	-	13	7	584	14 913	459	864	10 034	57 060	36 505	92 652	2 345
326199	All other plastics product mfg	-	12	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	47	20	1 846	65 889	1 454	2 988	48 303	278 270	172 472	453 563	13 220
3272	Glass & glass product mfg ..	-	7	5	990	36 945	815	1 701	27 313	171 936	103 052	278 889	10 688
32721	Glass & glass product mfg	-	7	5	990	36 945	815	1 701	27 313	171 936	103 052	278 889	10 688
327211	Flat glass mfg	-	2	2	e	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	30	12	e	D	D	D	D	D	D	D	1 748
32732	Ready-mix concrete mfg ..	1	16	7	282	8 756	220	436	6 363	19 716	23 641	43 395	944
327320	Ready-mix concrete mfg	1	16	7	282	8 756	220	436	6 363	19 716	23 641	43 395	944
3279	Other nonmetallic mineral product mfg	-	5	3	e	D	D	D	D	D	D	D	755
32799	All other nonmetallic mineral product mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	9	3	263	6 159	231	436	4 437	10 594	5 327	16 021	476
3315	Foundries	-	6	3	256	6 004	226	430	4 349	10 105	4 570	14 770	359
332	Fabricated metal product mfg	1	111	30	1 928	54 330	1 382	2 718	34 002	118 304	115 814	232 651	10 617
3323	Architectural & structural metals mfg	1	23	8	580	17 450	399	853	11 578	34 043	34 418	68 019	1 782
33232	Ornamental & architectural metal products mfg	2	15	5	400	11 472	264	530	7 177	20 607	16 929	37 117	1 496
3324	Boiler, tank, & shipping container mfg	1	8	6	e	D	D	D	D	D	D	D	1 583
33242	Metal tank (heavy gauge) mfg	2	6	5	254	7 275	170	333	4 362	13 593	10 416	24 020	D
332420	Metal tank (heavy gauge) mfg	2	6	5	254	7 275	170	333	4 362	13 593	10 416	24 020	D
3328	Coating, engraving, heat treating, & allied activities ..	1	19	4	274	6 742	207	419	4 005	13 823	5 188	19 014	D
33281	Coating, engraving, heat treating, & allied activities	1	19	4	274	6 742	207	419	4 005	13 823	5 188	19 014	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FRESNO, CA MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	2	13	6	431	11 783	306	534	7 141	33 996	35 612	69 064	4 352
33291	Metal valve mfg.....	2	4	3	308	8 436	222	379	5 272	26 097	26 282	51 879	D
332911	Industrial valve mfg...	2	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	75	30	4 406	136 840	3 058	5 817	73 291	285 351	410 486	695 283	19 000
3331	Agriculture, construction, & mining machinery mfg....	4	26	8	477	14 110	336	591	8 247	28 226	32 981	63 019	2 849
33311	Agricultural implement mfg.....	3	19	7	375	10 699	267	470	6 488	21 830	24 912	48 114	2 505
333111	Farm machinery & equipment mfg.....	3	18	7	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg..	—	12	4	367	15 079	188	381	6 221	31 903	27 290	59 286	927
33329	Other industrial machinery mfg.....	—	10	4	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg.....	—	8	4	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg..	—	3	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	6	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	—	6	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	25	14	2 206	67 531	1 438	2 619	32 317	133 717	213 861	342 980	9 693
33391	Pump & compressor mfg.....	—	6	3	655	21 670	365	776	9 565	36 421	88 032	122 660	D
333911	Pump & pumping equipment mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	—	4	3	646	16 798	480	873	9 302	40 902	82 990	122 235	D
333923	Overhead traveling crane, hoist, & monorail system mfg..	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	2	15	8	905	29 063	593	970	13 450	56 394	42 839	98 085	3 039
333993	Packaging machinery mfg.....	3	9	5	613	20 310	397	607	9 503	38 267	30 625	68 627	1 755
334	Computer & electronic product mfg.....	—	14	2	898	25 500	529	978	9 040	71 235	45 249	114 408	3 551
3342	Communications equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	36	16	877	20 896	703	1 327	14 258	41 804	74 691	117 003	1 778
3363	Motor vehicle parts mfg...	—	17	6	429	10 464	344	660	6 924	18 674	44 608	63 531	452
337	Furniture & related product mfg.....	1	47	7	676	11 862	580	929	8 878	20 757	22 373	44 868	847
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	36	4	532	9 086	459	719	6 916	14 991	16 068	32 788	389
33712	Household & institutional furniture mfg.....	1	9	3	324	5 021	288	425	3 860	8 354	10 878	20 935	137
337122	Nonupholstered wood household furniture mfg.....	—	3	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FRESNO, CA MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	2	77	8	1 025	25 978	627	1 226	13 208	131 125	41 872	175 367	4 179
3391	Medical equipment & supplies mfg	1	46	4	653	18 922	395	776	9 467	111 376	30 187	144 205	3 392
33911	Medical equipment & supplies mfg	1	46	4	653	18 922	395	776	9 467	111 376	30 187	144 205	3 392
339113	Surgical appliance & supplies mfg	—	7	1	e	D	D	D	D	D	D	D	2 059
3399	Other miscellaneous mfg	4	31	4	372	7 056	232	450	3 741	19 749	11 685	31 162	787
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA												
31-33	Manufacturing	1	28 102	9 096	981 382	32 250 798	678 278	1 316 546	16 481 830	87 696 608	83 527 737	171 358 536	6 805 541
311	Food mfg	2	1 629	495	56 210	1 537 693	40 051	75 635	897 225	5 786 113	7 640 201	13 417 227	373 935
312	Beverage & tobacco product mfg	—	78	35	i	D	D	D	D	D	D	D	D
313	Textile mills	3	356	112	10 158	241 183	8 415	17 002	158 355	543 703	589 976	1 133 080	D
314	Textile product mills	2	679	182	j	D	D	D	D	D	D	D	D
315	Apparel mfg	2	4 306	1 348	106 559	1 841 038	89 572	150 512	1 220 728	4 614 668	4 982 057	9 502 458	D
316	Leather & allied product mfg	3	151	48	i	D	D	D	D	D	D	D	D
321	Wood product mfg	2	490	158	13 112	302 416	10 631	20 744	203 561	660 785	786 112	1 441 699	D
322	Paper mfg	1	364	218	21 413	757 320	15 965	33 297	479 449	2 068 893	2 928 542	4 975 520	155 616
323	Printing & related support activities	2	2 876	554	50 796	1 592 669	36 629	70 462	959 762	3 471 077	2 375 731	5 851 001	261 040
324	Petroleum & coal products mfg	2	94	33	i	D	D	D	D	D	D	D	D
325	Chemical mfg	1	881	341	35 931	1 389 505	21 696	43 775	621 085	6 468 685	5 430 099	11 885 738	420 413
326	Plastics & rubber products mfg	2	1 241	641	62 074	1 632 025	49 212	96 854	1 033 905	4 487 565	3 908 854	8 385 133	338 337
327	Nonmetallic mineral product mfg	1	738	279	21 570	654 332	16 545	32 867	445 159	1 859 095	1 568 661	3 446 295	158 975
331	Primary metal mfg	—	324	187	18 126	596 053	14 529	30 714	404 152	1 765 086	2 526 780	4 292 669	161 417
332	Fabricated metal product mfg	1	4 803	1 441	120 046	3 933 455	89 534	182 151	2 399 159	8 930 108	6 385 288	15 185 230	711 794
333	Machinery mfg	1	1 766	555	52 826	1 975 321	33 067	66 160	955 099	4 299 125	3 637 449	7 900 722	277 188
334	Computer & electronic product mfg	1	1 811	770	128 182	5 723 628	64 392	132 726	1 871 356	16 510 669	10 893 823	27 114 095	1 794 692
335	Electrical equipment, appliance, & component mfg	1	587	254	26 650	859 829	18 306	36 429	429 257	2 497 195	1 973 602	4 436 796	113 636
336	Transportation equipment mfg	—	1 068	457	117 677	5 297 056	65 792	126 079	2 151 548	10 392 073	11 864 989	23 040 469	D
337	Furniture & related product mfg	1	1 532	496	49 113	1 139 861	39 234	74 642	755 783	2 754 211	2 302 341	5 053 514	96 806
339	Miscellaneous mfg	1	2 328	492	55 638	1 697 131	38 431	73 404	832 062	4 815 787	2 914 282	7 715 137	260 136

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA												
31-33	Manufacturing	1	17 915	5 839	622 302	20 311 335	430 159	817 449	10 295 069	53 692 011	52 735 817	106 706 380	3 549 692
311	Food mfg.....	2	1 137	349	39 804	1 109 807	27 745	51 255	619 148	3 806 969	5 057 785	8 848 733	212 187
3111	Animal food mfg.....	1	21	9	1 633	62 488	1 059	2 390	43 127	482 609	382 021	853 306	23 720
31111	Animal food mfg.....	1	21	9	1 633	62 488	1 059	2 390	43 127	482 609	382 021	853 306	23 720
311111	Dog & cat food mfg...	-	11	7	1 522	58 184	1 003	2 259	40 997	468 540	352 884	808 986	22 923
3112	Grain & oilseed milling....	1	25	15	1 154	43 436	786	1 571	26 937	164 866	492 771	658 829	6 379
31121	Flour milling & malt mfg...	-	13	7	e	D	D	D	D	D	D	D	3 724
311211	Flour milling.....	-	10	6	273	11 330	185	390	6 523	66 588	186 214	253 755	D
31122	Starch & vegetable fats & oils mfg.....	2	11	7	645	22 970	459	936	16 001	79 738	245 688	325 425	2 655
311225	Fats & oils refining & blending.....	2	10	6	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	38	10	1 231	37 323	1 015	1 997	24 254	115 411	111 611	228 899	14 484
31133	Confectionery mfg from purchased chocolate...	-	14	6	815	24 907	698	1 308	17 802	79 644	75 086	154 800	11 509
311330	Confectionery mfg from purchased chocolate.....	-	14	6	815	24 907	698	1 308	17 802	79 644	75 086	154 800	11 509
31134	Nonchocolate confectionery mfg.....	1	19	4	389	11 392	304	659	6 022	32 883	31 102	65 956	2 675
311340	Nonchocolate confectionery mfg...	1	19	4	389	11 392	304	659	6 022	32 883	31 102	65 956	2 675
3114	Fruit & vegetable preserving & specialty food mfg.....	3	64	37	4 418	109 798	3 552	6 070	63 785	344 101	409 460	753 307	33 630
31141	Frozen food mfg.....	2	31	20	2 637	58 209	2 292	3 867	35 575	179 567	203 089	382 949	13 869
311412	Frozen specialty food mfg.....	2	26	16	2 403	52 071	2 088	3 423	30 677	163 114	166 524	329 395	12 393
31142	Fruit & vegetable canning, pickling, & drying.....	4	33	17	1 781	51 589	1 260	2 203	28 210	164 534	206 371	370 358	19 761
311421	Fruit & vegetable canning.....	4	26	13	982	32 391	654	1 306	15 700	98 071	116 821	215 262	4 731
311422	Specialty canning.....	-	4	2	e	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	7	3	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	2	56	35	4 061	150 854	2 434	4 772	73 884	477 923	1 027 431	1 501 073	31 602
31151	Dairy product (except frozen) mfg.....	2	38	27	3 439	127 394	2 007	3 852	56 916	410 561	888 909	1 295 173	27 543
311511	Fluid milk mfg.....	2	17	14	2 563	102 131	1 458	2 840	43 360	345 509	742 811	1 084 574	20 445
311513	Cheese mfg.....	-	11	6	323	7 609	262	483	5 609	14 434	68 268	82 236	D
311514	Dry, condensed, & evaporated dairy product mfg.....	5	9	6	e	D	D	D	D	D	D	D	3 976
31152	Ice cream & frozen dessert mfg.....	4	18	8	622	23 460	427	920	16 968	67 362	138 522	205 900	4 059
311520	Ice cream & frozen dessert mfg.....	4	18	8	622	23 460	427	920	16 968	67 362	138 522	205 900	4 059
3116	Meat product mfg.....	2	91	46	5 182	131 180	4 339	8 341	89 072	446 342	959 944	1 407 018	17 124
31161	Animal slaughtering & processing.....	2	91	46	5 182	131 180	4 339	8 341	89 072	446 342	959 944	1 407 018	17 124
311611	Animal (except poultry) slaughtering.....	1	28	10	2 239	58 146	1 910	4 182	44 090	186 705	550 236	737 817	4 520
311612	Meat processed from carcasses.....	4	52	27	1 990	52 541	1 655	3 151	33 778	189 518	322 903	511 574	8 794
311613	Rendering & meat byproduct processing.....	-	3	3	308	10 635	160	142	2 065	20 795	18 711	40 164	2 737
311615	Poultry processing.....	-	8	6	645	9 858	614	866	9 139	49 324	68 094	117 463	1 073
3117	Seafood product preparation & packaging..	-	39	14	2 151	47 942	1 848	3 256	33 305	113 960	332 397	444 806	8 667
31171	Seafood product preparation & packaging.....	-	39	14	2 151	47 942	1 848	3 256	33 305	113 960	332 397	444 806	8 667
311711	Seafood canning.....	-	11	5	1 043	21 857	881	1 505	15 496	49 836	112 391	161 833	D
311712	Fresh & frozen seafood processing..	-	28	9	1 108	26 085	967	1 751	17 809	64 124	220 006	282 973	D
3118	Bakeries & tortilla mfg....	2	654	112	14 690	377 072	9 016	16 171	188 269	1 090 541	690 126	1 780 170	51 241
31181	Bread & bakery product mfg.....	2	589	79	11 419	309 430	6 522	11 730	146 440	884 348	481 300	1 365 435	38 443
311811	Retail bakeries.....	5	450	25	2 486	30 776	1 610	2 042	16 060	66 449	41 860	108 460	4 436
311812	Commercial bakeries..	2	130	48	8 130	261 406	4 269	8 612	120 930	762 998	369 529	1 132 421	29 465
311813	Frozen cakes, pies, & other pastries mfg...	-	9	6	803	17 248	643	1 076	9 450	54 901	69 911	124 554	4 542
31182	Cookie, cracker, & pasta mfg.....	1	40	15	1 245	31 541	903	1 489	17 869	88 034	122 787	209 976	7 468
311821	Cookie & cracker mfg..	-	16	9	854	21 476	656	1 005	11 580	54 537	59 074	114 062	4 032
31183	Tortilla mfg.....	2	25	18	2 026	36 101	1 591	2 952	23 960	118 159	86 039	204 759	5 330
311830	Tortilla mfg.....	2	25	18	2 026	36 101	1 591	2 952	23 960	118 159	86 039	204 759	5 330

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	149	71	5 284	149 714	3 696	6 687	76 515	571 216	652 024	1 221 325	25 340
31191	Snack food mfg	3	15	7	330	8 209	234	255	2 873	39 266	40 235	80 017	1 702
311919	Other snack food mfg .	3	11	5	278	6 486	199	167	2 029	35 500	21 664	57 715	D
31192	Coffee & tea mfg	—	11	9	713	24 296	435	825	13 246	132 883	165 180	293 586	6 948
311920	Coffee & tea mfg	—	11	9	713	24 296	435	825	13 246	132 883	165 180	293 586	6 948
31194	Seasoning & dressing mfg	2	39	15	1 221	39 768	885	1 620	23 389	140 125	173 257	315 509	4 741
311941	Mayonnaise, dressing, & other prepared sauce mfg	2	19	8	745	22 516	610	1 175	15 412	81 058	111 100	192 156	2 832
311942	Spice & extract mfg ...	2	20	7	476	17 252	275	445	7 977	59 067	62 157	123 353	1 909
31199	All other food mfg	1	77	38	2 865	71 757	2 055	3 793	34 149	236 502	248 160	484 114	10 949
311991	Perishable prepared food mfg	1	28	19	1 583	37 827	1 208	2 286	20 297	115 701	102 453	217 829	5 984
311999	All other miscellaneous food mfg	1	49	19	1 282	33 930	847	1 507	13 852	120 801	145 707	266 285	4 965
312	Beverage & tobacco product mfg	—	42	20	3 903	186 955	2 567	5 428	118 664	1 398 461	1 294 489	2 684 831	135 821
3121	Beverage mfg	—	41	20	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	28	14	1 829	68 867	993	2 168	32 096	380 057	603 455	979 844	8 210
312111	Soft drink mfg	—	15	10	1 560	60 319	834	1 796	26 894	363 124	596 973	956 344	6 834
31212	Breweries	—	8	5	g	D	D	D	D	D	D	D	127 189
312120	Breweries	—	8	5	g	D	D	D	D	D	D	D	127 189
313	Textile mills	3	294	96	8 465	199 648	7 037	14 061	133 233	456 885	494 821	943 774	42 653
3131	Fiber, yarn, & thread mills .	5	20	5	306	4 075	275	523	3 396	10 583	11 985	22 165	D
31311	Fiber, yarn, & thread mills	5	20	5	306	4 075	275	523	3 396	10 583	11 985	22 165	D
3132	Fabric mills	3	116	37	4 252	93 820	3 584	6 841	61 354	190 471	209 197	399 319	18 144
31321	Broadwoven fabric mills .	8	43	8	934	15 783	854	1 175	13 273	26 901	32 448	59 338	3 090
313210	Broadwoven fabric mills	8	43	8	934	15 783	854	1 175	13 273	26 901	32 448	59 338	3 090
31322	Narrow fabric mills & schiffli machine embroidery	1	38	11	1 346	26 829	1 175	2 509	19 929	65 267	28 344	93 376	D
313221	Narrow fabric mills	1	18	5	670	15 020	566	1 236	11 093	42 231	19 325	61 374	D
313222	Schiffli machine embroidery	—	20	6	676	11 809	609	1 273	8 836	23 036	9 019	32 002	D
31324	Knit fabric mills	2	31	17	1 891	50 394	1 489	3 042	27 574	96 043	145 443	241 411	D
313241	Weft knit fabric mills ..	2	24	14	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	3	158	54	3 907	101 753	3 178	6 697	68 483	255 831	273 639	522 290	D
31331	Textile & fabric finishing mills	3	142	48	3 626	91 130	2 975	6 263	62 407	231 966	238 495	463 194	D
313311	Broadwoven fabric finishing mills	2	103	30	1 772	44 922	1 398	2 835	28 189	135 697	138 014	270 449	D
313312	Textile & fabric finishing mills	3	39	18	1 854	46 208	1 577	3 428	34 218	96 269	100 481	192 745	13 816
31332	Fabric coating mills	6	16	6	281	10 623	203	434	6 076	23 865	35 144	59 096	D
313320	Fabric coating mills ...	6	16	6	281	10 623	203	434	6 076	23 865	35 144	59 096	D
314	Textile product mills	3	474	132	13 116	259 825	10 584	21 440	160 825	608 438	774 719	1 375 692	31 051
3141	Textile furnishings mills	3	174	48	6 507	142 873	5 206	9 980	86 796	388 014	569 448	952 094	14 951
31411	Carpet & rug mills	3	15	9	2 217	71 582	1 576	3 438	34 429	219 608	296 156	515 471	9 525
314110	Carpet & rug mills	3	15	9	2 217	71 582	1 576	3 438	34 429	219 608	296 156	515 471	9 525
31412	Curtain & linen mills	3	159	39	4 290	71 291	3 630	6 542	52 367	168 406	273 292	436 623	5 426
314121	Curtain & drapery mills	4	91	5	535	8 631	364	644	4 298	17 037	14 644	31 936	327
314129	Other household textile product mills	3	68	34	3 755	62 660	3 266	5 898	48 069	151 369	258 648	404 687	5 099
3149	Other textile product mills ..	3	300	84	6 609	116 952	5 378	11 460	74 029	220 424	205 271	423 598	16 100
31491	Textile bag & canvas mills	3	98	17	2 144	40 779	1 735	2 813	20 972	67 519	65 315	128 984	2 732
314911	Textile bag mills	1	24	7	1 250	20 442	1 094	1 690	9 817	33 830	39 658	69 650	556
314912	Canvas & related product mills	6	74	10	894	20 337	641	1 123	11 155	33 689	25 657	59 334	2 176
31499	All other textile product mills	3	202	67	4 465	76 173	3 643	8 647	53 057	152 905	139 956	294 614	13 368
314999	All other miscellaneous textile product mills ..	3	198	66	4 403	74 476	3 588	8 539	51 637	149 038	136 424	286 971	13 314

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	2	3 808	1 237	96 523	1 657 920	81 336	136 236	1 109 099	4 138 202	4 523 877	8 574 606	170 913
3151	Apparel knitting mills	1	95	42	3 655	63 524	3 069	6 065	44 050	148 588	178 999	329 526	14 301
31511	Hosiery & sock mills	3	14	3	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	1	81	39	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	1	76	38	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	3 487	1 143	87 805	1 498 829	74 112	123 135	1 004 794	3 755 285	4 138 962	7 804 565	147 083
31521	Cut & sew apparel contractors	5	2 354	683	45 622	505 746	42 805	65 405	441 699	884 415	255 818	1 129 442	32 637
315211	Men's & boys' cut & sew apparel contractors	3	102	62	4 320	54 341	4 098	7 193	48 402	105 431	15 786	121 030	3 247
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	2 252	621	41 302	451 405	38 707	58 212	393 297	778 984	240 032	1 008 412	29 390
31522	Men's & boys' cut & sew apparel mfg	2	237	101	9 113	171 945	7 851	14 701	125 015	399 898	475 869	861 767	13 110
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	88	45	2 951	60 131	2 410	4 454	41 848	143 473	239 872	373 044	4 046
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	1	43	25	h	D	D	D	D	D	D	D	3 926
315225	Men's & boys' cut & sew work clothing mfg	5	18	5	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	5	60	19	g	D	D	D	D	D	D	D	4 724
31523	Women's & girls' cut & sew apparel mfg	1	828	342	31 906	799 414	22 532	41 441	424 050	2 428 128	3 370 659	5 734 794	100 039
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	2	34	15	1 321	30 391	939	1 814	16 675	71 916	114 007	183 230	1 176
315232	Women's & girls' cut & sew blouse & shirt mfg	2	264	104	9 034	229 218	6 605	11 064	119 993	679 230	1 019 561	1 669 252	9 760
315233	Women's & girls' cut & sew dress mfg	1	233	101	7 939	231 330	5 306	10 177	117 917	624 227	960 042	1 568 854	14 152
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	69	24	1 768	42 139	1 238	2 054	23 295	136 160	172 749	304 605	1 042
315239	Women's & girls' cut & sew other outerwear mfg	1	228	98	11 844	266 336	8 444	16 332	146 170	916 595	1 104 300	2 008 853	73 909
31529	Other cut & sew apparel mfg	6	68	17	1 164	21 724	924	1 588	14 030	42 844	36 616	78 562	1 297
315299	All other cut & sew apparel mfg	8	47	14	903	15 290	695	1 173	9 684	31 145	25 567	56 002	767
3159	Apparel accessories & other apparel mfg	2	226	52	5 063	95 567	4 155	7 036	60 255	234 329	205 916	440 515	9 529
31599	Apparel accessories & other apparel mfg	2	226	52	5 063	95 567	4 155	7 036	60 255	234 329	205 916	440 515	9 529
315991	Hat, cap, & millinery mfg	5	33	8	f	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	-	11	3	772	14 445	715	1 267	11 191	62 532	52 718	114 114	D
315999	Other apparel accessories & other apparel mfg	3	181	40	3 633	70 762	2 865	4 765	41 459	152 955	138 120	292 741	7 994
316	Leather & allied product mfg .	2	114	40	4 283	74 460	3 616	6 621	50 843	154 236	125 157	280 537	5 037
3162	Footwear mfg	3	48	18	1 436	21 299	1 318	2 297	16 545	45 875	30 145	75 517	D
31621	Footwear mfg	3	48	18	1 436	21 299	1 318	2 297	16 545	45 875	30 145	75 517	D
316214	Women's footwear (except athletic) mfg .	2	23	11	947	13 972	866	1 649	10 951	29 559	17 316	47 084	358
316219	Other footwear mfg ...	1	13	4	336	4 520	319	448	3 545	8 897	5 622	13 878	D
3169	Other leather & allied product mfg	1	53	22	2 757	51 117	2 231	4 194	32 956	104 314	89 131	195 177	3 856
31699	Other leather & allied product mfg	1	53	22	2 757	51 117	2 231	4 194	32 956	104 314	89 131	195 177	3 856
316991	Luggage mfg	-	16	9	706	15 046	563	1 043	9 021	35 098	22 532	57 310	D
316993	Personal leather good (except women's handbag & purse) mfg	-	10	2	419	8 282	366	788	5 344	12 340	10 588	22 681	D
316999	All other leather good mfg	2	20	8	1 437	24 727	1 125	2 015	16 159	50 988	50 615	103 936	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	2	251	78	5 949	136 756	4 722	9 512	91 418	275 060	266 665	541 309	14 867
3212	Veneer, plywood, & engineered wood product mfg	1	17	6	436	9 861	396	876	8 413	28 338	46 582	74 133	1 590
32121	Veneer, plywood, & engineered wood product mfg	1	17	6	436	9 861	396	876	8 413	28 338	46 582	74 133	1 590
321211	Hardwood veneer & plywood mfg	1	8	5	297	7 010	270	603	5 757	15 490	19 627	35 282	721
3219	Other wood product mfg	2	231	72	5 475	125 765	4 295	8 578	82 258	244 806	215 924	460 919	12 865
32191	Millwork	2	105	35	2 830	67 640	2 266	4 626	45 390	127 431	102 721	229 899	5 682
321911	Wood window & door mfg	2	43	15	1 568	36 548	1 273	2 701	26 516	75 670	56 605	132 507	4 320
321912	Cut stock, resawing lumber, & planing	3	17	6	277	6 164	245	432	4 989	10 853	11 366	22 202	448
321918	Other millwork (including flooring)	1	45	14	985	24 928	748	1 493	13 885	40 908	34 750	75 190	914
32192	Wood container & pallet mfg	2	66	21	1 315	27 046	1 095	2 125	18 572	57 589	55 278	112 786	2 117
321920	Wood container & pallet mfg	2	66	21	1 315	27 046	1 095	2 125	18 572	57 589	55 278	112 786	2 117
32199	All other wood product mfg	2	60	16	1 330	31 079	934	1 827	18 296	59 786	57 925	118 234	5 066
321999	All other miscellaneous wood product mfg	2	56	16	1 274	29 566	894	1 744	17 383	56 825	53 490	110 815	4 936
322	Paper mfg	1	236	140	13 243	462 103	9 932	20 644	287 298	1 106 414	1 489 516	2 603 459	70 209
3221	Pulp, paper, & paperboard mills	—	10	9	1 020	53 588	753	1 725	32 981	146 017	227 350	375 762	11 302
32212	Paper mills	—	3	2	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	7	7	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	7	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	226	131	12 223	408 515	9 179	18 919	254 317	960 397	1 262 166	2 227 697	58 907
32221	Paperboard container mfg	1	97	63	6 988	262 630	5 244	11 230	156 902	582 029	837 805	1 416 760	33 366
322211	Corrugated & solid fiber box mfg	1	56	35	4 417	172 195	3 216	7 134	103 410	380 393	662 709	1 040 455	24 519
322212	Folding paperboard box mfg	—	25	17	1 781	70 979	1 353	2 822	40 753	153 380	120 829	274 450	6 765
322213	Setup paperboard box mfg	—	5	4	409	7 329	355	677	5 075	13 043	7 806	20 155	D
32222	Paper bag & coated & treated paper mfg	1	35	18	1 404	41 947	929	1 882	24 470	98 347	117 173	219 130	8 687
322222	Coated & laminated paper mfg	2	23	13	857	26 626	514	990	14 854	64 076	64 922	132 681	6 597
322224	Uncoated paper & multiwall bag mfg	—	3	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	56	28	2 406	69 638	1 897	3 833	49 110	176 038	193 807	372 161	9 742
322231	Die-cut paper & paperboard office supplies mfg	1	27	10	949	23 956	796	1 598	18 168	77 073	71 073	151 270	1 732
322232	Envelope mfg	2	22	13	1 273	39 911	975	2 029	28 185	87 843	115 420	202 126	7 888
32229	Other converted paper product mfg	2	38	22	1 425	34 300	1 109	1 974	23 835	103 983	113 381	219 646	7 112
322291	Sanitary paper product mfg	4	10	4	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	1	28	18	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 787	367	34 106	1 087 217	24 797	48 530	664 510	2 301 126	1 604 372	3 908 372	171 848
3231	Printing & related support activities	2	1 787	367	34 106	1 087 217	24 797	48 530	664 510	2 301 126	1 604 372	3 908 372	171 848
32311	Printing	2	1 564	308	30 084	949 992	21 802	42 752	575 926	2 050 909	1 544 827	3 598 325	153 594
323110	Commercial lithographic printing	2	745	157	15 740	592 638	11 053	23 512	368 107	1 274 498	897 611	2 179 626	105 885
323112	Commercial flexographic printing	3	38	8	464	15 149	327	589	8 110	31 168	22 423	53 515	2 229
323113	Commercial screen printing	1	219	75	7 059	161 190	5 622	10 090	90 541	318 671	297 875	614 630	18 254
323114	Quick printing	4	328	12	1 618	36 768	1 187	1 781	23 924	78 683	46 316	124 782	5 455
323116	Manifold business form printing	—	37	19	2 086	57 178	1 244	2 386	30 010	171 631	137 494	306 641	3 864
323117	Book printing	2	31	11	654	24 349	499	916	14 126	49 878	39 409	89 165	6 789
323118	Blankbook, looseleaf binder, & device mfg	1	17	8	987	21 932	806	1 640	15 502	56 334	50 023	106 251	6 558
323119	Other commercial printing	4	119	15	1 196	33 327	843	1 499	20 550	52 492	45 917	98 426	3 127

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32312	Support activities for printing	2	223	59	4 022	137 225	2 995	5 778	88 584	250 217	59 545	310 047	18 254
323121	Tradebinding & related work	4	73	25	1 728	37 896	1 501	2 917	28 967	72 193	15 148	87 224	5 546
323122	Prepress services	1	150	34	2 294	99 329	1 494	2 861	59 617	178 024	44 397	222 823	12 708
324	Petroleum & coal products mfg	2	61	29	6 256	362 649	3 963	9 016	222 575	3 014 598	7 731 279	10 756 249	413 648
3241	Petroleum & coal products mfg	2	61	29	6 256	362 649	3 963	9 016	222 575	3 014 598	7 731 279	10 756 249	413 648
32411	Petroleum refineries	2	14	14	5 077	312 687	3 091	7 021	188 087	2 805 292	7 355 467	10 164 509	397 841
324110	Petroleum refineries ..	2	14	14	5 077	312 687	3 091	7 021	188 087	2 805 292	7 355 467	10 164 509	397 841
32412	Asphalt paving, roofing, & saturated materials mfg	3	30	9	730	31 350	569	1 292	22 982	119 183	228 387	351 724	12 387
324122	Asphalt shingle & coating materials mfg	3	12	8	592	25 519	463	1 083	18 503	92 915	158 766	255 622	9 064
32419	Other petroleum & coal products mfg	2	17	6	449	18 612	303	703	11 506	90 123	147 425	240 016	3 420
324191	Petroleum lubricating oil & grease mfg	2	15	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	552	227	24 255	922 940	14 570	29 178	419 124	4 011 248	3 506 824	7 506 277	267 955
3251	Basic chemical mfg	2	52	22	1 507	68 259	868	1 870	35 832	258 038	276 426	545 239	29 257
32512	Industrial gas mfg	2	15	7	414	19 113	242	557	10 574	62 810	31 886	94 217	6 858
325120	Industrial gas mfg	2	15	7	414	19 113	242	557	10 574	62 810	31 886	94 217	6 858
32518	Other basic inorganic chemical mfg	—	14	6	555	24 220	347	762	13 956	91 349	95 781	191 426	13 695
325188	All other basic inorganic chemical mfg	—	12	6	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	2	17	8	497	23 762	252	517	10 626	98 587	143 354	248 922	7 926
325199	All other basic organic chemical mfg	2	17	8	497	23 762	252	517	10 626	98 587	143 354	248 922	7 926
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	24	17	1 010	47 949	640	1 448	24 619	212 463	396 529	623 415	27 115
32521	Resin & synthetic rubber mfg	1	24	17	1 010	47 949	640	1 448	24 619	212 463	396 529	623 415	27 115
325211	Plastics material & resin mfg	1	20	15	913	42 314	573	1 313	21 905	199 065	369 400	582 799	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	1	20	8	637	18 790	257	481	6 944	103 454	73 679	174 002	5 064
32531	Fertilizer mfg	—	10	4	341	8 064	101	184	2 535	50 923	23 709	73 036	964
32532	Pesticide & other agricultural chemical mfg	2	10	4	296	10 726	156	297	4 409	52 531	49 970	100 966	4 100
325320	Pesticide & other agricultural chemical mfg	2	10	4	296	10 726	156	297	4 409	52 531	49 970	100 966	4 100
3254	Pharmaceutical & medicine mfg	—	70	34	5 775	245 530	3 370	7 156	118 873	1 322 173	1 043 527	2 327 351	109 069
32541	Pharmaceutical & medicine mfg	—	70	34	5 775	245 530	3 370	7 156	118 873	1 322 173	1 043 527	2 327 351	109 069
325411	Medicinal & botanical mfg	1	25	11	1 520	68 024	889	2 138	29 681	294 221	248 509	549 657	37 401
325412	Pharmaceutical preparation mfg	—	33	17	2 151	86 134	1 323	2 634	40 140	544 364	355 321	901 268	42 541
325413	In-vitro diagnostic substance mfg	—	6	3	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	6	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	105	38	3 067	120 751	1 774	3 331	47 037	525 483	491 758	1 010 248	18 845
32551	Paint & coating mfg	1	74	27	2 219	83 320	1 325	2 475	34 894	386 902	386 558	766 494	13 143
325510	Paint & coating mfg	1	74	27	2 219	83 320	1 325	2 475	34 894	386 902	386 558	766 494	13 143
32552	Adhesive mfg	—	31	11	848	37 431	449	856	12 143	138 581	105 200	243 754	5 702
325520	Adhesive mfg	—	31	11	848	37 431	449	856	12 143	138 581	105 200	243 754	5 702

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	162	62	8 104	274 780	5 048	9 543	116 377	1 132 796	715 802	1 859 447	43 128
32561	Soap & cleaning compound mfg	3	87	24	1 743	58 744	1 078	2 252	30 209	277 548	222 508	501 427	12 567
325611	Soap & other detergent mfg	3	38	12	767	27 612	417	834	13 306	112 519	96 693	211 021	4 765
325612	Polish & other sanitation good mfg ..	3	40	11	876	25 915	620	1 332	15 565	153 919	108 697	262 065	6 651
32562	Toilet preparation mfg ...	1	75	38	6 361	216 036	3 970	7 291	86 168	855 248	493 294	1 358 020	30 561
325620	Toilet preparation mfg .	1	75	38	6 361	216 036	3 970	7 291	86 168	855 248	493 294	1 358 020	30 561
3259	Other chemical product mfg	1	119	46	4 155	146 881	2 613	5 349	69 442	456 841	509 103	966 575	35 477
32591	Printing ink mfg	1	28	12	f	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	28	12	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	2	2	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	2	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	89	32	2 946	99 310	1 827	3 540	47 555	366 991	383 517	748 222	26 819
325991	Custom compounding of purchased resin ...	1	34	17	1 438	48 664	884	1 720	23 557	132 136	190 207	321 839	16 116
325992	Photographic film, paper, plate, & chemical mfg	2	19	6	707	20 697	559	1 086	12 577	50 335	39 901	90 992	2 165
325998	All other miscellaneous chemical product & preparation mfg	3	36	9	801	29 949	384	734	11 421	184 520	153 409	335 391	8 538
326	Plastics & rubber products mfg	2	622	310	28 194	739 118	22 532	44 357	463 624	1 956 710	1 808 320	3 747 182	165 584
3261	Plastics product mfg	2	514	267	24 496	642 575	19 643	38 508	405 743	1 691 984	1 574 369	3 242 925	153 972
32611	Unsupported plastics film, sheet, & bag mfg ..	1	78	44	3 472	99 646	2 822	5 892	63 130	257 250	354 954	606 271	25 158
326111	Unsupported plastics bag mfg	—	41	24	2 246	56 960	1 887	3 997	36 732	124 690	187 510	307 446	17 325
326113	Unsupported plastics film & sheet (except packaging) mfg	2	33	16	1 020	34 268	778	1 520	20 961	112 115	138 375	249 401	6 162
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	39	16	1 134	33 226	890	1 705	19 542	82 683	61 519	143 157	4 613
326121	Unsupported plastics profile shape mfg	3	28	12	857	25 839	694	1 322	15 590	61 605	45 433	107 172	3 504
326122	Plastics pipe & pipe fitting mfg	1	11	4	277	7 387	196	383	3 952	21 078	16 086	35 985	1 109
32613	Laminated plastics plate, sheet, & shape mfg	1	16	4	424	14 385	279	533	5 376	35 699	31 160	66 621	1 332
326130	Laminated plastics plate, sheet, & shape mfg	1	16	4	424	14 385	279	533	5 376	35 699	31 160	66 621	1 332
32614	Polystyrene foam product mfg	3	19	12	733	18 834	564	1 022	11 871	58 105	46 651	106 041	3 793
326140	Polystyrene foam product mfg	3	19	12	733	18 834	564	1 022	11 871	58 105	46 651	106 041	3 793
32615	Urethane & other foam product (except polystyrene) mfg	2	24	15	1 700	41 696	1 320	2 707	25 917	111 016	173 136	279 288	8 735
326150	Urethane & other foam product (except polystyrene) mfg	2	24	15	1 700	41 696	1 320	2 707	25 917	111 016	173 136	279 288	8 735
32616	Plastics bottle mfg	—	19	10	1 371	34 501	1 028	2 259	22 434	83 475	92 101	175 422	21 457
326160	Plastics bottle mfg	—	19	10	1 371	34 501	1 028	2 259	22 434	83 475	92 101	175 422	21 457
32619	Other plastics product mfg	3	319	166	15 662	400 287	12 740	24 390	257 473	1 063 756	814 848	1 866 125	88 884
326191	Plastics plumbing fixture mfg	7	13	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	304	157	14 702	374 085	11 927	22 630	237 215	987 358	752 718	1 727 707	84 843

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	1	108	43	3 698	96 543	2 889	5 849	57 881	264 726	233 951	504 257	11 612
32621	Tire mfg	—	23	5	374	10 847	200	474	5 056	18 302	31 572	49 801	1 060
326212	Tire retreading	—	19	4	273	7 034	121	283	2 912	10 084	26 301	36 312	D
32622	Rubber & plastics hoses & belting mfg	—	6	4	387	9 567	348	659	6 588	31 521	35 337	68 881	2 165
326220	Rubber & plastics hoses & belting mfg..	—	6	4	387	9 567	348	659	6 588	31 521	35 337	68 881	2 165
32629	Other rubber product mfg	2	79	34	2 937	76 129	2 341	4 716	46 237	214 903	167 042	385 575	8 387
326291	Rubber product mfg for mechanical use	1	38	13	1 001	25 051	821	1 711	15 762	75 939	22 995	98 540	1 750
326299	All other rubber product mfg	2	41	21	1 936	51 078	1 520	3 005	30 475	138 964	144 047	287 035	6 637
327	Nonmetallic mineral product mfg	1	379	136	10 223	294 743	7 949	15 444	205 924	785 274	670 206	1 460 879	58 796
3271	Clay product & refractory mfg	2	80	37	2 505	51 629	2 040	3 886	36 326	113 358	58 511	169 838	6 936
32711	Pottery, ceramics, & plumbing fixture mfg ...	2	62	28	2 102	41 562	1 702	3 354	29 995	89 925	46 113	133 837	5 736
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	3	3	495	12 523	394	893	10 364	27 428	11 831	39 015	2 642
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	54	24	1 553	27 671	1 259	2 352	18 679	60 082	33 302	91 434	3 034
32712	Clay building material & refractories mfg	2	18	9	403	10 067	338	532	6 331	23 433	12 398	36 001	1 200
3272	Glass & glass product mfg .	—	97	27	3 525	105 776	2 774	5 334	76 075	291 267	196 489	494 491	21 700
32721	Glass & glass product mfg	—	97	27	3 525	105 776	2 774	5 334	76 075	291 267	196 489	494 491	21 700
327212	Other pressed & blown glass & glassware mfg	1	21	3	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	3	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	1	73	21	2 035	48 974	1 490	2 798	29 931	98 489	96 235	194 538	7 846
3273	Cement & concrete product mfg	1	99	41	2 213	77 387	1 669	3 399	54 897	214 628	231 828	446 060	18 211
32732	Ready-mix concrete mfg.	—	60	27	1 282	47 371	1 000	2 106	35 997	125 887	177 989	303 810	10 872
327320	Ready-mix concrete mfg	—	60	27	1 282	47 371	1 000	2 106	35 997	125 887	177 989	303 810	10 872
32739	Other concrete product mfg	5	23	9	577	15 966	432	825	9 998	35 743	24 162	60 119	1 885
327390	Other concrete product mfg	5	23	9	577	15 966	432	825	9 998	35 743	24 162	60 119	1 885
3274	Lime & gypsum product mfg	—	21	9	580	21 291	442	918	15 238	66 078	90 415	157 330	3 396
32742	Gypsum product mfg....	—	20	9	f	D	D	D	D	D	D	D	3 396
327420	Gypsum product mfg..	—	20	9	f	D	D	D	D	D	D	D	3 396
3279	Other nonmetallic mineral product mfg	3	82	22	1 400	38 660	1 024	1 907	23 388	99 943	92 963	193 160	8 553
32791	Abrasive product mfg ...	2	18	7	463	13 053	344	650	7 332	38 687	29 568	68 175	1 552
327910	Abrasive product mfg .	2	18	7	463	13 053	344	650	7 332	38 687	29 568	68 175	1 552
32799	All other nonmetallic mineral product mfg ...	4	64	15	937	25 607	680	1 257	16 056	61 256	63 395	124 985	7 001
327999	All other miscellaneous nonmetallic mineral product mfg	2	22	7	422	12 806	284	552	7 328	28 249	40 989	69 215	3 696
331	Primary metal mfg	—	218	135	12 829	392 862	10 190	21 235	260 321	1 105 365	1 373 551	2 488 464	66 771
3311	Iron & steel mills & ferroalloy mfg	1	7	6	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	1	7	6	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3312	Steel product mfg from purchased steel	-	31	21	2 013	75 784	1 497	3 266	47 525	202 041	375 991	575 237	24 381
33121	Iron & steel pipes & tubes mfg from purchased steel	-	10	6	769	31 142	549	1 118	18 459	70 252	169 388	238 645	11 302
331210	Iron & steel pipes & tubes mfg from purchased steel	-	10	6	769	31 142	549	1 118	18 459	70 252	169 388	238 645	11 302
33122	Rolling & drawing of purchased steel	-	21	15	1 244	44 642	948	2 148	29 066	131 789	206 603	336 592	13 079
331221	Cold-rolled steel shape mfg	2	9	4	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	12	11	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	17	14	1 648	52 166	1 319	2 812	33 669	139 490	268 195	409 714	D
33131	Alumina & aluminum production & processing	-	17	14	1 648	52 166	1 319	2 812	33 669	139 490	268 195	409 714	D
331315	Aluminum sheet, plate, & foil mfg	-	4	3	339	14 531	262	492	8 530	39 357	89 544	133 741	3 306
331316	Aluminum extruded product mfg	-	9	7	952	30 910	768	1 652	20 507	78 484	148 075	223 532	D
331319	Other aluminum rolling & drawing	-	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	31	14	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	25	11	1 639	52 457	1 219	2 879	33 341	222 241	291 210	529 136	9 500
331491	Other nonferrous metal rolling, drawing, & extruding	-	8	3	815	19 303	638	1 421	12 046	87 457	93 681	188 076	2 905
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	17	8	824	33 154	581	1 458	21 295	134 784	197 529	341 060	6 595
3315	Foundries	-	132	80	6 886	186 530	5 719	11 368	130 520	462 311	257 165	714 228	19 461
33151	Ferrous metal foundries ..	-	29	23	3 201	84 759	2 774	5 466	64 332	225 189	110 653	328 770	7 157
331511	Iron foundries	-	10	8	889	23 819	771	1 547	18 318	48 915	21 401	70 429	2 078
331512	Steel investment foundries	-	9	8	1 881	48 953	1 650	3 303	37 809	150 399	68 695	212 214	2 090
331513	Steel foundries (except investment)	-	10	7	431	11 987	353	616	8 205	25 875	20 557	46 127	2 989
33152	Nonferrous metal foundries	-	103	57	3 685	101 771	2 945	5 902	66 188	237 122	146 512	385 458	12 304
331521	Aluminum die-casting foundries	1	26	17	857	23 501	722	1 421	16 476	57 394	36 407	95 267	3 677
331522	Nonferrous (except aluminum) die-casting foundries	-	19	12	918	23 668	702	1 341	15 218	74 542	43 794	117 583	4 591
331524	Aluminum foundries (except die-casting) ..	-	42	22	1 525	42 965	1 209	2 482	27 373	89 541	47 055	135 251	3 121
332	Fabricated metal product mfg	1	2 808	862	71 150	2 319 462	52 648	103 963	1 413 312	5 310 310	3 624 189	8 858 064	330 592
3321	Forging & stamping	2	152	72	4 835	182 544	3 721	8 125	118 128	427 714	388 981	804 376	32 821
33211	Forging & stamping	2	152	72	4 835	182 544	3 721	8 125	118 128	427 714	388 981	804 376	32 821
332111	Iron & steel forging ...	9	13	4	472	31 130	381	954	22 764	56 617	69 984	126 091	5 164
332112	Nonferrous forging ...	-	6	4	837	32 800	674	1 455	22 847	116 228	97 948	204 244	12 089
332114	Custom roll forming ...	1	15	11	433	14 264	308	687	8 470	30 965	42 465	73 769	D
332116	Metal stamping	1	115	52	3 007	102 695	2 299	4 972	63 137	219 995	175 712	393 173	14 211
3322	Cutlery & handtool mfg	2	82	21	1 846	51 795	1 302	2 268	26 851	124 335	89 631	213 013	6 077
33221	Cutlery & handtool mfg ...	2	82	21	1 846	51 795	1 302	2 268	26 851	124 335	89 631	213 013	6 077
332212	Hand & edge tool mfg ..	3	69	16	1 489	40 174	1 087	1 949	22 657	88 101	54 756	141 299	4 302
3323	Architectural & structural metals mfg	1	410	148	12 417	365 986	8 873	17 818	208 672	829 892	685 405	1 509 315	32 789
33231	Plate work & fabricated structural product mfg ..	1	100	39	2 872	106 041	1 856	3 851	56 218	251 432	170 175	420 391	8 713
332311	Prefabricated metal building & component mfg	1	10	6	575	17 275	288	547	7 074	37 445	35 618	73 498	936
332312	Fabricated structural metal mfg	1	71	25	1 849	74 188	1 211	2 609	40 044	167 049	98 782	263 904	6 621
332313	Plate work mfg	-	19	8	448	14 578	357	695	9 100	46 938	35 775	82 989	1 156

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg—Con.												
33232	Ornamental & architectural metal products mfg.....	1	310	109	9 545	259 945	7 017	13 967	152 454	578 460	515 230	1 088 924	24 076
332321	Metal window & door mfg.....	—	59	31	3 474	91 781	2 569	5 252	52 192	226 081	245 684	470 233	7 515
332322	Sheet metal work mfg.	2	186	65	5 105	143 011	3 736	7 356	85 547	297 595	213 612	505 687	15 157
332323	Ornamental & architectural metal work mfg.....	1	65	13	966	25 153	712	1 359	14 715	54 784	55 934	113 004	1 404
3324	Boiler, tank, & shipping container mfg.....	—	65	32	3 155	123 826	2 142	4 534	78 477	294 862	469 972	761 514	26 274
33241	Power boiler & heat exchanger mfg.....	—	19	7	644	24 695	410	673	12 951	49 047	38 014	85 071	6 469
332410	Power boiler & heat exchanger mfg.....	—	19	7	644	24 695	410	673	12 951	49 047	38 014	85 071	6 469
33242	Metal tank (heavy gauge) mfg.....	—	17	12	1 079	42 160	542	1 249	21 753	71 497	75 020	145 250	3 028
332420	Metal tank (heavy gauge) mfg.....	—	17	12	1 079	42 160	542	1 249	21 753	71 497	75 020	145 250	3 028
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	29	13	1 432	56 971	1 190	2 612	43 773	174 318	356 938	531 193	16 777
332431	Metal can mfg.....	—	10	7	856	38 296	732	1 562	31 752	127 802	308 354	436 651	13 869
332439	Other metal container mfg.....	1	19	6	576	18 675	458	1 050	12 021	46 516	48 584	94 542	2 908
3325	Hardware mfg.....	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
33251	Hardware mfg.....	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
332510	Hardware mfg.....	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
3326	Spring & wire product mfg.	1	70	29	1 672	40 289	1 315	2 629	26 338	80 345	63 951	143 734	4 206
33261	Spring & wire product mfg.....	1	70	29	1 672	40 289	1 315	2 629	26 338	80 345	63 951	143 734	4 206
332612	Spring (light gauge) mfg.....	1	18	9	461	13 467	343	736	8 551	27 238	17 128	43 930	D
332618	Other fabricated wire product mfg.....	1	49	18	1 124	24 891	909	1 750	16 511	49 331	44 206	93 543	2 641
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	1 241	243	20 673	749 286	15 945	31 324	483 112	1 530 955	738 855	2 241 586	128 730
33271	Machine shops.....	1	1 051	165	12 297	426 933	9 599	17 911	289 345	873 457	372 570	1 230 954	83 909
332710	Machine shops.....	1	1 051	165	12 297	426 933	9 599	17 911	289 345	873 457	372 570	1 230 954	83 909
33272	Turned product & screw, nut, & bolt mfg.....	—	190	78	8 376	322 353	6 346	13 413	193 767	657 498	366 285	1 010 632	44 821
332721	Precision turned product mfg.....	1	122	38	2 246	70 939	1 827	3 741	50 151	132 930	61 798	192 819	7 095
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	68	40	6 130	251 414	4 519	9 672	143 616	524 568	304 487	817 813	37 726
3328	Coating, engraving, heat treating, & allied activities.	1	453	180	10 792	285 111	8 607	16 654	181 346	581 718	224 751	807 252	31 370
33281	Coating, engraving, heat treating, & allied activities.....	1	453	180	10 792	285 111	8 607	16 654	181 346	581 718	224 751	807 252	31 370
332811	Metal heat treating....	1	46	28	1 229	43 271	913	1 865	25 375	101 464	21 279	122 767	5 213
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	116	53	2 576	71 137	2 063	4 149	45 489	164 205	83 871	248 185	10 902
332813	Electroplating, plating, polishing, anodizing, & coloring.....	2	291	99	6 987	170 703	5 631	10 640	110 482	316 049	119 601	436 300	15 255
3329	Other fabricated metal product mfg.....	—	269	98	11 969	404 053	7 914	14 938	217 037	1 169 381	751 558	1 896 968	53 611
33291	Metal valve mfg.....	—	77	45	7 043	263 670	4 224	8 007	131 875	783 075	495 104	1 259 582	38 641
332911	Industrial valve mfg....	—	19	11	1 394	62 493	819	1 489	27 856	124 672	115 294	239 599	D
332912	Fluid power valve & hose fitting mfg.....	—	35	18	2 635	113 397	1 704	3 469	58 388	307 164	131 047	433 361	16 408
332913	Plumbing fixture fitting & trim mfg.....	—	16	13	2 540	74 262	1 533	2 720	41 335	322 074	235 715	545 418	17 369
332919	Other metal valve & pipe fitting mfg.....	1	7	3	474	13 518	168	329	4 296	29 165	13 048	41 204	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg—Con.												
33299	All other fabricated metal product mfg.....	1	192	53	4 926	140 383	3 690	6 931	85 162	386 306	256 454	637 386	14 970
332991	Ball & roller bearing mfg.....	—	7	4	499	13 870	426	790	10 775	57 718	14 777	72 307	1 471
332996	Fabricated pipe & pipe fitting mfg.....	2	29	6	494	15 180	378	766	9 345	31 905	22 063	54 796	1 466
332998	Enameled iron & metal sanitary ware mfg ...	—	8	6	1 400	36 764	1 050	1 864	21 030	118 390	89 275	204 419	3 827
332999	All other miscellaneous fabricated metal product mfg.....	2	113	31	2 038	56 066	1 491	2 880	34 208	132 146	109 389	240 393	6 762
333	Machinery mfg.....	1	957	311	27 855	1 019 461	18 035	35 620	530 897	2 227 836	1 792 285	4 007 047	131 664
3331	Agriculture, construction, & mining machinery mfg....	—	36	18	1 019	39 804	625	1 277	16 747	73 462	96 808	171 546	8 148
33311	Agricultural implement mfg.....	—	8	6	424	17 725	292	596	5 896	35 705	47 025	79 923	1 833
33312	Construction machinery mfg.....	2	14	6	371	13 515	178	379	6 190	19 176	34 802	58 928	3 696
333120	Construction machinery mfg.....	2	14	6	371	13 515	178	379	6 190	19 176	34 802	58 928	3 696
3332	Industrial machinery mfg ..	2	121	41	3 124	107 962	1 780	3 435	50 395	248 806	198 851	440 843	12 137
33329	Other industrial machinery mfg.....	2	97	38	2 899	100 204	1 635	3 150	45 892	232 937	181 600	407 225	11 597
333294	Food product machinery mfg.....	2	24	10	767	22 482	478	828	11 827	48 034	40 426	88 092	3 436
333295	Semiconductor machinery mfg.....	1	7	5	425	16 260	235	480	7 427	40 532	26 273	64 220	1 225
333298	All other industrial machinery mfg.....	3	48	21	1 500	55 403	792	1 575	23 289	128 924	107 949	232 278	6 601
3333	Commercial & service industry machinery mfg ..	2	150	54	4 569	155 730	2 961	6 071	78 621	347 124	274 369	618 029	21 077
33331	Commercial & service industry machinery mfg.....	2	150	54	4 569	155 730	2 961	6 071	78 621	347 124	274 369	618 029	21 077
333314	Optical instrument & lens mfg.....	2	20	9	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg.....	3	45	13	1 115	48 287	748	1 682	26 296	67 331	69 528	137 293	4 969
333319	Other commercial & service industry machinery mfg.....	1	68	29	2 772	86 150	1 727	3 478	40 024	231 548	168 172	394 238	12 573
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	2	50	25	2 424	75 031	1 785	3 652	41 698	162 707	143 831	305 123	6 682
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	50	25	2 424	75 031	1 785	3 652	41 698	162 707	143 831	305 123	6 682
333414	Heating equipment (except warm air furnaces) mfg.....	4	11	6	941	30 484	642	1 316	14 311	71 333	49 178	117 800	2 386
333415	AC & warm air heating & commercial/ industrial refig equip mfg.....	1	27	14	1 242	37 039	958	1 946	22 994	69 038	80 590	151 315	3 903
3335	Metalworking machinery mfg.....	1	335	74	5 767	207 511	4 245	7 975	128 832	397 331	317 572	725 655	23 560
33351	Metalworking machinery mfg.....	1	335	74	5 767	207 511	4 245	7 975	128 832	397 331	317 572	725 655	23 560
333511	Industrial mold mfg ...	1	98	24	1 836	76 302	1 452	2 734	50 072	138 925	56 873	196 580	6 406
333512	Machine tool (metal cutting types) mfg ...	—	8	5	567	20 443	393	791	11 765	54 442	140 413	196 407	3 942
333513	Machine tool (metal forming types) mfg...	2	8	4	317	14 043	188	341	7 244	30 621	48 504	85 182	1 366
333514	Special die & tool, die set, jig, & fixture mfg ..	2	130	20	1 538	49 135	1 172	2 146	33 094	94 500	28 462	122 973	4 517
333515	Cutting tool & machine tool accessory mfg ..	2	75	17	1 231	37 774	884	1 696	22 606	62 256	30 522	94 889	5 965
333518	Other metalworking machinery mfg.....	2	15	4	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	—	29	11	1 912	89 995	1 265	2 631	42 600	237 885	189 256	427 012	27 138
33361	Engine, turbine, & power transmission equipment mfg.....	—	29	11	1 912	89 995	1 265	2 631	42 600	237 885	189 256	427 012	27 138
333618	Other engine equipment mfg.....	—	12	7	1 547	72 634	1 045	2 162	34 893	205 814	173 599	379 723	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	236	88	9 040	343 428	5 374	10 579	172 004	760 521	571 598	1 318 839	32 922
33391	Pump & compressor mfg	1	37	19	1 836	83 858	1 024	1 971	36 801	172 363	190 511	356 842	8 435
333911	Pump & pumping equipment mfg	—	22	11	1 283	62 886	701	1 386	27 095	118 536	145 580	260 756	5 428
333912	Air & gas compressor mfg	4	9	4	389	15 762	205	337	6 565	37 887	31 934	67 471	2 394
33392	Material handling equipment mfg	2	49	16	1 293	40 404	806	1 509	22 241	73 410	77 936	152 330	4 576
333922	Conveyor & conveying equipment mfg	1	22	10	810	25 741	485	800	13 009	38 974	40 922	81 867	1 485
33399	All other general-purpose machinery mfg	—	150	53	5 911	219 166	3 544	7 099	112 962	514 748	303 151	809 667	19 911
333991	Power-driven handtool mfg	—	10	4	301	9 456	231	463	6 171	22 911	12 650	35 251	1 140
333992	Welding & soldering equipment mfg	—	10	7	596	24 363	361	654	12 413	58 772	44 282	100 705	2 481
333993	Packaging machinery mfg	1	26	10	1 364	56 975	756	1 526	25 801	113 720	49 260	162 451	4 297
333995	Fluid power cylinder & actuator mfg	—	23	9	1 724	69 494	880	1 914	37 946	171 216	70 565	236 860	3 759
333999	All other miscellaneous general-purpose machinery mfg	1	58	19	1 586	48 153	1 102	2 088	24 875	116 332	109 295	224 388	6 031
334	Computer & electronic product mfg	1	856	359	61 598	2 952 183	28 492	55 777	884 399	7 784 696	3 843 238	11 584 681	475 076
3341	Computer & peripheral equipment mfg	3	84	34	2 796	119 586	1 295	2 790	56 687	341 609	309 458	666 981	22 862
33411	Computer & peripheral equipment mfg	3	84	34	2 796	119 586	1 295	2 790	56 687	341 609	309 458	666 981	22 862
334111	Electronic computer mfg	3	16	8	e	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	9	13	4	542	32 626	297	816	23 379	67 585	66 677	144 007	12 342
334119	Other computer peripheral equipment mfg	1	52	20	1 691	68 568	736	1 509	26 453	228 296	206 032	440 794	7 533
3342	Communications equipment mfg	—	106	57	12 494	737 432	2 697	5 151	83 860	1 957 435	1 147 962	3 060 323	128 323
33421	Telephone apparatus mfg	1	21	13	1 144	50 616	353	654	13 064	214 058	149 560	336 886	8 949
334210	Telephone apparatus mfg	1	21	13	1 144	50 616	353	654	13 064	214 058	149 560	336 886	8 949
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	61	34	10 720	666 819	2 037	3 955	64 858	1 681 192	951 106	2 612 079	117 748
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	61	34	10 720	666 819	2 037	3 955	64 858	1 681 192	951 106	2 612 079	117 748
33429	Other communications equipment mfg	2	24	10	630	19 997	307	542	5 938	62 185	47 296	111 358	1 626
334290	Other communications equipment mfg	2	24	10	630	19 997	307	542	5 938	62 185	47 296	111 358	1 626
3343	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
33431	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
334310	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
3344	Semiconductor & other electronic component mfg	1	286	139	17 889	579 128	12 950	25 924	335 826	1 316 657	782 839	2 090 905	141 527
33441	Semiconductor & other electronic component mfg	1	286	139	17 889	579 128	12 950	25 924	335 826	1 316 657	782 839	2 090 905	141 527
334411	Electron tube mfg	—	7	4	1 251	64 075	977	2 272	51 591	97 585	73 850	164 631	D
334412	Bare printed circuit board mfg	3	66	26	2 162	63 596	1 709	3 619	40 066	147 194	78 050	226 876	10 912
334413	Semiconductor & related device mfg	2	45	15	4 159	144 637	2 653	4 936	78 326	337 856	182 948	525 059	75 920
334414	Electronic capacitor mfg	—	12	8	1 010	23 625	860	1 655	14 710	49 576	21 427	70 822	3 394
334416	Electronic coil, transformer, & other inductor mfg	3	26	11	730	17 456	560	994	9 684	33 853	13 700	47 214	D
334417	Electronic connector mfg	—	22	18	2 798	90 930	2 132	4 565	52 422	204 481	108 072	313 239	13 015

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg—Con.												
334418	Printed circuit assembly (electronic assembly) mfg	—	12	10	1 719	53 799	1 247	2 426	27 436	124 031	145 457	264 769	8 855
334419	Other electronic component mfg	2	90	43	3 824	115 248	2 615	5 022	57 918	307 768	155 894	460 463	14 446
3345	Navigational, measuring, medical, & control instruments mfg	—	207	81	23 300	1 358 440	7 797	14 976	322 957	3 798 110	1 205 504	4 988 556	133 878
33451	Navigational, measuring, medical, & control instruments mfg	—	207	81	23 300	1 358 440	7 797	14 976	322 957	3 798 110	1 205 504	4 988 556	133 878
334510	Electromedical & electrotherapeutic apparatus mfg	—	18	5	1 238	77 832	448	945	12 079	396 209	84 726	465 680	11 272
334511	Search, detection, navigation, & guidance instrument mfg	—	40	21	15 327	1 015 655	3 855	7 121	213 026	2 664 903	642 027	3 302 473	89 760
334512	Automatic environmental control mfg	—	9	2	685	21 993	465	946	13 781	93 162	55 789	148 565	3 764
334513	Industrial process control instrument mfg	2	42	17	1 976	73 773	1 010	1 993	26 098	154 854	73 351	231 320	6 909
334515	Electricity measuring & testing instrument mfg	2	35	13	1 935	94 524	844	1 717	30 648	332 364	204 559	538 315	17 130
334516	Analytical laboratory instrument mfg	1	14	2	285	14 841	88	181	2 795	17 662	9 791	26 506	778
334517	Irradiation apparatus mfg	—	8	5	332	12 623	152	352	4 449	38 889	60 273	97 938	661
334518	Watch, clock, & part mfg	—	5	3	260	5 437	223	433	2 891	13 614	12 513	25 716	266
334519	Other measuring & controlling device mfg	—	32	11	1 152	37 786	619	1 167	15 618	79 916	56 444	139 515	3 142
3346	Mfg & reproducing magnetic & optical media	4	118	33	3 120	88 346	2 382	4 369	59 282	247 237	155 654	406 334	37 023
33461	Mfg & reproducing magnetic & optical media	4	118	33	3 120	88 346	2 382	4 369	59 282	247 237	155 654	406 334	37 023
334611	Software reproducing	5	7	5	294	12 303	220	460	7 763	52 552	28 447	82 020	12 140
334612	Prerecorded CD (except software), tape, & record reproducing	3	91	25	2 564	69 947	1 942	3 578	47 352	182 586	110 812	295 310	22 527
334613	Magnetic & optical recording media mfg	5	20	3	262	6 096	220	331	4 167	12 099	16 395	29 004	2 356
335	Electrical equipment, appliance, & component mfg	1	361	158	15 925	493 844	10 933	21 453	239 646	1 372 074	1 156 311	2 530 781	68 862
3351	Electric lighting equipment mfg	1	136	57	4 953	132 192	3 364	6 581	64 800	418 932	339 358	754 586	D
33512	Lighting fixture mfg	1	132	56	4 895	129 903	3 312	6 467	62 811	412 581	335 587	744 364	D
335121	Residential electric lighting fixture mfg	1	64	22	1 922	39 607	1 302	2 609	20 337	123 343	117 507	242 019	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	1	39	20	1 653	50 687	1 128	2 206	24 779	186 250	146 378	329 567	6 073
335129	Other lighting equipment mfg	—	29	14	1 320	39 609	882	1 652	17 695	102 988	71 702	172 778	4 266
3352	Household appliance mfg	—	13	8	961	24 538	730	1 436	13 736	121 847	93 272	211 191	D
33521	Small electrical appliance mfg	1	8	4	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	1	8	4	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	5	4	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	2	107	42	4 145	128 221	2 832	5 525	60 076	277 861	208 909	492 813	15 355
33531	Electrical equipment mfg	2	107	42	4 145	128 221	2 832	5 525	60 076	277 861	208 909	492 813	15 355
335311	Power, distribution, & specialty transformer mfg	6	16	6	422	11 634	303	653	7 540	25 491	24 086	49 888	1 311
335312	Motor & generator mfg	3	30	13	1 075	35 655	793	1 649	17 039	65 687	57 745	125 769	8 217
335313	Switchgear & switchboard apparatus mfg	1	23	9	1 092	30 760	827	1 619	15 576	62 224	56 491	119 925	2 488
335314	Relay & industrial control mfg	2	38	14	1 556	50 172	909	1 604	19 921	124 459	70 587	197 231	3 339
3359	Other electrical equipment & component mfg	1	105	51	5 866	208 893	4 007	7 911	101 034	553 434	514 772	1 072 191	32 490
33591	Battery mfg	—	10	6	907	30 953	732	1 629	22 137	87 505	107 518	193 149	7 136
335911	Storage battery mfg ...	—	9	6	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	6	6	264	8 612	203	417	5 908	18 831	21 463	39 382	2 280
335929	Other communication & energy wire mfg ...	—	6	6	264	8 612	203	417	5 908	18 831	21 463	39 382	2 280
33593	Wiring device mfg	—	32	14	2 138	68 141	1 536	2 937	37 852	217 335	224 997	444 449	10 906
335931	Current-carrying wiring device mfg	—	17	7	1 030	32 851	666	1 170	16 402	90 352	41 732	133 387	3 186
335932	Noncurrent-carrying wiring device mfg	—	15	7	1 108	35 290	870	1 767	21 450	126 983	183 265	311 062	7 720
33599	All other electrical equipment & component mfg	2	57	25	2 557	101 187	1 536	2 928	35 137	229 763	160 794	395 211	12 168
335999	All other miscellaneous electrical equipment & component mfg	3	54	24	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	587	257	86 062	4 139 588	44 000	84 428	1 547 514	8 358 690	8 929 715	17 828 677	552 035
3361	Motor vehicle mfg	9	9	3	e	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	9	3	2	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	9	3	2	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	54	28	3 228	87 911	2 432	4 435	51 697	607 447	1 931 594	2 537 826	40 303
33621	Motor vehicle body & trailer mfg	—	54	28	3 228	87 911	2 432	4 435	51 697	607 447	1 931 594	2 537 826	40 303
336211	Motor vehicle body mfg	—	33	17	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	1	5	3	f	D	D	D	D	D	D	D	D
336213	Motor home mfg	1	3	2	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	13	6	939	14 791	767	1 444	10 185	32 363	43 382	74 545	1 012
3363	Motor vehicle parts mfg ...	2	285	115	13 795	361 200	10 950	21 828	237 652	816 126	811 575	1 638 995	62 781
33631	Motor vehicle gasoline engine & engine parts mfg	1	64	24	2 453	59 088	1 935	3 367	34 076	134 991	105 882	239 023	10 982
336311	Carburetor, piston, piston ring, & valve mfg	1	20	11	1 007	23 920	832	1 471	14 862	45 456	24 416	69 801	2 190
336312	Gasoline engine & engine parts mfg	1	44	13	1 446	35 168	1 103	1 896	19 214	89 535	81 466	169 222	8 792
33632	Motor vehicle electrical & electronic equipment mfg	6	48	17	1 535	35 978	1 229	2 338	23 747	70 023	63 764	135 377	4 680
336322	Other motor vehicle electrical & electronic equipment mfg	6	44	15	1 356	29 613	1 095	2 080	19 501	54 555	50 866	106 803	D
33635	Motor vehicle transmission & power train parts mfg	3	28	8	586	18 762	439	821	10 044	50 154	53 442	103 654	3 423
336350	Motor vehicle transmission & power train parts mfg	3	28	8	586	18 762	439	821	10 044	50 154	53 442	103 654	3 423
33636	Motor vehicle seating & interior trim mfg	1	26	9	1 185	23 072	960	1 686	16 007	44 466	40 632	84 911	3 332
336360	Motor vehicle seating & interior trim mfg ...	1	26	9	1 185	23 072	960	1 686	16 007	44 466	40 632	84 911	3 332
33637	Motor vehicle metal stamping	7	13	7	1 448	32 888	1 210	2 982	24 720	60 044	68 945	128 903	7 576
336370	Motor vehicle metal stamping	7	13	7	1 448	32 888	1 210	2 982	24 720	60 044	68 945	128 903	7 576

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	1	92	45	6 303	181 877	4 966	10 207	123 928	432 058	453 724	897 771	31 422
336399	All other motor vehicle parts mfg	2	87	43	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	161	84	66 388	3 599 072	28 490	53 939	1 191 247	6 766 130	5 974 176	13 261 358	440 493
33641	Aerospace product & parts mfg	—	161	84	66 388	3 599 072	28 490	53 939	1 191 247	6 766 130	5 974 176	13 261 358	440 493
336411	Aircraft mfg	—	11	7	k	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	2	17	10	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	114	54	20 590	909 244	8 424	18 079	378 984	2 227 981	1 052 998	3 073 200	143 389
336414	Guided missile & space vehicle mfg ...	—	3	3	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	5	4	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	1	11	6	1 379	54 762	959	2 207	34 425	102 716	98 856	198 632	20 520
3366	Ship & boat building	6	28	9	f	D	D	D	D	D	D	D	1 640
33661	Ship & boat building	6	28	9	f	D	D	D	D	D	D	D	1 640
336611	Ship building & repairing	2	18	6	e	D	D	D	D	D	D	D	D
336612	Boat building	9	10	3	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	1	49	17	1 523	57 811	1 160	2 269	40 291	86 062	97 562	192 085	D
33699	Other transportation equipment mfg	1	49	17	1 523	57 811	1 160	2 269	40 291	86 062	97 562	192 085	D
336991	Motorcycle, bicycle, & parts mfg	2	38	13	812	22 710	588	1 202	12 193	65 901	56 058	121 707	D
336992	Military armored vehicle, tank, & tank component mfg	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	999	321	29 180	662 936	23 418	43 283	432 726	1 474 926	1 335 272	2 801 612	53 195
3371	Household & institutional furniture & kitchen cabinet mfg	2	690	188	18 740	392 184	15 293	28 405	268 115	804 217	806 323	1 607 981	28 264
33711	Wood kitchen cabinet & counter top mfg	4	175	17	1 627	39 466	1 238	2 203	24 849	71 501	51 010	122 593	2 326
337110	Wood kitchen cabinet & counter top mfg ...	4	175	17	1 627	39 466	1 238	2 203	24 849	71 501	51 010	122 593	2 326
33712	Household & institutional furniture mfg	2	515	171	17 113	352 718	14 055	26 202	243 266	732 716	755 313	1 485 388	25 938
337121	Upholstered household furniture mfg	2	158	59	5 008	106 188	4 193	8 054	77 500	208 709	237 695	450 001	4 244
337122	Nonupholstered wood household furniture mfg	3	231	70	6 787	120 964	5 838	9 911	88 131	240 186	266 282	504 589	9 184
337124	Metal household furniture mfg	1	57	24	3 239	71 677	2 497	5 379	45 478	160 701	141 257	295 833	9 138
337127	Institutional furniture mfg	1	48	16	1 926	50 871	1 404	2 638	29 956	117 777	103 059	222 433	2 951
3372	Office furniture (including fixtures) mfg	2	232	106	7 696	201 509	6 103	11 019	124 298	471 375	326 675	793 146	16 302
33721	Office furniture (including fixtures) mfg	2	232	106	7 696	201 509	6 103	11 019	124 298	471 375	326 675	793 146	16 302
337211	Wood office furniture mfg	3	41	22	1 524	28 350	1 268	2 147	18 683	56 183	39 155	90 180	2 088
337212	Custom architectural woodwork & millwork mfg	—	36	14	1 058	31 989	787	1 383	19 566	62 271	29 370	92 181	1 395
337214	Office furniture (except wood) mfg	1	30	20	1 419	44 729	1 155	2 645	33 165	130 896	106 595	237 530	5 330
337215	Showcase, partition, shelving, & locker mfg	2	125	50	3 695	96 441	2 893	4 844	52 884	222 025	151 555	373 255	7 489
3379	Other furniture related product mfg	1	77	27	2 744	69 243	2 022	3 859	40 313	199 334	202 274	400 485	8 629
33791	Mattress mfg	1	56	17	1 715	45 106	1 365	2 531	27 617	144 479	143 343	285 407	7 513
337910	Mattress mfg	1	56	17	1 715	45 106	1 365	2 531	27 617	144 479	143 343	285 407	7 513
33792	Blind & shade mfg	1	21	10	1 029	24 137	657	1 328	12 696	54 855	58 931	115 078	1 116
337920	Blind & shade mfg	1	21	10	1 029	24 137	657	1 328	12 696	54 855	58 931	115 078	1 116

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Los Angeles—Long Beach, CA PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	2	1 372	275	29 383	836 858	21 093	39 968	439 969	2 044 493	1 333 226	3 375 154	110 928
3391	Medical equipment & supplies mfg.....	1	462	71	9 432	320 391	6 287	10 665	140 360	780 341	349 293	1 131 670	47 135
33911	Medical equipment & supplies mfg.....	1	462	71	9 432	320 391	6 287	10 665	140 360	780 341	349 293	1 131 670	47 135
339111	Laboratory apparatus & furniture mfg.....	1	13	5	629	17 108	460	878	8 766	42 698	19 909	63 446	2 624
339112	Surgical & medical instrument mfg.....	2	51	15	2 303	89 113	1 328	2 093	32 269	193 556	93 406	281 979	14 740
339113	Surgical appliance & supplies mfg.....	1	66	21	2 821	98 618	2 073	3 908	40 653	227 737	129 505	352 868	12 766
339114	Dental equipment & supplies mfg.....	-	40	10	1 688	62 958	1 113	1 666	29 931	179 774	49 775	238 431	8 444
339115	Ophthalmic goods mfg.....	1	19	6	604	17 439	292	567	8 363	61 446	26 889	88 888	6 217
339116	Dental laboratories...	5	273	14	1 387	35 155	1 021	1 553	20 378	75 130	29 809	106 058	2 344
3399	Other miscellaneous mfg...	2	910	204	19 951	516 467	14 806	29 303	299 609	1 264 152	983 933	2 243 484	63 793
33991	Jewelry & silverware mfg.....	2	327	46	4 938	106 915	3 679	6 366	60 123	320 390	289 193	604 907	8 210
339911	Jewelry (except costume) mfg.....	3	257	37	3 302	73 429	2 530	3 607	39 016	214 558	248 477	463 842	7 037
339914	Costume jewelry & novelty mfg.....	1	41	6	1 399	28 996	964	2 524	18 461	93 965	24 504	113 357	816
33992	Sporting & athletic goods mfg.....	2	92	23	2 536	73 026	1 738	4 165	32 854	144 193	130 229	276 264	12 482
339920	Sporting & athletic goods mfg.....	2	92	23	2 536	73 026	1 738	4 165	32 854	144 193	130 229	276 264	12 482
33993	Doll, toy, & game mfg...	4	36	7	1 061	24 456	886	1 756	16 974	72 870	48 677	121 563	2 461
339932	Game, toy, & children's vehicle mfg.....	4	29	7	1 018	23 835	854	1 706	16 463	70 553	47 352	117 829	2 452
33994	Office supplies (except paper) mfg.....	-	51	12	1 474	51 101	1 093	2 262	39 422	143 199	123 574	257 566	16 244
339941	Pen & mechanical pencil mfg.....	-	7	2	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg.....	-	4	3	290	5 882	217	305	3 460	16 347	15 833	32 022	1 914
33995	Sign mfg.....	1	158	28	2 267	71 286	1 564	2 943	33 857	155 275	92 908	249 337	3 884
339950	Sign mfg.....	1	158	28	2 267	71 286	1 564	2 943	33 857	155 275	92 908	249 337	3 884
33999	All other miscellaneous mfg.....	2	246	88	7 675	189 683	5 846	11 811	116 379	428 225	299 352	733 847	20 512
339991	Gasket, packing, & sealing device mfg...	3	41	21	1 991	54 636	1 447	3 310	33 282	114 608	63 437	177 970	7 462
339992	Musical instrument mfg.....	1	29	4	680	17 158	515	900	8 861	28 131	26 246	56 477	1 628
339994	Broom, brush, & mop mfg.....	-	15	8	448	15 369	335	653	8 017	27 205	20 505	48 625	743
339999	All other miscellaneous mfg.....	3	142	50	4 338	97 610	3 384	6 618	63 230	246 720	181 988	431 946	10 173
	Orange County, CA PMSA												
31-33	Manufacturing....	1	5 767	1 829	215 936	7 643 649	142 728	290 020	3 654 144	21 157 753	18 055 718	39 134 147	2 173 597
311	Food mfg.....	2	254	71	8 227	219 998	6 269	12 402	140 757	947 485	1 243 559	2 192 966	75 673
3114	Fruit & vegetable preserving & specialty food mfg.....	2	25	15	2 517	64 514	2 069	4 386	47 358	248 200	518 924	774 628	27 882
31141	Frozen food mfg.....	-	12	6	1 221	22 903	1 015	2 000	16 402	84 349	101 125	185 649	3 990
311411	Frozen fruit, juice, & vegetable mfg.....	-	5	3	392	5 179	301	497	3 334	37 985	38 405	76 641	1 359
311412	Frozen specialty food mfg.....	-	7	3	829	17 724	714	1 503	13 068	46 364	62 720	109 008	2 631
31142	Fruit & vegetable canning, pickling, & drying.....	3	13	9	1 296	41 611	1 054	2 386	30 956	163 851	417 799	588 979	23 892
311421	Fruit & vegetable canning.....	7	8	6	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	3	13	7	737	27 436	467	807	13 109	129 399	219 202	348 349	5 758
31151	Dairy product (except frozen) mfg.....	3	9	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	3	5	3	548	22 945	326	604	10 081	106 492	182 799	288 777	3 833
3116	Meat product mfg.....	1	5	4	365	10 821	209	467	3 723	16 737	43 581	61 253	740
31161	Animal slaughtering & processing.....	1	5	4	365	10 821	209	467	3 723	16 737	43 581	61 253	740

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	1	139	26	2 640	63 666	1 970	3 567	42 163	274 190	148 789	422 607	20 422
31181	Bread & bakery product mfg	2	124	22	2 102	44 257	1 538	2 677	27 979	150 650	93 027	243 744	D
311811	Retail bakeries	5	96	3	479	5 617	308	360	3 125	12 143	7 744	19 908	D
311812	Commercial bakeries	2	23	14	1 219	30 275	875	1 531	17 865	116 518	57 379	173 821	10 484
311813	Frozen cakes, pies, & other pastries mfg	—	5	5	404	8 365	355	786	6 989	21 989	27 904	50 015	2 180
31182	Cookie, cracker, & pasta mfg	1	11	3	476	18 475	390	840	13 720	120 917	53 649	174 120	D
311821	Cookie & cracker mfg	—	4	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	50	17	1 823	49 947	1 451	2 977	31 932	245 695	248 669	490 990	20 406
31194	Seasoning & dressing mfg	—	10	3	308	12 050	224	518	6 633	39 286	71 281	107 250	1 662
31199	All other food mfg	1	29	11	1 281	30 917	1 066	2 213	22 418	185 833	152 795	338 125	17 719
311991	Perishable prepared food mfg	—	14	6	832	16 437	746	1 447	13 350	126 100	89 139	214 731	D
311999	All other miscellaneous food mfg	3	15	5	449	14 480	320	766	9 068	59 733	63 656	123 394	D
312	Beverage & tobacco product mfg	—	12	7	902	29 726	503	1 080	13 598	119 755	211 557	331 958	17 057
3121	Beverage mfg	—	12	7	902	29 726	503	1 080	13 598	119 755	211 557	331 958	17 057
31211	Soft drink & ice mfg	—	11	7	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	6	4	779	25 961	412	868	10 675	106 653	197 358	304 757	D
313	Textile mills	2	38	12	1 217	31 071	959	2 052	17 470	66 429	75 922	149 784	18 471
3133	Textile & fabric finishing & fabric coating mills	2	24	7	864	24 411	653	1 486	12 502	48 824	47 176	103 528	D
31331	Textile & fabric finishing mills	—	16	5	674	17 344	544	1 137	8 940	38 934	22 918	62 150	D
313311	Broadwoven fabric finishing mills	—	13	5	656	16 873	529	1 107	8 698	37 569	22 360	60 216	11 239
314	Textile product mills	—	128	36	3 628	80 926	2 711	4 990	46 930	172 977	249 548	419 929	7 365
3141	Textile furnishings mills	—	67	20	2 421	60 320	1 747	3 430	33 138	142 027	207 469	347 658	5 946
31411	Carpet & rug mills	—	9	5	1 159	34 434	716	1 475	16 032	79 046	142 606	224 613	4 241
314110	Carpet & rug mills	—	9	5	1 159	34 434	716	1 475	16 032	79 046	142 606	224 613	4 241
31412	Curtain & linen mills	—	58	15	1 262	25 886	1 031	1 955	17 106	62 981	64 863	123 045	1 705
314121	Curtain & drapery mills	1	38	5	473	9 061	358	648	5 392	18 493	13 459	31 925	596
314129	Other household textile product mills	—	20	10	789	16 825	673	1 307	11 714	44 488	51 404	91 120	1 109
3149	Other textile product mills	2	61	16	1 207	20 606	964	1 560	13 792	30 950	42 079	72 271	1 419
31491	Textile bag & canvas mills	5	23	5	356	6 233	303	471	4 215	7 598	6 505	14 113	546
31499	All other textile product mills	1	38	11	851	14 373	661	1 089	9 577	23 352	35 574	58 158	873
314999	All other miscellaneous textile product mills	—	35	10	810	13 447	629	1 025	9 028	21 419	34 336	54 992	800
315	Apparel mfg	1	405	96	8 494	160 284	6 861	11 702	95 099	425 167	401 690	821 156	25 169
3152	Cut & sew apparel mfg	1	366	84	7 673	145 878	6 166	10 434	85 319	397 616	381 156	773 340	23 530
31521	Cut & sew apparel contractors	5	257	38	2 945	30 922	2 786	4 061	27 137	58 014	11 806	69 716	2 157
315211	Men's & boys' cut & sew apparel contractors	2	22	10	541	7 258	501	870	5 655	16 153	2 541	18 652	466
315212	Women's, girls', & infants' cut & sew apparel contractors	6	235	28	2 404	23 664	2 285	3 191	21 482	41 861	9 265	51 064	1 691
31522	Men's & boys' cut & sew apparel mfg	—	31	21	1 550	44 536	920	1 681	14 597	132 270	136 009	261 341	11 859
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	13	8	f	D	D	D	D	D	D	D	7 123
315228	Men's & boys' cut & sew other outerwear mfg	—	13	9	640	22 347	379	611	6 176	87 431	82 108	162 911	4 656
31523	Women's & girls' cut & sew apparel mfg	1	69	23	3 047	67 535	2 354	4 462	41 455	201 622	230 607	433 730	9 263
315232	Women's & girls' cut & sew blouse & shirt mfg	2	17	6	e	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	1	14	4	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	35	12	1 026	25 324	659	1 205	9 086	63 415	76 890	140 692	876

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	5	32	9	675	12 082	557	1 025	7 890	23 039	16 713	39 498	D
31599	Apparel accessories & other apparel mfg	5	32	9	675	12 082	557	1 025	7 890	23 039	16 713	39 498	D
315999	Other apparel accessories & other apparel mfg	6	28	7	477	8 298	378	628	4 986	17 389	14 139	31 266	D
316	Leather & allied product mfg .	9	22	5	f	D	D	D	D	D	D	D	1 504
3169	Other leather & allied product mfg	9	15	3	545	12 224	438	922	7 346	36 724	31 359	66 633	D
31699	Other leather & allied product mfg	9	15	3	545	12 224	438	922	7 346	36 724	31 359	66 633	D
316991	Luggage mfg	9	6	2	461	10 838	368	782	6 306	33 638	29 373	61 580	1 322
321	Wood product mfg	1	93	29	1 789	39 251	1 370	2 407	25 169	78 468	132 945	212 172	3 317
3219	Other wood product mfg . . .	1	83	24	1 414	31 848	1 044	1 879	19 367	58 985	96 367	155 905	2 136
32191	Millwork	1	45	15	966	22 496	686	1 242	13 225	41 850	79 703	121 590	1 498
321911	Wood window & door mfg	2	21	5	255	7 184	168	308	4 072	17 760	17 461	35 343	670
321918	Other millwork (including flooring) . . .	3	16	5	492	9 940	330	584	5 254	15 546	7 460	23 367	386
322	Paper mfg	—	71	39	4 795	171 174	3 421	7 093	108 524	498 353	755 782	1 231 857	46 498
3221	Pulp, paper, & paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	70	38	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	28	24	2 742	97 976	2 048	4 383	65 350	259 245	388 973	650 081	29 271
322211	Corrugated & solid fiber box mfg	—	23	20	2 107	74 009	1 542	3 219	47 586	182 968	315 346	500 563	26 443
322212	Folding paperboard box mfg	—	4	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	19	7	985	29 712	549	1 124	11 919	65 917	153 183	218 177	9 728
322222	Coated & laminated paper mfg	—	15	5	f	D	D	D	D	D	D	D	8 975
32223	Stationery product mfg . . .	4	15	4	e	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	8	8	3	260	7 970	186	411	5 309	22 852	32 900	56 881	D
323	Printing & related support activities	1	699	126	11 287	359 077	7 762	14 712	201 234	783 383	500 313	1 284 533	64 067
3231	Printing & related support activities	1	699	126	11 287	359 077	7 762	14 712	201 234	783 383	500 313	1 284 533	64 067
32311	Printing	1	632	115	9 988	316 031	6 854	12 940	175 601	719 111	489 853	1 209 602	56 032
323110	Commercial lithographic printing	1	278	52	4 935	177 657	3 434	7 019	101 118	383 867	262 811	647 675	33 883
323112	Commercial flexographic printing	—	22	8	636	20 027	308	598	7 152	39 651	32 154	72 340	3 353
323113	Commercial screen printing	1	85	27	1 836	42 259	1 454	2 568	24 639	76 642	42 345	119 525	8 414
323114	Quick printing	3	157	4	687	16 314	501	792	9 944	35 643	20 235	55 809	2 318
323116	Manifold business form printing	—	15	6	397	13 667	309	578	8 413	27 776	18 574	46 029	1 073
323118	Blankbook, looseleaf binder, & device mfg	—	5	2	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	3	45	10	683	22 251	455	686	14 563	50 223	23 392	73 709	3 280
32312	Support activities for printing	2	67	11	1 299	43 046	908	1 772	25 633	64 272	10 460	74 931	8 035
323122	Prepress services	2	50	7	1 072	38 577	747	1 511	23 290	56 789	9 471	66 418	7 714
325	Chemical mfg	1	181	61	7 082	298 248	4 720	9 748	129 181	1 778 167	1 399 988	3 173 675	101 130
3254	Pharmaceutical & medicine mfg	1	52	27	4 743	205 847	3 179	6 679	81 897	1 389 441	961 290	2 345 800	77 828
32541	Pharmaceutical & medicine mfg	1	52	27	4 743	205 847	3 179	6 679	81 897	1 389 441	961 290	2 345 800	77 828
325412	Pharmaceutical preparation mfg	1	30	18	3 843	167 827	2 680	5 763	65 145	1 237 278	903 064	2 123 645	57 579
325413	In-vitro diagnostic substance mfg	—	15	7	664	28 994	366	678	12 322	125 338	31 995	169 100	11 850
3255	Paint, coating, & adhesive mfg	2	25	7	726	31 825	459	1 064	15 648	126 756	160 147	285 938	5 825
32551	Paint & coating mfg	2	15	5	557	26 102	387	909	13 503	103 680	134 549	237 661	4 438
325510	Paint & coating mfg	2	15	5	557	26 102	387	909	13 503	103 680	134 549	237 661	4 438

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	40	11	718	25 669	472	911	13 569	119 944	118 075	237 496	8 087
32561	Soap & cleaning compound mfg	2	21	6	283	9 905	167	336	4 794	35 623	60 448	96 801	3 494
32562	Toilet preparation mfg ...	5	19	5	435	15 764	305	575	8 775	84 321	57 627	140 695	4 593
325620	Toilet preparation mfg .	5	19	5	435	15 764	305	575	8 775	84 321	57 627	140 695	4 593
3259	Other chemical product mfg	4	32	8	495	16 404	333	516	8 072	73 042	79 430	152 690	6 039
32599	All other chemical product & preparation mfg	4	28	7	453	14 318	300	445	6 508	70 707	70 869	141 769	D
326	Plastics & rubber products mfg	2	311	160	18 235	464 804	14 125	27 850	297 939	1 279 371	1 012 628	2 301 476	70 446
3261	Plastics product mfg	3	280	146	15 923	408 622	12 296	24 293	264 118	1 161 327	927 977	2 098 716	66 361
32611	Unsupported plastics film, sheet, & bag mfg ..	3	21	10	855	22 063	684	1 065	12 444	72 733	71 222	143 680	5 053
326111	Unsupported plastics bag mfg	1	9	7	f	D	D	D	D	D	D	D	2 837
326113	Unsupported plastics film & sheet (except packaging) mfg	3	11	3	290	11 681	197	385	5 826	37 405	35 649	72 690	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	28	13	932	22 728	704	1 232	14 209	56 453	63 631	119 523	4 441
326121	Unsupported plastics profile shape mfg	2	16	6	291	8 205	239	520	5 621	23 306	15 437	38 472	1 032
326122	Plastics pipe & pipe fitting mfg	—	12	7	641	14 523	465	712	8 588	33 147	48 194	81 051	3 409
32613	Laminated plastics plate, sheet, & shape mfg	2	8	4	576	14 092	406	896	10 265	50 118	42 761	93 554	2 030
326130	Laminated plastics plate, sheet, & shape mfg	2	8	4	576	14 092	406	896	10 265	50 118	42 761	93 554	2 030
32615	Urethane & other foam product (except polystyrene) mfg	6	21	10	746	20 302	587	1 042	13 426	45 120	66 664	112 154	3 632
326150	Urethane & other foam product (except polystyrene) mfg	6	21	10	746	20 302	587	1 042	13 426	45 120	66 664	112 154	3 632
32616	Plastics bottle mfg	1	11	8	1 007	27 640	665	1 417	18 643	74 662	67 446	145 866	5 379
326160	Plastics bottle mfg	1	11	8	1 007	27 640	665	1 417	18 643	74 662	67 446	145 866	5 379
32619	Other plastics product mfg	3	184	98	11 686	298 552	9 161	18 454	192 984	851 964	606 362	1 463 857	45 140
326191	Plastics plumbing fixture mfg	—	12	7	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	171	91	10 517	272 138	8 136	16 445	173 144	733 720	517 697	1 255 486	44 204
3262	Rubber product mfg	—	31	14	2 312	56 182	1 829	3 557	33 821	118 044	84 651	202 760	4 085
32629	Other rubber product mfg	—	26	12	2 127	50 666	1 675	3 232	29 747	105 958	70 239	176 455	3 336
326291	Rubber product mfg for mechanical use	—	12	7	1 266	34 180	1 023	2 069	21 367	70 587	36 628	107 386	1 062
326299	All other rubber product mfg	1	14	5	861	16 486	652	1 163	8 380	35 371	33 611	69 069	2 274
327	Nonmetallic mineral product mfg	1	141	48	3 020	93 661	2 271	4 420	60 330	249 940	248 104	497 966	17 888
3271	Clay product & refractory mfg	1	26	13	812	21 436	612	1 140	13 713	54 491	21 062	75 451	5 199
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	23	13	792	20 757	597	1 108	13 239	52 995	20 287	73 175	5 049
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	18	10	599	14 853	450	821	9 737	41 178	15 792	56 865	4 623
3272	Glass & glass product mfg .	3	42	8	524	14 364	400	780	9 773	36 619	20 566	58 085	2 896
32721	Glass & glass product mfg	3	42	8	524	14 364	400	780	9 773	36 619	20 566	58 085	2 896
327215	Glass product mfg made of purchased glass	3	28	7	421	10 412	320	605	6 540	19 808	15 081	35 365	2 410
3273	Cement & concrete product mfg	2	40	18	967	32 081	785	1 580	25 167	80 683	100 917	180 785	6 549
32732	Ready-mix concrete mfg.	2	28	12	508	17 990	436	856	15 479	50 437	75 839	126 327	5 600
327320	Ready-mix concrete mfg	2	28	12	508	17 990	436	856	15 479	50 437	75 839	126 327	5 600
32739	Other concrete product mfg	—	7	4	313	9 699	238	458	6 512	14 508	11 245	26 014	395
327390	Other concrete product mfg	—	7	4	313	9 699	238	458	6 512	14 508	11 245	26 014	395

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3274	Lime & gypsum product mfg	1	8	3	315	11 544	243	480	5 829	30 407	53 831	84 480	491
32742	Gypsum product mfg	1	8	3	315	11 544	243	480	5 829	30 407	53 831	84 480	491
327420	Gypsum product mfg	1	8	3	315	11 544	243	480	5 829	30 407	53 831	84 480	491
3279	Other nonmetallic mineral product mfg	1	25	6	402	14 236	231	440	5 848	47 740	51 728	99 165	2 753
32799	All other nonmetallic mineral product mfg	1	23	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	36	18	1 582	51 700	1 252	2 762	33 675	156 368	161 772	315 842	17 373
3313	Alumina & aluminum production & processing	—	4	4	620	20 276	539	1 285	14 324	55 409	39 781	94 110	D
33131	Alumina & aluminum production & processing	—	4	4	620	20 276	539	1 285	14 324	55 409	39 781	94 110	D
331316	Aluminum extruded product mfg	—	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	2	21	9	729	21 830	553	1 186	15 302	45 943	29 195	74 156	5 177
33152	Nonferrous metal foundries	2	15	7	581	18 873	428	946	12 694	43 284	24 623	66 749	5 062
331521	Aluminum die-casting foundries	1	6	3	291	8 725	197	389	5 038	14 865	9 898	24 228	D
332	Fabricated metal product mfg	1	1 105	325	27 951	953 434	21 121	46 334	579 979	2 079 578	1 139 249	3 186 741	162 776
3321	Forging & stamping	—	62	28	2 766	89 165	2 220	5 178	61 837	185 513	116 576	302 658	10 743
33211	Forging & stamping	—	62	28	2 766	89 165	2 220	5 178	61 837	185 513	116 576	302 658	10 743
332111	Iron & steel forging	1	5	3	384	8 120	313	790	6 399	9 765	23 836	34 120	342
332112	Nonferrous forging	—	4	4	813	32 786	700	1 771	24 909	70 217	24 694	95 173	D
332116	Metal stamping	1	48	18	1 385	42 607	1 062	2 343	27 271	92 196	61 223	153 368	4 319
3322	Cutlery & handtool mfg	2	30	9	599	22 356	457	970	12 321	44 690	25 844	70 550	2 216
33221	Cutlery & handtool mfg	2	30	9	599	22 356	457	970	12 321	44 690	25 844	70 550	2 216
332212	Hand & edge tool mfg	2	27	9	572	20 880	437	935	11 867	42 002	23 872	65 935	D
3323	Architectural & structural metals mfg	1	137	60	4 113	127 822	2 976	6 042	73 904	284 359	190 081	470 849	18 798
33231	Plate work & fabricated structural product mfg	—	32	8	755	30 601	529	1 077	19 464	86 113	45 921	130 004	4 406
332312	Fabricated structural metal mfg	—	21	5	581	24 222	413	847	16 284	71 502	34 753	103 746	3 301
33232	Ornamental & architectural metal products mfg	1	105	52	3 358	97 221	2 447	4 965	54 440	198 246	144 160	340 845	14 392
332322	Sheet metal work mfg	1	76	44	2 877	84 395	2 211	4 508	48 913	168 940	113 704	280 977	13 865
332323	Ornamental & architectural metal work mfg	1	20	5	276	7 291	147	268	3 595	16 592	16 693	34 087	384
3324	Boiler, tank, & shipping container mfg	—	11	6	778	24 868	530	1 134	13 491	54 235	46 856	96 709	6 316
33242	Metal tank (heavy gauge) mfg	—	3	1	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	3	1	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	3	337	9 202	263	618	5 580	19 641	17 669	36 275	D
3325	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
33251	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
332510	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
3326	Spring & wire product mfg	2	34	12	830	21 408	620	1 142	11 555	45 766	36 044	80 755	2 504
33261	Spring & wire product mfg	2	34	12	830	21 408	620	1 142	11 555	45 766	36 044	80 755	2 504
332618	Other fabricated wire product mfg	3	21	8	621	14 297	499	914	7 919	32 182	28 633	60 784	1 499
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	577	116	9 513	356 411	7 458	18 180	234 459	770 063	343 096	1 111 587	68 833
33271	Machine shops	1	503	83	5 311	189 320	4 162	9 444	123 870	395 597	169 174	561 831	26 972
332710	Machine shops	1	503	83	5 311	189 320	4 162	9 444	123 870	395 597	169 174	561 831	26 972
33272	Turned product & screw, nut, & bolt mfg	—	74	33	4 202	167 091	3 296	8 736	110 589	374 466	173 922	549 756	41 861
332721	Precision turned product mfg	—	50	21	1 286	44 976	1 017	2 315	31 717	104 717	34 626	138 898	10 618
332722	Bolt, nut, screw, rivet, & washer mfg	—	24	12	2 916	122 115	2 279	6 421	78 872	269 749	139 296	410 858	31 243

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.													
	Orange County, CA PMSA—Con.													
	Manufacturing—Con.													
	332	Fabricated metal product mfg—Con.												
	3328	Coating, engraving, heat treating, & allied activities .	1	158	62	4 337	118 283	3 551	6 949	76 787	236 651	79 769	317 405	14 554
	33281	Coating, engraving, heat treating, & allied activities	1	158	62	4 337	118 283	3 551	6 949	76 787	236 651	79 769	317 405	14 554
	332811	Metal heat treating	—	12	6	404	14 071	335	614	9 777	38 568	6 921	45 552	4 298
	332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	2	43	14	992	27 157	814	1 574	16 662	57 687	26 317	84 258	3 398
	332813	Electroplating, plating, polishing, anodizing, & coloring	1	103	42	2 941	77 055	2 402	4 761	50 348	140 396	46 531	187 595	6 858
	3329	Other fabricated metal product mfg	1	75	22	2 522	102 487	1 550	3 280	49 251	261 046	161 323	413 673	13 867
	33291	Metal valve mfg	1	18	9	1 564	65 685	844	1 775	26 795	174 236	115 867	284 374	4 794
	332911	Industrial valve mfg	2	8	4	860	32 032	468	906	12 731	87 570	60 840	147 319	3 143
	332912	Fluid power valve & hose fitting mfg	—	8	4	f	D	D	D	D	D	D	D	D
	33299	All other fabricated metal product mfg	1	57	13	958	36 802	706	1 505	22 456	86 810	45 456	129 299	9 073
	332999	All other miscellaneous fabricated metal product mfg	—	37	8	696	27 805	514	1 118	16 795	58 894	34 456	90 990	8 191
	333	Machinery mfg	1	417	141	15 013	609 084	8 356	17 035	240 650	1 227 522	1 120 650	2 321 386	94 997
	3331	Agriculture, construction, & mining machinery mfg	—	20	5	876	35 139	412	605	8 149	123 048	88 796	207 849	1 038
	33313	Mining & oil & gas field machinery mfg	—	7	3	f	D	D	D	D	D	D	D	440
	333132	Oil & gas field machinery & equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
	3332	Industrial machinery mfg	2	68	26	2 127	78 380	1 253	2 487	32 780	157 557	167 544	315 190	10 833
	33329	Other industrial machinery mfg	2	58	25	2 037	75 804	1 204	2 428	31 806	152 013	159 950	302 086	10 548
	333293	Printing machinery & equipment mfg	—	12	4	278	14 649	157	322	4 984	31 271	18 814	49 115	914
	333295	Semiconductor machinery mfg	—	5	3	371	18 931	216	442	6 630	35 261	20 970	57 004	1 368
	333298	All other industrial machinery mfg	2	31	15	1 226	37 478	724	1 485	17 648	77 560	113 453	181 369	8 156
	3333	Commercial & service industry machinery mfg	—	71	27	3 589	167 365	1 475	3 022	41 539	238 179	338 644	573 223	37 186
	33331	Commercial & service industry machinery mfg	—	71	27	3 589	167 365	1 475	3 022	41 539	238 179	338 644	573 223	37 186
	333314	Optical instrument & lens mfg	—	20	11	1 854	98 776	600	1 203	19 508	65 102	120 788	185 608	18 228
	333315	Photographic & photocopying equipment mfg	—	11	6	1 083	44 807	479	1 003	11 161	121 932	173 099	291 535	16 443
	333319	Other commercial & service industry machinery mfg	1	32	6	383	14 147	237	478	6 793	33 819	30 047	63 038	D
	3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	23	14	1 463	47 970	974	2 077	22 865	117 288	98 549	215 132	3 609
	33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	23	14	1 463	47 970	974	2 077	22 865	117 288	98 549	215 132	3 609
	333414	Heating equipment (except warm air furnaces) mfg	3	10	5	672	18 170	463	927	7 064	52 893	32 991	85 305	1 068
	333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	6	4	515	19 433	316	759	9 843	44 148	43 021	86 823	1 694
3335	Metalworking machinery mfg	1	124	31	2 171	81 767	1 590	3 276	51 833	180 963	80 484	254 458	20 226	
33351	Metalworking machinery mfg	1	124	31	2 171	81 767	1 590	3 276	51 833	180 963	80 484	254 458	20 226	
333511	Industrial mold mfg	—	29	5	313	14 154	230	489	9 570	32 676	12 560	42 834	3 705	
333514	Special die & tool, die set, jig, & fixture mfg	2	52	14	675	25 781	525	991	17 785	45 256	23 108	67 550	2 708	
333515	Cutting tool & machine tool accessory mfg	—	33	10	998	31 746	738	1 582	20 650	81 334	35 164	117 086	13 116	

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	3	14	6	442	14 990	336	600	10 186	36 806	22 930	58 638	2 147
33361	Engine, turbine, & power transmission equipment mfg	3	14	6	442	14 990	336	600	10 186	36 806	22 930	58 638	2 147
3339	Other general-purpose machinery mfg	—	97	32	4 345	183 473	2 316	4 968	73 298	373 681	323 703	696 896	19 958
33391	Pump & compressor mfg	—	10	4	925	29 603	456	1 195	9 921	79 862	65 964	143 841	4 277
333911	Pump & pumping equipment mfg	—	6	3	801	24 846	412	1 077	8 359	71 902	57 646	127 689	4 118
33392	Material handling equipment mfg	1	17	6	586	22 916	372	815	12 141	33 060	97 491	139 681	2 763
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	8	3	382	14 619	249	520	8 113	22 971	79 505	111 862	2 166
33399	All other general-purpose machinery mfg	—	70	22	2 834	130 954	1 488	2 958	51 236	260 759	160 248	413 374	12 918
333994	Industrial process furnace & oven mfg ..	—	9	3	560	25 315	251	485	8 461	70 290	55 143	136 277	D
333995	Fluid power cylinder & actuator mfg	—	4	2	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	5	2	295	21 391	136	270	4 525	36 729	12 266	49 489	307
333999	All other miscellaneous general-purpose machinery mfg	1	35	9	654	23 865	410	822	12 568	61 218	34 136	92 370	5 571
334	Computer & electronic product mfg	1	650	289	49 383	2 174 703	25 114	55 143	733 630	6 954 981	5 589 444	12 330 873	1 165 835
3341	Computer & peripheral equipment mfg	2	95	41	8 208	416 140	2 924	7 460	103 493	1 271 159	2 487 029	3 720 445	392 591
33411	Computer & peripheral equipment mfg	2	95	41	8 208	416 140	2 924	7 460	103 493	1 271 159	2 487 029	3 720 445	392 591
334111	Electronic computer mfg	2	24	12	3 134	138 990	1 635	4 382	56 921	616 417	1 763 543	2 322 915	304 873
334112	Computer storage device mfg	3	14	7	2 051	142 795	250	623	10 864	377 150	231 078	605 317	52 150
334119	Other computer peripheral equipment mfg	—	52	22	3 000	133 330	1 030	2 435	35 283	276 106	490 812	789 041	35 476
3342	Communications equipment mfg	1	53	21	3 179	175 935	1 524	3 100	52 476	482 692	324 421	799 844	28 704
33421	Telephone apparatus mfg	1	14	8	1 826	110 474	790	1 619	30 049	322 223	208 995	527 224	18 491
334210	Telephone apparatus mfg	1	14	8	1 826	110 474	790	1 619	30 049	322 223	208 995	527 224	18 491
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	29	8	961	50 598	564	1 126	17 579	117 472	82 902	197 292	8 549
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	29	8	961	50 598	564	1 126	17 579	117 472	82 902	197 292	8 549
33429	Other communications equipment mfg	1	10	5	392	14 863	170	355	4 848	42 997	32 524	75 328	1 664
334290	Other communications equipment mfg	1	10	5	392	14 863	170	355	4 848	42 997	32 524	75 328	1 664
3343	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
33431	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
334310	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
3344	Semiconductor & other electronic component mfg	1	294	140	22 970	840 242	14 292	31 297	334 846	3 342 279	1 774 640	4 945 698	622 776

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.													
	Orange County, CA PMSA—Con.													
	Manufacturing—Con.													
	334	Computer & electronic product mfg—Con.												
	3344	Semiconductor & other electronic component mfg—Con.												
	33441	Semiconductor & other electronic component mfg	1	294	140	22 970	840 242	14 292	31 297	334 846	3 342 279	1 774 640	4 945 698	622 776
	334412	Bare printed circuit board mfg	—	96	45	6 104	171 891	4 685	10 097	117 617	469 539	281 185	747 345	98 778
	334413	Semiconductor & related device mfg ...	1	32	13	5 211	264 914	2 199	3 602	52 550	1 470 206	377 213	1 684 235	465 262
	334415	Electronic resistor mfg	—	7	5	714	22 179	443	711	11 346	42 591	52 185	94 147	4 368
	334416	Electronic coil, transformer, & other inductor mfg	2	14	4	435	10 141	360	826	6 318	23 214	16 193	38 869	981
	334417	Electronic connector mfg	—	20	12	2 887	90 627	2 201	5 774	40 115	210 615	104 938	320 606	14 762
	334418	Printed circuit assembly (electronic assembly) mfg	—	33	26	3 555	142 234	1 802	5 153	52 634	792 232	706 534	1 497 185	17 581
	334419	Other electronic component mfg	1	83	33	3 965	135 246	2 532	4 994	52 732	326 343	232 514	552 194	20 693
	3345	Navigational, measuring, medical, & control instruments mfg	—	151	66	11 359	629 025	4 292	9 055	188 814	1 476 914	675 035	2 164 645	69 972
	33451	Navigational, measuring, medical, & control instruments mfg	—	151	66	11 359	629 025	4 292	9 055	188 814	1 476 914	675 035	2 164 645	69 972
	334510	Electromedical & electrotherapeutic apparatus mfg	—	23	14	1 485	84 517	751	1 596	33 554	249 606	74 025	323 081	13 095
	334511	Search, detection, navigation, & guidance instrument mfg	—	21	8	5 013	313 767	1 547	3 238	90 710	775 386	251 382	1 042 003	41 507
	334513	Industrial process control instrument mfg	1	21	11	920	35 888	469	1 010	14 992	90 621	36 855	127 967	1 849
	334515	Electricity measuring & testing instrument mfg	3	30	11	989	52 556	530	1 175	22 924	121 014	120 975	239 268	6 140
	334516	Analytical laboratory instrument mfg	—	20	9	1 965	107 874	420	856	13 834	148 557	127 207	275 520	3 927
	334519	Other measuring & controlling device mfg	—	21	7	572	20 589	320	647	7 570	57 758	27 994	86 454	2 137
	3346	Mfg & reproducing magnetic & optical media .	1	30	10	2 218	69 869	1 350	2 689	38 786	235 940	170 329	406 381	45 450
	33461	Mfg & reproducing magnetic & optical media	1	30	10	2 218	69 869	1 350	2 689	38 786	235 940	170 329	406 381	45 450
	334612	Prerecorded CD (except software), tape, & record reproducing	3	15	5	552	17 552	448	779	13 409	84 212	52 998	137 734	10 425
	334613	Magnetic & optical recording media mfg .	—	10	3	1 553	48 780	819	1 717	22 988	130 669	107 187	237 326	D
	335	Electrical equipment, appliance, & component mfg	1	146	62	7 047	254 087	4 710	9 619	132 566	757 153	538 387	1 264 611	36 550
	3351	Electric lighting equipment mfg	1	34	13	876	21 859	627	1 200	10 899	75 843	35 245	106 413	1 837
	33511	Electric lamp bulb & part mfg	—	2	2	e	D	D	D	D	D	D	D	D
	335110	Electric lamp bulb & part mfg	—	2	2	e	D	D	D	D	D	D	D	D
	33512	Lighting fixture mfg	1	32	11	f	D	D	D	D	D	D	D	D
	335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	10	5	279	6 816	189	395	3 317	30 453	16 365	46 591	870
	3352	Household appliance mfg ..	—	8	4	726	17 672	591	1 173	9 263	64 758	38 844	104 646	1 581
	33522	Major appliance mfg	—	5	3	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	3	2	e	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	1	49	16	1 730	56 551	1 072	2 247	26 453	128 791	83 067	209 024	3 627	
33531	Electrical equipment mfg	1	49	16	1 730	56 551	1 072	2 247	26 453	128 791	83 067	209 024	3 627	
335314	Relay & industrial control mfg	—	26	10	1 363	45 259	819	1 760	20 170	103 593	65 167	166 131	2 535	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	1	55	29	3 715	158 005	2 420	4 999	85 951	487 761	381 231	844 528	29 505
33591	Battery mfg	—	3	2	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	—	3	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	4	4	297	11 836	225	444	6 039	53 214	81 855	136 777	D
335929	Other communication & energy wire mfg ...	—	4	4	297	11 836	225	444	6 039	53 214	81 855	136 777	D
33593	Wiring device mfg	3	21	8	f	D	D	D	D	D	D	D	3 061
335931	Current-carrying wiring device mfg	2	16	8	797	28 625	531	1 156	15 502	60 755	30 027	91 266	2 878
33599	All other electrical equipment & component mfg	1	27	15	1 987	90 267	1 089	2 352	40 494	289 888	208 621	472 467	22 613
335999	All other miscellaneous electrical equipment & component mfg	1	26	14	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	225	88	18 992	781 018	11 869	22 736	350 521	1 151 417	1 575 013	2 980 000	135 143
3361	Motor vehicle mfg	7	14	5	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	7	13	5	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	7	10	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	107	42	5 817	149 004	4 576	8 758	90 171	283 575	313 716	596 701	30 943
33631	Motor vehicle gasoline engine & engine parts mfg	2	21	7	473	15 676	322	557	6 834	26 189	27 459	52 259	2 422
336312	Gasoline engine & engine parts mfg	2	19	6	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	26	10	2 180	52 814	1 751	3 786	35 218	107 508	56 517	159 322	10 476
336322	Other motor vehicle electrical & electronic equipment mfg	2	24	10	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	4	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	4	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	6	3	336	10 500	230	483	4 962	22 594	13 475	35 601	502
336360	Motor vehicle seating & interior trim mfg ...	—	6	3	336	10 500	230	483	4 962	22 594	13 475	35 601	502
33639	Other motor vehicle parts mfg	4	35	15	1 938	47 961	1 524	2 366	28 547	112 857	140 173	253 102	14 179
336399	All other motor vehicle parts mfg	4	35	15	1 938	47 961	1 524	2 366	28 547	112 857	140 173	253 102	14 179
3364	Aerospace product & parts mfg	—	45	23	10 915	561 773	5 669	10 820	216 522	707 537	1 058 807	2 018 276	97 227
33641	Aerospace product & parts mfg	—	45	23	10 915	561 773	5 669	10 820	216 522	707 537	1 058 807	2 018 276	97 227
336411	Aircraft mfg	—	2	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	5	2	e	D	D	D	D	D	D	D	985
336413	Other aircraft part & auxiliary equipment mfg	—	36	18	2 971	110 618	1 959	3 723	56 874	226 137	122 448	356 980	D
336414	Guided missile & space vehicle mfg ...	—	1	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	23	6	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	23	6	f	D	D	D	D	D	D	D	D
336612	Boat building.....	2	16	5	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	5	23	9	868	23 193	570	1 076	12 858	55 353	47 238	102 961	D
33699	Other transportation equipment mfg	5	23	9	868	23 193	570	1 076	12 858	55 353	47 238	102 961	D
336991	Motorcycle, bicycle, & parts mfg	5	20	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Orange County, CA PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	248	81	9 876	264 366	7 988	16 181	179 231	827 143	499 755	1 318 374	24 402
3371	Household & institutional furniture & kitchen cabinet mfg	1	166	46	5 025	127 216	4 154	8 479	84 311	350 276	263 230	606 660	9 172
33711	Wood kitchen cabinet & counter top mfg	1	74	8	899	23 564	688	1 495	14 233	81 618	64 482	146 304	3 861
337110	Wood kitchen cabinet & counter top mfg ...	1	74	8	899	23 564	688	1 495	14 233	81 618	64 482	146 304	3 861
33712	Household & institutional furniture mfg	1	92	38	4 126	103 652	3 466	6 984	70 078	268 658	198 748	460 356	5 311
337121	Upholstered household furniture mfg	-	23	6	792	21 668	664	1 470	15 125	88 515	59 252	147 642	886
337122	Nonupholstered wood household furniture mfg	5	41	14	1 285	23 308	1 131	2 209	17 908	49 548	47 834	95 448	1 941
337124	Metal household furniture mfg	-	4	2	e	D	D	D	D	D	D	D	D
337125	Household furniture (except wood & metal) mfg	-	3	1	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	14	10	1 082	36 965	817	1 661	21 510	76 599	31 004	101 315	1 595
337129	Wood television, radio, & sewing machine cabinet mfg	-	7	5	381	6 542	339	640	4 616	15 243	20 063	35 696	379
3372	Office furniture (including fixtures) mfg	1	63	28	3 578	110 213	2 851	5 504	78 611	365 617	142 221	506 366	10 156
33721	Office furniture (including fixtures) mfg	1	63	28	3 578	110 213	2 851	5 504	78 611	365 617	142 221	506 366	10 156
337211	Wood office furniture mfg	4	14	7	650	17 488	522	1 014	11 635	36 462	20 664	56 635	1 062
337212	Custom architectural woodwork & millwork mfg	2	10	3	346	7 177	268	333	5 104	13 697	6 880	20 668	303
337214	Office furniture (except wood) mfg	-	11	6	1 557	56 679	1 263	2 747	43 749	258 499	70 899	329 274	4 516
337215	Showcase, partition, shelving, & locker mfg	2	28	12	1 025	28 869	798	1 410	18 123	56 959	43 778	99 789	4 275
3379	Other furniture related product mfg	2	19	7	1 273	26 937	983	2 198	16 309	111 250	94 304	205 348	5 074
33792	Blind & shade mfg	2	9	6	1 145	23 561	879	1 949	14 076	97 080	76 390	173 933	D
337920	Blind & shade mfg	2	9	6	1 145	23 561	879	1 949	14 076	97 080	76 390	173 933	D
339	Miscellaneous mfg	1	573	134	16 652	586 932	10 740	20 516	255 369	1 541 715	1 107 043	2 645 508	86 487
3391	Medical equipment & supplies mfg	-	256	62	9 856	396 288	5 827	12 122	164 610	1 127 501	748 209	1 871 683	67 964
33911	Medical equipment & supplies mfg	-	256	62	9 856	396 288	5 827	12 122	164 610	1 127 501	748 209	1 871 683	67 964
339111	Laboratory apparatus & furniture mfg	-	9	4	952	47 600	278	559	10 474	101 203	78 551	175 262	8 075
339112	Surgical & medical instrument mfg	1	61	21	2 672	107 684	1 487	3 050	38 231	171 318	167 424	342 060	14 053
339113	Surgical appliance & supplies mfg	-	47	22	2 976	118 078	1 919	3 656	47 677	435 372	315 035	749 896	26 822
339114	Dental equipment & supplies mfg	-	18	5	864	40 592	504	1 134	20 090	193 477	60 034	244 326	4 690
339115	Ophthalmic goods mfg	1	9	5	1 072	44 421	763	1 618	23 331	177 532	111 514	295 083	12 684
339116	Dental laboratories ...	3	112	5	1 320	37 913	876	2 105	24 807	48 599	15 651	65 056	1 640
3399	Other miscellaneous mfg ..	2	317	72	6 796	190 644	4 913	8 394	90 759	414 214	358 834	773 825	18 523
33991	Jewelry & silverware mfg	-	25	3	539	14 348	383	810	7 397	29 142	24 736	53 829	1 081
33992	Sporting & athletic goods mfg	1	103	23	2 332	65 157	1 658	2 877	28 812	160 616	173 231	334 003	6 381
339920	Sporting & athletic goods mfg	1	103	23	2 332	65 157	1 658	2 877	28 812	160 616	173 231	334 003	6 381
33994	Office supplies (except paper) mfg	1	15	3	252	5 276	206	296	3 828	11 525	16 212	27 634	896
33995	Sign mfg	2	86	11	1 002	27 725	670	1 146	14 916	47 906	32 570	80 591	1 973
339950	Sign mfg	2	86	11	1 002	27 725	670	1 146	14 916	47 906	32 570	80 591	1 973
33999	All other miscellaneous mfg	3	70	29	2 438	72 573	1 808	2 889	32 426	152 279	102 813	255 952	7 852
339991	Gasket, packing, & sealing device mfg ...	3	15	9	900	30 468	644	1 242	16 013	63 570	30 873	94 097	2 217
339999	All other miscellaneous mfg	3	48	17	1 336	37 269	990	1 290	12 854	79 814	60 917	142 232	5 285

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA												
31-33	Manufacturing	1	3 412	1 107	109 582	3 159 516	83 254	164 000	1 977 072	9 494 407	9 875 342	19 354 632	850 161
311	Food mfg	2	177	55	6 822	178 682	4 886	10 121	115 228	927 312	1 226 693	2 159 063	74 556
3111	Animal food mfg	2	12	8	526	20 427	310	650	9 290	73 457	258 276	333 443	4 267
31111	Animal food mfg	2	12	8	526	20 427	310	650	9 290	73 457	258 276	333 443	4 267
311119	Other animal food mfg	2	11	7	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	19	4	684	9 585	390	674	7 026	21 381	23 254	45 513	3 541
31134	Nonchocolate confectionery mfg	2	9	2	425	4 325	164	341	2 643	9 900	6 651	17 292	2 142
311340	Nonchocolate confectionery mfg ...	2	9	2	425	4 325	164	341	2 643	9 900	6 651	17 292	2 142
3114	Fruit & vegetable preserving & specialty food mfg	3	18	12	2 144	48 592	1 437	2 978	33 960	194 850	240 805	435 437	28 431
31141	Frozen food mfg	5	5	5	1 474	26 872	898	1 847	20 546	115 607	122 743	238 402	10 574
311411	Frozen fruit, juice, & vegetable mfg	6	3	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	13	7	670	21 720	539	1 131	13 414	79 243	118 062	197 035	17 857
311421	Fruit & vegetable canning	-	10	5	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	5	13	5	552	23 322	389	943	14 286	67 016	319 984	388 106	5 515
31151	Dairy product (except frozen) mfg	5	11	5	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	6	4	4	371	14 222	279	731	9 319	40 792	254 474	296 332	D
3116	Meat product mfg	8	16	2	348	7 393	279	467	4 737	17 440	39 902	57 422	755
31161	Animal slaughtering & processing	8	16	2	348	7 393	279	467	4 737	17 440	39 902	57 422	755
311611	Animal (except poultry) slaughtering	8	7	2	252	5 622	212	358	3 618	10 854	30 383	41 300	392
3118	Bakeries & tortilla mfg	1	71	11	1 294	27 012	1 042	2 122	19 179	110 196	72 593	182 843	13 258
31181	Bread & bakery product mfg	2	61	7	580	11 048	415	703	6 838	32 695	24 312	56 904	D
31183	Tortilla mfg	-	5	2	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	5	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	22	11	1 173	39 244	972	2 162	25 424	430 739	230 237	662 149	17 687
31191	Snack food mfg	-	7	3	706	25 615	583	1 336	15 604	94 256	115 601	210 556	D
311919	Other snack food mfg .	-	6	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	20	8	752	21 391	392	721	9 815	92 551	151 167	244 848	9 647
3121	Beverage mfg	1	20	8	752	21 391	392	721	9 815	92 551	151 167	244 848	9 647
31211	Soft drink & ice mfg	-	11	5	537	17 022	309	628	8 291	78 128	135 462	213 462	6 348
312111	Soft drink mfg	-	4	3	441	15 220	249	533	7 564	73 688	130 713	204 274	5 899
313	Textile mills	3	19	3	422	9 137	373	781	6 748	17 884	15 207	32 994	2 304
3133	Textile & fabric finishing & fabric coating mills	3	15	3	412	8 995	364	769	6 630	17 643	14 886	32 434	D
31331	Textile & fabric finishing mills	3	12	2	349	8 077	310	719	6 054	15 264	13 650	28 828	D
313311	Broadwoven fabric finishing mills	3	11	2	e	D	D	D	D	D	D	D	2 213
314	Textile product mills	6	60	12	812	16 135	625	1 071	8 959	44 103	38 209	79 699	2 142
3149	Other textile product mills ..	6	41	10	701	13 932	526	895	7 332	41 611	35 418	74 415	2 102
31491	Textile bag & canvas mills	7	21	5	351	7 849	244	406	3 545	28 657	25 316	51 419	1 459
314912	Canvas & related product mills	8	17	4	276	6 309	184	306	2 683	25 874	22 336	45 656	1 386
31499	All other textile product mills	3	20	5	350	6 083	282	489	3 787	12 954	10 102	22 996	643
314999	All other miscellaneous textile product mills ..	3	20	5	350	6 083	282	489	3 787	12 954	10 102	22 996	643
315	Apparel mfg	4	73	10	858	10 317	777	1 297	8 351	17 426	16 518	33 684	D
3152	Cut & sew apparel mfg	4	62	9	782	9 030	717	1 195	7 456	15 647	14 349	29 628	D
31521	Cut & sew apparel contractors	8	48	6	640	6 540	602	1 002	5 892	10 340	1 457	11 773	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	9	45	4	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	14	3	355	7 514	279	562	4 281	20 194	16 759	37 105	D
3169	Other leather & allied product mfg	-	8	1	252	5 707	196	435	3 154	15 051	7 690	22 295	D
31699	Other leather & allied product mfg	-	8	1	252	5 707	196	435	3 154	15 051	7 690	22 295	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	2	136	50	5 208	123 675	4 402	8 605	84 914	302 116	380 554	677 117	12 640
3212	Veneer, plywood, & engineered wood product mfg	—	25	14	1 181	29 875	975	2 018	19 589	71 947	80 602	152 688	2 310
32121	Veneer, plywood, & engineered wood product mfg	—	25	14	1 181	29 875	975	2 018	19 589	71 947	80 602	152 688	2 310
321214	Truss mfg	—	21	11	1 090	27 077	898	1 864	18 090	61 994	62 841	124 240	1 810
3219	Other wood product mfg	2	102	35	3 953	92 164	3 363	6 459	64 075	226 442	296 137	516 888	9 978
32191	Millwork	4	38	11	983	20 055	842	1 558	14 398	55 029	106 127	155 892	3 745
321911	Wood window & door mfg	9	10	3	292	7 078	217	451	4 450	24 837	41 007	63 711	1 018
321912	Cut stock, resawing lumber, & planing	—	11	4	493	9 519	455	885	7 214	23 466	57 745	78 042	2 368
32192	Wood container & pallet mfg	4	29	5	390	7 790	331	637	5 751	20 215	23 100	42 883	1 170
321920	Wood container & pallet mfg	4	29	5	390	7 790	331	637	5 751	20 215	23 100	42 883	1 170
32199	All other wood product mfg	1	35	19	2 580	64 319	2 190	4 264	43 926	151 198	166 910	318 113	5 063
321991	Manufactured home (mobile home) mfg	—	9	9	1 616	45 372	1 407	2 718	30 663	98 967	130 901	230 503	1 651
321999	All other miscellaneous wood product mfg	—	20	8	771	14 242	639	1 269	10 297	42 520	22 716	64 517	2 870
322	Paper mfg	1	47	33	2 293	79 922	1 739	3 743	49 685	216 848	332 548	549 868	19 097
3222	Converted paper product mfg	1	45	31	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	24	15	972	31 947	765	1 680	20 999	71 260	141 693	212 104	7 469
322211	Corrugated & solid fiber box mfg	—	11	8	533	18 582	417	920	11 701	40 562	113 750	153 666	5 154
322212	Folding paperboard box mfg	2	7	6	347	10 968	267	605	7 490	24 542	19 741	44 072	2 111
32222	Paper bag & coated & treated paper mfg	—	6	6	344	12 973	244	562	7 002	41 174	58 122	100 358	4 127
32223	Stationery product mfg	—	5	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	3	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	4	10	8	516	13 685	405	829	9 269	39 316	54 783	94 441	2 164
322299	All other converted paper product mfg	2	8	6	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	301	45	4 346	113 905	3 317	5 799	74 517	298 878	223 656	523 528	16 394
3231	Printing & related support activities	2	301	45	4 346	113 905	3 317	5 799	74 517	298 878	223 656	523 528	16 394
32311	Printing	2	275	38	3 398	95 705	2 492	4 402	60 068	259 927	213 539	474 802	15 111
323110	Commercial lithographic printing	2	124	19	1 903	56 581	1 418	2 566	34 919	146 523	125 467	271 710	7 489
323114	Quick printing	3	76	3	402	8 711	296	408	5 384	19 056	9 792	28 847	1 431
323116	Manifold business form printing	1	13	8	576	18 592	406	792	12 678	68 710	62 319	132 947	1 534
32312	Support activities for printing	5	26	7	948	18 200	825	1 397	14 449	38 951	10 117	48 726	1 283
323121	Tradebinding & related work	4	14	6	836	13 156	743	1 214	10 984	25 483	7 074	32 212	720
324	Petroleum & coal products mfg	2	17	3	324	15 734	263	566	11 945	72 431	113 097	185 344	3 237
3241	Petroleum & coal products mfg	2	17	3	324	15 734	263	566	11 945	72 431	113 097	185 344	3 237
32412	Asphalt paving, roofing, & saturated materials mfg	3	15	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	115	39	2 987	100 925	1 846	3 750	53 036	513 797	436 076	958 654	32 792
3251	Basic chemical mfg	—	16	7	471	19 416	304	639	11 139	131 327	106 856	248 594	8 335
32518	Other basic inorganic chemical mfg	—	9	4	288	13 470	192	393	8 373	38 269	74 321	124 793	D
325188	All other basic inorganic chemical mfg	—	9	4	288	13 470	192	393	8 373	38 269	74 321	124 793	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	4	10	6	335	12 641	200	508	6 422	60 058	76 228	136 089	4 179
32521	Resin & synthetic rubber mfg	4	10	6	335	12 641	200	508	6 422	60 058	76 228	136 089	4 179
325211	Plastics material & resin mfg	3	8	6	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	-	10	3	617	24 003	391	808	12 908	137 580	64 403	199 982	9 181
32541	Pharmaceutical & medicine mfg	-	10	3	617	24 003	391	808	12 908	137 580	64 403	199 982	9 181
325412	Pharmaceutical preparation mfg	-	5	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	30	9	621	18 670	345	648	8 435	85 463	88 514	175 083	3 264
32551	Paint & coating mfg	1	24	6	363	11 351	222	446	6 072	58 511	63 190	124 517	1 958
325510	Paint & coating mfg	1	24	6	363	11 351	222	446	6 072	58 511	63 190	124 517	1 958
32552	Adhesive mfg	-	6	3	258	7 319	123	202	2 363	26 952	25 324	50 566	1 306
325520	Adhesive mfg	-	6	3	258	7 319	123	202	2 363	26 952	25 324	50 566	1 306
3256	Soap, cleaning compound, & toilet preparation mfg ..	6	20	5	507	13 042	339	604	6 979	42 043	47 961	90 515	3 272
32561	Soap & cleaning compound mfg	7	10	2	262	7 140	180	330	3 735	14 720	26 712	41 742	1 549
3259	Other chemical product mfg	1	25	6	330	11 040	190	393	5 565	42 610	44 330	85 837	2 233
32599	All other chemical product & preparation mfg	1	23	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	253	141	13 116	353 584	10 594	20 569	231 875	1 070 866	984 009	2 054 018	94 587
3261	Plastics product mfg	1	217	123	11 986	324 335	9 722	18 883	213 642	961 891	876 470	1 837 408	90 063
32611	Unsupported plastics film, sheet, & bag mfg ..	-	17	13	967	26 961	770	1 640	16 894	91 472	123 033	211 083	6 170
326111	Unsupported plastics bag mfg	-	8	6	405	10 248	338	770	6 309	37 804	43 400	80 381	3 734
326113	Unsupported plastics film & sheet (except packaging) mfg	-	9	7	562	16 713	432	870	10 585	53 668	79 633	130 702	2 436
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	14	4	378	11 133	294	582	6 868	40 263	58 999	92 175	3 235
32613	Laminated plastics plate, sheet, & shape mfg	1	6	2	320	9 032	257	405	4 832	23 147	17 873	41 141	1 854
326130	Laminated plastics plate, sheet, & shape mfg	1	6	2	320	9 032	257	405	4 832	23 147	17 873	41 141	1 854
32614	Polystyrene foam product mfg	1	8	5	707	20 708	604	1 285	15 848	89 802	87 419	177 591	6 595
326140	Polystyrene foam product mfg	1	8	5	707	20 708	604	1 285	15 848	89 802	87 419	177 591	6 595
32615	Urethane & other foam product (except polystyrene) mfg	3	14	10	962	21 528	817	1 619	16 861	72 385	88 721	158 304	3 424
326150	Urethane & other foam product (except polystyrene) mfg	3	14	10	962	21 528	817	1 619	16 861	72 385	88 721	158 304	3 424
32616	Plastics bottle mfg	2	15	13	1 093	31 884	913	1 879	24 488	114 476	136 673	250 597	22 782
326160	Plastics bottle mfg	2	15	13	1 093	31 884	913	1 879	24 488	114 476	136 673	250 597	22 782
32619	Other plastics product mfg	-	143	76	7 559	203 089	6 067	11 473	127 851	530 346	363 752	906 517	46 003
326191	Plastics plumbing fixture mfg	-	10	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	132	73	7 032	190 773	5 657	10 482	120 127	494 708	321 115	828 910	44 743
3262	Rubber product mfg	1	36	18	1 130	29 249	872	1 686	18 233	108 975	107 539	216 610	4 524
32621	Tire mfg	-	11	4	295	8 813	213	429	5 559	54 323	56 267	110 859	1 165
32629	Other rubber product mfg	2	22	14	821	20 076	647	1 235	12 377	53 005	50 112	102 965	3 262
326291	Rubber product mfg for mechanical use	4	7	6	429	9 869	383	749	6 978	24 817	10 759	35 555	1 911
326299	All other rubber product mfg	2	15	8	392	10 207	264	486	5 399	28 188	39 353	67 410	1 351

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	190	80	7 203	234 062	5 494	11 235	158 438	749 029	571 444	1 332 011	76 948
3271	Clay product & refractory mfg	1	30	15	1 236	30 198	923	1 906	18 465	65 439	34 768	103 223	2 550
32711	Pottery, ceramics, & plumbing fixture mfg ...	2	18	7	740	17 091	556	1 127	10 056	32 954	15 387	48 130	1 414
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	2	16	6	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	12	8	496	13 107	367	779	8 409	32 485	19 381	55 093	1 136
327123	Other structural clay product mfg	—	6	6	308	8 347	229	503	5 354	15 581	14 406	34 148	486
3272	Glass & glass product mfg .	—	16	3	366	14 019	295	604	10 968	56 354	26 926	82 909	D
32721	Glass & glass product mfg	—	16	3	366	14 019	295	604	10 968	56 354	26 926	82 909	D
3273	Cement & concrete product mfg	1	115	52	4 709	161 257	3 586	7 396	109 469	508 593	440 800	954 720	66 207
32731	Cement mfg	—	6	5	852	41 428	646	1 369	27 791	181 323	179 150	362 647	37 902
327310	Cement mfg	—	6	5	852	41 428	646	1 369	27 791	181 323	179 150	362 647	37 902
32732	Ready-mix concrete mfg .	5	48	12	1 075	35 349	778	1 613	25 091	99 889	117 909	217 934	9 836
327320	Ready-mix concrete mfg	5	48	12	1 075	35 349	778	1 613	25 091	99 889	117 909	217 934	9 836
32733	Concrete pipe, brick, & block mfg	2	25	16	1 035	29 299	833	1 625	20 490	58 536	51 536	112 741	3 819
327331	Concrete block & brick mfg	3	14	8	436	10 415	333	718	6 487	33 446	23 190	56 357	1 726
327332	Concrete pipe mfg	1	11	8	599	18 884	500	907	14 003	25 090	28 346	56 384	2 093
32739	Other concrete product mfg	—	36	19	1 747	55 181	1 329	2 789	36 097	168 845	92 205	261 398	14 650
327390	Other concrete product mfg	—	36	19	1 747	55 181	1 329	2 789	36 097	168 845	92 205	261 398	14 650
3279	Other nonmetallic mineral product mfg	2	24	9	f	D	D	D	D	D	D	D	6 398
32799	All other nonmetallic mineral product mfg ...	2	16	4	546	19 370	425	877	14 521	71 595	35 920	107 487	5 426
327993	Mineral wool mfg	2	4	3	434	16 392	358	744	12 666	51 509	28 829	80 161	4 532
331	Primary metal mfg	—	60	28	3 408	143 790	2 828	6 300	105 007	486 994	979 740	1 459 937	76 990
3311	Iron & steel mills & ferroalloy mfg	—	5	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	5	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	5	2	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	9	6	399	15 923	330	686	9 558	36 934	85 806	120 583	D
3313	Alumina & aluminum production & processing ..	—	13	11	888	31 827	741	2 010	22 385	102 767	270 474	368 664	6 801
33131	Alumina & aluminum production & processing	—	13	11	888	31 827	741	2 010	22 385	102 767	270 474	368 664	6 801
331314	Secondary smelting & alloying of aluminum .	—	6	6	395	14 469	332	750	9 076	74 578	208 953	276 713	D
331316	Aluminum extruded product mfg	—	6	4	e	D	D	D	D	D	D	D	D
3315	Foundries	—	23	9	f	D	D	D	D	D	D	D	2 216
33152	Nonferrous metal foundries	1	16	7	590	14 417	488	1 033	9 482	37 214	19 717	57 924	2 095
331524	Aluminum foundries (except die-casting) ..	—	8	4	438	10 874	383	803	7 178	26 616	15 007	42 602	1 894
332	Fabricated metal product mfg	—	701	206	17 466	537 578	13 386	26 889	341 788	1 243 913	1 460 379	2 681 553	200 896
3321	Forging & stamping	—	43	18	1 481	56 347	1 121	2 466	33 413	144 248	211 875	347 442	8 356
33211	Forging & stamping	—	43	18	1 481	56 347	1 121	2 466	33 413	144 248	211 875	347 442	8 356
332111	Iron & steel forging ...	—	4	3	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	24	8	408	14 890	289	647	8 301	33 502	31 179	64 730	1 828
3322	Cutlery & handtool mfg	1	20	10	770	21 536	562	948	11 712	53 591	42 496	98 206	D
33221	Cutlery & handtool mfg ..	1	20	10	770	21 536	562	948	11 712	53 591	42 496	98 206	D
332211	Cutlery & flatware (except precious) mfg	—	3	2	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	4	14	7	427	10 211	308	496	5 981	19 168	14 924	34 292	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	—	146	59	5 058	137 321	3 865	7 707	85 332	318 807	393 073	711 874	11 537
33231	Plate work & fabricated structural product mfg . .	1	52	18	1 693	50 983	1 315	2 718	33 332	124 078	141 194	265 680	3 945
332311	Prefabricated metal building & component mfg	—	10	7	584	15 926	459	971	10 551	37 570	44 359	84 141	1 694
332312	Fabricated structural metal mfg	2	33	9	833	25 551	670	1 343	17 162	64 712	74 887	137 336	1 537
332313	Plate work mfg	—	9	2	276	9 506	186	404	5 619	21 796	21 948	44 203	714
33232	Ornamental & architectural metal products mfg	—	94	41	3 365	86 338	2 550	4 989	52 000	194 729	251 879	446 194	7 592
332321	Metal window & door mfg	—	26	14	1 458	33 034	1 182	2 138	20 066	73 358	77 653	150 635	2 260
332322	Sheet metal work mfg	—	54	24	1 642	44 541	1 190	2 488	26 864	102 970	122 148	224 934	4 764
332323	Ornamental & architectural metal work mfg	—	14	3	265	8 763	178	363	5 070	18 401	52 078	70 625	568
3324	Boiler, tank, & shipping container mfg	1	26	11	1 060	44 510	817	1 785	31 318	85 406	284 182	366 214	13 580
33242	Metal tank (heavy gauge) mfg	—	6	4	409	15 368	287	648	8 765	38 059	33 324	72 441	D
332420	Metal tank (heavy gauge) mfg	—	6	4	409	15 368	287	648	8 765	38 059	33 324	72 441	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	15	5	505	24 933	420	945	19 867	39 369	243 353	278 299	11 066
332431	Metal can mfg	—	7	4	393	22 022	335	764	17 709	31 835	234 105	261 643	10 886
3325	Hardware mfg	1	20	7	721	18 953	569	1 124	11 321	40 436	29 125	69 057	4 984
33251	Hardware mfg	1	20	7	721	18 953	569	1 124	11 321	40 436	29 125	69 057	4 984
332510	Hardware mfg	1	20	7	721	18 953	569	1 124	11 321	40 436	29 125	69 057	4 984
3326	Spring & wire product mfg	—	27	7	703	19 102	446	929	11 563	86 467	53 421	138 482	3 618
33261	Spring & wire product mfg	—	27	7	703	19 102	446	929	11 563	86 467	53 421	138 482	3 618
332618	Other fabricated wire product mfg	—	19	6	578	14 536	358	748	8 708	52 475	43 113	94 571	3 136
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	304	52	3 784	120 298	3 029	5 808	83 027	225 713	121 548	345 556	18 636
33271	Machine shops	2	258	32	2 453	80 012	1 967	3 546	53 653	154 820	64 052	218 575	10 658
332710	Machine shops	2	258	32	2 453	80 012	1 967	3 546	53 653	154 820	64 052	218 575	10 658
33272	Turned product & screw, nut, & bolt mfg	—	46	20	1 331	40 286	1 062	2 262	29 374	70 893	57 496	126 981	7 978
332721	Precision turned product mfg	—	36	16	1 126	34 194	893	1 901	25 081	61 251	50 622	110 441	7 712
3328	Coating, engraving, heat treating, & allied activities	—	52	22	1 450	44 008	1 234	2 708	32 361	112 101	172 641	276 793	D
33281	Coating, engraving, heat treating, & allied activities	—	52	22	1 450	44 008	1 234	2 708	32 361	112 101	172 641	276 793	D
332812	Metal coating engraving (exc jewelry/silverware)/ allied services	—	25	14	1 061	33 740	913	2 146	25 949	90 522	163 797	246 372	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	26	8	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	63	20	2 439	75 503	1 743	3 414	41 741	177 144	152 018	327 929	10 117
33291	Metal valve mfg	—	13	8	1 044	35 528	729	1 459	20 054	88 437	78 389	165 792	6 693
332912	Fluid power valve & hose fitting mfg	—	3	2	e	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	4	4	519	13 969	430	911	9 518	45 265	44 440	88 838	D
33299	All other fabricated metal product mfg	1	50	12	1 395	39 975	1 014	1 955	21 687	88 707	73 629	162 137	3 424
332999	All other miscellaneous fabricated metal product mfg	1	32	9	1 038	27 493	795	1 499	16 227	52 900	63 435	116 670	2 308

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	2	297	72	6 254	207 999	4 397	8 930	118 800	462 061	386 816	849 525	30 640
3331	Agriculture, construction, & mining machinery mfg.	2	21	4	268	9 866	158	311	4 209	20 756	21 600	41 720	D
3332	Industrial machinery mfg	6	29	6	619	26 774	353	760	11 853	52 017	41 046	90 779	3 920
33329	Other industrial machinery mfg	6	25	5	461	23 087	249	516	9 883	45 679	37 218	80 559	D
333298	All other industrial machinery mfg	8	13	3	291	16 412	156	341	7 146	35 892	24 646	59 092	3 347
3333	Commercial & service industry machinery mfg	1	37	12	883	27 306	568	1 062	13 277	60 870	65 122	126 641	3 802
33331	Commercial & service industry machinery mfg	1	37	12	883	27 306	568	1 062	13 277	60 870	65 122	126 641	3 802
333319	Other commercial & service industry machinery mfg	1	22	7	586	16 480	387	718	7 822	30 951	48 003	80 404	1 898
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	24	10	1 605	47 034	1 294	2 883	31 280	104 518	113 678	222 222	7 618
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	24	10	1 605	47 034	1 294	2 883	31 280	104 518	113 678	222 222	7 618
333414	Heating equipment (except warm air furnaces) mfg	1	6	3	443	11 008	335	649	5 820	23 415	22 084	47 443	1 095
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	11	5	954	26 211	804	1 914	19 554	58 730	69 621	128 988	5 593
3335	Metalworking machinery mfg	2	114	18	1 226	43 591	945	1 851	30 567	81 834	31 710	112 385	6 067
33351	Metalworking machinery mfg	2	114	18	1 226	43 591	945	1 851	30 567	81 834	31 710	112 385	6 067
333511	Industrial mold mfg	1	53	9	569	21 753	452	878	16 002	38 388	14 821	52 474	3 819
333514	Special die & tool, die set, jig, & fixture mfg	4	39	6	419	14 679	327	628	10 189	27 960	9 391	37 038	1 526
3339	Other general-purpose machinery mfg	1	68	21	1 605	52 294	1 044	2 006	26 877	139 925	111 808	251 739	8 155
33391	Pump & compressor mfg	—	10	4	455	18 321	305	655	10 003	60 083	48 953	109 042	3 440
333911	Pump & pumping equipment mfg	—	5	3	e	D	D	D	D	D	D	D	3 068
33399	All other general-purpose machinery mfg	2	45	13	933	24 726	586	1 025	11 903	61 929	42 833	104 330	3 338
333999	All other miscellaneous general-purpose machinery mfg	2	16	5	354	6 611	204	305	3 024	13 645	11 189	24 746	1 314
334	Computer & electronic product mfg	1	151	54	6 618	201 547	4 307	7 919	81 755	531 247	352 462	884 320	52 658
3341	Computer & peripheral equipment mfg	4	20	4	761	16 873	568	1 209	11 209	37 120	108 895	145 499	4 607
33411	Computer & peripheral equipment mfg	4	20	4	761	16 873	568	1 209	11 209	37 120	108 895	145 499	4 607
334119	Other computer peripheral equipment mfg	4	13	3	687	14 721	536	1 148	9 803	32 420	102 856	134 332	3 919
3342	Communications equipment mfg	—	14	7	976	35 380	439	871	10 098	110 220	46 348	155 719	3 822
33429	Other communications equipment mfg	—	8	4	666	22 309	279	534	6 264	80 176	30 615	109 817	2 048
334290	Other communications equipment mfg	—	8	4	666	22 309	279	534	6 264	80 176	30 615	109 817	2 048
3344	Semiconductor & other electronic component mfg	—	62	27	3 894	116 749	2 691	4 738	46 313	307 550	149 210	458 270	41 502
33441	Semiconductor & other electronic component mfg	—	62	27	3 894	116 749	2 691	4 738	46 313	307 550	149 210	458 270	41 502
334412	Bare printed circuit board mfg	2	9	4	265	8 792	192	357	4 083	26 554	15 625	41 553	2 084
334413	Semiconductor & related device mfg	—	7	4	1 112	32 788	630	1 208	12 437	123 088	78 867	202 241	D
334415	Electronic resistor mfg	—	3	3	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	8	5	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	4	22	7	592	22 024	336	608	5 620	15 105	14 213	32 170	942

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	3	43	13	828	27 423	537	959	12 427	63 228	31 694	95 307	2 185
33451	Navigational, measuring, medical, & control instruments mfg	3	43	13	828	27 423	537	959	12 427	63 228	31 694	95 307	2 185
335	Electrical equipment, appliance, & component mfg	—	51	19	2 233	61 959	1 804	3 453	38 062	244 013	173 306	415 731	4 809
3351	Electric lighting equipment mfg	—	15	9	1 294	33 724	1 077	2 291	23 207	157 093	103 401	260 169	2 419
33512	Lighting fixture mfg	—	15	9	1 294	33 724	1 077	2 291	23 207	157 093	103 401	260 169	2 419
335129	Other lighting equipment mfg	—	6	5	1 008	27 770	860	1 910	19 733	138 218	86 451	224 488	D
3359	Other electrical equipment & component mfg	—	13	7	633	18 615	512	787	10 000	41 271	48 421	91 541	1 518
336	Transportation equipment mfg	1	211	97	11 161	324 839	9 028	17 134	227 250	715 514	1 185 826	1 894 346	65 069
3362	Motor vehicle body & trailer mfg	—	45	26	4 126	102 160	3 447	6 751	76 776	264 353	506 897	768 936	9 492
33621	Motor vehicle body & trailer mfg	—	45	26	4 126	102 160	3 447	6 751	76 776	264 353	506 897	768 936	9 492
336211	Motor vehicle body mfg	1	16	8	718	18 240	606	1 159	12 844	40 571	71 512	111 269	D
336213	Motor home mfg	—	3	3	1 670	36 368	1 424	2 986	30 356	127 227	260 554	385 324	D
336214	Travel trailer & camper mfg	1	23	14	1 649	45 347	1 337	2 436	31 718	93 555	167 139	261 649	2 666
3363	Motor vehicle parts mfg ...	4	82	37	3 648	91 059	2 930	5 436	58 113	208 680	259 463	466 797	23 222
33632	Motor vehicle electrical & electronic equipment mfg	1	11	3	416	9 323	340	588	6 642	15 705	41 190	57 182	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	10	3	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	7	3	448	12 080	283	559	4 959	17 459	13 962	32 152	2 198
336350	Motor vehicle transmission & power train parts mfg	—	7	3	448	12 080	283	559	4 959	17 459	13 962	32 152	2 198
33639	Other motor vehicle parts mfg	6	35	22	2 251	52 959	1 874	3 495	35 816	129 414	161 184	287 602	13 127
336399	All other motor vehicle parts mfg	6	35	22	2 251	52 959	1 874	3 495	35 816	129 414	161 184	287 602	13 127
3364	Aerospace product & parts mfg	—	38	20	2 248	100 773	1 723	2 949	70 807	168 812	345 102	512 457	D
33641	Aerospace product & parts mfg	—	38	20	2 248	100 773	1 723	2 949	70 807	168 812	345 102	512 457	D
336412	Aircraft engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	2	32	18	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	3	13	4	502	13 265	413	909	9 946	28 179	30 857	58 983	D
33661	Ship & boat building	3	13	4	502	13 265	413	909	9 946	28 179	30 857	58 983	D
336612	Boat building	3	9	4	479	12 543	392	868	9 365	26 889	29 896	56 732	D
3369	Other transportation equipment mfg	2	25	7	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	2	25	7	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	251	88	9 444	200 244	7 357	14 301	136 043	423 784	446 515	884 714	18 656
3371	Household & institutional furniture & kitchen cabinet mfg	—	178	51	6 543	134 738	5 500	10 880	96 292	269 149	290 211	572 092	12 699
33711	Wood kitchen cabinet & counter top mfg	1	77	7	1 220	26 857	825	1 645	15 600	59 884	34 565	94 773	1 696
337110	Wood kitchen cabinet & counter top mfg ...	1	77	7	1 220	26 857	825	1 645	15 600	59 884	34 565	94 773	1 696

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Riverside—San Bernardino, CA PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3371	Household & institutional furniture & kitchen cabinet mfg—Con.												
33712	Household & institutional furniture mfg	-	101	44	5 323	107 881	4 675	9 235	80 692	209 265	255 646	477 319	11 003
337121	Upholstered household furniture mfg	-	25	13	2 172	47 494	1 934	3 786	38 239	95 369	118 816	213 602	1 567
337122	Nonupholstered wood household furniture mfg	-	46	18	2 028	36 454	1 777	3 644	26 042	66 941	94 919	175 537	7 267
337127	Institutional furniture mfg	-	16	7	698	14 910	608	1 161	10 083	31 299	25 659	56 479	1 085
3372	Office furniture (including fixtures) mfg	3	58	29	2 472	54 445	1 541	2 804	32 629	116 682	125 563	243 736	4 234
33721	Office furniture (including fixtures) mfg	3	58	29	2 472	54 445	1 541	2 804	32 629	116 682	125 563	243 736	4 234
337212	Custom architectural woodwork & millwork mfg	-	9	5	285	7 769	171	323	5 059	14 168	10 607	25 203	378
337214	Office furniture (except wood) mfg	9	9	7	896	13 434	416	776	9 358	34 952	41 526	76 803	1 959
337215	Showcase, partition, shelving, & locker mfg	-	31	15	1 096	29 031	801	1 385	15 178	59 234	66 726	126 694	1 580
3379	Other furniture related product mfg	1	15	8	429	11 061	316	617	7 122	37 953	30 741	68 886	1 723
339	Miscellaneous mfg	-	268	61	7 500	216 577	5 160	10 254	110 575	1 043 446	384 361	1 416 573	55 211
3391	Medical equipment & supplies mfg	-	111	22	3 287	103 363	2 040	4 460	46 362	763 517	146 798	905 373	11 221
33911	Medical equipment & supplies mfg	-	111	22	3 287	103 363	2 040	4 460	46 362	763 517	146 798	905 373	11 221
339112	Surgical & medical instrument mfg	-	19	7	g	D	D	D	D	D	D	D	2 471
339113	Surgical appliance & supplies mfg	-	21	12	1 643	48 746	992	1 893	20 309	148 299	94 259	242 121	8 258
3399	Other miscellaneous mfg ..	1	157	39	4 213	113 214	3 120	5 794	64 213	279 929	237 563	511 200	43 990
33992	Sporting & athletic goods mfg	1	41	10	948	20 349	744	1 334	11 630	66 336	45 085	107 595	6 998
339920	Sporting & athletic goods mfg	1	41	10	948	20 349	744	1 334	11 630	66 336	45 085	107 595	6 998
33993	Doll, toy, & game mfg ...	-	9	3	262	7 663	199	322	3 495	17 771	9 003	26 872	592
339932	Game, toy, & children's vehicle mfg	-	7	3	e	D	D	D	D	D	D	D	592
33994	Office supplies (except paper) mfg	1	11	3	269	7 256	137	218	2 523	16 291	13 365	29 410	195
33995	Sign mfg	1	40	8	537	13 928	357	619	7 577	22 241	13 671	35 906	846
339950	Sign mfg	1	40	8	537	13 928	357	619	7 577	22 241	13 671	35 906	846
33999	All other miscellaneous mfg	-	46	15	2 140	62 990	1 638	3 239	38 349	154 739	154 809	307 238	35 274
339991	Gasket, packing, & sealing device mfg ...	1	10	4	515	18 611	343	746	10 278	40 821	21 032	60 369	D
339992	Musical instrument mfg	-	5	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	27	8	1 047	29 418	740	1 358	14 059	96 921	118 932	214 963	26 584
	Ventura, CA PMSA												
31-33	Manufacturing	1	1 008	321	33 562	1 136 298	22 137	45 077	555 545	3 352 437	2 860 860	6 163 377	232 091
311	Food mfg	5	61	20	1 357	29 206	1 151	1 857	22 092	104 347	112 164	216 465	11 519
3114	Fruit & vegetable preserving & specialty food mfg	6	10	7	573	15 920	477	890	11 826	63 049	77 962	139 969	4 521
31141	Frozen food mfg	7	6	4	421	11 756	363	647	9 020	46 654	64 560	112 233	3 874
311411	Frozen fruit, juice, & vegetable mfg	7	6	4	421	11 756	363	647	9 020	46 654	64 560	112 233	3 874
3118	Bakeries & tortilla mfg	1	31	5	324	7 008	279	536	5 682	20 809	10 417	30 145	D
31181	Bread & bakery product mfg	1	28	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Ventura, CA PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	-	20	5	684	12 517	598	1 277	8 179	33 873	39 972	73 012	D
3152	Cut & sew apparel mfg	-	17	5	681	12 472	595	1 273	8 144	33 768	39 903	72 839	D
31522	Men's & boys' cut & sew apparel mfg	-	4	2	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	6	1 082	44 121	873	1 817	33 942	247 278	350 696	590 336	19 812
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	4	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	5	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	1	e	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	89	16	1 057	32 470	753	1 421	19 501	87 690	47 390	134 568	8 731
3231	Printing & related support activities	-	89	16	1 057	32 470	753	1 421	19 501	87 690	47 390	134 568	8 731
32311	Printing	-	83	16	1 031	31 562	745	1 410	19 332	85 915	46 979	132 380	8 712
323110	Commercial lithographic printing	-	35	7	440	15 580	293	596	9 287	42 577	23 729	66 062	5 507
325	Chemical mfg	2	33	14	1 607	67 392	560	1 099	19 744	165 473	87 211	247 132	18 536
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	1	1	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	1	12	4	636	22 517	179	280	3 999	72 085	34 063	105 208	5 411
32562	Toilet preparation mfg	1	9	4	630	22 385	174	274	3 924	71 560	33 615	104 226	5 384
325620	Toilet preparation mfg	1	9	4	630	22 385	174	274	3 924	71 560	33 615	104 226	5 384
326	Plastics & rubber products mfg	1	55	30	2 529	74 519	1 961	4 078	40 467	180 618	103 897	282 457	7 720
3261	Plastics product mfg	1	52	29	g	D	D	D	D	D	D	D	7 631
32619	Other plastics product mfg	1	41	24	2 103	63 532	1 642	3 324	34 445	152 729	86 389	237 299	6 718
326199	All other plastics product mfg	-	39	23	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	28	15	1 124	31 866	831	1 768	20 467	74 852	78 907	155 439	5 343
3273	Cement & concrete product mfg	1	11	6	301	11 175	180	352	6 096	23 027	30 057	53 469	3 410
3279	Other nonmetallic mineral product mfg	-	9	7	f	D	D	D	D	D	D	D	1 844
32791	Abrasive product mfg	-	5	4	300	8 299	228	457	4 474	29 488	20 731	50 590	1 127
327910	Abrasive product mfg	-	5	4	300	8 299	228	457	4 474	29 488	20 731	50 590	1 127
32799	All other nonmetallic mineral product mfg	-	4	3	e	D	D	D	D	D	D	D	717
327993	Mineral wool mfg	-	3	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	6	307	7 701	259	417	5 149	16 359	11 717	28 426	283
3315	Foundries	-	9	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	189	48	3 479	122 981	2 379	4 965	64 080	296 307	161 471	458 872	17 530
3322	Cutlery & handtool mfg	-	13	6	607	23 740	268	575	7 274	55 369	28 587	86 857	4 648
33221	Cutlery & handtool mfg	-	13	6	607	23 740	268	575	7 274	55 369	28 587	86 857	4 648
332212	Hand & edge tool mfg	-	11	4	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	28	15	704	21 859	505	1 125	12 446	44 676	39 748	84 770	4 395
33232	Ornamental & architectural metal products mfg	-	20	11	585	18 177	430	983	10 644	38 169	30 276	68 696	4 113
332321	Metal window & door mfg	-	3	3	282	8 126	203	504	4 337	18 734	17 594	36 431	1 363
332322	Sheet metal work mfg	1	14	7	269	9 384	201	426	5 923	17 686	11 279	29 111	2 701

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	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Ventura, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	100	10	952	34 123	731	1 441	19 951	66 789	23 971	90 571	4 943
33271	Machine shops	3	94	9	772	24 365	608	1 139	16 716	43 223	19 087	62 564	4 740
332710	Machine shops	3	94	9	772	24 365	608	1 139	16 716	43 223	19 087	62 564	4 740
3329	Other fabricated metal product mfg	—	17	6	564	20 141	409	874	11 652	59 375	16 977	75 901	1 214
33299	All other fabricated metal product mfg	—	13	5	394	13 600	293	620	7 838	38 730	12 203	51 118	858
333	Machinery mfg	1	95	31	3 704	138 777	2 279	4 575	64 752	381 706	337 698	722 764	19 887
3332	Industrial machinery mfg ..	—	20	6	815	27 361	473	957	11 122	54 464	51 204	108 655	5 992
33329	Other industrial machinery mfg	—	17	6	788	26 508	456	920	10 650	52 908	49 203	104 886	5 923
333293	Printing machinery & equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	5	2	356	9 438	301	643	6 581	13 911	10 523	23 925	D
3333	Commercial & service industry machinery mfg ..	7	15	4	446	15 682	261	603	6 839	31 639	52 091	85 064	4 982
33331	Commercial & service industry machinery mfg	7	15	4	446	15 682	261	603	6 839	31 639	52 091	85 064	4 982
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	3	453	17 171	228	449	6 269	47 198	30 825	77 822	1 070
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	8	3	453	17 171	228	449	6 269	47 198	30 825	77 822	1 070
333414	Heating equipment (except warm air furnaces) mfg	—	2	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	21	5	798	37 359	593	1 231	21 047	143 625	135 225	279 299	1 469
33351	Metalworking machinery mfg	—	21	5	798	37 359	593	1 231	21 047	143 625	135 225	279 299	1 469
333512	Machine tool (metal cutting types) mfg ...	—	3	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	22	10	834	29 233	486	866	12 318	73 409	49 133	122 957	3 731
33399	All other general-purpose machinery mfg	—	17	7	661	23 595	371	669	9 650	60 773	36 647	98 083	3 382
333999	All other miscellaneous general-purpose machinery mfg	—	12	6	593	20 362	323	584	8 074	55 463	32 443	87 421	3 274
334	Computer & electronic product mfg	—	154	68	10 583	395 195	6 479	13 887	171 572	1 239 745	1 108 679	2 314 221	101 123
3341	Computer & peripheral equipment mfg	4	26	9	1 482	52 940	764	1 496	18 699	100 045	139 781	233 631	11 610
33411	Computer & peripheral equipment mfg	4	26	9	1 482	52 940	764	1 496	18 699	100 045	139 781	233 631	11 610
334119	Other computer peripheral equipment mfg	3	18	7	1 037	38 933	415	643	10 168	68 935	105 327	172 246	9 584
3342	Communications equipment mfg	—	27	15	1 476	69 160	639	1 247	19 455	106 485	117 638	226 363	8 977
33421	Telephone apparatus mfg	1	6	2	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	6	2	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	17	11	1 029	41 168	513	984	14 407	60 111	56 585	118 170	5 292
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	17	11	1 029	41 168	513	984	14 407	60 111	56 585	118 170	5 292
3343	Audio & video equipment mfg	1	6	2	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	1	6	2	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	1	6	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Ventura, CA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	63	27	4 280	159 924	2 485	5 329	63 892	387 247	316 294	709 441	53 386
33441	Semiconductor & other electronic component mfg	1	63	27	4 280	159 924	2 485	5 329	63 892	387 247	316 294	709 441	53 386
334413	Semiconductor & related device mfg ...	—	16	7	1 274	66 831	640	1 598	26 240	126 923	75 871	206 170	41 800
334418	Printed circuit assembly (electronic assembly) mfg	7	5	3	373	8 740	233	401	3 951	14 458	28 313	47 047	D
334419	Other electronic component mfg	—	26	9	1 858	56 741	1 034	2 156	17 650	167 948	183 904	350 536	6 559
3345	Navigational, measuring, medical, & control instruments mfg	—	28	11	1 213	54 747	668	1 497	20 922	322 197	337 431	625 434	8 002
33451	Navigational, measuring, medical, & control instruments mfg	—	28	11	1 213	54 747	668	1 497	20 922	322 197	337 431	625 434	8 002
334515	Electricity measuring & testing instrument mfg	—	4	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	8	4	530	24 656	255	607	7 938	51 898	37 654	91 061	2 054
3346	Mfg & reproducing magnetic & optical media .	—	4	4	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	4	4	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	3	3	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	29	15	1 445	49 939	859	1 904	18 983	123 955	105 598	225 673	3 415
3351	Electric lighting equipment mfg	—	9	5	659	18 299	403	883	6 355	55 780	46 655	100 029	478
33512	Lighting fixture mfg	—	8	5	f	D	D	D	D	D	D	D	478
335129	Other lighting equipment mfg	—	4	3	529	16 047	291	662	4 779	50 328	44 447	92 764	D
3353	Electrical equipment mfg ..	—	9	5	425	13 469	292	651	8 225	33 777	22 885	55 117	1 344
33531	Electrical equipment mfg	—	9	5	425	13 469	292	651	8 225	33 777	22 885	55 117	1 344
3359	Other electrical equipment & component mfg	7	11	5	361	18 171	164	370	4 403	34 398	36 058	70 527	1 593
33599	All other electrical equipment & component mfg	8	6	3	e	D	D	D	D	D	D	D	1 243
335999	All other miscellaneous electrical equipment & component mfg	8	6	3	e	D	D	D	D	D	D	D	1 243
336	Transportation equipment mfg	1	45	15	1 462	51 611	895	1 781	26 263	166 452	174 435	337 446	D
3363	Motor vehicle parts mfg ...	4	21	8	687	21 501	420	904	11 799	56 631	38 480	93 923	D
33639	Other motor vehicle parts mfg	5	4	3	262	6 807	179	315	4 443	21 991	7 584	30 247	D
336399	All other motor vehicle parts mfg	5	4	3	262	6 807	179	315	4 443	21 991	7 584	30 247	D
3364	Aerospace product & parts mfg	—	16	5	687	28 251	398	741	13 052	106 631	132 822	237 186	D
33641	Aerospace product & parts mfg	—	16	5	687	28 251	398	741	13 052	106 631	132 822	237 186	D
336411	Aircraft mfg	—	1	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	14	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	34	6	613	12 315	471	877	7 783	28 358	20 799	48 814	553
3371	Household & institutional furniture & kitchen cabinet mfg	—	28	5	564	10 724	431	798	6 800	25 755	19 090	44 500	478
33712	Household & institutional furniture mfg	—	14	4	474	8 130	360	664	5 334	22 503	16 527	38 725	143
337122	Nonupholstered wood household furniture mfg	—	7	1	307	4 639	279	506	3 538	11 455	8 763	20 313	68

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES—RIVERSIDE—ORANGE COUNTY, CA CMSA—Con.												
	Ventura, CA PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	115	22	2 103	56 764	1 438	2 666	26 149	186 133	89 652	277 902	7 510
3391	Medical equipment & supplies mfg.....	1	59	12	941	31 547	553	954	11 683	108 033	41 522	151 706	3 915
33911	Medical equipment & supplies mfg.....	1	59	12	941	31 547	553	954	11 683	108 033	41 522	151 706	3 915
339113	Surgical appliance & supplies mfg.....	—	13	4	498	17 242	283	449	5 543	76 368	25 581	103 779	2 427
3399	Other miscellaneous mfg ..	1	56	10	1 162	25 217	885	1 712	14 466	78 100	48 130	126 196	3 595
33992	Sporting & athletic goods mfg.....	1	15	2	473	9 290	396	832	6 352	17 519	16 760	34 185	1 274
339920	Sporting & athletic goods mfg.....	1	15	2	473	9 290	396	832	6 352	17 519	16 760	34 185	1 274
33999	All other miscellaneous mfg.....	1	15	4	322	8 815	239	485	4 895	45 284	19 075	64 467	1 501
	MERCED, CA MSA												
31-33	Manufacturing	1	123	51	8 381	198 183	6 660	13 568	146 654	665 306	1 869 859	2 431 480	73 832
311	Food mfg.....	1	28	15	4 600	101 367	3 904	8 118	81 784	391 099	1 229 652	1 609 603	52 110
3114	Fruit & vegetable preserving & specialty food mfg.....	3	6	5	1 779	42 893	1 482	3 297	33 949	166 479	248 887	411 723	D
31141	Frozen food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	3	5	4	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	3	4	3	f	D	D	D	D	D	D	D	7 019
3115	Dairy product mfg.....	—	6	5	707	22 121	547	1 220	18 415	114 983	654 409	763 641	22 187
31151	Dairy product (except frozen) mfg.....	—	6	5	707	22 121	547	1 220	18 415	114 983	654 409	763 641	22 187
311513	Cheese mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	3	3	3	519	12 040	264	449	6 296	41 672	385 885	343 914	D
3121	Beverage mfg.....	3	3	3	519	12 040	264	449	6 296	41 672	385 885	343 914	D
31211	Soft drink & ice mfg.....	9	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	9	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	—	9	2	f	D	D	D	D	D	D	D	D
32311	Printing.....	—	9	2	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	17	8	798	18 799	540	1 040	11 457	59 132	29 649	86 866	1 685
3323	Architectural & structural metals mfg.....	—	5	4	508	10 595	291	587	4 980	17 511	17 151	33 059	923
33232	Ornamental & architectural metal products mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
332321	Metal window & door mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	13	8	476	13 643	404	718	9 605	29 703	41 743	69 994	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MODESTO, CA MSA													
31-33	Manufacturing	1	435	163	25 056	823 113	18 871	38 437	524 340	3 081 137	3 829 750	6 886 621	170 399
311	Food mfg	1	74	46	11 227	346 263	9 449	19 779	257 424	1 661 747	2 009 195	3 682 675	93 364
3111	Animal food mfg	—	13	7	422	16 258	254	609	7 696	43 511	364 378	408 137	5 377
31111	Animal food mfg	—	13	7	422	16 258	254	609	7 696	43 511	364 378	408 137	5 377
311119	Other animal food mfg	—	13	7	422	16 258	254	609	7 696	43 511	364 378	408 137	5 377
3113	Sugar & confectionery product mfg	3	3	2	g	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	3	2	2	g	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans	3	2	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	13	11	4 882	157 948	4 312	8 808	121 798	659 896	542 032	1 214 057	25 948
31141	Frozen food mfg	—	2	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	11	10	h	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	6	6	3 240	110 108	2 951	6 450	92 815	566 792	405 924	978 982	22 510
311423	Dried & dehydrated food mfg	—	3	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	15	10	862	32 545	682	1 506	23 842	88 570	422 296	508 319	8 437
31151	Dairy product (except frozen) mfg	1	12	9	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	12	9	2 589	54 614	2 310	4 764	45 174	319 533	241 935	562 242	6 593
31161	Animal slaughtering & processing	1	12	9	2 589	54 614	2 310	4 764	45 174	319 533	241 935	562 242	6 593
311615	Poultry processing	—	4	4	2 293	45 678	2 074	4 228	39 294	299 308	177 489	477 501	5 646
3119	Other food mfg	—	9	5	1 065	32 452	776	1 696	20 515	198 412	185 027	391 815	18 857
31191	Snack food mfg	—	4	4	1 008	31 181	734	1 629	19 724	193 592	178 600	380 568	D
311911	Roasted nuts & peanut butter mfg	—	2	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	5	5	h	D	D	D	D	D	D	D	3 023
3121	Beverage mfg	—	5	5	h	D	D	D	D	D	D	D	3 023
31213	Wineries	—	2	2	h	D	D	D	D	D	D	D	D
312130	Wineries	—	2	2	h	D	D	D	D	D	D	D	D
321	Wood product mfg	3	29	16	1 299	30 283	1 081	2 005	21 423	87 938	133 386	220 478	4 517
3219	Other wood product mfg	3	21	12	1 062	24 809	896	1 647	17 751	74 084	108 806	181 999	3 549
32192	Wood container & pallet mfg	—	11	5	271	5 668	237	483	3 927	24 188	27 448	51 155	D
321920	Wood container & pallet mfg	—	11	5	271	5 668	237	483	3 927	24 188	27 448	51 155	D
32199	All other wood product mfg	4	7	4	699	17 627	583	1 068	12 753	46 791	74 860	121 329	2 738
321991	Manufactured home (mobile home) mfg	4	2	2	e	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	9	3	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	8	8	1 324	57 691	1 085	2 396	44 788	257 886	306 812	574 333	17 847
3222	Converted paper product mfg	—	8	8	1 324	57 691	1 085	2 396	44 788	257 886	306 812	574 333	17 847
32221	Paperboard container mfg	—	5	5	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	4	735	34 546	568	1 383	25 837	56 370	152 766	212 318	D
32229	Other converted paper product mfg	—	2	2	e	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	31	6	483	13 557	363	660	9 478	37 018	18 246	55 089	2 360
3231	Printing & related support activities	5	31	6	483	13 557	363	660	9 478	37 018	18 246	55 089	2 360
32311	Printing	5	30	5	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	17	4	251	7 042	181	344	4 614	15 721	8 909	24 687	1 375
326	Plastics & rubber products mfg	2	20	7	502	13 551	379	815	8 818	55 298	41 543	97 184	5 297
3261	Plastics product mfg	1	14	6	355	10 408	277	596	6 859	47 458	34 025	81 716	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MODESTO, CA MSA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	17	5	1 103	38 078	926	1 967	31 447	75 471	88 509	161 987	5 478
3272	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	86	29	2 485	84 604	1 909	3 628	59 136	181 405	319 600	499 393	15 025
3323	Architectural & structural metals mfg	—	26	15	958	29 082	675	1 277	17 079	61 018	72 290	133 138	2 437
33231	Plate work & fabricated structural product mfg	1	8	4	368	11 332	259	419	6 565	28 768	37 362	66 388	523
332312	Fabricated structural metal mfg	1	6	2	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	18	11	590	17 750	416	858	10 514	32 250	34 928	66 750	1 914
332321	Metal window & door mfg	—	5	5	e	D	D	D	D	D	D	D	1 335
332322	Sheet metal work mfg	—	11	5	285	9 328	212	425	6 095	16 686	15 455	32 157	D
3324	Boiler, tank, & shipping container mfg	—	8	6	854	33 718	705	1 385	28 727	70 188	215 571	284 412	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	7	6	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	6	6	f	D	D	D	D	D	D	D	9 204
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	34	2	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	30	2	267	7 647	217	356	5 326	14 379	5 785	20 203	651
332710	Machine shops	1	30	2	267	7 647	217	356	5 326	14 379	5 785	20 203	651
333	Machinery mfg	2	46	13	1 022	30 716	672	1 108	17 713	65 483	80 000	144 404	5 684
3339	Other general-purpose machinery mfg	1	18	4	439	13 017	262	451	7 347	32 246	31 346	62 942	1 536
33399	All other general-purpose machinery mfg	—	12	3	345	9 539	192	328	4 970	25 334	24 334	48 859	1 253
334	Computer & electronic product mfg	8	11	4	251	8 155	177	374	4 926	18 779	12 601	31 670	3 180
336	Transportation equipment mfg	1	10	8	840	24 491	549	1 260	13 745	57 480	45 145	101 709	4 912
3362	Motor vehicle body & trailer mfg	2	6	5	328	8 306	267	441	5 571	16 452	21 653	37 667	D
33621	Motor vehicle body & trailer mfg	2	6	5	328	8 306	267	441	5 571	16 452	21 653	37 667	D
3363	Motor vehicle parts mfg	1	4	3	512	16 185	282	819	8 174	41 028	23 492	64 042	D
33639	Other motor vehicle parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	26	6	533	11 498	426	841	7 796	22 336	18 653	40 710	1 960
3371	Household & institutional furniture & kitchen cabinet mfg	3	21	5	490	10 167	396	778	7 024	18 501	17 337	35 530	D
33712	Household & institutional furniture mfg	—	8	3	259	5 328	205	353	3 594	10 396	9 670	19 851	D
339	Miscellaneous mfg	1	40	4	363	9 201	267	452	5 611	18 579	13 276	31 863	741
REDDING, CA MSA													
31-33	Manufacturing	1	177	32	3 526	118 739	2 549	4 955	79 515	261 675	375 777	635 027	20 828
321	Wood product mfg	1	23	11	1 066	33 992	891	1 952	26 816	97 394	195 017	290 602	7 589
3211	Sawmills & wood preservation	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
32111	Sawmills & wood preservation	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
321113	Sawmills	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
3219	Other wood product mfg	2	12	4	e	D	D	D	D	D	D	D	D
32191	Millwork	2	5	4	283	4 482	255	550	3 654	11 011	31 587	43 323	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	REDDING, CA MSA— Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	-	10	5	288	11 082	218	438	8 195	39 585	19 548	59 811	3 361
3273	Cement & concrete product mfg	-	8	5	e	D	D	D	D	D	D	D	D
31-33	SACRAMENTO-YOLO, CA CMSA Manufacturing	-	1 489	363	47 690	1 688 680	29 516	57 293	756 920	7 670 386	6 985 287	14 550 771	415 020
311	Food mfg	-	114	35	6 663	228 663	4 620	9 038	135 200	1 153 489	1 055 553	2 232 463	54 840
312	Beverage & tobacco product mfg	-	23	13	g	D	D	D	D	D	D	D	D
314	Textile product mills	2	30	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	4	34	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	75	39	3 505	94 310	2 891	5 922	69 280	255 711	382 268	637 938	15 589
322	Paper mfg	-	18	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	230	30	2 958	80 288	2 187	4 033	51 862	196 866	126 504	323 373	19 640
325	Chemical mfg	1	40	12	1 104	47 061	582	1 136	18 107	246 483	379 821	608 056	16 501
326	Plastics & rubber products mfg	-	65	21	1 699	49 468	1 305	2 501	32 680	122 901	155 487	276 666	D
327	Nonmetallic mineral product mfg	1	68	23	1 214	41 540	828	1 632	26 421	99 593	76 612	177 494	9 044
332	Fabricated metal product mfg	1	223	46	3 317	105 836	2 460	4 840	68 270	241 958	293 348	531 102	11 648
333	Machinery mfg	1	79	22	2 165	71 521	1 353	2 705	36 681	159 668	208 785	357 767	28 392
334	Computer & electronic product mfg	-	91	35	14 548	619 321	7 081	13 984	164 842	4 320 698	3 624 695	7 962 158	D
335	Electrical equipment, appliance, & component mfg	-	16	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	74	20	3 193	156 917	1 558	3 019	46 705	329 396	240 650	453 519	D
337	Furniture & related product mfg	3	113	21	1 633	38 687	1 342	2 181	26 737	71 727	63 700	135 416	D
339	Miscellaneous mfg	2	162	23	1 709	51 176	1 162	2 081	25 038	99 327	73 396	172 650	D
31-33	Sacramento, CA PMSA Manufacturing	-	1 314	310	41 512	1 476 703	25 302	48 766	640 492	7 038 386	6 079 128	13 035 853	363 013
311	Food mfg	-	93	22	4 951	171 090	3 197	6 161	92 912	1 012 159	617 913	1 630 942	30 902
3114	Fruit & vegetable preserving & specialty food mfg	-	5	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	3	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	7	4	f	D	D	D	D	D	D	D	1 530
31151	Dairy product (except frozen) mfg	2	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	2	4	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	50	11	1 812	64 835	751	1 333	18 149	138 096	69 774	208 192	5 305
31181	Bread & bakery product mfg	-	45	7	1 541	58 993	595	1 051	16 386	122 088	63 318	185 737	4 336
311812	Commercial bakeries ..	-	11	6	1 354	56 960	482	921	15 341	117 131	60 273	177 726	4 075
3119	Other food mfg	-	8	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	-	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	21	12	1 512	30 733	375	694	8 611	150 504	106 799	259 537	10 048
3121	Beverage mfg	-	21	12	1 512	30 733	375	694	8 611	150 504	106 799	259 537	10 048
31211	Soft drink & ice mfg	-	8	7	1 324	28 112	311	607	7 574	137 650	99 032	239 255	7 293
312111	Soft drink mfg	-	4	4	1 213	24 693	260	509	6 416	128 849	95 106	225 564	D

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	SACRAMENTO-YOLO, CA CMSA—Con.												
	Sacramento, CA PMSA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills.....	2	26	4	331	6 378	241	435	3 723	14 944	12 915	26 738	513
315	Apparel mfg	3	31	2	261	3 396	228	345	2 187	8 865	2 228	11 070	D
321	Wood product mfg	1	59	34	2 667	70 510	2 174	4 531	53 132	196 155	320 782	516 997	14 693
3211	Sawmills & wood preservation	—	4	3	f	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	—	4	3	f	D	D	D	D	D	D	D	D
321113	Sawmills	—	4	3	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	10	9	e	D	D	D	D	D	D	D	3 922
32121	Veneer, plywood, & engineered wood product mfg	—	10	9	e	D	D	D	D	D	D	D	3 922
321219	Reconstituted wood product mfg	—	3	3	325	12 069	297	642	8 575	27 215	32 016	60 420	3 536
3219	Other wood product mfg ...	2	45	22	1 649	33 958	1 284	2 550	24 872	98 924	164 590	255 413	D
32191	Millwork	—	30	13	1 025	21 496	835	1 586	15 320	58 963	111 109	162 941	2 115
321911	Wood window & door mfg	1	13	5	375	8 200	315	651	6 184	22 966	32 660	55 609	976
321918	Other millwork (including flooring) ...	—	13	6	572	11 368	468	849	8 170	30 820	69 843	93 514	D
32199	All other wood product mfg	5	11	6	532	10 752	372	816	8 351	36 156	48 062	83 390	D
321992	Prefabricated wood building mfg	5	5	4	444	9 568	300	701	7 377	31 642	37 971	70 152	D
322	Paper mfg	—	14	9	588	20 942	463	965	14 296	65 236	63 115	130 800	7 351
3222	Converted paper product mfg	—	14	9	588	20 942	463	965	14 296	65 236	63 115	130 800	7 351
32221	Paperboard container mfg	—	6	5	406	15 199	306	640	9 800	30 575	42 260	75 021	6 238
322211	Corrugated & solid fiber box mfg	—	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	209	29	2 534	69 313	1 837	3 382	43 995	167 625	91 983	259 230	14 887
3231	Printing & related support activities.....	3	209	29	2 534	69 313	1 837	3 382	43 995	167 625	91 983	259 230	14 887
32311	Printing	3	186	28	2 378	64 934	1 722	3 184	41 048	157 536	89 602	246 757	14 434
323110	Commercial lithographic printing ..	3	80	19	1 501	42 701	1 078	1 958	26 939	109 489	56 947	166 263	11 534
323114	Quick printing	3	64	3	331	8 176	240	371	4 979	19 292	8 229	27 492	1 139
325	Chemical mfg	—	28	7	443	16 849	296	533	10 785	114 017	273 662	371 474	7 188
326	Plastics & rubber products mfg	—	57	19	1 561	45 541	1 221	2 301	30 880	112 385	146 379	258 042	8 443
3261	Plastics product mfg	—	49	17	1 444	42 602	1 142	2 141	28 835	98 036	137 523	234 639	7 688
32613	Laminated plastics plate, sheet, & shape mfg	—	2	1	e	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	2	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	30	12	643	16 146	496	827	9 052	36 472	41 638	77 737	1 517
326199	All other plastics product mfg	1	25	11	591	14 551	465	767	8 332	33 412	39 808	72 874	D
327	Nonmetallic mineral product mfg	1	61	20	936	32 158	656	1 272	21 143	71 986	62 207	135 846	8 367
3273	Cement & concrete product mfg	1	39	15	633	22 631	438	841	15 068	44 838	52 169	97 967	4 965
32732	Ready-mix concrete mfg	—	26	11	442	17 393	313	604	11 319	33 295	43 497	78 855	4 741
327320	Ready-mix concrete mfg	—	26	11	442	17 393	313	604	11 319	33 295	43 497	78 855	4 741
332	Fabricated metal product mfg	1	200	39	2 794	86 149	2 159	4 194	59 081	186 518	225 342	408 328	10 905
3323	Architectural & structural metals mfg	1	55	18	1 178	33 752	878	1 836	21 774	66 730	67 712	134 586	2 799
33232	Ornamental & architectural metal products mfg	1	39	14	929	26 802	703	1 487	17 713	49 749	50 874	100 973	1 868
332321	Metal window & door mfg	—	7	5	441	13 501	341	757	8 597	18 244	25 103	43 455	474
332322	Sheet metal work mfg	2	26	9	451	12 588	336	684	8 653	30 202	24 983	55 424	1 346
3324	Boiler, tank, & shipping container mfg	—	5	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	2	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SACRAMENTO-YOLO, CA CMSA—Con.												
	Sacramento, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	84	12	892	27 525	716	1 322	19 114	55 570	23 984	79 247	4 806
33271	Machine shops	1	74	9	718	21 229	567	998	14 425	44 422	19 640	63 927	4 172
332710	Machine shops	1	74	9	718	21 229	567	998	14 425	44 422	19 640	63 927	4 172
333	Machinery mfg	1	69	18	1 877	59 938	1 200	2 399	31 590	137 678	180 656	309 695	26 882
3333	Commercial & service industry machinery mfg ..	1	19	4	527	22 197	365	755	11 594	42 832	20 780	63 299	2 412
33331	Commercial & service industry machinery mfg	1	19	4	527	22 197	365	755	11 594	42 832	20 780	63 299	2 412
333314	Optical instrument & lens mfg	1	7	1	361	16 762	260	533	9 122	32 648	12 135	44 312	2 132
3335	Metalworking machinery mfg	—	10	5	281	8 894	191	382	4 844	23 075	7 543	30 209	2 113
33351	Metalworking machinery mfg	—	10	5	281	8 894	191	382	4 844	23 075	7 543	30 209	2 113
3339	Other general-purpose machinery mfg	—	19	4	648	17 540	340	738	8 093	44 688	122 744	158 883	D
33392	Material handling equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	86	32	14 385	611 532	7 013	13 841	162 744	4 304 738	3 615 202	7 936 682	207 984
3341	Computer & peripheral equipment mfg	—	18	8	9 970	424 702	4 455	8 933	87 665	3 704 123	3 270 821	7 000 157	62 924
33411	Computer & peripheral equipment mfg	—	18	8	9 970	424 702	4 455	8 933	87 665	3 704 123	3 270 821	7 000 157	62 924
334111	Electronic computer mfg	—	9	5	9 668	412 622	4 326	8 705	83 982	3 672 184	3 208 162	6 901 138	60 089
3342	Communications equipment mfg	1	12	5	679	28 084	457	980	19 119	54 915	27 938	84 295	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	666	27 485	450	967	18 955	53 568	26 687	81 667	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	666	27 485	450	967	18 955	53 568	26 687	81 667	D
3344	Semiconductor & other electronic component mfg	—	22	11	2 932	131 519	1 701	3 218	46 709	485 137	270 047	742 986	D
33441	Semiconductor & other electronic component mfg	—	22	11	2 932	131 519	1 701	3 218	46 709	485 137	270 047	742 986	D
334413	Semiconductor & related device mfg ...	—	4	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	22	5	588	22 663	241	440	6 625	49 530	27 442	79 229	D
33451	Navigational, measuring, medical, & control instruments mfg	2	22	5	588	22 663	241	440	6 625	49 530	27 442	79 229	D
335	Electrical equipment, appliance, & component mfg	—	15	5	623	21 778	460	972	13 762	54 635	44 315	97 931	D
3353	Electrical equipment mfg ..	—	9	3	474	16 350	338	708	9 699	33 638	25 799	58 468	298
33531	Electrical equipment mfg	—	9	3	474	16 350	338	708	9 699	33 638	25 799	58 468	298
335314	Relay & industrial control mfg	—	7	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	59	15	2 638	136 780	1 210	2 321	36 559	261 029	157 739	344 926	3 646
3363	Motor vehicle parts mfg ...	3	26	7	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	4	8	3	e	D	D	D	D	D	D	D	672
336322	Other motor vehicle electrical & electronic equipment mfg	4	7	3	e	D	D	D	D	D	D	D	D

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	SACRAMENTO-YOLO, CA CMSA—Con.													
	Sacramento, CA PMSA—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	-	11	4	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	11	4	g	D	D	D	D	D	D	D	D	
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	3	105	20		1 553	36 573	1 275	2 067	25 367	68 141	61 870	130 006	3 867
3371	Household & institutional furniture & kitchen cabinet mfg	3	78	13		986	20 082	844	1 302	14 156	38 180	33 421	71 772	2 099
33711	Wood kitchen cabinet & counter top mfg	4	57	6		496	11 182	423	683	7 838	17 769	16 973	34 878	1 291
337110	Wood kitchen cabinet & counter top mfg ...	4	57	6		496	11 182	423	683	7 838	17 769	16 973	34 878	1 291
33712	Household & institutional furniture mfg	1	21	7		490	8 900	421	619	6 318	20 411	16 448	36 894	808
337122	Nonupholstered wood household furniture mfg	-	14	6		436	7 840	373	530	5 462	18 535	14 451	33 019	715
3372	Office furniture (including fixtures) mfg	-	20	5		366	12 123	286	485	8 569	20 449	17 135	37 581	1 410
33721	Office furniture (including fixtures) mfg	-	20	5		366	12 123	286	485	8 569	20 449	17 135	37 581	1 410
339	Miscellaneous mfg	2	149	22		1 628	49 287	1 106	1 997	24 014	95 127	71 441	166 490	4 261
3391	Medical equipment & supplies mfg	2	83	12		925	28 982	615	1 019	13 988	54 147	40 872	95 479	2 434
33911	Medical equipment & supplies mfg	2	83	12		925	28 982	615	1 019	13 988	54 147	40 872	95 479	2 434
339112	Surgical & medical instrument mfg	-	5	4		279	12 034	162	295	4 426	17 104	23 851	40 784	1 151
339116	Dental laboratories	6	55	2		303	7 053	214	320	4 202	16 240	5 941	22 383	456
3399	Other miscellaneous mfg ..	2	66	10		703	20 305	491	978	10 026	40 980	30 569	71 011	1 827
33995	Sign mfg	3	25	5		276	9 536	164	332	3 902	15 847	7 837	23 621	674
339950	Sign mfg	3	25	5		276	9 536	164	332	3 902	15 847	7 837	23 621	674
33999	All other miscellaneous mfg	-	18	3		304	7 674	240	496	4 607	17 267	13 886	30 642	615
	Yolo, CA PMSA													
31-33	Manufacturing	1	175	53		6 178	211 977	4 214	8 527	116 428	632 000	906 159	1 514 918	52 007
311	Food mfg	1	21	13		1 712	57 573	1 423	2 877	42 288	141 330	437 640	601 521	23 938
3112	Grain & oilseed milling	-	5	5		599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
31121	Flour milling & malt mfg .	-	5	5		599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
311212	Rice milling	-	5	5		599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
3114	Fruit & vegetable preserving & specialty food mfg	2	3	3	e	D	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	2	3	3	e	D	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	2	2	2	e	D	D	D	D	D	D	D	D	D
3119	Other food mfg	9	8	3		400	8 926	326	515	6 046	31 828	34 604	66 524	2 193
31191	Snack food mfg	9	3	2		329	7 029	272	413	4 851	24 436	25 051	49 578	D
311911	Roasted nuts & peanut butter mfg	9	3	2		329	7 029	272	413	4 851	24 436	25 051	49 578	D
321	Wood product mfg	-	16	5		838	23 800	717	1 391	16 148	59 556	61 486	120 941	896
3219	Other wood product mfg ...	-	12	4		789	22 418	678	1 303	15 079	54 647	58 883	113 423	549
32199	All other wood product mfg	-	6	3		703	20 299	612	1 187	14 044	46 985	53 689	100 788	452
321991	Manufactured home (mobile home) mfg ..	-	3	3		681	19 893	592	1 149	13 739	45 548	52 821	98 472	D
323	Printing & related support activities	-	21	1		424	10 975	350	651	7 867	29 241	34 521	64 143	4 753
3231	Printing & related support activities	-	21	1		424	10 975	350	651	7 867	29 241	34 521	64 143	4 753
32311	Printing	-	19	1	e	D	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	11	1		378	10 143	318	613	7 343	27 888	32 351	60 621	4 412

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SACRAMENTO-YOLO, CA CMSA—Con.												
	Yolo, CA PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	2	12	5	661	30 212	286	603	7 322	132 466	106 159	236 582	9 313
3254	Pharmaceutical & medicine mfg	—	7	2	503	22 712	228	459	5 626	105 530	62 684	166 351	8 483
32541	Pharmaceutical & medicine mfg	—	7	2	503	22 712	228	459	5 626	105 530	62 684	166 351	8 483
325413	In-vitro diagnostic substance mfg	—	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	7	3	278	9 382	172	360	5 278	27 607	14 405	41 648	677
3273	Cement & concrete product mfg	—	4	3	254	8 721	153	322	4 824	26 404	13 398	39 430	D
332	Fabricated metal product mfg	—	23	7	523	19 687	301	646	9 189	55 440	68 006	122 774	743
333	Machinery mfg	—	10	4	288	11 583	153	306	5 091	21 990	28 129	48 072	1 510
336	Transportation equipment mfg	—	15	5	555	20 137	348	698	10 146	68 367	82 911	108 593	D
3365	Railroad rolling stock mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
	SALINAS, CA MSA												
31-33	Manufacturing	3	302	67	7 070	223 735	5 110	9 720	132 527	698 433	654 291	1 329 405	64 562
311	Food mfg	3	65	15	2 619	69 819	2 104	4 030	48 704	334 795	300 040	635 846	26 339
3114	Fruit & vegetable preserving & specialty food mfg	5	9	5	1 286	36 911	1 084	2 266	27 461	121 296	145 739	269 235	21 620
31141	Frozen food mfg	9	2	1	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	1	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	3	7	4	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	9	5	2	e	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	—	2	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging ..	8	6	2	330	6 014	283	387	4 136	15 745	35 916	51 661	963
31171	Seafood product preparation & packaging	8	6	2	330	6 014	283	387	4 136	15 745	35 916	51 661	963
311712	Fresh & frozen seafood processing ..	8	6	2	330	6 014	283	387	4 136	15 745	35 916	51 661	963
3119	Other food mfg	—	8	6	745	21 970	575	1 114	14 567	184 185	101 821	284 702	2 557
31194	Seasoning & dressing mfg	—	2	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	2	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg	1	5	3	e	D	D	D	D	D	D	D	1 847
312	Beverage & tobacco product mfg	2	15	4	327	14 585	236	421	10 001	74 952	31 424	80 201	13 319
3121	Beverage mfg	2	15	4	327	14 585	236	421	10 001	74 952	31 424	80 201	13 319
31213	Wineries	2	13	3	e	D	D	D	D	D	D	D	D
312130	Wineries	2	13	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	9	5	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	9	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	3	3	370	16 412	302	653	11 822	33 167	90 781	124 561	D
3222	Converted paper product mfg	—	3	3	370	16 412	302	653	11 822	33 167	90 781	124 561	D
32221	Paperboard container mfg	—	2	2	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	29	3	281	8 100	206	401	4 853	16 064	9 669	25 507	2 053
3231	Printing & related support activities	1	29	3	281	8 100	206	401	4 853	16 064	9 669	25 507	2 053
32311	Printing	1	27	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SALINAS, CA MSA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	20	5	308	10 846	235	478	8 221	28 222	28 183	56 271	1 681
332	Fabricated metal product mfg	2	34	5	305	8 058	234	378	4 778	17 865	7 202	25 239	896
333	Machinery mfg	—	20	4	479	15 436	281	560	7 154	25 343	31 694	58 537	2 182
3339	Other general-purpose machinery mfg	—	5	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	5	20	9	1 088	44 619	511	1 015	13 686	71 789	41 262	113 503	11 645
3344	Semiconductor & other electronic component mfg	9	5	3	562	23 341	277	542	7 327	46 208	13 391	59 990	D
33441	Semiconductor & other electronic component mfg	9	5	3	562	23 341	277	542	7 327	46 208	13 391	59 990	D
334413	Semiconductor & related device mfg ...	9	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	8	5	466	19 304	210	434	5 739	23 011	26 464	49 429	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	5	466	19 304	210	434	5 739	23 011	26 464	49 429	D
334513	Industrial process control instrument mfg	—	3	2	e	D	D	D	D	D	D	D	D
SAN DIEGO, CA MSA													
31-33	Manufacturing	1	3 407	953	118 868	4 223 506	73 111	144 405	1 868 764	10 999 196	11 403 094	22 233 599	919 402
311	Food mfg	2	191	45	4 279	110 975	2 871	5 324	59 828	290 947	264 102	567 504	30 184
3114	Fruit & vegetable preserving & specialty food mfg	—	7	5	1 001	20 461	833	1 537	12 084	62 526	64 872	127 435	D
31141	Frozen food mfg	—	5	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	4	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	6	3	288	9 020	98	189	3 198	16 308	40 222	56 609	1 459
31151	Dairy product (except frozen) mfg	—	4	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	4	134	28	2 028	43 866	1 283	2 267	24 421	106 185	66 161	172 181	6 234
31181	Bread & bakery product mfg	4	117	23	1 715	38 642	1 052	1 871	20 566	93 048	56 516	149 361	5 536
311811	Retail bakeries	4	78	5	e	D	D	D	D	D	D	D	731
311812	Commercial bakeries ..	5	35	16	1 034	26 491	586	1 136	13 527	63 889	35 688	99 595	4 311
3119	Other food mfg	1	25	6	757	31 984	497	1 066	16 332	71 513	45 795	129 372	6 668
31199	All other food mfg	1	17	4	682	30 829	449	1 013	15 676	65 329	40 622	117 987	6 465
311999	All other miscellaneous food mfg	—	10	2	517	26 611	311	772	13 036	57 113	26 409	95 691	D
312	Beverage & tobacco product mfg	3	22	7	822	23 646	344	673	9 487	97 101	142 207	237 852	5 052
3121	Beverage mfg	3	21	7	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	3	10	5	731	21 024	289	594	7 940	90 315	136 392	225 360	4 369
312111	Soft drink mfg	3	3	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	99	16	1 219	23 075	973	1 633	13 806	51 044	39 986	90 902	1 809
3149	Other textile product mills...	2	67	13	986	19 339	769	1 295	11 118	42 732	31 774	74 239	1 552
31491	Textile bag & canvas mills	1	32	5	385	8 023	307	516	4 461	16 250	13 593	29 807	524
31499	All other textile product mills	3	35	8	601	11 316	462	779	6 657	26 482	18 181	44 432	1 028
314999	All other miscellaneous textile product mills ..	3	33	8	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	159	52	5 661	87 602	4 554	8 757	59 436	243 988	182 884	426 277	8 959
3151	Apparel knitting mills	—	4	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN DIEGO, CA MSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	3	125	42	4 648	70 084	3 756	7 348	49 582	200 367	139 079	339 673	D
31521	Cut & sew apparel contractors	4	76	20	1 973	25 671	1 633	3 253	21 565	41 608	9 935	50 240	1 678
315211	Men's & boys' cut & sew apparel contractors	1	14	7	540	8 099	414	778	5 820	12 808	2 104	14 991	185
315212	Women's, girls', & infants' cut & sew apparel contractors	5	62	13	1 433	17 572	1 219	2 475	15 745	28 800	7 831	35 249	1 493
31522	Men's & boys' cut & sew apparel mfg	4	24	13	1 927	30 813	1 627	3 231	20 453	115 722	86 275	203 204	3 640
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	6	11	5	1 135	16 955	935	2 064	10 374	69 652	45 456	120 273	1 885
315228	Men's & boys' cut & sew other outerwear mfg	1	7	4	459	7 622	418	756	5 845	24 084	29 694	49 900	1 241
31523	Women's & girls' cut & sew apparel mfg	1	17	6	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	8	3	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	5	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	30	8	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	—	30	8	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	—	4	3	386	8 264	302	506	3 508	13 477	5 930	19 349	1 208
315999	Other apparel accessories & other apparel mfg	2	23	4	271	3 871	203	303	2 318	4 342	3 937	8 422	D
316	Leather & allied product mfg	1	18	5	714	13 151	574	1 359	8 572	31 783	30 392	62 743	928
3162	Footwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	15	4	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	15	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	54	12	710	16 691	549	1 007	10 323	30 795	33 685	63 502	2 083
3219	Other wood product mfg	2	44	10	595	13 529	460	851	8 362	23 982	22 186	45 280	1 695
32191	Millwork	1	21	4	275	8 092	204	410	4 809	13 326	13 125	25 626	1 106
32192	Wood container & pallet mfg	2	13	6	267	4 897	215	392	3 166	9 307	7 804	17 041	549
321920	Wood container & pallet mfg	2	13	6	267	4 897	215	392	3 166	9 307	7 804	17 041	549
322	Paper mfg	1	26	10	756	21 009	575	1 174	12 232	54 879	66 582	120 353	2 218
3222	Converted paper product mfg	1	26	10	756	21 009	575	1 174	12 232	54 879	66 582	120 353	2 218
32221	Paperboard container mfg	1	9	6	538	14 346	410	839	7 854	37 520	47 272	83 711	1 091
322211	Corrugated & solid fiber box mfg	2	7	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	432	67	5 500	158 528	3 838	7 223	94 124	354 097	230 717	584 767	36 751
3231	Printing & related support activities	4	432	67	5 500	158 528	3 838	7 223	94 124	354 097	230 717	584 767	36 751
32311	Printing	3	388	58	4 725	136 797	3 392	6 415	82 827	292 710	192 894	485 499	30 730
323110	Commercial lithographic printing	3	177	36	2 656	84 832	1 858	3 686	50 525	180 000	118 394	298 269	23 593
323113	Commercial screen printing	5	56	11	823	19 903	607	1 030	10 711	38 280	28 263	66 712	2 833
323114	Quick printing	4	90	1	422	9 225	293	429	5 646	20 199	10 724	30 964	1 457
323119	Other commercial printing	4	33	3	276	8 650	208	448	6 183	14 739	7 936	22 714	531
32312	Support activities for printing	7	44	9	775	21 731	446	808	11 297	61 387	37 823	99 268	6 021
323122	Prepress services	8	29	6	586	17 973	289	542	8 547	52 507	36 611	89 164	5 054

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN DIEGO, CA MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	1	124	42	4 957	204 801	2 349	4 595	66 864	595 108	376 174	977 852	95 896
3251	Basic chemical mfg	3	10	2	403	16 587	192	460	5 803	62 610	34 106	100 255	D
32512	Industrial gas mfg	—	3	1	e	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	3	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	58	28	3 547	153 056	1 568	3 138	47 703	388 809	186 418	578 091	69 571
32541	Pharmaceutical & medicine mfg	1	58	28	3 547	153 056	1 568	3 138	47 703	388 809	186 418	578 091	69 571
325411	Medicinal & botanical mfg	4	12	5	509	19 966	110	198	3 424	25 170	14 895	42 054	6 659
325412	Pharmaceutical preparation mfg	6	12	5	301	11 353	182	351	4 671	39 266	18 324	55 371	2 497
325413	In-vitro diagnostic substance mfg	—	15	11	2 001	83 616	1 002	1 983	29 661	244 833	92 526	333 821	43 775
325414	Biological product (except diagnostic) mfg	1	19	7	736	38 121	274	606	9 947	79 540	60 673	146 845	16 640
3255	Paint, coating, & adhesive mfg	—	8	3	277	14 338	126	161	2 890	73 533	81 566	155 592	D
32551	Paint & coating mfg	—	7	3	e	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	7	3	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	20	6	476	13 519	315	599	6 615	44 236	37 345	81 792	2 727
32562	Toilet preparation mfg ..	2	7	4	347	9 553	250	467	4 868	32 432	22 727	55 143	1 478
325620	Toilet preparation mfg ..	2	7	4	347	9 553	250	467	4 868	32 432	22 727	55 143	1 478
326	Plastics & rubber products mfg	3	161	58	4 578	130 515	3 327	6 198	68 198	331 234	305 858	632 720	32 200
3261	Plastics product mfg	3	135	49	3 985	113 623	2 919	5 498	59 879	288 014	267 530	551 299	30 131
32611	Unsupported plastics film, sheet, & bag mfg ..	5	8	2	355	13 202	257	495	6 678	42 161	39 275	79 112	2 803
326113	Unsupported plastics film & sheet (except packaging) mfg	5	5	2	339	12 932	242	468	6 438	41 678	38 639	77 998	2 769
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	12	3	423	16 692	319	592	8 173	35 862	27 992	63 572	5 714
326122	Plastics pipe & pipe fitting mfg	—	3	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	103	39	3 012	79 459	2 192	4 142	42 071	197 439	187 848	383 450	20 681
326191	Plastics plumbing fixture mfg	—	6	3	773	22 284	476	1 013	10 716	64 891	73 722	139 998	2 440
326199	All other plastics product mfg	4	97	36	2 239	57 175	1 716	3 129	31 355	132 548	114 126	243 452	18 241
3262	Rubber product mfg	4	26	9	593	16 892	408	700	8 319	43 220	38 328	81 421	2 069
32629	Other rubber product mfg	4	19	7	451	12 015	334	565	6 835	35 751	26 046	61 402	1 679
326299	All other rubber product mfg	3	16	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	93	23	1 842	53 390	1 204	2 256	35 098	129 795	147 610	277 910	9 262
3271	Clay product & refractory mfg	3	13	3	459	6 351	259	407	4 383	14 635	7 799	22 539	516
32711	Pottery, ceramics, & plumbing fixture mfg ...	3	12	3	e	D	D	D	D	D	D	D	516
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	10	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	42	15	1 006	36 823	692	1 382	24 622	92 142	120 201	212 564	7 178
32732	Ready-mix concrete mfg ..	3	26	11	801	30 534	555	1 086	20 919	76 889	105 699	182 869	6 445
327320	Ready-mix concrete mfg	3	26	11	801	30 534	555	1 086	20 919	76 889	105 699	182 869	6 445
332	Fabricated metal product mfg	1	495	134	10 655	328 921	7 478	14 329	195 141	759 470	411 936	1 171 062	48 284
3321	Forging & stamping	—	14	7	509	18 397	374	764	10 837	37 709	40 866	77 333	3 372
33211	Forging & stamping	—	14	7	509	18 397	374	764	10 837	37 709	40 866	77 333	3 372
3322	Cutlery & handtool mfg	7	16	2	470	15 267	308	447	7 992	49 213	14 293	63 163	4 897
33221	Cutlery & handtool mfg ..	7	16	2	470	15 267	308	447	7 992	49 213	14 293	63 163	4 897
332211	Cutlery & flatware (except precious) mfg	9	5	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	91	32	2 806	88 567	1 757	3 459	46 420	202 277	122 729	323 715	8 414
33231	Plate work & fabricated structural product mfg ..	—	21	9	808	26 015	625	1 186	16 791	63 812	48 232	111 088	2 145
332312	Fabricated structural metal mfg	—	18	9	777	25 140	601	1 140	16 233	62 371	47 069	108 444	2 105
33232	Ornamental & architectural metal products mfg	—	70	23	1 998	62 552	1 132	2 273	29 629	138 465	74 497	212 627	6 269
332322	Sheet metal work mfg ..	—	49	20	1 674	53 637	923	1 851	25 073	119 625	61 580	181 090	5 536

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN DIEGO, CA MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	1	14	3	540	13 206	339	757	8 065	34 270	46 956	79 600	1 165
33242	Metal tank (heavy gauge) mfg	—	4	2	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	235	55	3 511	112 768	2 790	5 214	77 747	223 721	85 755	310 573	17 777
33271	Machine shops	1	211	44	2 791	92 181	2 234	4 108	62 891	181 318	69 208	252 205	14 332
332710	Machine shops	1	211	44	2 791	92 181	2 234	4 108	62 891	181 318	69 208	252 205	14 332
33272	Turned product & screw, nut, & bolt mfg	2	24	11	720	20 587	556	1 106	14 856	42 403	16 547	58 368	3 445
332721	Precision turned product mfg	—	18	9	579	16 597	452	925	12 050	32 023	12 247	44 477	2 365
3328	Coating, engraving, heat treating, & allied activities.	2	59	17	873	20 140	686	1 230	12 799	38 559	14 386	51 980	2 109
33281	Coating, engraving, heat treating, & allied activities	2	59	17	873	20 140	686	1 230	12 799	38 559	14 386	51 980	2 109
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	19	6	270	6 842	222	390	4 329	12 183	6 367	18 148	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	37	9	538	11 121	413	730	7 068	21 468	6 467	27 378	1 069
3329	Other fabricated metal product mfg	—	49	12	1 610	50 781	993	2 014	26 294	154 805	70 553	229 146	9 777
33291	Metal valve mfg	—	5	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	44	10	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	33	7	550	16 680	400	828	10 434	29 395	17 499	48 001	1 743
333	Machinery mfg	—	204	53	8 954	369 382	5 174	10 451	163 304	1 289 085	797 339	2 064 665	70 016
3331	Agriculture, construction, & mining machinery mfg	3	10	4	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	1	5	1	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	38	9	1 788	54 876	1 439	2 787	37 576	424 655	95 159	515 112	15 940
33329	Other industrial machinery mfg	—	32	8	1 669	50 739	1 360	2 632	35 518	415 297	86 594	497 562	15 342
333295	Semiconductor machinery mfg	—	7	4	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	18	3	528	16 859	331	603	6 594	39 314	30 862	69 998	D
3333	Commercial & service industry machinery mfg ..	1	40	12	1 187	42 300	637	1 274	17 410	107 997	89 162	196 605	5 012
33331	Commercial & service industry machinery mfg	1	40	12	1 187	42 300	637	1 274	17 410	107 997	89 162	196 605	5 012
333314	Optical instrument & lens mfg	1	15	5	e	D	D	D	D	D	D	D	3 399
333315	Photographic & photocopying equipment mfg	—	6	3	399	14 462	164	351	3 705	32 842	42 940	76 091	791
333319	Other commercial & service industry machinery mfg	1	17	3	285	7 966	172	304	2 936	38 021	28 073	65 514	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	16	4	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	4	16	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	50	10	858	29 409	614	1 156	18 308	82 909	40 288	121 465	5 138
33351	Metalworking machinery mfg	1	50	10	858	29 409	614	1 156	18 308	82 909	40 288	121 465	5 138
333514	Special die & tool, die set, jig, & fixture mfg ..	1	20	6	330	11 060	271	573	8 247	42 261	12 008	53 332	2 632

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	SAN DIEGO, CA MSA—Con.													
31-33	Manufacturing—Con.													
333	Machinery mfg—Con.													
3336	Engine, turbine, & power transmission equipment mfg	—	5	2	h	D	D	D	D	D	D	D	D	
33361	Engine, turbine, & power transmission equipment mfg	—	5	2	h	D	D	D	D	D	D	D	D	
333611	Turbine & turbine generator set unit mfg	—	2	2	h	D	D	D	D	D	D	D	D	
3339	Other general-purpose machinery mfg	1	45	12		1 010	34 126	599	1 263	15 594	76 872	79 772	155 526	D
33399	All other general-purpose machinery mfg	1	34	10		851	28 997	521	1 107	13 363	63 729	65 800	127 626	2 346
333992	Welding & soldering equipment mfg	—	5	3		272	9 916	181	373	5 432	23 402	22 859	46 139	658
333999	All other miscellaneous general-purpose machinery mfg	1	20	6		409	14 122	244	539	5 946	32 107	35 703	66 657	1 209
334	Computer & electronic product mfg	1	414	196		30 825	1 373 848	13 861	27 875	404 879	3 317 227	5 550 764	8 730 916	334 995
3341	Computer & peripheral equipment mfg	—	63	27		8 192	431 119	2 679	5 671	84 294	1 008 756	3 809 245	4 663 199	94 542
33411	Computer & peripheral equipment mfg	—	63	27		8 192	431 119	2 679	5 671	84 294	1 008 756	3 809 245	4 663 199	94 542
334111	Electronic computer mfg	—	15	6		812	38 479	324	759	10 217	539 104	230 044	734 438	11 014
334112	Computer storage device mfg	—	3	3	f		D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	42	17		6 641	376 717	2 280	4 768	70 836	432 832	3 529 741	3 842 157	79 723
3342	Communications equipment mfg	2	62	43		5 064	222 330	1 993	3 786	54 792	420 544	504 464	929 970	66 616
33421	Telephone apparatus mfg	—	9	7		1 239	62 393	322	609	9 163	51 984	103 226	156 759	4 812
334210	Telephone apparatus mfg	—	9	7		1 239	62 393	322	609	9 163	51 984	103 226	156 759	4 812
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	43	30		3 377	144 936	1 493	2 889	41 825	331 191	333 870	661 838	57 858
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	43	30		3 377	144 936	1 493	2 889	41 825	331 191	333 870	661 838	57 858
33429	Other communications equipment mfg	6	10	6		448	15 001	178	288	3 804	37 369	67 368	111 373	3 946
334290	Other communications equipment mfg	6	10	6		448	15 001	178	288	3 804	37 369	67 368	111 373	3 946
3343	Audio & video equipment mfg	2	12	4		274	8 670	207	395	4 728	6 646	14 231	21 207	1 090
33431	Audio & video equipment mfg	2	12	4		274	8 670	207	395	4 728	6 646	14 231	21 207	1 090
334310	Audio & video equipment mfg	2	12	4		274	8 670	207	395	4 728	6 646	14 231	21 207	1 090
3344	Semiconductor & other electronic component mfg	3	140	58		7 465	248 229	4 810	9 642	114 193	591 366	410 075	1 012 670	101 554
33441	Semiconductor & other electronic component mfg	3	140	58		7 465	248 229	4 810	9 642	114 193	591 366	410 075	1 012 670	101 554
334412	Bare printed circuit board mfg	1	35	17		2 083	53 816	1 718	3 441	35 753	147 776	116 064	262 637	16 984
334413	Semiconductor & related device mfg ...	5	23	13		1 325	62 279	724	1 493	23 982	172 297	70 868	250 622	63 036
334414	Electronic capacitor mfg	2	8	6		855	30 143	504	1 013	14 387	55 642	43 498	100 171	4 077
334417	Electronic connector mfg	—	6	6		854	23 186	722	1 462	13 535	75 855	17 622	90 143	3 492
334418	Printed circuit assembly (electronic assembly) mfg	5	19	10		1 715	56 659	714	1 492	17 167	89 882	125 785	221 028	10 806
334419	Other electronic component mfg	6	40	6		553	19 798	371	627	8 154	45 219	32 539	79 490	2 841
3345	Navigational, measuring, medical, & control instruments mfg	—	124	59		9 381	450 874	3 886	7 892	139 858	1 245 875	693 875	1 942 005	68 965

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN DIEGO, CA MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg	-	124	59	9 381	450 874	3 886	7 892	139 858	1 245 875	693 875	1 942 005	68 965
334510	Electromedical & electrotherapeutic apparatus mfg	-	13	9	670	50 915	359	968	11 800	58 164	67 821	131 969	11 111
334511	Search, detection, navigation, & guidance instrument mfg	-	22	15	4 595	218 029	1 541	2 988	54 239	523 578	212 770	740 645	17 983
334512	Automatic environmental control mfg	-	3	2	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	15	7	773	31 032	249	528	7 819	100 273	59 625	158 686	3 418
334514	Totalizing fluid meter & counting device mfg	-	3	1	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	30	15	1 851	81 194	961	1 885	32 925	271 036	205 226	474 853	29 833
334519	Other measuring & controlling device mfg	1	21	6	506	24 020	244	406	7 927	61 910	26 045	88 107	1 113
3346	Mfg & reproducing magnetic & optical media	1	13	5	449	12 626	286	489	7 014	44 040	118 874	161 865	2 228
33461	Mfg & reproducing magnetic & optical media	1	13	5	449	12 626	286	489	7 014	44 040	118 874	161 865	2 228
335	Electrical equipment, appliance, & component mfg	-	66	31	3 263	131 032	1 943	4 186	63 287	375 743	361 886	717 274	58 534
3351	Electric lighting equipment mfg	4	15	4	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	4	14	4	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	24	11	1 152	36 986	730	1 587	18 449	85 499	65 558	146 964	4 123
33531	Electrical equipment mfg	-	24	11	1 152	36 986	730	1 587	18 449	85 499	65 558	146 964	4 123
335312	Motor & generator mfg	-	9	7	631	17 084	408	936	9 299	46 553	33 921	79 790	1 790
335314	Relay & industrial control mfg	-	10	3	390	14 731	235	482	6 899	25 651	24 009	46 562	1 668
3359	Other electrical equipment & component mfg	-	25	15	1 623	80 766	918	2 066	39 539	238 327	183 686	407 892	50 008
33599	All other electrical equipment & component mfg	-	18	9	1 300	71 252	699	1 614	34 131	222 337	149 091	357 549	D
335999	All other miscellaneous electrical equipment & component mfg	-	15	7	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	139	50	14 688	558 939	10 759	21 726	338 668	1 131 708	1 113 668	2 253 448	76 461
3362	Motor vehicle body & trailer mfg	-	10	2	266	5 997	223	478	3 540	35 382	28 451	47 745	D
33621	Motor vehicle body & trailer mfg	-	10	2	266	5 997	223	478	3 540	35 382	28 451	47 745	D
3363	Motor vehicle parts mfg	6	50	16	956	29 739	689	1 161	16 647	50 964	67 858	119 979	5 728
33632	Motor vehicle electrical & electronic equipment mfg	8	15	6	270	8 439	160	303	3 321	15 992	12 495	29 394	D
336322	Other motor vehicle electrical & electronic equipment mfg	8	15	6	270	8 439	160	303	3 321	15 992	12 495	29 394	D
3364	Aerospace product & parts mfg	-	31	15	6 232	292 855	4 213	7 477	168 395	604 736	624 917	1 252 472	59 566
33641	Aerospace product & parts mfg	-	31	15	6 232	292 855	4 213	7 477	168 395	604 736	624 917	1 252 472	59 566
336411	Aircraft mfg	-	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	5	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	22	10	4 262	222 900	2 804	4 591	113 396	426 146	531 518	992 383	48 158
336414	Guided missile & space vehicle mfg	-	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	21	13	6 874	220 818	5 371	12 102	145 056	423 670	374 865	798 612	8 575
33661	Ship & boat building	-	21	13	6 874	220 818	5 371	12 102	145 056	423 670	374 865	798 612	8 575
336611	Ship building & repairing	-	16	11	6 759	217 422	5 298	11 955	143 386	416 309	370 115	786 424	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SAN DIEGO, CA MSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3369	Other transportation equipment mfg	2	24	4	e	D	D	D	D	D	D	D	1 967	
33699	Other transportation equipment mfg	2	24	4	e	D	D	D	D	D	D	D	1 967	
337	Furniture & related product mfg	1	185	32		3 511	75 071	2 790	5 140	48 926	145 632	166 337	313 068	5 107
3371	Household & institutional furniture & kitchen cabinet mfg	1	132	16		1 887	37 003	1 580	2 784	26 645	66 175	67 597	133 103	2 273
33711	Wood kitchen cabinet & counter top mfg	3	63	4		468	10 826	386	699	7 402	18 134	15 144	33 239	752
337110	Wood kitchen cabinet & counter top mfg ...	3	63	4		468	10 826	386	699	7 402	18 134	15 144	33 239	752
33712	Household & institutional furniture mfg	1	69	12		1 419	26 177	1 194	2 085	19 243	48 041	52 453	99 864	1 521
337122	Nonupholstered wood household furniture mfg	—	34	8		1 117	19 056	957	1 671	14 592	34 407	43 857	77 821	1 090
3372	Office furniture (including fixtures) mfg	—	41	11		1 065	25 726	831	1 769	16 730	48 581	45 483	95 762	1 768
33721	Office furniture (including fixtures) mfg	—	41	11		1 065	25 726	831	1 769	16 730	48 581	45 483	95 762	1 768
337211	Wood office furniture mfg	—	9	4		400	7 854	320	684	5 109	13 355	20 869	35 504	279
337215	Showcase, partition, shelving, & locker mfg	—	16	3		411	11 581	346	789	8 496	25 758	19 148	44 776	1 209
3379	Other furniture related product mfg	—	12	5		559	12 342	379	587	5 551	30 876	53 257	84 203	1 066
33792	Blind & shade mfg	—	8	4		472	10 568	322	487	4 659	26 031	46 023	72 133	827
337920	Blind & shade mfg	—	8	4		472	10 568	322	487	4 659	26 031	46 023	72 133	827
339	Miscellaneous mfg	1	477	110		15 288	518 781	9 591	19 839	207 783	1 668 787	1 076 281	2 736 169	96 094
3391	Medical equipment & supplies mfg	1	196	42		6 101	221 751	3 345	6 413	71 519	554 738	340 995	913 047	36 594
33911	Medical equipment & supplies mfg	1	196	42		6 101	221 751	3 345	6 413	71 519	554 738	340 995	913 047	36 594
339112	Surgical & medical instrument mfg	1	49	20		2 860	120 625	1 255	2 243	24 082	223 395	133 499	358 196	23 099
339113	Surgical appliance & supplies mfg	—	20	7		1 154	38 840	671	1 260	16 225	130 230	60 188	194 723	5 511
339114	Dental equipment & supplies mfg	—	19	3		438	17 064	212	411	5 685	51 373	82 040	134 107	1 661
339115	Ophthalmic goods mfg	—	14	4		1 141	31 157	856	1 916	19 086	120 756	51 056	182 700	4 531
339116	Dental laboratories ...	6	83	5		346	7 763	271	416	4 719	17 607	6 813	24 657	619
3399	Other miscellaneous mfg ..	—	281	68		9 187	297 030	6 246	13 426	136 264	1 114 049	735 286	1 823 122	59 500
33991	Jewelry & silverware mfg	3	23	4		270	6 847	219	410	4 569	16 907	41 402	57 956	281
33992	Sporting & athletic goods mfg	—	110	31		6 648	224 214	4 537	10 101	98 700	924 108	584 813	1 483 027	54 006
339920	Sporting & athletic goods mfg	—	110	31		6 648	224 214	4 537	10 101	98 700	924 108	584 813	1 483 027	54 006
33995	Sign mfg	3	67	12		692	20 157	449	961	10 917	40 198	19 891	60 023	966
339950	Sign mfg	3	67	12		692	20 157	449	961	10 917	40 198	19 891	60 023	966
33999	All other miscellaneous mfg	1	55	19		1 404	41 183	920	1 722	19 556	114 889	74 359	189 279	3 964
339991	Gasket, packing, & sealing device mfg...	—	4	2		e	D	D	D	D	D	D	D	674
339999	All other miscellaneous mfg	2	37	14		814	21 111	476	775	9 145	62 590	39 786	103 116	2 776
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA													
31-33	Manufacturing	1	11 035	3 331		479 063	22 173 668	264 910	528 059	8 613 791	71 348 918	59 766 409	130 726 883	6 942 626
311	Food mfg	2	841	278		30 532	879 763	21 568	40 323	522 532	3 046 172	3 889 097	6 961 737	190 636
312	Beverage & tobacco product mfg	2	305	114		j	D	D	D	D	D	D	D	D
313	Textile mills	1	53	4		f	D	D	D	D	D	D	D	D
314	Textile product mills	3	179	29		g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	549	214		j	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	1	42	13		g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	198	53		3 929	107 683	3 117	6 260	71 601	225 884	299 099	520 073	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.													
	Manufacturing—Con.													
322	Paper mfg	1	111	63	i	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	2	1 403	232		19 497	682 651	13 918	26 309	411 259	1 410 235	867 554	2 283 399	125 905
324	Petroleum & coal products mfg	2	46	17	h	D	D	D	D	D	D	D	D	
325	Chemical mfg	1	332	119		16 326	927 964	7 541	14 951	274 938	3 339 239	1 486 829	4 782 346	387 161
326	Plastics & rubber products mfg	2	325	135		13 696	537 552	9 412	17 855	247 957	1 338 490	974 383	2 296 812	135 024
327	Nonmetallic mineral product mfg	1	353	109		9 188	350 458	7 288	15 421	251 160	1 050 663	805 023	1 842 679	97 941
331	Primary metal mfg	—	73	33	h	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 798	486		37 923	1 399 655	29 157	58 455	910 433	3 003 938	2 210 233	5 201 594	208 473
333	Machinery mfg	1	636	208		30 291	1 366 161	15 412	31 072	512 046	3 391 183	3 777 662	7 106 157	469 142
334	Computer & electronic product mfg.....	—	1 729	818		210 661	11 647 767	92 296	190 779	3 464 058	40 440 683	27 153 443	67 452 958	D
335	Electrical equipment, appliance, & component mfg	1	221	90	i	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	231	61	k	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	571	87		6 976	205 911	5 338	10 254	127 601	446 866	321 534	765 935	D
339	Miscellaneous mfg.....	1	1 039	168		19 782	794 079	10 853	20 821	297 422	2 326 672	950 733	3 244 848	137 138
	Oakland, CA PMSA													
31-33	Manufacturing	1	3 230	1 020		113 175	4 692 006	72 683	143 400	2 413 842	14 194 822	19 984 736	33 982 568	1 616 377
311	Food mfg	2	245	99		12 243	383 436	8 194	16 023	218 231	1 395 368	1 571 390	2 948 633	89 692
3113	Sugar & confectionery product mfg.....	1	21	12		2 258	81 465	1 781	3 336	55 299	280 436	507 314	780 848	18 844
31131	Sugar mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
311312	Cane sugar refining...	—	1	1	f	D	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	4	9	6		1 004	27 363	763	1 202	14 731	90 913	90 946	176 009	9 042
311330	Confectionery mfg from purchased chocolate.....	4	9	6		1 004	27 363	763	1 202	14 731	90 913	90 946	176 009	9 042
31134	Nonchocolate confectionery mfg	—	8	4	f	D	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	—	8	4	f	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	2	13	8		813	34 186	667	1 318	21 214	110 179	102 133	215 114	D
31141	Frozen food mfg.....	—	6	5		348	14 284	262	456	4 989	49 193	24 077	73 241	D
311412	Frozen specialty food mfg	—	6	5		348	14 284	262	456	4 989	49 193	24 077	73 241	D
31142	Fruit & vegetable canning, pickling, & drying	3	7	3		465	19 902	405	862	16 225	60 986	78 056	141 873	3 547
311421	Fruit & vegetable canning	3	7	3		465	19 902	405	862	16 225	60 986	78 056	141 873	3 547
3115	Dairy product mfg	1	15	6		645	27 539	394	926	16 346	158 315	256 480	413 830	6 020
31151	Dairy product (except frozen) mfg	1	10	5	e	D	D	D	D	D	D	D	D	5 314
311511	Fluid milk mfg	1	8	5		457	18 569	244	535	9 604	104 705	196 307	301 153	D
3116	Meat product mfg	5	20	9		1 036	27 792	800	1 329	16 568	77 771	95 843	171 319	14 166
31161	Animal slaughtering & processing.....	5	20	9		1 036	27 792	800	1 329	16 568	77 771	95 843	171 319	14 166
311612	Meat processed from carcasses	4	14	8		970	26 265	743	1 232	15 634	73 736	82 252	153 693	14 032

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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	3	125	40	5 713	156 369	3 296	6 273	72 796	419 838	249 906	668 034	26 212
31181	Bread & bakery product mfg	5	102	29	4 154	102 667	2 438	4 731	54 240	241 088	136 611	375 761	17 087
311811	Retail bakeries	3	56	4	418	6 460	256	329	3 181	14 074	7 020	21 118	D
311812	Commercial bakeries	5	42	22	3 529	92 110	2 001	4 004	48 152	217 262	116 489	333 553	14 691
31182	Cookie, cracker, & pasta mfg	1	19	7	1 307	47 252	687	1 190	15 062	170 560	106 080	276 925	8 684
311821	Cookie & cracker mfg	—	10	4	f	D	D	D	D	D	D	D	6 371
311822	Flour mixes & dough mfg from purchased flour	3	5	3	308	7 033	266	481	5 557	17 367	47 807	63 675	2 149
31183	Tortilla mfg	2	4	4	252	6 450	171	352	3 494	8 190	7 215	15 348	441
311830	Tortilla mfg	2	4	4	252	6 450	171	352	3 494	8 190	7 215	15 348	441
3119	Other food mfg	1	38	20	1 516	46 249	1 079	2 489	29 593	297 040	275 835	570 010	14 705
31191	Snack food mfg	—	8	4	283	7 788	216	553	5 434	35 305	40 486	74 212	973
31192	Coffee & tea mfg	—	6	3	436	13 622	314	829	8 460	198 468	174 101	372 124	9 230
311920	Coffee & tea mfg	—	6	3	436	13 622	314	829	8 460	198 468	174 101	372 124	9 230
31194	Seasoning & dressing mfg	3	6	5	326	11 396	191	477	6 549	23 332	23 083	45 832	1 637
31199	All other food mfg	4	18	8	471	13 443	358	630	9 150	39 935	38 165	77 842	2 865
311999	All other miscellaneous food mfg	3	14	6	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	6	31	12	987	34 033	705	1 414	23 634	278 991	403 722	673 005	16 258
3121	Beverage mfg	6	31	12	987	34 033	705	1 414	23 634	278 991	403 722	673 005	16 258
31211	Soft drink & ice mfg	6	12	7	740	27 005	539	1 164	19 118	240 087	371 820	608 604	14 113
312111	Soft drink mfg	6	8	5	648	23 667	456	962	16 531	235 050	363 204	594 792	13 742
313	Textile mills	—	14	2	280	9 505	224	444	5 629	22 124	51 804	72 060	D
314	Textile product mills	3	60	13	679	12 950	514	993	7 918	20 494	22 852	43 580	D
3149	Other textile product mills	2	36	11	520	9 565	412	810	6 331	15 128	16 859	32 296	D
31499	All other textile product mills	—	13	7	314	5 230	245	484	3 608	6 502	8 986	15 601	D
314999	All other miscellaneous textile product mills	—	13	7	314	5 230	245	484	3 608	6 502	8 986	15 601	D
315	Apparel mfg	3	142	45	2 375	35 868	2 058	3 598	25 040	69 040	40 803	109 666	D
3152	Cut & sew apparel mfg	4	128	40	2 029	29 300	1 801	3 024	21 194	55 872	28 058	83 995	D
31521	Cut & sew apparel contractors	7	91	23	1 421	17 199	1 332	2 143	14 746	26 521	6 715	33 184	D
315212	Women's, girls', & infants' cut & sew apparel contractors	7	88	21	1 344	16 375	1 261	2 043	14 127	24 744	6 386	31 108	D
31523	Women's & girls' cut & sew apparel mfg	—	33	14	515	10 056	413	782	5 854	22 674	14 565	36 991	D
316	Leather & allied product mfg	1	11	4	348	7 079	285	542	4 991	17 200	9 966	27 349	D
3169	Other leather & allied product mfg	—	8	3	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	8	3	e	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	63	14	943	26 890	782	1 750	18 844	54 690	68 388	118 360	D
3219	Other wood product mfg	3	60	14	936	26 740	777	1 741	18 740	54 370	67 937	117 595	D
32192	Wood container & pallet mfg	3	29	7	408	8 795	338	692	6 128	18 751	27 246	46 256	D
321920	Wood container & pallet mfg	3	29	7	408	8 795	338	692	6 128	18 751	27 246	46 256	D
32199	All other wood product mfg	2	12	5	386	13 379	336	855	9 861	27 368	31 023	53 356	D
321999	All other miscellaneous wood product mfg	—	10	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	1	50	32	2 930	123 093	2 065	4 378	76 234	282 355	441 990	724 011	23 657
3221	Pulp, paper, & paperboard mills	—	3	3	323	17 567	256	560	12 928	60 792	98 349	158 571	6 753
32213	Paperboard mills	—	3	3	323	17 567	256	560	12 928	60 792	98 349	158 571	6 753
322130	Paperboard mills	—	3	3	323	17 567	256	560	12 928	60 792	98 349	158 571	6 753
3222	Converted paper product mfg	1	47	29	2 607	105 526	1 809	3 818	63 306	221 563	343 641	565 440	16 904
32221	Paperboard container mfg	1	26	21	1 910	77 809	1 377	2 959	46 968	150 452	262 823	413 113	14 476
322211	Corrugated & solid fiber box mfg	2	19	17	1 633	67 498	1 150	2 498	40 180	121 094	241 792	362 559	12 949
32222	Paper bag & coated & treated paper mfg	—	10	6	552	23 730	316	649	13 469	60 499	66 406	127 242	1 960
322222	Coated & laminated paper mfg	—	8	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	393	56	5 150	165 256	3 659	6 480	96 608	351 712	304 752	660 311	29 406
3231	Printing & related support activities	1	393	56	5 150	165 256	3 659	6 480	96 608	351 712	304 752	660 311	29 406
32311	Printing	1	348	50	4 716	150 253	3 330	5 857	87 043	321 140	298 761	623 820	27 711
323110	Commercial lithographic printing ..	1	180	30	2 757	91 552	1 931	3 511	54 840	195 488	224 256	418 724	14 576
323113	Commercial screen printing	1	31	7	746	22 688	541	819	9 824	47 130	19 313	68 166	3 050
323114	Quick printing	1	91	4	525	15 090	378	706	9 626	38 346	20 956	59 467	2 592
32312	Support activities for printing	2	45	6	434	15 003	329	623	9 565	30 572	5 991	36 491	1 695
323122	Prepress services	2	32	5	309	12 107	222	421	7 394	25 504	4 628	30 049	1 280
324	Petroleum & coal products mfg	2	27	13	4 093	235 548	2 781	6 490	160 487	1 770 710	5 586 212	7 269 608	290 734
3241	Petroleum & coal products mfg	2	27	13	4 093	235 548	2 781	6 490	160 487	1 770 710	5 586 212	7 269 608	290 734
32411	Petroleum refineries	2	7	5	3 689	217 739	2 510	5 903	148 483	1 648 091	5 416 462	6 974 045	284 672
324110	Petroleum refineries ..	2	7	5	3 689	217 739	2 510	5 903	148 483	1 648 091	5 416 462	6 974 045	284 672
32412	Asphalt paving, roofing, & saturated materials mfg	1	16	5	289	12 828	210	433	9 319	57 436	104 998	162 578	4 617
325	Chemical mfg	1	144	59	7 646	430 607	3 658	7 392	146 681	1 332 584	866 109	2 186 332	139 156
3251	Basic chemical mfg	—	28	18	1 401	78 143	828	1 778	46 150	452 621	323 001	778 375	27 429
32518	Other basic inorganic chemical mfg	—	14	8	479	24 270	267	615	13 144	101 780	116 558	221 692	18 763
325188	All other basic inorganic chemical mfg	—	13	8	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	5	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	5	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	25	12	4 163	266 555	1 569	2 879	53 797	591 681	118 323	692 924	94 953
32541	Pharmaceutical & medicine mfg	1	25	12	4 163	266 555	1 569	2 879	53 797	591 681	118 323	692 924	94 953
325413	In-vitro diagnostic substance mfg	—	4	3	423	22 280	95	233	3 469	48 959	9 814	52 848	D
325414	Biological product (except diagnostic) mfg	—	8	4	3 431	231 250	1 277	2 289	42 759	473 428	86 469	552 851	57 900
3255	Paint, coating, & adhesive mfg	—	22	9	745	32 671	368	803	13 419	133 377	149 633	283 167	4 866
32551	Paint & coating mfg	—	16	6	508	19 572	260	547	8 948	89 430	120 280	210 661	3 640
325510	Paint & coating mfg	—	16	6	508	19 572	260	547	8 948	89 430	120 280	210 661	3 640
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	23	7	346	14 437	231	558	7 331	50 191	42 115	92 074	1 947
3259	Other chemical product mfg	—	37	12	850	30 139	558	1 142	19 951	116 385	85 129	201 062	7 850
32599	All other chemical product & preparation mfg	1	26	7	669	22 569	466	950	15 843	98 560	47 387	145 875	6 980
325998	All other miscellaneous chemical product & preparation mfg	—	17	6	596	20 409	404	847	14 226	91 544	39 812	131 238	6 600

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	127	54	4 276	116 594	3 337	6 463	74 057	317 719	292 171	609 821	30 248
3261	Plastics product mfg	2	114	49	4 044	108 814	3 160	6 089	68 673	299 356	274 284	572 170	29 303
32611	Unsupported plastics film, sheet, & bag mfg ..	1	24	14	1 001	27 194	798	1 597	18 368	65 721	97 260	165 659	12 270
326111	Unsupported plastics bag mfg	1	14	7	529	10 711	457	817	8 170	26 857	48 799	76 220	5 584
32615	Urethane & other foam product (except polystyrene) mfg	2	9	6	456	10 802	344	647	7 282	41 648	57 555	97 969	3 753
326150	Urethane & other foam product (except polystyrene) mfg	2	9	6	456	10 802	344	647	7 282	41 648	57 555	97 969	3 753
32619	Other plastics product mfg	3	68	24	2 301	63 484	1 804	3 452	38 774	174 593	104 155	275 733	12 352
326199	All other plastics product mfg	3	61	21	2 081	56 768	1 646	3 176	35 890	162 710	97 775	257 478	11 843
327	Nonmetallic mineral product mfg	—	109	39	3 631	155 521	2 943	6 426	110 463	455 741	355 587	793 474	34 670
3271	Clay product & refractory mfg	—	16	3	455	20 773	386	921	13 396	38 841	15 429	53 837	4 655
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	14	3	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	—	5	3	401	19 717	342	838	12 632	36 844	14 753	51 077	D
3272	Glass & glass product mfg .	—	32	10	1 516	66 062	1 308	2 846	49 502	201 517	138 237	323 822	14 003
32721	Glass & glass product mfg	—	32	10	1 516	66 062	1 308	2 846	49 502	201 517	138 237	323 822	14 003
327213	Glass container mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	19	8	f	D	D	D	D	D	D	D	8 572
3273	Cement & concrete product mfg	1	43	18	1 192	48 510	897	1 846	34 031	151 114	126 997	276 424	7 908
32732	Ready-mix concrete mfg.	—	24	11	604	25 844	470	934	19 335	101 172	87 038	186 994	5 719
327320	Ready-mix concrete mfg	—	24	11	604	25 844	470	934	19 335	101 172	87 038	186 994	5 719
32739	Other concrete product mfg	1	15	6	538	20 631	388	834	13 324	44 584	35 597	79 689	1 698
327390	Other concrete product mfg	1	15	6	538	20 631	388	834	13 324	44 584	35 597	79 689	1 698
3274	Lime & gypsum product mfg	1	5	4	280	13 753	215	538	9 634	44 751	61 332	106 793	6 601
32742	Gypsum product mfg	1	5	4	280	13 753	215	538	9 634	44 751	61 332	106 793	6 601
327420	Gypsum product mfg ..	1	5	4	280	13 753	215	538	9 634	44 751	61 332	106 793	6 601
331	Primary metal mfg	—	35	20	3 125	138 445	2 476	5 454	103 457	511 514	766 113	1 266 624	31 169
3312	Steel product mfg from purchased steel	—	4	4	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	4	4	g	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	1	1	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	3	3	e	D	D	D	D	D	D	D	D
3315	Foundries	—	26	14	1 796	69 908	1 491	3 201	52 717	183 418	101 733	282 956	D
33151	Ferrous metal foundries .	—	13	6	1 246	46 449	1 020	2 193	36 010	143 303	71 838	212 788	6 741
331511	Iron foundries	—	7	3	582	22 508	462	974	16 235	92 752	40 566	132 161	4 879
331513	Steel foundries (except investment)	—	5	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	13	8	550	23 459	471	1 008	16 707	40 115	29 895	70 168	D
331521	Aluminum die-casting foundries	—	5	5	273	11 787	229	479	9 116	16 612	16 682	33 367	1 152
331524	Aluminum foundries (except die-casting) ..	—	5	3	251	10 688	223	475	7 007	21 474	12 554	34 112	520
332	Fabricated metal product mfg	1	565	174	13 504	517 861	9 950	19 641	318 774	1 156 865	1 083 820	2 226 203	83 772
3321	Forging & stamping	2	23	11	1 326	40 816	1 062	2 331	27 567	63 006	115 149	181 504	19 087
33211	Forging & stamping	2	23	11	1 326	40 816	1 062	2 331	27 567	63 006	115 149	181 504	19 087
332116	Metal stamping	2	14	7	936	27 964	785	1 836	19 647	51 943	82 827	135 129	12 293
3322	Cutlery & handtool mfg	—	16	4	464	29 336	193	347	7 633	87 695	39 077	124 850	3 915
33221	Cutlery & handtool mfg ..	—	16	4	464	29 336	193	347	7 633	87 695	39 077	124 850	3 915
332212	Hand & edge tool mfg .	—	15	3	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	132	40	3 086	110 991	2 248	4 212	69 398	280 193	182 287	456 351	12 118
33231	Plate work & fabricated structural product mfg ..	—	34	12	917	39 711	658	1 282	24 692	115 211	72 525	188 185	3 498
332312	Fabricated structural metal mfg	—	20	8	673	28 653	485	915	18 892	97 886	57 848	156 121	2 867
33232	Ornamental & architectural metal products mfg	1	98	28	2 169	71 280	1 590	2 930	44 706	164 982	109 762	268 166	8 620
332321	Metal window & door mfg	1	20	7	429	12 186	293	593	6 706	25 820	25 715	51 306	1 284
332322	Sheet metal work mfg ..	1	62	21	1 628	55 913	1 221	2 187	36 125	127 956	80 660	202 228	7 096
3324	Boiler, tank, & shipping container mfg	1	18	12	1 155	49 892	970	2 041	40 312	150 954	292 171	426 528	4 840
33243	Metal can, box, & other metal container (light gauge) mfg	1	15	11	1 114	47 975	941	1 990	39 389	147 569	289 856	420 660	4 766
332431	Metal can mfg	—	7	5	703	35 438	610	1 307	30 499	121 875	253 480	358 539	3 332
332439	Other metal container mfg	6	8	6	411	12 537	331	683	8 890	25 694	36 376	62 121	1 434
3325	Hardware mfg	—	9	6	617	22 141	467	928	13 571	46 480	31 300	77 960	1 286
33251	Hardware mfg	—	9	6	617	22 141	467	928	13 571	46 480	31 300	77 960	1 286
332510	Hardware mfg	—	9	6	617	22 141	467	928	13 571	46 480	31 300	77 960	1 286
3326	Spring & wire product mfg ..	—	14	3	262	10 168	169	378	5 329	17 473	17 313	34 536	4 491
33261	Spring & wire product mfg	—	14	3	262	10 168	169	378	5 329	17 473	17 313	34 536	4 491
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	248	55	3 598	141 142	2 711	5 281	87 614	278 958	129 060	408 821	24 360
33271	Machine shops	1	223	44	3 087	121 878	2 341	4 448	75 593	236 569	111 204	347 987	20 646
332710	Machine shops	1	223	44	3 087	121 878	2 341	4 448	75 593	236 569	111 204	347 987	20 646
33272	Turned product & screw, nut, & bolt mfg	—	25	11	511	19 264	370	833	12 021	42 389	17 856	60 834	3 714
332721	Precision turned product mfg	1	19	6	375	14 154	267	636	8 791	31 709	9 605	41 563	2 390
3328	Coating, engraving, heat treating, & allied activities.	1	55	21	1 203	43 611	885	1 692	25 629	96 159	151 990	247 104	6 287
33281	Coating, engraving, heat treating, & allied activities	1	55	21	1 203	43 611	885	1 692	25 629	96 159	151 990	247 104	6 287
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	22	7	507	21 852	328	671	10 678	53 550	139 220	191 548	D
332813	Electroplating, plating, polishing, anodizing, & coloring	4	27	11	591	17 687	479	859	12 188	33 673	10 693	44 534	D
3329	Other fabricated metal product mfg	1	50	22	1 793	69 764	1 245	2 431	41 721	135 947	125 473	268 549	7 388
33291	Metal valve mfg	2	17	9	887	38 514	608	1 168	23 134	42 314	37 363	89 071	4 795
332911	Industrial valve mfg	2	10	8	824	36 639	568	1 091	22 032	37 535	34 187	81 131	D
33299	All other fabricated metal product mfg	—	33	13	906	31 250	637	1 263	18 587	93 633	88 110	179 478	2 593
332999	All other miscellaneous fabricated metal product mfg	—	25	10	745	25 973	508	1 015	14 943	79 652	80 610	157 991	2 316
333	Machinery mfg	—	205	73	10 096	445 812	4 131	7 813	158 644	1 039 990	1 116 872	2 124 390	86 585
3332	Industrial machinery mfg ..	—	53	24	6 690	292 700	2 102	3 823	83 026	717 526	864 980	1 562 856	68 662
33329	Other industrial machinery mfg	—	52	23	i	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	23	16	6 085	263 897	1 727	3 154	71 914	635 651	815 164	1 433 301	64 458
333298	All other industrial machinery mfg	2	16	6	431	22 445	273	469	7 786	72 324	37 884	108 079	3 516
3333	Commercial & service industry machinery mfg ..	3	31	9	676	30 885	368	710	14 201	61 531	31 731	93 308	4 007
33331	Commercial & service industry machinery mfg	3	31	9	676	30 885	368	710	14 201	61 531	31 731	93 308	4 007
333314	Optical instrument & lens mfg	4	9	5	364	18 647	181	353	8 530	37 137	13 813	51 852	2 483
3335	Metalworking machinery mfg	—	46	14	964	43 893	793	1 462	31 539	85 925	38 539	122 328	5 002
33351	Metalworking machinery mfg	—	46	14	964	43 893	793	1 462	31 539	85 925	38 539	122 328	5 002
333512	Machine tool (metal cutting types) mfg ...	—	3	2	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	—	24	5	341	16 396	276	487	10 781	29 221	11 591	40 706	3 230

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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	2	55	19	1 355	64 291	624	1 344	22 812	133 201	156 167	279 175	7 410
33392	Material handling equipment mfg	2	15	4	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	38	14	1 003	46 337	432	929	16 040	92 956	132 909	216 425	6 614
333993	Packaging machinery mfg	—	6	3	428	21 955	133	272	5 365	48 135	101 002	139 286	1 655
333999	All other miscellaneous general-purpose machinery mfg	3	14	6	324	13 724	187	428	6 843	25 656	17 916	43 136	4 080
334	Computer & electronic product mfg	1	397	183	24 007	1 127 559	12 591	24 777	383 179	3 638 479	3 998 466	7 645 403	410 466
3341	Computer & peripheral equipment mfg	1	66	29	2 979	174 175	1 049	2 033	50 862	834 750	1 277 496	2 111 751	38 730
33411	Computer & peripheral equipment mfg	1	66	29	2 979	174 175	1 049	2 033	50 862	834 750	1 277 496	2 111 751	38 730
334111	Electronic computer mfg	—	27	11	1 400	79 763	550	1 096	21 799	679 380	942 155	1 621 353	14 036
334119	Other computer peripheral equipment mfg	3	30	15	1 313	78 037	423	779	25 609	134 976	301 974	439 014	20 648
3342	Communications equipment mfg	1	57	29	3 182	191 303	1 022	2 082	34 612	744 043	558 924	1 280 393	88 284
33421	Telephone apparatus mfg	—	25	12	1 815	136 517	441	941	17 598	615 424	471 120	1 066 023	80 015
334210	Telephone apparatus mfg	—	25	12	1 815	136 517	441	941	17 598	615 424	471 120	1 066 023	80 015
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	21	12	953	35 712	346	762	12 547	83 966	52 492	133 342	6 332
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	21	12	953	35 712	346	762	12 547	83 966	52 492	133 342	6 332
33429	Other communications equipment mfg	1	11	5	414	19 074	235	379	4 467	44 653	35 312	81 028	1 937
334290	Other communications equipment mfg	1	11	5	414	19 074	235	379	4 467	44 653	35 312	81 028	1 937
3344	Semiconductor & other electronic component mfg	2	139	59	7 247	257 086	5 174	9 558	135 821	624 515	1 039 854	1 699 304	117 137
33441	Semiconductor & other electronic component mfg	2	139	59	7 247	257 086	5 174	9 558	135 821	624 515	1 039 854	1 699 304	117 137
334412	Bare printed circuit board mfg	—	33	15	2 161	66 028	1 736	3 067	44 012	150 714	148 297	297 130	38 429
334413	Semiconductor & related device mfg	2	39	12	1 115	50 496	623	1 154	15 728	168 770	133 224	296 606	33 982
334417	Electronic connector mfg	6	3	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	1	25	17	2 695	88 730	2 019	3 794	50 877	182 199	673 924	900 876	21 433
334419	Other electronic component mfg	5	32	12	943	40 538	584	1 114	19 527	101 966	71 749	170 114	20 279
3345	Navigational, measuring, medical, & control instruments mfg	1	99	47	5 364	278 980	2 043	4 055	64 590	737 337	464 327	1 199 884	46 132
33451	Navigational, measuring, medical, & control instruments mfg	1	99	47	5 364	278 980	2 043	4 055	64 590	737 337	464 327	1 199 884	46 132
334510	Electromedical & electrotherapeutic apparatus mfg	—	8	4	614	30 958	236	457	7 329	79 774	41 435	123 092	6 849
334515	Electricity measuring & testing instrument mfg	3	23	14	1 323	73 132	504	1 104	19 381	240 136	133 391	374 857	12 735
334516	Analytical laboratory instrument mfg	—	21	13	1 841	97 255	661	1 380	20 729	266 959	143 214	406 245	12 281
334517	Irradiation apparatus mfg	—	4	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	14	7	553	25 627	208	370	6 128	55 809	29 046	86 133	2 759

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Oakland, CA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3346	Mfg & reproducing magnetic & optical media .	2	28	15	5 047	218 888	3 198	6 830	94 677	684 094	632 476	1 313 414	119 859
33461	Mfg & reproducing magnetic & optical media	2	28	15	5 047	218 888	3 198	6 830	94 677	684 094	632 476	1 313 414	119 859
334611	Software reproducing .	1	9	5	541	18 297	443	1 083	12 549	63 819	33 180	96 999	11 406
334612	Prerecorded CD (except software), tape, & record reproducing	3	6	4	890	25 685	757	1 616	17 865	129 819	83 769	216 021	8 195
334613	Magnetic & optical recording media mfg .	2	13	6	3 616	174 906	1 998	4 131	64 263	490 456	515 527	1 000 394	100 258
335	Electrical equipment, appliance, & component mfg	—	65	26	2 264	92 223	1 285	2 456	33 942	230 769	177 068	409 431	12 723
3351	Electric lighting equipment mfg	—	23	10	1 037	39 893	576	1 145	14 826	93 787	63 459	159 420	5 009
33512	Lighting fixture mfg	—	23	10	1 037	39 893	576	1 145	14 826	93 787	63 459	159 420	5 009
335122	Commercial/industrial/institutional electric lighting fixture mfg . . .	—	10	6	656	27 116	357	722	9 762	67 202	31 395	101 059	3 018
335129	Other lighting equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . .	2	22	6	478	22 771	250	428	8 238	65 242	44 257	109 556	2 221
33531	Electrical equipment mfg	2	22	6	478	22 771	250	428	8 238	65 242	44 257	109 556	2 221
335314	Relay & industrial control mfg	2	12	4	267	14 407	102	189	3 013	38 503	21 027	59 421	1 206
3359	Other electrical equipment & component mfg	—	20	10	749	29 559	459	883	10 878	71 740	69 352	140 455	5 493
33593	Wiring device mfg	—	5	3	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	14	7	456	18 227	243	422	6 696	34 269	40 044	73 629	2 433
335999	All other miscellaneous electrical equipment & component mfg	—	13	7	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	81	23	7 331	389 738	6 334	11 725	329 153	761 606	2 511 199	3 275 307	D
3361	Motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	2	40	13	1 078	35 223	797	1 717	20 652	90 778	153 392	246 470	D
33632	Motor vehicle electrical & electronic equipment mfg	4	13	6	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	3	12	5	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	3	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	3	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	7	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	7	2	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	21	2	416	14 811	354	726	12 464	25 602	11 916	37 535	D
33661	Ship & boat building	2	21	2	416	14 811	354	726	12 464	25 602	11 916	37 535	D
336611	Ship building & repairing	1	16	2	386	13 927	330	685	11 796	23 138	11 093	34 231	D

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	Oakland, CA PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	168	32	2 319	64 604	1 845	3 525	43 179	153 730	112 638	265 445	4 468
3371	Household & institutional furniture & kitchen cabinet mfg	4	121	9	870	21 374	734	1 361	16 038	43 639	36 193	80 034	1 800
33711	Wood kitchen cabinet & counter top mfg	3	70	3	376	10 335	309	603	7 798	22 986	15 197	38 184	900
337110	Wood kitchen cabinet & counter top mfg ...	3	70	3	376	10 335	309	603	7 798	22 986	15 197	38 184	900
33712	Household & institutional furniture mfg	5	51	6	494	11 039	425	758	8 240	20 653	20 996	41 850	900
3372	Office furniture (including fixtures) mfg	1	37	18	1 001	31 159	779	1 466	19 727	59 466	32 188	90 602	1 584
33721	Office furniture (including fixtures) mfg	1	37	18	1 001	31 159	779	1 466	19 727	59 466	32 188	90 602	1 584
337211	Wood office furniture mfg	1	12	6	496	13 349	418	749	9 446	22 891	14 946	37 794	891
337215	Showcase, partition, shelving, & locker mfg	2	14	8	271	9 771	199	387	5 947	22 340	9 277	31 492	326
3379	Other furniture related product mfg	—	10	5	448	12 071	332	698	7 414	50 625	44 257	94 809	1 084
33791	Mattress mfg	—	7	4	403	10 881	297	628	6 801	49 184	42 826	91 922	D
337910	Mattress mfg	—	7	4	403	10 881	297	628	6 801	49 184	42 826	91 922	D
339	Miscellaneous mfg	2	298	47	4 948	179 384	2 866	5 616	74 697	333 141	202 814	533 555	21 467
3391	Medical equipment & supplies mfg	1	158	25	2 921	123 928	1 504	3 032	47 051	212 182	124 136	333 232	16 381
33911	Medical equipment & supplies mfg	1	158	25	2 921	123 928	1 504	3 032	47 051	212 182	124 136	333 232	16 381
339112	Surgical & medical instrument mfg	—	27	9	1 641	84 547	622	1 385	24 027	128 989	91 910	217 625	12 104
339116	Dental laboratories ...	4	96	5	789	24 665	590	1 040	15 450	47 480	13 303	61 200	1 359
3399	Other miscellaneous mfg ..	2	140	22	2 027	55 456	1 362	2 584	27 646	120 959	78 678	200 323	5 086
33994	Office supplies (except paper) mfg	1	13	3	505	10 815	404	918	7 785	27 731	11 947	39 520	246
339943	Marking device mfg ...	—	10	3	e	D	D	D	D	D	D	D	230
33995	Sign mfg	1	38	6	576	22 242	294	522	7 455	41 153	22 591	64 880	1 229
339950	Sign mfg	1	38	6	576	22 242	294	522	7 455	41 153	22 591	64 880	1 229
33999	All other miscellaneous mfg	4	43	8	534	12 010	382	635	7 162	30 098	22 010	51 699	2 246
339999	All other miscellaneous mfg	4	31	6	434	9 463	317	506	5 653	24 879	18 344	42 849	2 095
	San Francisco, CA PMSA												
31-33	Manufacturing	2	2 607	637	64 080	2 451 959	42 062	80 298	1 097 095	6 696 333	4 674 991	11 325 192	486 316
311	Food mfg	3	280	76	6 679	193 944	4 607	8 238	104 960	607 380	484 095	1 095 516	28 760
3113	Sugar & confectionery product mfg	—	23	7	1 187	39 096	951	1 844	25 394	171 717	120 042	293 128	6 871
31132	Chocolate & confectionery mfg from cacao beans	—	3	2	e	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	—	3	2	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	—	16	4	875	26 875	724	1 366	18 084	125 696	59 379	186 046	3 817
311330	Confectionery mfg from purchased chocolate	—	16	4	875	26 875	724	1 366	18 084	125 696	59 379	186 046	3 817
3116	Meat product mfg	3	18	11	661	19 755	505	920	13 026	91 515	101 744	195 512	4 020
31161	Animal slaughtering & processing	3	18	11	661	19 755	505	920	13 026	91 515	101 744	195 512	4 020
311612	Meat processed from carcasses	3	16	10	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	148	35	3 368	96 381	2 028	3 311	42 563	232 640	114 027	346 839	10 718
31181	Bread & bakery product mfg	5	132	31	3 076	90 680	1 797	2 969	38 731	217 640	99 577	317 481	9 929
311811	Retail bakeries	7	88	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ...	5	41	22	2 258	77 391	1 194	2 090	30 512	186 883	82 306	269 485	8 497
3119	Other food mfg	2	45	13	794	19 996	606	1 142	11 699	51 705	77 587	130 248	2 929
31199	All other food mfg	3	27	9	596	11 933	459	863	7 762	30 054	21 957	52 046	1 724
311991	Perishable prepared food mfg	1	7	5	326	4 852	248	458	3 123	6 858	10 915	17 805	871
311999	All other miscellaneous food mfg	3	20	4	270	7 081	211	405	4 639	23 196	11 042	34 241	853

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Francisco, CA PMSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	19	6	599	23 111	317	659	15 803	215 314	110 999	325 781	5 386
3121	Beverage mfg	—	19	6	599	23 111	317	659	15 803	215 314	110 999	325 781	5 386
314	Textile product mills	4	72	10	772	14 737	549	992	8 314	28 687	28 813	58 139	1 214
3141	Textile furnishings mills	3	36	4	334	6 228	220	399	3 231	11 009	14 299	25 448	385
31412	Curtain & linen mills	2	34	4	e	D	D	D	D	D	D	D	D
3149	Other textile product mills	5	36	6	438	8 509	329	593	5 083	17 678	14 514	32 691	829
31499	All other textile product mills	5	20	6	357	6 999	266	483	4 154	14 233	11 323	25 856	530
314999	All other miscellaneous textile product mills	5	19	5	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	359	158	12 626	242 643	10 721	20 022	158 025	1 059 422	1 379 473	2 421 451	12 507
3151	Apparel knitting mills	—	8	7	739	14 381	657	1 548	10 988	25 286	15 796	42 763	665
31519	Other apparel knitting mills	—	8	7	739	14 381	657	1 548	10 988	25 286	15 796	42 763	665
315191	Outerwear knitting mills	—	8	7	739	14 381	657	1 548	10 988	25 286	15 796	42 763	665
3152	Cut & sew apparel mfg	—	327	149	11 566	218 340	9 820	17 980	142 796	1 008 983	1 340 732	2 332 447	10 897
31521	Cut & sew apparel contractors	5	204	91	5 211	68 197	4 840	8 925	60 738	104 988	21 984	126 800	2 989
315211	Men's & boys' cut & sew apparel contractors	1	11	7	429	6 501	408	801	5 529	11 316	3 622	14 938	211
315212	Women's, girls', & infants' cut & sew apparel contractors	6	193	84	4 782	61 696	4 432	8 124	55 209	93 672	18 362	111 862	2 778
31522	Men's & boys' cut & sew apparel mfg	—	23	17	g	D	D	D	D	D	D	D	1 065
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	5	4	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	4	3	f	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	6	4	3	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	5	5	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	84	36	3 531	92 387	2 443	4 017	37 707	201 518	312 153	512 202	6 273
315232	Women's & girls' cut & sew blouse & shirt mfg	—	29	15	1 594	39 489	1 194	1 669	16 142	82 137	143 467	221 419	4 243
315233	Women's & girls' cut & sew dress mfg	—	17	7	1 059	33 600	624	1 203	11 455	77 865	125 255	207 937	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	1	13	5	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	2	22	7	509	11 734	349	632	6 447	25 121	28 263	51 758	383
31529	Other cut & sew apparel mfg	8	16	5	e	D	D	D	D	D	D	D	570
3159	Apparel accessories & other apparel mfg	—	24	2	321	9 922	244	494	4 241	25 153	22 945	46 241	945
31599	Apparel accessories & other apparel mfg	—	24	2	321	9 922	244	494	4 241	25 153	22 945	46 241	945
315999	Other apparel accessories & other apparel mfg	—	20	1	282	9 237	215	445	3 849	24 655	22 336	45 125	D
316	Leather & allied product mfg	1	15	5	398	9 110	317	634	6 140	16 759	13 943	30 866	D
3169	Other leather & allied product mfg	—	10	3	305	5 575	240	463	3 599	12 284	8 349	20 760	D
31699	Other leather & allied product mfg	—	10	3	305	5 575	240	463	3 599	12 284	8 349	20 760	D
321	Wood product mfg	1	36	5	314	10 496	233	492	6 725	18 941	20 932	39 780	1 097
3219	Other wood product mfg	1	36	5	314	10 496	233	492	6 725	18 941	20 932	39 780	1 097
322	Paper mfg	2	23	10	925	34 676	737	1 465	23 408	66 965	98 665	165 401	6 899
3222	Converted paper product mfg	2	23	10	925	34 676	737	1 465	23 408	66 965	98 665	165 401	6 899
32221	Paperboard container mfg	—	8	3	343	14 465	287	545	9 360	27 450	54 595	82 137	4 229
322211	Corrugated & solid fiber box mfg	—	5	3	322	13 938	269	509	8 946	26 174	51 788	77 983	D
32223	Stationery product mfg	5	11	6	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	5	5	5	412	13 753	325	657	9 545	24 199	31 889	55 743	1 488

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Francisco, CA PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	487	92	6 969	266 412	4 902	9 675	160 283	519 106	265 165	785 528	44 208
3231	Printing & related support activities.....	2	487	92	6 969	266 412	4 902	9 675	160 283	519 106	265 165	785 528	44 208
32311	Printing.....	3	405	73	5 595	211 095	3 894	7 635	123 761	410 298	242 237	652 743	37 331
323110	Commercial lithographic printing ..	3	231	50	3 784	155 415	2 599	5 252	92 996	294 978	172 761	467 848	30 720
323113	Commercial screen printing.....	6	32	5	391	10 179	312	593	6 317	19 272	18 557	37 411	1 109
323114	Quick printing.....	2	88	5	650	15 296	451	763	9 237	32 577	16 028	46 789	2 347
323117	Book printing.....	—	10	6	381	17 364	269	522	8 576	35 924	17 747	53 977	930
323119	Other commercial printing.....	7	30	5	256	6 430	173	339	4 017	13 179	8 126	21 329	806
32312	Support activities for printing.....	1	82	19	1 374	55 317	1 008	2 040	36 522	108 808	22 928	132 785	6 877
323121	Tradebinding & related work.....	1	18	6	366	10 233	327	679	8 122	21 203	4 515	25 968	1 046
323122	Prepress services.....	1	64	13	1 008	45 084	681	1 361	28 400	87 605	18 413	106 817	5 831
325	Chemical mfg.....	1	79	20	4 542	282 528	1 793	3 752	48 678	1 003 110	224 934	1 207 000	173 692
3254	Pharmaceutical & medicine mfg.....	—	29	10	3 846	256 326	1 361	2 892	31 829	879 853	87 498	942 411	D
32541	Pharmaceutical & medicine mfg.....	—	29	10	3 846	256 326	1 361	2 892	31 829	879 853	87 498	942 411	D
325412	Pharmaceutical preparation mfg.....	—	11	4	h	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	7	10	4	439	16 225	310	737	10 239	31 948	22 962	54 468	3 777
3255	Paint, coating, & adhesive mfg.....	—	9	5	351	13 510	205	405	9 086	69 526	102 127	177 752	2 262
32551	Paint & coating mfg.....	—	9	5	351	13 510	205	405	9 086	69 526	102 127	177 752	2 262
325510	Paint & coating mfg.....	—	9	5	351	13 510	205	405	9 086	69 526	102 127	177 752	2 262
326	Plastics & rubber products mfg.....	1	60	20	4 472	254 998	2 366	3 972	72 988	603 602	320 162	910 393	55 983
3261	Plastics product mfg.....	1	51	19	4 306	251 293	2 232	3 694	70 115	584 918	311 447	883 124	55 777
32619	Other plastics product mfg.....	1	41	17	4 034	243 538	1 985	3 192	63 397	563 658	296 930	847 022	52 238
326199	All other plastics product mfg.....	1	40	17	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	5	72	16	1 081	39 940	856	1 805	29 444	84 429	93 485	178 127	5 943
3271	Clay product & refractory mfg.....	3	18	5	304	8 305	232	459	5 266	14 627	5 637	20 176	622
3273	Cement & concrete product mfg.....	4	21	9	584	25 520	469	1 019	19 773	54 731	76 897	131 706	4 107
32732	Ready-mix concrete mfg.....	5	13	6	453	21 502	356	800	16 570	46 639	69 032	115 814	3 759
327320	Ready-mix concrete mfg.....	5	13	6	453	21 502	356	800	16 570	46 639	69 032	115 814	3 759
331	Primary metal mfg.....	—	10	2	784	25 399	596	1 021	10 994	32 688	53 000	83 939	4 179
3314	Nonferrous metal (except aluminum) production & processing.....	—	3	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	1	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing.	—	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	1	1	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	294	60	4 710	177 177	3 634	7 077	116 916	394 666	203 436	598 564	22 374
3321	Forging & stamping.....	—	14	5	550	22 357	401	851	15 392	67 718	24 395	91 964	3 453
33211	Forging & stamping.....	—	14	5	550	22 357	401	851	15 392	67 718	24 395	91 964	3 453
332116	Metal stamping.....	—	11	4	517	21 082	380	808	14 781	64 841	22 411	87 116	D
3323	Architectural & structural metals mfg.....	2	68	13	772	25 964	530	1 014	15 378	52 479	33 687	86 167	2 919
33232	Ornamental & architectural metal products mfg.....	2	55	12	678	22 147	473	888	13 518	45 024	25 874	70 947	2 452
332322	Sheet metal work mfg.....	2	26	8	410	13 559	298	578	8 981	27 712	14 968	42 548	1 718
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	119	18	1 398	58 236	1 116	2 190	39 568	103 497	39 772	142 474	8 123
33271	Machine shops.....	2	106	15	1 167	48 246	930	1 827	32 505	84 401	30 677	114 395	6 412
332710	Machine shops.....	2	106	15	1 167	48 246	930	1 827	32 505	84 401	30 677	114 395	6 412

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Francisco, CA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	2	38	11	810	25 370	637	1 299	18 199	62 199	55 844	119 564	3 784
33281	Coating, engraving, heat treating, & allied activities.	2	38	11	810	25 370	637	1 299	18 199	62 199	55 844	119 564	3 784
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	16	5	296	9 074	225	422	6 000	27 028	43 858	72 258	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	20	5	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	30	9	702	28 454	562	994	16 087	50 709	25 330	75 706	2 622
33299	All other fabricated metal product mfg	—	27	8	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	18	7	468	16 582	382	708	10 299	30 650	18 056	49 027	1 364
333	Machinery mfg	4	89	15	1 241	53 565	706	1 439	22 316	112 424	95 836	207 603	6 639
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	13	4	264	10 814	183	403	5 295	26 339	20 362	46 446	1 005
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	13	4	264	10 814	183	403	5 295	26 339	20 362	46 446	1 005
3339	Other general-purpose machinery mfg	1	25	5	400	15 453	226	442	6 472	40 272	27 341	66 483	2 851
33399	All other general-purpose machinery mfg	—	17	3	310	11 740	164	320	4 303	32 367	19 885	51 017	2 268
334	Computer & electronic product mfg	2	145	55	9 969	529 387	4 433	8 907	172 136	1 253 121	892 485	2 157 551	82 556
3341	Computer & peripheral equipment mfg	9	18	9	444	22 736	136	288	5 668	45 220	28 217	73 453	2 346
33411	Computer & peripheral equipment mfg	9	18	9	444	22 736	136	288	5 668	45 220	28 217	73 453	2 346
3342	Communications equipment mfg	5	25	10	3 083	182 682	945	1 880	29 138	530 439	257 080	807 944	29 587
33421	Telephone apparatus mfg	7	11	5	1 718	118 103	280	599	12 839	332 181	164 786	518 256	19 373
334210	Telephone apparatus mfg	7	11	5	1 718	118 103	280	599	12 839	332 181	164 786	518 256	19 373
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	12	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	12	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	42	15	2 426	81 288	1 641	3 507	48 638	155 159	124 525	279 114	11 355
33441	Semiconductor & other electronic component mfg	1	42	15	2 426	81 288	1 641	3 507	48 638	155 159	124 525	279 114	11 355
334411	Electron tube mfg	—	3	2	882	34 855	647	1 445	27 249	65 916	30 475	95 314	4 822
334418	Printed circuit assembly (electronic assembly) mfg	—	3	3	808	17 831	533	961	7 678	36 792	51 687	87 247	1 358
334419	Other electronic component mfg	3	13	3	317	9 841	154	202	2 801	20 033	23 094	44 654	1 038
3345	Navigational, measuring, medical, & control instruments mfg	—	46	17	3 842	236 697	1 592	2 985	85 763	513 100	463 540	968 315	37 234
33451	Navigational, measuring, medical, & control instruments mfg	—	46	17	3 842	236 697	1 592	2 985	85 763	513 100	463 540	968 315	37 234
334510	Electromedical & electrotherapeutic apparatus mfg	—	8	5	1 266	80 414	383	593	16 208	136 693	148 966	282 520	11 134
334511	Search, detection, navigation, & guidance instrument mfg	—	6	4	783	42 870	394	734	20 638	79 165	43 045	120 513	1 812
334516	Analytical laboratory instrument mfg	—	12	4	1 516	101 015	693	1 439	44 617	272 081	261 207	529 330	23 033

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Francisco, CA PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	3	34	12	1 141	58 210	657	1 290	21 819	94 286	74 696	166 432	6 580
3353	Electrical equipment mfg ..	—	10	3	291	12 911	199	394	7 285	24 737	22 115	44 634	420
33531	Electrical equipment mfg	—	10	3	291	12 911	199	394	7 285	24 737	22 115	44 634	420
3359	Other electrical equipment & component mfg	4	9	6	708	40 960	370	752	12 607	56 607	41 001	97 137	5 953
33593	Wiring device mfg	8	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	5	4	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	2	4	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	43	9	893	32 256	708	1 399	23 319	71 928	46 859	118 719	2 932
3366	Ship & boat building	9	8	3	402	16 739	340	781	14 184	34 947	12 252	47 218	D
33661	Ship & boat building	9	8	3	402	16 739	340	781	14 184	34 947	12 252	47 218	D
336611	Ship building & repairing	9	5	3	378	16 002	321	738	13 667	33 380	10 412	43 792	D
337	Furniture & related product mfg	3	163	21	1 807	60 288	1 387	2 707	35 901	122 558	71 385	192 520	4 738
3371	Household & institutional furniture & kitchen cabinet mfg	4	126	12	1 100	34 991	829	1 685	21 368	64 428	42 855	106 754	D
33711	Wood kitchen cabinet & counter top mfg	3	67	5	469	16 345	315	566	8 528	27 631	13 166	40 750	1 131
337110	Wood kitchen cabinet & counter top mfg	3	67	5	469	16 345	315	566	8 528	27 631	13 166	40 750	1 131
33712	Household & institutional furniture mfg	5	59	7	631	18 646	514	1 119	12 840	36 797	29 689	66 004	D
3372	Office furniture (including fixtures) mfg	1	32	7	630	23 483	498	912	13 364	55 105	25 097	79 270	2 174
33721	Office furniture (including fixtures) mfg	1	32	7	630	23 483	498	912	13 364	55 105	25 097	79 270	2 174
337211	Wood office furniture mfg	—	5	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	298	42	3 916	134 610	2 370	4 449	54 033	367 904	161 512	523 714	18 468
3391	Medical equipment & supplies mfg	2	136	13	1 972	85 665	1 106	2 068	29 626	250 338	87 810	336 720	13 851
33911	Medical equipment & supplies mfg	2	136	13	1 972	85 665	1 106	2 068	29 626	250 338	87 810	336 720	13 851
339112	Surgical & medical instrument mfg	4	24	5	675	35 224	303	602	9 378	79 067	34 224	112 731	4 037
339113	Surgical appliance & supplies mfg	1	8	3	397	21 557	226	437	7 339	36 955	20 427	58 557	3 737
339115	Ophthalmic goods mfg	—	3	1	e	D	D	D	D	D	D	D	D
339116	Dental laboratories	5	88	1	340	8 616	257	397	5 128	19 407	8 350	28 095	733
3399	Other miscellaneous mfg ..	3	162	29	1 944	48 945	1 264	2 381	24 407	117 566	73 702	186 994	4 617
33991	Jewelry & silverware mfg	6	56	4	401	8 188	284	451	4 533	17 689	13 394	30 707	622
33999	All other miscellaneous mfg	1	45	13	792	21 609	560	1 175	11 288	42 215	26 577	68 256	1 749
339999	All other miscellaneous mfg	1	32	10	671	18 224	485	1 030	9 603	34 826	22 200	56 571	1 484
	San Jose, CA PMSA												
31-33	Manufacturing	—	3 464	1 199	249 947	13 093 977	116 800	240 863	4 149 520	44 011 275	28 486 651	72 528 275	4 246 704
311	Food mfg	2	142	39	5 082	136 832	3 952	7 238	93 228	496 315	815 822	1 335 826	21 174
3114	Fruit & vegetable preserving & specialty food mfg	—	17	13	2 886	80 979	2 365	4 457	57 370	287 986	408 871	721 127	8 783
31141	Frozen food mfg	—	4	3	265	7 316	200	473	5 321	47 109	21 748	68 847	1 017
31142	Fruit & vegetable canning, pickling, & drying	—	13	10	2 621	73 663	2 165	3 984	52 049	240 877	387 123	652 280	7 766
311421	Fruit & vegetable canning	—	9	7	1 231	31 152	1 101	1 898	25 272	164 358	170 982	335 224	3 485
311423	Dried & dehydrated food mfg	1	4	3	1 390	42 511	1 064	2 086	26 777	76 519	216 141	317 056	4 281
3115	Dairy product mfg	5	8	4	650	18 353	532	1 031	14 508	83 585	246 938	329 815	6 598
31151	Dairy product (except frozen) mfg	6	5	3	591	16 762	493	973	13 461	77 471	233 482	310 305	D
311513	Cheese mfg	7	2	2	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Jose, CA PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	2	12	5	266	7 647	192	396	4 581	28 508	41 676	69 893	1 191
31161	Animal slaughtering & processing.....	2	12	5	266	7 647	192	396	4 581	28 508	41 676	69 893	1 191
3118	Bakeries & tortilla mfg.....	3	76	10	665	12 833	402	667	6 615	33 003	15 453	48 524	1 313
31181	Bread & bakery product mfg.....	2	71	10	641	12 401	381	639	6 294	31 713	14 355	46 121	1 175
311811	Retail bakeries.....	4	52	3	316	5 290	190	268	3 057	13 111	5 934	19 101	320
3119	Other food mfg.....	2	19	5	426	11 131	323	480	7 396	50 829	42 505	93 233	2 476
312	Beverage & tobacco product mfg.....	3	21	4	390	13 587	130	187	3 579	36 689	39 644	74 013	7 308
3121	Beverage mfg.....	3	21	4	390	13 587	130	187	3 579	36 689	39 644	74 013	7 308
315	Apparel mfg.....	1	20	6	345	7 050	249	423	3 368	13 895	15 072	29 022	D
321	Wood product mfg.....	6	26	9	677	18 794	520	983	11 408	39 230	30 310	69 208	2 308
3219	Other wood product mfg...	6	23	8	651	18 164	499	950	10 920	37 035	28 113	64 759	D
32192	Wood container & pallet mfg.....	7	9	4	340	9 008	271	537	5 410	18 041	12 296	29 823	513
321920	Wood container & pallet mfg.....	7	9	4	340	9 008	271	537	5 410	18 041	12 296	29 823	513
322	Paper mfg.....	1	28	19	1 625	63 241	1 236	2 496	42 476	168 106	241 587	406 700	11 897
3221	Pulp, paper, & paperboard mills.....	—	2	2	e	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	1	26	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	15	14	1 138	45 340	857	1 732	30 522	104 579	179 402	281 061	9 278
322211	Corrugated & solid fiber box mfg.....	1	10	10	865	35 666	635	1 266	23 517	78 857	142 272	219 866	9 108
323	Printing & related support activities.....	3	344	58	5 488	188 576	3 997	7 459	117 067	394 647	214 710	610 556	40 832
3231	Printing & related support activities.....	3	344	58	5 488	188 576	3 997	7 459	117 067	394 647	214 710	610 556	40 832
32311	Printing.....	3	302	50	4 889	170 458	3 586	6 698	106 636	362 350	207 387	570 914	39 044
323110	Commercial lithographic printing..	3	135	24	1 754	58 823	1 301	2 462	36 002	117 940	67 989	185 349	15 958
323111	Commercial gravure printing.....	5	4	2	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing..	—	7	3	283	9 291	181	382	4 715	15 539	6 270	21 754	423
323113	Commercial screen printing.....	3	27	3	463	15 433	309	715	8 300	35 282	14 625	49 913	1 544
323114	Quick printing.....	2	81	7	580	19 067	395	667	10 912	37 917	21 214	59 157	2 356
323116	Manifold business form printing.....	—	3	2	e	D	D	D	D	D	D	D	D
323117	Book printing.....	3	13	7	466	20 516	376	793	11 819	42 019	29 942	73 505	3 415
32312	Support activities for printing.....	3	42	8	599	18 118	411	761	10 431	32 297	7 323	39 642	1 788
323121	Tradebinding & related work.....	5	10	4	282	6 545	230	416	4 671	11 335	2 613	13 963	690
323122	Prepress services.....	2	32	4	317	11 573	181	345	5 760	20 962	4 710	25 679	1 098
325	Chemical mfg.....	—	58	23	2 164	136 193	906	1 775	46 689	557 023	173 040	732 250	41 449
3254	Pharmaceutical & medicine mfg.....	—	20	11	1 543	114 453	508	1 025	35 790	351 035	107 137	459 262	29 858
32541	Pharmaceutical & medicine mfg.....	—	20	11	1 543	114 453	508	1 025	35 790	351 035	107 137	459 262	29 858
325412	Pharmaceutical preparation mfg.....	1	8	6	347	18 809	244	496	9 126	126 270	61 789	190 205	D
325413	In-vitro diagnostic substance mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	6	82	34	3 380	117 930	2 491	4 989	72 884	281 246	236 912	515 165	34 816
3261	Plastics product mfg.....	6	67	30	3 028	108 292	2 193	4 441	65 991	263 106	214 578	474 643	33 469
32619	Other plastics product mfg.....	6	50	24	2 666	97 161	1 908	3 877	58 000	239 156	171 564	408 104	28 574
326199	All other plastics product mfg.....	6	48	23	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	1	15	4	352	9 638	298	548	6 893	18 140	22 334	40 522	1 347
32629	Other rubber product mfg.....	1	9	3	252	8 056	208	387	5 604	14 738	17 572	32 469	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Jose, CA PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg.....	-	73	31	2 422	90 425	1 839	3 905	65 697	306 916	201 706	511 615	25 579
3272	Glass & glass product mfg.	2	20	4	310	11 849	223	385	7 603	21 075	13 133	34 803	1 446
32721	Glass & glass product mfg.....	2	20	4	310	11 849	223	385	7 603	21 075	13 133	34 803	1 446
327215	Glass product mfg made of purchased glass.....	1	16	4	283	10 627	205	341	6 640	17 556	11 760	29 895	1 104
3273	Cement & concrete product mfg.....	-	28	17	1 039	42 243	821	1 809	30 186	167 181	129 083	295 778	14 328
32731	Cement mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
327310	Cement mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.	-	10	7	346	16 040	301	735	13 537	52 268	64 319	116 657	3 374
327320	Ready-mix concrete mfg.....	-	10	7	346	16 040	301	735	13 537	52 268	64 319	116 657	3 374
32739	Other concrete product mfg.....	1	9	6	308	7 675	250	495	5 667	22 285	11 139	34 333	2 924
327390	Other concrete product mfg.....	1	9	6	308	7 675	250	495	5 667	22 285	11 139	34 333	2 924
3279	Other nonmetallic mineral product mfg.....	1	10	5	834	29 388	601	1 354	23 129	104 193	51 560	157 985	8 895
32799	All other nonmetallic mineral product mfg....	-	8	3	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	1	19	8	405	13 512	327	673	9 747	27 892	21 814	49 410	1 395
3315	Foundries.....	1	11	6	260	9 196	208	498	6 888	16 237	11 603	27 735	1 207
332	Fabricated metal product mfg.....	1	764	220	16 647	593 639	13 176	27 186	397 402	1 192 471	656 083	1 846 767	82 791
3321	Forging & stamping.....	3	21	11	696	24 779	551	1 190	15 806	44 077	43 104	88 101	3 878
33211	Forging & stamping.....	3	21	11	696	24 779	551	1 190	15 806	44 077	43 104	88 101	3 878
332116	Metal stamping.....	3	18	11	670	23 868	528	1 149	15 153	42 299	41 384	84 593	D
3323	Architectural & structural metals mfg.....	1	120	56	5 159	181 048	3 977	8 457	116 801	340 077	278 142	617 868	20 716
33231	Plate work & fabricated structural product mfg..	2	19	5	320	11 619	249	502	7 885	27 124	16 270	43 375	824
33232	Ornamental & architectural metal products mfg.....	1	101	51	4 839	169 429	3 728	7 955	108 916	312 953	261 872	574 493	19 892
332322	Sheet metal work mfg.	1	84	48	4 648	163 568	3 574	7 675	105 541	300 975	253 329	554 285	19 623
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	474	96	7 006	266 624	5 678	11 498	185 542	538 520	210 207	744 429	38 923
33271	Machine shops.....	1	441	81	6 186	233 575	5 018	10 200	160 656	471 958	182 394	652 675	33 969
332710	Machine shops.....	1	441	81	6 186	233 575	5 018	10 200	160 656	471 958	182 394	652 675	33 969
33272	Turned product & screw, nut, & bolt mfg.....	1	33	15	820	33 049	660	1 298	24 886	66 562	27 813	91 754	4 954
332721	Precision turned product mfg.....	1	31	14	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	1	86	40	2 769	84 515	2 182	4 577	56 999	170 962	69 029	242 197	10 465
33281	Coating, engraving, heat treating, & allied activities.....	1	86	40	2 769	84 515	2 182	4 577	56 999	170 962	69 029	242 197	10 465
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	5	28	8	574	17 438	456	867	11 817	35 447	12 964	48 363	D
332813	Electroplating, plating, polishing, anodizing, & coloring.....	-	54	30	2 126	64 129	1 675	3 596	43 513	128 914	54 472	185 642	8 102
3329	Other fabricated metal product mfg.....	3	35	8	418	15 658	318	596	9 286	33 334	23 356	56 229	4 008
33299	All other fabricated metal product mfg.....	3	31	6	338	11 873	265	474	7 293	23 180	16 121	38 975	3 693

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Jose, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	245	82	13 844	658 338	7 577	15 733	247 946	1 702 686	2 191 327	3 872 043	341 473
3332	Industrial machinery mfg ..	1	97	46	9 928	466 872	5 663	12 032	178 588	1 346 807	1 908 640	3 221 933	321 415
33329	Other industrial machinery mfg	1	95	44	i	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	1	58	29	8 107	401 700	4 411	9 081	142 610	1 210 942	1 782 198	2 959 883	311 088
333298	All other industrial machinery mfg	6	26	14	1 571	56 046	1 103	2 661	31 325	124 633	106 542	230 541	8 797
3333	Commercial & service industry machinery mfg ..	3	52	17	1 282	60 373	704	1 455	24 085	104 950	106 818	216 090	8 310
33331	Commercial & service industry machinery mfg	3	52	17	1 282	60 373	704	1 455	24 085	104 950	106 818	216 090	8 310
333314	Optical instrument & lens mfg	2	20	7	416	22 367	183	386	6 459	40 621	23 575	64 796	1 384
333319	Other commercial & service industry machinery mfg	—	17	4	490	20 221	326	638	9 682	31 946	55 677	90 651	3 660
3335	Metalworking machinery mfg	2	55	11	714	26 451	544	1 099	18 391	49 297	15 482	63 882	D
33351	Metalworking machinery mfg	2	55	11	714	26 451	544	1 099	18 391	49 297	15 482	63 882	D
333514	Special die & tool, die set, jig, & fixture mfg .	2	34	6	366	14 440	294	683	10 279	29 523	8 448	37 724	2 158
3336	Engine, turbine, & power transmission equipment mfg	1	2	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	1	2	2	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	33	5	793	35 261	363	648	11 966	63 770	63 351	131 264	D
33399	All other general-purpose machinery mfg	1	26	3	604	27 954	275	519	8 926	41 604	45 234	93 039	4 042
333999	All other miscellaneous general-purpose machinery mfg	—	14	2	485	23 921	184	344	6 113	33 319	38 438	77 661	3 527
334	Computer & electronic product mfg	—	1 068	531	166 578	9 490 567	69 308	145 766	2 691 273	33 955 967	21 263 192	55 077 331	3 215 033
3341	Computer & peripheral equipment mfg	—	165	48	32 876	2 041 315	11 001	26 701	531 340	8 537 067	7 831 692	16 421 348	731 586
33411	Computer & peripheral equipment mfg	—	165	48	32 876	2 041 315	11 001	26 701	531 340	8 537 067	7 831 692	16 421 348	731 586
334111	Electronic computer mfg	—	50	16	15 873	1 127 754	2 650	7 670	154 242	5 874 916	3 510 709	9 417 090	231 436
334112	Computer storage device mfg	—	31	11	9 923	433 380	5 244	11 775	174 036	1 602 958	2 737 907	4 350 215	398 641
334113	Computer terminal mfg	—	9	4	542	38 009	222	483	7 121	103 386	169 957	270 677	3 622
334119	Other computer peripheral equipment mfg	—	75	17	6 538	442 172	2 885	6 773	195 941	955 807	1 413 119	2 383 366	97 887
3342	Communications equipment mfg	1	137	90	36 058	1 971 548	11 286	21 219	470 422	9 833 314	4 723 594	14 466 612	338 293
33421	Telephone apparatus mfg	1	49	37	23 234	1 325 520	4 796	9 679	230 356	7 473 630	3 786 006	11 157 542	226 227
334210	Telephone apparatus mfg	1	49	37	23 234	1 325 520	4 796	9 679	230 356	7 473 630	3 786 006	11 157 542	226 227
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	82	51	12 735	642 297	6 444	11 467	238 875	2 348 840	929 918	3 290 476	111 739
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	82	51	12 735	642 297	6 444	11 467	238 875	2 348 840	929 918	3 290 476	111 739
3343	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920
33431	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920
334310	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920

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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Jose, CA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	510	256	64 795	3 626 229	33 650	71 050	1 164 070	11 080 652	6 353 092	17 430 347	1 754 256
33441	Semiconductor & other electronic component mfg	-	510	256	64 795	3 626 229	33 650	71 050	1 164 070	11 080 652	6 353 092	17 430 347	1 754 256
334411	Electron tube mfg	-	9	5	842	42 204	589	1 007	22 099	90 687	55 895	145 587	3 837
334412	Bare printed circuit board mfg	-	99	48	7 466	322 272	4 691	9 417	132 399	1 040 373	662 557	1 729 701	110 412
334413	Semiconductor & related device mfg	-	215	110	35 975	2 507 377	15 476	31 485	657 198	7 750 606	3 860 210	11 547 131	1 518 640
334416	Electronic coil, transformer, & other inductor mfg	3	17	7	378	12 166	293	616	7 555	29 827	13 316	43 091	962
334418	Printed circuit assembly (electronic assembly) mfg	-	65	52	14 447	486 961	9 335	21 529	244 773	1 737 448	1 592 509	3 363 086	87 751
334419	Other electronic component mfg	1	93	29	5 179	234 620	2 956	6 338	91 299	393 123	147 914	543 199	30 832
3345	Navigational, measuring, medical, & control instruments mfg	-	202	112	28 054	1 644 857	10 093	20 895	451 553	4 074 921	2 023 164	5 998 425	238 164
33451	Navigational, measuring, medical, & control instruments mfg	-	202	112	28 054	1 644 857	10 093	20 895	451 553	4 074 921	2 023 164	5 998 425	238 164
334510	Electromedical & electrotherapeutic apparatus mfg	-	17	9	3 061	189 336	1 389	2 390	63 716	603 767	260 867	837 835	21 609
334511	Search, detection, navigation, & guidance instrument mfg	-	15	7	3 416	216 406	1 679	3 394	85 803	438 223	123 173	562 632	44 968
334513	Industrial process control instrument mfg	1	25	16	2 704	103 771	856	1 731	31 913	191 139	108 495	305 943	12 940
334515	Electricity measuring & testing instrument mfg	-	76	42	11 399	711 813	3 840	8 719	172 633	1 664 218	726 417	2 336 304	107 271
334516	Analytical laboratory instrument mfg	-	31	16	3 184	190 871	1 032	2 058	43 275	615 294	308 027	916 313	18 825
334517	Irradiation apparatus mfg	-	9	6	2 777	150 676	837	1 643	38 359	338 662	392 495	718 626	24 764
334519	Other measuring & controlling device mfg	-	23	13	1 373	76 464	393	858	14 642	213 908	95 110	302 248	7 098
3346	Mfg & reproducing magnetic & optical media	2	43	18	4 164	182 871	2 935	5 161	65 149	388 542	289 707	677 363	150 814
33461	Mfg & reproducing magnetic & optical media	2	43	18	4 164	182 871	2 935	5 161	65 149	388 542	289 707	677 363	150 814
334613	Magnetic & optical recording media mfg	3	29	12	3 839	173 178	2 718	4 755	58 852	358 465	273 085	630 685	145 290
335	Electrical equipment, appliance, & component mfg	-	85	37	4 343	204 409	2 454	4 751	84 507	434 857	308 114	722 882	26 465
3353	Electrical equipment mfg	1	31	9	922	42 032	555	948	20 644	94 855	58 123	138 192	4 336
33531	Electrical equipment mfg	1	31	9	922	42 032	555	948	20 644	94 855	58 123	138 192	4 336
335311	Power, distribution, & specialty transformer mfg	-	6	1	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	3	19	6	367	17 227	141	250	3 467	34 294	25 121	58 625	2 141
3359	Other electrical equipment & component mfg	-	50	27	3 302	158 735	1 854	3 708	62 736	332 843	246 974	574 539	22 060
33592	Communication & energy wire & cable mfg	-	7	7	781	30 164	515	926	10 103	60 264	58 687	121 731	4 341
335929	Other communication & energy wire mfg	-	7	7	781	30 164	515	926	10 103	60 264	58 687	121 731	4 341
33599	All other electrical equipment & component mfg	-	34	18	2 396	123 448	1 243	2 582	49 900	262 112	182 641	436 637	16 926
335999	All other miscellaneous electrical equipment & component mfg	-	33	18	g	D	D	D	D	D	D	D	D

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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	San Jose, CA PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	62	20	16 824	931 621	3 586	7 495	116 101	3 066 350	1 528 722	4 782 764	D
3363	Motor vehicle parts mfg . . .	8	38	11	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	8	27	11	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	8	26	11	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	7	3	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	7	3	j	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg . . .	—	1	1	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	1	7	3	f	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	120	21	1 742	50 813	1 241	2 336	28 973	103 958	80 832	184 971	3 991
3371	Household & institutional furniture & kitchen cabinet mfg	5	90	17	1 087	29 392	839	1 612	18 986	57 051	41 658	99 491	2 207
33711	Wood kitchen cabinet & counter top mfg	4	48	6	430	12 727	318	659	8 478	22 394	14 223	37 247	859
337110	Wood kitchen cabinet & counter top mfg . . .	4	48	6	430	12 727	318	659	8 478	22 394	14 223	37 247	859
33712	Household & institutional furniture mfg	6	42	11	657	16 665	521	953	10 508	34 657	27 435	62 244	1 348
3372	Office furniture (including fixtures) mfg	2	28	3	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	28	3	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	2	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	2	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	270	54	7 668	368 170	3 576	7 000	111 271	1 218 903	444 035	1 670 041	71 321
3391	Medical equipment & supplies mfg	1	181	41	6 412	329 113	2 752	5 400	93 592	1 143 628	392 850	1 535 607	67 413
33911	Medical equipment & supplies mfg	1	181	41	6 412	329 113	2 752	5 400	93 592	1 143 628	392 850	1 535 607	67 413
339111	Laboratory apparatus & furniture mfg	—	10	6	692	23 842	314	603	11 966	62 728	44 364	117 357	1 986
339112	Surgical & medical instrument mfg	—	51	29	5 021	282 093	1 996	4 020	70 502	1 022 915	316 380	1 325 900	63 714
339116	Dental laboratories . . .	7	102	2	405	10 553	299	472	6 455	22 430	9 344	32 223	839
3399	Other miscellaneous mfg . .	5	89	13	1 256	39 057	824	1 600	17 679	75 275	51 185	134 434	3 908
33995	Sign mfg	1	31	5	309	9 114	200	399	4 410	19 067	9 704	28 884	808
339950	Sign mfg	1	31	5	309	9 114	200	399	4 410	19 067	9 704	28 884	808
33999	All other miscellaneous mfg	7	29	7	777	22 843	523	1 008	11 325	49 893	35 943	86 679	2 738
339999	All other miscellaneous mfg	7	22	5	695	19 956	471	906	10 243	44 940	31 894	77 638	2 479

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Santa Cruz—Watsonville, CA PMSA												
31-33	Manufacturing	1	387	89	10 011	315 177	6 213	11 946	152 898	1 139 974	956 809	2 134 950	82 832
311	Food mfg.....	-	51	18	2 272	59 473	1 792	3 318	42 583	195 543	180 219	393 398	15 771
3113	Sugar & confectionery product mfg.....	-	6	3	262	8 188	172	352	4 457	37 133	32 637	71 817	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	10	7	D	D	D	D	D	D	D	D	6 512
31141	Frozen food mfg.....	-	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
3118	Bakeries & tortilla mfg.....	2	27	6	417	7 912	237	399	3 841	19 520	8 891	28 442	1 515
31181	Bread & bakery product mfg.....	2	22	5	368	7 037	207	347	3 371	16 156	7 349	23 516	1 425
311812	Commercial bakeries ..	3	11	4	258	5 355	133	253	2 418	10 704	3 732	14 436	1 233
321	Wood product mfg.....	1	10	4	266	8 961	216	406	5 997	12 866	19 451	32 494	563
323	Printing & related support activities.....	2	45	8	449	12 873	288	581	7 233	32 977	22 424	55 207	2 199
3231	Printing & related support activities.....	2	45	8	449	12 873	288	581	7 233	32 977	22 424	55 207	2 199
32311	Printing.....	2	43	8	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	8	14	5	269	10 294	205	356	4 775	25 000	36 500	62 959	4 726
3261	Plastics product mfg.....	8	11	5	250	9 948	189	335	4 535	24 058	35 662	61 168	D
327	Nonmetallic mineral product mfg.....	-	25	3	298	13 218	234	494	9 521	59 165	37 401	98 661	7 643
332	Fabricated metal product mfg.....	2	38	4	324	11 978	239	462	7 367	25 757	12 005	36 737	2 246
333	Machinery mfg.....	-	16	5	1 198	41 043	613	1 284	10 623	139 020	142 126	283 867	5 840
3339	Other general-purpose machinery mfg.....	-	6	4	1 094	38 406	534	1 176	9 048	134 869	139 660	277 209	D
33399	All other general-purpose machinery mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg..	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	52	23	3 124	106 928	1 464	2 855	38 943	532 575	378 408	928 901	34 884
3342	Communications equipment mfg.....	7	6	3	673	22 776	166	333	3 895	92 894	61 233	153 976	D
33421	Telephone apparatus mfg.....	7	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	7	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	19	9	1 697	52 745	907	1 581	19 836	363 766	248 830	627 376	26 080
33441	Semiconductor & other electronic component mfg.....	-	19	9	1 697	52 745	907	1 581	19 836	363 766	248 830	627 376	26 080
334412	Bare printed circuit board mfg.....	-	8	3	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	5	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	3	20	8	e	D	D	D	D	D	D	D	2 486
33451	Navigational, measuring, medical, & control instruments mfg.....	3	20	8	e	D	D	D	D	D	D	D	2 486
339	Miscellaneous mfg.....	2	40	3	346	9 502	161	247	2 430	24 765	17 039	40 602	2 531
3399	Other miscellaneous mfg..	1	27	3	312	8 212	140	208	1 916	21 435	15 279	35 474	2 364

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Santa Rosa, CA PMSA												
31-33	Manufacturing	1	793	218	24 209	968 796	15 754	29 805	464 947	2 883 722	2 393 144	5 119 819	239 962
311	Food mfg.....	—	72	28	2 215	51 746	1 485	2 724	27 010	149 453	556 599	705 146	16 922
3114	Fruit & vegetable preserving & specialty food mfg.....	—	8	4	573	12 876	428	833	7 158	29 904	40 768	70 091	3 849
31142	Fruit & vegetable canning, pickling, & drying.....	—	7	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	4	3	266	7 545	203	443	4 198	15 215	51 154	66 227	404
31161	Animal slaughtering & processing.....	—	4	3	266	7 545	203	443	4 198	15 215	51 154	66 227	404
3118	Bakeries & tortilla mfg.....	1	22	9	610	10 526	461	683	6 284	24 433	13 714	38 185	1 376
31181	Bread & bakery product mfg.....	1	20	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	13	8	527	8 663	399	579	5 157	21 491	7 461	28 969	883
3119	Other food mfg.....	3	17	5	318	9 136	160	273	3 016	30 420	29 993	60 861	4 583
312	Beverage & tobacco product mfg.....	2	90	35	2 934	111 226	1 449	2 652	41 335	564 446	580 843	1 066 339	78 041
3121	Beverage mfg.....	2	90	35	2 934	111 226	1 449	2 652	41 335	564 446	580 843	1 066 339	78 041
31213	Wineries	2	84	34	2 849	109 341	1 418	2 597	40 401	556 691	575 019	1 052 772	77 625
312130	Wineries	2	84	34	2 849	109 341	1 418	2 597	40 401	556 691	575 019	1 052 772	77 625
321	Wood product mfg.....	—	43	14	1 057	25 494	801	1 541	16 265	62 877	76 640	139 824	2 599
3212	Veneer, plywood, & engineered wood product mfg.....	—	6	1	339	8 680	230	493	5 915	17 544	24 251	41 839	D
32121	Veneer, plywood, & engineered wood product mfg.....	—	6	1	339	8 680	230	493	5 915	17 544	24 251	41 839	D
321213	Engineered wood member (except truss) mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	1	32	9	523	12 152	419	749	7 508	34 585	33 840	68 750	1 589
323	Printing & related support activities.....	2	91	14	971	33 322	695	1 360	19 250	71 974	42 708	114 718	5 607
3231	Printing & related support activities.....	2	91	14	971	33 322	695	1 360	19 250	71 974	42 708	114 718	5 607
32311	Printing	2	81	14	913	31 895	653	1 289	18 296	68 895	41 848	110 810	5 464
323110	Commercial lithographic printing ..	4	37	7	431	15 577	315	583	9 303	31 794	17 545	49 443	2 520
325	Chemical mfg.....	3	21	6	450	16 856	287	536	9 169	47 935	41 697	87 678	5 846
326	Plastics & rubber products mfg.....	1	23	10	606	17 860	473	934	10 164	45 871	21 184	67 056	3 927
3261	Plastics product mfg.....	1	23	10	606	17 860	473	934	10 164	45 871	21 184	67 056	3 927
32619	Other plastics product mfg.....	—	18	9	556	16 682	436	876	9 476	42 735	17 995	60 740	3 636
326199	All other plastics product mfg.....	—	18	9	556	16 682	436	876	9 476	42 735	17 995	60 740	3 636
327	Nonmetallic mineral product mfg.....	5	43	9	578	16 802	455	831	11 720	38 436	42 205	81 557	3 109
3273	Cement & concrete product mfg.....	5	17	4	290	9 831	237	462	7 016	24 174	34 564	58 781	1 940
332	Fabricated metal product mfg.....	1	77	13	1 257	38 111	1 007	1 917	25 782	76 131	59 428	135 678	7 380
3321	Forging & stamping.....	—	6	3	343	13 055	252	522	8 045	19 966	24 012	44 646	2 697
33211	Forging & stamping.....	—	6	3	343	13 055	252	522	8 045	19 966	24 012	44 646	2 697
3323	Architectural & structural metals mfg.....	—	15	3	325	8 255	278	588	5 917	19 346	12 335	30 835	1 927
33232	Ornamental & architectural metal products mfg.....	—	13	3	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg.....	—	7	3	293	7 195	254	537	5 244	16 440	10 312	25 896	1 853
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	30	6	397	11 152	343	563	8 532	24 736	8 940	34 134	1 431

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Santa Rosa, CA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	48	22	2 660	118 757	1 640	3 263	50 501	285 021	147 871	425 647	23 629
3332	Industrial machinery mfg ..	4	14	8	546	24 255	269	525	8 339	64 211	28 825	92 136	3 072
33329	Other industrial machinery mfg	5	11	7	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	7	4	4	309	14 560	99	185	2 270	44 949	12 493	56 126	2 300
3333	Commercial & service industry machinery mfg ..	—	9	6	1 364	64 544	859	1 788	26 916	154 964	68 499	219 949	14 532
33331	Commercial & service industry machinery mfg	—	9	6	1 364	64 544	859	1 788	26 916	154 964	68 499	219 949	14 532
333314	Optical instrument & lens mfg	—	4	3	1 101	52 977	729	1 518	22 404	125 669	48 692	172 979	D
3339	Other general-purpose machinery mfg	—	15	6	503	22 224	336	604	10 862	57 202	40 448	94 848	5 693
334	Computer & electronic product mfg	—	47	21	6 665	380 186	4 264	7 997	170 964	1 029 166	590 075	1 580 611	62 302
3342	Communications equipment mfg	—	11	6	1 044	103 287	266	584	8 422	178 011	153 563	308 628	20 901
33421	Telephone apparatus mfg	—	3	3	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	11	6	391	14 751	272	525	8 233	34 470	16 836	51 718	D
33441	Semiconductor & other electronic component mfg	1	11	6	391	14 751	272	525	8 233	34 470	16 836	51 718	D
3345	Navigational, measuring, medical, & control instruments mfg	—	17	5	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	17	5	h	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	21	8	645	23 960	396	768	8 593	61 938	44 475	107 067	2 434
3353	Electrical equipment mfg ..	1	9	2	343	16 194	174	331	4 637	50 555	33 438	83 379	1 127
33531	Electrical equipment mfg	1	9	2	343	16 194	174	331	4 637	50 555	33 438	83 379	1 127
335314	Relay & industrial control mfg	—	6	1	263	13 608	118	234	3 630	44 400	28 339	72 057	946
336	Transportation equipment mfg	1	24	5	587	18 546	430	954	10 554	40 786	35 222	76 045	D
3363	Motor vehicle parts mfg ...	1	7	3	371	11 679	279	688	6 769	29 161	17 715	46 757	2 051
337	Furniture & related product mfg	6	61	4	380	9 461	301	561	6 218	20 917	16 323	36 870	1 021
3371	Household & institutional furniture & kitchen cabinet mfg	5	49	2	250	6 134	201	378	4 157	12 521	9 592	21 669	523
339	Miscellaneous mfg	—	89	18	2 519	91 158	1 613	3 087	49 820	355 397	106 425	431 141	22 361
3391	Medical equipment & supplies mfg	—	36	5	1 662	68 400	1 031	2 058	37 107	304 661	69 721	344 317	19 142
33911	Medical equipment & supplies mfg	—	36	5	1 662	68 400	1 031	2 058	37 107	304 661	69 721	344 317	19 142
339113	Surgical appliance & supplies mfg	—	3	1	e	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	3	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	53	13	857	22 758	582	1 029	12 713	50 736	36 704	86 824	3 219
33999	All other miscellaneous mfg	—	17	4	312	8 768	218	436	6 230	17 320	14 592	31 015	1 087
339999	All other miscellaneous mfg	—	8	3	270	7 815	191	384	5 638	15 460	13 487	28 061	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Vallejo—Fairfield—Napa, CA PMSA												
31-33	Manufacturing	—	554	168	17 641	651 753	11 398	21 747	335 489	2 422 792	3 270 078	5 636 079	270 435
311	Food mfg.....	2	51	18	2 041	54 332	1 538	2 782	36 520	202 113	280 972	483 218	18 317
3113	Sugar & confectionery product mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	5	9	7	1 012	23 181	871	1 503	18 929	74 115	84 370	159 134	8 355
31142	Fruit & vegetable canning, pickling, & drying.....	6	6	6	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	2	4	4	e	D	D	D	D	D	D	D	D
311422	Specialty canning.....	9	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	132	53	4 963	213 435	2 102	3 834	76 441	853 626	750 442	1 557 981	128 928
3121	Beverage mfg.....	—	132	53	4 963	213 435	2 102	3 834	76 441	853 626	750 442	1 557 981	128 928
31211	Soft drink & ice mfg.....	—	5	4	e	D	D	D	D	D	D	D	D
31212	Breweries.....	—	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries.....	—	2	1	f	D	D	D	D	D	D	D	D
31213	Wineries.....	—	124	48	4 161	171 994	1 631	2 940	52 499	632 025	559 207	1 146 691	106 901
312130	Wineries.....	—	124	48	4 161	171 994	1 631	2 940	52 499	632 025	559 207	1 146 691	106 901
315	Apparel mfg.....	—	7	1	e	D	D	D	D	D	D	D	211
321	Wood product mfg.....	—	20	7	672	17 048	565	1 088	12 362	37 280	83 378	120 407	1 729
3212	Veneer, plywood, & engineered wood product mfg.....	1	5	2	340	7 857	293	534	5 956	17 524	26 310	43 461	861
32121	Veneer, plywood, & engineered wood product mfg.....	1	5	2	340	7 857	293	534	5 956	17 524	26 310	43 461	861
321214	Truss mfg.....	—	4	2	e	D	D	D	D	D	D	D	861
3219	Other wood product mfg...	—	15	5	332	9 191	272	554	6 406	19 756	57 068	76 946	868
323	Printing & related support activities.....	1	43	4	470	16 212	377	754	10 818	39 819	17 795	57 079	3 653
3231	Printing & related support activities.....	1	43	4	470	16 212	377	754	10 818	39 819	17 795	57 079	3 653
32311	Printing.....	2	41	4	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	—	20	3	338	12 371	273	571	8 210	32 132	12 512	44 155	2 933
324	Petroleum & coal products mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries....	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	21	8	1 340	55 406	824	1 377	22 056	384 754	168 789	542 867	26 554
3254	Pharmaceutical & medicine mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	19	12	693	19 876	540	1 141	13 089	65 052	67 454	131 418	5 324
3261	Plastics product mfg.....	1	15	11	649	18 903	507	1 084	12 483	61 635	65 587	126 249	D
32619	Other plastics product mfg.....	—	9	6	368	10 454	261	557	5 659	32 753	32 765	64 772	3 496
326199	All other plastics product mfg.....	—	9	6	368	10 454	261	557	5 659	32 753	32 765	64 772	3 496
327	Nonmetallic mineral product mfg.....	2	31	11	1 178	34 552	961	1 960	24 315	105 976	74 639	179 245	20 997
3273	Cement & concrete product mfg.....	1	16	9	983	29 915	810	1 700	21 212	94 804	67 154	160 551	19 703
32739	Other concrete product mfg.....	—	6	5	677	17 877	569	1 230	12 672	53 048	25 239	76 859	D
327390	Other concrete product mfg.....	—	6	5	677	17 877	569	1 230	12 672	53 048	25 239	76 859	D

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	SAN FRANCISCO—OAKLAND—SAN JOSE, CA CMSA—Con.												
	Vallejo—Fairfield—Napa, CA PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	3	2	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	60	15	1 481	60 889	1 151	2 172	44 192	158 048	195 461	357 645	9 910
3323	Architectural & structural metals mfg	—	21	5	531	19 657	407	713	13 274	40 368	29 353	69 279	1 834
33232	Ornamental & architectural metal products mfg	—	10	3	395	14 737	305	521	10 200	31 384	19 902	50 823	1 382
3324	Boiler, tank, & shipping container mfg	—	6	5	555	27 224	446	911	21 401	91 077	153 888	249 521	6 234
33243	Metal can, box, & other metal container (light gauge) mfg	—	4	3	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	3	3	318	18 829	260	544	15 276	72 809	140 184	216 778	5 792
333	Machinery mfg	—	33	11	1 252	48 646	745	1 540	22 016	112 042	83 630	192 607	4 976
3332	Industrial machinery mfg . .	—	6	2	588	26 975	277	565	9 999	45 646	47 789	91 461	885
33329	Other industrial machinery mfg	—	6	2	588	26 975	277	565	9 999	45 646	47 789	91 461	885
333295	Semiconductor machinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	12	4	251	9 589	141	256	3 667	20 225	17 236	36 361	3 054
334	Computer & electronic product mfg	3	20	5	318	13 140	236	477	7 563	31 375	30 817	63 161	D
335	Electrical equipment, appliance, & component mfg	—	7	4	411	15 312	303	553	6 718	62 494	29 119	91 920	7 850
336	Transportation equipment mfg	—	8	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	34	8	583	17 221	460	946	11 263	39 120	35 137	74 349	2 098
3371	Household & institutional furniture & kitchen cabinet mfg	2	26	5	296	8 427	252	452	6 096	15 918	14 856	30 748	1 270
339	Miscellaneous mfg	2	44	4	385	11 255	267	422	5 171	26 562	18 908	45 795	990
3399	Other miscellaneous mfg . .	1	23	3	276	7 238	189	296	3 189	18 838	13 843	32 844	532
	SAN LUIS OBISPO—ATASCADERO—PASO ROBLES, CA MSA												
31-33	Manufacturing	4	323	69	6 322	182 321	4 157	7 650	94 401	619 697	533 953	1 156 257	52 082
311	Food mfg	6	32	5	392	7 870	264	481	4 353	22 956	20 211	42 912	1 326
312	Beverage & tobacco product mfg	1	21	4	280	6 974	180	216	3 421	59 166	58 993	116 039	7 587
3121	Beverage mfg	1	21	4	280	6 974	180	216	3 421	59 166	58 993	116 039	7 587
315	Apparel mfg	3	9	5	307	5 357	234	479	3 338	11 950	8 414	20 910	1 000
3152	Cut & sew apparel mfg	3	8	5	e	D	D	D	D	D	D	D	1 000
323	Printing & related support activities	—	32	7	605	17 755	411	744	10 394	47 471	32 226	78 935	5 175
3231	Printing & related support activities	—	32	7	605	17 755	411	744	10 394	47 471	32 226	78 935	5 175
32311	Printing	—	30	7	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	—	5	4	370	11 701	246	461	6 840	35 641	23 781	58 621	4 189

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN LUIS OBISPO-ATASCADERO-PASO ROBLES, CA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg.....	—	51	7	817	22 034	646	1 323	14 865	64 685	45 612	109 392	3 491
3329	Other fabricated metal product mfg.....	—	5	3	267	7 073	200	392	3 685	30 217	26 641	57 746	D
333	Machinery mfg.....	7	17	6	680	29 399	327	524	10 077	71 305	74 468	143 535	5 333
3332	Industrial machinery mfg ..	9	4	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg ..	9	4	2	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg ..	9	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	26	11	1 346	40 214	728	1 492	18 225	95 051	49 136	141 105	9 987
3341	Computer & peripheral equipment mfg ..	4	4	3	279	9 483	90	192	3 548	21 128	18 905	38 403	1 989
33411	Computer & peripheral equipment mfg ..	4	4	3	279	9 483	90	192	3 548	21 128	18 905	38 403	1 989
3344	Semiconductor & other electronic component mfg ..	—	9	5	822	22 349	527	1 086	12 116	53 473	21 297	73 260	5 285
33441	Semiconductor & other electronic component mfg ..	—	9	5	822	22 349	527	1 086	12 116	53 473	21 297	73 260	5 285
334417	Electronic connector mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg ..	—	5	3	387	8 379	189	377	2 681	23 117	11 146	32 009	3 030
339	Miscellaneous mfg.....	2	38	4	612	14 058	480	773	8 840	41 351	15 829	57 380	2 331
3399	Other miscellaneous mfg ..	1	25	2	408	8 570	343	505	5 653	27 269	10 056	37 404	1 503
33999	All other miscellaneous mfg ..	—	9	2	335	6 956	295	422	4 753	23 628	7 366	31 058	1 313
339992	Musical instrument mfg ..	—	6	2	319	6 728	282	410	4 621	23 141	7 142	30 348	D
	SANTA BARBARA-SANTA MARIA-LOMPOC, CA MSA												
31-33	Manufacturing	1	502	135	14 985	584 227	8 254	14 895	205 117	1 463 893	1 149 280	2 770 418	88 096
311	Food mfg.....	1	35	7	839	14 545	717	1 037	8 853	89 347	67 939	156 893	4 440
3114	Fruit & vegetable preserving & specialty food mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	3	20	7	337	8 965	177	313	4 000	36 079	27 780	58 511	3 058
3121	Beverage mfg.....	3	20	7	337	8 965	177	313	4 000	36 079	27 780	58 511	3 058
31213	Wineries ..	3	18	6	e	D	D	D	D	D	D	D	D
312130	Wineries ..	3	18	6	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	—	6	3	252	7 953	155	291	3 295	38 759	18 241	57 999	D
323	Printing & related support activities.....	3	59	8	513	12 184	385	606	7 899	26 624	18 337	44 979	1 422
3231	Printing & related support activities.....	3	59	8	513	12 184	385	606	7 899	26 624	18 337	44 979	1 422
32311	Printing ..	3	53	8	494	11 579	369	578	7 491	25 384	18 083	43 486	1 382
323110	Commercial lithographic printing ..	3	33	7	395	9 506	292	445	6 142	19 812	12 260	32 055	1 153
325	Chemical mfg.....	—	11	6	862	26 311	431	531	6 816	114 426	42 274	155 306	5 233
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	3	2	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg ..	—	16	6	928	26 324	659	1 424	13 587	67 600	53 170	119 182	2 894
3261	Plastics product mfg ..	—	11	4	763	20 403	550	1 279	11 942	55 186	44 056	98 086	D
32614	Polystyrene foam product mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg ..	—	7	2	292	9 201	219	510	5 171	18 967	17 162	36 428	1 849
326199	All other plastics product mfg ..	—	7	2	292	9 201	219	510	5 171	18 967	17 162	36 428	1 849

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA BARBARA— SANTA MARIA— LOMPOC, CA MSA— Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	1	24	5	440	12 490	303	576	7 743	37 025	22 232	60 289	1 813
332	Fabricated metal product mfg	2	65	15	815	23 803	660	1 166	15 074	48 572	22 770	71 233	3 716
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	36	8	439	12 757	358	636	8 913	25 822	7 967	33 766	1 983
33271	Machine shops	2	33	6	344	11 179	280	549	7 784	22 052	6 448	28 507	1 670
332710	Machine shops	2	33	6	344	11 179	280	549	7 784	22 052	6 448	28 507	1 670
333	Machinery mfg	3	37	12	916	37 303	544	1 082	16 981	74 046	64 552	141 620	5 194
334	Computer & electronic product mfg	—	60	28	5 457	285 105	2 056	3 666	64 313	592 277	578 619	1 337 501	42 259
3342	Communications equipment mfg	—	14	7	1 691	87 934	717	1 042	17 406	339 404	415 864	754 307	D
33421	Telephone apparatus mfg	—	3	2	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	2	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	7	5	g	D	D	D	D	D	D	D	17 146
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	7	5	g	D	D	D	D	D	D	D	17 146
3344	Semiconductor & other electronic component mfg	1	19	7	942	35 292	484	993	16 515	81 015	37 376	118 769	3 613
33441	Semiconductor & other electronic component mfg	1	19	7	942	35 292	484	993	16 515	81 015	37 376	118 769	3 613
334414	Electronic capacitor mfg	—	1	1	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	10	4	425	13 654	290	533	6 959	40 966	18 626	59 816	D
3345	Navigational, measuring, medical, & control instruments mfg	—	19	12	2 641	153 170	735	1 390	26 031	131 515	112 246	412 215	12 024
33451	Navigational, measuring, medical, & control instruments mfg	—	19	12	2 641	153 170	735	1 390	26 031	131 515	112 246	412 215	12 024
334511	Search, detection, navigation, & guidance instrument mfg	—	5	4	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	17	5	575	27 324	305	649	9 525	83 734	83 542	165 474	5 384
3359	Other electrical equipment & component mfg	—	8	3	357	19 212	199	438	6 898	56 137	69 793	124 411	4 349
33592	Communication & energy wire & cable mfg	—	3	2	288	16 233	162	373	5 807	52 710	68 143	119 339	4 223
336	Transportation equipment mfg	3	19	5	420	17 012	299	583	10 256	49 395	20 101	70 432	1 853
339	Miscellaneous mfg	—	74	15	1 856	66 808	996	2 018	27 084	159 267	66 696	222 208	7 266
3391	Medical equipment & supplies mfg	—	30	9	1 328	53 600	718	1 498	21 700	135 029	48 181	179 438	6 240
33911	Medical equipment & supplies mfg	—	30	9	1 328	53 600	718	1 498	21 700	135 029	48 181	179 438	6 240
339112	Surgical & medical instrument mfg	—	5	3	506	19 290	233	365	6 250	55 812	27 083	79 910	2 893
339113	Surgical appliance & supplies mfg	—	8	3	670	27 795	386	963	12 770	66 842	15 028	81 148	D
3399	Other miscellaneous mfg ..	3	44	6	528	13 208	278	520	5 384	24 238	18 515	42 770	1 026
33999	All other miscellaneous mfg	—	13	4	270	7 365	92	204	2 043	13 885	7 607	21 235	581

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STOCKTON-LODI, CA MSA													
31-33	Manufacturing	1	553	210	24 646	749 607	19 276	39 038	527 168	2 900 786	3 199 752	5 879 062	208 588
311	Food mfg.	1	84	42	7 744	221 522	6 334	12 319	168 145	1 213 281	1 414 422	2 557 997	70 065
3112	Grain & oilseed milling	1	3	3	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg.	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.	-	5	2	e	D	D	D	D	D	D	D	D
31131	Sugar mfg.	-	2	2	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.	-	2	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.	1	19	15	h	D	D	D	D	D	D	D	D
31141	Frozen food mfg.	8	2	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.	8	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	17	14	3 282	94 105	2 974	5 820	78 604	370 386	408 381	749 286	24 358
311421	Fruit & vegetable canning	-	17	14	3 282	94 105	2 974	5 820	78 604	370 386	408 381	749 286	24 358
3115	Dairy product mfg.	-	5	3	405	15 558	282	657	9 549	71 170	150 060	221 696	3 685
31151	Dairy product (except frozen) mfg.	-	3	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg.	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.	2	10	6	475	12 652	411	744	10 906	73 072	117 128	179 057	4 592
31161	Animal slaughtering & processing	2	10	6	475	12 652	411	744	10 906	73 072	117 128	179 057	4 592
3118	Bakeries & tortilla mfg.	-	20	6	515	12 492	376	592	8 164	35 438	32 694	68 191	2 243
31181	Bread & bakery product mfg.	-	17	5	449	10 835	316	484	7 188	27 394	26 904	54 315	1 623
311812	Commercial bakeries	-	3	3	339	9 320	257	409	6 469	23 743	25 618	49 369	D
3119	Other food mfg.	-	10	4	727	21 418	566	1 274	12 407	85 225	174 520	242 589	5 604
31191	Snack food mfg.	-	3	2	e	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg.	-	2	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg.	-	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	-	13	8	1 115	38 171	723	1 558	23 688	413 562	420 432	687 186	36 606
3121	Beverage mfg.	-	13	8	1 115	38 171	723	1 558	23 688	413 562	420 432	687 186	36 606
31213	Wineries	-	12	8	g	D	D	D	D	D	D	D	D
312130	Wineries	-	12	8	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	12	3	533	12 554	460	1 005	9 368	34 258	41 263	75 966	1 191
3149	Other textile product mills	-	6	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	2	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	-	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg.	1	28	17	1 981	45 111	1 682	3 091	34 192	99 860	191 217	291 912	6 335
3219	Other wood product mfg.	1	25	14	1 886	43 026	1 607	2 968	32 920	95 300	185 659	281 790	D
32191	Millwork	2	11	7	760	17 419	653	1 310	13 997	43 301	91 524	136 715	4 308
321912	Cut stock, resawing lumber, & planing	4	5	5	519	12 674	473	951	10 406	28 291	56 822	87 207	D
32192	Wood container & pallet mfg.	-	10	6	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg.	-	10	6	e	D	D	D	D	D	D	D	D
32199	All other wood product mfg.	-	4	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg.	-	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.	-	10	8	1 144	44 744	936	2 086	33 208	111 818	158 747	271 527	11 361
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.	-	8	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.	-	8	6	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.	-	5	3	287	11 710	223	492	8 370	22 500	61 985	84 596	1 303
322212	Folding paperboard box mfg.	-	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	50	7	688	17 907	477	818	11 410	33 121	21 457	55 485	2 787
3231	Printing & related support activities	2	50	7	688	17 907	477	818	11 410	33 121	21 457	55 485	2 787
32311	Printing	2	47	6	661	17 410	454	776	11 094	32 241	21 317	54 465	D
325	Chemical mfg.	1	19	7	465	14 659	285	612	7 355	87 018	82 817	166 934	4 778
3253	Pesticide, fertilizer, & other agricultural chemical mfg.	1	4	3	266	9 889	184	429	5 117	64 660	57 855	119 005	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	STOCKTON-LODI, CA MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	38	17	1 387	38 131	1 068	1 909	25 861	130 779	141 369	271 508	8 564
3261	Plastics product mfg	-	29	16	1 248	34 503	960	1 686	23 600	121 943	135 191	256 590	7 733
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	5	3	280	8 974	178	361	5 171	37 083	55 852	94 194	5 165
32619	Other plastics product mfg	-	16	8	503	13 426	378	741	8 113	31 558	21 501	53 012	1 607
326199	All other plastics product mfg	-	13	7	451	12 303	345	679	7 517	29 724	20 277	49 956	D
327	Nonmetallic mineral product mfg	-	33	10	1 563	61 548	1 279	2 686	49 716	197 829	144 193	343 373	14 773
3272	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	e	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	23	7	659	21 001	501	996	15 803	47 878	56 970	103 794	4 560
32739	Other concrete product mfg	-	10	3	341	10 832	256	500	8 683	24 275	30 462	54 417	1 378
327390	Other concrete product mfg	-	10	3	341	10 832	256	500	8 683	24 275	30 462	54 417	1 378
332	Fabricated metal product mfg	1	92	33	2 758	84 894	2 099	4 352	56 556	209 349	262 213	467 251	10 091
3323	Architectural & structural metals mfg	-	27	18	1 412	42 368	1 004	2 166	26 655	126 638	105 879	230 171	3 566
33231	Plate work & fabricated structural product mfg ..	-	15	11	1 124	32 772	798	1 750	21 147	92 564	88 958	179 936	2 694
332312	Fabricated structural metal mfg	-	11	7	1 012	29 050	713	1 568	18 540	85 977	75 836	159 898	2 122
33232	Ornamental & architectural metal products mfg	1	12	7	288	9 596	206	416	5 508	34 074	16 921	50 235	872
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	34	3	261	7 659	198	336	5 495	14 835	5 926	20 644	863
3329	Other fabricated metal product mfg	-	12	5	337	9 897	291	538	6 271	22 620	20 210	42 697	363
33299	All other fabricated metal product mfg	-	12	5	337	9 897	291	538	6 271	22 620	20 210	42 697	363
333	Machinery mfg	2	36	15	826	28 669	549	1 102	16 441	57 418	52 823	110 980	3 715
3331	Agriculture, construction, & mining machinery mfg	5	11	5	269	7 683	197	404	5 001	19 682	13 222	30 917	1 939
3332	Industrial machinery mfg ..	-	9	6	252	10 588	170	322	5 805	14 479	20 146	35 930	697
334	Computer & electronic product mfg	1	13	6	1 025	34 299	932	2 349	25 548	60 087	47 589	107 539	20 697
3344	Semiconductor & other electronic component mfg	1	11	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	11	6	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	4	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	1	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	20	10	954	30 514	748	1 780	22 234	66 711	70 329	136 941	5 497
3363	Motor vehicle parts mfg ...	1	7	3	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	37	11	1 179	39 181	870	1 869	23 732	73 659	71 932	145 563	3 770
3371	Household & institutional furniture & kitchen cabinet mfg	2	27	4	579	18 201	373	842	9 802	28 391	28 788	56 511	1 696
33712	Household & institutional furniture mfg	-	4	2	330	10 402	187	391	4 637	15 572	20 447	35 337	1 220
3372	Office furniture (including fixtures) mfg	-	7	6	545	19 848	453	955	13 170	42 233	38 617	81 525	1 987
33721	Office furniture (including fixtures) mfg	-	7	6	545	19 848	453	955	13 170	42 233	38 617	81 525	1 987
337215	Showcase, partition, shelving, & locker mfg	-	5	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	STOCKTON-LODI, CA MSA—Con.													
	Manufacturing—Con.													
339	Miscellaneous mfg.....	1	46	8	875	24 917	545	906	12 096	70 671	27 701	97 978	3 464	
3391	Medical equipment & supplies mfg.....	—	21	4	441	12 604	277	372	4 995	38 988	10 604	45 851	2 451	
33911	Medical equipment & supplies mfg.....	—	21	4	441	12 604	277	372	4 995	38 988	10 604	45 851	2 451	
339113	Surgical appliance & supplies mfg.....	—	3	2	330	10 093	194	223	3 533	32 919	8 010	37 293	D	
3399	Other miscellaneous mfg..	2	25	4	434	12 313	268	534	7 101	31 683	17 097	52 127	1 013	
33995	Sign mfg.....	2	11	2	305	9 644	173	381	5 654	25 953	9 618	39 007	718	
339950	Sign mfg.....	2	11	2	305	9 644	173	381	5 654	25 953	9 618	39 007	718	
31-33	VISALIA-TULARE-PORTERVILLE, CA MSA													
	Manufacturing	1	282	101	11 439	314 453	8 825	18 107	214 641	1 109 550	2 094 858	3 167 304	94 983	
311	Food mfg.....	—	47	26	3 979	113 698	3 157	6 914	83 453	506 388	1 501 136	1 980 227	53 109	
3114	Fruit & vegetable preserving & specialty food mfg.....	3	10	7	1 695	30 574	1 277	2 633	21 076	160 388	126 695	273 802	7 304	
31141	Frozen food mfg.....	8	5	4	1 026	19 652	830	1 837	12 679	74 687	51 254	125 879	5 209	
311412	Frozen specialty food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D	
31142	Fruit & vegetable canning, pickling, & drying.....	—	5	3	669	10 922	447	796	8 397	85 701	75 441	147 923	2 095	
311421	Fruit & vegetable canning.....	—	3	2	f	D	D	D	D	D	D	D	D	
3115	Dairy product mfg.....	—	7	7	1 309	50 142	1 117	2 685	40 965	183 733	1 006 294	1 178 085	38 501	
31151	Dairy product (except frozen) mfg.....	—	6	6	g	D	D	D	D	D	D	D	D	
311511	Fluid milk mfg.....	—	2	2	e	D	D	D	D	D	D	D	D	
311513	Cheese mfg.....	—	3	3	392	9 498	335	652	7 573	62 673	170 944	227 339	D	
311514	Dry, condensed, & evaporated dairy product mfg.....	—	1	1	e	D	D	D	D	D	D	D	D	
3119	Other food mfg.....	—	6	6	531	15 553	474	992	12 717	59 266	67 445	122 326	4 569	
31191	Snack food mfg.....	—	3	3	e	D	D	D	D	D	D	D	D	
321	Wood product mfg.....	—	14	8	792	20 606	613	1 169	12 164	49 803	92 660	143 091	546	
3219	Other wood product mfg...	—	8	5	399	9 880	310	587	6 200	26 373	40 572	66 916	D	
32199	All other wood product mfg.....	—	4	2	287	7 319	242	465	4 860	18 945	21 348	40 271	57	
322	Paper mfg.....	—	6	3	354	9 444	219	473	5 159	27 677	40 079	68 904	4 301	
3222	Converted paper product mfg.....	—	6	3	354	9 444	219	473	5 159	27 677	40 079	68 904	4 301	
32221	Paperboard container mfg.....	—	5	3	e	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067	
3231	Printing & related support activities.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067	
32311	Printing.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067	
323110	Commercial lithographic printing..	—	9	2	334	10 364	218	505	5 626	30 242	8 825	41 990	D	
323116	Manifold business form printing.....	6	4	4	423	15 690	338	738	12 783	90 596	60 538	149 747	3 938	
323117	Book printing.....	—	1	1	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg.....	—	19	11	1 036	25 107	896	1 764	20 086	76 013	101 742	180 670	16 496	
3261	Plastics product mfg.....	—	17	11	g	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg.....	—	8	5	603	14 149	542	1 001	11 234	43 664	34 867	77 939	8 358	
326199	All other plastics product mfg.....	—	8	5	603	14 149	542	1 001	11 234	43 664	34 867	77 939	8 358	
332	Fabricated metal product mfg.....	1	45	13	1 295	37 687	866	1 810	21 176	80 794	85 013	163 379	3 167	
3323	Architectural & structural metals mfg.....	—	11	6	627	18 870	409	871	9 532	36 040	53 595	89 130	480	
33231	Plate work & fabricated structural product mfg..	—	2	2	e	D	D	D	D	D	D	D	D	
33232	Ornamental & architectural metal products mfg.....	—	9	4	e	D	D	D	D	D	D	D	D	
332321	Metal window & door mfg.....	—	4	2	e	D	D	D	D	D	D	D	110	
3329	Other fabricated metal product mfg.....	5	6	3	e	D	D	D	D	D	D	D	D	
33291	Metal valve mfg.....	5	3	3	e	D	D	D	D	D	D	D	D	
332911	Industrial valve mfg...	8	2	2	e	D	D	D	D	D	D	D	D	
333	Machinery mfg.....	2	37	10	535	16 951	330	661	8 575	47 132	30 379	62 608	1 989	

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VISALIA-TULARE-PORTERVILLE, CA MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	6	4	431	10 732	353	601	7 202	21 224	24 215	45 533	693
3344	Semiconductor & other electronic component mfg.....	-	3	2	e	D	D	D	D	D	D	D	485
33441	Semiconductor & other electronic component mfg.....	-	3	2	e	D	D	D	D	D	D	D	485
	YUBA CITY, CA MSA												
31-33	Manufacturing	1	114	31	2 792	76 132	2 226	4 628	52 361	239 095	368 203	602 235	18 036
311	Food mfg.....	1	19	10	1 037	33 593	855	2 113	23 171	146 618	194 197	335 316	10 635
3114	Fruit & vegetable preserving & specialty food mfg.....	1	11	9	776	27 545	635	1 571	18 429	130 538	153 784	275 341	9 500
31142	Fruit & vegetable canning, pickling, & drying.....	1	11	9	776	27 545	635	1 571	18 429	130 538	153 784	275 341	9 500
311423	Dried & dehydrated food mfg.....	1	9	8	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	19	9	807	18 371	693	1 282	13 962	38 679	117 031	153 989	2 435
3219	Other wood product mfg....	-	16	7	681	15 308	592	1 074	11 930	28 338	102 775	131 766	2 175
32191	Millwork.....	-	9	5	519	11 299	450	803	9 100	19 475	81 723	102 105	701
321918	Other millwork (including flooring)...	-	5	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	13	3	270	7 118	208	379	4 760	19 538	18 025	37 079	495

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALAMEDA COUNTY, CA												
31-33	Manufacturing	1	2 507	862	93 809	3 803 028	60 299	117 493	1 914 328	10 363 294	12 063 270	22 337 780	1 201 766
311	Food mfg.....	2	188	82	10 322	311 508	6 766	12 996	164 457	1 146 020	1 079 222	2 212 982	75 192
3113	Sugar & confectionery product mfg.....	3	16	11	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	4	8	6	f	D	D	D	D	D	D	D	9 042
311330	Confectionery mfg from purchased chocolate.....	4	8	6	f	D	D	D	D	D	D	D	9 042
31134	Nonchocolate confectionery mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg....	-	6	4	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	1	13	5	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	5	17	8	f	D	D	D	D	D	D	D	13 979
31161	Animal slaughtering & processing.....	5	17	8	f	D	D	D	D	D	D	D	13 979
311612	Meat processed from carcasses.....	4	12	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALAMEDA COUNTY, CA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	3	96	34	i	D	D	D	D	D	D	D	24 411
31181	Bread & bakery product mfg	4	77	25		3 816	94 650	2 181	4 279	48 097	217 800	118 810	334 667
311812	Commercial bakeries	5	34	19		3 296	85 478	1 805	3 618	42 698	197 162	100 300	297 262
31182	Cookie, cracker, & pasta mfg	—	15	5	g	D	D	D	D	D	D	D	7 911
311821	Cookie & cracker mfg	—	8	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	30	17	g	D	D	D	D	D	D	D	13 822
312	Beverage & tobacco product mfg	6	26	10		864	29 684	603	1 222	20 053	258 206	361 402	614 098
3121	Beverage mfg	6	26	10		864	29 684	603	1 222	20 053	258 206	361 402	614 098
31211	Soft drink & ice mfg	6	9	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	7	6	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	38	11	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	134	44	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	122	39	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	7	87	23	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	7	84	21	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	46	12	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	2	46	12	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	43	29		2 462	101 430	1 697	3 586	60 474	219 383	337 842	557 015
3222	Converted paper product mfg	1	41	27	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	24	19	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	2	18	16	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	10	6		552	23 730	316	649	13 469	60 499	66 406	127 242
323	Printing & related support activities	1	278	44		4 043	133 422	2 928	5 165	78 419	285 227	236 546	525 355
3231	Printing & related support activities	1	278	44		4 043	133 422	2 928	5 165	78 419	285 227	236 546	525 355
32311	Printing	1	244	41		3 766	122 781	2 726	4 778	71 954	263 191	232 456	499 362
323110	Commercial lithographic printing	1	124	24		2 084	72 266	1 521	2 816	44 711	158 995	171 325	329 204
323113	Commercial screen printing	—	21	7		727	22 358	526	799	9 636	46 437	18 705	66 864
325	Chemical mfg	1	101	42		6 080	341 859	2 735	5 437	97 316	881 757	551 409	1 417 720
3254	Pharmaceutical & medicine mfg	1	19	10	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	19	10	h	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	7	4	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	19	8	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	15	6	f	D	D	D	D	D	D	D	3 640
325510	Paint & coating mfg	—	15	6	f	D	D	D	D	D	D	D	3 640
3259	Other chemical product mfg	—	27	10		758	27 105	494	1 032	17 966	106 907	75 811	182 338
32599	All other chemical product & preparation mfg	1	19	5	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	12	4		527	18 130	357	763	12 724	83 364	32 264	115 559
326	Plastics & rubber products mfg	2	111	51		4 004	108 005	3 113	5 958	68 487	297 509	280 604	578 942
3261	Plastics product mfg	2	98	46		3 772	100 225	2 936	5 584	63 103	279 146	262 717	541 291
32611	Unsupported plastics film, sheet, & bag mfg	1	23	14	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	1	14	7		529	10 711	457	817	8 170	26 857	48 799	76 220
32619	Other plastics product mfg	3	57	22		2 088	56 601	1 628	3 020	34 352	157 358	96 198	251 467
326199	All other plastics product mfg	3	53	20		1 940	52 263	1 526	2 857	32 611	149 830	92 086	239 815

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	ALAMEDA COUNTY, CA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	80	32	3 119	133 967	2 524	5 545	94 259	389 542	283 932	655 544	27 418
3272	Glass & glass product mfg	—	28	10	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	28	10	g	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	18	8	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	30	15	977	40 453	723	1 532	27 938	127 284	95 762	221 384	4 385
32739	Other concrete product mfg	1	14	6	f	D	D	D	D	D	D	D	1 698
327390	Other concrete product mfg	1	14	6	f	D	D	D	D	D	D	D	1 698
331	Primary metal mfg	—	28	19	g	D	D	D	D	D	D	D	D
3315	Foundries	—	20	14	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	10	6	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	6	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	10	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	470	148	11 519	441 079	8 570	16 998	276 345	977 213	832 640	1 792 711	76 402
3321	Forging & stamping	2	19	11	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	2	19	11	g	D	D	D	D	D	D	D	D
332116	Metal stamping	1	12	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	102	30	2 578	92 609	1 870	3 436	58 828	214 702	150 102	362 252	10 890
33231	Plate work & fabricated structural product mfg	—	24	9	717	31 170	513	986	20 210	99 367	60 211	159 983	2 841
332312	Fabricated structural metal mfg	—	13	8	618	26 917	443	839	17 791	91 775	53 846	145 997	2 694
33232	Ornamental & architectural metal products mfg	1	78	21	1 861	61 439	1 357	2 450	38 618	115 335	89 891	202 269	8 049
332322	Sheet metal work mfg	1	50	15	1 377	48 122	1 024	1 773	31 130	86 865	63 842	147 910	6 612
3324	Boiler, tank, & shipping container mfg	1	16	10	g	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	1	13	9	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	7	5	703	35 438	610	1 307	30 499	121 875	253 480	358 539	3 332
3325	Hardware mfg	—	6	5	515	18 622	382	752	11 485	37 311	26 245	63 709	D
33251	Hardware mfg	—	6	5	515	18 622	382	752	11 485	37 311	26 245	63 709	D
332510	Hardware mfg	—	6	5	515	18 622	382	752	11 485	37 311	26 245	63 709	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	219	54	h	D	D	D	D	D	D	D	D
33271	Machine shops	1	195	43	2 943	117 566	2 233	4 286	72 960	228 476	108 853	337 595	20 261
332710	Machine shops	1	195	43	2 943	117 566	2 233	4 286	72 960	228 476	108 853	337 595	20 261
33272	Turned product & screw, nut, & bolt mfg	—	24	11	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	3	46	19	f	D	D	D	D	D	D	D	5 649
33281	Coating, engraving, heat treating, & allied activities	3	46	19	f	D	D	D	D	D	D	D	5 649
332813	Electroplating, plating, polishing, anodizing, & coloring	4	24	11	579	17 280	468	837	11 927	32 707	10 313	43 181	D
3329	Other fabricated metal product mfg	1	36	13	1 000	39 194	725	1 502	24 440	88 249	60 348	148 038	3 194
33299	All other fabricated metal product mfg	1	23	7	632	22 364	448	883	13 031	54 749	39 964	94 557	D
332999	All other miscellaneous fabricated metal product mfg	—	16	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	167	65	9 388	416 993	3 678	6 883	142 610	969 228	1 077 927	2 015 832	80 061
3332	Industrial machinery mfg	—	41	22	6 439	282 228	1 922	3 477	77 501	688 711	850 874	1 519 416	66 302
33329	Other industrial machinery mfg	—	41	22	6 439	282 228	1 922	3 477	77 501	688 711	850 874	1 519 416	66 302
333295	Semiconductor machinery mfg	—	22	16	i	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	4	26	7	550	24 737	268	519	9 346	47 723	24 821	72 330	D
33331	Commercial & service industry machinery mfg	4	26	7	550	24 737	268	519	9 346	47 723	24 821	72 330	D
3335	Metalworking machinery mfg	—	41	14	f	D	D	D	D	D	D	D	4 918
33351	Metalworking machinery mfg	—	41	14	f	D	D	D	D	D	D	D	4 918

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALAMEDA COUNTY, CA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	45	15	1 061	53 267	479	1 007	18 004	109 048	139 903	240 656	D
33399	All other general-purpose machinery mfg	1	30	11	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	329	160	20 218	936 041	11 089	21 872	335 242	3 161 352	3 678 245	6 853 791	384 432
3341	Computer & peripheral equipment mfg	1	58	28	2 815	167 819	968	1 864	48 125	821 110	1 264 604	2 085 155	D
33411	Computer & peripheral equipment mfg	1	58	28	2 815	167 819	968	1 864	48 125	821 110	1 264 604	2 085 155	D
334111	Electronic computer mfg	—	22	10	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	3	27	15	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	50	27	h	D	D	D	D	D	D	D	87 864
33421	Telephone apparatus mfg	—	22	11	1 735	129 912	407	875	15 900	601 948	458 264	1 039 305	D
334210	Telephone apparatus mfg	—	22	11	1 735	129 912	407	875	15 900	601 948	458 264	1 039 305	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	18	11	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	18	11	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	122	56	6 838	241 599	4 865	8 952	124 635	591 059	1 021 985	1 648 530	113 504
33441	Semiconductor & other electronic component mfg	2	122	56	6 838	241 599	4 865	8 952	124 635	591 059	1 021 985	1 648 530	113 504
334412	Bare printed circuit board mfg	—	30	14	2 113	65 173	1 697	3 020	43 475	149 540	147 353	294 993	D
334413	Semiconductor & related device mfg ...	2	36	12	1 102	49 850	615	1 138	15 467	166 747	132 296	293 643	33 356
334418	Printed circuit assembly (electronic assembly) mfg	1	23	17	h	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	6	25	10	627	27 812	349	637	9 832	75 075	61 263	133 349	17 473
3345	Navigational, measuring, medical, & control instruments mfg	1	70	31	2 504	124 372	1 125	2 315	37 731	340 913	202 988	548 356	26 348
33451	Navigational, measuring, medical, & control instruments mfg	1	70	31	2 504	124 372	1 125	2 315	37 731	340 913	202 988	548 356	26 348
334515	Electricity measuring & testing instrument mfg	1	17	10	874	49 525	356	893	14 607	166 331	99 922	270 651	8 182
334516	Analytical laboratory instrument mfg	2	14	9	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	2	23	14	4 947	215 968	3 115	6 663	92 667	675 893	627 247	1 299 925	118 289
33461	Mfg & reproducing magnetic & optical media	2	23	14	4 947	215 968	3 115	6 663	92 667	675 893	627 247	1 299 925	118 289
334612	Prerecorded CD (except software), tape, & record reproducing	3	5	4	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	2	12	6	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	56	22	1 983	79 739	1 144	2 187	29 880	193 048	159 779	354 938	11 702
3351	Electric lighting equipment mfg	—	20	9	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	20	9	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	9	5	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	17	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALAMEDA COUNTY, CA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	64	21	7 156	384 613	6 223	11 517	325 593	751 717	2 504 400	3 258 656	D
3361	Motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	35	12	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	127	28	g	D	D	D	D	D	D	D	3 662
3371	Household & institutional furniture & kitchen cabinet mfg	4	89	9	721	18 283	603	1 127	13 594	37 529	31 109	68 834	1 545
3372	Office furniture (including fixtures) mfg	1	31	16	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	31	16	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	192	34	4 228	158 545	2 345	4 652	63 255	288 358	183 032	468 838	19 622
3391	Medical equipment & supplies mfg	1	93	17	2 473	109 578	1 183	2 448	39 122	180 669	111 982	289 583	14 962
33911	Medical equipment & supplies mfg	1	93	17	2 473	109 578	1 183	2 448	39 122	180 669	111 982	289 583	14 962
339112	Surgical & medical instrument mfg	—	21	8	1 585	82 318	594	1 350	23 297	123 551	89 228	209 606	11 854
339116	Dental laboratories ...	2	46	1	539	17 670	391	726	10 969	32 423	7 983	40 770	1 025
3399	Other miscellaneous mfg ...	2	99	17	1 755	48 967	1 162	2 204	24 133	107 689	71 050	179 255	4 660
33995	Sign mfg	1	26	6	549	21 787	275	497	7 218	40 322	22 018	63 476	1 190
339950	Sign mfg	1	26	6	549	21 787	275	497	7 218	40 322	22 018	63 476	1 190
AMADOR COUNTY, CA													
31-33	Manufacturing	2	51	10	732	19 452	552	943	13 557	67 818	70 713	136 784	5 267
BUTTE COUNTY, CA													
31-33	Manufacturing	2	232	53	4 944	128 396	3 939	7 703	89 668	377 262	397 132	771 554	41 327
311	Food mfg	3	25	10	1 283	33 615	1 149	2 177	26 795	121 956	132 075	255 136	5 279
3114	Fruit & vegetable preserving & specialty food mfg	3	7	5	f	D	D	D	D	D	D	D	2 299
31142	Fruit & vegetable canning, pickling, & drying	3	6	5	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	3	4	4	787	20 973	726	1 370	18 131	78 889	81 095	159 889	2 265
321	Wood product mfg	2	19	7	726	19 071	626	1 403	15 458	48 340	76 938	125 570	3 093
3219	Other wood product mfg ...	2	15	4	519	12 321	454	1 016	10 172	22 869	48 313	72 923	D
336	Transportation equipment mfg	—	9	2	523	14 091	431	1 089	10 344	29 196	84 124	109 888	D
COLUSA COUNTY, CA													
31-33	Manufacturing	1	20	8	651	20 772	520	1 092	13 670	75 439	192 221	265 772	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONTRA COSTA COUNTY, CA													
31-33	Manufacturing	2	723	158	19 366	888 978	12 384	25 907	499 514	3 831 528	7 921 466	11 644 788	414 611
311	Food mfg	1	57	17	1 921	71 928	1 428	3 027	53 774	249 348	492 168	735 651	14 500
3113	Sugar & confectionery product mfg	—	5	1	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	—	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	115	12	1 107	31 834	731	1 315	18 189	66 485	68 206	134 956	5 590
3231	Printing & related support activities	1	115	12	1 107	31 834	731	1 315	18 189	66 485	68 206	134 956	5 590
32311	Printing	1	104	9	950	27 472	604	1 079	15 089	57 949	66 305	124 458	D
323110	Commercial lithographic printing	—	56	6	673	19 286	410	695	10 129	36 493	52 931	89 520	3 329
324	Petroleum & coal products mfg	2	15	10	3 881	226 075	2 644	6 208	154 575	1 737 797	5 506 344	7 156 458	D
3241	Petroleum & coal products mfg	2	15	10	3 881	226 075	2 644	6 208	154 575	1 737 797	5 506 344	7 156 458	D
32411	Petroleum refineries	2	5	4	h	D	D	D	D	D	D	D	D
324110	Petroleum refineries	2	5	4	h	D	D	D	D	D	D	D	D
325	Chemical mfg	—	43	17	1 566	88 748	923	1 955	49 365	450 827	314 700	768 612	25 722
3251	Basic chemical mfg	—	18	11	1 122	66 956	684	1 465	40 644	395 952	281 182	680 038	22 769
327	Nonmetallic mineral product mfg	1	29	7	512	21 554	419	881	16 204	66 199	71 655	137 930	7 252
331	Primary metal mfg	—	7	1	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	95	26	1 985	76 782	1 380	2 643	42 429	179 652	251 180	433 492	7 370
3323	Architectural & structural metals mfg	—	30	10	508	18 382	378	776	10 570	65 491	32 185	94 099	1 228
3329	Other fabricated metal product mfg	1	14	9	793	30 570	520	929	17 281	47 698	65 125	120 511	4 194
33291	Metal valve mfg	5	4	3	519	21 684	331	549	11 725	8 814	16 979	35 590	D
332911	Industrial valve mfg	5	4	3	519	21 684	331	549	11 725	8 814	16 979	35 590	D
333	Machinery mfg	2	38	8	708	28 819	453	930	16 034	70 762	38 945	108 558	6 524
334	Computer & electronic product mfg	2	68	23	3 789	191 518	1 502	2 905	47 937	477 127	320 221	791 612	26 034
3345	Navigational, measuring, medical, & control instruments mfg	1	29	16	2 860	154 608	918	1 740	26 859	396 424	261 339	651 528	19 784
33451	Navigational, measuring, medical, & control instruments mfg	1	29	16	2 860	154 608	918	1 740	26 859	396 424	261 339	651 528	19 784
334516	Analytical laboratory instrument mfg	—	7	4	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	6	106	13	720	20 839	521	964	11 442	44 783	19 782	64 717	1 845
EL DORADO COUNTY, CA													
31-33	Manufacturing	1	144	28	1 775	56 352	1 342	2 593	36 485	133 984	152 734	287 861	9 577
FRESNO COUNTY, CA													
31-33	Manufacturing	1	696	229	27 552	704 270	19 949	38 623	428 507	2 347 573	3 473 538	5 667 592	160 726
311	Food mfg	2	115	62	11 134	263 420	8 778	17 081	173 611	1 056 563	2 014 876	2 980 941	65 922
3114	Fruit & vegetable preserving & specialty food mfg	—	22	18	h	D	D	D	D	D	D	D	30 681
31141	Frozen food mfg	5	2	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	5	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	20	16	h	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	8	7	g	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	—	11	9	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	4	3	524	20 947	244	542	9 716	131 367	309 890	438 251	2 778
31151	Dairy product (except frozen) mfg	—	3	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FRESNO COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	5	16	12	3 452	65 945	2 983	5 312	50 354	187 013	677 612	856 696	11 677
31161	Animal slaughtering & processing.....	5	16	12	3 452	65 945	2 983	5 312	50 354	187 013	677 612	856 696	11 677
311611	Animal (except poultry) slaughtering.....	9	7	4	930	21 718	770	983	14 896	50 609	387 890	438 401	3 073
311615	Poultry processing....	—	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	46	13	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	1	36	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	—	10	5	553	18 904	314	585	6 681	38 223	22 094	60 360	417
31183	Tortilla mfg.....	—	3	3	682	14 411	440	965	10 544	38 926	37 743	76 834	934
311830	Tortilla mfg.....	—	3	3	682	14 411	440	965	10 544	38 926	37 743	76 834	934
3119	Other food mfg.....	1	11	7	693	21 200	434	794	9 962	146 140	70 920	162 448	3 606
312	Beverage & tobacco product mfg.....	—	13	10	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	13	10	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	11	8	759	21 005	507	1 032	12 336	51 606	98 454	150 520	D
3222	Converted paper product mfg.....	—	10	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	10	7	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	79	12	1 072	27 068	705	1 263	15 469	53 756	35 201	89 303	2 749
3231	Printing & related support activities.....	2	79	12	1 072	27 068	705	1 263	15 469	53 756	35 201	89 303	2 749
32311	Printing.....	2	74	12	g	D	D	D	D	D	D	D	2 728
323110	Commercial lithographic printing..	1	40	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	24	13	947	26 405	757	1 586	17 827	88 808	70 019	161 173	9 562
3261	Plastics product mfg.....	1	21	12	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	—	38	15	1 067	35 444	792	1 653	23 669	143 711	100 863	245 874	D
3272	Glass & glass product mfg..	—	6	4	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	96	27	1 776	49 148	1 274	2 504	31 280	105 688	108 464	212 437	D
3323	Architectural & structural metals mfg.....	1	21	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	66	26	3 773	114 530	2 605	4 872	60 076	225 360	366 642	591 681	14 953
3333	Commercial & service industry machinery mfg..	—	3	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	23	14	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg..	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	2	15	8	905	29 063	593	970	13 450	56 394	42 839	98 085	3 039
333993	Packaging machinery mfg.....	3	9	5	613	20 310	397	607	9 503	38 267	30 625	68 627	1 755

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRESNO COUNTY, CA													
—Con.													
31-33	Manufacturing—												
	Con.												
334	Computer & electronic product mfg.....	—	12	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	3	33	14	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	43	7	664	11 679	570	917	8 744	20 423	22 126	44 287	832
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	32	4	520	8 903	449	707	6 782	14 657	15 821	32 207	374
339	Miscellaneous mfg.....	1	70	7	961	25 013	593	1 151	12 669	127 667	38 118	168 256	3 943
3391	Medical equipment & supplies mfg.....	1	43	4	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	1	43	4	f	D	D	D	D	D	D	D	D
GLENN COUNTY, CA													
31-33	Manufacturing	—	29	9	946	29 247	790	1 561	23 601	68 000	192 170	290 607	6 764
HUMBOLDT COUNTY, CA													
31-33	Manufacturing	1	178	42	5 540	161 428	4 628	9 522	125 874	454 634	569 184	1 041 922	32 885
311	Food mfg.....	2	33	8	714	12 623	547	858	8 302	58 768	97 274	156 241	4 996
321	Wood product mfg.....	1	39	18	3 604	115 987	3 160	7 051	95 094	323 863	389 746	726 881	23 079
3211	Sawmills & wood preservation.....	1	21	10	3 098	102 847	2 718	6 143	84 324	284 331	332 715	628 291	20 829
32111	Sawmills & wood preservation.....	1	21	10	3 098	102 847	2 718	6 143	84 324	284 331	332 715	628 291	20 829
321113	Sawmills.....	1	21	10	3 098	102 847	2 718	6 143	84 324	284 331	332 715	628 291	20 829
IMPERIAL COUNTY, CA													
31-33	Manufacturing	1	61	18	1 481	40 605	1 202	2 445	26 732	94 709	149 554	241 643	11 706
KERN COUNTY, CA													
31-33	Manufacturing	1	390	88	14 306	379 246	11 322	24 464	250 987	1 608 492	1 189 154	2 824 572	145 184
311	Food mfg.....	—	39	17	7 192	165 788	6 130	14 619	115 874	571 052	515 956	1 100 368	67 272
3114	Fruit & vegetable preserving & specialty food mfg.....	—	5	5	2 813	54 529	2 633	6 097	42 577	195 309	129 709	347 409	D
31142	Fruit & vegetable canning, pickling, & drying.....	—	4	4	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	—	1	1	g	D	D	D	D	D	D	D	D
3119	Other food mfg.....	—	9	7	3 755	91 360	3 024	7 570	59 183	334 238	332 010	652 181	45 420
31191	Snack food mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	—	6	4	g	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	—	15	3	646	5 555	482	831	3 958	8 407	26 594	35 011	1 310
325	Chemical mfg.....	—	22	9	1 216	47 858	904	1 769	31 287	379 576	133 351	513 488	26 981
3251	Basic chemical mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	28	11	823	28 456	637	1 279	20 030	104 070	81 472	187 135	8 512
3273	Cement & concrete product mfg.....	1	22	8	622	23 343	471	959	16 192	90 212	72 128	164 621	7 186

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KERN COUNTY, CA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	2	81	13	1 025	27 082	777	1 406	18 337	63 686	34 170	98 025	4 566
333	Machinery mfg	4	40	9	542	16 097	344	580	8 618	35 169	33 052	67 831	2 337
KINGS COUNTY, CA													
31-33	Manufacturing	—	65	23	2 796	90 625	2 312	4 778	67 984	249 640	496 133	748 732	23 208
311	Food mfg	—	15	6	1 029	32 952	835	1 682	23 919	117 592	294 475	413 001	2 686
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	f	D	D	D	D	D	D	D	D
LOS ANGELES COUNTY, CA													
31-33	Manufacturing	1	17 915	5 839	622 302	20 311 335	430 159	817 449	10 295 069	53 692 011	52 735 817	106 706 380	3 549 692
311	Food mfg	2	1 137	349	39 804	1 109 807	27 745	51 255	619 148	3 806 969	5 057 785	8 848 733	212 187
3111	Animal food mfg	1	21	9	1 633	62 488	1 059	2 390	43 127	482 609	382 021	853 306	23 720
31111	Animal food mfg	1	21	9	1 633	62 488	1 059	2 390	43 127	482 609	382 021	853 306	23 720
311111	Dog & cat food mfg	—	11	7	1 522	58 184	1 003	2 259	40 997	468 540	352 884	808 986	22 923
3112	Grain & oilseed milling	1	25	15	1 154	43 436	786	1 571	26 937	164 866	492 771	658 829	6 379
31122	Starch & vegetable fats & oils mfg	2	11	7	645	22 970	459	936	16 001	79 738	245 688	325 425	2 655
311225	Fats & oils refining & blending	2	10	6	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	38	10	1 231	37 323	1 015	1 997	24 254	115 411	111 611	228 899	14 484
31133	Confectionery mfg from purchased chocolate	—	14	6	815	24 907	698	1 308	17 802	79 644	75 086	154 800	11 509
311330	Confectionery mfg from purchased chocolate	—	14	6	815	24 907	698	1 308	17 802	79 644	75 086	154 800	11 509
3114	Fruit & vegetable preserving & specialty food mfg	3	64	37	4 418	109 798	3 552	6 070	63 785	344 101	409 460	753 307	33 630
31141	Frozen food mfg	2	31	20	2 637	58 209	2 292	3 867	35 575	179 567	203 089	382 949	13 869
311412	Frozen specialty food mfg	2	26	16	2 403	52 071	2 088	3 423	30 677	163 114	166 524	329 395	12 393
31142	Fruit & vegetable canning, pickling, & drying	4	33	17	1 781	51 589	1 260	2 203	28 210	164 534	206 371	370 358	19 761
311421	Fruit & vegetable canning	4	26	13	982	32 391	654	1 306	15 700	98 071	116 821	215 262	4 731
3115	Dairy product mfg	2	56	35	4 061	150 854	2 434	4 772	73 884	477 923	1 027 431	1 501 073	31 602
31151	Dairy product (except frozen) mfg	2	38	27	3 439	127 394	2 007	3 852	56 916	410 561	888 909	1 295 173	27 543
311511	Fluid milk mfg	2	17	14	2 563	102 131	1 458	2 840	43 360	345 509	742 811	1 084 574	20 445
31152	Ice cream & frozen dessert mfg	4	18	8	622	23 460	427	920	16 968	67 362	138 522	205 900	4 059
311520	Ice cream & frozen dessert mfg	4	18	8	622	23 460	427	920	16 968	67 362	138 522	205 900	4 059
3116	Meat product mfg	2	91	46	5 182	131 180	4 339	8 341	89 072	446 342	959 944	1 407 018	17 124
31161	Animal slaughtering & processing	2	91	46	5 182	131 180	4 339	8 341	89 072	446 342	959 944	1 407 018	17 124
311611	Animal (except poultry) slaughtering	1	28	10	2 239	58 146	1 910	4 182	44 090	186 705	550 236	737 817	4 520
311612	Meat processed from carcasses	4	52	27	1 990	52 541	1 655	3 151	33 778	189 518	322 903	511 574	8 794
311615	Poultry processing	—	8	6	645	9 858	614	866	9 139	49 324	68 094	117 463	1 073
3117	Seafood product preparation & packaging	—	39	14	2 151	47 942	1 848	3 256	33 305	113 960	332 397	444 806	8 667
31171	Seafood product preparation & packaging	—	39	14	2 151	47 942	1 848	3 256	33 305	113 960	332 397	444 806	8 667
311711	Seafood canning	—	11	5	1 043	21 857	881	1 505	15 496	49 836	112 391	161 833	D
311712	Fresh & frozen seafood processing	—	28	9	1 108	26 085	967	1 751	17 809	64 124	220 006	282 973	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg.....	2	654	112	14 690	377 072	9 016	16 171	188 269	1 090 541	690 126	1 780 170	51 241
31181	Bread & bakery product mfg.....	2	589	79	11 419	309 430	6 522	11 730	146 440	884 348	481 300	1 365 435	38 443
311811	Retail bakeries.....	5	450	25	2 486	30 776	1 610	2 042	16 060	66 449	41 860	108 460	4 436
311812	Commercial bakeries.....	2	130	48	8 130	261 406	4 269	8 612	120 930	762 998	369 529	1 132 421	29 465
311813	Frozen cakes, pies, & other pastries mfg....	—	9	6	803	17 248	643	1 076	9 450	54 901	69 911	124 554	4 542
31182	Cookie, cracker, & pasta mfg.....	1	40	15	1 245	31 541	903	1 489	17 869	88 034	122 787	209 976	7 468
311821	Cookie & cracker mfg....	—	16	9	854	21 476	656	1 005	11 580	54 537	59 074	114 062	4 032
31183	Tortilla mfg.....	2	25	18	2 026	36 101	1 591	2 952	23 960	118 159	86 039	204 759	5 330
311830	Tortilla mfg.....	2	25	18	2 026	36 101	1 591	2 952	23 960	118 159	86 039	204 759	5 330
3119	Other food mfg.....	1	149	71	5 284	149 714	3 696	6 687	76 515	571 216	652 024	1 221 325	25 340
31192	Coffee & tea mfg.....	—	11	9	713	24 296	435	825	13 246	132 883	165 180	293 586	6 948
311920	Coffee & tea mfg.....	—	11	9	713	24 296	435	825	13 246	132 883	165 180	293 586	6 948
31194	Seasoning & dressing mfg.....	2	39	15	1 221	39 768	885	1 620	23 389	140 125	173 257	315 509	4 741
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	2	19	8	745	22 516	610	1 175	15 412	81 058	111 100	192 156	2 832
31199	All other food mfg.....	1	77	38	2 865	71 757	2 055	3 793	34 149	236 502	248 160	484 114	10 949
311991	Perishable prepared food mfg.....	1	28	19	1 583	37 827	1 208	2 286	20 297	115 701	102 453	217 829	5 984
311999	All other miscellaneous food mfg.....	1	49	19	1 282	33 930	847	1 507	13 852	120 801	145 707	266 285	4 965
312	Beverage & tobacco product mfg.....	—	42	20	3 903	186 955	2 567	5 428	118 664	1 398 461	1 294 489	2 684 831	135 821
3121	Beverage mfg.....	—	41	20	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	—	28	14	1 829	68 867	993	2 168	32 096	380 057	603 455	979 844	8 210
312111	Soft drink mfg.....	—	15	10	1 560	60 319	834	1 796	26 894	363 124	596 973	956 344	6 834
31212	Breweries.....	—	8	5	g	D	D	D	D	D	D	D	127 189
312120	Breweries.....	—	8	5	g	D	D	D	D	D	D	D	127 189
313	Textile mills.....	3	294	96	8 465	199 648	7 037	14 061	133 233	456 885	494 821	943 774	42 653
3132	Fabric mills.....	3	116	37	4 252	93 820	3 584	6 841	61 354	190 471	209 197	399 319	18 144
31321	Broadwoven fabric mills.....	8	43	8	934	15 783	854	1 175	13 273	26 901	32 448	59 338	3 090
313210	Broadwoven fabric mills.....	8	43	8	934	15 783	854	1 175	13 273	26 901	32 448	59 338	3 090
31322	Narrow fabric mills & schiffli machine embroidery.....	1	38	11	1 346	26 829	1 175	2 509	19 929	65 267	28 344	93 376	D
313221	Narrow fabric mills....	1	18	5	670	15 020	566	1 236	11 093	42 231	19 325	61 374	D
313222	Schiffli machine embroidery.....	—	20	6	676	11 809	609	1 273	8 836	23 036	9 019	32 002	D
31324	Knit fabric mills.....	2	31	17	1 891	50 394	1 489	3 042	27 574	96 043	145 443	241 411	D
313241	Weft knit fabric mills..	2	24	14	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	3	158	54	3 907	101 753	3 178	6 697	68 483	255 831	273 639	522 290	D
31331	Textile & fabric finishing mills.....	3	142	48	3 626	91 130	2 975	6 263	62 407	231 966	238 495	463 194	D
313311	Broadwoven fabric finishing mills.....	2	103	30	1 772	44 922	1 398	2 835	28 189	135 697	138 014	270 449	D
313312	Textile & fabric finishing mills.....	3	39	18	1 854	46 208	1 577	3 428	34 218	96 269	100 481	192 745	13 816
314	Textile product mills.....	3	474	132	13 116	259 825	10 584	21 440	160 825	608 438	774 719	1 375 692	31 051
3141	Textile furnishings mills....	3	174	48	6 507	142 873	5 206	9 980	86 796	388 014	569 448	952 094	14 951
31411	Carpet & rug mills.....	3	15	9	2 217	71 582	1 576	3 438	34 429	219 608	296 156	515 471	9 525
314110	Carpet & rug mills....	3	15	9	2 217	71 582	1 576	3 438	34 429	219 608	296 156	515 471	9 525
31412	Curtain & linen mills.....	3	159	39	4 290	71 291	3 630	6 542	52 367	168 406	273 292	436 623	5 426
314121	Curtain & drapery mills.....	4	91	5	535	8 631	364	644	4 298	17 037	14 644	31 936	327
314129	Other household textile product mills.....	3	68	34	3 755	62 660	3 266	5 898	48 069	151 369	258 648	404 687	5 099
3149	Other textile product mills..	3	300	84	6 609	116 952	5 378	11 460	74 029	220 424	205 271	423 598	16 100
31491	Textile bag & canvas mills.....	3	98	17	2 144	40 779	1 735	2 813	20 972	67 519	65 315	128 984	2 732
314911	Textile bag mills.....	1	24	7	1 250	20 442	1 094	1 690	9 817	33 830	39 658	69 650	556
314912	Canvas & related product mills.....	6	74	10	894	20 337	641	1 123	11 155	33 689	25 657	59 334	2 176
31499	All other textile product mills.....	3	202	67	4 465	76 173	3 643	8 647	53 057	152 905	139 956	294 614	13 368
314999	All other miscellaneous textile product mills..	3	198	66	4 403	74 476	3 588	8 539	51 637	149 038	136 424	286 971	13 314

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	3 808	1 237	96 523	1 657 920	81 336	136 236	1 109 099	4 138 202	4 523 877	8 574 606	170 913
3151	Apparel knitting mills	1	95	42	3 655	63 524	3 069	6 065	44 050	148 588	178 999	329 526	14 301
31519	Other apparel knitting mills	1	81	39	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	1	76	38	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	3 487	1 143	87 805	1 498 829	74 112	123 135	1 004 794	3 755 285	4 138 962	7 804 565	147 083
31521	Cut & sew apparel contractors	5	2 354	683	45 622	505 746	42 805	65 405	441 699	884 415	255 818	1 129 442	32 637
315211	Men's & boys' cut & sew apparel contractors	3	102	62	4 320	54 341	4 098	7 193	48 402	105 431	15 786	121 030	3 247
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	2 252	621	41 302	451 405	38 707	58 212	393 297	778 984	240 032	1 008 412	29 390
31522	Men's & boys' cut & sew apparel mfg	2	237	101	9 113	171 945	7 851	14 701	125 015	399 898	475 869	861 767	13 110
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	88	45	2 951	60 131	2 410	4 454	41 848	143 473	239 872	373 044	4 046
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	1	43	25	h	D	D	D	D	D	D	D	3 926
315228	Men's & boys' cut & sew other outerwear mfg	5	60	19	g	D	D	D	D	D	D	D	4 724
31523	Women's & girls' cut & sew apparel mfg	1	828	342	31 906	799 414	22 532	41 441	424 050	2 428 128	3 370 659	5 734 794	100 039
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	2	34	15	1 321	30 391	939	1 814	16 675	71 916	114 007	183 230	1 176
315232	Women's & girls' cut & sew blouse & shirt mfg	2	264	104	9 034	229 218	6 605	11 064	119 993	679 230	1 019 561	1 669 252	9 760
315233	Women's & girls' cut & sew dress mfg	1	233	101	7 939	231 330	5 306	10 177	117 917	624 227	960 042	1 568 854	14 152
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	69	24	1 768	42 139	1 238	2 054	23 295	136 160	172 749	304 605	1 042
315239	Women's & girls' cut & sew other outerwear mfg	1	228	98	11 844	266 336	8 444	16 332	146 170	916 595	1 104 300	2 008 853	73 909
31529	Other cut & sew apparel mfg	6	68	17	1 164	21 724	924	1 588	14 030	42 844	36 616	78 562	1 297
315299	All other cut & sew apparel mfg	8	47	14	903	15 290	695	1 173	9 684	31 145	25 567	56 002	767
3159	Apparel accessories & other apparel mfg	2	226	52	5 063	95 567	4 155	7 036	60 255	234 329	205 916	440 515	9 529
31599	Apparel accessories & other apparel mfg	2	226	52	5 063	95 567	4 155	7 036	60 255	234 329	205 916	440 515	9 529
315991	Hat, cap, & millinery mfg	5	33	8	f	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	-	11	3	772	14 445	715	1 267	11 191	62 532	52 718	114 114	D
315999	Other apparel accessories & other apparel mfg	3	181	40	3 633	70 762	2 865	4 765	41 459	152 955	138 120	292 741	7 994
316	Leather & allied product mfg .	2	114	40	4 283	74 460	3 616	6 621	50 843	154 236	125 157	280 537	5 037
3162	Footwear mfg	3	48	18	1 436	21 299	1 318	2 297	16 545	45 875	30 145	75 517	D
31621	Footwear mfg	3	48	18	1 436	21 299	1 318	2 297	16 545	45 875	30 145	75 517	D
316214	Women's footwear (except athletic) mfg .	2	23	11	947	13 972	866	1 649	10 951	29 559	17 316	47 084	358
3169	Other leather & allied product mfg	1	53	22	2 757	51 117	2 231	4 194	32 956	104 314	89 131	195 177	3 856
31699	Other leather & allied product mfg	1	53	22	2 757	51 117	2 231	4 194	32 956	104 314	89 131	195 177	3 856
316991	Luggage mfg	-	16	9	706	15 046	563	1 043	9 021	35 098	22 532	57 310	D
316999	All other leather good mfg	2	20	8	1 437	24 727	1 125	2 015	16 159	50 988	50 615	103 936	D
321	Wood product mfg	2	251	78	5 949	136 756	4 722	9 512	91 418	275 060	266 665	541 309	14 867
3219	Other wood product mfg ...	2	231	72	5 475	125 765	4 295	8 578	82 258	244 806	215 924	460 919	12 865
32191	Millwork	2	105	35	2 830	67 640	2 266	4 626	45 390	127 431	102 721	229 899	5 682
321911	Wood window & door mfg	2	43	15	1 568	36 548	1 273	2 701	26 516	75 670	56 605	132 507	4 320
321918	Other millwork (including flooring) ...	1	45	14	985	24 928	748	1 493	13 885	40 908	34 750	75 190	914
32192	Wood container & pallet mfg	2	66	21	1 315	27 046	1 095	2 125	18 572	57 589	55 278	112 786	2 117
321920	Wood container & pallet mfg	2	66	21	1 315	27 046	1 095	2 125	18 572	57 589	55 278	112 786	2 117
32199	All other wood product mfg	2	60	16	1 330	31 079	934	1 827	18 296	59 786	57 925	118 234	5 066
321999	All other miscellaneous wood product mfg ...	2	56	16	1 274	29 566	894	1 744	17 383	56 825	53 490	110 815	4 936

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	1	236	140	13 243	462 103	9 932	20 644	287 298	1 106 414	1 489 516	2 603 459	70 209
3221	Pulp, paper, & paperboard mills	—	10	9	1 020	53 588	753	1 725	32 981	146 017	227 350	375 762	11 302
32213	Paperboard mills	—	7	7	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	7	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	226	131	12 223	408 515	9 179	18 919	254 317	960 397	1 262 166	2 227 697	58 907
32221	Paperboard container mfg	1	97	63	6 988	262 630	5 244	11 230	156 902	582 029	837 805	1 416 760	33 366
322211	Corrugated & solid fiber box mfg	1	56	35	4 417	172 195	3 216	7 134	103 410	380 393	662 709	1 040 455	24 519
322212	Folding paperboard box mfg	—	25	17	1 781	70 979	1 353	2 822	40 753	153 380	120 829	274 450	6 765
32222	Paper bag & coated & treated paper mfg	1	35	18	1 404	41 947	929	1 882	24 470	98 347	117 173	219 130	8 687
322222	Coated & laminated paper mfg	2	23	13	857	26 626	514	990	14 854	64 076	64 922	132 681	6 597
32223	Stationery product mfg ..	1	56	28	2 406	69 638	1 897	3 833	49 110	176 038	193 807	372 161	9 742
322231	Die-cut paper & paperboard office supplies mfg	1	27	10	949	23 956	796	1 598	18 168	77 073	71 073	151 270	1 732
322232	Envelope mfg	2	22	13	1 273	39 911	975	2 029	28 185	87 843	115 420	202 126	7 888
32229	Other converted paper product mfg	2	38	22	1 425	34 300	1 109	1 974	23 835	103 983	113 381	219 646	7 112
322299	All other converted paper product mfg ..	1	28	18	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 787	367	34 106	1 087 217	24 797	48 530	664 510	2 301 126	1 604 372	3 908 372	171 848
3231	Printing & related support activities	2	1 787	367	34 106	1 087 217	24 797	48 530	664 510	2 301 126	1 604 372	3 908 372	171 848
32311	Printing	2	1 564	308	30 084	949 992	21 802	42 752	575 926	2 050 909	1 544 827	3 598 325	153 594
323110	Commercial lithographic printing ..	2	745	157	15 740	592 638	11 053	23 512	368 107	1 274 498	897 611	2 179 626	105 885
323113	Commercial screen printing	1	219	75	7 059	161 190	5 622	10 090	90 541	318 671	297 875	614 630	18 254
323114	Quick printing	4	328	12	1 618	36 768	1 187	1 781	23 924	78 683	46 316	124 782	5 455
323116	Manifold business form printing	—	37	19	2 086	57 178	1 244	2 386	30 010	171 631	137 494	306 641	3 864
323117	Book printing	2	31	11	654	24 349	499	916	14 126	49 878	39 409	89 165	6 789
323118	Blankbook, looseleaf binder, & device mfg ..	1	17	8	987	21 932	806	1 640	15 502	56 334	50 023	106 251	6 558
323119	Other commercial printing	4	119	15	1 196	33 327	843	1 499	20 550	52 492	45 917	98 426	3 127
32312	Support activities for printing	2	223	59	4 022	137 225	2 995	5 778	88 584	250 217	59 545	310 047	18 254
323121	Tradebinding & related work	4	73	25	1 728	37 896	1 501	2 917	28 967	72 193	15 148	87 224	5 546
323122	Prepress services	1	150	34	2 294	99 329	1 494	2 861	59 617	178 024	44 397	222 823	12 708
324	Petroleum & coal products mfg	2	61	29	6 256	362 649	3 963	9 016	222 575	3 014 598	7 731 279	10 756 249	413 648
3241	Petroleum & coal products mfg	2	61	29	6 256	362 649	3 963	9 016	222 575	3 014 598	7 731 279	10 756 249	413 648
32411	Petroleum refineries	2	14	14	5 077	312 687	3 091	7 021	188 087	2 805 292	7 355 467	10 164 509	397 841
324110	Petroleum refineries ..	2	14	14	5 077	312 687	3 091	7 021	188 087	2 805 292	7 355 467	10 164 509	397 841
32412	Asphalt paving, roofing, & saturated materials mfg	3	30	9	730	31 350	569	1 292	22 982	119 183	228 387	351 724	12 387
324122	Asphalt shingle & coating materials mfg	3	12	8	592	25 519	463	1 083	18 503	92 915	158 766	255 622	9 064
325	Chemical mfg	1	552	227	24 255	922 940	14 570	29 178	419 124	4 011 248	3 506 824	7 506 277	267 955
3251	Basic chemical mfg	2	52	22	1 507	68 259	868	1 870	35 832	258 038	276 426	545 239	29 257
32518	Other basic inorganic chemical mfg	—	14	6	555	24 220	347	762	13 956	91 349	95 781	191 426	13 695
325188	All other basic inorganic chemical mfg	—	12	6	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	24	17	1 010	47 949	640	1 448	24 619	212 463	396 529	623 415	27 115
32521	Resin & synthetic rubber mfg	1	24	17	1 010	47 949	640	1 448	24 619	212 463	396 529	623 415	27 115
325211	Plastics material & resin mfg	1	20	15	913	42 314	573	1 313	21 905	199 065	369 400	582 799	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	1	20	8	637	18 790	257	481	6 944	103 454	73 679	174 002	5 064

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	70	34	5 775	245 530	3 370	7 156	118 873	1 322 173	1 043 527	2 327 351	109 069
32541	Pharmaceutical & medicine mfg	—	70	34	5 775	245 530	3 370	7 156	118 873	1 322 173	1 043 527	2 327 351	109 069
325411	Medicinal & botanical mfg	1	25	11	1 520	68 024	889	2 138	29 681	294 221	248 509	549 657	37 401
325412	Pharmaceutical preparation mfg	—	33	17	2 151	86 134	1 323	2 634	40 140	544 364	355 321	901 268	42 541
325413	In-vitro diagnostic substance mfg	—	6	3	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	6	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	105	38	3 067	120 751	1 774	3 331	47 037	525 483	491 758	1 010 248	18 845
32551	Paint & coating mfg	1	74	27	2 219	83 320	1 325	2 475	34 894	386 902	386 558	766 494	13 143
325510	Paint & coating mfg	1	74	27	2 219	83 320	1 325	2 475	34 894	386 902	386 558	766 494	13 143
32552	Adhesive mfg	—	31	11	848	37 431	449	856	12 143	138 581	105 200	243 754	5 702
325520	Adhesive mfg	—	31	11	848	37 431	449	856	12 143	138 581	105 200	243 754	5 702
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	162	62	8 104	274 780	5 048	9 543	116 377	1 132 796	715 802	1 859 447	43 128
32561	Soap & cleaning compound mfg	3	87	24	1 743	58 744	1 078	2 252	30 209	277 548	222 508	501 427	12 567
325611	Soap & other detergent mfg	3	38	12	767	27 612	417	834	13 306	112 519	96 693	211 021	4 765
325612	Polish & other sanitation good mfg ..	3	40	11	876	25 915	620	1 332	15 565	153 919	108 697	262 065	6 651
32562	Toilet preparation mfg ..	1	75	38	6 361	216 036	3 970	7 291	86 168	855 248	493 294	1 358 020	30 561
325620	Toilet preparation mfg ..	1	75	38	6 361	216 036	3 970	7 291	86 168	855 248	493 294	1 358 020	30 561
3259	Other chemical product mfg	1	119	46	4 155	146 881	2 613	5 349	69 442	456 841	509 103	966 575	35 477
32591	Printing ink mfg	1	28	12	f	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	28	12	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	2	2	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	2	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	89	32	2 946	99 310	1 827	3 540	47 555	366 991	383 517	748 222	26 819
325991	Custom compounding of purchased resin ...	1	34	17	1 438	48 664	884	1 720	23 557	132 136	190 207	321 839	16 116
325992	Photographic film, paper, plate, & chemical mfg	2	19	6	707	20 697	559	1 086	12 577	50 335	39 901	90 992	2 165
325998	All other miscellaneous chemical product & preparation mfg	3	36	9	801	29 949	384	734	11 421	184 520	153 409	335 391	8 538
326	Plastics & rubber products mfg	2	622	310	28 194	739 118	22 532	44 357	463 624	1 956 710	1 808 320	3 747 182	165 584
3261	Plastics product mfg	2	514	267	24 496	642 575	19 643	38 508	405 743	1 691 984	1 574 369	3 242 925	153 972
32611	Unsupported plastics film, sheet, & bag mfg ..	1	78	44	3 472	99 646	2 822	5 892	63 130	257 250	354 954	606 271	25 158
326111	Unsupported plastics bag mfg	—	41	24	2 246	56 960	1 887	3 997	36 732	124 690	187 510	307 446	17 325
326113	Unsupported plastics film & sheet (except packaging) mfg	2	33	16	1 020	34 268	778	1 520	20 961	112 115	138 375	249 401	6 162
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	39	16	1 134	33 226	890	1 705	19 542	82 683	61 519	143 157	4 613
326121	Unsupported plastics profile shape mfg	3	28	12	857	25 839	694	1 322	15 590	61 605	45 433	107 172	3 504
32614	Polystyrene foam product mfg	3	19	12	733	18 834	564	1 022	11 871	58 105	46 651	106 041	3 793
326140	Polystyrene foam product mfg	3	19	12	733	18 834	564	1 022	11 871	58 105	46 651	106 041	3 793
32615	Urethane & other foam product (except polystyrene) mfg	2	24	15	1 700	41 696	1 320	2 707	25 917	111 016	173 136	279 288	8 735
326150	Urethane & other foam product (except polystyrene) mfg	2	24	15	1 700	41 696	1 320	2 707	25 917	111 016	173 136	279 288	8 735
32616	Plastics bottle mfg	—	19	10	1 371	34 501	1 028	2 259	22 434	83 475	92 101	175 422	21 457
326160	Plastics bottle mfg	—	19	10	1 371	34 501	1 028	2 259	22 434	83 475	92 101	175 422	21 457
32619	Other plastics product mfg	3	319	166	15 662	400 287	12 740	24 390	257 473	1 063 756	814 848	1 866 125	88 884
326191	Plastics plumbing fixture mfg	7	13	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	304	157	14 702	374 085	11 927	22 630	237 215	987 358	752 718	1 727 707	84 843

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	1	108	43	3 698	96 543	2 889	5 849	57 881	264 726	233 951	504 257	11 612
32629	Other rubber product mfg	2	79	34	2 937	76 129	2 341	4 716	46 237	214 903	167 042	385 575	8 387
326291	Rubber product mfg for mechanical use	1	38	13	1 001	25 051	821	1 711	15 762	75 939	22 995	98 540	1 750
326299	All other rubber product mfg	2	41	21	1 936	51 078	1 520	3 005	30 475	138 964	144 047	287 035	6 637
327	Nonmetallic mineral product mfg	1	379	136	10 223	294 743	7 949	15 444	205 924	785 274	670 206	1 460 879	58 796
3271	Clay product & refractory mfg	2	80	37	2 505	51 629	2 040	3 886	36 326	113 358	58 511	169 838	6 936
32711	Pottery, ceramics, & plumbing fixture mfg	2	62	28	2 102	41 562	1 702	3 354	29 995	89 925	46 113	133 837	5 736
327112	Vitreous china, fine earthenware, & other pottery product mfg	3	54	24	1 553	27 671	1 259	2 352	18 679	60 082	33 302	91 434	3 034
3272	Glass & glass product mfg	—	97	27	3 525	105 776	2 774	5 334	76 075	291 267	196 489	494 491	21 700
32721	Glass & glass product mfg	—	97	27	3 525	105 776	2 774	5 334	76 075	291 267	196 489	494 491	21 700
327212	Other pressed & blown glass & glassware mfg	1	21	3	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	3	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	73	21	2 035	48 974	1 490	2 798	29 931	98 489	96 235	194 538	7 846
3273	Cement & concrete product mfg	1	99	41	2 213	77 387	1 669	3 399	54 897	214 628	231 828	446 060	18 211
32732	Ready-mix concrete mfg	—	60	27	1 282	47 371	1 000	2 106	35 997	125 887	177 989	303 810	10 872
327320	Ready-mix concrete mfg	—	60	27	1 282	47 371	1 000	2 106	35 997	125 887	177 989	303 810	10 872
32739	Other concrete product mfg	5	23	9	577	15 966	432	825	9 998	35 743	24 162	60 119	1 885
327390	Other concrete product mfg	5	23	9	577	15 966	432	825	9 998	35 743	24 162	60 119	1 885
3274	Lime & gypsum product mfg	—	21	9	580	21 291	442	918	15 238	66 078	90 415	157 330	3 396
32742	Gypsum product mfg	—	20	9	f	D	D	D	D	D	D	D	3 396
327420	Gypsum product mfg	—	20	9	f	D	D	D	D	D	D	D	3 396
3279	Other nonmetallic mineral product mfg	3	82	22	1 400	38 660	1 024	1 907	23 388	99 943	92 963	193 160	8 553
32799	All other nonmetallic mineral product mfg	4	64	15	937	25 607	680	1 257	16 056	61 256	63 395	124 985	7 001
331	Primary metal mfg	—	218	135	12 829	392 862	10 190	21 235	260 321	1 105 365	1 373 551	2 488 464	66 771
3312	Steel product mfg from purchased steel	—	31	21	2 013	75 784	1 497	3 266	47 525	202 041	375 991	575 237	24 381
33121	Iron & steel pipes & tubes mfg from purchased steel	—	10	6	769	31 142	549	1 118	18 459	70 252	169 388	238 645	11 302
331210	Iron & steel pipes & tubes mfg from purchased steel	—	10	6	769	31 142	549	1 118	18 459	70 252	169 388	238 645	11 302
33122	Rolling & drawing of purchased steel	—	21	15	1 244	44 642	948	2 148	29 066	131 789	206 603	336 592	13 079
331222	Steel wire drawing	—	12	11	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	17	14	1 648	52 166	1 319	2 812	33 669	139 490	268 195	409 714	D
33131	Alumina & aluminum production & processing	—	17	14	1 648	52 166	1 319	2 812	33 669	139 490	268 195	409 714	D
331316	Aluminum extruded product mfg	—	9	7	952	30 910	768	1 652	20 507	78 484	148 075	223 532	D
3314	Nonferrous metal (except aluminum) production & processing	—	31	14	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	25	11	1 639	52 457	1 219	2 879	33 341	222 241	291 210	529 136	9 500
331491	Other nonferrous metal rolling, drawing, & extruding	—	8	3	815	19 303	638	1 421	12 046	87 457	93 681	188 076	2 905
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	17	8	824	33 154	581	1 458	21 295	134 784	197 529	341 060	6 595

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	—	132	80	6 886	186 530	5 719	11 368	130 520	462 311	257 165	714 228	19 461
33151	Ferrous metal foundries .	—	29	23	3 201	84 759	2 774	5 466	64 332	225 189	110 653	328 770	7 157
331511	Iron foundries	—	10	8	889	23 819	771	1 547	18 318	48 915	21 401	70 429	2 078
331512	Steel investment foundries	—	9	8	1 881	48 953	1 650	3 303	37 809	150 399	68 695	212 214	2 090
33152	Nonferrous metal foundries	—	103	57	3 685	101 771	2 945	5 902	66 188	237 122	146 512	385 458	12 304
331521	Aluminum die-casting foundries	1	26	17	857	23 501	722	1 421	16 476	57 394	36 407	95 267	3 677
331522	Nonferrous (except aluminum) die-casting foundries	—	19	12	918	23 668	702	1 341	15 218	74 542	43 794	117 583	4 591
331524	Aluminum foundries (except die-casting) ..	—	42	22	1 525	42 965	1 209	2 482	27 373	89 541	47 055	135 251	3 121
332	Fabricated metal product mfg	1	2 808	862	71 150	2 319 462	52 648	103 963	1 413 312	5 310 310	3 624 189	8 858 064	330 592
3321	Forging & stamping	2	152	72	4 835	182 544	3 721	8 125	118 128	427 714	388 981	804 376	32 821
33211	Forging & stamping	2	152	72	4 835	182 544	3 721	8 125	118 128	427 714	388 981	804 376	32 821
332112	Nonferrous forging	—	6	4	837	32 800	674	1 455	22 847	116 228	97 948	204 244	12 089
332116	Metal stamping	1	115	52	3 007	102 695	2 299	4 972	63 137	219 995	175 712	393 173	14 211
3322	Cutlery & handtool mfg	2	82	21	1 846	51 795	1 302	2 268	26 851	124 335	89 631	213 013	6 077
33221	Cutlery & handtool mfg ..	2	82	21	1 846	51 795	1 302	2 268	26 851	124 335	89 631	213 013	6 077
332212	Hand & edge tool mfg ..	3	69	16	1 489	40 174	1 087	1 949	22 657	88 101	54 756	141 299	4 302
3323	Architectural & structural metals mfg	1	410	148	12 417	365 986	8 873	17 818	208 672	829 892	685 405	1 509 315	32 789
33231	Plate work & fabricated structural product mfg ..	1	100	39	2 872	106 041	1 856	3 851	56 218	251 432	170 175	420 391	8 713
332311	Prefabricated metal building & component mfg	1	10	6	575	17 275	288	547	7 074	37 445	35 618	73 498	936
332312	Fabricated structural metal mfg	1	71	25	1 849	74 188	1 211	2 609	40 044	167 049	98 782	263 904	6 621
33232	Ornamental & architectural metal products mfg	1	310	109	9 545	259 945	7 017	13 967	152 454	578 460	515 230	1 088 924	24 076
332321	Metal window & door mfg	—	59	31	3 474	91 781	2 569	5 252	52 192	226 081	245 684	470 233	7 515
332322	Sheet metal work mfg ..	2	186	65	5 105	143 011	3 736	7 356	85 547	297 595	213 612	505 687	15 157
332323	Ornamental & architectural metal work mfg	1	65	13	966	25 153	712	1 359	14 715	54 784	55 934	113 004	1 404
3324	Boiler, tank, & shipping container mfg	—	65	32	3 155	123 826	2 142	4 534	78 477	294 862	469 972	761 514	26 274
33241	Power boiler & heat exchanger mfg	—	19	7	644	24 695	410	673	12 951	49 047	38 014	85 071	6 469
332410	Power boiler & heat exchanger mfg	—	19	7	644	24 695	410	673	12 951	49 047	38 014	85 071	6 469
33242	Metal tank (heavy gauge) mfg	—	17	12	1 079	42 160	542	1 249	21 753	71 497	75 020	145 250	3 028
332420	Metal tank (heavy gauge) mfg	—	17	12	1 079	42 160	542	1 249	21 753	71 497	75 020	145 250	3 028
33243	Metal can, box, & other metal container (light gauge) mfg	—	29	13	1 432	56 971	1 190	2 612	43 773	174 318	356 938	531 193	16 777
332431	Metal can mfg	—	10	7	856	38 296	732	1 562	31 752	127 802	308 354	436 651	13 869
332439	Other metal container mfg	1	19	6	576	18 675	458	1 050	12 021	46 516	48 584	94 542	2 908
3325	Hardware mfg	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
33251	Hardware mfg	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
332510	Hardware mfg	1	66	39	3 791	116 572	2 829	5 673	73 351	271 108	211 085	480 306	14 714
3326	Spring & wire product mfg .	1	70	29	1 672	40 289	1 315	2 629	26 338	80 345	63 951	143 734	4 206
33261	Spring & wire product mfg	1	70	29	1 672	40 289	1 315	2 629	26 338	80 345	63 951	143 734	4 206
332618	Other fabricated wire product mfg	1	49	18	1 124	24 891	909	1 750	16 511	49 331	44 206	93 543	2 641
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	1 241	243	20 673	749 286	15 945	31 324	483 112	1 530 955	738 855	2 241 586	128 730
33271	Machine shops	1	1 051	165	12 297	426 933	9 599	17 911	289 345	873 457	372 570	1 230 954	83 909
332710	Machine shops	1	1 051	165	12 297	426 933	9 599	17 911	289 345	873 457	372 570	1 230 954	83 909
33272	Turned product & screw, nut, & bolt mfg	—	190	78	8 376	322 353	6 346	13 413	193 767	657 498	366 285	1 010 632	44 821
332721	Precision turned product mfg	1	122	38	2 246	70 939	1 827	3 741	50 151	132 930	61 798	192 819	7 095
332722	Bolt, nut, screw, rivet, & washer mfg	—	68	40	6 130	251 414	4 519	9 672	143 616	524 568	304 487	817 813	37 726

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	1	453	180	10 792	285 111	8 607	16 654	181 346	581 718	224 751	807 252	31 370
33281	Coating, engraving, heat treating, & allied activities.....	1	453	180	10 792	285 111	8 607	16 654	181 346	581 718	224 751	807 252	31 370
332811	Metal heat treating....	1	46	28	1 229	43 271	913	1 865	25 375	101 464	21 279	122 767	5 213
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	116	53	2 576	71 137	2 063	4 149	45 489	164 205	83 871	248 185	10 902
332813	Electroplating, plating, polishing, anodizing, & coloring.....	2	291	99	6 987	170 703	5 631	10 640	110 482	316 049	119 601	436 300	15 255
3329	Other fabricated metal product mfg.....	—	269	98	11 969	404 053	7 914	14 938	217 037	1 169 381	751 558	1 896 968	53 611
33291	Metal valve mfg.....	—	77	45	7 043	263 670	4 224	8 007	131 875	783 075	495 104	1 259 582	38 641
332911	Industrial valve mfg...	—	19	11	1 394	62 493	819	1 489	27 856	124 672	115 294	239 599	D
332912	Fluid power valve & hose fitting mfg.....	—	35	18	2 635	113 397	1 704	3 469	58 388	307 164	131 047	433 361	16 408
332913	Plumbing fixture fitting & trim mfg.....	—	16	13	2 540	74 262	1 533	2 720	41 335	322 074	235 715	545 418	17 369
33299	All other fabricated metal product mfg.....	1	192	53	4 926	140 383	3 690	6 931	85 162	386 306	256 454	637 386	14 970
332998	Enameled iron & metal sanitary ware mfg...	—	8	6	1 400	36 764	1 050	1 864	21 030	118 390	89 275	204 419	3 827
332999	All other miscellaneous fabricated metal product mfg.....	2	113	31	2 038	56 066	1 491	2 880	34 208	132 146	109 389	240 393	6 762
333	Machinery mfg.....	1	957	311	27 855	1 019 461	18 035	35 620	530 897	2 227 836	1 792 285	4 007 047	131 664
3331	Agriculture, construction, & mining machinery mfg....	—	36	18	1 019	39 804	625	1 277	16 747	73 462	96 808	171 546	8 148
3332	Industrial machinery mfg ..	2	121	41	3 124	107 962	1 780	3 435	50 395	248 806	198 851	440 843	12 137
33329	Other industrial machinery mfg.....	2	97	38	2 899	100 204	1 635	3 150	45 892	232 937	181 600	407 225	11 597
333294	Food product machinery mfg.....	2	24	10	767	22 482	478	828	11 827	48 034	40 426	88 092	3 436
333298	All other industrial machinery mfg.....	3	48	21	1 500	55 403	792	1 575	23 289	128 924	107 949	232 278	6 601
3333	Commercial & service industry machinery mfg ..	2	150	54	4 569	155 730	2 961	6 071	78 621	347 124	274 369	618 029	21 077
33331	Commercial & service industry machinery mfg.....	2	150	54	4 569	155 730	2 961	6 071	78 621	347 124	274 369	618 029	21 077
333314	Optical instrument & lens mfg.....	2	20	9	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg.....	3	45	13	1 115	48 287	748	1 682	26 296	67 331	69 528	137 293	4 969
333319	Other commercial & service industry machinery mfg.....	1	68	29	2 772	86 150	1 727	3 478	40 024	231 548	168 172	394 238	12 573
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	2	50	25	2 424	75 031	1 785	3 652	41 698	162 707	143 831	305 123	6 682
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	50	25	2 424	75 031	1 785	3 652	41 698	162 707	143 831	305 123	6 682
333414	Heating equipment (except warm air furnaces) mfg.....	4	11	6	941	30 484	642	1 316	14 311	71 333	49 178	117 800	2 386
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	1	27	14	1 242	37 039	958	1 946	22 994	69 038	80 590	151 315	3 903
3335	Metalworking machinery mfg.....	1	335	74	5 767	207 511	4 245	7 975	128 832	397 331	317 572	725 655	23 560
33351	Metalworking machinery mfg.....	1	335	74	5 767	207 511	4 245	7 975	128 832	397 331	317 572	725 655	23 560
333511	Industrial mold mfg....	1	98	24	1 836	76 302	1 452	2 734	50 072	138 925	56 873	196 580	6 406
333512	Machine tool (metal cutting types) mfg....	—	8	5	567	20 443	393	791	11 765	54 442	140 413	196 407	3 942
333514	Special die & tool, die set, jig, & fixture mfg ..	2	130	20	1 538	49 135	1 172	2 146	33 094	94 500	28 462	122 973	4 517
333515	Cutting tool & machine tool accessory mfg ..	2	75	17	1 231	37 774	884	1 696	22 606	62 256	30 522	94 889	5 965
3336	Engine, turbine, & power transmission equipment mfg.....	—	29	11	1 912	89 995	1 265	2 631	42 600	237 885	189 256	427 012	27 138
33361	Engine, turbine, & power transmission equipment mfg.....	—	29	11	1 912	89 995	1 265	2 631	42 600	237 885	189 256	427 012	27 138
333618	Other engine equipment mfg.....	—	12	7	1 547	72 634	1 045	2 162	34 893	205 814	173 599	379 723	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOS ANGELES COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	236	88	9 040	343 428	5 374	10 579	172 004	760 521	571 598	1 318 839	32 922
33391	Pump & compressor mfg	1	37	19	1 836	83 858	1 024	1 971	36 801	172 363	190 511	356 842	8 435
333911	Pump & pumping equipment mfg	—	22	11	1 283	62 886	701	1 386	27 095	118 536	145 580	260 756	5 428
33392	Material handling equipment mfg	2	49	16	1 293	40 404	806	1 509	22 241	73 410	77 936	152 330	4 576
333922	Conveyor & conveying equipment mfg	1	22	10	810	25 741	485	800	13 009	38 974	40 922	81 867	1 485
33399	All other general-purpose machinery mfg	—	150	53	5 911	219 166	3 544	7 099	112 962	514 748	303 151	809 667	19 911
333992	Welding & soldering equipment mfg	—	10	7	596	24 363	361	654	12 413	58 772	44 282	100 705	2 481
333993	Packaging machinery mfg	1	26	10	1 364	56 975	756	1 526	25 801	113 720	49 260	162 451	4 297
333995	Fluid power cylinder & actuator mfg	—	23	9	1 724	69 494	880	1 914	37 946	171 216	70 565	236 860	3 759
333999	All other miscellaneous general-purpose machinery mfg	1	58	19	1 586	48 153	1 102	2 088	24 875	116 332	109 295	224 388	6 031
334	Computer & electronic product mfg	1	856	359	61 598	2 952 183	28 492	55 777	884 399	7 784 696	3 843 238	11 584 681	475 076
3341	Computer & peripheral equipment mfg	3	84	34	2 796	119 586	1 295	2 790	56 687	341 609	309 458	666 981	22 862
33411	Computer & peripheral equipment mfg	3	84	34	2 796	119 586	1 295	2 790	56 687	341 609	309 458	666 981	22 862
334112	Computer storage device mfg	9	13	4	542	32 626	297	816	23 379	67 585	66 677	144 007	12 342
334119	Other computer peripheral equipment mfg	1	52	20	1 691	68 568	736	1 509	26 453	228 296	206 032	440 794	7 533
3342	Communications equipment mfg	—	106	57	12 494	737 432	2 697	5 151	83 860	1 957 435	1 147 962	3 060 323	128 323
33421	Telephone apparatus mfg	1	21	13	1 144	50 616	353	654	13 064	214 058	149 560	336 886	8 949
334210	Telephone apparatus mfg	1	21	13	1 144	50 616	353	654	13 064	214 058	149 560	336 886	8 949
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	61	34	10 720	666 819	2 037	3 955	64 858	1 681 192	951 106	2 612 079	117 748
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	61	34	10 720	666 819	2 037	3 955	64 858	1 681 192	951 106	2 612 079	117 748
33429	Other communications equipment mfg	2	24	10	630	19 997	307	542	5 938	62 185	47 296	111 358	1 626
334290	Other communications equipment mfg	2	24	10	630	19 997	307	542	5 938	62 185	47 296	111 358	1 626
3343	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
33431	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
334310	Audio & video equipment mfg	1	55	15	1 999	69 251	1 371	2 567	25 787	123 648	241 821	371 582	11 463
3344	Semiconductor & other electronic component mfg	1	286	139	17 889	579 128	12 950	25 924	335 826	1 316 657	782 839	2 090 905	141 527
33441	Semiconductor & other electronic component mfg	1	286	139	17 889	579 128	12 950	25 924	335 826	1 316 657	782 839	2 090 905	141 527
334411	Electron tube mfg	—	7	4	1 251	64 075	977	2 272	51 591	97 585	73 850	164 631	D
334412	Bare printed circuit board mfg	3	66	26	2 162	63 596	1 709	3 619	40 066	147 194	78 050	226 876	10 912
334413	Semiconductor & related device mfg	2	45	15	4 159	144 637	2 653	4 936	78 326	337 856	182 948	525 059	75 920
334414	Electronic capacitor mfg	—	12	8	1 010	23 625	860	1 655	14 710	49 576	21 427	70 822	3 394
334416	Electronic coil, transformer, & other inductor mfg	3	26	11	730	17 456	560	994	9 684	33 853	13 700	47 214	D
334417	Electronic connector mfg	—	22	18	2 798	90 930	2 132	4 565	52 422	204 481	108 072	313 239	13 015
334418	Printed circuit assembly (electronic assembly) mfg	—	12	10	1 719	53 799	1 247	2 426	27 436	124 031	145 457	264 769	8 855
334419	Other electronic component mfg	2	90	43	3 824	115 248	2 615	5 022	57 918	307 768	155 894	460 463	14 446

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	207	81	23 300	1 358 440	7 797	14 976	322 957	3 798 110	1 205 504	4 988 556	133 878
33451	Navigational, measuring, medical, & control instruments mfg	—	207	81	23 300	1 358 440	7 797	14 976	322 957	3 798 110	1 205 504	4 988 556	133 878
334510	Electromedical & electrotherapeutic apparatus mfg	—	18	5	1 238	77 832	448	945	12 079	396 209	84 726	465 680	11 272
334511	Search, detection, navigation, & guidance instrument mfg	—	40	21	15 327	1 015 655	3 855	7 121	213 026	2 664 903	642 027	3 302 473	89 760
334512	Automatic environmental control mfg	—	9	2	685	21 993	465	946	13 781	93 162	55 789	148 565	3 764
334513	Industrial process control instrument mfg	2	42	17	1 976	73 773	1 010	1 993	26 098	154 854	73 351	231 320	6 909
334515	Electricity measuring & testing instrument mfg	2	35	13	1 935	94 524	844	1 717	30 648	332 364	204 559	538 315	17 130
334519	Other measuring & controlling device mfg	—	32	11	1 152	37 786	619	1 167	15 618	79 916	56 444	139 515	3 142
3346	Mfg & reproducing magnetic & optical media	4	118	33	3 120	88 346	2 382	4 369	59 282	247 237	155 654	406 334	37 023
33461	Mfg & reproducing magnetic & optical media	4	118	33	3 120	88 346	2 382	4 369	59 282	247 237	155 654	406 334	37 023
334612	Prerecorded CD (except software), tape, & record reproducing	3	91	25	2 564	69 947	1 942	3 578	47 352	182 586	110 812	295 310	22 527
335	Electrical equipment, appliance, & component mfg	1	361	158	15 925	493 844	10 933	21 453	239 646	1 372 074	1 156 311	2 530 781	68 862
3351	Electric lighting equipment mfg	1	136	57	4 953	132 192	3 364	6 581	64 800	418 932	339 358	754 586	D
33512	Lighting fixture mfg	1	132	56	4 895	129 903	3 312	6 467	62 811	412 581	335 587	744 364	D
335121	Residential electric lighting fixture mfg	1	64	22	1 922	39 607	1 302	2 609	20 337	123 343	117 507	242 019	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	1	39	20	1 653	50 687	1 128	2 206	24 779	186 250	146 378	329 567	6 073
335129	Other lighting equipment mfg	—	29	14	1 320	39 609	882	1 652	17 695	102 988	71 702	172 778	4 266
3352	Household appliance mfg	—	13	8	961	24 538	730	1 436	13 736	121 847	93 272	211 191	D
33522	Major appliance mfg	—	5	4	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	2	107	42	4 145	128 221	2 832	5 525	60 076	277 861	208 909	492 813	15 355
33531	Electrical equipment mfg	2	107	42	4 145	128 221	2 832	5 525	60 076	277 861	208 909	492 813	15 355
335312	Motor & generator mfg	3	30	13	1 075	35 655	793	1 649	17 039	65 687	57 745	125 769	8 217
335313	Switchgear & switchboard apparatus mfg	1	23	9	1 092	30 760	827	1 619	15 576	62 224	56 491	119 925	2 488
335314	Relay & industrial control mfg	2	38	14	1 556	50 172	909	1 604	19 921	124 459	70 587	197 231	3 339
3359	Other electrical equipment & component mfg	1	105	51	5 866	208 893	4 007	7 911	101 034	553 434	514 772	1 072 191	32 490
33591	Battery mfg	—	10	6	907	30 953	732	1 629	22 137	87 505	107 518	193 149	7 136
335911	Storage battery mfg	—	9	6	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	32	14	2 138	68 141	1 536	2 937	37 852	217 335	224 997	444 449	10 906
335931	Current-carrying wiring device mfg	—	17	7	1 030	32 851	666	1 170	16 402	90 352	41 732	133 387	3 186
335932	Noncurrent-carrying wiring device mfg	—	15	7	1 108	35 290	870	1 767	21 450	126 983	183 265	311 062	7 720
33599	All other electrical equipment & component mfg	2	57	25	2 557	101 187	1 536	2 928	35 137	229 763	160 794	395 211	12 168
335999	All other miscellaneous electrical equipment & component mfg	3	54	24	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	587	257	86 062	4 139 588	44 000	84 428	1 547 514	8 358 690	8 929 715	17 828 677	552 035
3362	Motor vehicle body & trailer mfg	—	54	28	3 228	87 911	2 432	4 435	51 697	607 447	1 931 594	2 537 826	40 303
33621	Motor vehicle body & trailer mfg	—	54	28	3 228	87 911	2 432	4 435	51 697	607 447	1 931 594	2 537 826	40 303
336211	Motor vehicle body mfg	—	33	17	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	1	5	3	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	13	6	939	14 791	767	1 444	10 185	32 363	43 382	74 545	1 012

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	2	285	115	13 795	361 200	10 950	21 828	237 652	816 126	811 575	1 638 995	62 781
33631	Motor vehicle gasoline engine & engine parts mfg	1	64	24	2 453	59 088	1 935	3 367	34 076	134 991	105 882	239 023	10 982
336311	Carburetor, piston, piston ring, & valve mfg	1	20	11	1 007	23 920	832	1 471	14 862	45 456	24 416	69 801	2 190
336312	Gasoline engine & engine parts mfg	1	44	13	1 446	35 168	1 103	1 896	19 214	89 535	81 466	169 222	8 792
33632	Motor vehicle electrical & electronic equipment mfg	6	48	17	1 535	35 978	1 229	2 338	23 747	70 023	63 764	135 377	4 680
336322	Other motor vehicle electrical & electronic equipment mfg	6	44	15	1 356	29 613	1 095	2 080	19 501	54 555	50 866	106 803	D
33635	Motor vehicle transmission & power train parts mfg	3	28	8	586	18 762	439	821	10 044	50 154	53 442	103 654	3 423
336350	Motor vehicle transmission & power train parts mfg	3	28	8	586	18 762	439	821	10 044	50 154	53 442	103 654	3 423
33636	Motor vehicle seating & interior trim mfg	1	26	9	1 185	23 072	960	1 686	16 007	44 466	40 632	84 911	3 332
336360	Motor vehicle seating & interior trim mfg ...	1	26	9	1 185	23 072	960	1 686	16 007	44 466	40 632	84 911	3 332
33637	Motor vehicle metal stamping	7	13	7	1 448	32 888	1 210	2 982	24 720	60 044	68 945	128 903	7 576
336370	Motor vehicle metal stamping	7	13	7	1 448	32 888	1 210	2 982	24 720	60 044	68 945	128 903	7 576
33639	Other motor vehicle parts mfg	1	92	45	6 303	181 877	4 966	10 207	123 928	432 058	453 724	897 771	31 422
336399	All other motor vehicle parts mfg	2	87	43	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	161	84	66 388	3 599 072	28 490	53 939	1 191 247	6 766 130	5 974 176	13 261 358	440 493
33641	Aerospace product & parts mfg	—	161	84	66 388	3 599 072	28 490	53 939	1 191 247	6 766 130	5 974 176	13 261 358	440 493
336411	Aircraft mfg	—	11	7	k	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	2	17	10	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	114	54	20 590	909 244	8 424	18 079	378 984	2 227 981	1 052 998	3 073 200	143 389
336414	Guided missile & space vehicle mfg ...	—	3	3	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	5	4	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	1	11	6	1 379	54 762	959	2 207	34 425	102 716	98 856	198 632	20 520
3366	Ship & boat building	6	28	9	f	D	D	D	D	D	D	D	1 640
33661	Ship & boat building	6	28	9	f	D	D	D	D	D	D	D	1 640
3369	Other transportation equipment mfg	1	49	17	1 523	57 811	1 160	2 269	40 291	86 062	97 562	192 085	D
33699	Other transportation equipment mfg	1	49	17	1 523	57 811	1 160	2 269	40 291	86 062	97 562	192 085	D
336991	Motorcycle, bicycle, & parts mfg	2	38	13	812	22 710	588	1 202	12 193	65 901	56 058	121 707	D
336992	Military armored vehicle, tank, & tank component mfg	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	999	321	29 180	662 936	23 418	43 283	432 726	1 474 926	1 335 272	2 801 612	53 195
3371	Household & institutional furniture & kitchen cabinet mfg	2	690	188	18 740	392 184	15 293	28 405	268 115	804 217	806 323	1 607 981	28 264
33711	Wood kitchen cabinet & counter top mfg	4	175	17	1 627	39 466	1 238	2 203	24 849	71 501	51 010	122 593	2 326
337110	Wood kitchen cabinet & counter top mfg ...	4	175	17	1 627	39 466	1 238	2 203	24 849	71 501	51 010	122 593	2 326
33712	Household & institutional furniture mfg	2	515	171	17 113	352 718	14 055	26 202	243 266	732 716	755 313	1 485 388	25 938
337121	Upholstered household furniture mfg	2	158	59	5 008	106 188	4 193	8 054	77 500	208 709	237 695	450 001	4 244
337122	Nonupholstered wood household furniture mfg	3	231	70	6 787	120 964	5 838	9 911	88 131	240 186	266 282	504 589	9 184
337124	Metal household furniture mfg	1	57	24	3 239	71 677	2 497	5 379	45 478	160 701	141 257	295 833	9 138
337127	Institutional furniture mfg	1	48	16	1 926	50 871	1 404	2 638	29 956	117 777	103 059	222 433	2 951

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES COUNTY, CA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	2	232	106	7 696	201 509	6 103	11 019	124 298	471 375	326 675	793 146	16 302
33721	Office furniture (including fixtures) mfg	2	232	106	7 696	201 509	6 103	11 019	124 298	471 375	326 675	793 146	16 302
337211	Wood office furniture mfg	3	41	22	1 524	28 350	1 268	2 147	18 683	56 183	39 155	90 180	2 088
337212	Custom architectural woodwork & millwork mfg	—	36	14	1 058	31 989	787	1 383	19 566	62 271	29 370	92 181	1 395
337214	Office furniture (except wood) mfg	1	30	20	1 419	44 729	1 155	2 645	33 165	130 896	106 595	237 530	5 330
337215	Showcase, partition, shelving, & locker mfg	2	125	50	3 695	96 441	2 893	4 844	52 884	222 025	151 555	373 255	7 489
3379	Other furniture related product mfg	1	77	27	2 744	69 243	2 022	3 859	40 313	199 334	202 274	400 485	8 629
33791	Mattress mfg	1	56	17	1 715	45 106	1 365	2 531	27 617	144 479	143 343	285 407	7 513
337910	Mattress mfg	1	56	17	1 715	45 106	1 365	2 531	27 617	144 479	143 343	285 407	7 513
33792	Blind & shade mfg	1	21	10	1 029	24 137	657	1 328	12 696	54 855	58 931	115 078	1 116
337920	Blind & shade mfg	1	21	10	1 029	24 137	657	1 328	12 696	54 855	58 931	115 078	1 116
339	Miscellaneous mfg	2	1 372	275	29 383	836 858	21 093	39 968	439 969	2 044 493	1 333 226	3 375 154	110 928
3391	Medical equipment & supplies mfg	1	462	71	9 432	320 391	6 287	10 665	140 360	780 341	349 293	1 131 670	47 135
33911	Medical equipment & supplies mfg	1	462	71	9 432	320 391	6 287	10 665	140 360	780 341	349 293	1 131 670	47 135
339111	Laboratory apparatus & furniture mfg	1	13	5	629	17 108	460	878	8 766	42 698	19 909	63 446	2 624
339112	Surgical & medical instrument mfg	2	51	15	2 303	89 113	1 328	2 093	32 269	193 556	93 406	281 979	14 740
339113	Surgical appliance & supplies mfg	1	66	21	2 821	98 618	2 073	3 908	40 653	227 737	129 505	352 868	12 766
339114	Dental equipment & supplies mfg	—	40	10	1 688	62 958	1 113	1 666	29 931	179 774	49 775	238 431	8 444
339115	Ophthalmic goods mfg	1	19	6	604	17 439	292	567	8 363	61 446	26 889	88 888	6 217
339116	Dental laboratories	5	273	14	1 387	35 155	1 021	1 553	20 378	75 130	29 809	106 058	2 344
3399	Other miscellaneous mfg	2	910	204	19 951	516 467	14 806	29 303	299 609	1 264 152	983 933	2 243 484	63 793
33991	Jewelry & silverware mfg	2	327	46	4 938	106 915	3 679	6 366	60 123	320 390	289 193	604 907	8 210
339911	Jewelry (except costume) mfg	3	257	37	3 302	73 429	2 530	3 607	39 016	214 558	248 477	463 842	7 037
339914	Costume jewelry & novelty mfg	1	41	6	1 399	28 996	964	2 524	18 461	93 965	24 504	113 357	816
33992	Sporting & athletic goods mfg	2	92	23	2 536	73 026	1 738	4 165	32 854	144 193	130 229	276 264	12 482
339920	Sporting & athletic goods mfg	2	92	23	2 536	73 026	1 738	4 165	32 854	144 193	130 229	276 264	12 482
33993	Doll, toy, & game mfg	4	36	7	1 061	24 456	886	1 756	16 974	72 870	48 677	121 563	2 461
339932	Game, toy, & children's vehicle mfg	4	29	7	1 018	23 835	854	1 706	16 463	70 553	47 352	117 829	2 452
33994	Office supplies (except paper) mfg	—	51	12	1 474	51 101	1 093	2 262	39 422	143 199	123 574	257 566	16 244
339941	Pen & mechanical pencil mfg	—	7	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	1	158	28	2 267	71 286	1 564	2 943	33 857	155 275	92 908	249 337	3 884
339950	Sign mfg	1	158	28	2 267	71 286	1 564	2 943	33 857	155 275	92 908	249 337	3 884
33999	All other miscellaneous mfg	2	246	88	7 675	189 683	5 846	11 811	116 379	428 225	299 352	733 847	20 512
339991	Gasket, packing, & sealing device mfg	3	41	21	1 991	54 636	1 447	3 310	33 282	114 608	63 437	177 970	7 462
339992	Musical instrument mfg	1	29	4	680	17 158	515	900	8 861	28 131	26 246	56 477	1 628
339999	All other miscellaneous mfg	3	142	50	4 338	97 610	3 384	6 618	63 230	246 720	181 988	431 946	10 173
	MADERA COUNTY, CA												
31-33	Manufacturing	1	94	34	3 913	120 770	2 978	6 311	84 280	450 626	518 740	952 330	37 056
311	Food mfg	4	14	9	608	16 459	476	1 056	12 492	50 046	105 878	166 303	1 793
312	Beverage & tobacco product mfg	—	5	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	5	2	f	D	D	D	D	D	D	D	D
31213	Wineries	—	5	2	f	D	D	D	D	D	D	D	D
312130	Wineries	—	5	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	9	5	779	30 445	662	1 335	24 634	134 559	71 609	207 689	D
333	Machinery mfg	—	9	4	633	22 310	453	945	13 215	59 991	43 844	103 602	4 047

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARIN COUNTY, CA													
31-33	Manufacturing	4	341	48	4 605	159 965	2 953	5 636	78 164	333 146	310 219	656 178	18 140
323	Printing & related support activities	2	67	9	634	23 283	458	880	13 886	51 747	23 443	75 238	2 247
3231	Printing & related support activities	2	67	9	634	23 283	458	880	13 886	51 747	23 443	75 238	2 247
32311	Printing	2	61	9	599	21 878	427	819	12 889	49 030	22 826	71 906	1 576
326	Plastics & rubber products mfg	5	13	5	566	16 303	433	882	10 187	43 253	25 919	69 490	2 686
3261	Plastics product mfg	5	11	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	16	5	710	36 599	202	363	6 176	60 924	81 223	153 722	4 584
MENDOCINO COUNTY, CA													
31-33	Manufacturing	1	160	36	4 287	124 082	3 182	6 043	85 247	374 887	452 119	769 322	20 159
312	Beverage & tobacco product mfg	-	22	7	709	22 706	413	723	10 301	124 221	113 207	196 298	6 049
3121	Beverage mfg	-	22	7	709	22 706	413	723	10 301	124 221	113 207	196 298	6 049
31213	Wineries	-	18	4	569	19 991	336	630	8 782	117 800	108 307	185 132	5 182
312130	Wineries	-	18	4	569	19 991	336	630	8 782	117 800	108 307	185 132	5 182
321	Wood product mfg	-	28	13	1 740	54 965	1 533	3 158	45 675	127 532	217 280	332 402	6 810
3211	Sawmills & wood preservation	-	12	5	875	30 845	776	1 530	26 499	73 915	157 020	220 883	4 409
32111	Sawmills & wood preservation	-	12	5	875	30 845	776	1 530	26 499	73 915	157 020	220 883	4 409
321113	Sawmills	-	10	4	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	4	786	20 538	493	767	12 898	35 916	40 269	71 737	1 291
3323	Architectural & structural metals mfg	-	4	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	1	1	f	D	D	D	D	D	D	D	D
MERCED COUNTY, CA													
31-33	Manufacturing	1	123	51	8 381	198 183	6 660	13 568	146 654	665 306	1 869 859	2 431 480	73 832
311	Food mfg	1	28	15	4 600	101 367	3 904	8 118	81 784	391 099	1 229 652	1 609 603	52 110
3114	Fruit & vegetable preserving & specialty food mfg	3	6	5	1 779	42 893	1 482	3 297	33 949	166 479	248 887	411 723	D
31141	Frozen food mfg	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	3	5	4	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	3	4	3	f	D	D	D	D	D	D	D	7 019
3115	Dairy product mfg	-	6	5	707	22 121	547	1 220	18 415	114 983	654 409	763 641	22 187
31151	Dairy product (except frozen) mfg	-	6	5	707	22 121	547	1 220	18 415	114 983	654 409	763 641	22 187
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	3	3	519	12 040	264	449	6 296	41 672	385 885	343 914	D
3121	Beverage mfg	3	3	3	519	12 040	264	449	6 296	41 672	385 885	343 914	D
323	Printing & related support activities	-	9	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	9	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	2	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	8	798	18 799	540	1 040	11 457	59 132	29 649	86 866	1 685
3323	Architectural & structural metals mfg	-	5	4	508	10 595	291	587	4 980	17 511	17 151	33 059	923

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTEREY COUNTY, CA													
31-33	Manufacturing	3	302	67	7 070	223 735	5 110	9 720	132 527	698 433	654 291	1 329 405	64 562
311	Food mfg.....	3	65	15	2 619	69 819	2 104	4 030	48 704	334 795	300 040	635 846	26 339
3114	Fruit & vegetable preserving & specialty food mfg.....	5	9	5	1 286	36 911	1 084	2 266	27 461	121 296	145 739	269 235	21 620
31142	Fruit & vegetable canning, pickling, & drying.....	3	7	4	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	8	6	745	21 970	575	1 114	14 567	184 185	101 821	284 702	2 557
334	Computer & electronic product mfg.....	5	20	9	1 088	44 619	511	1 015	13 686	71 789	41 262	113 503	11 645
3344	Semiconductor & other electronic component mfg.....	9	5	3	562	23 341	277	542	7 327	46 208	13 391	59 990	D
33441	Semiconductor & other electronic component mfg.....	9	5	3	562	23 341	277	542	7 327	46 208	13 391	59 990	D
NAPA COUNTY, CA													
31-33	Manufacturing	-	277	85	8 466	320 725	4 576	8 800	129 035	1 198 768	1 004 026	2 139 690	167 543
312	Beverage & tobacco product mfg.....	-	129	50	h	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	129	50	h	D	D	D	D	D	D	D	D
31213	Wineries.....	-	124	48	4 161	171 994	1 631	2 940	52 499	632 025	559 207	1 146 691	106 901
312130	Wineries.....	-	124	48	4 161	171 994	1 631	2 940	52 499	632 025	559 207	1 146 691	106 901
325	Chemical mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	3	10	4	645	18 826	546	1 166	13 875	58 153	33 560	90 760	D
3273	Cement & concrete product mfg.....	3	5	3	608	17 811	521	1 119	13 299	55 779	32 552	87 344	D
32739	Other concrete product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
NEVADA COUNTY, CA													
31-33	Manufacturing	1	174	25	2 311	74 149	1 457	2 475	37 713	211 199	154 442	372 909	11 161
334	Computer & electronic product mfg.....	-	24	7	724	33 632	402	543	14 473	123 626	87 778	219 990	D
3342	Communications equipment mfg.....	-	9	4	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
ORANGE COUNTY, CA													
31-33	Manufacturing	1	5 767	1 829	215 936	7 643 649	142 728	290 020	3 654 144	21 157 753	18 055 718	39 134 147	2 173 597

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ORANGE COUNTY, CA												
	—Con.												
31-33	Manufacturing—												
	Con.												
311	Food mfg	2	254	71	8 227	219 998	6 269	12 402	140 757	947 485	1 243 559	2 192 966	75 673
3114	Fruit & vegetable preserving & specialty food mfg	2	25	15	2 517	64 514	2 069	4 386	47 358	248 200	518 924	774 628	27 882
31141	Frozen food mfg	—	12	6	1 221	22 903	1 015	2 000	16 402	84 349	101 125	185 649	3 990
311412	Frozen specialty food mfg	—	7	3	829	17 724	714	1 503	13 068	46 364	62 720	109 008	2 631
31142	Fruit & vegetable canning, pickling, & drying	3	13	9	1 296	41 611	1 054	2 386	30 956	163 851	417 799	588 979	23 892
311421	Fruit & vegetable canning	7	8	6	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	3	13	7	737	27 436	467	807	13 109	129 399	219 202	348 349	5 758
31151	Dairy product (except frozen) mfg	3	9	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	3	5	3	548	22 945	326	604	10 081	106 492	182 799	288 777	3 833
3118	Bakeries & tortilla mfg	1	139	26	2 640	63 666	1 970	3 567	42 163	274 190	148 789	422 607	20 422
31181	Bread & bakery product mfg	2	124	22	2 102	44 257	1 538	2 677	27 979	150 650	93 027	243 744	D
311812	Commercial bakeries	2	23	14	1 219	30 275	875	1 531	17 865	116 518	57 379	173 821	10 484
3119	Other food mfg	1	50	17	1 823	49 947	1 451	2 977	31 932	245 695	248 669	490 990	20 406
31199	All other food mfg	1	29	11	1 281	30 917	1 066	2 213	22 418	185 833	152 795	338 125	17 719
311991	Perishable prepared food mfg	—	14	6	832	16 437	746	1 447	13 350	126 100	89 139	214 731	D
312	Beverage & tobacco product mfg	—	12	7	902	29 726	503	1 080	13 598	119 755	211 557	331 958	17 057
3121	Beverage mfg	—	12	7	902	29 726	503	1 080	13 598	119 755	211 557	331 958	17 057
31211	Soft drink & ice mfg	—	11	7	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	6	4	779	25 961	412	868	10 675	106 653	197 358	304 757	D
313	Textile mills	2	38	12	1 217	31 071	959	2 052	17 470	66 429	75 922	149 784	18 471
3133	Textile & fabric finishing & fabric coating mills	2	24	7	864	24 411	653	1 486	12 502	48 824	47 176	103 528	D
31331	Textile & fabric finishing mills	—	16	5	674	17 344	544	1 137	8 940	38 934	22 918	62 150	D
313311	Broadwoven fabric finishing mills	—	13	5	656	16 873	529	1 107	8 698	37 569	22 360	60 216	11 239
314	Textile product mills	—	128	36	3 628	80 926	2 711	4 990	46 930	172 977	249 548	419 929	7 365
3141	Textile furnishings mills	—	67	20	2 421	60 320	1 747	3 430	33 138	142 027	207 469	347 658	5 946
31411	Carpet & rug mills	—	9	5	1 159	34 434	716	1 475	16 032	79 046	142 606	224 613	4 241
314110	Carpet & rug mills	—	9	5	1 159	34 434	716	1 475	16 032	79 046	142 606	224 613	4 241
31412	Curtain & linen mills	—	58	15	1 262	25 886	1 031	1 955	17 106	62 981	64 863	123 045	1 705
314129	Other household textile product mills	—	20	10	789	16 825	673	1 307	11 714	44 488	51 404	91 120	1 109
3149	Other textile product mills	2	61	16	1 207	20 606	964	1 560	13 792	30 950	42 079	72 271	1 419
31499	All other textile product mills	1	38	11	851	14 373	661	1 089	9 577	23 352	35 574	58 158	873
314999	All other miscellaneous textile product mills	—	35	10	810	13 447	629	1 025	9 028	21 419	34 336	54 992	800
315	Apparel mfg	1	405	96	8 494	160 284	6 861	11 702	95 099	425 167	401 690	821 156	25 169
3152	Cut & sew apparel mfg	1	366	84	7 673	145 878	6 166	10 434	85 319	397 616	381 156	773 340	23 530
31521	Cut & sew apparel contractors	5	257	38	2 945	30 922	2 786	4 061	27 137	58 014	11 806	69 716	2 157
315211	Men's & boys' cut & sew apparel contractors	2	22	10	541	7 258	501	870	5 655	16 153	2 541	18 652	466
315212	Women's, girls', & infants' cut & sew apparel contractors	6	235	28	2 404	23 664	2 285	3 191	21 482	41 861	9 265	51 064	1 691
31522	Men's & boys' cut & sew apparel mfg	—	31	21	1 550	44 536	920	1 681	14 597	132 270	136 009	261 341	11 859
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	13	8	f	D	D	D	D	D	D	D	7 123
315228	Men's & boys' cut & sew other outerwear mfg	—	13	9	640	22 347	379	611	6 176	87 431	82 108	162 911	4 656
31523	Women's & girls' cut & sew apparel mfg	1	69	23	3 047	67 535	2 354	4 462	41 455	201 622	230 607	433 730	9 263
315233	Women's & girls' cut & sew dress mfg	1	14	4	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	35	12	1 026	25 324	659	1 205	9 086	63 415	76 890	140 692	876
3159	Apparel accessories & other apparel mfg	5	32	9	675	12 082	557	1 025	7 890	23 039	16 713	39 498	D
31599	Apparel accessories & other apparel mfg	5	32	9	675	12 082	557	1 025	7 890	23 039	16 713	39 498	D
316	Leather & allied product mfg	9	22	5	f	D	D	D	D	D	D	D	1 504
3169	Other leather & allied product mfg	9	15	3	545	12 224	438	922	7 346	36 724	31 359	66 633	D
31699	Other leather & allied product mfg	9	15	3	545	12 224	438	922	7 346	36 724	31 359	66 633	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORANGE COUNTY, CA —Con.												
	Manufacturing—Con.												
321	Wood product mfg	1	93	29	1 789	39 251	1 370	2 407	25 169	78 468	132 945	212 172	3 317
3219	Other wood product mfg . . .	1	83	24	1 414	31 848	1 044	1 879	19 367	58 985	96 367	155 905	2 136
32191	Millwork	1	45	15	966	22 496	686	1 242	13 225	41 850	79 703	121 590	1 498
322	Paper mfg	—	71	39	4 795	171 174	3 421	7 093	108 524	498 353	755 782	1 231 857	46 498
3222	Converted paper product mfg	—	70	38	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	28	24	2 742	97 976	2 048	4 383	65 350	259 245	388 973	650 081	29 271
322211	Corrugated & solid fiber box mfg	—	23	20	2 107	74 009	1 542	3 219	47 586	182 968	315 346	500 563	26 443
322212	Folding paperboard box mfg	—	4	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	19	7	985	29 712	549	1 124	11 919	65 917	153 183	218 177	9 728
322222	Coated & laminated paper mfg	—	15	5	f	D	D	D	D	D	D	D	8 975
323	Printing & related support activities	1	699	126	11 287	359 077	7 762	14 712	201 234	783 383	500 313	1 284 533	64 067
3231	Printing & related support activities	1	699	126	11 287	359 077	7 762	14 712	201 234	783 383	500 313	1 284 533	64 067
32311	Printing	1	632	115	9 988	316 031	6 854	12 940	175 601	719 111	489 853	1 209 602	56 032
323110	Commercial lithographic printing	1	278	52	4 935	177 657	3 434	7 019	101 118	383 867	262 811	647 675	33 883
323112	Commercial flexographic printing	—	22	8	636	20 027	308	598	7 152	39 651	32 154	72 340	3 353
323113	Commercial screen printing	1	85	27	1 836	42 259	1 454	2 568	24 639	76 642	42 345	119 525	8 414
323114	Quick printing	3	157	4	687	16 314	501	792	9 944	35 643	20 235	55 809	2 318
323119	Other commercial printing	3	45	10	683	22 251	455	686	14 563	50 223	23 392	73 709	3 280
32312	Support activities for printing	2	67	11	1 299	43 046	908	1 772	25 633	64 272	10 460	74 931	8 035
323122	Prepress services	2	50	7	1 072	38 577	747	1 511	23 290	56 789	9 471	66 418	7 714
325	Chemical mfg	1	181	61	7 082	298 248	4 720	9 748	129 181	1 778 167	1 399 988	3 173 675	101 130
3254	Pharmaceutical & medicine mfg	1	52	27	4 743	205 847	3 179	6 679	81 897	1 389 441	961 290	2 345 800	77 828
32541	Pharmaceutical & medicine mfg	1	52	27	4 743	205 847	3 179	6 679	81 897	1 389 441	961 290	2 345 800	77 828
325412	Pharmaceutical preparation mfg	1	30	18	3 843	167 827	2 680	5 763	65 145	1 237 278	903 064	2 123 645	57 579
325413	In-vitro diagnostic substance mfg	—	15	7	664	28 994	366	678	12 322	125 338	31 995	169 100	11 850
3255	Paint, coating, & adhesive mfg	2	25	7	726	31 825	459	1 064	15 648	126 756	160 147	285 938	5 825
32551	Paint & coating mfg	2	15	5	557	26 102	387	909	13 503	103 680	134 549	237 661	4 438
325510	Paint & coating mfg	2	15	5	557	26 102	387	909	13 503	103 680	134 549	237 661	4 438
3256	Soap, cleaning compound, & toilet preparation mfg	4	40	11	718	25 669	472	911	13 569	119 944	118 075	237 496	8 087
326	Plastics & rubber products mfg	2	311	160	18 235	464 804	14 125	27 850	297 939	1 279 371	1 012 628	2 301 476	70 446
3261	Plastics product mfg	3	280	146	15 923	408 622	12 296	24 293	264 118	1 161 327	927 977	2 098 716	66 361
32611	Unsupported plastics film, sheet, & bag mfg	3	21	10	855	22 063	684	1 065	12 444	72 733	71 222	143 680	5 053
326111	Unsupported plastics bag mfg	1	9	7	f	D	D	D	D	D	D	D	2 837
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	28	13	932	22 728	704	1 232	14 209	56 453	63 631	119 523	4 441
326122	Plastics pipe & pipe fitting mfg	—	12	7	641	14 523	465	712	8 588	33 147	48 194	81 051	3 409
32613	Laminated plastics plate, sheet, & shape mfg	2	8	4	576	14 092	406	896	10 265	50 118	42 761	93 554	2 030
326130	Laminated plastics plate, sheet, & shape mfg	2	8	4	576	14 092	406	896	10 265	50 118	42 761	93 554	2 030
32615	Urethane & other foam product (except polystyrene) mfg	6	21	10	746	20 302	587	1 042	13 426	45 120	66 664	112 154	3 632
326150	Urethane & other foam product (except polystyrene) mfg	6	21	10	746	20 302	587	1 042	13 426	45 120	66 664	112 154	3 632
32616	Plastics bottle mfg	1	11	8	1 007	27 640	665	1 417	18 643	74 662	67 446	145 866	5 379
326160	Plastics bottle mfg	1	11	8	1 007	27 640	665	1 417	18 643	74 662	67 446	145 866	5 379
32619	Other plastics product mfg	3	184	98	11 686	298 552	9 161	18 454	192 984	851 964	606 362	1 463 857	45 140
326191	Plastics plumbing fixture mfg	—	12	7	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	171	91	10 517	272 138	8 136	16 445	173 144	733 720	517 697	1 255 486	44 204

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORANGE COUNTY, CA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	—	31	14	2 312	56 182	1 829	3 557	33 821	118 044	84 651	202 760	4 085
32629	Other rubber product mfg	—	26	12	2 127	50 666	1 675	3 232	29 747	105 958	70 239	176 455	3 336
326291	Rubber product mfg for mechanical use	—	12	7	1 266	34 180	1 023	2 069	21 367	70 587	36 628	107 386	1 062
326299	All other rubber product mfg	1	14	5	861	16 486	652	1 163	8 380	35 371	33 611	69 069	2 274
327	Nonmetallic mineral product mfg	1	141	48	3 020	93 661	2 271	4 420	60 330	249 940	248 104	497 966	17 888
3271	Clay product & refractory mfg	1	26	13	812	21 436	612	1 140	13 713	54 491	21 062	75 451	5 199
32711	Pottery, ceramics, & plumbing fixture mfg	1	23	13	792	20 757	597	1 108	13 239	52 995	20 287	73 175	5 049
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	18	10	599	14 853	450	821	9 737	41 178	15 792	56 865	4 623
3272	Glass & glass product mfg	3	42	8	524	14 364	400	780	9 773	36 619	20 566	58 085	2 896
32721	Glass & glass product mfg	3	42	8	524	14 364	400	780	9 773	36 619	20 566	58 085	2 896
3273	Cement & concrete product mfg	2	40	18	967	32 081	785	1 580	25 167	80 683	100 917	180 785	6 549
32732	Ready-mix concrete mfg	2	28	12	508	17 990	436	856	15 479	50 437	75 839	126 327	5 600
327320	Ready-mix concrete mfg	2	28	12	508	17 990	436	856	15 479	50 437	75 839	126 327	5 600
331	Primary metal mfg	—	36	18	1 582	51 700	1 252	2 762	33 675	156 368	161 772	315 842	17 373
3313	Alumina & aluminum production & processing	—	4	4	620	20 276	539	1 285	14 324	55 409	39 781	94 110	D
33131	Alumina & aluminum production & processing	—	4	4	620	20 276	539	1 285	14 324	55 409	39 781	94 110	D
331316	Aluminum extruded product mfg	—	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	2	21	9	729	21 830	553	1 186	15 302	45 943	29 195	74 156	5 177
33152	Nonferrous metal foundries	2	15	7	581	18 873	428	946	12 694	43 284	24 623	66 749	5 062
332	Fabricated metal product mfg	1	1 105	325	27 951	953 434	21 121	46 334	579 979	2 079 578	1 139 249	3 186 741	162 776
3321	Forging & stamping	—	62	28	2 766	89 165	2 220	5 178	61 837	185 513	116 576	302 658	10 743
33211	Forging & stamping	—	62	28	2 766	89 165	2 220	5 178	61 837	185 513	116 576	302 658	10 743
332112	Nonferrous forging	—	4	4	813	32 786	700	1 771	24 909	70 217	24 694	95 173	D
332116	Metal stamping	1	48	18	1 385	42 607	1 062	2 343	27 271	92 196	61 223	153 368	4 319
3322	Cutlery & handtool mfg	2	30	9	599	22 356	457	970	12 321	44 690	25 844	70 550	2 216
33221	Cutlery & handtool mfg	2	30	9	599	22 356	457	970	12 321	44 690	25 844	70 550	2 216
332212	Hand & edge tool mfg	2	27	9	572	20 880	437	935	11 867	42 002	23 872	65 935	D
3323	Architectural & structural metals mfg	1	137	60	4 113	127 822	2 976	6 042	73 904	284 359	190 081	470 849	18 798
33231	Plate work & fabricated structural product mfg	—	32	8	755	30 601	529	1 077	19 464	86 113	45 921	130 004	4 406
332312	Fabricated structural metal mfg	—	21	5	581	24 222	413	847	16 284	71 502	34 753	103 746	3 301
33232	Ornamental & architectural metal products mfg	1	105	52	3 358	97 221	2 447	4 965	54 440	198 246	144 160	340 845	14 392
332322	Sheet metal work mfg	1	76	44	2 877	84 395	2 211	4 508	48 913	168 940	113 704	280 977	13 865
3324	Boiler, tank, & shipping container mfg	—	11	6	778	24 868	530	1 134	13 491	54 235	46 856	96 709	6 316
3325	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
33251	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
332510	Hardware mfg	1	21	10	2 493	90 634	1 759	3 459	46 374	197 255	139 660	322 555	24 945
3326	Spring & wire product mfg	2	34	12	830	21 408	620	1 142	11 555	45 766	36 044	80 755	2 504
33261	Spring & wire product mfg	2	34	12	830	21 408	620	1 142	11 555	45 766	36 044	80 755	2 504
332618	Other fabricated wire product mfg	3	21	8	621	14 297	499	914	7 919	32 182	28 633	60 784	1 499
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	577	116	9 513	356 411	7 458	18 180	234 459	770 063	343 096	1 111 587	68 833
33271	Machine shops	1	503	83	5 311	189 320	4 162	9 444	123 870	395 597	169 174	561 831	26 972
332710	Machine shops	1	503	83	5 311	189 320	4 162	9 444	123 870	395 597	169 174	561 831	26 972
33272	Turned product & screw, nut, & bolt mfg	—	74	33	4 202	167 091	3 296	8 736	110 589	374 466	173 922	549 756	41 861
332721	Precision turned product mfg	—	50	21	1 286	44 976	1 017	2 315	31 717	104 717	34 626	138 898	10 618
332722	Bolt, nut, screw, rivet, & washer mfg	—	24	12	2 916	122 115	2 279	6 421	78 872	269 749	139 296	410 858	31 243

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORANGE COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	1	158	62	4 337	118 283	3 551	6 949	76 787	236 651	79 769	317 405	14 554
33281	Coating, engraving, heat treating, & allied activities.....	1	158	62	4 337	118 283	3 551	6 949	76 787	236 651	79 769	317 405	14 554
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	2	43	14	992	27 157	814	1 574	16 662	57 687	26 317	84 258	3 398
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	103	42	2 941	77 055	2 402	4 761	50 348	140 396	46 531	187 595	6 858
3329	Other fabricated metal product mfg.....	1	75	22	2 522	102 487	1 550	3 280	49 251	261 046	161 323	413 673	13 867
33291	Metal valve mfg.....	1	18	9	1 564	65 685	844	1 775	26 795	174 236	115 867	284 374	4 794
332911	Industrial valve mfg...	2	8	4	860	32 032	468	906	12 731	87 570	60 840	147 319	3 143
332912	Fluid power valve & hose fitting mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	1	57	13	958	36 802	706	1 505	22 456	86 810	45 456	129 299	9 073
332999	All other miscellaneous fabricated metal product mfg.....	-	37	8	696	27 805	514	1 118	16 795	58 894	34 456	90 990	8 191
333	Machinery mfg.....	1	417	141	15 013	609 084	8 356	17 035	240 650	1 227 522	1 120 650	2 321 386	94 997
3331	Agriculture, construction, & mining machinery mfg.	-	20	5	876	35 139	412	605	8 149	123 048	88 796	207 849	1 038
33313	Mining & oil & gas field machinery mfg.....	-	7	3	f	D	D	D	D	D	D	D	440
333132	Oil & gas field machinery & equipment mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	2	68	26	2 127	78 380	1 253	2 487	32 780	157 557	167 544	315 190	10 833
33329	Other industrial machinery mfg.....	2	58	25	2 037	75 804	1 204	2 428	31 806	152 013	159 950	302 086	10 548
333298	All other industrial machinery mfg.....	2	31	15	1 226	37 478	724	1 485	17 648	77 560	113 453	181 369	8 156
3333	Commercial & service industry machinery mfg ..	-	71	27	3 589	167 365	1 475	3 022	41 539	238 179	338 644	573 223	37 186
33331	Commercial & service industry machinery mfg.....	-	71	27	3 589	167 365	1 475	3 022	41 539	238 179	338 644	573 223	37 186
333314	Optical instrument & lens mfg.....	-	20	11	1 854	98 776	600	1 203	19 508	65 102	120 788	185 608	18 228
333315	Photographic & photocopying equipment mfg.....	-	11	6	1 083	44 807	479	1 003	11 161	121 932	173 099	291 535	16 443
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	23	14	1 463	47 970	974	2 077	22 865	117 288	98 549	215 132	3 609
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	23	14	1 463	47 970	974	2 077	22 865	117 288	98 549	215 132	3 609
333414	Heating equipment (except warm air furnaces) mfg.....	3	10	5	672	18 170	463	927	7 064	52 893	32 991	85 305	1 068
333415	AC & warm air heating & commercial/industrial refrig equip mfg.....	-	6	4	515	19 433	316	759	9 843	44 148	43 021	86 823	1 694
3335	Metalworking machinery mfg.....	1	124	31	2 171	81 767	1 590	3 276	51 833	180 963	80 484	254 458	20 226
33351	Metalworking machinery mfg.....	1	124	31	2 171	81 767	1 590	3 276	51 833	180 963	80 484	254 458	20 226
333514	Special die & tool, die set, jig, & fixture mfg ..	2	52	14	675	25 781	525	991	17 785	45 256	23 108	67 550	2 708
333515	Cutting tool & machine tool accessory mfg ..	-	33	10	998	31 746	738	1 582	20 650	81 334	35 164	117 086	13 116
3339	Other general-purpose machinery mfg.....	-	97	32	4 345	183 473	2 316	4 968	73 298	373 681	323 703	696 896	19 958
33391	Pump & compressor mfg.....	-	10	4	925	29 603	456	1 195	9 921	79 862	65 964	143 841	4 277
333911	Pump & pumping equipment mfg.....	-	6	3	801	24 846	412	1 077	8 359	71 902	57 646	127 689	4 118
33392	Material handling equipment mfg.....	1	17	6	586	22 916	372	815	12 141	33 060	97 491	139 681	2 763
33399	All other general-purpose machinery mfg.....	-	70	22	2 834	130 954	1 488	2 958	51 236	260 759	160 248	413 374	12 918
333994	Industrial process furnace & oven mfg ..	-	9	3	560	25 315	251	485	8 461	70 290	55 143	136 277	D
333995	Fluid power cylinder & actuator mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg.....	1	35	9	654	23 865	410	822	12 568	61 218	34 136	92 370	5 571

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORANGE COUNTY, CA —Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	1	650	289	49 383	2 174 703	25 114	55 143	733 630	6 954 981	5 589 444	12 330 873	1 165 835
3341	Computer & peripheral equipment mfg	2	95	41	8 208	416 140	2 924	7 460	103 493	1 271 159	2 487 029	3 720 445	392 591
33411	Computer & peripheral equipment mfg	2	95	41	8 208	416 140	2 924	7 460	103 493	1 271 159	2 487 029	3 720 445	392 591
334111	Electronic computer mfg	2	24	12	3 134	138 990	1 635	4 382	56 921	616 417	1 763 543	2 322 915	304 873
334112	Computer storage device mfg	3	14	7	2 051	142 795	250	623	10 864	377 150	231 078	605 317	52 150
334119	Other computer peripheral equipment mfg	—	52	22	3 000	133 330	1 030	2 435	35 283	276 106	490 812	789 041	35 476
3342	Communications equipment mfg	1	53	21	3 179	175 935	1 524	3 100	52 476	482 692	324 421	799 844	28 704
33421	Telephone apparatus mfg	1	14	8	1 826	110 474	790	1 619	30 049	322 223	208 995	527 224	18 491
334210	Telephone apparatus mfg	1	14	8	1 826	110 474	790	1 619	30 049	322 223	208 995	527 224	18 491
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	29	8	961	50 598	564	1 126	17 579	117 472	82 902	197 292	8 549
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	29	8	961	50 598	564	1 126	17 579	117 472	82 902	197 292	8 549
3343	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
33431	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
334310	Audio & video equipment mfg	—	27	11	1 449	43 492	732	1 542	15 215	145 997	157 990	293 860	6 342
3344	Semiconductor & other electronic component mfg	1	294	140	22 970	840 242	14 292	31 297	334 846	3 342 279	1 774 640	4 945 698	622 776
33441	Semiconductor & other electronic component mfg	1	294	140	22 970	840 242	14 292	31 297	334 846	3 342 279	1 774 640	4 945 698	622 776
334412	Bare printed circuit board mfg	—	96	45	6 104	171 891	4 685	10 097	117 617	469 539	281 185	747 345	98 778
334413	Semiconductor & related device mfg	1	32	13	5 211	264 914	2 199	3 602	52 550	1 470 206	377 213	1 684 235	465 262
334415	Electronic resistor mfg	—	7	5	714	22 179	443	711	11 346	42 591	52 185	94 147	4 368
334417	Electronic connector mfg	—	20	12	2 887	90 627	2 201	5 774	40 115	210 615	104 938	320 606	14 762
334418	Printed circuit assembly (electronic assembly) mfg	—	33	26	3 555	142 234	1 802	5 153	52 634	792 232	706 534	1 497 185	17 581
334419	Other electronic component mfg	1	83	33	3 965	135 246	2 532	4 994	52 732	326 343	232 514	552 194	20 693
3345	Navigational, measuring, medical, & control instruments mfg	—	151	66	11 359	629 025	4 292	9 055	188 814	1 476 914	675 035	2 164 645	69 972
33451	Navigational, measuring, medical, & control instruments mfg	—	151	66	11 359	629 025	4 292	9 055	188 814	1 476 914	675 035	2 164 645	69 972
334510	Electromedical & electrotherapeutic apparatus mfg	—	23	14	1 485	84 517	751	1 596	33 554	249 606	74 025	323 081	13 095
334511	Search, detection, navigation, & guidance instrument mfg	—	21	8	5 013	313 767	1 547	3 238	90 710	775 386	251 382	1 042 003	41 507
334513	Industrial process control instrument mfg	1	21	11	920	35 888	469	1 010	14 992	90 621	36 855	127 967	1 849
334515	Electricity measuring & testing instrument mfg	3	30	11	989	52 556	530	1 175	22 924	121 014	120 975	239 268	6 140
334516	Analytical laboratory instrument mfg	—	20	9	1 965	107 874	420	856	13 834	148 557	127 207	275 520	3 927
334519	Other measuring & controlling device mfg	—	21	7	572	20 589	320	647	7 570	57 758	27 994	86 454	2 137
3346	Mfg & reproducing magnetic & optical media	1	30	10	2 218	69 869	1 350	2 689	38 786	235 940	170 329	406 381	45 450
33461	Mfg & reproducing magnetic & optical media	1	30	10	2 218	69 869	1 350	2 689	38 786	235 940	170 329	406 381	45 450
334612	Prerecorded CD (except software), tape, & record reproducing	3	15	5	552	17 552	448	779	13 409	84 212	52 998	137 734	10 425
334613	Magnetic & optical recording media mfg	—	10	3	1 553	48 780	819	1 717	22 988	130 669	107 187	237 326	D

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	ORANGE COUNTY, CA												
	—Con.												
31-33	Manufacturing—												
	Con.												
335	Electrical equipment, appliance, & component mfg	1	146	62	7 047	254 087	4 710	9 619	132 566	757 153	538 387	1 264 611	36 550
3351	Electric lighting equipment mfg	1	34	13	876	21 859	627	1 200	10 899	75 843	35 245	106 413	1 837
33512	Lighting fixture mfg	1	32	11	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg...	—	8	4	726	17 672	591	1 173	9 263	64 758	38 844	104 646	1 581
33522	Major appliance mfg	—	5	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	49	16	1 730	56 551	1 072	2 247	26 453	128 791	83 067	209 024	3 627
33531	Electrical equipment mfg	1	49	16	1 730	56 551	1 072	2 247	26 453	128 791	83 067	209 024	3 627
335314	Relay & industrial control mfg	—	26	10	1 363	45 259	819	1 760	20 170	103 593	65 167	166 131	2 535
3359	Other electrical equipment & component mfg	1	55	29	3 715	158 005	2 420	4 999	85 951	487 761	381 231	844 528	29 505
33591	Battery mfg	—	3	2	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	3	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	3	21	8	f	D	D	D	D	D	D	D	3 061
335931	Current-carrying wiring device mfg	2	16	8	797	28 625	531	1 156	15 502	60 755	30 027	91 266	2 878
33599	All other electrical equipment & component mfg	1	27	15	1 987	90 267	1 089	2 352	40 494	289 888	208 621	472 467	22 613
335999	All other miscellaneous electrical equipment & component mfg	1	26	14	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	225	88	18 992	781 018	11 869	22 736	350 521	1 151 417	1 575 013	2 980 000	135 143
3361	Motor vehicle mfg	7	14	5	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	7	13	5	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	7	10	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	107	42	5 817	149 004	4 576	8 758	90 171	283 575	313 716	596 701	30 943
33632	Motor vehicle electrical & electronic equipment mfg	2	26	10	2 180	52 814	1 751	3 786	35 218	107 508	56 517	159 322	10 476
336322	Other motor vehicle electrical & electronic equipment mfg	2	24	10	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	4	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	4	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	35	15	1 938	47 961	1 524	2 366	28 547	112 857	140 173	253 102	14 179
336399	All other motor vehicle parts mfg	4	35	15	1 938	47 961	1 524	2 366	28 547	112 857	140 173	253 102	14 179
3364	Aerospace product & parts mfg	—	45	23	10 915	561 773	5 669	10 820	216 522	707 537	1 058 807	2 018 276	97 227
33641	Aerospace product & parts mfg	—	45	23	10 915	561 773	5 669	10 820	216 522	707 537	1 058 807	2 018 276	97 227
336411	Aircraft mfg	—	2	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	36	18	2 971	110 618	1 959	3 723	56 874	226 137	122 448	356 980	D
336414	Guided missile & space vehicle mfg ...	—	1	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	23	6	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	23	6	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	5	23	9	868	23 193	570	1 076	12 858	55 353	47 238	102 961	D
33699	Other transportation equipment mfg	5	23	9	868	23 193	570	1 076	12 858	55 353	47 238	102 961	D
336991	Motorcycle, bicycle, & parts mfg	5	20	8	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	248	81	9 876	264 366	7 988	16 181	179 231	827 143	499 755	1 318 374	24 402
3371	Household & institutional furniture & kitchen cabinet mfg	1	166	46	5 025	127 216	4 154	8 479	84 311	350 276	263 230	606 660	9 172
33711	Wood kitchen cabinet & counter top mfg	1	74	8	899	23 564	688	1 495	14 233	81 618	64 482	146 304	3 861
337110	Wood kitchen cabinet & counter top mfg ...	1	74	8	899	23 564	688	1 495	14 233	81 618	64 482	146 304	3 861
33712	Household & institutional furniture mfg	1	92	38	4 126	103 652	3 466	6 984	70 078	268 658	198 748	460 356	5 311
337121	Upholstered household furniture mfg	—	23	6	792	21 668	664	1 470	15 125	88 515	59 252	147 642	886
337122	Nonupholstered wood household furniture mfg	5	41	14	1 285	23 308	1 131	2 209	17 908	49 548	47 834	95 448	1 941
337127	Institutional furniture mfg	—	14	10	1 082	36 965	817	1 661	21 510	76 599	31 004	101 315	1 595

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	ORANGE COUNTY, CA —Con.												
31-33	Manufacturing— Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	63	28	3 578	110 213	2 851	5 504	78 611	365 617	142 221	506 366	10 156
33721	Office furniture (including fixtures) mfg	1	63	28	3 578	110 213	2 851	5 504	78 611	365 617	142 221	506 366	10 156
337211	Wood office furniture mfg	4	14	7	650	17 488	522	1 014	11 635	36 462	20 664	56 635	1 062
337214	Office furniture (except wood) mfg	—	11	6	1 557	56 679	1 263	2 747	43 749	258 499	70 899	329 274	4 516
337215	Showcase, partition, shelving, & locker mfg	2	28	12	1 025	28 869	798	1 410	18 123	56 959	43 778	99 789	4 275
3379	Other furniture related product mfg	2	19	7	1 273	26 937	983	2 198	16 309	111 250	94 304	205 348	5 074
33792	Blind & shade mfg	2	9	6	1 145	23 561	879	1 949	14 076	97 080	76 390	173 933	D
337920	Blind & shade mfg	2	9	6	1 145	23 561	879	1 949	14 076	97 080	76 390	173 933	D
339	Miscellaneous mfg	1	573	134	16 652	586 932	10 740	20 516	255 369	1 541 715	1 107 043	2 645 508	86 487
3391	Medical equipment & supplies mfg	—	256	62	9 856	396 288	5 827	12 122	164 610	1 127 501	748 209	1 871 683	67 964
33911	Medical equipment & supplies mfg	—	256	62	9 856	396 288	5 827	12 122	164 610	1 127 501	748 209	1 871 683	67 964
339111	Laboratory apparatus & furniture mfg	—	9	4	952	47 600	278	559	10 474	101 203	78 551	175 262	8 075
339112	Surgical & medical instrument mfg	1	61	21	2 672	107 684	1 487	3 050	38 231	171 318	167 424	342 060	14 053
339113	Surgical appliance & supplies mfg	—	47	22	2 976	118 078	1 919	3 656	47 677	435 372	315 035	749 896	26 822
339114	Dental equipment & supplies mfg	—	18	5	864	40 592	504	1 134	20 090	193 477	60 034	244 326	4 690
339115	Ophthalmic goods mfg	1	9	5	1 072	44 421	763	1 618	23 331	177 532	111 514	295 083	12 684
339116	Dental laboratories ...	3	112	5	1 320	37 913	876	2 105	24 807	48 599	15 651	65 056	1 640
3399	Other miscellaneous mfg ..	2	317	72	6 796	190 644	4 913	8 394	90 759	414 214	358 834	773 825	18 523
33991	Jewelry & silverware mfg	—	25	3	539	14 348	383	810	7 397	29 142	24 736	53 829	1 081
33992	Sporting & athletic goods mfg	1	103	23	2 332	65 157	1 658	2 877	28 812	160 616	173 231	334 003	6 381
339920	Sporting & athletic goods mfg	1	103	23	2 332	65 157	1 658	2 877	28 812	160 616	173 231	334 003	6 381
33995	Sign mfg	2	86	11	1 002	27 725	670	1 146	14 916	47 906	32 570	80 591	1 973
339950	Sign mfg	2	86	11	1 002	27 725	670	1 146	14 916	47 906	32 570	80 591	1 973
33999	All other miscellaneous mfg	3	70	29	2 438	72 573	1 808	2 889	32 426	152 279	102 813	255 952	7 852
339991	Gasket, packing, & sealing device mfg ...	3	15	9	900	30 468	644	1 242	16 013	63 570	30 873	94 097	2 217
339999	All other miscellaneous mfg	3	48	17	1 336	37 269	990	1 290	12 854	79 814	60 917	142 232	5 285
	PLACER COUNTY, CA												
31-33	Manufacturing	—	260	53	9 244	403 378	4 310	8 441	120 468	1 671 323	2 105 811	3 808 390	163 209
321	Wood product mfg	1	16	8	1 026	30 589	911	1 985	23 634	96 428	150 707	253 570	10 131
332	Fabricated metal product mfg	—	34	9	553	20 568	456	908	15 167	60 839	80 732	138 551	D
333	Machinery mfg	1	22	6	656	26 591	457	936	14 436	53 871	23 797	76 674	D
334	Computer & electronic product mfg	—	22	7	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	5	3	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	5	3	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLUMAS COUNTY, CA													
31-33	Manufacturing	-	23	4	643	21 893	559	1 194	18 965	54 258	123 912	176 661	3 079
321	Wood product mfg	-	7	2	f	D	D	D	D	D	D	D	2 656
3211	Sawmills & wood preservation	-	4	2	f	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	4	2	f	D	D	D	D	D	D	D	D
321113	Sawmills	-	4	2	f	D	D	D	D	D	D	D	D
RIVERSIDE COUNTY, CA													
31-33	Manufacturing	1	1 420	423	46 134	1 329 074	34 135	65 833	797 582	3 977 142	3 754 251	7 735 960	257 330
311	Food mfg	3	73	19	2 349	62 213	1 512	3 043	38 599	204 845	495 240	700 276	14 620
3114	Fruit & vegetable preserving & specialty food mfg	-	8	6	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	16	6	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	1	16	6	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	41	13	1 835	47 149	1 540	2 910	32 045	98 005	129 450	227 290	3 921
3219	Other wood product mfg ...	-	32	11	1 584	41 426	1 343	2 448	28 680	87 472	116 265	204 092	2 776
32199	All other wood product mfg	-	14	6	1 302	35 152	1 101	2 006	23 966	75 340	88 212	164 174	1 183
321991	Manufactured home (mobile home) mfg ..	-	4	4	1 091	32 412	958	1 779	22 003	69 833	81 851	152 281	D
322	Paper mfg	1	16	10	664	23 961	524	1 041	15 954	54 821	79 876	134 789	2 059
3222	Converted paper product mfg	1	16	10	664	23 961	524	1 041	15 954	54 821	79 876	134 789	2 059
323	Printing & related support activities	1	129	19	1 953	53 846	1 509	2 717	35 543	156 685	116 783	273 399	10 526
3231	Printing & related support activities	1	129	19	1 953	53 846	1 509	2 717	35 543	156 685	116 783	273 399	10 526
32311	Printing	1	121	18	1 861	51 563	1 430	2 544	33 761	152 617	115 993	268 535	10 429
323110	Commercial lithographic printing ..	1	47	8	1 062	28 173	854	1 535	19 194	93 387	79 363	172 754	4 545
325	Chemical mfg	3	42	10	1 122	39 388	687	1 413	21 619	219 672	151 257	371 322	14 185
3254	Pharmaceutical & medicine mfg	-	7	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	7	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	93	47	5 385	149 168	4 320	8 247	96 105	440 489	332 658	789 745	34 864
3261	Plastics product mfg	-	80	43	5 081	141 890	4 088	7 809	91 393	421 647	316 033	754 311	33 549
32619	Other plastics product mfg	1	63	33	3 781	107 562	2 966	5 376	66 020	289 831	174 043	481 188	28 830
326199	All other plastics product mfg	1	57	32	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	84	31	2 638	81 542	1 952	4 039	56 676	215 051	204 385	424 083	14 111
3271	Clay product & refractory mfg	-	17	8	613	17 128	413	843	9 820	46 468	23 478	73 063	1 143
3273	Cement & concrete product mfg	3	52	21	1 631	50 377	1 209	2 516	35 738	126 077	156 288	284 691	10 353
32732	Ready-mix concrete mfg	7	23	7	764	23 963	561	1 229	18 410	64 293	74 766	139 361	6 834
327320	Ready-mix concrete mfg	7	23	7	764	23 963	561	1 229	18 410	64 293	74 766	139 361	6 834
331	Primary metal mfg	-	23	10	724	24 558	554	1 418	15 826	62 329	111 989	173 767	5 460
332	Fabricated metal product mfg	-	278	80	6 674	213 244	5 069	9 871	132 033	473 223	576 107	1 048 483	31 989
3323	Architectural & structural metals mfg	-	54	26	1 965	51 753	1 564	3 182	34 598	117 507	144 562	263 585	4 142
33231	Plate work & fabricated structural product mfg ..	1	16	8	597	16 341	485	1 017	11 467	36 141	41 343	79 726	1 847
33232	Ornamental & architectural metal products mfg	-	38	18	1 368	35 412	1 079	2 165	23 131	81 366	103 219	183 859	2 295
332321	Metal window & door mfg	-	14	7	f	D	D	D	D	D	D	D	639
332322	Sheet metal work mfg ..	-	19	10	664	16 735	541	1 110	11 112	40 106	38 955	78 599	1 263
3324	Boiler, tank, & shipping container mfg	-	11	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	130	19	1 354	43 388	1 081	1 889	28 552	85 948	37 815	123 808	6 385
33271	Machine shops	2	111	13	1 054	34 264	859	1 446	22 359	69 968	29 865	100 075	5 187
332710	Machine shops	2	111	13	1 054	34 264	859	1 446	22 359	69 968	29 865	100 075	5 187

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RIVERSIDE COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	28	9	1 399	45 135	927	1 762	22 042	92 491	86 531	178 534	D
33291	Metal valve mfg.....	-	6	3	582	21 621	376	726	11 634	38 479	54 449	93 259	D
33299	All other fabricated metal product mfg.....	1	22	6	817	23 514	551	1 036	10 408	54 012	32 082	85 275	2 087
332999	All other miscellaneous fabricated metal product mfg.....	-	15	4	550	13 473	408	727	6 702	25 165	26 226	51 247	1 221
333	Machinery mfg.....	3	115	26	2 087	70 437	1 414	2 753	37 572	144 372	112 529	255 240	10 581
3339	Other general-purpose machinery mfg.....	1	31	10	588	18 057	390	761	8 958	39 577	29 882	68 408	2 793
334	Computer & electronic product mfg.....	-	73	28	4 308	132 676	2 823	5 026	51 076	361 688	220 703	585 888	43 789
3344	Semiconductor & other electronic component mfg.....	-	33	17	3 075	92 907	2 126	3 617	35 783	248 250	110 581	360 712	38 116
33441	Semiconductor & other electronic component mfg.....	-	33	17	3 075	92 907	2 126	3 617	35 783	248 250	110 581	360 712	38 116
334413	Semiconductor & related device mfg...	-	6	4	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	99	47	6 500	177 239	5 355	10 099	126 453	398 172	615 832	1 009 527	27 066
3362	Motor vehicle body & trailer mfg.....	-	17	13	2 592	59 176	2 207	4 203	46 945	184 881	352 830	535 037	6 650
33621	Motor vehicle body & trailer mfg.....	-	17	13	2 592	59 176	2 207	4 203	46 945	184 881	352 830	535 037	6 650
336213	Motor home mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg.....	-	10	7	836	20 865	715	1 177	14 307	50 483	91 061	142 178	1 052
3363	Motor vehicle parts mfg...	5	38	18	2 256	57 393	1 884	3 497	38 723	133 790	181 396	312 050	D
33639	Other motor vehicle parts mfg.....	7	19	12	1 645	40 396	1 389	2 641	27 511	93 053	118 513	208 079	11 131
336399	All other motor vehicle parts mfg.....	7	19	12	1 645	40 396	1 389	2 641	27 511	93 053	118 513	208 079	11 131
3364	Aerospace product & parts mfg.....	2	17	7	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	2	17	7	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	2	14	7	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	110	29	2 779	52 677	2 031	3 646	36 787	108 471	128 620	238 005	4 843
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	80	16	1 519	31 719	1 315	2 348	21 724	58 649	75 977	134 594	2 544
33712	Household & institutional furniture mfg.....	-	41	13	1 281	26 923	1 126	2 050	18 571	50 015	68 841	118 811	2 166
337122	Nonupholstered wood household furniture mfg.....	-	18	4	566	10 500	521	1 046	7 393	19 688	24 941	44 596	1 276
3372	Office furniture (including fixtures) mfg.....	5	24	11	1 187	19 271	658	1 179	14 035	46 440	48 507	95 750	2 149
33721	Office furniture (including fixtures) mfg.....	5	24	11	1 187	19 271	658	1 179	14 035	46 440	48 507	95 750	2 149
337214	Office furniture (except wood) mfg.....	9	4	4	702	7 402	267	459	5 811	21 515	29 662	51 506	D
339	Miscellaneous mfg.....	-	136	31	4 967	146 241	3 329	6 873	72 030	839 554	232 053	1 062 146	26 432
3391	Medical equipment & supplies mfg.....	-	54	13	h	D	D	D	D	D	D	D	8 354
33911	Medical equipment & supplies mfg.....	-	54	13	h	D	D	D	D	D	D	D	8 354
339112	Surgical & medical instrument mfg.....	-	11	3	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	15	9	g	D	D	D	D	D	D	D	6 990
3399	Other miscellaneous mfg...	1	82	18	g	D	D	D	D	D	D	D	18 078
33992	Sporting & athletic goods mfg.....	2	26	6	617	12 619	471	719	6 050	22 700	22 636	44 700	6 181
339920	Sporting & athletic goods mfg.....	2	26	6	617	12 619	471	719	6 050	22 700	22 636	44 700	6 181
33999	All other miscellaneous mfg.....	-	25	8	1 383	40 439	1 097	2 247	25 883	89 384	78 011	164 492	D
339999	All other miscellaneous mfg.....	-	16	4	577	17 579	414	846	8 501	56 042	52 846	107 204	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SACRAMENTO COUNTY, CA													
31-33	Manufacturing	-	910	229	30 493	1 016 973	19 650	37 732	483 539	5 233 079	3 820 583	8 939 602	190 227
311	Food mfg	-	73	20	4 828	168 067	3 108	6 012	91 208	1 003 738	611 016	1 615 878	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	6	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	40	11	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	35	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	10	6	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	7	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	-	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	11	10	1 437	29 402	318	614	7 742	145 807	101 427	249 563	D
3121	Beverage mfg	-	11	10	1 437	29 402	318	614	7 742	145 807	101 427	249 563	D
31211	Soft drink & ice mfg	-	6	6	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	4	4	1 213	24 693	260	509	6 416	128 849	95 106	225 564	D
321	Wood product mfg	1	35	21	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	31	18	g	D	D	D	D	D	D	D	D
32191	Millwork	-	20	11	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	13	9	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	13	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	162	26	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	3	162	26	g	D	D	D	D	D	D	D	D
32311	Printing	3	142	25	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	3	64	18	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	44	13	f	D	D	D	D	D	D	D	2 987
3261	Plastics product mfg	1	37	11	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	37	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	133	25	1 989	58 645	1 517	2 961	39 365	112 197	137 305	248 788	D
3323	Architectural & structural metals mfg	1	45	16	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	32	12	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	39	12	1 161	31 427	699	1 388	16 041	80 286	153 771	226 412	D
3339	Other general-purpose machinery mfg	-	10	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	55	23	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	12	5	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	12	5	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	6	3	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	6	4	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	6	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	15	8	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	15	8	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SACRAMENTO COUNTY, CA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	39	11	2 398	129 735	1 019	1 945	31 754	249 614	147 451	322 573	2 867
3363	Motor vehicle parts mfg . . .	1	19	6	f	D	D	D	D	D	D	D	2 011
3364	Aerospace product & parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	74	20	g	D	D	D	D	D	D	D	3 542
3371	Household & institutional furniture & kitchen cabinet mfg	2	54	13	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	101	15	g	D	D	D	D	D	D	D	3 089
3391	Medical equipment & supplies mfg	2	61	9	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	2	61	9	f	D	D	D	D	D	D	D	D
SAN BENITO COUNTY, CA													
31-33	Manufacturing	—	75	22	2 160	64 166	1 662	3 348	42 978	162 833	216 064	365 272	9 245
SAN BERNARDINO COUNTY, CA													
31-33	Manufacturing	1	1 992	684	63 448	1 830 442	49 119	98 167	1 179 490	5 517 265	6 121 091	11 618 672	592 831
311	Food mfg	1	104	36	4 473	116 469	3 374	7 078	76 629	722 467	731 453	1 458 787	59 936
3113	Sugar & confectionery product mfg	—	14	4	652	9 035	362	634	6 640	19 573	21 707	41 827	D
3114	Fruit & vegetable preserving & specialty food mfg	5	10	6	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	6	3	3	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	6	3	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	32	6	979	20 372	814	1 791	16 160	87 120	63 215	150 282	11 037
31183	Tortilla mfg	—	4	2	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	—	4	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	16	10	1 118	37 735	921	2 063	24 473	424 692	225 985	651 886	D
31191	Snack food mfg	—	4	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	50	7	573	6 672	520	872	5 489	11 320	12 828	23 755	D
3152	Cut & sew apparel mfg	4	45	7	560	6 507	509	855	5 362	11 009	12 598	23 215	D
321	Wood product mfg	2	95	37	3 373	76 526	2 862	5 695	52 869	204 111	251 104	449 827	8 719
3212	Veneer, plywood, & engineered wood product mfg	—	21	12	947	24 455	793	1 579	16 470	62 237	69 054	131 946	1 246
32121	Veneer, plywood, & engineered wood product mfg	—	21	12	947	24 455	793	1 579	16 470	62 237	69 054	131 946	1 246
321214	Truss mfg	—	17	9	856	21 657	716	1 425	14 971	52 284	51 293	103 498	746
3219	Other wood product mfg	3	70	24	2 369	50 738	2 020	4 011	35 395	138 970	179 872	312 796	7 202
32191	Millwork	5	25	7	767	15 168	659	1 226	10 881	47 174	84 369	126 272	2 279
32199	All other wood product mfg	1	21	13	1 278	29 167	1 089	2 258	19 960	75 858	78 698	153 939	3 880
321991	Manufactured home (mobile home) mfg	—	5	5	525	12 960	449	939	8 660	29 134	49 050	78 222	D
321999	All other miscellaneous wood product mfg	—	11	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	31	23	1 629	55 961	1 215	2 702	33 731	162 027	252 672	415 079	17 038
3222	Converted paper product mfg	1	29	21	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	17	11	678	21 133	543	1 233	13 792	48 875	104 699	153 052	6 562

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN BERNARDINO COUNTY, CA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	3	172	26	2 393	60 059	1 808	3 082	38 974	142 193	106 873	250 129	5 868
3231	Printing & related support activities.....	3	172	26	2 393	60 059	1 808	3 082	38 974	142 193	106 873	250 129	5 868
32311	Printing	3	154	20	1 537	44 142	1 062	1 858	26 307	107 310	97 546	206 267	4 682
323110	Commercial lithographic printing ..	4	77	11	841	28 408	564	1 031	15 725	53 136	46 104	98 956	2 944
32312	Support activities for printing	5	18	6	856	15 917	746	1 224	12 667	34 883	9 327	43 862	1 186
323121	Tradebinding & related work	3	10	5	f	D	D	D	D	D	D	D	694
325	Chemical mfg	—	73	29	1 865	61 537	1 159	2 337	31 417	294 125	284 819	587 332	18 607
3255	Paint, coating, & adhesive mfg	—	25	8	538	15 650	291	545	6 540	62 166	69 623	131 282	D
326	Plastics & rubber products mfg	1	160	94	7 731	204 416	6 274	12 322	135 770	630 377	651 351	1 264 273	59 723
3261	Plastics product mfg	1	137	80	6 905	182 445	5 634	11 074	122 249	540 244	560 437	1 083 097	56 514
32611	Unsupported plastics film, sheet, & bag mfg ..	—	15	11	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	2	14	12	g	D	D	D	D	D	D	D	22 782
326160	Plastics bottle mfg	2	14	12	g	D	D	D	D	D	D	D	22 782
32619	Other plastics product mfg	—	80	43	3 778	95 527	3 101	6 097	61 831	240 515	189 709	425 329	17 173
326199	All other plastics product mfg	—	75	41	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	23	14	826	21 971	640	1 248	13 521	90 133	90 914	181 176	3 209
32629	Other rubber product mfg	1	14	10	533	13 210	428	825	7 984	35 210	34 567	69 655	2 027
327	Nonmetallic mineral product mfg	—	106	49	4 565	152 520	3 542	7 196	101 762	533 978	367 059	907 928	62 837
3271	Clay product & refractory mfg	3	13	7	623	13 070	510	1 063	8 645	18 971	11 290	30 160	1 407
32711	Pottery, ceramics, & plumbing fixture mfg ...	4	9	5	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	4	8	5	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	63	31	3 078	110 880	2 377	4 880	73 731	382 516	284 512	670 029	55 854
32731	Cement mfg	—	4	4	f	D	D	D	D	D	D	D	D
327310	Cement mfg	—	4	4	f	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, & block mfg	3	14	10	f	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	2	9	6	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	20	12	1 258	40 970	947	2 066	26 651	140 246	74 925	215 451	13 771
327390	Other concrete product mfg	—	20	12	1 258	40 970	947	2 066	26 651	140 246	74 925	215 451	13 771
331	Primary metal mfg	—	37	18	2 684	119 232	2 274	4 882	89 181	424 665	867 751	1 286 170	71 530
3311	Iron & steel mills & ferroalloy mfg	—	4	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	4	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	4	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	8	7	538	17 170	478	1 194	12 893	71 006	186 616	252 628	D
33131	Alumina & aluminum production & processing.....	—	8	7	538	17 170	478	1 194	12 893	71 006	186 616	252 628	D
3315	Foundries	1	16	6	f	D	D	D	D	D	D	D	1 194
332	Fabricated metal product mfg	—	423	126	10 792	324 334	8 317	17 018	209 755	770 690	884 272	1 633 070	168 907
3321	Forging & stamping	—	34	15	1 386	52 789	1 056	2 338	31 720	135 224	205 815	332 194	D
33211	Forging & stamping	—	34	15	1 386	52 789	1 056	2 338	31 720	135 224	205 815	332 194	D
332111	Iron & steel forging	—	4	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	92	33	3 093	85 568	2 301	4 525	50 734	201 300	248 511	448 289	7 395
33231	Plate work & fabricated structural product mfg ..	1	36	10	1 096	34 642	830	1 701	21 865	87 937	99 851	185 954	2 098
332312	Fabricated structural metal mfg	2	23	5	673	21 097	552	1 109	14 339	57 306	66 392	121 423	1 062
33232	Ornamental & architectural metal products mfg	—	56	23	1 997	50 926	1 471	2 824	28 869	113 363	148 660	262 335	5 297
332321	Metal window & door mfg	—	12	7	f	D	D	D	D	D	D	D	1 621
332322	Sheet metal work mfg ..	—	35	14	978	27 806	649	1 378	15 752	62 864	83 193	146 335	3 501
3325	Hardware mfg	—	10	5	562	14 352	445	895	8 454	30 381	23 655	53 606	4 228
33251	Hardware mfg	—	10	5	562	14 352	445	895	8 454	30 381	23 655	53 606	4 228
332510	Hardware mfg	—	10	5	562	14 352	445	895	8 454	30 381	23 655	53 606	4 228

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN BERNARDINO COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	174	33	2 430	76 910	1 948	3 919	54 475	139 765	83 733	221 748	12 251
33271	Machine shops	2	147	19	1 399	45 748	1 108	2 100	31 294	84 852	34 187	118 500	5 471
332710	Machine shops	2	147	19	1 399	45 748	1 108	2 100	31 294	84 852	34 187	118 500	5 471
33272	Turned product & screw, nut, & bolt mfg	—	27	14	1 031	31 162	840	1 819	23 181	54 913	49 546	103 248	6 780
332721	Precision turned product mfg	—	19	11	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	—	36	16	1 239	38 523	1 061	2 383	28 841	101 376	164 614	258 160	D
33281	Coating, engraving, heat treating, & allied activities	—	36	16	1 239	38 523	1 061	2 383	28 841	101 376	164 614	258 160	D
332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	—	17	11	964	30 631	836	2 014	24 186	83 610	157 654	233 299	D
3329	Other fabricated metal product mfg	1	35	11	1 040	30 368	816	1 652	19 699	84 653	65 487	149 395	D
33299	All other fabricated metal product mfg	1	28	6	578	16 461	463	919	11 279	34 695	41 547	76 862	1 337
333	Machinery mfg	1	182	46	4 167	137 562	2 983	6 177	81 228	317 689	274 287	594 285	20 059
3333	Commercial & service industry machinery mfg ..	—	22	7	509	14 344	339	611	6 807	32 920	42 033	75 455	1 938
33331	Commercial & service industry machinery mfg	—	22	7	509	14 344	339	611	6 807	32 920	42 033	75 455	1 938
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	13	6	1 249	38 822	1 027	2 454	26 819	89 784	93 459	186 991	6 801
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	2	13	6	1 249	38 822	1 027	2 454	26 819	89 784	93 459	186 991	6 801
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	5	3	764	22 073	660	1 716	17 051	52 793	58 541	111 739	D
3335	Metalworking machinery mfg	2	73	14	886	31 879	694	1 356	22 395	60 418	22 995	82 563	3 233
33351	Metalworking machinery mfg	2	73	14	886	31 879	694	1 356	22 395	60 418	22 995	82 563	3 233
3339	Other general-purpose machinery mfg	1	37	11	1 017	34 237	654	1 245	17 919	100 348	81 926	183 331	5 362
33399	All other general-purpose machinery mfg	3	21	5	500	11 567	302	512	5 746	27 416	18 658	46 072	962
334	Computer & electronic product mfg	3	78	26	2 310	68 871	1 484	2 893	30 679	169 559	131 759	298 432	8 869
3344	Semiconductor & other electronic component mfg	2	29	10	819	23 842	565	1 121	10 530	59 300	38 629	97 558	3 386
33441	Semiconductor & other electronic component mfg	2	29	10	819	23 842	565	1 121	10 530	59 300	38 629	97 558	3 386
3345	Navigational, measuring, medical, & control instruments mfg	3	22	8	521	15 234	359	631	7 479	34 523	19 454	53 109	1 239
33451	Navigational, measuring, medical, & control instruments mfg	3	22	8	521	15 234	359	631	7 479	34 523	19 454	53 109	1 239
335	Electrical equipment, appliance, & component mfg	—	31	13	1 751	46 568	1 431	2 762	29 514	187 104	128 857	317 199	3 301
3351	Electric lighting equipment mfg	—	11	8	1 262	32 972	1 058	2 254	22 762	155 511	102 145	257 348	D
33512	Lighting fixture mfg	—	11	8	1 262	32 972	1 058	2 254	22 762	155 511	102 145	257 348	D
335129	Other lighting equipment mfg	—	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	112	50	4 661	147 600	3 673	7 035	100 797	317 342	569 994	884 819	38 003
3362	Motor vehicle body & trailer mfg	1	28	13	1 534	42 984	1 240	2 548	29 831	79 472	154 067	233 899	2 842
33621	Motor vehicle body & trailer mfg	1	28	13	1 534	42 984	1 240	2 548	29 831	79 472	154 067	233 899	2 842
336214	Travel trailer & camper mfg	1	13	7	813	24 482	622	1 259	17 411	43 072	76 078	119 471	1 614
3363	Motor vehicle parts mfg ...	2	44	19	1 392	33 666	1 046	1 939	19 390	74 890	78 067	154 747	D
33639	Other motor vehicle parts mfg	2	16	10	606	12 563	485	854	8 305	36 361	42 671	79 523	1 996
336399	All other motor vehicle parts mfg	2	16	10	606	12 563	485	854	8 305	36 361	42 671	79 523	1 996

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
SAN BERNARDINO COUNTY, CA—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	—	21	13	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	21	13	g	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	2	18	11	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	—	141	59		6 665	147 567	5 326	10 655	99 256	315 313	317 895	646 709	13 813
3371	Household & institutional furniture & kitchen cabinet mfg	—	98	35		5 024	103 019	4 185	8 532	74 568	210 500	214 234	437 498	10 155
33711	Wood kitchen cabinet & counter top mfg	—	38	4		982	22 061	636	1 347	12 447	51 250	27 429	78 990	1 318
337110	Wood kitchen cabinet & counter top mfg ...	—	38	4		982	22 061	636	1 347	12 447	51 250	27 429	78 990	1 318
33712	Household & institutional furniture mfg	—	60	31		4 042	80 958	3 549	7 185	62 121	159 250	186 805	358 508	8 837
337121	Upholstered household furniture mfg	—	17	9		1 748	36 884	1 574	3 170	31 283	77 191	88 446	164 712	1 219
337122	Nonupholstered wood household furniture mfg	—	28	14		1 462	25 954	1 256	2 598	18 649	47 253	69 978	130 941	5 991
337127	Institutional furniture mfg	—	10	5		614	12 979	547	1 066	8 851	27 211	19 581	46 610	907
3372	Office furniture (including fixtures) mfg	2	34	18		1 285	35 174	883	1 625	18 594	70 242	77 056	147 986	2 085
33721	Office furniture (including fixtures) mfg	2	34	18		1 285	35 174	883	1 625	18 594	70 242	77 056	147 986	2 085
337215	Showcase, partition, shelving, & locker mfg	—	21	10		809	21 840	570	1 002	10 397	43 491	54 980	98 749	1 000
339	Miscellaneous mfg	1	132	30		2 533	70 336	1 831	3 381	38 545	203 892	152 308	354 427	28 779
3391	Medical equipment & supplies mfg	4	57	9	f	D	D	D	D	D	D	D	D	2 867
33911	Medical equipment & supplies mfg	4	57	9	f	D	D	D	D	D	D	D	D	2 867
3399	Other miscellaneous mfg ..	—	75	21	g	D	D	D	D	D	D	D	D	25 912
33999	All other miscellaneous mfg	—	21	7		757	22 551	541	992	12 466	65 355	76 798	142 746	D
SAN DIEGO COUNTY, CA														
31-33	Manufacturing	1	3 407	953		118 868	4 223 506	73 111	144 405	1 868 764	10 999 196	11 403 094	22 233 599	919 402
311	Food mfg	2	191	45		4 279	110 975	2 871	5 324	59 828	290 947	264 102	567 504	30 184
3114	Fruit & vegetable preserving & specialty food mfg	—	7	5	1 001	20 461	833	1 537	12 084	62 526	64 872	127 435	D	D
31141	Frozen food mfg	—	5	3	f	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	4	3	f	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	4	134	28		2 028	43 866	1 283	2 267	24 421	106 185	66 161	172 181	6 234
31181	Bread & bakery product mfg	4	117	23		1 715	38 642	1 052	1 871	20 566	93 048	56 516	149 361	5 536
311812	Commercial bakeries ..	5	35	16		1 034	26 491	586	1 136	13 527	63 889	35 688	99 595	4 311
3119	Other food mfg	1	25	6		757	31 984	497	1 066	16 332	71 513	45 795	129 372	6 668
31199	All other food mfg	1	17	4		682	30 829	449	1 013	15 676	65 329	40 622	117 987	6 465
311999	All other miscellaneous food mfg	—	10	2		517	26 611	311	772	13 036	57 113	26 409	95 691	D
312	Beverage & tobacco product mfg	3	22	7		822	23 646	344	673	9 487	97 101	142 207	237 852	5 052
3121	Beverage mfg	3	21	7	f	D	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	3	10	5		731	21 024	289	594	7 940	90 315	136 392	225 360	4 369
312111	Soft drink mfg	3	3	2	f	D	D	D	D	D	D	D	D	D
314	Textile product mills	3	99	16		1 219	23 075	973	1 633	13 806	51 044	39 986	90 902	1 809
3149	Other textile product mills ..	2	67	13		986	19 339	769	1 295	11 118	42 732	31 774	74 239	1 552
31499	All other textile product mills	3	35	8		601	11 316	462	779	6 657	26 482	18 181	44 432	1 028
314999	All other miscellaneous textile product mills ..	3	33	8	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN DIEGO COUNTY, CA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	3	159	52	5 661	87 602	4 554	8 757	59 436	243 988	182 884	426 277	8 959
3152	Cut & sew apparel mfg	3	125	42	4 648	70 084	3 756	7 348	49 582	200 367	139 079	339 673	D
31521	Cut & sew apparel contractors	4	76	20	1 973	25 671	1 633	3 253	21 565	41 608	9 935	50 240	1 678
315211	Men's & boys' cut & sew apparel contractors	1	14	7	540	8 099	414	778	5 820	12 808	2 104	14 991	185
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	62	13	1 433	17 572	1 219	2 475	15 745	28 800	7 831	35 249	1 493
31522	Men's & boys' cut & sew apparel mfg	4	24	13	1 927	30 813	1 627	3 231	20 453	115 722	86 275	203 204	3 640
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	6	11	5	1 135	16 955	935	2 064	10 374	69 652	45 456	120 273	1 885
3159	Apparel accessories & other apparel mfg	—	30	8	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	—	30	8	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	1	18	5	714	13 151	574	1 359	8 572	31 783	30 392	62 743	928
321	Wood product mfg	2	54	12	710	16 691	549	1 007	10 323	30 795	33 685	63 502	2 083
3219	Other wood product mfg ...	2	44	10	595	13 529	460	851	8 362	23 982	22 186	45 280	1 695
322	Paper mfg	1	26	10	756	21 009	575	1 174	12 232	54 879	66 582	120 353	2 218
3222	Converted paper product mfg	1	26	10	756	21 009	575	1 174	12 232	54 879	66 582	120 353	2 218
32221	Paperboard container mfg	1	9	6	538	14 346	410	839	7 854	37 520	47 272	83 711	1 091
323	Printing & related support activities.....	4	432	67	5 500	158 528	3 838	7 223	94 124	354 097	230 717	584 767	36 751
3231	Printing & related support activities.....	4	432	67	5 500	158 528	3 838	7 223	94 124	354 097	230 717	584 767	36 751
32311	Printing	3	388	58	4 725	136 797	3 392	6 415	82 827	292 710	192 894	485 499	30 730
323110	Commercial lithographic printing ..	3	177	36	2 656	84 832	1 858	3 686	50 525	180 000	118 394	298 269	23 593
323113	Commercial screen printing.....	5	56	11	823	19 903	607	1 030	10 711	38 280	28 263	66 712	2 833
32312	Support activities for printing.....	7	44	9	775	21 731	446	808	11 297	61 387	37 823	99 268	6 021
323122	Prepress services	8	29	6	586	17 973	289	542	8 547	52 507	36 611	89 164	5 054
325	Chemical mfg	1	124	42	4 957	204 801	2 349	4 595	66 864	595 108	376 174	977 852	95 896
3254	Pharmaceutical & medicine mfg	1	58	28	3 547	153 056	1 568	3 138	47 703	388 809	186 418	578 091	69 571
32541	Pharmaceutical & medicine mfg	1	58	28	3 547	153 056	1 568	3 138	47 703	388 809	186 418	578 091	69 571
325411	Medicinal & botanical mfg	4	12	5	509	19 966	110	198	3 424	25 170	14 895	42 054	6 659
325413	In-vitro diagnostic substance mfg	—	15	11	2 001	83 616	1 002	1 983	29 661	244 833	92 526	333 821	43 775
325414	Biological product (except diagnostic) mfg	1	19	7	736	38 121	274	606	9 947	79 540	60 673	146 845	16 640
326	Plastics & rubber products mfg	3	161	58	4 578	130 515	3 327	6 198	68 198	331 234	305 858	632 720	32 200
3261	Plastics product mfg	3	135	49	3 985	113 623	2 919	5 498	59 879	288 014	267 530	551 299	30 131
32619	Other plastics product mfg	3	103	39	3 012	79 459	2 192	4 142	42 071	197 439	187 848	383 450	20 681
326191	Plastics plumbing fixture mfg	—	6	3	773	22 284	476	1 013	10 716	64 891	73 722	139 998	2 440
326199	All other plastics product mfg.....	4	97	36	2 239	57 175	1 716	3 129	31 355	132 548	114 126	243 452	18 241
3262	Rubber product mfg	4	26	9	593	16 892	408	700	8 319	43 220	38 328	81 421	2 069
327	Nonmetallic mineral product mfg	3	93	23	1 842	53 390	1 204	2 256	35 098	129 795	147 610	277 910	9 262
3273	Cement & concrete product mfg	3	42	15	1 006	36 823	692	1 382	24 622	92 142	120 201	212 564	7 178
32732	Ready-mix concrete mfg	3	26	11	801	30 534	555	1 086	20 919	76 889	105 699	182 869	6 445
327320	Ready-mix concrete mfg	3	26	11	801	30 534	555	1 086	20 919	76 889	105 699	182 869	6 445
332	Fabricated metal product mfg	1	495	134	10 655	328 921	7 478	14 329	195 141	759 470	411 936	1 171 062	48 284
3321	Forging & stamping	—	14	7	509	18 397	374	764	10 837	37 709	40 866	77 333	3 372
33211	Forging & stamping	—	14	7	509	18 397	374	764	10 837	37 709	40 866	77 333	3 372

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SAN DIEGO COUNTY, CA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	—	91	32	2 806	88 567	1 757	3 459	46 420	202 277	122 729	323 715	8 414
33231	Plate work & fabricated structural product mfg . .	—	21	9	808	26 015	625	1 186	16 791	63 812	48 232	111 088	2 145
332312	Fabricated structural metal mfg	—	18	9	777	25 140	601	1 140	16 233	62 371	47 069	108 444	2 105
33232	Ornamental & architectural metal products mfg	—	70	23	1 998	62 552	1 132	2 273	29 629	138 465	74 497	212 627	6 269
332322	Sheet metal work mfg	—	49	20	1 674	53 637	923	1 851	25 073	119 625	61 580	181 090	5 536
3324	Boiler, tank, & shipping container mfg	1	14	3	540	13 206	339	757	8 065	34 270	46 956	79 600	1 165
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	235	55	3 511	112 768	2 790	5 214	77 747	223 721	85 755	310 573	17 777
33271	Machine shops	1	211	44	2 791	92 181	2 234	4 108	62 891	181 318	69 208	252 205	14 332
332710	Machine shops	1	211	44	2 791	92 181	2 234	4 108	62 891	181 318	69 208	252 205	14 332
33272	Turned product & screw, nut, & bolt mfg	2	24	11	720	20 587	556	1 106	14 856	42 403	16 547	58 368	3 445
332721	Precision turned product mfg	—	18	9	579	16 597	452	925	12 050	32 023	12 247	44 477	2 365
3328	Coating, engraving, heat treating, & allied activities .	2	59	17	873	20 140	686	1 230	12 799	38 559	14 386	51 980	2 109
33281	Coating, engraving, heat treating, & allied activities	2	59	17	873	20 140	686	1 230	12 799	38 559	14 386	51 980	2 109
332813	Electroplating, plating, polishing, anodizing, & coloring	3	37	9	538	11 121	413	730	7 068	21 468	6 467	27 378	1 069
3329	Other fabricated metal product mfg	—	49	12	1 610	50 781	993	2 014	26 294	154 805	70 553	229 146	9 777
33291	Metal valve mfg	—	5	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	44	10	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	33	7	550	16 680	400	828	10 434	29 395	17 499	48 001	1 743
333	Machinery mfg	—	204	53	8 954	369 382	5 174	10 451	163 304	1 289 085	797 339	2 064 665	70 016
3332	Industrial machinery mfg . .	—	38	9	1 788	54 876	1 439	2 787	37 576	424 655	95 159	515 112	15 940
33329	Other industrial machinery mfg	—	32	8	1 669	50 739	1 360	2 632	35 518	415 297	86 594	497 562	15 342
333295	Semiconductor machinery mfg	—	7	4	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	18	3	528	16 859	331	603	6 594	39 314	30 862	69 998	D
3333	Commercial & service industry machinery mfg . .	1	40	12	1 187	42 300	637	1 274	17 410	107 997	89 162	196 605	5 012
33331	Commercial & service industry machinery mfg	1	40	12	1 187	42 300	637	1 274	17 410	107 997	89 162	196 605	5 012
3335	Metalworking machinery mfg	1	50	10	858	29 409	614	1 156	18 308	82 909	40 288	121 465	5 138
33351	Metalworking machinery mfg	1	50	10	858	29 409	614	1 156	18 308	82 909	40 288	121 465	5 138
3336	Engine, turbine, & power transmission equipment mfg	—	5	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	5	2	h	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	2	2	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	45	12	1 010	34 126	599	1 263	15 594	76 872	79 772	155 526	D
33399	All other general-purpose machinery mfg	1	34	10	851	28 997	521	1 107	13 363	63 729	65 800	127 626	2 346

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN DIEGO COUNTY, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	414	196	30 825	1 373 848	13 861	27 875	404 879	3 317 227	5 550 764	8 730 916	334 995
3341	Computer & peripheral equipment mfg.....	—	63	27	8 192	431 119	2 679	5 671	84 294	1 008 756	3 809 245	4 663 199	94 542
33411	Computer & peripheral equipment mfg.....	—	63	27	8 192	431 119	2 679	5 671	84 294	1 008 756	3 809 245	4 663 199	94 542
334111	Electronic computer mfg.....	—	15	6	812	38 479	324	759	10 217	539 104	230 044	734 438	11 014
334112	Computer storage device mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	42	17	6 641	376 717	2 280	4 768	70 836	432 832	3 529 741	3 842 157	79 723
3342	Communications equipment mfg.....	2	62	43	5 064	222 330	1 993	3 786	54 792	420 544	504 464	929 970	66 616
33421	Telephone apparatus mfg.....	—	9	7	1 239	62 393	322	609	9 163	51 984	103 226	156 759	4 812
334210	Telephone apparatus mfg.....	—	9	7	1 239	62 393	322	609	9 163	51 984	103 226	156 759	4 812
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	1	43	30	3 377	144 936	1 493	2 889	41 825	331 191	333 870	661 838	57 858
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	1	43	30	3 377	144 936	1 493	2 889	41 825	331 191	333 870	661 838	57 858
3344	Semiconductor & other electronic component mfg.....	3	140	58	7 465	248 229	4 810	9 642	114 193	591 366	410 075	1 012 670	101 554
33441	Semiconductor & other electronic component mfg.....	3	140	58	7 465	248 229	4 810	9 642	114 193	591 366	410 075	1 012 670	101 554
334412	Bare printed circuit board mfg.....	1	35	17	2 083	53 816	1 718	3 441	35 753	147 776	116 064	262 637	16 984
334413	Semiconductor & related device mfg...	5	23	13	1 325	62 279	724	1 493	23 982	172 297	70 868	250 622	63 036
334414	Electronic capacitor mfg.....	2	8	6	855	30 143	504	1 013	14 387	55 642	43 498	100 171	4 077
334417	Electronic connector mfg.....	—	6	6	854	23 186	722	1 462	13 535	75 855	17 622	90 143	3 492
334418	Printed circuit assembly (electronic assembly) mfg.....	5	19	10	1 715	56 659	714	1 492	17 167	89 882	125 785	221 028	10 806
334419	Other electronic component mfg.....	6	40	6	553	19 798	371	627	8 154	45 219	32 539	79 490	2 841
3345	Navigational, measuring, medical, & control instruments mfg.....	—	124	59	9 381	450 874	3 886	7 892	139 858	1 245 875	693 875	1 942 005	68 965
33451	Navigational, measuring, medical, & control instruments mfg.....	—	124	59	9 381	450 874	3 886	7 892	139 858	1 245 875	693 875	1 942 005	68 965
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	13	9	670	50 915	359	968	11 800	58 164	67 821	131 969	11 111
334511	Search, detection, navigation, & guidance instrument mfg.....	—	22	15	4 595	218 029	1 541	2 988	54 239	523 578	212 770	740 645	17 983
334513	Industrial process control instrument mfg.....	—	15	7	773	31 032	249	528	7 819	100 273	59 625	158 686	3 418
334515	Electricity measuring & testing instrument mfg.....	—	30	15	1 851	81 194	961	1 885	32 925	271 036	205 226	474 853	29 833
334519	Other measuring & controlling device mfg.....	1	21	6	506	24 020	244	406	7 927	61 910	26 045	88 107	1 113
335	Electrical equipment, appliance, & component mfg.....	—	66	31	3 263	131 032	1 943	4 186	63 287	375 743	361 886	717 274	58 534
3353	Electrical equipment mfg ..	—	24	11	1 152	36 986	730	1 587	18 449	85 499	65 558	146 964	4 123
33531	Electrical equipment mfg.....	—	24	11	1 152	36 986	730	1 587	18 449	85 499	65 558	146 964	4 123
335312	Motor & generator mfg.....	—	9	7	631	17 084	408	936	9 299	46 553	33 921	79 790	1 790
3359	Other electrical equipment & component mfg.....	—	25	15	1 623	80 766	918	2 066	39 539	238 327	183 686	407 892	50 008
33599	All other electrical equipment & component mfg.....	—	18	9	1 300	71 252	699	1 614	34 131	222 337	149 091	357 549	D
335999	All other miscellaneous electrical equipment & component mfg.....	—	15	7	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN DIEGO COUNTY, CA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	139	50	14 688	558 939	10 759	21 726	338 668	1 131 708	1 113 668	2 253 448	76 461
3363	Motor vehicle parts mfg ...	6	50	16	956	29 739	689	1 161	16 647	50 964	67 858	119 979	5 728
3364	Aerospace product & parts mfg	—	31	15	6 232	292 855	4 213	7 477	168 395	604 736	624 917	1 252 472	59 566
33641	Aerospace product & parts mfg	—	31	15	6 232	292 855	4 213	7 477	168 395	604 736	624 917	1 252 472	59 566
336412	Aircraft engine & engine parts mfg	—	5	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	22	10	4 262	222 900	2 804	4 591	113 396	426 146	531 518	992 383	48 158
3366	Ship & boat building	—	21	13	6 874	220 818	5 371	12 102	145 056	423 670	374 865	798 612	8 575
33661	Ship & boat building	—	21	13	6 874	220 818	5 371	12 102	145 056	423 670	374 865	798 612	8 575
336611	Ship building & repairing	—	16	11	6 759	217 422	5 298	11 955	143 386	416 309	370 115	786 424	D
337	Furniture & related product mfg	1	185	32	3 511	75 071	2 790	5 140	48 926	145 632	166 337	313 068	5 107
3371	Household & institutional furniture & kitchen cabinet mfg	1	132	16	1 887	37 003	1 580	2 784	26 645	66 175	67 597	133 103	2 273
33712	Household & institutional furniture mfg	1	69	12	1 419	26 177	1 194	2 085	19 243	48 041	52 453	99 864	1 521
337122	Nonupholstered wood household furniture mfg	—	34	8	1 117	19 056	957	1 671	14 592	34 407	43 857	77 821	1 090
3372	Office furniture (including fixtures) mfg	—	41	11	1 065	25 726	831	1 769	16 730	48 581	45 483	95 762	1 768
33721	Office furniture (including fixtures) mfg	—	41	11	1 065	25 726	831	1 769	16 730	48 581	45 483	95 762	1 768
3379	Other furniture related product mfg	—	12	5	559	12 342	379	587	5 551	30 876	53 257	84 203	1 066
339	Miscellaneous mfg	1	477	110	15 288	518 781	9 591	19 839	207 783	1 668 787	1 076 281	2 736 169	96 094
3391	Medical equipment & supplies mfg	1	196	42	6 101	221 751	3 345	6 413	71 519	554 738	340 995	913 047	36 594
33911	Medical equipment & supplies mfg	1	196	42	6 101	221 751	3 345	6 413	71 519	554 738	340 995	913 047	36 594
339112	Surgical & medical instrument mfg	1	49	20	2 860	120 625	1 255	2 243	24 082	223 395	133 499	358 196	23 099
339113	Surgical appliance & supplies mfg	—	20	7	1 154	38 840	671	1 260	16 225	130 230	60 188	194 723	5 511
339115	Ophthalmic goods mfg	—	14	4	1 141	31 157	856	1 916	19 086	120 756	51 056	182 700	4 531
3399	Other miscellaneous mfg ...	—	281	68	9 187	297 030	6 246	13 426	136 264	1 114 049	735 286	1 823 122	59 500
33992	Sporting & athletic goods mfg	—	110	31	6 648	224 214	4 537	10 101	98 700	924 108	584 813	1 483 027	54 006
339920	Sporting & athletic goods mfg	—	110	31	6 648	224 214	4 537	10 101	98 700	924 108	584 813	1 483 027	54 006
33995	Sign mfg	3	67	12	692	20 157	449	961	10 917	40 198	19 891	60 023	966
339950	Sign mfg	3	67	12	692	20 157	449	961	10 917	40 198	19 891	60 023	966
33999	All other miscellaneous mfg	1	55	19	1 404	41 183	920	1 722	19 556	114 889	74 359	189 279	3 964
339999	All other miscellaneous mfg	2	37	14	814	21 111	476	775	9 145	62 590	39 786	103 116	2 776
SAN FRANCISCO COUNTY, CA													
31-33	Manufacturing	1	1 247	309	25 037	642 429	19 500	35 967	392 849	1 998 438	1 999 422	3 978 945	67 132
311	Food mfg	1	150	38	3 020	76 308	2 145	3 612	45 172	242 771	182 817	429 634	10 097
3118	Bakeries & tortilla mfg	2	85	17	1 613	42 452	1 030	1 602	23 697	118 835	47 120	166 256	4 060
31181	Bread & bakery product mfg	1	75	16	1 508	40 677	951	1 484	22 617	113 842	43 025	157 160	3 789
311812	Commercial bakeries ..	1	22	11	1 128	34 776	654	1 072	18 655	102 834	36 641	139 776	3 219
315	Apparel mfg	—	320	149	11 694	220 817	10 000	18 429	142 589	1 026 012	1 346 564	2 353 619	11 635
3151	Apparel knitting mills	—	6	6	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	6	6	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	6	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN FRANCISCO COUNTY, CA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	—	298	141	10 795	198 868	9 244	16 612	129 158	979 903	1 310 953	2 273 431	10 223
31521	Cut & sew apparel contractors	5	194	91	5 156	67 388	4 789	8 844	60 047	103 760	21 673	125 261	2 906
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	183	84	4 727	60 887	4 381	8 043	54 518	92 444	18 051	110 323	2 695
31522	Men's & boys' cut & sew apparel mfg	—	16	14	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	4	4	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	75	31	h	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	26	13	g	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	—	15	7	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	266	43	3 324	121 365	2 419	4 781	78 285	224 152	125 572	349 654	20 119
3231	Printing & related support activities	3	266	43	3 324	121 365	2 419	4 781	78 285	224 152	125 572	349 654	20 119
32311	Printing	4	211	32	2 476	83 772	1 774	3 444	52 504	155 713	109 470	264 601	15 867
323110	Commercial lithographic printing ..	4	120	22	1 640	64 510	1 154	2 356	40 157	116 854	79 525	195 976	12 585
32312	Support activities for printing	1	55	11	848	37 593	645	1 337	25 781	68 439	16 102	85 053	4 252
323122	Prepress services	1	45	9	660	32 032	476	980	21 305	56 220	13 061	69 558	3 581
332	Fabricated metal product mfg	1	70	11	947	31 182	736	1 281	20 373	87 630	34 697	122 861	2 512
334	Computer & electronic product mfg	2	26	6	1 028	24 429	671	1 245	11 854	61 999	58 741	119 690	3 684
3344	Semiconductor & other electronic component mfg	—	6	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	6	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	79	12	913	31 586	685	1 318	18 132	59 517	30 139	88 162	1 444
3371	Household & institutional furniture & kitchen cabinet mfg	3	61	7	625	20 980	444	920	11 352	39 259	22 603	61 516	963
339	Miscellaneous mfg	3	135	14	1 031	25 069	752	1 238	12 992	57 583	35 773	92 423	2 889
3399	Other miscellaneous mfg ..	3	79	12	764	18 437	541	908	8 826	43 575	27 677	69 995	2 159
	SAN JOAQUIN COUNTY, CA												
31-33	Manufacturing	1	553	210	24 646	749 607	19 276	39 038	527 168	2 900 786	3 199 752	5 879 062	208 588
311	Food mfg	1	84	42	7 744	221 522	6 334	12 319	168 145	1 213 281	1 414 422	2 557 997	70 065
3112	Grain & oilseed milling	1	3	3	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	—	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	19	15	h	D	D	D	D	D	D	D	D
31141	Frozen food mfg	8	2	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	8	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	17	14	3 282	94 105	2 974	5 820	78 604	370 386	408 381	749 286	24 358
311421	Fruit & vegetable canning	—	17	14	3 282	94 105	2 974	5 820	78 604	370 386	408 381	749 286	24 358
3118	Bakeries & tortilla mfg	—	20	6	515	12 492	376	592	8 164	35 438	32 694	68 191	2 243
3119	Other food mfg	—	10	4	727	21 418	566	1 274	12 407	85 225	174 520	242 589	5 604
312	Beverage & tobacco product mfg	—	13	8	1 115	38 171	723	1 558	23 688	413 562	420 432	687 186	36 606
3121	Beverage mfg	—	13	8	1 115	38 171	723	1 558	23 688	413 562	420 432	687 186	36 606
31213	Wineries	—	12	8	g	D	D	D	D	D	D	D	D
312130	Wineries	—	12	8	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN JOAQUIN COUNTY, CA—Con.												
	Manufacturing—Con.												
314	Textile product mills	—	12	3	533	12 554	460	1 005	9 368	34 258	41 263	75 966	1 191
321	Wood product mfg	1	28	17	1 981	45 111	1 682	3 091	34 192	99 860	191 217	291 912	6 335
3219	Other wood product mfg . . .	1	25	14	1 886	43 026	1 607	2 968	32 920	95 300	185 659	281 790	D
32191	Millwork	2	11	7	760	17 419	653	1 310	13 997	43 301	91 524	136 715	4 308
321912	Cut stock, resawing lumber, & planing	4	5	5	519	12 674	473	951	10 406	28 291	56 822	87 207	D
32199	All other wood product mfg	—	4	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	—	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	10	8	1 144	44 744	936	2 086	33 208	111 818	158 747	271 527	11 361
3222	Converted paper product mfg	—	8	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	8	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	50	7	688	17 907	477	818	11 410	33 121	21 457	55 485	2 787
3231	Printing & related support activities	2	50	7	688	17 907	477	818	11 410	33 121	21 457	55 485	2 787
32311	Printing	2	47	6	661	17 410	454	776	11 094	32 241	21 317	54 465	D
326	Plastics & rubber products mfg	—	38	17	1 387	38 131	1 068	1 909	25 861	130 779	141 369	271 508	8 564
3261	Plastics product mfg	—	29	16	1 248	34 503	960	1 686	23 600	121 943	135 191	256 590	7 733
32619	Other plastics product mfg	—	16	8	503	13 426	378	741	8 113	31 558	21 501	53 012	1 607
327	Nonmetallic mineral product mfg	—	33	10	1 563	61 548	1 279	2 686	49 716	197 829	144 193	343 373	14 773
3272	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	23	7	659	21 001	501	996	15 803	47 878	56 970	103 794	4 560
332	Fabricated metal product mfg	1	92	33	2 758	84 894	2 099	4 352	56 556	209 349	262 213	467 251	10 091
3323	Architectural & structural metals mfg	—	27	18	1 412	42 368	1 004	2 166	26 655	126 638	105 879	230 171	3 566
33231	Plate work & fabricated structural product mfg	—	15	11	1 124	32 772	798	1 750	21 147	92 564	88 958	179 936	2 694
332312	Fabricated structural metal mfg	—	11	7	1 012	29 050	713	1 568	18 540	85 977	75 836	159 898	2 122
333	Machinery mfg	2	36	15	826	28 669	549	1 102	16 441	57 418	52 823	110 980	3 715
334	Computer & electronic product mfg	1	13	6	1 025	34 299	932	2 349	25 548	60 087	47 589	107 539	20 697
3344	Semiconductor & other electronic component mfg	1	11	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	11	6	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	20	10	954	30 514	748	1 780	22 234	66 711	70 329	136 941	5 497
337	Furniture & related product mfg	1	37	11	1 179	39 181	870	1 869	23 732	73 659	71 932	145 563	3 770
3371	Household & institutional furniture & kitchen cabinet mfg	2	27	4	579	18 201	373	842	9 802	28 391	28 788	56 511	1 696
3372	Office furniture (including fixtures) mfg	—	7	6	545	19 848	453	955	13 170	42 233	38 617	81 525	1 987
33721	Office furniture (including fixtures) mfg	—	7	6	545	19 848	453	955	13 170	42 233	38 617	81 525	1 987
339	Miscellaneous mfg	1	46	8	875	24 917	545	906	12 096	70 671	27 701	97 978	3 464

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN LUIS OBISPO COUNTY, CA													
31-33	Manufacturing	4	323	69	6 322	182 321	4 157	7 650	94 401	619 697	533 953	1 156 257	52 082
323	Printing & related support activities.....	—	32	7	605	17 755	411	744	10 394	47 471	32 226	78 935	5 175
3231	Printing & related support activities.....	—	32	7	605	17 755	411	744	10 394	47 471	32 226	78 935	5 175
32311	Printing	—	30	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	51	7	817	22 034	646	1 323	14 865	64 685	45 612	109 392	3 491
333	Machinery mfg	7	17	6	680	29 399	327	524	10 077	71 305	74 468	143 535	5 333
334	Computer & electronic product mfg.....	2	26	11	1 346	40 214	728	1 492	18 225	95 051	49 136	141 105	9 987
3344	Semiconductor & other electronic component mfg	—	9	5	822	22 349	527	1 086	12 116	53 473	21 297	73 260	5 285
33441	Semiconductor & other electronic component mfg	—	9	5	822	22 349	527	1 086	12 116	53 473	21 297	73 260	5 285
339	Miscellaneous mfg.....	2	38	4	612	14 058	480	773	8 840	41 351	15 829	57 380	2 331
SAN MATEO COUNTY, CA													
31-33	Manufacturing	2	1 019	280	34 438	1 649 565	19 609	38 695	626 082	4 364 749	2 365 350	6 690 069	401 044
311	Food mfg.....	4	104	34	3 447	113 619	2 309	4 429	57 486	356 659	287 407	643 952	17 947
3113	Sugar & confectionery product mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	—	5	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	—	5	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	8	49	16	1 635	51 756	922	1 620	17 843	110 493	64 575	174 917	6 370
31181	Bread & bakery product mfg	9	46	14	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	14	10	1 079	41 235	518	976	11 361	82 885	45 023	127 903	5 204
322	Paper mfg	2	16	8	841	31 941	673	1 349	21 728	62 227	93 771	155 768	6 791
3222	Converted paper product mfg	2	16	8	841	31 941	673	1 349	21 728	62 227	93 771	155 768	6 791
323	Printing & related support activities.....	2	154	40	3 011	121 764	2 025	4 014	68 112	243 207	116 150	360 636	21 842
3231	Printing & related support activities.....	2	154	40	3 011	121 764	2 025	4 014	68 112	243 207	116 150	360 636	21 842
32311	Printing	2	133	32	2 520	105 445	1 693	3 372	58 368	205 555	109 941	316 236	19 888
323110	Commercial lithographic printing ..	2	77	22	1 731	74 608	1 139	2 286	42 859	144 851	76 867	222 335	17 268
325	Chemical mfg	—	50	17	4 337	275 070	1 680	3 572	45 530	983 309	204 011	1 166 022	172 412
3254	Pharmaceutical & medicine mfg	—	21	10	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	21	10	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	8	4	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	38	14	3 734	234 788	1 799	2 816	59 985	541 761	286 251	814 517	D
3261	Plastics product mfg	—	33	14	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	27	13	3 617	231 504	1 702	2 638	57 687	535 500	281 911	803 953	D
326199	All other plastics product mfg.....	—	26	13	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN MATEO COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	195	47	3 528	138 678	2 729	5 494	91 723	283 782	123 566	405 896	19 283
3321	Forging & stamping	—	10	4	514	21 169	378	815	14 745	64 153	24 046	88 169	D
33211	Forging & stamping	—	10	4	514	21 169	378	815	14 745	64 153	24 046	88 169	D
3323	Architectural & structural metals mfg	2	38	9	506	17 652	361	725	10 945	35 057	22 590	57 545	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	101	17	g	D	D	D	D	D	D	D	D
33271	Machine shops	2	90	14	1 081	46 505	858	1 717	31 250	81 049	29 609	109 979	6 280
332710	Machine shops	2	90	14	1 081	46 505	858	1 717	31 250	81 049	29 609	109 979	6 280
3328	Coating, engraving, heat treating, & allied activities	4	23	9	598	18 666	486	1 025	13 779	40 346	13 291	53 800	D
33281	Coating, engraving, heat treating, & allied activities	4	23	9	598	18 666	486	1 025	13 779	40 346	13 291	53 800	D
333	Machinery mfg	3	60	8	847	36 402	443	864	13 148	75 685	67 810	142 692	4 474
334	Computer & electronic product mfg	2	103	44	8 231	468 359	3 560	7 299	154 106	1 130 198	752 521	1 884 139	74 288
3342	Communications equipment mfg	5	20	8	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	9	8	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	8	3	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	32	13	1 479	61 976	1 026	2 467	40 402	108 653	73 300	182 102	9 599
33441	Semiconductor & other electronic component mfg	1	32	13	1 479	61 976	1 026	2 467	40 402	108 653	73 300	182 102	9 599
334411	Electron tube mfg	—	3	2	882	34 855	647	1 445	27 249	65 916	30 475	95 314	4 822
3345	Navigational, measuring, medical, & control instruments mfg	—	33	16	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	33	16	h	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	6	5	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	6	4	783	42 870	394	734	20 638	79 165	43 045	120 513	1 812
334516	Analytical laboratory instrument mfg	—	9	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	11	7	567	20 827	408	825	12 064	45 187	31 795	76 035	D
337	Furniture & related product mfg	3	59	8	785	25 327	611	1 199	15 381	57 348	36 146	93 568	3 021
339	Miscellaneous mfg	2	109	22	2 392	95 651	1 308	2 618	34 028	277 464	106 542	379 712	14 346
3391	Medical equipment & supplies mfg	2	63	10	1 635	75 978	844	1 643	23 941	228 826	76 782	303 828	12 919
33911	Medical equipment & supplies mfg	2	63	10	1 635	75 978	844	1 643	23 941	228 826	76 782	303 828	12 919
339112	Surgical & medical instrument mfg	4	16	4	639	34 330	270	542	8 581	77 173	31 591	108 094	3 834
3399	Other miscellaneous mfg ..	2	46	12	757	19 673	464	975	10 087	48 638	29 760	75 884	1 427

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANTA BARBARA COUNTY, CA													
31-33	Manufacturing	1	502	135	14 985	584 227	8 254	14 895	205 117	1 463 893	1 149 280	2 770 418	88 096
311	Food mfg.....	1	35	7	839	14 545	717	1 037	8 853	89 347	67 939	156 893	4 440
3114	Fruit & vegetable preserving & specialty food mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	59	8	513	12 184	385	606	7 899	26 624	18 337	44 979	1 422
3231	Printing & related support activities.....	3	59	8	513	12 184	385	606	7 899	26 624	18 337	44 979	1 422
325	Chemical mfg.....	-	11	6	862	26 311	431	531	6 816	114 426	42 274	155 306	5 233
326	Plastics & rubber products mfg.....	-	16	6	928	26 324	659	1 424	13 587	67 600	53 170	119 182	2 894
3261	Plastics product mfg.....	-	11	4	763	20 403	550	1 279	11 942	55 186	44 056	98 086	D
332	Fabricated metal product mfg.....	2	65	15	815	23 803	660	1 166	15 074	48 572	22 770	71 233	3 716
333	Machinery mfg.....	3	37	12	916	37 303	544	1 082	16 981	74 046	64 552	141 620	5 194
334	Computer & electronic product mfg.....	-	60	28	5 457	285 105	2 056	3 666	64 313	592 277	578 619	1 337 501	42 259
3342	Communications equipment mfg.....	-	14	7	1 691	87 934	717	1 042	17 406	339 404	415 864	754 307	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	7	5	g	D	D	D	D	D	D	D	17 146
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	7	5	g	D	D	D	D	D	D	D	17 146
3344	Semiconductor & other electronic component mfg.....	1	19	7	942	35 292	484	993	16 515	81 015	37 376	118 769	3 613
33441	Semiconductor & other electronic component mfg.....	1	19	7	942	35 292	484	993	16 515	81 015	37 376	118 769	3 613
3345	Navigational, measuring, medical, & control instruments mfg.....	-	19	12	2 641	153 170	735	1 390	26 031	131 515	112 246	412 215	12 024
33451	Navigational, measuring, medical, & control instruments mfg.....	-	19	12	2 641	153 170	735	1 390	26 031	131 515	112 246	412 215	12 024
334511	Search, detection, navigation, & guidance instrument mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	17	5	575	27 324	305	649	9 525	83 734	83 542	165 474	5 384
339	Miscellaneous mfg.....	-	74	15	1 856	66 808	996	2 018	27 084	159 267	66 696	222 208	7 266
3391	Medical equipment & supplies mfg.....	-	30	9	1 328	53 600	718	1 498	21 700	135 029	48 181	179 438	6 240
33911	Medical equipment & supplies mfg.....	-	30	9	1 328	53 600	718	1 498	21 700	135 029	48 181	179 438	6 240
339112	Surgical & medical instrument mfg.....	-	5	3	506	19 290	233	365	6 250	55 812	27 083	79 910	2 893
339113	Surgical appliance & supplies mfg.....	-	8	3	670	27 795	386	963	12 770	66 842	15 028	81 148	D
3399	Other miscellaneous mfg ..	3	44	6	528	13 208	278	520	5 384	24 238	18 515	42 770	1 026
SANTA CLARA COUNTY, CA													
31-33	Manufacturing	-	3 464	1 199	249 947	13 093 977	116 800	240 863	4 149 520	44 011 275	28 486 651	72 528 275	4 246 704

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA CLARA COUNTY, CA—Con.												
	Manufacturing—Con.												
311	Food mfg.....	2	142	39	5 082	136 832	3 952	7 238	93 228	496 315	815 822	1 335 826	21 174
3114	Fruit & vegetable preserving & specialty food mfg.....	—	17	13	2 886	80 979	2 365	4 457	57 370	287 986	408 871	721 127	8 783
31142	Fruit & vegetable canning, pickling, & drying.....	—	13	10	2 621	73 663	2 165	3 984	52 049	240 877	387 123	652 280	7 766
311421	Fruit & vegetable canning.....	—	9	7	1 231	31 152	1 101	1 898	25 272	164 358	170 982	335 224	3 485
311423	Dried & dehydrated food mfg.....	1	4	3	1 390	42 511	1 064	2 086	26 777	76 519	216 141	317 056	4 281
3115	Dairy product mfg.....	5	8	4	650	18 353	532	1 031	14 508	83 585	246 938	329 815	6 598
31151	Dairy product (except frozen) mfg.....	6	5	3	591	16 762	493	973	13 461	77 471	233 482	310 305	D
311513	Cheese mfg.....	7	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	3	76	10	665	12 833	402	667	6 615	33 003	15 453	48 524	1 313
31181	Bread & bakery product mfg.....	2	71	10	641	12 401	381	639	6 294	31 713	14 355	46 121	1 175
321	Wood product mfg.....	6	26	9	677	18 794	520	983	11 408	39 230	30 310	69 208	2 308
3219	Other wood product mfg...	6	23	8	651	18 164	499	950	10 920	37 035	28 113	64 759	D
322	Paper mfg.....	1	28	19	1 625	63 241	1 236	2 496	42 476	168 106	241 587	406 700	11 897
3222	Converted paper product mfg.....	1	26	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	15	14	1 138	45 340	857	1 732	30 522	104 579	179 402	281 061	9 278
322211	Corrugated & solid fiber box mfg.....	1	10	10	865	35 666	635	1 266	23 517	78 857	142 272	219 866	9 108
323	Printing & related support activities.....	3	344	58	5 488	188 576	3 997	7 459	117 067	394 647	214 710	610 556	40 832
3231	Printing & related support activities.....	3	344	58	5 488	188 576	3 997	7 459	117 067	394 647	214 710	610 556	40 832
32311	Printing.....	3	302	50	4 889	170 458	3 586	6 698	106 636	362 350	207 387	570 914	39 044
323110	Commercial lithographic printing..	3	135	24	1 754	58 823	1 301	2 462	36 002	117 940	67 989	185 349	15 958
323111	Commercial gravure printing.....	5	4	2	f	D	D	D	D	D	D	D	D
323114	Quick printing.....	2	81	7	580	19 067	395	667	10 912	37 917	21 214	59 157	2 356
32312	Support activities for printing.....	3	42	8	599	18 118	411	761	10 431	32 297	7 323	39 642	1 788
325	Chemical mfg.....	—	58	23	2 164	136 193	906	1 775	46 689	557 023	173 040	732 250	41 449
3254	Pharmaceutical & medicine mfg.....	—	20	11	1 543	114 453	508	1 025	35 790	351 035	107 137	459 262	29 858
32541	Pharmaceutical & medicine mfg.....	—	20	11	1 543	114 453	508	1 025	35 790	351 035	107 137	459 262	29 858
325413	In-vitro diagnostic substance mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	6	82	34	3 380	117 930	2 491	4 989	72 884	281 246	236 912	515 165	34 816
3261	Plastics product mfg.....	6	67	30	3 028	108 292	2 193	4 441	65 991	263 106	214 578	474 643	33 469
32619	Other plastics product mfg.....	6	50	24	2 666	97 161	1 908	3 877	58 000	239 156	171 564	408 104	28 574
326199	All other plastics product mfg.....	6	48	23	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	—	73	31	2 422	90 425	1 839	3 905	65 697	306 916	201 706	511 615	25 579
3273	Cement & concrete product mfg.....	—	28	17	1 039	42 243	821	1 809	30 186	167 181	129 083	295 778	14 328
3279	Other nonmetallic mineral product mfg.....	1	10	5	834	29 388	601	1 354	23 129	104 193	51 560	157 985	8 895
32799	All other nonmetallic mineral product mfg...	—	8	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	764	220	16 647	593 639	13 176	27 186	397 402	1 192 471	656 083	1 846 767	82 791
3321	Forging & stamping.....	3	21	11	696	24 779	551	1 190	15 806	44 077	43 104	88 101	3 878
33211	Forging & stamping.....	3	21	11	696	24 779	551	1 190	15 806	44 077	43 104	88 101	3 878
332116	Metal stamping.....	3	18	11	670	23 868	528	1 149	15 153	42 299	41 384	84 593	D
3323	Architectural & structural metals mfg.....	1	120	56	5 159	181 048	3 977	8 457	116 801	340 077	278 142	617 868	20 716
33232	Ornamental & architectural metal products mfg.....	1	101	51	4 839	169 429	3 728	7 955	108 916	312 953	261 872	574 493	19 892
332322	Sheet metal work mfg..	1	84	48	4 648	163 568	3 574	7 675	105 541	300 975	253 329	554 285	19 623

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA CLARA COUNTY, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	474	96	7 006	266 624	5 678	11 498	185 542	538 520	210 207	744 429	38 923
33271	Machine shops	1	441	81	6 186	233 575	5 018	10 200	160 656	471 958	182 394	652 675	33 969
332710	Machine shops	1	441	81	6 186	233 575	5 018	10 200	160 656	471 958	182 394	652 675	33 969
33272	Turned product & screw, nut, & bolt mfg	1	33	15	820	33 049	660	1 298	24 886	66 562	27 813	91 754	4 954
332721	Precision turned product mfg	1	31	14	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	1	86	40	2 769	84 515	2 182	4 577	56 999	170 962	69 029	242 197	10 465
33281	Coating, engraving, heat treating, & allied activities	1	86	40	2 769	84 515	2 182	4 577	56 999	170 962	69 029	242 197	10 465
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	5	28	8	574	17 438	456	867	11 817	35 447	12 964	48 363	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	54	30	2 126	64 129	1 675	3 596	43 513	128 914	54 472	185 642	8 102
333	Machinery mfg	1	245	82	13 844	658 338	7 577	15 733	247 946	1 702 686	2 191 327	3 872 043	341 473
3332	Industrial machinery mfg ..	1	97	46	9 928	466 872	5 663	12 032	178 588	1 346 807	1 908 640	3 221 933	321 415
33329	Other industrial machinery mfg	1	95	44	i	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	1	58	29	8 107	401 700	4 411	9 081	142 610	1 210 942	1 782 198	2 959 883	311 088
333298	All other industrial machinery mfg	6	26	14	1 571	56 046	1 103	2 661	31 325	124 633	106 542	230 541	8 797
3333	Commercial & service industry machinery mfg ..	3	52	17	1 282	60 373	704	1 455	24 085	104 950	106 818	216 090	8 310
33331	Commercial & service industry machinery mfg	3	52	17	1 282	60 373	704	1 455	24 085	104 950	106 818	216 090	8 310
3335	Metalworking machinery mfg	2	55	11	714	26 451	544	1 099	18 391	49 297	15 482	63 882	D
33351	Metalworking machinery mfg	2	55	11	714	26 451	544	1 099	18 391	49 297	15 482	63 882	D
3336	Engine, turbine, & power transmission equipment mfg	1	2	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	1	2	2	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	33	5	793	35 261	363	648	11 966	63 770	63 351	131 264	D
33399	All other general-purpose machinery mfg	1	26	3	604	27 954	275	519	8 926	41 604	45 234	93 039	4 042
334	Computer & electronic product mfg	—	1 068	531	166 578	9 490 567	69 308	145 766	2 691 273	33 955 967	21 263 192	55 077 331	3 215 033
3341	Computer & peripheral equipment mfg	—	165	48	32 876	2 041 315	11 001	26 701	531 340	8 537 067	7 831 692	16 421 348	731 586
33411	Computer & peripheral equipment mfg	—	165	48	32 876	2 041 315	11 001	26 701	531 340	8 537 067	7 831 692	16 421 348	731 586
334111	Electronic computer mfg	—	50	16	15 873	1 127 754	2 650	7 670	154 242	5 874 916	3 510 709	9 417 090	231 436
334112	Computer storage device mfg	—	31	11	9 923	433 380	5 244	11 775	174 036	1 602 958	2 737 907	4 350 215	398 641
334113	Computer terminal mfg	—	9	4	542	38 009	222	483	7 121	103 386	169 957	270 677	3 622
334119	Other computer peripheral equipment mfg	—	75	17	6 538	442 172	2 885	6 773	195 941	955 807	1 413 119	2 383 366	97 887
3342	Communications equipment mfg	1	137	90	36 058	1 971 548	11 286	21 219	470 422	9 833 314	4 723 594	14 466 612	338 293
33421	Telephone apparatus mfg	1	49	37	23 234	1 325 520	4 796	9 679	230 356	7 473 630	3 786 006	11 157 542	226 227
334210	Telephone apparatus mfg	1	49	37	23 234	1 325 520	4 796	9 679	230 356	7 473 630	3 786 006	11 157 542	226 227
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	82	51	12 735	642 297	6 444	11 467	238 875	2 348 840	929 918	3 290 476	111 739
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	82	51	12 735	642 297	6 444	11 467	238 875	2 348 840	929 918	3 290 476	111 739

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA CLARA COUNTY, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3343	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920
33431	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920
334310	Audio & video equipment mfg	2	11	7	631	23 747	343	740	8 739	41 471	41 943	83 236	1 920
3344	Semiconductor & other electronic component mfg	—	510	256	64 795	3 626 229	33 650	71 050	1 164 070	11 080 652	6 353 092	17 430 347	1 754 256
33441	Semiconductor & other electronic component mfg	—	510	256	64 795	3 626 229	33 650	71 050	1 164 070	11 080 652	6 353 092	17 430 347	1 754 256
334411	Electron tube mfg	—	9	5	842	42 204	589	1 007	22 099	90 687	55 895	145 587	3 837
334412	Bare printed circuit board mfg	—	99	48	7 466	322 272	4 691	9 417	132 399	1 040 373	662 557	1 729 701	110 412
334413	Semiconductor & related device mfg ...	—	215	110	35 975	2 507 377	15 476	31 485	657 198	7 750 606	3 860 210	11 547 131	1 518 640
334418	Printed circuit assembly (electronic assembly) mfg	—	65	52	14 447	486 961	9 335	21 529	244 773	1 737 448	1 592 509	3 363 086	87 751
334419	Other electronic component mfg	1	93	29	5 179	234 620	2 956	6 338	91 299	393 123	147 914	543 199	30 832
3345	Navigational, measuring, medical, & control instruments mfg	—	202	112	28 054	1 644 857	10 093	20 895	451 553	4 074 921	2 023 164	5 998 425	238 164
33451	Navigational, measuring, medical, & control instruments mfg	—	202	112	28 054	1 644 857	10 093	20 895	451 553	4 074 921	2 023 164	5 998 425	238 164
334510	Electromedical & electrotherapeutic apparatus mfg	—	17	9	3 061	189 336	1 389	2 390	63 716	603 767	260 867	837 835	21 609
334511	Search, detection, navigation, & guidance instrument mfg	—	15	7	3 416	216 406	1 679	3 394	85 803	438 223	123 173	562 632	44 968
334513	Industrial process control instrument mfg	1	25	16	2 704	103 771	856	1 731	31 913	191 139	108 495	305 943	12 940
334515	Electricity measuring & testing instrument mfg	—	76	42	11 399	711 813	3 840	8 719	172 633	1 664 218	726 417	2 336 304	107 271
334516	Analytical laboratory instrument mfg	—	31	16	3 184	190 871	1 032	2 058	43 275	615 294	308 027	916 313	18 825
334517	Irradiation apparatus mfg	—	9	6	2 777	150 676	837	1 643	38 359	338 662	392 495	718 626	24 764
334519	Other measuring & controlling device mfg	—	23	13	1 373	76 464	393	858	14 642	213 908	95 110	302 248	7 098
3346	Mfg & reproducing magnetic & optical media .	2	43	18	4 164	182 871	2 935	5 161	65 149	388 542	289 707	677 363	150 814
33461	Mfg & reproducing magnetic & optical media	2	43	18	4 164	182 871	2 935	5 161	65 149	388 542	289 707	677 363	150 814
334613	Magnetic & optical recording media mfg .	3	29	12	3 839	173 178	2 718	4 755	58 852	358 465	273 085	630 685	145 290
335	Electrical equipment, appliance, & component mfg	—	85	37	4 343	204 409	2 454	4 751	84 507	434 857	308 114	722 882	26 465
3353	Electrical equipment mfg ..	1	31	9	922	42 032	555	948	20 644	94 855	58 123	138 192	4 336
33531	Electrical equipment mfg	1	31	9	922	42 032	555	948	20 644	94 855	58 123	138 192	4 336
3359	Other electrical equipment & component mfg	—	50	27	3 302	158 735	1 854	3 708	62 736	332 843	246 974	574 539	22 060
33592	Communication & energy wire & cable mfg	—	7	7	781	30 164	515	926	10 103	60 264	58 687	121 731	4 341
335929	Other communication & energy wire mfg ...	—	7	7	781	30 164	515	926	10 103	60 264	58 687	121 731	4 341
33599	All other electrical equipment & component mfg	—	34	18	2 396	123 448	1 243	2 582	49 900	262 112	182 641	436 637	16 926
335999	All other miscellaneous electrical equipment & component mfg	—	33	18	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	62	20	16 824	931 621	3 586	7 495	116 101	3 066 350	1 528 722	4 782 764	D
3363	Motor vehicle parts mfg ...	8	38	11	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	8	27	11	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	8	26	11	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SANTA CLARA COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	—	7	3	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	7	3	j	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	—	1	1	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	1	7	3	f	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	120	21	1 742	50 813	1 241	2 336	28 973	103 958	80 832	184 971	3 991
3371	Household & institutional furniture & kitchen cabinet mfg	5	90	17	1 087	29 392	839	1 612	18 986	57 051	41 658	99 491	2 207
33712	Household & institutional furniture mfg	6	42	11	657	16 665	521	953	10 508	34 657	27 435	62 244	1 348
339	Miscellaneous mfg	1	270	54	7 668	368 170	3 576	7 000	111 271	1 218 903	444 035	1 670 041	71 321
3391	Medical equipment & supplies mfg	1	181	41	6 412	329 113	2 752	5 400	93 592	1 143 628	392 850	1 535 607	67 413
33911	Medical equipment & supplies mfg	1	181	41	6 412	329 113	2 752	5 400	93 592	1 143 628	392 850	1 535 607	67 413
339111	Laboratory apparatus & furniture mfg	—	10	6	692	23 842	314	603	11 966	62 728	44 364	117 357	1 986
339112	Surgical & medical instrument mfg	—	51	29	5 021	282 093	1 996	4 020	70 502	1 022 915	316 380	1 325 900	63 714
3399	Other miscellaneous mfg ..	5	89	13	1 256	39 057	824	1 600	17 679	75 275	51 185	134 434	3 908
33999	All other miscellaneous mfg	7	29	7	777	22 843	523	1 008	11 325	49 893	35 943	86 679	2 738
339999	All other miscellaneous mfg	7	22	5	695	19 956	471	906	10 243	44 940	31 894	77 638	2 479
	SANTA CRUZ COUNTY, CA												
31-33	Manufacturing	1	387	89	10 011	315 177	6 213	11 946	152 898	1 139 974	956 809	2 134 950	82 832
311	Food mfg	—	51	18	2 272	59 473	1 792	3 318	42 583	195 543	180 219	393 398	15 771
3114	Fruit & vegetable preserving & specialty food mfg	—	10	7	g	D	D	D	D	D	D	D	6 512
31141	Frozen food mfg	—	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
311411	Frozen fruit, juice, & vegetable mfg	—	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
333	Machinery mfg	—	16	5	1 198	41 043	613	1 284	10 623	139 020	142 126	283 867	5 840
3339	Other general-purpose machinery mfg	—	6	4	1 094	38 406	534	1 176	9 048	134 869	139 660	277 209	D
33399	All other general-purpose machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	52	23	3 124	106 928	1 464	2 855	38 943	532 575	378 408	928 901	34 884
3342	Communications equipment mfg	7	6	3	673	22 776	166	333	3 895	92 894	61 233	153 976	D
33421	Telephone apparatus mfg	7	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	7	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	19	9	1 697	52 745	907	1 581	19 836	363 766	248 830	627 376	26 080
33441	Semiconductor & other electronic component mfg	—	19	9	1 697	52 745	907	1 581	19 836	363 766	248 830	627 376	26 080
334413	Semiconductor & related device mfg ...	—	5	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHASTA COUNTY, CA													
31-33	Manufacturing	1	177	32	3 526	118 739	2 549	4 955	79 515	261 675	375 777	635 027	20 828
321	Wood product mfg	1	23	11	1 066	33 992	891	1 952	26 816	97 394	195 017	290 602	7 589
3211	Sawmills & wood preservation	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
32111	Sawmills & wood preservation	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
321113	Sawmills	1	9	6	697	27 440	572	1 286	21 776	82 312	158 767	238 459	6 921
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
SISKIYOU COUNTY, CA													
31-33	Manufacturing	4	41	10	1 016	30 118	889	1 536	22 292	78 122	128 134	207 323	5 251
321	Wood product mfg	5	13	7	704	21 809	636	1 320	18 399	60 545	113 078	175 606	4 392
SOLANO COUNTY, CA													
31-33	Manufacturing	-	277	83	9 175	331 028	6 822	12 947	206 454	1 224 024	2 266 052	3 496 389	102 892
311	Food mfg	1	30	11	1 606	44 037	1 222	2 193	29 967	170 338	256 843	427 883	14 073
3114	Fruit & vegetable preserving & specialty food mfg	5	6	4	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	6	3	3	f	D	D	D	D	D	D	D	D
311422	Specialty canning.....	9	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	16	6	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	16	11	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	12	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	21	7	533	15 726	415	794	10 440	47 823	41 079	88 485	D
332	Fabricated metal product mfg	-	44	13	1 330	56 225	1 036	1 977	41 324	146 248	189 286	339 658	9 476
3324	Boiler, tank, & shipping container mfg	-	5	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	25	9	f	D	D	D	D	D	D	D	4 737
336	Transportation equipment mfg	-	6	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	24	8	559	16 679	439	909	10 844	38 176	34 317	72 591	2 052
SONOMA COUNTY, CA													
31-33	Manufacturing	1	793	218	24 209	968 796	15 754	29 805	464 947	2 883 722	2 393 144	5 119 819	239 962
311	Food mfg	-	72	28	2 215	51 746	1 485	2 724	27 010	149 453	556 599	705 146	16 922
3114	Fruit & vegetable preserving & specialty food mfg	-	8	4	573	12 876	428	833	7 158	29 904	40 768	70 091	3 849
3118	Bakeries & tortilla mfg	1	22	9	610	10 526	461	683	6 284	24 433	13 714	38 185	1 376
31181	Bread & bakery product mfg	1	20	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	13	8	527	8 663	399	579	5 157	21 491	7 461	28 969	883
312	Beverage & tobacco product mfg	2	90	35	2 934	111 226	1 449	2 652	41 335	564 446	580 843	1 066 339	78 041
3121	Beverage mfg	2	90	35	2 934	111 226	1 449	2 652	41 335	564 446	580 843	1 066 339	78 041
31213	Wineries	2	84	34	2 849	109 341	1 418	2 597	40 401	556 691	575 019	1 052 772	77 625
312130	Wineries	2	84	34	2 849	109 341	1 418	2 597	40 401	556 691	575 019	1 052 772	77 625
321	Wood product mfg	-	43	14	1 057	25 494	801	1 541	16 265	62 877	76 640	139 824	2 599
3219	Other wood product mfg ...	1	32	9	523	12 152	419	749	7 508	34 585	33 840	68 750	1 589

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SONOMA COUNTY, CA —Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	91	14	971	33 322	695	1 360	19 250	71 974	42 708	114 718	5 607
3231	Printing & related support activities.....	2	91	14	971	33 322	695	1 360	19 250	71 974	42 708	114 718	5 607
32311	Printing	2	81	14	913	31 895	653	1 289	18 296	68 895	41 848	110 810	5 464
326	Plastics & rubber products mfg	1	23	10	606	17 860	473	934	10 164	45 871	21 184	67 056	3 927
3261	Plastics product mfg	1	23	10	606	17 860	473	934	10 164	45 871	21 184	67 056	3 927
32619	Other plastics product mfg	—	18	9	556	16 682	436	876	9 476	42 735	17 995	60 740	3 636
326199	All other plastics product mfg	—	18	9	556	16 682	436	876	9 476	42 735	17 995	60 740	3 636
327	Nonmetallic mineral product mfg	5	43	9	578	16 802	455	831	11 720	38 436	42 205	81 557	3 109
332	Fabricated metal product mfg	1	77	13	1 257	38 111	1 007	1 917	25 782	76 131	59 428	135 678	7 380
333	Machinery mfg	1	48	22	2 660	118 757	1 640	3 263	50 501	285 021	147 871	425 647	23 629
3332	Industrial machinery mfg ..	4	14	8	546	24 255	269	525	8 339	64 211	28 825	92 136	3 072
3333	Commercial & service industry machinery mfg ..	—	9	6	1 364	64 544	859	1 788	26 916	154 964	68 499	219 949	14 532
33331	Commercial & service industry machinery mfg	—	9	6	1 364	64 544	859	1 788	26 916	154 964	68 499	219 949	14 532
333314	Optical instrument & lens mfg	—	4	3	1 101	52 977	729	1 518	22 404	125 669	48 692	172 979	D
3339	Other general-purpose machinery mfg	—	15	6	503	22 224	336	604	10 862	57 202	40 448	94 848	5 693
334	Computer & electronic product mfg	—	47	21	6 665	380 186	4 264	7 997	170 964	1 029 166	590 075	1 580 611	62 302
3342	Communications equipment mfg	—	11	6	1 044	103 287	266	584	8 422	178 011	153 563	308 628	20 901
33421	Telephone apparatus mfg	—	3	3	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	17	5	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	17	5	h	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	21	8	645	23 960	396	768	8 593	61 938	44 475	107 067	2 434
336	Transportation equipment mfg	1	24	5	587	18 546	430	954	10 554	40 786	35 222	76 045	D
339	Miscellaneous mfg	—	89	18	2 519	91 158	1 613	3 087	49 820	355 397	106 425	431 141	22 361
3391	Medical equipment & supplies mfg	—	36	5	1 662	68 400	1 031	2 058	37 107	304 661	69 721	344 317	19 142
33911	Medical equipment & supplies mfg	—	36	5	1 662	68 400	1 031	2 058	37 107	304 661	69 721	344 317	19 142
339115	Ophthalmic goods mfg	—	3	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	53	13	857	22 758	582	1 029	12 713	50 736	36 704	86 824	3 219
STANISLAUS COUNTY, CA													
31-33	Manufacturing	1	435	163	25 056	823 113	18 871	38 437	524 340	3 081 137	3 829 750	6 886 621	170 399
311	Food mfg	1	74	46	11 227	346 263	9 449	19 779	257 424	1 661 747	2 009 195	3 682 675	93 364
3113	Sugar & confectionery product mfg	3	3	2	g	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	3	2	2	g	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	3	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	STANISLAUS COUNTY, CA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3114	Fruit & vegetable preserving & specialty food mfg	—	13	11	4 882	157 948	4 312	8 808	121 798	659 896	542 032	1 214 057	25 948
31141	Frozen food mfg	—	2	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	11	10	h	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	6	6	3 240	110 108	2 951	6 450	92 815	566 792	405 924	978 982	22 510
311423	Dried & dehydrated food mfg	—	3	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	15	10	862	32 545	682	1 506	23 842	88 570	422 296	508 319	8 437
31151	Dairy product (except frozen) mfg	1	12	9	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	12	9	2 589	54 614	2 310	4 764	45 174	319 533	241 935	562 242	6 593
31161	Animal slaughtering & processing	1	12	9	2 589	54 614	2 310	4 764	45 174	319 533	241 935	562 242	6 593
311615	Poultry processing	—	4	4	2 293	45 678	2 074	4 228	39 294	299 308	177 489	477 501	5 646
3119	Other food mfg	—	9	5	1 065	32 452	776	1 696	20 515	198 412	185 027	391 815	18 857
31191	Snack food mfg	—	4	4	1 008	31 181	734	1 629	19 724	193 592	178 600	380 568	D
311919	Other snack food mfg	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	5	5	h	D	D	D	D	D	D	D	3 023
3121	Beverage mfg	—	5	5	h	D	D	D	D	D	D	D	3 023
31213	Wineries	—	2	2	h	D	D	D	D	D	D	D	D
312130	Wineries	—	2	2	h	D	D	D	D	D	D	D	D
321	Wood product mfg	3	29	16	1 299	30 283	1 081	2 005	21 423	87 938	133 386	220 478	4 517
3219	Other wood product mfg	3	21	12	1 062	24 809	896	1 647	17 751	74 084	108 806	181 999	3 549
32199	All other wood product mfg	4	7	4	699	17 627	583	1 068	12 753	46 791	74 860	121 329	2 738
322	Paper mfg	—	8	8	1 324	57 691	1 085	2 396	44 788	257 886	306 812	574 333	17 847
3222	Converted paper product mfg	—	8	8	1 324	57 691	1 085	2 396	44 788	257 886	306 812	574 333	17 847
32221	Paperboard container mfg	—	5	5	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	4	735	34 546	568	1 383	25 837	56 370	152 766	212 318	D
326	Plastics & rubber products mfg	2	20	7	502	13 551	379	815	8 818	55 298	41 543	97 184	5 297
327	Nonmetallic mineral product mfg	—	17	5	1 103	38 078	926	1 967	31 447	75 471	88 509	161 987	5 478
3272	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	2	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	86	29	2 485	84 604	1 909	3 628	59 136	181 405	319 600	499 393	15 025
3323	Architectural & structural metals mfg	—	26	15	958	29 082	675	1 277	17 079	61 018	72 290	133 138	2 437
33232	Ornamental & architectural metal products mfg	—	18	11	590	17 750	416	858	10 514	32 250	34 928	66 750	1 914
3324	Boiler, tank, & shipping container mfg	—	8	6	854	33 718	705	1 385	28 727	70 188	215 571	284 412	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	7	6	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	6	6	f	D	D	D	D	D	D	D	9 204
333	Machinery mfg	2	46	13	1 022	30 716	672	1 108	17 713	65 483	80 000	144 404	5 684
336	Transportation equipment mfg	1	10	8	840	24 491	549	1 260	13 745	57 480	45 145	101 709	4 912
3363	Motor vehicle parts mfg	1	4	3	512	16 185	282	819	8 174	41 028	23 492	64 042	D
337	Furniture & related product mfg	2	26	6	533	11 498	426	841	7 796	22 336	18 653	40 710	1 960

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUTTER COUNTY, CA													
31-33	Manufacturing	1	70	16	1 589	49 314	1 245	2 620	33 018	161 127	201 007	354 003	10 782
311	Food mfg.....	1	13	6	701	26 588	565	1 435	17 583	120 147	137 044	247 826	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	8	6	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	1	8	6	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	1	6	5	f	D	D	D	D	D	D	D	D
TEHAMA COUNTY, CA													
31-33	Manufacturing	3	48	15	2 228	62 900	1 965	4 147	53 524	180 683	281 413	455 221	8 975
321	Wood product mfg.....	-	10	7	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg....	-	8	6	g	D	D	D	D	D	D	D	D
32191	Millwork.....	-	5	5	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)....	-	3	3	f	D	D	D	D	D	D	D	D
TULARE COUNTY, CA													
31-33	Manufacturing	1	282	101	11 439	314 453	8 825	18 107	214 641	1 109 550	2 094 858	3 167 304	94 983
311	Food mfg.....	-	47	26	3 979	113 698	3 157	6 914	83 453	506 388	1 501 136	1 980 227	53 109
3114	Fruit & vegetable preserving & specialty food mfg.....	3	10	7	1 695	30 574	1 277	2 633	21 076	160 388	126 695	273 802	7 304
31141	Frozen food mfg.....	8	5	4	1 026	19 652	830	1 837	12 679	74 687	51 254	125 879	5 209
311412	Frozen specialty food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	5	3	669	10 922	447	796	8 397	85 701	75 441	147 923	2 095
311421	Fruit & vegetable canning.....	-	3	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	7	7	1 309	50 142	1 117	2 685	40 965	183 733	1 006 294	1 178 085	38 501
31151	Dairy product (except frozen) mfg.....	-	6	6	g	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	6	6	531	15 553	474	992	12 717	59 266	67 445	122 326	4 569
321	Wood product mfg.....	-	14	8	792	20 606	613	1 169	12 164	49 803	92 660	143 091	546
323	Printing & related support activities.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067
3231	Printing & related support activities.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067
32311	Printing.....	3	26	9	1 536	42 935	1 187	2 346	31 712	175 878	80 375	259 466	7 067
323117	Book printing.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	19	11	1 036	25 107	896	1 764	20 086	76 013	101 742	180 670	16 496
3261	Plastics product mfg.....	-	17	11	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	8	5	603	14 149	542	1 001	11 234	43 664	34 867	77 939	8 358
326199	All other plastics product mfg.....	-	8	5	603	14 149	542	1 001	11 234	43 664	34 867	77 939	8 358
332	Fabricated metal product mfg.....	1	45	13	1 295	37 687	866	1 810	21 176	80 794	85 013	163 379	3 167
3323	Architectural & structural metals mfg.....	-	11	6	627	18 870	409	871	9 532	36 040	53 595	89 130	480
333	Machinery mfg.....	2	37	10	535	16 951	330	661	8 575	47 132	30 379	62 608	1 989
TUOLUMNE COUNTY, CA													
31-33	Manufacturing	2	65	11	880	22 472	665	1 317	15 257	75 629	81 752	155 158	7 196

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VENTURA COUNTY, CA												
31-33	Manufacturing	1	1 008	321	33 562	1 136 298	22 137	45 077	555 545	3 352 437	2 860 860	6 163 377	232 091
311	Food mfg.....	5	61	20	1 357	29 206	1 151	1 857	22 092	104 347	112 164	216 465	11 519
3114	Fruit & vegetable preserving & specialty food mfg.....	6	10	7	573	15 920	477	890	11 826	63 049	77 962	139 969	4 521
315	Apparel mfg.....	-	20	5	684	12 517	598	1 277	8 179	33 873	39 972	73 012	D
3152	Cut & sew apparel mfg....	-	17	5	681	12 472	595	1 273	8 144	33 768	39 903	72 839	D
322	Paper mfg.....	-	10	6	1 082	44 121	873	1 817	33 942	247 278	350 696	590 336	19 812
3222	Converted paper product mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	89	16	1 057	32 470	753	1 421	19 501	87 690	47 390	134 568	8 731
3231	Printing & related support activities.....	-	89	16	1 057	32 470	753	1 421	19 501	87 690	47 390	134 568	8 731
32311	Printing.....	-	83	16	1 031	31 562	745	1 410	19 332	85 915	46 979	132 380	8 712
325	Chemical mfg.....	2	33	14	1 607	67 392	560	1 099	19 744	165 473	87 211	247 132	18 536
3254	Pharmaceutical & medicine mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg..	1	12	4	636	22 517	179	280	3 999	72 085	34 063	105 208	5 411
32562	Toilet preparation mfg...	1	9	4	630	22 385	174	274	3 924	71 560	33 615	104 226	5 384
325620	Toilet preparation mfg.	1	9	4	630	22 385	174	274	3 924	71 560	33 615	104 226	5 384
326	Plastics & rubber products mfg.....	1	55	30	2 529	74 519	1 961	4 078	40 467	180 618	103 897	282 457	7 720
3261	Plastics product mfg.....	1	52	29	g	D	D	D	D	D	D	D	7 631
32619	Other plastics product mfg.....	1	41	24	2 103	63 532	1 642	3 324	34 445	152 729	86 389	237 299	6 718
326199	All other plastics product mfg.....	-	39	23	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	28	15	1 124	31 866	831	1 768	20 467	74 852	78 907	155 439	5 343
3279	Other nonmetallic mineral product mfg.....	-	9	7	f	D	D	D	D	D	D	D	1 844
332	Fabricated metal product mfg.....	1	189	48	3 479	122 981	2 379	4 965	64 080	296 307	161 471	458 872	17 530
3322	Cutlery & handtool mfg....	-	13	6	607	23 740	268	575	7 274	55 369	28 587	86 857	4 648
33221	Cutlery & handtool mfg..	-	13	6	607	23 740	268	575	7 274	55 369	28 587	86 857	4 648
3323	Architectural & structural metals mfg.....	-	28	15	704	21 859	505	1 125	12 446	44 676	39 748	84 770	4 395
33232	Ornamental & architectural metal products mfg.....	-	20	11	585	18 177	430	983	10 644	38 169	30 276	68 696	4 113
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	100	10	952	34 123	731	1 441	19 951	66 789	23 971	90 571	4 943
33271	Machine shops.....	3	94	9	772	24 365	608	1 139	16 716	43 223	19 087	62 564	4 740
332710	Machine shops.....	3	94	9	772	24 365	608	1 139	16 716	43 223	19 087	62 564	4 740
3329	Other fabricated metal product mfg.....	-	17	6	564	20 141	409	874	11 652	59 375	16 977	75 901	1 214
333	Machinery mfg.....	1	95	31	3 704	138 777	2 279	4 575	64 752	381 706	337 698	722 764	19 887
3332	Industrial machinery mfg..	-	20	6	815	27 361	473	957	11 122	54 464	51 204	108 655	5 992
33329	Other industrial machinery mfg.....	-	17	6	788	26 508	456	920	10 650	52 908	49 203	104 886	5 923
3335	Metalworking machinery mfg.....	-	21	5	798	37 359	593	1 231	21 047	143 625	135 225	279 299	1 469
33351	Metalworking machinery mfg.....	-	21	5	798	37 359	593	1 231	21 047	143 625	135 225	279 299	1 469
333512	Machine tool (metal cutting types) mfg....	-	3	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	22	10	834	29 233	486	866	12 318	73 409	49 133	122 957	3 731
33399	All other general-purpose machinery mfg.....	-	17	7	661	23 595	371	669	9 650	60 773	36 647	98 083	3 382
333999	All other miscellaneous general-purpose machinery mfg.....	-	12	6	593	20 362	323	584	8 074	55 463	32 443	87 421	3 274

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VENTURA COUNTY, CA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	—	154	68	10 583	395 195	6 479	13 887	171 572	1 239 745	1 108 679	2 314 221	101 123
3341	Computer & peripheral equipment mfg.....	4	26	9	1 482	52 940	764	1 496	18 699	100 045	139 781	233 631	11 610
33411	Computer & peripheral equipment mfg.....	4	26	9	1 482	52 940	764	1 496	18 699	100 045	139 781	233 631	11 610
334119	Other computer peripheral equipment mfg.....	3	18	7	1 037	38 933	415	643	10 168	68 935	105 327	172 246	9 584
3342	Communications equipment mfg.....	—	27	15	1 476	69 160	639	1 247	19 455	106 485	117 638	226 363	8 977
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	17	11	1 029	41 168	513	984	14 407	60 111	56 585	118 170	5 292
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	17	11	1 029	41 168	513	984	14 407	60 111	56 585	118 170	5 292
3344	Semiconductor & other electronic component mfg.....	1	63	27	4 280	159 924	2 485	5 329	63 892	387 247	316 294	709 441	53 386
33441	Semiconductor & other electronic component mfg.....	1	63	27	4 280	159 924	2 485	5 329	63 892	387 247	316 294	709 441	53 386
334413	Semiconductor & related device mfg...	—	16	7	1 274	66 831	640	1 598	26 240	126 923	75 871	206 170	41 800
334419	Other electronic component mfg.....	—	26	9	1 858	56 741	1 034	2 156	17 650	167 948	183 904	350 536	6 559
3345	Navigational, measuring, medical, & control instruments mfg.....	—	28	11	1 213	54 747	668	1 497	20 922	322 197	337 431	625 434	8 002
33451	Navigational, measuring, medical, & control instruments mfg.....	—	28	11	1 213	54 747	668	1 497	20 922	322 197	337 431	625 434	8 002
334519	Other measuring & controlling device mfg.....	—	8	4	530	24 656	255	607	7 938	51 898	37 654	91 061	2 054
3346	Mfg & reproducing magnetic & optical media.	—	4	4	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	—	4	4	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	—	3	3	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg.	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	2	29	15	1 445	49 939	859	1 904	18 983	123 955	105 598	225 673	3 415
3351	Electric lighting equipment mfg.....	—	9	5	659	18 299	403	883	6 355	55 780	46 655	100 029	478
33512	Lighting fixture mfg.....	—	8	5	f	D	D	D	D	D	D	D	478
335129	Other lighting equipment mfg.....	—	4	3	529	16 047	291	662	4 779	50 328	44 447	92 764	D
336	Transportation equipment mfg.....	1	45	15	1 462	51 611	895	1 781	26 263	166 452	174 435	337 446	D
3363	Motor vehicle parts mfg...	4	21	8	687	21 501	420	904	11 799	56 631	38 480	93 923	D
3364	Aerospace product & parts mfg.....	—	16	5	687	28 251	398	741	13 052	106 631	132 822	237 186	D
33641	Aerospace product & parts mfg.....	—	16	5	687	28 251	398	741	13 052	106 631	132 822	237 186	D
337	Furniture & related product mfg.....	1	34	6	613	12 315	471	877	7 783	28 358	20 799	48 814	553
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	28	5	564	10 724	431	798	6 800	25 755	19 090	44 500	478
339	Miscellaneous mfg.....	1	115	22	2 103	56 764	1 438	2 666	26 149	186 133	89 652	277 902	7 510
3391	Medical equipment & supplies mfg.....	1	59	12	941	31 547	553	954	11 683	108 033	41 522	151 706	3 915
33911	Medical equipment & supplies mfg.....	1	59	12	941	31 547	553	954	11 683	108 033	41 522	151 706	3 915
3399	Other miscellaneous mfg..	1	56	10	1 162	25 217	885	1 712	14 466	78 100	48 130	126 196	3 595

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YOLO COUNTY, CA													
31-33	Manufacturing	1	175	53	6 178	211 977	4 214	8 527	116 428	632 000	906 159	1 514 918	52 007
311	Food mfg	1	21	13	1 712	57 573	1 423	2 877	42 288	141 330	437 640	601 521	23 938
3112	Grain & oilseed milling	-	5	5	599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
31121	Flour milling & malt mfg .	-	5	5	599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
311212	Rice milling	-	5	5	599	23 382	460	979	16 645	99 240	235 883	346 958	10 774
321	Wood product mfg	-	16	5	838	23 800	717	1 391	16 148	59 556	61 486	120 941	896
3219	Other wood product mfg ...	-	12	4	789	22 418	678	1 303	15 079	54 647	58 883	113 423	549
32199	All other wood product mfg	-	6	3	703	20 299	612	1 187	14 044	46 985	53 689	100 788	452
321991	Manufactured home (mobile home) mfg ..	-	3	3	681	19 893	592	1 149	13 739	45 548	52 821	98 472	D
325	Chemical mfg	2	12	5	661	30 212	286	603	7 322	132 466	106 159	236 582	9 313
3254	Pharmaceutical & medicine mfg	-	7	2	503	22 712	228	459	5 626	105 530	62 684	166 351	8 483
32541	Pharmaceutical & medicine mfg	-	7	2	503	22 712	228	459	5 626	105 530	62 684	166 351	8 483
332	Fabricated metal product mfg	-	23	7	523	19 687	301	646	9 189	55 440	68 006	122 774	743
336	Transportation equipment mfg	-	15	5	555	20 137	348	698	10 146	68 367	82 911	108 593	D
YUBA COUNTY, CA													
31-33	Manufacturing	-	44	15	1 203	26 818	981	2 008	19 343	77 968	167 196	248 232	7 254
321	Wood product mfg	-	11	6	503	11 588	427	839	8 357	31 137	85 910	114 438	1 880

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADELANTO, CA													
31-33	Manufacturing	-	31	12	1 144	31 027	916	1 883	20 332	74 855	64 605	138 972	3 236
AGOURA HILLS, CA													
31-33	Manufacturing	-	27	4	1 924	116 653	635	1 211	29 941	286 505	261 666	560 358	35 867
334	Computer & electronic product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALAMEDA, CA													
31-33	Manufacturing	1	56	17	2 298	127 252	1 132	2 265	40 002	578 741	452 042	1 009 124	85 091
334	Computer & electronic product mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
ALHAMBRA, CA													
31-33	Manufacturing	1	125	36	3 248	81 829	2 658	4 991	55 703	175 929	134 070	308 451	9 510
315	Apparel mfg.....	2	49	18	1 166	14 323	1 121	1 803	12 596	23 731	17 367	40 987	758
3152	Cut & sew apparel mfg....	2	47	17	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	9	6	599	8 134	584	1 014	7 271	12 701	13 988	26 538	262
334	Computer & electronic product mfg.....	-	10	3	678	28 101	437	1 021	16 816	71 497	17 291	88 098	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	1	1	f	D	D	D	D	D	D	D	D
ANAHEIM, CA													
31-33	Manufacturing	1	896	319	38 330	1 358 665	24 360	49 767	628 019	3 402 548	2 628 296	6 019 754	294 126
311	Food mfg.....	5	24	9	1 128	34 690	790	1 684	19 257	95 687	185 463	281 957	6 400
3114	Fruit & vegetable preserving & specialty food mfg.....	6	5	3	606	18 039	457	1 045	12 219	50 308	125 938	177 173	D
323	Printing & related support activities.....	1	103	24	2 236	75 079	1 546	3 109	43 662	135 258	72 574	208 147	14 216
3231	Printing & related support activities.....	1	103	24	2 236	75 079	1 546	3 109	43 662	135 258	72 574	208 147	14 216
32311	Printing.....	2	91	21	1 512	52 420	1 040	2 120	29 931	102 907	70 201	173 208	8 214
323110	Commercial lithographic printing..	1	35	11	819	31 184	535	1 092	17 262	61 985	40 131	102 168	4 014
32312	Support activities for printing.....	-	12	3	724	22 659	506	989	13 731	32 351	2 373	34 939	6 002
323122	Prepress services.....	-	8	3	702	22 178	491	965	13 413	31 429	2 241	33 883	D
326	Plastics & rubber products mfg.....	1	55	33	4 272	110 513	3 256	6 284	76 250	249 015	194 467	455 141	11 669
3261	Plastics product mfg.....	1	51	32	3 949	102 794	2 949	5 675	70 508	235 227	186 825	433 426	11 361
32616	Plastics bottle mfg.....	-	3	3	735	17 542	428	953	11 528	43 877	33 472	81 061	D
326160	Plastics bottle mfg.....	-	3	3	735	17 542	428	953	11 528	43 877	33 472	81 061	D
32619	Other plastics product mfg.....	1	33	21	2 677	74 169	2 162	4 074	51 547	154 908	124 034	286 512	6 913
326199	All other plastics product mfg.....	1	30	19	g	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	9	5	699	24 169	591	1 366	15 743	89 606	117 672	206 180	11 024
3313	Alumina & aluminum production & processing..	-	3	3	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	3	3	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	227	84	7 079	232 224	5 515	11 831	136 604	508 600	283 250	778 170	56 162
3321	Forging & stamping.....	-	17	11	632	17 417	452	954	10 488	35 308	19 372	54 518	1 905
33211	Forging & stamping.....	-	17	11	632	17 417	452	954	10 488	35 308	19 372	54 518	1 905
3323	Architectural & structural metals mfg.....	1	35	19	1 161	33 592	883	1 924	19 634	76 466	44 084	120 859	6 080
33232	Ornamental & architectural metal products mfg.....	1	27	16	1 019	28 479	778	1 678	16 637	64 084	36 348	100 531	D
332322	Sheet metal work mfg.....	1	19	13	842	23 589	692	1 508	14 736	55 836	25 051	80 973	4 143
3325	Hardware mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	2	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANAHEIM, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	109	27	2 065	81 326	1 605	4 138	49 675	171 254	72 011	240 065	22 859
33271	Machine shops	1	91	18	831	27 972	675	1 167	19 793	56 559	23 929	79 617	3 530
332710	Machine shops	1	91	18	831	27 972	675	1 167	19 793	56 559	23 929	79 617	3 530
33272	Turned product & screw, nut, & bolt mfg	—	18	9	1 234	53 354	930	2 971	29 882	114 695	48 082	160 448	19 329
332722	Bolt, nut, screw, rivet, & washer mfg	—	8	5	1 053	48 192	778	2 647	26 108	101 934	43 100	142 824	D
3328	Coating, engraving, heat treating, & allied activities.	1	42	18	1 130	28 611	953	1 812	18 042	49 194	18 879	68 269	2 683
33281	Coating, engraving, heat treating, & allied activities	1	42	18	1 130	28 611	953	1 812	18 042	49 194	18 879	68 269	2 683
332813	Electroplating, plating, polishing, anodizing, & coloring	2	26	11	679	15 498	566	1 012	10 243	26 501	8 469	35 135	792
333	Machinery mfg	1	76	24	2 102	71 285	1 364	2 684	36 980	143 567	142 994	275 058	11 094
3332	Industrial machinery mfg ..	—	13	8	568	18 445	375	782	9 963	29 373	58 682	85 646	5 425
33329	Other industrial machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	93	51	11 099	494 522	4 246	8 982	124 734	1 224 744	815 063	2 035 522	115 688
3341	Computer & peripheral equipment mfg	7	11	4	1 473	77 607	453	948	13 631	136 873	234 961	372 354	23 525
33411	Computer & peripheral equipment mfg	7	11	4	1 473	77 607	453	948	13 631	136 873	234 961	372 354	23 525
334119	Other computer peripheral equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	12	6	842	37 245	343	692	8 015	113 791	83 981	194 857	1 675
3344	Semiconductor & other electronic component mfg	2	40	24	2 879	77 315	1 771	3 847	40 753	224 838	110 631	332 771	17 389
33441	Semiconductor & other electronic component mfg	2	40	24	2 879	77 315	1 771	3 847	40 753	224 838	110 631	332 771	17 389
334412	Bare printed circuit board mfg	—	10	8	1 687	36 915	1 028	2 346	24 859	133 206	58 171	191 780	11 814
3345	Navigational, measuring, medical, & control instruments mfg	—	22	10	4 310	254 682	919	2 009	40 291	603 275	264 101	870 979	40 808
33451	Navigational, measuring, medical, & control instruments mfg	—	22	10	4 310	254 682	919	2 009	40 291	603 275	264 101	870 979	40 808
334511	Search, detection, navigation, & guidance instrument mfg	—	4	2	h	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	2	4	4	1 252	41 595	590	1 124	19 235	107 659	89 773	195 622	D
33461	Mfg & reproducing magnetic & optical media	2	4	4	1 252	41 595	590	1 124	19 235	107 659	89 773	195 622	D
334613	Magnetic & optical recording media mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	20	12	1 987	85 972	1 246	2 453	46 282	297 876	155 675	454 263	8 083
3359	Other electrical equipment & component mfg	1	11	7	1 566	71 505	972	1 950	39 091	238 022	129 573	368 373	6 918
33599	All other electrical equipment & component mfg	2	5	4	948	47 862	411	940	18 160	142 721	47 566	188 743	4 855
335999	All other miscellaneous electrical equipment & component mfg	2	5	4	948	47 862	411	940	18 160	142 721	47 566	188 743	4 855
336	Transportation equipment mfg	2	41	14	1 202	35 613	948	1 806	21 544	74 288	50 470	123 645	5 422
3363	Motor vehicle parts mfg ...	2	22	9	805	23 755	651	1 250	14 344	47 710	30 102	75 863	4 464
337	Furniture & related product mfg	2	50	14	2 054	45 501	1 652	3 282	30 098	169 346	118 563	287 223	6 876
3371	Household & institutional furniture & kitchen cabinet mfg	2	33	7	1 151	25 049	961	1 993	16 513	92 401	72 539	163 866	2 902
33712	Household & institutional furniture mfg	6	16	5	679	13 574	596	1 163	10 341	32 074	24 863	55 514	1 057

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANAHEIM, CA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	63	12	1 668	57 556	1 095	1 971	20 730	84 986	111 426	196 073	8 666
3391	Medical equipment & supplies mfg.....	1	17	4	766	25 707	453	1 090	11 180	22 588	58 609	80 126	4 449
33911	Medical equipment & supplies mfg.....	1	17	4	766	25 707	453	1 090	11 180	22 588	58 609	80 126	4 449
3399	Other miscellaneous mfg... ..	1	46	8	902	31 849	642	881	9 550	62 398	52 817	115 947	4 217
33999	All other miscellaneous mfg.....	-	14	5	514	20 893	390	452	4 589	39 510	35 101	75 722	D
	ANDERSON, CA												
31-33	Manufacturing	-	17	6	527	17 195	342	630	10 186	47 127	51 455	96 210	4 176
	ANTIOCH, CA												
31-33	Manufacturing	1	38	8	577	20 165	412	791	11 897	61 317	59 619	117 728	4 374
	ARCADIA, CA												
31-33	Manufacturing	1	72	15	971	29 021	689	1 221	15 356	151 017	50 042	201 162	3 181
	ARCATA, CA												
31-33	Manufacturing	2	62	14	1 067	24 228	859	1 568	18 800	62 942	79 330	144 100	2 972
321	Wood product mfg.....	1	16	7	507	13 649	433	883	11 671	38 093	57 408	97 051	1 614
	ARVIN, CA												
31-33	Manufacturing	4	6	4	664	13 425	562	921	9 335	38 863	20 282	59 105	D
	ATWATER, CA												
31-33	Manufacturing	8	13	7	1 449	32 156	1 166	2 677	25 274	66 694	124 915	192 032	D
311	Food mfg.....	9	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
	AUBURN, CA												
31-33	Manufacturing	1	54	12	931	31 323	675	1 278	18 679	70 443	37 140	106 884	6 262
	AZUSA, CA												
31-33	Manufacturing	1	126	53	5 017	197 737	2 974	5 348	71 413	488 689	380 806	905 859	25 848
325	Chemical mfg.....	2	10	8	501	20 789	264	546	7 498	129 792	87 075	223 797	7 237
332	Fabricated metal product mfg.....	1	36	10	868	26 899	706	1 415	19 661	97 899	81 838	177 338	5 073
334	Computer & electronic product mfg.....	-	6	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
	BAKERSFIELD, CA												
31-33	Manufacturing	2	160	29	4 560	107 906	3 631	7 963	69 119	217 840	210 049	416 017	41 635
311	Food mfg.....	-	12	6	2 067	51 199	1 781	4 476	33 998	108 617	50 981	146 647	D
3119	Other food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BALDWIN PARK, CA													
31-33	Manufacturing	2	141	35	2 854	68 490	2 146	3 724	40 656	146 985	88 132	232 145	7 803
332	Fabricated metal product mfg	2	37	7	585	14 476	449	769	9 246	31 885	21 802	53 298	1 749
BANNING, CA													
31-33	Manufacturing	1	27	6	1 023	31 198	937	1 787	17 754	62 052	25 176	86 549	3 964
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	2	1	f	D	D	D	D	D	D	D	D
BELL, CA													
31-33	Manufacturing	3	29	11	940	28 762	624	1 268	12 582	68 969	107 935	177 320	4 129
BELL GARDENS, CA													
31-33	Manufacturing	2	70	26	1 672	42 227	1 252	2 163	26 512	81 355	80 954	163 289	3 387
332	Fabricated metal product mfg	3	25	10	526	17 606	412	817	11 138	31 440	15 147	46 565	1 481
BENICIA, CA													
31-33	Manufacturing	-	85	24	2 063	88 140	1 452	3 009	51 820	280 776	1 362 892	1 649 964	26 250
BERKELEY, CA													
31-33	Manufacturing	2	199	53	5 247	212 847	3 390	6 522	98 621	656 470	344 464	996 621	37 918
311	Food mfg	8	27	10	841	21 794	598	1 116	13 752	61 192	46 691	107 942	3 617
325	Chemical mfg	-	12	3	1 296	74 701	635	1 033	17 665	327 023	75 860	397 116	D
3254	Pharmaceutical & medicine mfg	-	3	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	1	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	540	21 594	487	1 146	19 291	49 767	32 934	81 679	D
3315	Foundries	-	3	3	540	21 594	487	1 146	19 291	49 767	32 934	81 679	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	20	8	734	31 410	350	724	9 901	74 239	81 010	158 009	8 075
BEVERLY HILLS, CA													
31-33	Manufacturing	5	64	4	501	10 872	351	513	6 130	21 698	23 712	45 123	1 297

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BREA, CA													
31-33	Manufacturing	2	187	69	8 461	316 536	5 140	10 458	140 093	603 175	525 865	1 145 063	25 813
323	Printing & related support activities.....	1	25	6	779	24 317	509	873	13 214	55 034	30 207	86 085	5 015
3231	Printing & related support activities.....	1	25	6	779	24 317	509	873	13 214	55 034	30 207	86 085	5 015
32311	Printing	1	21	5	735	23 463	473	821	12 563	53 265	29 799	83 908	4 923
326	Plastics & rubber products mfg	2	9	5	1 253	32 143	885	2 018	17 760	61 815	50 620	112 766	2 105
3262	Rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	39	15	1 131	44 758	822	1 764	30 909	119 936	44 540	162 247	4 624
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	20	8	674	28 496	504	1 171	20 341	59 073	20 415	78 191	3 088
333	Machinery mfg	2	22	10	526	18 443	381	761	10 924	36 358	24 457	60 252	1 405
334	Computer & electronic product mfg	-	14	5	1 800	100 770	315	716	9 087	113 593	94 348	208 185	4 619
3345	Navigational, measuring, medical, & control instruments mfg	-	5	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	1	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	11	7	1 255	47 420	974	1 645	29 287	46 471	143 616	205 986	D
3364	Aerospace product & parts mfg	-	3	3	637	27 880	432	772	13 221	36 152	45 681	89 079	D
33641	Aerospace product & parts mfg	-	3	3	637	27 880	432	772	13 221	36 152	45 681	89 079	D
336413	Other aircraft part & auxiliary equipment mfg	-	3	3	637	27 880	432	772	13 221	36 152	45 681	89 079	D
337	Furniture & related product mfg	-	13	6	701	21 073	549	1 280	12 833	91 981	50 942	143 113	599
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	5	648	19 703	508	1 204	11 979	89 295	48 381	137 875	437
33712	Household & institutional furniture mfg	-	5	2	f	D	D	D	D	D	D	D	D
BRISBANE, CA													
31-33	Manufacturing	2	33	13	1 467	45 954	1 041	2 192	21 737	87 130	78 560	163 183	4 893
BUENA PARK, CA													
31-33	Manufacturing	2	126	55	7 108	227 808	4 980	10 257	128 538	675 959	698 066	1 358 527	68 988
311	Food mfg	4	7	6	771	28 099	603	1 289	20 911	195 966	136 801	332 421	12 690
312	Beverage & tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	8	922	34 803	717	1 553	23 111	111 977	164 697	277 342	18 913
3222	Converted paper product mfg	-	10	8	922	34 803	717	1 553	23 111	111 977	164 697	277 342	18 913
32221	Paperboard container mfg	-	6	6	801	30 628	626	1 354	20 514	101 299	146 485	248 593	18 206
322211	Corrugated & solid fiber box mfg	-	5	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	9	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	9	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	9	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	9	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	36	6	630	26 890	478	1 133	18 793	51 475	19 900	69 352	8 561

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	BUENA PARK, CA— Con.													
31-33	Manufacturing— Con.													
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D	
335314	Relay & industrial control mfg	-	2	1	f	D	D	D	D	D	D	D	D	
	BURBANK, CA													
31-33	Manufacturing	2	298	94		9 355	306 905	6 746	13 407	172 316	725 796	413 558	1 131 224	37 910
323	Printing & related support activities.....	3	43	9		836	34 009	654	1 296	21 533	64 508	21 939	85 873	4 012
3231	Printing & related support activities.....	3	43	9		836	34 009	654	1 296	21 533	64 508	21 939	85 873	4 012
326	Plastics & rubber products mfg	2	13	7		562	16 810	459	974	9 360	36 715	26 530	63 009	1 682
3261	Plastics product mfg	1	11	6	f		D	D		D	D	D	D	D
332	Fabricated metal product mfg	-	87	30		3 238	117 913	2 319	4 480	63 937	264 240	122 370	381 133	15 575
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	37	11		1 195	42 996	800	1 600	20 755	67 209	46 126	112 666	4 720
33272	Turned product & screw, nut, & bolt mfg	-	6	3		792	30 463	480	1 041	12 485	42 701	36 466	78 655	2 729
332722	Bolt, nut, screw, rivet, & washer mfg	-	2	2	f		D	D		D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	-	22	7		515	14 915	423	825	9 561	28 621	8 637	37 222	1 701
33281	Coating, engraving, heat treating, & allied activities.....	-	22	7		515	14 915	423	825	9 561	28 621	8 637	37 222	1 701
3329	Other fabricated metal product mfg	-	8	5		1 037	46 154	680	1 252	23 717	137 023	48 838	182 000	6 734
33291	Metal valve mfg	-	5	4		1 008	45 306	662	1 223	23 171	134 919	48 232	179 290	D
332912	Fluid power valve & hose fitting mfg	-	3	3	f		D	D		D	D	D	D	D
333	Machinery mfg	3	19	7		603	21 338	394	742	11 847	53 793	36 048	90 591	3 372
334	Computer & electronic product mfg	2	19	7		521	18 536	334	784	9 050	43 887	33 339	79 103	2 584
335	Electrical equipment, appliance, & component mfg	-	13	6		576	17 636	396	799	8 568	41 022	22 359	65 094	1 803
336	Transportation equipment mfg	-	11	5		512	20 075	318	612	9 432	54 020	32 505	85 448	4 304
339	Miscellaneous mfg	3	27	8		1 468	32 565	1 061	2 264	19 834	104 170	41 796	139 440	1 630
3399	Other miscellaneous mfg ..	2	15	5		1 118	25 863	773	1 757	15 962	89 692	30 064	114 924	651
33991	Jewelry & silverware mfg	2	4	4	g		D	D		D	D	D	D	D
339914	Costume jewelry & novelty mfg	-	1	1	f		D	D		D	D	D	D	D
	BURLINGAME, CA													
31-33	Manufacturing	1	83	26		2 286	90 898	1 550	3 212	48 504	237 210	171 438	408 509	19 225
	CALABASAS, CA *													
31-33	Manufacturing	-	18	9		992	46 089	452	957	16 516	166 102	58 093	221 309	6 873
334	Computer & electronic product mfg	-	8	7		659	36 011	198	412	11 247	138 027	44 672	180 194	6 137

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMARILLO, CA													
31-33	Manufacturing	-	173	72	8 487	296 905	5 520	11 832	143 715	875 556	650 445	1 513 514	88 777
326	Plastics & rubber products mfg	2	15	7	521	15 433	345	668	6 295	37 886	28 134	64 360	2 362
3261	Plastics product mfg	2	14	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	10	818	29 570	469	922	11 447	74 846	49 997	126 434	4 791
334	Computer & electronic product mfg	-	37	21	4 417	170 016	2 963	6 611	85 025	562 348	432 211	984 626	67 239
3342	Communications equipment mfg	-	6	5	f	D	D	D	D	D	D	D	5 732
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	4	503	16 090	305	552	5 659	17 954	28 224	48 134	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	4	503	16 090	305	552	5 659	17 954	28 224	48 134	D
3344	Semiconductor & other electronic component mfg	-	16	9	1 614	81 120	801	1 848	29 863	203 110	178 064	372 969	41 010
33441	Semiconductor & other electronic component mfg	-	16	9	1 614	81 120	801	1 848	29 863	203 110	178 064	372 969	41 010
334413	Semiconductor & related device mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	4	4	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	4	4	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	3	3	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	f	D	D	D	D	D	D	D	D
CAMPBELL, CA													
31-33	Manufacturing	1	156	30	3 307	133 568	2 152	4 141	64 288	351 993	246 728	613 494	13 334
323	Printing & related support activities	-	23	4	599	17 633	431	765	11 439	54 104	17 288	71 025	2 148
3231	Printing & related support activities	-	23	4	599	17 633	431	765	11 439	54 104	17 288	71 025	2 148
32311	Printing	-	21	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	41	8	586	21 978	492	1 011	15 804	38 221	17 425	56 237	1 854
334	Computer & electronic product mfg	-	27	4	1 120	51 985	543	1 083	18 112	188 731	139 904	333 513	3 937
3342	Communications equipment mfg	-	5	1	f	D	D	D	D	D	D	D	225
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	5	1	f	D	D	D	D	D	D	D	225
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	5	1	f	D	D	D	D	D	D	D	225
CARLSBAD, CA													
31-33	Manufacturing	1	205	93	12 384	457 952	7 251	15 462	184 032	1 482 216	940 896	2 418 945	109 024
315	Apparel mfg	5	12	4	960	14 592	763	1 678	7 638	71 861	45 342	121 358	2 215
3152	Cut & sew apparel mfg	5	9	3	871	12 825	691	1 562	6 648	69 985	44 082	118 102	D
31522	Men's & boys' cut & sew apparel mfg	5	3	3	843	12 161	677	1 539	6 306	67 760	42 602	114 968	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	6	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	20	11	1 335	51 239	571	1 104	15 016	128 249	90 148	223 124	25 582
3254	Pharmaceutical & medicine mfg	2	15	8	922	35 821	375	636	10 236	77 523	57 566	136 539	D
32541	Pharmaceutical & medicine mfg	2	15	8	922	35 821	375	636	10 236	77 523	57 566	136 539	D
332	Fabricated metal product mfg	-	14	6	665	18 869	240	423	5 341	52 348	9 505	64 088	2 141
333	Machinery mfg	-	12	6	853	32 194	412	809	13 824	61 797	63 538	129 372	3 065

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CARLSBAD, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	39	24	1 574	71 694	764	1 559	22 190	148 201	115 059	264 688	11 223
3344	Semiconductor & other electronic component mfg.....	5	10	7	516	16 846	356	710	8 569	37 681	29 871	68 090	3 072
33441	Semiconductor & other electronic component mfg.....	5	10	7	516	16 846	356	710	8 569	37 681	29 871	68 090	3 072
335	Electrical equipment, appliance, & component mfg.....	—	11	6	828	34 790	509	1 026	20 706	84 138	79 640	158 732	2 620
339	Miscellaneous mfg.....	—	35	17	4 909	195 837	3 021	7 029	75 872	850 729	477 911	1 312 648	47 852
3391	Medical equipment & supplies mfg.....	1	14	5	751	24 245	318	627	8 249	80 370	30 821	114 913	3 416
33911	Medical equipment & supplies mfg.....	1	14	5	751	24 245	318	627	8 249	80 370	30 821	114 913	3 416
3399	Other miscellaneous mfg ..	—	21	12	4 158	171 592	2 703	6 402	67 623	770 359	447 090	1 197 735	44 436
33992	Sporting & athletic goods mfg.....	—	14	8	3 742	159 687	2 425	5 865	61 570	733 054	427 624	1 142 000	42 906
339920	Sporting & athletic goods mfg.....	—	14	8	3 742	159 687	2 425	5 865	61 570	733 054	427 624	1 142 000	42 906
	CARPINTERIA, CA												
31-33	Manufacturing	1	35	16	1 379	59 625	662	1 230	18 302	166 471	64 547	230 530	12 026
	CARSON, CA												
31-33	Manufacturing	—	321	137	13 958	477 518	9 576	20 067	259 812	2 235 168	2 973 059	5 207 943	183 139
311	Food mfg.....	1	14	6	722	22 730	531	866	13 054	128 139	83 010	210 805	3 935
313	Textile mills.....	—	13	8	1 239	30 397	979	2 214	17 839	58 792	58 605	116 428	4 234
3132	Fabric mills.....	—	8	5	1 025	25 759	791	1 773	14 479	48 189	49 816	97 039	3 861
31324	Knit fabric mills.....	—	4	3	777	20 835	570	1 242	10 997	36 838	45 574	81 454	3 752
313241	Weft knit fabric mills ..	—	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	6	14	6	594	14 676	393	751	6 167	33 436	49 090	83 231	1 739
323	Printing & related support activities.....	4	37	8	563	16 511	384	706	9 558	31 495	26 223	57 916	1 788
3231	Printing & related support activities.....	4	37	8	563	16 511	384	706	9 558	31 495	26 223	57 916	1 788
32311	Printing.....	4	34	8	558	16 405	380	700	9 476	31 301	26 179	57 678	D
324	Petroleum & coal products mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	24	12	1 092	43 822	469	1 132	13 554	191 303	284 702	480 419	7 627
326	Plastics & rubber products mfg.....	3	19	9	626	13 965	532	990	9 083	37 150	33 288	70 410	3 193
3261	Plastics product mfg.....	3	19	9	626	13 965	532	990	9 083	37 150	33 288	70 410	3 193
332	Fabricated metal product mfg.....	1	53	21	2 035	72 800	1 300	2 816	39 336	179 151	92 369	262 166	8 618
3323	Architectural & structural metals mfg.....	—	13	10	1 173	38 998	633	1 394	17 156	84 128	44 495	127 075	2 391
33231	Plate work & fabricated structural product mfg..	—	5	4	507	22 125	201	465	7 443	48 285	22 348	71 776	1 115
33232	Ornamental & architectural metal products mfg.....	1	8	6	666	16 873	432	929	9 713	35 843	22 147	55 299	1 276
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	—	27	5	530	23 919	411	926	16 096	71 452	33 978	97 591	5 116
334	Computer & electronic product mfg.....	—	20	11	1 214	40 372	773	1 409	21 510	88 253	61 078	156 143	3 405
335	Electrical equipment, appliance, & component mfg.....	—	7	6	968	29 628	734	1 543	16 632	100 493	162 737	262 871	6 615
3359	Other electrical equipment & component mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg....	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CARSON, CA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	20	8	1 188	40 943	906	1 895	24 400	118 650	88 742	197 553	8 416
3363	Motor vehicle parts mfg ...	—	9	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	3	f	D	D	D	D	D	D	D	6 037
33641	Aerospace product & parts mfg	—	6	3	f	D	D	D	D	D	D	D	6 037
337	Furniture & related product mfg	2	19	10	683	18 521	480	934	10 414	31 845	26 672	58 794	1 240
	CERES, CA												
31-33	Manufacturing	6	32	9	835	24 036	597	1 025	13 385	67 702	67 031	131 131	6 406
	CERRITOS, CA												
31-33	Manufacturing	—	117	62	5 463	169 441	3 820	7 647	94 753	347 984	433 558	801 112	21 691
323	Printing & related support activities	—	13	8	723	27 798	471	1 075	17 448	53 063	89 639	148 001	1 950
3231	Printing & related support activities	—	13	8	723	27 798	471	1 075	17 448	53 063	89 639	148 001	1 950
32311	Printing	—	10	5	588	23 823	381	873	14 645	44 067	83 235	132 641	D
332	Fabricated metal product mfg	1	20	13	930	27 358	507	1 103	13 209	57 097	32 636	89 286	4 879
333	Machinery mfg	—	11	4	802	33 136	521	1 126	16 805	77 559	53 886	130 266	4 633
337	Furniture & related product mfg	—	10	7	571	15 204	451	748	7 499	32 726	31 783	64 292	1 869
	CHICO, CA												
31-33	Manufacturing	2	107	27	2 455	63 128	1 834	3 752	40 004	195 298	209 935	403 737	31 204
336	Transportation equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
	CHINO, CA												
31-33	Manufacturing	1	259	99	9 897	245 797	7 629	16 220	161 406	621 175	678 624	1 294 685	48 312
311	Food mfg	6	11	3	594	8 190	311	644	5 712	22 991	35 442	58 897	2 181
326	Plastics & rubber products mfg	—	25	14	1 423	37 797	1 111	2 316	26 109	149 577	195 761	343 748	12 657
3261	Plastics product mfg	1	20	10	1 200	30 696	956	1 993	21 694	96 359	144 676	239 386	11 434
32619	Other plastics product mfg	1	13	5	740	16 184	604	1 291	10 601	47 943	69 082	115 845	1 653
332	Fabricated metal product mfg	1	62	16	1 383	39 303	1 081	2 327	24 234	74 930	57 818	131 889	6 189
3323	Architectural & structural metals mfg	—	14	4	502	15 408	389	884	9 760	27 680	26 768	53 674	1 385
333	Machinery mfg	—	31	10	1 287	37 813	974	2 336	25 903	85 197	74 786	159 446	8 249
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	15	8	842	21 400	668	1 298	12 828	58 363	73 376	130 313	2 592
337	Furniture & related product mfg	1	27	13	1 854	42 949	1 460	3 057	26 512	84 871	91 493	176 508	4 119
3371	Household & institutional furniture & kitchen cabinet mfg	—	22	9	1 454	29 008	1 182	2 515	20 273	58 940	52 096	110 814	2 850
33712	Household & institutional furniture mfg	—	16	8	1 072	21 040	973	1 927	16 288	39 725	45 416	84 982	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CHULA VISTA, CA													
31-33	Manufacturing	1	158	40	5 626	210 860	4 164	7 057	108 399	390 041	588 435	1 029 220	49 956
315	Apparel mfg	5	22	11	1 021	20 153	755	1 597	12 549	35 089	15 841	49 872	802
3152	Cut & sew apparel mfg	7	18	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	5	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
CLAREMONT, CA													
31-33	Manufacturing	-	29	13	1 309	58 021	819	1 591	21 062	100 936	77 027	177 609	7 749
339	Miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLOVIS, CA													
31-33	Manufacturing	-	55	13	2 320	55 996	1 593	3 184	29 366	117 467	143 865	259 416	9 536
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
COLTON, CA													
31-33	Manufacturing	-	54	21	1 668	45 385	1 225	2 468	26 328	139 694	137 081	278 223	13 578
COMMERCE, CA													
31-33	Manufacturing	-	345	217	22 393	633 089	17 215	35 098	392 354	1 853 748	2 267 577	4 099 136	105 402
311	Food mfg	1	23	17	2 167	61 049	1 627	3 249	44 268	290 800	451 687	743 759	10 020
3118	Bakeries & tortilla mfg	3	6	5	1 030	22 963	808	1 648	18 150	85 819	86 831	173 002	1 815
31183	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	15	14	1 508	31 322	1 225	2 215	19 285	75 939	104 872	181 087	2 759
3141	Textile furnishings mills	3	9	9	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	6	7	7	954	11 820	826	1 347	8 551	31 913	51 370	83 061	1 144
314129	Other household textile product mills	6	7	7	954	11 820	826	1 347	8 551	31 913	51 370	83 061	1 144
315	Apparel mfg	-	55	37	4 203	86 790	3 534	6 390	55 172	217 223	367 023	570 779	4 549
3152	Cut & sew apparel mfg	-	50	34	3 995	84 052	3 342	6 191	52 728	211 347	363 288	561 136	4 423
31521	Cut & sew apparel contractors	3	25	15	2 344	31 055	2 242	4 019	28 455	49 709	7 452	56 184	2 222
315212	Women's, girls', & infants' cut & sew apparel contractors ..	1	23	13	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	21	17	1 554	50 769	1 018	2 061	22 585	157 567	350 172	495 255	D
315233	Women's & girls' cut & sew dress mfg	-	4	3	505	22 822	361	744	12 723	56 203	114 357	157 620	D
315239	Women's & girls' cut & sew other outerwear mfg	-	8	8	672	17 669	498	1 057	7 226	79 629	191 824	272 481	812
316	Leather & allied product mfg .	-	4	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	3	2	f	D	D	D	D	D	D	D	D
316999	All other leather good mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COMMERCE, CA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	20	16	1 621	55 338	1 259	2 638	36 694	171 257	212 320	383 171	7 986
3222	Converted paper product mfg	-	18	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	6	797	30 594	589	1 297	19 149	82 555	101 968	184 267	3 572
323	Printing & related support activities	-	40	20	2 661	95 971	2 001	5 413	59 724	207 884	230 110	438 824	15 998
3231	Printing & related support activities	-	40	20	2 661	95 971	2 001	5 413	59 724	207 884	230 110	438 824	15 998
32311	Printing	-	32	16	2 359	86 238	1 756	4 906	53 688	188 687	226 314	415 862	15 034
323110	Commercial lithographic printing ..	-	12	6	818	44 296	597	2 399	29 068	89 478	98 642	187 760	4 609
323113	Commercial screen printing	-	7	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	24	15	1 052	41 832	588	1 238	21 955	236 150	264 583	491 221	13 738
326	Plastics & rubber products mfg	1	20	16	1 426	33 797	1 178	2 320	23 223	107 247	99 123	202 801	14 762
3261	Plastics product mfg	1	18	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	7	6	753	17 016	656	1 257	13 055	46 550	40 918	84 800	4 631
326199	All other plastics product mfg	1	6	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	11	9	1 032	33 918	788	1 657	21 945	74 103	126 809	201 305	8 803
332	Fabricated metal product mfg	-	44	22	1 772	65 300	1 180	2 499	32 423	154 249	115 730	270 362	6 295
3324	Boiler, tank, & shipping container mfg	-	4	3	562	20 450	233	483	9 110	32 133	59 857	92 623	1 963
336	Transportation equipment mfg	1	7	6	810	16 578	634	1 113	11 108	39 280	38 688	77 644	2 942
3363	Motor vehicle parts mfg ...	-	5	5	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	29	15	1 204	28 673	1 008	2 081	18 215	78 008	84 447	161 187	2 836
3371	Household & institutional furniture & kitchen cabinet mfg	1	17	10	907	18 406	758	1 615	13 244	42 938	48 085	90 873	1 377
33712	Household & institutional furniture mfg	1	16	10	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	13	8	536	16 638	363	654	6 879	36 914	17 823	55 240	999
3399	Other miscellaneous mfg ..	1	12	8	f	D	D	D	D	D	D	D	D
	COMPTON, CA												
31-33	Manufacturing	1	179	98	8 188	215 288	6 267	12 522	128 509	562 951	551 318	1 108 086	56 170
311	Food mfg	2	17	7	890	21 194	669	1 347	10 208	73 244	70 366	143 495	4 804
315	Apparel mfg	1	17	12	916	23 202	792	1 605	15 079	47 538	59 361	104 244	3 933
3152	Cut & sew apparel mfg	1	16	11	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	9	1 370	34 791	1 056	2 226	19 601	99 876	100 489	199 179	21 192
3261	Plastics product mfg	1	8	6	877	22 254	693	1 442	13 101	69 072	59 527	125 026	20 597
32619	Other plastics product mfg	1	4	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	3	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	5	549	13 584	412	864	8 180	29 586	25 518	54 958	1 165
332	Fabricated metal product mfg	1	49	22	1 556	43 002	1 128	2 222	25 236	124 902	86 300	210 147	9 789
339	Miscellaneous mfg	-	6	4	581	15 016	490	1 042	9 474	42 344	49 323	91 697	D
	CONCORD, CA												
31-33	Manufacturing	1	145	31	2 554	97 583	1 380	2 755	42 278	167 754	185 619	353 256	15 513
334	Computer & electronic product mfg	1	19	7	1 084	51 079	490	990	18 770	75 501	107 278	182 296	5 898
3345	Navigational, measuring, medical, & control instruments mfg	1	9	4	602	33 579	186	371	6 038	36 950	87 115	123 794	2 988
33451	Navigational, measuring, medical, & control instruments mfg	1	9	4	602	33 579	186	371	6 038	36 950	87 115	123 794	2 988

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CORONA, CA													
31-33	Manufacturing	2	291	116	10 424	313 180	7 934	15 556	194 375	859 544	962 114	1 817 430	53 274
311	Food mfg	4	13	6	741	28 127	590	1 460	18 458	108 995	302 531	411 526	D
325	Chemical mfg	1	11	3	662	24 624	401	862	12 582	131 200	69 523	198 841	D
326	Plastics & rubber products mfg	-	30	18	1 836	48 881	1 532	2 814	33 757	137 244	127 577	264 721	4 955
3261	Plastics product mfg	-	30	18	1 836	48 881	1 532	2 814	33 757	137 244	127 577	264 721	4 955
32619	Other plastics product mfg	-	23	13	1 183	32 750	929	1 626	20 841	67 709	50 447	118 239	2 683
326199	All other plastics product mfg	-	21	13	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	13	10	702	24 633	526	1 148	17 624	64 470	40 544	106 121	2 621
332	Fabricated metal product mfg	-	66	26	2 158	67 796	1 533	2 979	39 185	165 230	145 011	310 424	8 651
3329	Other fabricated metal product mfg	-	9	5	924	28 875	634	1 214	15 373	51 126	72 558	123 759	D
33291	Metal valve mfg	-	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	4	19	12	708	19 399	535	1 138	11 793	57 823	48 871	104 466	4 233
339	Miscellaneous mfg	1	26	8	1 158	27 403	900	1 730	18 978	47 817	39 003	86 102	7 137
3399	Other miscellaneous mfg ..	1	19	7	g	D	D	D	D	D	D	D	7 101
33999	All other miscellaneous mfg	-	6	2	560	14 374	547	1 116	13 760	15 602	14 145	29 756	D
COSTA MESA, CA													
31-33	Manufacturing	1	310	82	11 091	429 590	6 085	11 958	150 013	985 993	761 574	1 757 620	95 328
326	Plastics & rubber products mfg	7	24	11	1 355	37 328	1 100	2 186	25 645	69 092	57 839	128 350	5 965
3261	Plastics product mfg	7	23	11	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	14	8	1 163	31 507	948	1 910	21 798	55 025	43 736	99 833	5 405
326199	All other plastics product mfg	7	14	8	1 163	31 507	948	1 910	21 798	55 025	43 736	99 833	5 405
332	Fabricated metal product mfg	-	47	11	1 053	31 349	775	1 571	17 653	69 494	39 624	109 521	3 049
333	Machinery mfg	1	20	9	919	42 662	527	1 002	16 654	81 302	35 239	119 206	4 711
3339	Other general-purpose machinery mfg	-	4	3	539	30 676	275	569	10 027	56 595	22 569	81 485	3 643
334	Computer & electronic product mfg	-	41	18	4 433	216 511	1 375	3 102	37 915	507 393	397 447	915 324	65 719
3341	Computer & peripheral equipment mfg	-	7	5	1 725	102 288	265	568	9 094	329 379	178 558	518 231	D
33411	Computer & peripheral equipment mfg	-	7	5	1 725	102 288	265	568	9 094	329 379	178 558	518 231	D
334112	Computer storage device mfg	-	2	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	20	11	2 272	99 595	893	2 097	24 880	143 675	162 996	306 799	15 688
33441	Semiconductor & other electronic component mfg	-	20	11	2 272	99 595	893	2 097	24 880	143 675	162 996	306 799	15 688
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	7	5	854	32 642	496	1 104	13 406	68 467	57 116	126 348	4 272
COVINA, CA													
31-33	Manufacturing	1	119	28	3 226	114 452	2 362	4 631	58 870	236 567	122 032	359 457	17 411
334	Computer & electronic product mfg	-	11	5	706	30 222	470	933	7 668	71 508	18 839	89 094	3 416
3344	Semiconductor & other electronic component mfg	-	6	3	534	14 021	408	801	6 090	33 473	10 947	43 538	2 924
33441	Semiconductor & other electronic component mfg	-	6	3	534	14 021	408	801	6 090	33 473	10 947	43 538	2 924
339	Miscellaneous mfg	-	8	2	f	D	D	D	D	D	D	D	D
CUDAHY, CA													
31-33	Manufacturing	1	35	16	893	24 385	718	1 397	13 850	53 540	40 041	94 185	2 411

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CULVER CITY, CA													
31-33	Manufacturing	3	119	37	2 789	76 140	2 142	3 788	40 971	160 294	95 436	253 653	10 734
315	Apparel mfg	3	11	9	513	7 603	388	535	4 716	15 602	10 192	25 748	485
339	Miscellaneous mfg	2	19	7	731	18 817	602	1 202	10 070	53 722	20 937	73 243	2 667
3391	Medical equipment & supplies mfg	—	8	3	505	13 260	440	919	7 377	40 154	11 076	50 437	D
33911	Medical equipment & supplies mfg	—	8	3	505	13 260	440	919	7 377	40 154	11 076	50 437	D
CUPERTINO, CA													
31-33	Manufacturing	1	49	10	2 626	112 927	809	1 611	27 880	188 380	104 113	295 064	14 845
334	Computer & electronic product mfg	1	19	6	2 180	92 173	595	1 205	21 043	169 175	87 176	259 922	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	2	1	g	D	D	D	D	D	D	D	D
CYPRESS, CA													
31-33	Manufacturing	1	40	16	1 341	41 758	966	1 895	21 486	132 698	75 800	200 419	5 153
DINUBA, CA													
31-33	Manufacturing	6	10	2	g	D	D	D	D	D	D	D	D
311	Food mfg	6	3	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	6	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	9	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	9	1	1	f	D	D	D	D	D	D	D	D
DOWNEY, CA													
31-33	Manufacturing	—	102	30	7 464	372 817	2 630	5 921	84 192	841 582	578 849	1 419 004	36 850
332	Fabricated metal product mfg	—	28	5	536	19 830	380	732	11 945	37 078	20 011	55 742	1 441
336	Transportation equipment mfg	—	6	4	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	—	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	14	2	882	20 785	635	1 567	14 199	46 907	27 058	75 552	1 905
3399	Other miscellaneous mfg ..	4	5	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	4	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	4	2	2	f	D	D	D	D	D	D	D	D
DUARTE, CA													
31-33	Manufacturing	1	47	15	1 539	55 657	1 017	2 062	29 670	125 297	107 557	228 824	5 107
336	Transportation equipment mfg	—	3	3	684	30 373	373	740	15 855	72 929	62 141	130 044	2 513
3364	Aerospace product & parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
DUBLIN, CA													
31-33	Manufacturing	3	26	5	606	23 428	400	835	13 001	50 125	24 599	75 083	3 427
EAST PALO ALTO, CA													
31-33	Manufacturing	1	13	8	767	42 546	422	684	16 595	117 577	85 108	196 486	8 346
334	Computer & electronic product mfg	—	2	1	f	D	D	D	D	D	D	D	D

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EL CAJON, CA													
31-33	Manufacturing	2	187	60	6 102	194 129	4 319	8 325	116 981	390 270	275 016	654 324	24 700
332	Fabricated metal product mfg	3	38	14	1 400	49 137	980	1 917	29 107	105 308	58 285	162 841	6 749
336	Transportation equipment mfg	-	17	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	17	7	737	15 477	606	1 189	10 553	25 841	26 812	54 323	694
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	4	598	11 804	524	1 026	8 639	19 494	23 331	43 965	435
33712	Household & institutional furniture mfg	-	5	3	f	D	D	D	D	D	D	D	324
339	Miscellaneous mfg	4	19	9	598	19 971	477	967	10 184	45 676	25 533	71 195	1 329
3399	Other miscellaneous mfg ..	5	16	8	556	18 864	440	911	9 536	43 419	24 483	67 869	D
EL MONTE, CA													
31-33	Manufacturing	2	238	89	8 068	211 822	6 081	11 114	129 044	484 262	384 206	882 167	33 021
311	Food mfg	5	24	7	592	18 196	349	698	9 856	48 970	106 554	156 763	4 430
315	Apparel mfg	2	56	23	1 676	23 742	1 464	2 405	19 056	43 579	33 631	76 767	2 078
3151	Apparel knitting mills	-	7	5	592	11 401	531	1 064	9 127	22 725	17 323	39 902	1 281
31519	Other apparel knitting mills	-	7	5	592	11 401	531	1 064	9 127	22 725	17 323	39 902	1 281
315191	Outerwear knitting mills	-	7	5	592	11 401	531	1 064	9 127	22 725	17 323	39 902	1 281
3152	Cut & sew apparel mfg	3	48	17	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	6	35	12	733	7 129	642	930	6 010	11 329	2 857	14 185	577
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	35	12	733	7 129	642	930	6 010	11 329	2 857	14 185	577
326	Plastics & rubber products mfg	3	11	7	739	21 378	507	975	9 321	44 627	47 513	91 819	3 060
3261	Plastics product mfg	3	11	7	739	21 378	507	975	9 321	44 627	47 513	91 819	3 060
332	Fabricated metal product mfg	1	43	15	1 423	42 350	1 088	2 038	28 158	82 977	51 280	131 885	9 029
334	Computer & electronic product mfg	-	12	9	719	27 029	415	734	10 649	78 446	31 994	109 194	2 389
337	Furniture & related product mfg	-	15	7	907	22 993	663	1 238	12 304	44 683	32 316	76 461	1 025
3371	Household & institutional furniture & kitchen cabinet mfg	-	12	6	829	20 900	600	1 147	10 870	39 297	26 558	65 389	D
EL PASO DE ROBLES (PASO ROBLES), CA													
31-33	Manufacturing	1	64	23	2 233	61 498	1 500	3 009	36 843	159 476	121 858	279 300	12 212
334	Computer & electronic product mfg	3	7	6	823	23 078	447	944	13 224	52 325	27 609	80 512	6 777
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EL SEGUNDO, CA													
31-33	Manufacturing	-	97	45	32 174	1 700 295	8 233	16 181	366 611	5 336 252	3 386 481	8 617 042	347 595
324	Petroleum & coal products mfg	-	1	1	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	8	885	30 850	578	1 151	17 149	61 073	54 497	114 971	3 685
334	Computer & electronic product mfg	-	23	16	17 988	1 137 097	3 589	6 668	168 331	3 576 199	1 291 789	4 793 821	172 208
3342	Communications equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	9	7	2 101	76 767	1 407	2 935	38 043	131 256	217 186	337 852	D
33441	Semiconductor & other electronic component mfg	-	9	7	2 101	76 767	1 407	2 935	38 043	131 256	217 186	337 852	D
334413	Semiconductor & related device mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	3	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	3	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	4	3	j	D	D	D	D	D	D	D	D
EMERYVILLE, CA													
31-33	Manufacturing	-	84	24	3 606	216 026	1 601	3 167	53 152	361 675	236 266	598 355	46 250
325	Chemical mfg	-	5	3	2 052	155 494	600	1 182	22 457	178 068	85 304	262 505	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	1	1	g	D	D	D	D	D	D	D	D
ESCONDIDO, CA													
31-33	Manufacturing	2	190	52	4 330	114 461	2 678	5 098	62 234	296 410	263 916	563 806	17 151
311	Food mfg	-	16	7	806	24 260	428	876	11 708	56 024	71 926	127 987	3 824
3118	Bakeries & tortilla mfg	-	11	5	535	15 450	341	710	8 643	37 765	23 177	60 687	D
332	Fabricated metal product mfg	1	43	12	988	23 977	690	1 408	15 759	51 485	30 775	82 039	2 929
334	Computer & electronic product mfg	1	12	9	676	23 261	395	752	10 339	49 118	46 438	99 072	3 461
339	Miscellaneous mfg	-	23	3	621	9 354	254	425	4 752	56 825	41 283	96 748	1 730
3399	Other miscellaneous mfg ..	-	12	1	f	D	D	D	D	D	D	D	1 537
EUREKA, CA													
31-33	Manufacturing	1	44	8	686	20 555	551	1 036	15 053	61 779	65 447	128 492	2 296
FAIRFIELD, CA													
31-33	Manufacturing	-	53	21	2 955	121 684	2 158	4 188	75 809	561 814	475 308	1 036 123	45 649

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FOLSOM, CA													
31-33	Manufacturing	2	23	7	648	26 166	417	786	16 491	44 599	33 468	79 170	7 758
334	Computer & electronic product mfg.....	2	5	4	509	21 718	326	628	14 307	32 019	22 390	55 457	4 193
FONTANA, CA													
31-33	Manufacturing	-	111	54	4 811	153 900	3 605	7 089	89 538	460 803	664 652	1 128 683	55 054
327	Nonmetallic mineral product mfg.....	-	12	7	682	22 651	522	1 010	14 616	96 072	62 967	164 540	3 619
3273	Cement & concrete product mfg.....	-	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	31	19	1 784	57 066	1 338	2 654	31 801	136 948	243 457	379 779	10 076
3323	Architectural & structural metals mfg.....	1	8	7	605	14 333	367	678	6 148	32 764	68 427	101 920	1 674
FORT BRAGG, CA													
31-33	Manufacturing	-	18	4	572	19 680	492	1 057	16 807	44 914	86 930	116 788	572
FOSTER CITY, CA													
31-33	Manufacturing	-	26	11	1 866	115 772	945	1 877	51 768	297 920	269 618	563 413	24 043
334	Computer & electronic product mfg.....	-	9	5	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
FOUNTAIN VALLEY, CA													
31-33	Manufacturing	-	111	28	2 645	84 598	2 153	5 625	61 283	737 093	558 940	1 302 157	13 372
334	Computer & electronic product mfg.....	-	10	3	f	D	D	D	D	D	D	D	7 677
3344	Semiconductor & other electronic component mfg.....	-	7	3	f	D	D	D	D	D	D	D	7 585
33441	Semiconductor & other electronic component mfg.....	-	7	3	f	D	D	D	D	D	D	D	7 585
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
FREMONT, CA													
31-33	Manufacturing	1	464	219	34 623	1 593 386	20 938	39 809	800 881	4 280 594	6 488 463	10 765 345	663 042
323	Printing & related support activities.....	2	31	7	914	30 613	614	979	12 339	61 107	32 373	94 777	D
3231	Printing & related support activities.....	2	31	7	914	30 613	614	979	12 339	61 107	32 373	94 777	D
32311	Printing.....	1	28	7	883	29 546	589	927	11 627	59 020	31 992	92 307	D
323113	Commercial screen printing.....	-	5	3	516	16 295	381	519	6 223	33 373	8 769	43 747	2 145
327	Nonmetallic mineral product mfg.....	-	12	11	974	46 271	795	1 907	30 491	141 234	100 173	236 551	13 039
3272	Glass & glass product mfg.....	-	7	6	639	30 287	539	1 356	19 549	77 059	66 940	141 151	8 356
32721	Glass & glass product mfg.....	-	7	6	639	30 287	539	1 356	19 549	77 059	66 940	141 151	8 356
327215	Glass product mfg made of purchased glass.....	-	6	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	94	37	3 559	148 205	2 582	5 117	88 960	367 721	288 702	643 298	31 421
3323	Architectural & structural metals mfg.....	-	20	7	f	D	D	D	D	D	D	D	4 071
33232	Ornamental & architectural metal products mfg.....	-	17	6	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg.....	-	16	6	779	29 056	600	994	19 297	44 247	36 407	77 680	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	50	15	g	D	D	D	D	D	D	D	D
33271	Machine shops.....	-	48	14	938	36 125	684	1 309	23 002	77 053	31 229	107 757	10 103
332710	Machine shops.....	-	48	14	938	36 125	684	1 309	23 002	77 053	31 229	107 757	10 103

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FREMONT, CA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	47	28	6 654	277 894	2 324	4 192	88 969	686 845	850 751	1 519 173	48 437
3332	Industrial machinery mfg ..	-	21	15	5 650	230 846	1 645	2 915	61 530	598 296	806 487	1 387 591	D
33329	Other industrial machinery mfg	-	21	15	5 650	230 846	1 645	2 915	61 530	598 296	806 487	1 387 591	D
333295	Semiconductor machinery mfg	-	17	12	5 456	219 295	1 537	2 762	58 983	556 662	783 656	1 325 720	D
3335	Metalworking machinery mfg	-	13	7	589	25 790	502	919	19 955	55 926	25 262	79 006	2 198
33351	Metalworking machinery mfg	-	13	7	589	25 790	502	919	19 955	55 926	25 262	79 006	2 198
334	Computer & electronic product mfg	1	182	104	14 905	673 800	8 516	16 647	260 063	2 192 065	2 922 347	5 145 396	254 609
3341	Computer & peripheral equipment mfg	1	33	18	2 376	145 601	799	1 542	40 754	773 699	1 192 437	1 963 279	34 804
33411	Computer & peripheral equipment mfg	1	33	18	2 376	145 601	799	1 542	40 754	773 699	1 192 437	1 963 279	34 804
334111	Electronic computer mfg	-	12	6	1 090	65 569	411	810	17 227	645 854	882 604	1 526 688	12 218
334119	Other computer peripheral equipment mfg	3	16	9	1 039	64 807	322	602	20 855	109 330	278 975	389 649	18 823
3342	Communications equipment mfg	3	20	13	1 205	61 580	472	971	15 266	158 830	109 550	263 305	9 106
33421	Telephone apparatus mfg	3	9	4	518	34 436	172	390	6 712	89 127	55 697	142 276	D
334210	Telephone apparatus mfg	3	9	4	518	34 436	172	390	6 712	89 127	55 697	142 276	D
3344	Semiconductor & other electronic component mfg	1	91	47	6 322	218 824	4 583	8 421	115 145	543 259	974 761	1 553 956	96 892
33441	Semiconductor & other electronic component mfg	1	91	47	6 322	218 824	4 583	8 421	115 145	543 259	974 761	1 553 956	96 892
334412	Bare printed circuit board mfg	-	23	13	2 041	63 189	1 653	2 944	42 460	145 863	144 007	287 774	37 628
334413	Semiconductor & related device mfg ...	2	28	10	1 022	45 921	578	1 083	14 451	153 105	127 981	275 621	21 908
334418	Printed circuit assembly (electronic assembly) mfg	1	17	16	2 608	85 269	1 975	3 708	49 814	174 642	644 337	864 414	20 532
3345	Navigational, measuring, medical, & control instruments mfg	1	25	16	1 241	68 851	537	1 291	20 572	199 506	127 619	332 109	11 362
33451	Navigational, measuring, medical, & control instruments mfg	1	25	16	1 241	68 851	537	1 291	20 572	199 506	127 619	332 109	11 362
334515	Electricity measuring & testing instrument mfg	-	9	7	753	45 096	306	791	13 074	153 663	92 396	250 192	7 451
3346	Mfg & reproducing magnetic & optical media ..	2	13	10	3 761	178 944	2 125	4 422	68 326	516 771	517 980	1 032 747	102 445
33461	Mfg & reproducing magnetic & optical media	2	13	10	3 761	178 944	2 125	4 422	68 326	516 771	517 980	1 032 747	102 445
334613	Magnetic & optical recording media mfg ..	2	7	5	3 164	160 744	1 635	3 342	55 822	452 206	484 419	934 614	90 899
335	Electrical equipment, appliance, & component mfg	-	10	5	511	21 438	329	631	8 947	62 552	59 834	122 948	D
336	Transportation equipment mfg	-	7	4	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	31	5	974	52 981	342	889	12 736	69 464	35 742	107 701	6 812
3391	Medical equipment & supplies mfg	-	22	4	719	39 856	229	642	8 282	44 681	24 098	69 941	6 228
33911	Medical equipment & supplies mfg	-	22	4	719	39 856	229	642	8 282	44 681	24 098	69 941	6 228
339112	Surgical & medical instrument mfg	-	7	2	599	36 501	168	521	6 576	29 954	17 367	48 508	5 411

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRESNO, CA													
31-33	Manufacturing	1	412	128	15 225	395 070	10 466	20 497	233 351	1 298 165	1 919 996	3 099 768	91 610
311	Food mfg	2	59	30	5 633	141 731	4 182	8 411	87 328	533 700	1 098 418	1 573 127	29 289
3115	Dairy product mfg	-	4	3	524	20 947	244	542	9 716	131 367	309 890	438 251	2 778
31151	Dairy product (except frozen) mfg	-	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	8	6	2 594	48 168	2 304	4 516	38 958	137 116	445 168	574 117	8 440
31161	Animal slaughtering & processing	3	8	6	2 594	48 168	2 304	4 516	38 958	137 116	445 168	574 117	8 440
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	30	8	1 338	36 704	854	1 751	20 360	100 204	71 462	171 538	2 733
31181	Bread & bakery product mfg	-	25	4	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	1	8	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	4	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	3	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	66	11	906	24 178	633	1 144	14 020	47 263	29 371	76 967	2 630
3231	Printing & related support activities	3	66	11	906	24 178	633	1 144	14 020	47 263	29 371	76 967	2 630
32311	Printing	2	61	11	f	D	D	D	D	D	D	D	2 609
323110	Commercial lithographic printing	1	33	6	523	14 718	342	664	8 619	28 300	16 694	44 869	1 445
326	Plastics & rubber products mfg	-	18	8	615	18 388	483	981	12 007	49 446	47 649	99 433	7 866
332	Fabricated metal product mfg	1	52	17	1 122	31 758	803	1 621	20 267	68 341	64 760	131 618	7 067
333	Machinery mfg	1	33	14	1 992	61 345	1 391	2 765	33 557	127 376	183 151	311 435	6 936
3333	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	11	6	622	20 384	356	748	8 990	50 623	44 318	91 756	2 449
337	Furniture & related product mfg	-	23	6	516	9 043	446	716	6 626	15 369	17 762	34 858	625
339	Miscellaneous mfg	1	50	4	697	19 452	404	797	9 576	111 957	26 091	140 631	2 771
FULLERTON, CA													
31-33	Manufacturing	-	228	88	10 916	375 833	8 238	16 766	254 236	1 202 024	1 042 150	2 217 145	36 994
311	Food mfg	2	16	8	1 404	36 102	1 249	2 527	29 790	210 773	285 795	494 085	5 672
3114	Fruit & vegetable preserving & specialty food mfg	7	5	3	653	16 639	585	1 162	14 340	39 080	103 891	143 276	2 976
3119	Other food mfg	-	4	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	7	1 080	44 605	788	1 668	32 237	150 298	244 342	372 282	6 486
3222	Converted paper product mfg	-	6	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	4	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	24	7	673	21 890	270	490	7 619	100 062	85 564	184 452	1 856
3231	Printing & related support activities	-	24	7	673	21 890	270	490	7 619	100 062	85 564	184 452	1 856
32311	Printing	-	23	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	18	9	690	19 036	583	1 161	11 707	78 197	30 146	109 106	2 056
3261	Plastics product mfg	-	14	8	625	17 341	529	1 052	10 512	73 574	26 567	100 893	D
32619	Other plastics product mfg	-	11	6	522	14 694	444	887	8 723	66 767	20 458	88 179	1 375
326199	All other plastics product mfg	-	11	6	522	14 694	444	887	8 723	66 767	20 458	88 179	1 375

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FULLERTON, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	57	13	1 325	45 137	968	2 119	28 891	85 972	42 330	128 095	4 362
3325	Hardware mfg	—	2	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	23	7	541	20 658	278	584	8 115	43 455	24 906	67 966	1 928
334	Computer & electronic product mfg	—	15	9	1 885	94 840	1 462	2 718	75 628	296 529	146 689	454 469	9 235
3344	Semiconductor & other electronic component mfg	—	5	4	752	26 265	522	930	18 818	54 113	88 257	140 529	6 192
33441	Semiconductor & other electronic component mfg	—	5	4	752	26 265	522	930	18 818	54 113	88 257	140 529	6 192
3345	Navigational, measuring, medical, & control instruments mfg	—	6	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	6	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	12	7	1 039	33 117	817	1 727	19 868	67 925	32 021	93 783	1 060
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	4	855	27 832	677	1 415	16 573	56 781	26 533	77 205	976
33712	Household & institutional furniture mfg	—	5	4	834	27 549	660	1 397	16 372	56 292	26 131	76 312	951
337127	Institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	19	5	736	18 186	545	1 089	9 600	61 120	37 369	98 439	661
	GARDENA, CA												
31-33	Manufacturing	3	339	98	7 739	208 323	5 759	10 608	126 291	469 309	389 927	849 180	55 766
311	Food mfg	6	13	5	666	15 971	520	851	11 353	48 873	85 081	133 247	D
3114	Fruit & vegetable preserving & specialty food mfg	7	3	3	544	13 334	420	678	9 574	39 895	82 355	121 280	D
315	Apparel mfg	—	35	10	1 063	18 794	791	1 279	10 401	43 706	65 062	106 205	9 002
3152	Cut & sew apparel mfg	—	33	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	94	27	2 025	63 716	1 631	3 210	41 690	148 587	90 993	237 654	9 742
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	54	9	1 020	35 991	827	1 773	23 647	73 972	24 612	97 806	6 143
33272	Turned product & screw, nut, & bolt mfg	—	10	4	541	19 418	438	1 037	12 094	36 759	11 719	48 448	897
336	Transportation equipment mfg	1	15	8	876	33 151	565	1 203	17 753	69 785	38 906	104 439	13 410
3364	Aerospace product & parts mfg	—	5	3	604	27 436	367	850	13 862	59 384	30 708	85 744	D
33641	Aerospace product & parts mfg	—	5	3	604	27 436	367	850	13 862	59 384	30 708	85 744	D
	GARDEN GROVE, CA												
31-33	Manufacturing	1	354	86	9 710	269 464	7 393	14 427	154 055	1 158 058	1 092 766	2 255 302	63 413
315	Apparel mfg	7	120	21	1 483	16 459	1 351	1 923	12 879	30 722	31 789	65 534	1 042
3152	Cut & sew apparel mfg	7	118	21	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	95	14	1 083	10 141	1 039	1 456	9 296	20 111	3 075	23 158	564
315212	Women's, girls', & infants' cut & sew apparel contractors	5	90	11	925	8 150	891	1 191	7 587	15 996	2 725	18 693	421
325	Chemical mfg	—	8	5	526	21 712	372	739	12 479	486 111	607 895	1 096 910	4 818
326	Plastics & rubber products mfg	4	15	7	638	15 866	483	736	9 748	39 374	27 027	66 575	3 059
3261	Plastics product mfg	4	13	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GARDEN GROVE, CA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	2	63	18	2 202	65 817	1 761	4 098	43 148	165 844	126 001	293 742	9 239
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	29	5	939	29 597	823	2 262	22 557	95 864	48 355	147 617	4 567
33272	Turned product & screw, nut, & bolt mfg	—	3	2	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	26	8	1 049	47 476	676	1 777	19 031	153 274	87 838	241 129	22 218
336	Transportation equipment mfg	2	12	5	1 425	38 159	1 051	1 919	20 831	80 730	46 612	127 936	8 691
3363	Motor vehicle parts mfg ...	6	7	3	605	11 324	498	713	5 799	26 712	22 596	49 356	D
33639	Other motor vehicle parts mfg	6	4	3	597	11 118	491	703	5 672	26 255	21 956	48 253	D
336399	All other motor vehicle parts mfg	6	4	3	597	11 118	491	703	5 672	26 255	21 956	48 253	D
3364	Aerospace product & parts mfg	—	4	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	4	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
GILROY, CA													
31-33	Manufacturing	1	61	18	2 538	76 698	1 960	3 469	49 176	145 886	256 020	426 853	14 772
311	Food mfg	—	7	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	2	2	g	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	—	1	1	g	D	D	D	D	D	D	D	D
GLENDALE, CA													
31-33	Manufacturing	3	329	98	7 280	217 728	5 006	9 783	121 215	511 036	278 745	784 695	30 139
311	Food mfg	7	24	7	855	28 387	331	589	8 906	90 103	37 500	127 597	1 097
3118	Bakeries & tortilla mfg	8	20	5	777	26 222	272	502	7 863	83 378	28 287	111 709	852
31181	Bread & bakery product mfg	8	20	5	777	26 222	272	502	7 863	83 378	28 287	111 709	852
311812	Commercial bakeries ..	8	6	4	f	D	D	D	D	D	D	D	698
315	Apparel mfg	4	46	18	1 081	12 611	913	1 491	9 922	19 255	8 603	27 718	1 785
3152	Cut & sew apparel mfg	4	45	18	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	4	29	11	766	8 422	718	1 230	7 392	12 577	2 994	15 539	1 676
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	29	11	766	8 422	718	1 230	7 392	12 577	2 994	15 539	1 676
323	Printing & related support activities.....	3	60	15	987	34 951	693	1 350	21 240	63 947	34 533	98 280	8 721
3231	Printing & related support activities.....	3	60	15	987	34 951	693	1 350	21 240	63 947	34 533	98 280	8 721
32311	Printing	3	56	12	821	28 454	579	1 191	17 339	54 988	32 967	87 817	8 246
323110	Commercial lithographic printing ..	3	35	10	710	25 582	500	1 077	15 534	50 510	29 949	80 272	7 973
332	Fabricated metal product mfg	—	49	18	1 181	35 741	799	1 589	21 707	73 935	26 438	99 468	3 567
334	Computer & electronic product mfg	3	25	12	1 109	50 447	737	1 779	27 601	129 195	54 876	181 628	8 761
3344	Semiconductor & other electronic component mfg	—	9	4	582	25 236	440	1 260	17 852	55 433	26 218	80 843	2 259
33441	Semiconductor & other electronic component mfg	—	9	4	582	25 236	440	1 260	17 852	55 433	26 218	80 843	2 259
339	Miscellaneous mfg	2	51	7	566	10 223	445	1 012	6 240	20 716	27 475	48 015	715
3399	Other miscellaneous mfg ..	1	32	7	503	8 299	398	942	5 289	15 848	25 047	40 638	483

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GLENDORA, CA													
31-33	Manufacturing	1	53	11	1 321	49 344	877	1 312	21 964	131 403	60 826	194 408	6 370
339	Miscellaneous mfg	-	11	3	696	27 434	489	625	13 985	90 631	25 986	120 417	D
3391	Medical equipment & supplies mfg	-	5	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	1	f	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
GRASS VALLEY, CA													
31-33	Manufacturing	2	62	14	1 041	30 654	622	1 160	14 625	62 233	40 008	100 975	5 755
HANFORD, CA													
31-33	Manufacturing	-	27	7	1 672	62 626	1 412	2 985	48 513	113 947	261 163	376 296	17 773
311	Food mfg	-	5	1	581	18 744	505	1 061	14 903	18 074	106 317	123 578	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
HAWTHORNE, CA													
31-33	Manufacturing	1	114	39	5 719	234 586	3 831	7 737	116 736	793 906	415 686	1 006 572	27 338
334	Computer & electronic product mfg	-	8	6	1 271	76 503	843	1 741	31 691	131 702	126 602	255 677	6 605
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	3	593	13 403	438	912	6 532	37 822	16 431	55 498	600
336	Transportation equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
HAYWARD, CA													
31-33	Manufacturing	1	385	151	11 817	430 090	7 948	15 496	226 814	1 036 271	1 280 282	2 287 233	90 686
311	Food mfg	3	29	19	1 574	38 302	1 187	2 248	23 167	131 684	122 931	251 540	6 143
3116	Meat product mfg	7	3	3	513	12 140	426	794	8 875	46 444	47 468	92 990	D
31161	Animal slaughtering & processing	7	3	3	513	12 140	426	794	8 875	46 444	47 468	92 990	D
3118	Bakeries & tortilla mfg	2	16	10	737	14 647	508	950	9 178	36 916	30 635	65 791	1 222
31181	Bread & bakery product mfg	2	11	8	580	11 442	420	781	7 566	27 483	24 859	50 606	902
311812	Commercial bakeries	2	10	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	35	6	568	18 441	411	730	11 990	36 013	25 674	61 332	2 392
3231	Printing & related support activities	1	35	6	568	18 441	411	730	11 990	36 013	25 674	61 332	2 392
32311	Printing	1	34	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	23	7	514	23 647	297	657	11 026	49 133	196 626	245 788	6 096

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAYWARD, CA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	3	31	18	1 279	34 195	968	1 919	20 704	97 177	86 194	183 599	6 638
3261	Plastics product mfg	3	29	17		D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	18	8	785	20 064	598	1 201	12 321	68 911	43 997	112 242	4 206
326199	All other plastics product mfg	4	18	8	785	20 064	598	1 201	12 321	68 911	43 997	112 242	4 206
332	Fabricated metal product mfg	—	101	33	2 285	87 862	1 799	3 511	58 123	156 159	205 907	359 967	16 539
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	48	10	631	24 237	503	969	14 862	44 628	21 889	65 608	4 169
33271	Machine shops	1	42	7	523	20 281	425	805	12 416	33 118	15 302	47 669	2 361
332710	Machine shops	1	42	7	523	20 281	425	805	12 416	33 118	15 302	47 669	2 361
333	Machinery mfg	—	33	13	1 388	77 253	562	1 121	24 177	156 595	146 839	293 154	24 454
3332	Industrial machinery mfg ..	—	5	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	37	19	1 320	55 187	764	1 526	21 123	115 773	109 956	220 184	13 506
336	Transportation equipment mfg	—	9	3	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	24	8	521	14 367	257	453	6 831	18 197	22 542	40 763	3 332
HEALDSBURG, CA													
31-33	Manufacturing	4	50	15	850	24 794	550	1 015	13 275	56 452	42 594	97 253	4 990
HEMET, CA													
31-33	Manufacturing	—	25	7	972	19 889	821	816	11 726	69 079	36 173	106 544	2 372
334	Computer & electronic product mfg	—	3	2	f	D	D	D	D	D	D	D	D
HERCULES, CA													
31-33	Manufacturing	—	6	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	2	2	f	D	D	D	D	D	D	D	D
HESPERIA, CA													
31-33	Manufacturing	1	66	16	1 212	26 301	1 007	1 821	17 373	68 444	99 245	157 555	3 536
HOLLISTER, CA													
31-33	Manufacturing	1	49	15	1 346	39 691	1 013	2 014	24 326	105 640	127 407	231 075	4 917

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUNTINGTON BEACH, CA												
	Manufacturing	1	417	105	14 927	594 767	8 714	18 068	246 836	906 253	1 227 188	2 377 270	109 149
326	Plastics & rubber products mfg	4	31	15	2 418	50 054	1 843	3 944	32 277	207 842	110 375	316 007	10 761
3261	Plastics product mfg	4	25	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	23	11	g	D	D	D	D	D	D	D	10 428
326199	All other plastics product mfg	4	22	11	2 266	46 192	1 726	3 740	29 795	199 457	104 777	302 144	10 428
332	Fabricated metal product mfg	1	97	26	1 740	67 655	1 322	2 899	42 085	130 843	63 404	195 655	9 718
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	57	11	802	35 969	617	1 359	23 596	59 932	20 800	81 961	5 177
33271	Machine shops	1	52	9	707	32 451	538	1 191	21 077	54 719	19 227	75 058	4 966
332710	Machine shops	1	52	9	707	32 451	538	1 191	21 077	54 719	19 227	75 058	4 966
333	Machinery mfg	3	48	10	648	25 081	454	850	12 882	54 591	41 352	95 116	2 738
334	Computer & electronic product mfg	2	42	16	918	28 188	566	1 064	12 556	55 663	37 218	91 235	D
3344	Semiconductor & other electronic component mfg	2	19	10	535	16 504	323	590	7 021	32 386	22 099	52 207	D
33441	Semiconductor & other electronic component mfg	2	19	10	535	16 504	323	590	7 021	32 386	22 099	52 207	D
336	Transportation equipment mfg	-	20	5	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	2	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	2	i	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	50	9	689	18 675	492	900	9 323	51 226	38 724	91 707	2 695
	HUNTINGTON PARK, CA												
31-33	Manufacturing	3	163	62	5 042	133 452	3 908	7 347	86 494	301 720	268 852	575 391	21 030
315	Apparel mfg	3	56	22	1 835	36 619	1 455	2 562	24 706	89 392	96 905	185 919	2 553
3152	Cut & sew apparel mfg	3	51	19	1 638	33 980	1 273	2 249	22 478	85 065	95 474	180 161	2 396
31521	Cut & sew apparel contractors	7	32	10	573	6 769	505	843	5 732	10 985	2 929	13 859	381
315212	Women's, girls' & infants' cut & sew apparel contractors ..	7	31	10	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	2	16	8	997	26 445	705	1 313	16 068	72 598	91 904	164 180	1 915
332	Fabricated metal product mfg	1	31	10	814	25 767	606	1 180	18 094	53 938	32 459	86 462	3 123
	INDUSTRY, CA *												
31-33	Manufacturing	1	308	199	25 655	815 843	18 319	37 167	443 881	2 335 206	2 564 624	4 888 391	156 472
311	Food mfg	3	43	29	3 250	107 816	2 303	4 694	52 478	318 943	669 591	985 493	21 721
3115	Dairy product mfg	6	7	5	1 060	43 072	559	1 092	11 759	119 212	235 347	351 131	12 396
31151	Dairy product (except frozen) mfg	6	6	5	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	7	4	4	f	D	D	D	D	D	D	D	12 232
3116	Meat product mfg	2	4	4	540	15 971	432	920	11 144	26 340	158 851	185 392	2 196
31161	Animal slaughtering & processing	2	4	4	540	15 971	432	920	11 144	26 340	158 851	185 392	2 196
3119	Other food mfg	1	12	8	737	19 047	617	1 295	11 010	75 839	80 654	156 488	2 786
31199	All other food mfg	1	7	5	565	13 865	505	1 052	8 052	53 440	50 902	104 310	1 416
314	Textile product mills	9	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	9	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDUSTRY, CA *—Con.												
	Manufacturing—Con.												
315	Apparel mfg	-	23	9	1 700	44 247	1 270	2 448	19 229	123 544	91 480	211 971	1 454
3152	Cut & sew apparel mfg	-	18	8	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	5	3	f	D	D	D	D	D	D	D	713
315232	Women's & girls' cut & sew blouse & shirt mfg	-	3	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	6	4	537	12 652	307	671	5 624	30 916	19 273	49 751	755
3219	Other wood product mfg ...	1	6	4	537	12 652	307	671	5 624	30 916	19 273	49 751	755
322	Paper mfg	2	14	14	1 484	51 581	1 080	2 348	32 815	127 658	184 568	310 514	7 723
3222	Converted paper product mfg	2	13	13	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	8	8	873	35 963	678	1 505	23 315	86 692	125 740	212 201	5 033
322211	Corrugated & solid fiber box mfg	3	5	5	639	26 230	484	1 104	16 422	67 177	109 084	175 975	D
323	Printing & related support activities	-	19	7	692	21 443	531	1 117	13 953	49 921	41 216	91 193	6 065
3231	Printing & related support activities	-	19	7	692	21 443	531	1 117	13 953	49 921	41 216	91 193	6 065
32311	Printing	-	18	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	10	5	573	17 099	442	952	11 464	39 503	36 085	76 062	5 336
325	Chemical mfg	1	22	19	1 987	71 713	1 167	2 233	32 526	351 525	269 200	634 855	18 173
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	9	8	1 212	41 761	710	1 367	18 542	260 588	155 552	428 641	10 858
32562	Toilet preparation mfg ...	1	5	5	1 041	34 594	634	1 265	15 513	200 554	133 358	346 656	8 992
325620	Toilet preparation mfg .	1	5	5	1 041	34 594	634	1 265	15 513	200 554	133 358	346 656	8 992
3259	Other chemical product mfg	-	6	5	519	19 985	308	596	9 434	57 096	72 095	130 528	3 396
326	Plastics & rubber products mfg	1	21	17	2 935	84 854	2 321	4 972	53 593	226 447	212 020	436 159	20 791
3261	Plastics product mfg	-	16	13	2 475	72 860	1 964	4 274	46 004	200 029	182 402	380 027	19 235
32611	Unsupported plastics film, sheet, & bag mfg ..	2	4	4	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	7	1 292	39 536	1 079	2 306	26 356	118 076	78 593	195 898	6 942
326199	All other plastics product mfg	-	10	7	1 292	39 536	1 079	2 306	26 356	118 076	78 593	195 898	6 942
327	Nonmetallic mineral product mfg	1	10	6	854	25 870	686	1 342	18 974	94 378	47 722	141 560	7 881
331	Primary metal mfg	-	15	11	1 351	42 431	956	2 330	27 236	147 363	160 313	304 122	7 674
3315	Foundries	-	8	7	786	20 252	590	1 371	14 085	71 132	39 375	110 554	2 571
33152	Nonferrous metal foundries	-	6	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	30	3 357	119 561	2 387	4 728	67 480	260 041	215 534	470 496	19 288
3325	Hardware mfg	-	6	6	510	16 235	388	591	8 234	38 022	33 324	71 001	1 358
33251	Hardware mfg	-	6	6	510	16 235	388	591	8 234	38 022	33 324	71 001	1 358
332510	Hardware mfg	-	6	6	510	16 235	388	591	8 234	38 022	33 324	71 001	1 358
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	18	10	1 249	51 012	759	1 699	26 961	97 181	81 057	172 826	12 579
33272	Turned product & screw, nut, & bolt mfg	-	6	5	929	37 868	527	1 288	18 325	68 075	69 432	134 694	6 796
332722	Bolt, nut, screw, rivet, & washer mfg	-	4	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	3 026
333	Machinery mfg	1	17	11	810	31 176	571	1 172	16 514	62 337	97 528	160 197	3 485

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
INDUSTRY, CA *—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	12	6	1 092	37 118	692	1 230	19 211	104 287	64 619	171 274	16 561
3345	Navigational, measuring, medical, & control instruments mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	9	7	1 453	43 675	1 097	2 347	26 502	154 168	156 667	307 826	8 425
3351	Electric lighting equipment mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	7	5	815	25 406	493	724	9 845	39 455	59 147	93 154	4 825
337	Furniture & related product mfg.....	-	26	18	1 690	37 133	1 263	2 250	21 458	114 696	115 855	228 913	3 374
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	16	10	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	15	10	839	20 155	625	1 275	11 787	58 319	61 562	118 844	1 231
3372	Office furniture (including fixtures) mfg.....	1	7	5	561	9 439	412	574	4 920	34 829	34 644	69 039	1 132
33721	Office furniture (including fixtures) mfg.....	1	7	5	561	9 439	412	574	4 920	34 829	34 644	69 039	1 132
339	Miscellaneous mfg.....	1	11	4	779	26 688	535	1 187	11 754	50 575	61 433	112 108	D
3399	Other miscellaneous mfg..	1	8	4	f	D	D	D	D	D	D	D	D
INGLEWOOD, CA													
31-33	Manufacturing	-	74	21	2 554	79 653	1 800	3 381	45 530	204 869	182 515	384 319	11 047
311	Food mfg.....	-	8	4	819	17 658	651	898	11 712	38 709	80 340	119 223	1 681
332	Fabricated metal product mfg.....	-	18	5	593	20 376	388	803	12 823	53 895	35 575	86 466	921
IRVINE, CA													
31-33	Manufacturing	1	479	250	34 067	1 318 985	21 417	45 824	589 803	4 143 406	4 460 719	8 500 571	627 255
311	Food mfg.....	-	17	8	794	23 960	662	1 640	17 536	121 976	259 968	388 208	26 549
314	Textile product mills.....	-	10	8	788	14 492	584	1 222	9 857	53 826	71 619	129 742	D
3141	Textile furnishings mills....	-	5	4	599	11 050	422	961	7 756	47 321	65 818	117 499	D
315	Apparel mfg.....	-	15	9	2 219	55 944	1 506	3 019	30 821	168 150	189 209	357 112	14 565
3152	Cut & sew apparel mfg....	-	14	9	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	6	6	1 827	42 555	1 430	2 893	29 434	142 425	153 291	294 170	D
315233	Women's & girls' cut & sew dress mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	76	22	1 737	65 965	1 248	2 477	36 808	119 687	75 229	194 741	16 591
3231	Printing & related support activities.....	3	76	22	1 737	65 965	1 248	2 477	36 808	119 687	75 229	194 741	16 591
32311	Printing.....	3	70	21	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	3	35	12	943	40 390	629	1 318	22 239	82 968	54 789	137 972	13 219
325	Chemical mfg.....	1	24	12	2 190	115 393	1 565	3 526	43 689	439 675	183 992	632 800	41 642
3254	Pharmaceutical & medicine mfg.....	-	9	8	1 936	107 001	1 382	3 254	38 786	403 940	154 165	567 335	39 349
32541	Pharmaceutical & medicine mfg.....	-	9	8	1 936	107 001	1 382	3 254	38 786	403 940	154 165	567 335	39 349
325412	Pharmaceutical preparation mfg.....	1	7	6	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	22	15	1 500	30 332	1 204	2 383	21 363	110 870	80 803	193 409	3 083
3261	Plastics product mfg.....	-	20	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	13	9	1 168	22 517	959	1 926	16 292	95 628	61 232	158 306	2 365
326199	All other plastics product mfg.....	1	12	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IRVINE, CA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	39	24	1 857	75 848	1 194	2 372	37 973	169 901	104 247	262 377	7 135
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	18	7	506	17 896	414	762	12 333	43 000	13 012	54 995	3 094
333	Machinery mfg	-	28	20	3 099	138 458	1 564	3 496	51 752	280 737	214 851	474 447	29 430
3333	Commercial & service industry machinery mfg ..	-	6	5	899	42 841	402	838	10 822	79 119	75 234	154 532	11 997
33331	Commercial & service industry machinery mfg	-	6	5	899	42 841	402	838	10 822	79 119	75 234	154 532	11 997
3339	Other general-purpose machinery mfg	-	10	7	1 391	61 219	723	1 621	25 231	102 801	75 280	159 768	5 136
33399	All other general-purpose machinery mfg	-	8	5	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	119	66	10 466	420 518	6 141	13 700	172 248	1 534 363	2 409 398	3 871 859	419 542
3341	Computer & peripheral equipment mfg	1	33	17	2 788	124 518	1 369	3 797	39 489	562 495	1 830 121	2 339 206	D
33411	Computer & peripheral equipment mfg	1	33	17	2 788	124 518	1 369	3 797	39 489	562 495	1 830 121	2 339 206	D
334111	Electronic computer mfg	1	8	6	1 394	59 622	921	2 961	26 979	455 941	1 587 455	1 984 890	D
334119	Other computer peripheral equipment mfg	1	17	7	1 034	47 825	355	609	9 847	60 330	157 989	223 056	D
3342	Communications equipment mfg	3	10	6	1 161	55 638	625	1 349	18 195	142 049	99 790	237 736	10 650
33421	Telephone apparatus mfg	7	5	3	638	21 427	319	726	7 296	50 873	35 303	85 492	D
334210	Telephone apparatus mfg	7	5	3	638	21 427	319	726	7 296	50 873	35 303	85 492	D
3344	Semiconductor & other electronic component mfg	2	41	23	4 271	142 790	2 690	5 390	60 939	469 770	291 589	748 697	93 597
33441	Semiconductor & other electronic component mfg	2	41	23	4 271	142 790	2 690	5 390	60 939	469 770	291 589	748 697	93 597
334412	Bare printed circuit board mfg	-	10	5	1 431	33 367	1 290	2 653	26 747	132 423	66 370	193 954	D
334413	Semiconductor & related device mfg ...	8	4	3	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	1	3	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	10	8	657	30 514	230	434	4 675	78 228	107 702	185 768	4 153
334419	Other electronic component mfg	-	13	5	991	37 413	615	1 169	12 305	108 239	70 561	173 278	7 660
3345	Navigational, measuring, medical, & control instruments mfg	2	30	17	1 613	78 355	952	2 061	41 055	283 232	136 211	416 338	8 716
33451	Navigational, measuring, medical, & control instruments mfg	2	30	17	1 613	78 355	952	2 061	41 055	283 232	136 211	416 338	8 716
334515	Electricity measuring & testing instrument mfg	4	8	6	501	25 620	290	694	11 863	80 164	91 929	172 607	3 512
3346	Mfg & reproducing magnetic & optical media ..	-	3	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	15	11	947	42 276	530	1 190	15 141	110 502	113 317	219 171	3 816
3359	Other electrical equipment & component mfg	-	8	6	676	29 211	418	977	12 586	77 114	85 164	161 948	2 856
33599	All other electrical equipment & component mfg	-	7	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	14	10	1 708	56 963	969	2 158	27 652	151 203	150 249	296 379	14 457
3363	Motor vehicle parts mfg ...	1	7	6	1 153	34 850	733	1 738	19 284	103 306	120 157	217 028	D
33632	Motor vehicle electrical & electronic equipment mfg	2	4	3	669	20 624	391	979	11 139	58 838	35 328	87 425	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	3	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	11	7	800	24 737	641	1 487	15 650	64 301	47 757	111 235	1 282

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
IRVINE, CA—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	69	29	5 281	227 839	3 056	5 961	89 758	761 712	492 237	1 244 917	43 599
3391	Medical equipment & supplies mfg.....	-	47	21	4 673	210 324	2 682	5 298	82 093	724 830	452 709	1 168 556	41 559
33911	Medical equipment & supplies mfg.....	-	47	21	4 673	210 324	2 682	5 298	82 093	724 830	452 709	1 168 556	41 559
339111	Laboratory apparatus & furniture mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	1	20	6	1 027	39 654	558	994	14 917	59 294	63 089	122 358	5 055
339113	Surgical appliance & supplies mfg.....	-	12	7	2 135	92 442	1 372	2 669	37 763	368 762	274 992	642 599	23 602
339114	Dental equipment & supplies mfg.....	-	4	3	504	24 959	344	794	15 685	167 262	43 691	203 996	D
3399	Other miscellaneous mfg..	-	22	8	608	17 515	374	663	7 665	36 882	39 528	76 361	2 040
KING CITY, CA													
31-33	Manufacturing	-	6	4	806	24 488	650	1 476	17 295	67 039	75 959	146 230	D
311	Food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	1	1	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
KINGSBURG, CA													
31-33	Manufacturing	-	8	4	728	20 886	643	1 204	16 484	151 536	110 482	262 947	3 291
LAFAYETTE, CA													
31-33	Manufacturing	-	29	4	f	D	D	D	D	D	D	D	2 801
LAGUNA HILLS, CA													
31-33	Manufacturing	3	71	13	782	26 540	541	918	12 972	59 032	38 043	97 716	3 677
LA HABRA, CA													
31-33	Manufacturing	2	87	17	1 371	39 394	979	1 872	23 138	95 388	58 714	155 026	4 633
LAKE ELSINORE, CA													
31-33	Manufacturing	5	53	12	778	17 693	652	1 039	11 994	36 935	24 216	60 977	2 098
LAKE FOREST, CA													
31-33	Manufacturing	1	63	21	1 508	53 884	869	1 662	22 423	161 562	120 464	279 158	13 479
LA MIRADA, CA													
31-33	Manufacturing	2	74	39	4 323	132 111	3 489	6 694	89 734	360 387	397 217	757 039	31 977
326	Plastics & rubber products mfg.....	1	9	8	774	22 686	637	1 304	16 521	81 794	84 172	167 990	5 991
3261	Plastics product mfg.....	1	9	8	774	22 686	637	1 304	16 521	81 794	84 172	167 990	5 991
333	Machinery mfg.....	1	9	5	555	17 937	406	839	10 629	41 729	57 709	99 355	9 312
336	Transportation equipment mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	-	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	9	4	3	868	12 037	756	867	8 875	32 520	29 162	61 116	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	9	4	3	868	12 037	756	867	8 875	32 520	29 162	61 116	D
33712	Household & institutional furniture mfg.....	9	4	3	868	12 037	756	867	8 875	32 520	29 162	61 116	D
337122	Nonupholstered wood household furniture mfg.....	9	2	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LANCASTER, CA													
31-33	Manufacturing	2	50	6	845	15 253	656	1 126	10 698	56 845	22 167	79 029	2 442
323	Printing & related support activities.....	-	9	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	9	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	1	f	D	D	D	D	D	D	D	D
LA PALMA, CA													
31-33	Manufacturing	2	16	10	756	28 134	581	1 099	20 576	62 673	107 147	178 905	6 856
LATHROP, CA													
31-33	Manufacturing	-	12	7	1 122	42 403	870	1 754	29 750	177 945	131 771	303 759	5 274
327	Nonmetallic mineral product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
LA VERNE, CA													
31-33	Manufacturing	1	43	16	1 062	34 973	791	1 733	20 682	105 763	82 730	188 649	5 975
LIVERMORE, CA													
31-33	Manufacturing	2	112	36	2 897	89 657	2 030	3 936	52 649	210 999	288 725	499 476	34 734
332	Fabricated metal product mfg.....	4	33	8	637	19 665	458	840	11 908	44 557	25 735	70 345	2 490
LIVINGSTON, CA													
31-33	Manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D
LODI, CA													
31-33	Manufacturing	2	99	28	3 149	88 589	2 644	5 057	65 115	220 170	257 120	475 314	12 731
311	Food mfg.....	-	9	3	g	D	D	D	D	D	D	D	3 798
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	2	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	5	19	8	712	22 273	562	1 116	15 309	43 267	89 315	129 748	2 432

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LONG BEACH, CA													
31-33	Manufacturing	—	332	92	27 548	1 400 338	15 443	27 299	557 327	2 238 957	5 775 775	8 786 935	134 711
332	Fabricated metal product mfg	1	58	18	1 127	39 377	824	1 621	21 228	84 636	77 980	159 631	9 364
334	Computer & electronic product mfg	1	14	6	1 199	38 971	739	1 590	20 527	128 927	104 459	234 042	5 166
3345	Navigational, measuring, medical, & control instruments mfg	—	5	2	f	D	D	D	D	D	D	D	3 605
33451	Navigational, measuring, medical, & control instruments mfg	—	5	2	f	D	D	D	D	D	D	D	3 605
334512	Automatic environmental control mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	27	14	j	D	D	D	D	D	D	D	104 298
3362	Motor vehicle body & trailer mfg	—	4	4	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	4	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	3	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	9	6	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	9	6	j	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	4	4	j	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	36	7	579	16 073	418	793	9 141	32 159	20 607	52 811	1 273
LOS ALAMITOS, CA													
31-33	Manufacturing	1	63	14	2 048	73 489	1 395	3 109	39 577	144 112	120 442	262 477	7 942
323	Printing & related support activities	—	11	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	11	2	f	D	D	D	D	D	D	D	D
32311	Printing	—	11	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	6	2	f	D	D	D	D	D	D	D	D
LOS ANGELES, CA													
31-33	Manufacturing	2	7 222	1 981	186 758	5 302 781	137 467	249 815	2 909 901	14 314 915	13 140 668	27 378 162	1 000 445
311	Food mfg	1	416	105	12 365	348 685	8 646	15 995	200 621	1 059 433	1 390 128	2 449 979	69 949
3112	Grain & oilseed milling	—	9	6	501	20 396	334	685	13 554	78 087	170 671	249 893	D
3113	Sugar & confectionery product mfg	—	13	4	f	D	D	D	D	D	D	D	11 511
31133	Confectionery mfg from purchased chocolate	—	6	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	6	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	2	19	7	878	25 899	787	1 302	13 321	87 143	82 197	169 009	9 037
31141	Frozen food mfg	—	8	3	627	16 395	605	933	7 406	51 083	45 781	96 990	D
311412	Frozen specialty food mfg	—	7	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	10	4	807	29 745	437	870	15 118	71 761	229 067	301 023	D
31151	Dairy product (except frozen) mfg	1	7	4	793	29 528	426	859	14 955	70 866	227 678	298 739	2 566
311511	Fluid milk mfg	—	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	25	9	726	18 892	526	890	9 219	64 157	87 680	150 966	3 805
31161	Animal slaughtering & processing	1	25	9	726	18 892	526	890	9 219	64 157	87 680	150 966	3 805
3117	Seafood product preparation & packaging	—	27	9	1 474	35 484	1 225	2 189	23 169	73 710	229 265	302 591	5 578
31171	Seafood product preparation & packaging	—	27	9	1 474	35 484	1 225	2 189	23 169	73 710	229 265	302 591	5 578
311711	Seafood canning	—	9	4	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing	—	18	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES, CA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg.....	1	257	41	5 149	130 241	3 098	5 495	67 293	324 705	201 660	526 346	17 865
31181	Bread & bakery product mfg.....	1	231	30	4 446	115 112	2 546	4 479	57 869	289 831	174 007	463 371	14 952
311811	Retail bakeries.....	5	177	15	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	1	52	14	3 135	96 031	1 647	3 310	47 779	244 520	115 685	360 224	10 572
3119	Other food mfg.....	1	52	24	1 651	50 883	1 187	2 429	30 501	204 340	241 593	445 808	9 385
31199	All other food mfg.....	2	26	12	678	16 178	494	1 091	9 270	35 988	35 460	71 400	3 050
312	Beverage & tobacco product mfg.....	—	13	6	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	13	6	g	D	D	D	D	D	D	D	D
31212	Breweries.....	—	2	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	—	2	1	g	D	D	D	D	D	D	D	D
313	Textile mills.....	4	148	37	2 664	64 194	2 176	4 369	42 272	172 204	165 120	331 679	13 804
3132	Fabric mills.....	5	50	11	828	15 582	722	1 360	11 388	29 255	30 249	59 311	2 523
3133	Textile & fabric finishing & fabric coating mills.....	3	91	24	g	D	D	D	D	D	D	D	8 385
31331	Textile & fabric finishing mills.....	3	86	22	1 606	40 966	1 276	2 628	26 230	122 894	113 387	230 832	D
313311	Broadwoven fabric finishing mills.....	3	67	12	792	20 759	591	1 185	11 563	71 461	74 163	141 623	D
313312	Textile & fabric finishing mills.....	3	19	10	814	20 207	685	1 443	14 667	51 433	39 224	89 209	4 452
314	Textile product mills.....	3	243	56	4 917	84 896	4 053	6 889	53 889	170 441	200 143	366 849	11 891
3141	Textile furnishings mills.....	2	75	14	1 234	22 992	994	1 876	16 155	59 345	96 500	155 772	2 139
31412	Curtain & linen mills.....	2	72	13	1 163	20 966	937	1 766	14 829	55 997	92 194	147 758	2 003
314129	Other household textile product mills.....	2	31	10	858	15 868	756	1 448	12 664	46 770	83 352	129 242	1 840
3149	Other textile product mills.....	4	168	42	3 683	61 904	3 059	5 013	37 734	111 096	103 643	211 077	9 752
31491	Textile bag & canvas mills.....	2	53	8	1 443	26 268	1 209	1 948	12 742	43 504	45 940	85 675	1 175
314911	Textile bag mills.....	—	16	3	1 103	18 599	962	1 532	8 622	30 039	35 664	61 863	406
31499	All other textile product mills.....	5	115	34	2 240	35 636	1 850	3 065	24 992	67 592	57 703	125 402	8 577
314999	All other miscellaneous textile product mills.....	5	114	34	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	2	2 396	705	51 314	856 791	43 583	71 519	587 965	2 209 660	2 249 583	4 413 402	112 048
3151	Apparel knitting mills.....	2	39	16	930	16 581	786	1 508	10 225	32 274	50 273	81 848	1 935
31519	Other apparel knitting mills.....	2	34	15	838	14 707	721	1 378	9 337	28 277	36 043	63 732	D
315191	Outerwear knitting mills.....	2	30	14	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.....	2	2 222	662	47 763	795 493	40 557	66 277	545 380	2 049 999	2 091 237	4 097 098	104 827
31521	Cut & sew apparel contractors.....	5	1 498	403	25 992	287 343	24 482	37 414	252 622	525 116	143 472	660 641	18 014
315211	Men's & boys' cut & sew apparel contractors.....	2	63	36	2 538	31 823	2 412	4 030	28 608	66 726	8 565	75 134	2 107
315212	Women's, girls', & infants' cut & sew apparel contractors.....	6	1 435	367	23 454	255 520	22 070	33 384	224 014	458 390	134 907	585 507	15 907
31522	Men's & boys' cut & sew apparel mfg.....	4	150	56	4 265	80 158	3 644	6 690	58 969	191 856	189 896	381 559	4 764
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	3	50	22	1 310	27 798	1 081	2 008	18 181	67 756	102 649	168 519	1 628
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	2	30	15	g	D	D	D	D	D	D	D	1 014
315228	Men's & boys' cut & sew other outerwear mfg.....	6	39	9	965	19 724	802	1 681	15 491	54 965	38 970	96 032	1 824
31523	Women's & girls' cut & sew apparel mfg.....	1	530	190	16 638	411 135	11 701	20 901	222 611	1 301 740	1 728 253	2 993 785	81 008
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	3	24	9	780	17 289	647	1 172	10 602	48 577	72 385	119 312	675
315232	Women's & girls' cut & sew blouse & shirt mfg.....	2	159	59	5 186	140 621	3 753	6 453	78 282	408 058	635 424	1 026 219	6 450
315233	Women's & girls' cut & sew dress mfg.....	2	159	60	3 861	95 352	2 724	5 005	50 747	250 525	359 598	610 112	6 107
315234	Women's & girls' cut & sew suit, coat, skirt mfg.....	1	55	20	1 345	29 196	1 030	1 584	17 598	104 912	126 095	225 282	D
315239	Women's & girls' cut & sew other outerwear mfg.....	—	133	42	5 466	128 677	3 547	6 687	65 382	489 668	534 751	1 012 860	D
31529	Other cut & sew apparel mfg.....	6	44	13	868	16 857	730	1 272	11 178	31 287	29 616	61 113	1 041
315299	All other cut & sew apparel mfg.....	9	29	11	661	11 060	551	937	7 338	21 208	19 299	40 896	623

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES, CA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	3	135	27	2 621	44 717	2 240	3 734	32 360	127 387	108 073	234 456	5 286
31599	Apparel accessories & other apparel mfg	3	135	27	2 621	44 717	2 240	3 734	32 360	127 387	108 073	234 456	5 286
315993	Men's & boys' neckwear mfg	—	6	3	735	13 326	687	1 230	10 715	60 082	50 965	110 030	D
315999	Other apparel accessories & other apparel mfg	5	112	20	1 472	24 833	1 183	1 848	16 575	55 590	49 882	106 176	3 966
316	Leather & allied product mfg .	2	64	19	1 945	33 234	1 681	3 049	22 114	74 945	58 696	135 070	2 101
3162	Footwear mfg	2	30	9	728	9 215	673	1 161	7 109	18 692	15 627	33 687	D
31621	Footwear mfg	2	30	9	728	9 215	673	1 161	7 109	18 692	15 627	33 687	D
3169	Other leather & allied product mfg	2	28	10	1 172	23 030	969	1 820	14 319	54 029	39 810	96 010	1 832
31699	Other leather & allied product mfg	2	28	10	1 172	23 030	969	1 820	14 319	54 029	39 810	96 010	1 832
316999	All other leather good mfg	4	10	4	583	10 045	479	877	6 287	23 399	25 104	50 602	912
321	Wood product mfg	2	89	26	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	2	86	26	g	D	D	D	D	D	D	D	D
32191	Millwork	2	44	12	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	2	26	9	549	14 552	461	918	10 917	22 886	13 344	36 709	D
321999	All other miscellaneous wood product mfg ...	2	26	9	549	14 552	461	918	10 917	22 886	13 344	36 709	D
322	Paper mfg	2	44	17	1 154	41 868	920	1 847	23 361	76 888	85 360	163 305	D
3222	Converted paper product mfg	2	44	17	1 154	41 868	920	1 847	23 361	76 888	85 360	163 305	D
32221	Paperboard container mfg	4	13	6	545	22 958	445	853	10 763	39 088	37 121	76 540	1 438
323	Printing & related support activities	3	690	121	12 692	433 364	9 057	17 147	261 679	895 686	595 538	1 487 871	62 455
3231	Printing & related support activities	3	690	121	12 692	433 364	9 057	17 147	261 679	895 686	595 538	1 487 871	62 455
32311	Printing	3	608	107	11 712	400 843	8 292	15 725	239 425	837 412	581 919	1 415 953	59 525
323110	Commercial lithographic printing ..	3	293	65	6 563	268 303	4 521	9 501	168 452	564 947	386 874	952 960	43 862
323113	Commercial screen printing	1	80	20	2 717	64 695	2 170	3 574	35 512	131 443	122 708	250 526	6 081
323114	Quick printing	5	135	4	610	13 146	432	624	8 251	28 992	16 946	45 970	2 244
323116	Manifold business form printing	—	8	4	640	20 655	294	561	7 672	54 536	15 858	69 661	191
323119	Other commercial printing	3	43	5	548	15 553	391	662	8 964	20 297	22 717	42 966	1 106
32312	Support activities for printing	2	82	14	980	32 521	765	1 422	22 254	58 274	13 619	71 918	2 930
323122	Prepress services	2	54	10	610	26 239	448	900	17 606	47 109	11 332	58 469	2 646
324	Petroleum & coal products mfg	6	15	8	1 988	114 348	1 281	2 791	71 885	671 442	2 449 068	3 113 689	135 804
3241	Petroleum & coal products mfg	6	15	8	1 988	114 348	1 281	2 791	71 885	671 442	2 449 068	3 113 689	135 804
32411	Petroleum refineries	6	4	4	1 698	101 604	1 064	2 313	62 948	626 014	2 359 944	2 977 077	129 782
324110	Petroleum refineries ..	6	4	4	1 698	101 604	1 064	2 313	62 948	626 014	2 359 944	2 977 077	129 782
325	Chemical mfg	1	169	59	9 337	363 706	5 503	10 444	163 741	1 722 642	1 109 640	2 779 148	116 164
3254	Pharmaceutical & medicine mfg	—	20	13	2 961	131 528	1 695	3 507	69 503	905 995	551 926	1 407 971	68 442
32541	Pharmaceutical & medicine mfg	—	20	13	2 961	131 528	1 695	3 507	69 503	905 995	551 926	1 407 971	68 442
325412	Pharmaceutical preparation mfg	—	10	7	804	35 329	504	1 016	18 145	415 443	99 805	512 305	33 356
325413	In-vitro diagnostic substance mfg	—	2	2	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	3	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	39	11	873	33 212	456	879	11 481	99 528	112 717	210 171	4 243
32551	Paint & coating mfg	2	32	9	790	30 445	405	784	9 996	93 486	101 724	193 097	3 644
325510	Paint & coating mfg ...	2	32	9	790	30 445	405	784	9 996	93 486	101 724	193 097	3 644
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	58	19	3 917	142 451	2 257	3 960	51 861	506 158	271 254	775 962	17 851
32562	Toilet preparation mfg	—	34	15	3 672	134 437	2 117	3 683	47 971	483 173	246 084	727 904	15 809
325620	Toilet preparation mfg .	—	34	15	3 672	134 437	2 117	3 683	47 971	483 173	246 084	727 904	15 809
3259	Other chemical product mfg	2	28	9	892	27 204	681	1 266	15 855	87 622	70 649	158 569	6 143
32599	All other chemical product & preparation mfg	2	23	8	795	22 730	617	1 140	13 666	65 965	62 427	128 663	5 603

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES, CA— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	3	151	59	5 484	143 044	4 341	8 673	89 709	312 861	214 908	524 212	22 362
3261	Plastics product mfg	4	125	51	4 766	126 506	3 776	7 455	78 633	273 798	190 129	460 863	21 225
32611	Unsupported plastics film, sheet, & bag mfg ..	2	14	7	588	18 905	455	1 031	12 147	50 057	46 815	96 234	3 069
32619	Other plastics product mfg	5	83	39	3 726	94 306	2 942	5 659	58 110	196 771	115 356	310 182	12 754
326199	All other plastics product mfg	5	80	37	3 586	90 348	2 838	5 502	56 445	189 850	109 836	297 759	12 754
3262	Rubber product mfg	1	26	8	718	16 538	565	1 218	11 076	39 063	24 779	63 349	1 137
32629	Other rubber product mfg	2	17	5	543	11 852	467	985	8 256	29 672	14 562	43 796	865
327	Nonmetallic mineral product mfg	2	129	36	2 144	59 148	1 667	3 283	42 311	150 571	132 626	282 726	13 300
3272	Glass & glass product mfg ..	3	36	5	511	12 000	389	791	7 945	23 172	16 998	40 464	2 662
32721	Glass & glass product mfg	3	36	5	511	12 000	389	791	7 945	23 172	16 998	40 464	2 662
3273	Cement & concrete product mfg	1	31	15	758	27 710	594	1 229	21 559	88 624	87 644	175 625	6 632
331	Primary metal mfg	—	42	17	1 526	42 362	1 148	2 357	24 732	142 840	143 551	292 459	7 153
3314	Nonferrous metal (except aluminum) production & processing	—	13	3	764	16 986	595	1 282	11 413	103 246	95 021	204 879	3 637
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	10	3	744	16 471	579	1 259	11 063	101 670	92 114	200 391	3 484
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	1	25	11	541	16 025	410	822	9 557	30 352	25 040	54 926	2 350
33152	Nonferrous metal foundries	1	25	11	541	16 025	410	822	9 557	30 352	25 040	54 926	2 350
332	Fabricated metal product mfg	1	791	219	18 778	589 799	14 052	27 558	368 742	1 411 991	941 721	2 334 327	79 496
3321	Forging & stamping	—	38	14	839	27 450	605	1 301	16 843	68 714	52 580	119 679	4 198
33211	Forging & stamping	—	38	14	839	27 450	605	1 301	16 843	68 714	52 580	119 679	4 198
332116	Metal stamping	1	31	12	688	20 947	500	1 061	12 764	51 623	34 199	85 181	3 981
3322	Cutlery & handtool mfg	2	27	8	781	18 078	528	899	9 598	49 858	38 460	88 011	2 642
33221	Cutlery & handtool mfg ..	2	27	8	781	18 078	528	899	9 598	49 858	38 460	88 011	2 642
332212	Hand & edge tool mfg .	3	24	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	114	37	3 787	103 558	2 915	5 730	60 714	223 793	188 680	411 983	9 088
33232	Ornamental & architectural metal products mfg	2	103	34	3 624	97 557	2 790	5 512	57 491	210 841	179 806	390 429	8 786
332321	Metal window & door mfg	—	18	9	1 277	35 892	973	2 131	20 314	90 416	89 925	180 421	1 809
332322	Sheet metal work mfg .	3	65	22	2 081	56 011	1 620	3 071	33 712	108 046	84 098	191 549	6 173
3324	Boiler, tank, & shipping container mfg	—	19	8	687	30 083	529	1 211	21 933	99 129	145 189	245 105	5 677
3325	Hardware mfg	—	17	8	696	17 610	533	946	10 264	42 761	33 473	76 662	1 195
33251	Hardware mfg	—	17	8	696	17 610	533	946	10 264	42 761	33 473	76 662	1 195
332510	Hardware mfg	—	17	8	696	17 610	533	946	10 264	42 761	33 473	76 662	1 195
3326	Spring & wire product mfg .	—	18	6	528	10 711	430	816	7 474	23 979	19 570	43 827	1 146
33261	Spring & wire product mfg	—	18	6	528	10 711	430	816	7 474	23 979	19 570	43 827	1 146
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	347	50	4 354	161 438	3 401	6 637	111 688	310 053	138 076	449 166	26 037
33271	Machine shops	2	293	35	3 175	118 897	2 490	4 770	82 401	230 123	95 140	327 393	17 861
332710	Machine shops	2	293	35	3 175	118 897	2 490	4 770	82 401	230 123	95 140	327 393	17 861
33272	Turned product & screw, nut, & bolt mfg	1	54	15	1 179	42 541	911	1 867	29 287	79 930	42 936	121 773	8 176
332722	Bolt, nut, screw, rivet, & washer mfg	1	14	8	700	27 104	538	1 139	18 859	51 893	31 074	82 291	5 937
3328	Coating, engraving, heat treating, & allied activities .	1	130	60	2 970	75 901	2 400	4 814	50 979	159 813	53 054	212 721	8 472
33281	Coating, engraving, heat treating, & allied activities	1	130	60	2 970	75 901	2 400	4 814	50 979	159 813	53 054	212 721	8 472
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	1	27	17	617	17 021	503	981	11 603	43 750	14 472	58 157	3 003
332813	Electroplating, plating, polishing, anodizing, & coloring	1	93	35	2 062	50 046	1 668	3 401	33 492	94 109	33 520	127 440	4 664

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	LOS ANGELES, CA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	81	28	4 136	144 970	2 711	5 204	79 249	433 891	272 639	687 173	21 041
33291	Metal valve mfg	—	29	14	2 891	108 335	1 729	3 188	55 776	340 078	225 005	546 283	17 991
332912	Fluid power valve & hose fitting mfg	1	17	6	g	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	8	6	1 580	50 821	898	1 425	27 404	197 288	152 932	337 697	12 225
33299	All other fabricated metal product mfg	1	52	14	1 245	36 635	982	2 016	23 473	93 813	47 634	140 890	3 050
332999	All other miscellaneous fabricated metal product mfg	2	36	10	711	21 420	537	1 170	13 417	44 078	32 506	76 243	2 624
333	Machinery mfg	1	237	64	5 951	204 435	3 957	7 741	111 561	380 011	419 305	797 189	29 364
3332	Industrial machinery mfg . .	2	27	6	595	18 398	357	608	8 785	32 721	27 052	59 073	1 661
33329	Other industrial machinery mfg	2	21	6	544	16 968	319	537	7 894	28 765	24 430	52 529	D
3333	Commercial & service industry machinery mfg . .	3	57	15	1 327	52 809	901	2 052	29 170	85 063	92 552	177 865	9 746
33331	Commercial & service industry machinery mfg	3	57	15	1 327	52 809	901	2 052	29 170	85 063	92 552	177 865	9 746
333315	Photographic & photocopying equipment mfg	4	23	6	618	29 830	404	1 015	16 846	30 341	47 345	77 221	2 574
3335	Metalworking machinery mfg	—	75	16	1 443	49 211	1 057	1 888	32 185	93 889	159 788	258 408	6 217
33351	Metalworking machinery mfg	—	75	16	1 443	49 211	1 057	1 888	32 185	93 889	159 788	258 408	6 217
3339	Other general-purpose machinery mfg	1	57	18	1 957	63 611	1 202	2 338	32 879	133 368	107 236	233 795	6 606
33399	All other general-purpose machinery mfg	1	39	13	1 387	47 091	859	1 814	25 388	97 640	64 052	153 539	4 728
334	Computer & electronic product mfg	1	304	115	15 117	649 613	8 709	16 469	236 021	1 465 031	721 562	2 184 353	88 457
3341	Computer & peripheral equipment mfg	6	29	15	1 093	53 364	629	1 428	31 471	109 257	98 616	218 808	14 845
33411	Computer & peripheral equipment mfg	6	29	15	1 093	53 364	629	1 428	31 471	109 257	98 616	218 808	14 845
3342	Communications equipment mfg	1	36	17	1 603	63 600	891	1 552	24 450	154 344	137 027	298 105	10 603
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	24	14	1 321	54 481	749	1 335	22 115	123 632	107 458	235 180	9 900
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	24	14	1 321	54 481	749	1 335	22 115	123 632	107 458	235 180	9 900
3343	Audio & video equipment mfg	1	17	5	939	39 337	700	1 150	12 605	65 140	76 307	146 546	4 215
33431	Audio & video equipment mfg	1	17	5	939	39 337	700	1 150	12 605	65 140	76 307	146 546	4 215
334310	Audio & video equipment mfg	1	17	5	939	39 337	700	1 150	12 605	65 140	76 307	146 546	4 215
3344	Semiconductor & other electronic component mfg	2	101	46	5 324	169 510	3 823	7 547	93 445	352 847	159 457	522 364	26 690
33441	Semiconductor & other electronic component mfg	2	101	46	5 324	169 510	3 823	7 547	93 445	352 847	159 457	522 364	26 690
334412	Bare printed circuit board mfg	1	32	11	866	27 823	723	1 512	18 291	52 156	29 376	82 459	2 544
334413	Semiconductor & related device mfg	5	12	6	908	37 888	598	1 112	20 176	100 324	32 133	134 568	14 156
334418	Printed circuit assembly (electronic assembly) mfg	—	6	5	989	29 171	638	1 315	14 303	58 960	14 399	77 602	D
334419	Other electronic component mfg	3	31	14	1 205	37 377	785	1 452	18 892	73 192	48 810	124 707	4 550
3345	Navigational, measuring, medical, & control instruments mfg	—	60	18	5 168	299 317	1 865	3 625	56 923	716 846	210 206	891 457	23 555

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOS ANGELES, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg	—	60	18	5 168	299 317	1 865	3 625	56 923	716 846	210 206	891 457	23 555
334510	Electromedical & electrotherapeutic apparatus mfg	—	3	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	12	6	3 113	203 806	881	1 788	34 793	304 605	122 336	402 617	10 063
334513	Industrial process control instrument mfg	—	11	5	564	19 739	349	691	9 066	33 064	20 339	53 996	1 760
3346	Mfg & reproducing magnetic & optical media .	4	61	14	990	24 485	801	1 167	17 127	66 597	39 949	107 073	8 549
33461	Mfg & reproducing magnetic & optical media	4	61	14	990	24 485	801	1 167	17 127	66 597	39 949	107 073	8 549
334612	Prerecorded CD (except software), tape, & record reproducing	3	54	13	902	22 434	729	1 055	15 666	63 085	34 078	97 234	7 269
335	Electrical equipment, appliance, & component mfg	2	120	46	4 545	140 316	3 045	5 661	58 453	316 993	199 395	515 840	15 634
3351	Electric lighting equipment mfg	3	46	19	1 706	46 886	1 040	2 206	20 781	123 622	75 443	196 130	6 686
33512	Lighting fixture mfg	2	45	18	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg . . .	1	19	7	758	12 259	479	1 057	7 447	28 059	18 643	47 268	402
335122	Commercial/industrial/institutional electric lighting fixture mfg . . .	4	13	6	572	21 033	300	648	6 863	68 951	31 440	98 832	4 501
3353	Electrical equipment mfg . .	3	38	11	1 299	38 397	951	1 841	18 533	69 674	51 915	125 351	3 922
33531	Electrical equipment mfg	3	38	11	1 299	38 397	951	1 841	18 533	69 674	51 915	125 351	3 922
3359	Other electrical equipment & component mfg	2	33	15	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	22	8	947	42 184	616	990	11 746	97 317	54 707	150 597	2 909
335999	All other miscellaneous electrical equipment & component mfg	2	21	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	183	73	13 908	573 718	7 852	15 545	211 226	1 131 016	698 465	1 882 117	70 238
3362	Motor vehicle body & trailer mfg	1	11	5	755	9 948	594	1 010	6 135	19 628	29 915	49 579	D
33621	Motor vehicle body & trailer mfg	1	11	5	755	9 948	594	1 010	6 135	19 628	29 915	49 579	D
336214	Travel trailer & camper mfg	1	4	2	f	D	D	D	D	D	D	D	492
3363	Motor vehicle parts mfg . . .	4	91	32	4 639	127 091	3 692	7 517	81 015	256 864	239 765	497 135	22 490
33632	Motor vehicle electrical & electronic equipment mfg	7	21	8	826	19 735	676	1 258	13 607	40 324	40 602	82 006	3 263
336322	Other motor vehicle electrical & electronic equipment mfg	6	19	7	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	9	5	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	9	5	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	25	12	1 826	60 658	1 407	2 898	35 756	129 494	99 157	226 420	7 316
336399	All other motor vehicle parts mfg	1	23	12	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	54	23	7 559	409 627	2 786	5 386	105 056	800 978	358 262	1 208 906	44 891
33641	Aerospace product & parts mfg	—	54	23	7 559	409 627	2 786	5 386	105 056	800 978	358 262	1 208 906	44 891
336413	Other aircraft part & auxiliary equipment mfg	1	35	13	1 124	39 907	829	1 338	24 798	93 548	54 366	146 418	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	4	3	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg . . .	1	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOS ANGELES, CA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3366	Ship & boat building	5	10	6	f	D	D	D	D	D	D	D	1 464
33661	Ship & boat building	5	10	6	f	D	D	D	D	D	D	D	1 464
337	Furniture & related product mfg	1	357	87	8 038	177 937	6 399	11 396	113 519	393 851	321 051	716 401	11 021
3371	Household & institutional furniture & kitchen cabinet mfg	2	256	54	4 921	98 085	3 998	7 314	68 668	201 268	181 901	384 612	5 271
33712	Household & institutional furniture mfg	2	178	49	4 453	88 408	3 614	6 651	61 395	184 410	169 132	355 038	4 621
337121	Upholstered household furniture mfg	1	53	21	1 797	34 270	1 533	2 805	25 233	60 732	69 845	130 206	1 687
337122	Nonupholstered wood household furniture mfg	4	86	20	1 334	21 744	1 122	1 969	16 400	41 162	34 333	74 777	1 444
337127	Institutional furniture mfg	—	12	3	855	23 608	629	1 293	14 640	61 513	45 745	109 897	518
3372	Office furniture (including fixtures) mfg	1	71	25	2 104	56 262	1 737	2 717	32 664	140 461	78 903	218 523	4 163
33721	Office furniture (including fixtures) mfg	1	71	25	2 104	56 262	1 737	2 717	32 664	140 461	78 903	218 523	4 163
337215	Showcase, partition, shelving, & locker mfg	1	33	10	973	25 982	800	1 191	12 940	79 566	38 465	118 095	2 346
3379	Other furniture related product mfg	—	30	8	1 013	23 590	664	1 365	12 187	52 122	60 247	113 266	1 587
33792	Blind & shade mfg	—	13	6	811	19 649	503	1 074	9 801	43 032	49 920	93 835	747
337920	Blind & shade mfg	—	13	6	811	19 649	503	1 074	9 801	43 032	49 920	93 835	747
339	Miscellaneous mfg	3	621	106	9 669	249 179	6 972	12 228	132 635	584 076	436 318	1 029 213	30 119
3391	Medical equipment & supplies mfg	3	159	22	1 844	57 647	1 147	1 931	27 154	126 830	52 161	180 992	6 328
33911	Medical equipment & supplies mfg	3	159	22	1 844	57 647	1 147	1 931	27 154	126 830	52 161	180 992	6 328
339112	Surgical & medical instrument mfg	2	19	4	529	21 430	209	428	6 907	45 652	16 865	63 459	2 383
339116	Dental laboratories ..	4	102	6	548	16 192	400	648	9 344	33 220	10 277	43 991	728
3399	Other miscellaneous mfg ..	3	462	84	7 825	191 532	5 825	10 297	105 481	457 246	384 157	848 221	23 791
33991	Jewelry & silverware mfg	3	243	28	2 890	64 550	2 156	3 245	34 704	186 683	197 378	385 811	5 810
339911	Jewelry (except costume) mfg	2	195	24	2 390	55 204	1 827	2 614	29 367	168 061	185 165	355 448	5 286
33992	Sporting & athletic goods mfg	1	28	6	1 080	29 726	769	1 623	14 864	72 678	35 977	110 321	9 068
339920	Sporting & athletic goods mfg	1	28	6	1 080	29 726	769	1 623	14 864	72 678	35 977	110 321	9 068
33995	Sign mfg	1	61	15	969	27 067	721	1 316	13 412	57 322	29 385	87 083	1 658
339950	Sign mfg	1	61	15	969	27 067	721	1 316	13 412	57 322	29 385	87 083	1 658
33999	All other miscellaneous mfg	4	97	29	2 450	58 495	1 864	3 484	35 774	109 505	95 792	208 539	5 101
339999	All other miscellaneous mfg	6	58	18	1 686	36 518	1 326	2 473	25 032	71 489	64 974	135 874	3 818
LOS BANOS, CA													
31-33	Manufacturing	1	14	7	f	D	D	D	D	D	D	D	D
LOS GATOS, CA													
31-33	Manufacturing	3	61	13	1 055	50 155	731	1 204	19 338	80 486	54 558	136 389	5 673
334	Computer & electronic product mfg	4	25	9	685	37 910	462	705	12 655	57 259	31 626	90 187	3 749
LYNWOOD, CA													
31-33	Manufacturing	2	62	32	2 516	56 647	2 007	3 541	36 297	119 863	170 249	288 952	8 194
332	Fabricated metal product mfg	2	11	8	544	11 870	437	652	6 636	24 323	19 396	43 214	1 765
333	Machinery mfg	6	8	3	507	14 548	316	651	8 932	21 358	30 370	50 391	3 975
337	Furniture & related product mfg	2	11	5	518	11 066	438	870	7 519	15 201	22 747	38 799	291
MADERA, CA													
31-33	Manufacturing	1	38	15	1 260	33 908	863	1 794	19 554	90 532	101 393	190 942	5 951

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MANTECA, CA													
31-33	Manufacturing	2	28	8	1 779	38 406	1 300	2 192	25 527	92 914	116 223	208 194	23 879
311	Food mfg.....	4	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
MARTINEZ, CA													
31-33	Manufacturing	9	33	7	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	9	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	9	1	1	f	D	D	D	D	D	D	D	D
MARYSVILLE, CA													
31-33	Manufacturing	-	21	7	587	13 954	496	1 069	10 557	41 157	106 115	148 135	3 017
MAYWOOD, CA													
31-33	Manufacturing	4	31	9	514	9 089	446	727	6 623	19 870	11 657	32 687	603
MENLO PARK, CA													
31-33	Manufacturing	-	78	44	6 371	369 776	3 053	5 309	108 731	950 119	541 632	1 477 966	66 960
326	Plastics & rubber products mfg.....	-	9	4	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	9	4	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	8	4	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	8	4	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	21	15	1 063	56 245	483	915	21 374	106 758	89 027	195 852	8 422
3345	Navigational, measuring, medical, & control instruments mfg.....	-	10	6	660	36 214	327	626	17 047	76 510	43 079	117 814	3 973
33451	Navigational, measuring, medical, & control instruments mfg.....	-	10	6	660	36 214	327	626	17 047	76 510	43 079	117 814	3 973
334511	Search, detection, navigation, & guidance instrument mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	14	7	859	47 545	379	744	12 265	92 438	41 936	134 508	6 081
3391	Medical equipment & supplies mfg.....	1	10	5	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	1	10	5	f	D	D	D	D	D	D	D	D
MERCED, CA													
31-33	Manufacturing	1	42	18	2 326	64 256	1 762	3 650	44 906	208 550	256 984	457 299	8 959
323	Printing & related support activities.....	-	7	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	7	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	7	2	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	5	5	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MILPITAS, CA													
31-33	Manufacturing	1	202	107	27 550	1 364 643	12 846	29 776	449 537	4 486 657	2 643 471	7 129 621	422 248
332	Fabricated metal product mfg	-	32	13	1 501	60 764	1 220	2 755	40 458	129 796	72 630	203 265	8 611
3328	Coating, engraving, heat treating, & allied activities .	-	3	3	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	3	3	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	8	16	4	643	38 190	379	811	17 981	86 750	70 315	156 872	D
334	Computer & electronic product mfg	1	90	62	21 406	1 071 815	9 322	22 559	326 491	3 296 070	2 152 039	5 474 985	383 676
3341	Computer & peripheral equipment mfg	-	15	6	2 202	122 050	849	1 810	36 887	194 571	219 611	411 541	74 575
33411	Computer & peripheral equipment mfg	-	15	6	2 202	122 050	849	1 810	36 887	194 571	219 611	411 541	74 575
334112	Computer storage device mfg	-	6	3	1 709	91 225	653	1 356	31 491	144 345	165 238	307 240	D
3342	Communications equipment mfg	9	7	6	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	9	5	5	1 704	109 658	207	430	7 081	232 717	118 413	355 504	19 611
334210	Telephone apparatus mfg	9	5	5	1 704	109 658	207	430	7 081	232 717	118 413	355 504	19 611
3344	Semiconductor & other electronic component mfg	-	50	37	16 030	759 121	7 707	19 298	267 049	2 721 312	1 635 861	4 389 203	272 946
33441	Semiconductor & other electronic component mfg	-	50	37	16 030	759 121	7 707	19 298	267 049	2 721 312	1 635 861	4 389 203	272 946
334412	Bare printed circuit board mfg	-	10	5	2 753	165 960	895	1 778	33 180	725 058	409 379	1 163 301	76 899
334413	Semiconductor & related device mfg ...	1	17	12	3 690	231 663	1 727	4 748	82 121	725 187	270 054	992 588	146 597
334418	Printed circuit assembly (electronic assembly) mfg	-	9	9	i	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	10	7	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	15	10	1 235	69 909	449	772	11 895	112 811	163 854	269 609	13 608
33451	Navigational, measuring, medical, & control instruments mfg	-	15	10	1 235	69 909	449	772	11 895	112 811	163 854	269 609	13 608
334517	Irradiation apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	10	5	604	27 268	403	662	16 281	63 825	32 398	81 242	2 615
3353	Electrical equipment mfg ..	-	5	4	533	24 663	344	540	15 127	59 227	29 340	73 478	2 527
33531	Electrical equipment mfg	-	5	4	533	24 663	344	540	15 127	59 227	29 340	73 478	2 527
339	Miscellaneous mfg	-	7	4	g	D	D	D	D	D	D	D	10 962
3391	Medical equipment & supplies mfg	-	5	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	3	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	3	g	D	D	D	D	D	D	D	D
MISSION VIEJO, CA													
31-33	Manufacturing	8	46	7	1 466	70 349	634	1 234	27 817	151 272	120 471	272 294	D
334	Computer & electronic product mfg	9	9	4	977	55 781	330	689	22 518	121 253	111 756	233 121	D
3341	Computer & peripheral equipment mfg	9	5	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	9	5	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	9	2	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MODESTO, CA													
31-33	Manufacturing	-	137	42	7 462	265 526	4 677	8 996	116 156	946 491	1 207 850	2 124 803	22 637
311	Food mfg	-	18	10	2 275	65 911	1 869	3 492	41 850	358 468	349 008	711 755	13 447
3114	Fruit & vegetable preserving & specialty food mfg	-	3	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	4	6	5	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	4	6	5	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	3	3	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	3	h	D	D	D	D	D	D	D	D
31213	Wineries	-	1	1	h	D	D	D	D	D	D	D	D
312130	Wineries	-	1	1	h	D	D	D	D	D	D	D	D
MONROVIA, CA													
31-33	Manufacturing	2	130	51	5 150	199 411	2 969	5 985	89 874	395 645	331 148	725 614	26 679
334	Computer & electronic product mfg	6	17	13	1 134	50 875	633	1 330	22 369	111 137	65 148	174 213	7 378
3345	Navigational, measuring, medical, & control instruments mfg	9	8	5	689	33 919	390	835	16 755	75 176	29 238	101 257	5 743
33451	Navigational, measuring, medical, & control instruments mfg	9	8	5	689	33 919	390	835	16 755	75 176	29 238	101 257	5 743
336	Transportation equipment mfg	-	5	3	1 593	66 641	810	1 728	28 499	90 812	126 043	217 381	8 469
3364	Aerospace product & parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
MONTCLAIR, CA													
31-33	Manufacturing	3	72	10	854	19 904	699	1 200	12 950	40 858	54 472	94 950	2 106
MONTEBELLO, CA													
31-33	Manufacturing	1	112	43	4 850	133 688	3 421	6 786	74 817	367 836	274 573	642 228	23 737
311	Food mfg	1	11	5	1 175	40 492	529	940	14 791	159 491	89 882	248 244	5 844
3118	Bakeries & tortilla mfg	-	7	3	1 007	35 911	400	624	12 397	141 799	72 832	214 548	D
31181	Bread & bakery product mfg	-	6	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	20	8	718	11 212	660	1 353	9 002	16 148	9 869	25 623	650
3152	Cut & sew apparel mfg	5	15	7	619	9 034	574	1 147	7 559	9 696	7 664	17 080	502
31523	Women's & girls' cut & sew apparel mfg	5	7	4	509	7 822	466	1 025	6 483	7 410	6 960	14 090	464
337	Furniture & related product mfg	1	9	3	771	12 330	665	1 471	8 470	21 085	19 075	37 616	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	5	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	5	2	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONTEREY, CA													
31-33	Manufacturing	3	61	13	1 317	44 105	745	1 341	17 235	80 163	80 543	159 556	6 780
334	Computer & electronic product mfg	-	12	6	f	D	D	D	D	D	D	D	D
MONTEREY PARK, CA													
31-33	Manufacturing	3	79	22	1 841	43 858	1 318	2 073	23 859	106 065	64 996	170 437	10 043
334	Computer & electronic product mfg	-	7	3	502	5 626	317	336	2 827	21 299	9 102	30 361	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MOORPARK, CA													
31-33	Manufacturing	1	52	18	2 578	79 369	1 576	3 352	34 601	221 189	148 545	370 150	11 419
334	Computer & electronic product mfg	-	11	2	1 444	35 203	875	1 840	13 414	98 293	67 760	166 194	4 233
3344	Semiconductor & other electronic component mfg	-	6	2	g	D	D	D	D	D	D	D	4 116
33441	Semiconductor & other electronic component mfg	-	6	2	g	D	D	D	D	D	D	D	4 116
334419	Other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
MORENO VALLEY, CA													
31-33	Manufacturing	2	19	5	1 095	20 757	631	1 243	14 956	58 033	86 690	143 668	1 964
337	Furniture & related product mfg	9	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	9	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	9	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	9	1	1	f	D	D	D	D	D	D	D	D
MORGAN HILL, CA													
31-33	Manufacturing	1	68	25	2 304	91 779	1 465	2 927	45 462	220 090	144 756	365 310	13 064
332	Fabricated metal product mfg	-	22	8	787	26 733	589	1 173	16 657	41 024	42 282	80 972	2 561
3323	Architectural & structural metals mfg	-	6	4	526	18 480	381	767	11 310	24 289	25 968	49 648	D
33232	Ornamental & architectural metal products mfg	-	6	4	526	18 480	381	767	11 310	24 289	25 968	49 648	D
332322	Sheet metal work mfg	-	6	4	526	18 480	381	767	11 310	24 289	25 968	49 648	D
334	Computer & electronic product mfg	1	16	7	848	42 334	400	893	15 109	135 164	39 647	175 532	8 721
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	634	32 182	277	644	10 888	114 146	25 930	141 429	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	634	32 182	277	644	10 888	114 146	25 930	141 429	D
334515	Electricity measuring & testing instrument mfg	-	4	3	634	32 182	277	644	10 888	114 146	25 930	141 429	D
MOUNTAIN VIEW, CA													
31-33	Manufacturing	-	235	78	20 837	1 298 658	7 926	18 250	352 645	6 251 610	3 198 126	9 372 036	283 172
332	Fabricated metal product mfg	4	39	9	650	25 195	474	994	15 429	47 535	21 508	68 043	3 139
333	Machinery mfg	5	13	6	575	23 647	336	649	10 293	49 485	40 936	92 666	D
334	Computer & electronic product mfg	-	76	37	17 045	1 141 150	5 526	13 357	274 021	5 865 194	2 937 854	8 727 157	257 163
3341	Computer & peripheral equipment mfg	-	14	7	11 090	834 467	1 482	4 984	104 823	4 974 836	2 657 736	7 567 196	D
33411	Computer & peripheral equipment mfg	-	14	7	11 090	834 467	1 482	4 984	104 823	4 974 836	2 657 736	7 567 196	D
334111	Electronic computer mfg	-	6	3	j	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	13	11	893	46 321	418	807	10 783	79 333	53 777	135 286	7 709
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	8	7	535	28 531	292	566	7 041	62 637	41 044	105 997	2 568
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	8	7	535	28 531	292	566	7 041	62 637	41 044	105 997	2 568
3344	Semiconductor & other electronic component mfg	3	30	10	1 856	69 923	1 489	3 109	38 976	163 030	61 801	218 201	20 433
33441	Semiconductor & other electronic component mfg	3	30	10	1 856	69 923	1 489	3 109	38 976	163 030	61 801	218 201	20 433
334412	Bare printed circuit board mfg	-	5	4	538	15 837	511	1 105	13 986	38 299	26 834	64 553	4 037
334413	Semiconductor & related device mfg	4	12	5	1 193	50 029	888	1 828	22 912	116 270	29 323	139 229	15 857

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MOUNTAIN VIEW, CA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	16	6	2 902	177 717	2 005	4 177	115 882	619 831	145 999	760 076	D
33451	Navigational, measuring, medical, & control instruments mfg	-	16	6	2 902	177 717	2 005	4 177	115 882	619 831	145 999	760 076	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	3	681	33 735	325	708	15 710	74 782	74 181	144 947	D
3359	Other electrical equipment & component mfg	-	4	3	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	3	3	657	33 097	306	675	15 273	73 302	72 666	141 923	D
335999	All other miscellaneous electrical equipment & component mfg	-	3	3	657	33 097	306	675	15 273	73 302	72 666	141 923	D
339	Miscellaneous mfg	4	22	5	514	24 144	271	525	8 673	47 196	24 753	72 130	3 034
	MURRIETA, CA												
31-33	Manufacturing	4	29	10	765	30 327	544	1 034	16 333	71 974	72 275	143 525	9 793
	NAPA, CA												
31-33	Manufacturing	-	104	20	2 694	84 685	1 805	3 420	40 967	400 475	203 814	591 200	30 617
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	9	3	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	-	2	2	f	D	D	D	D	D	D	D	D
	NATIONAL CITY, CA												
31-33	Manufacturing	1	100	22	1 744	45 079	1 321	2 372	27 554	133 607	209 142	342 740	21 743
	NEVADA CITY, CA												
31-33	Manufacturing	-	20	5	596	26 920	368	478	13 296	111 110	79 673	199 550	D
334	Computer & electronic product mfg	-	7	4	f	D	D	D	D	D	D	D	D
	NEWARK, CA												
31-33	Manufacturing	-	84	37	2 989	124 070	2 179	4 535	70 595	337 105	263 858	597 479	30 317
325	Chemical mfg	-	7	6	501	18 021	357	824	13 626	69 314	32 990	101 911	6 353

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWPORT BEACH, CA													
31-33	Manufacturing	1	109	18	5 136	255 577	2 563	4 662	69 589	1 295 162	346 327	1 481 798	D
334	Computer & electronic product mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	2	2	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	17	3	994	30 208	624	1 672	19 912	33 506	12 019	45 996	1 340
3391	Medical equipment & supplies mfg.....	-	9	3	973	29 663	607	1 645	19 548	32 193	11 122	43 781	1 259
33911	Medical equipment & supplies mfg.....	-	9	3	973	29 663	607	1 645	19 548	32 193	11 122	43 781	1 259
339116	Dental laboratories ...	-	6	2	f	D	D	D	D	D	D	D	D
NORWALK, CA													
31-33	Manufacturing	3	75	19	1 234	28 871	922	1 644	18 210	73 073	88 171	159 882	4 518
NOVATO, CA													
31-33	Manufacturing	3	82	20	1 669	65 232	947	2 007	25 404	122 525	130 347	263 127	8 331
OAKDALE, CA													
31-33	Manufacturing	2	34	13	2 568	98 314	2 076	4 619	72 499	451 531	511 880	964 237	40 468
311	Food mfg.....	2	4	4	1 911	75 687	1 554	3 562	55 570	400 873	410 150	809 130	33 405
3113	Sugar & confectionery product mfg.....	3	2	2	g	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	3	2	2	g	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	3	2	2	g	D	D	D	D	D	D	D	D
OAKLAND, CA													
31-33	Manufacturing	3	574	157	13 913	426 225	9 664	18 457	242 879	1 196 774	869 507	2 048 065	68 042
311	Food mfg.....	2	65	25	4 306	137 728	2 381	4 703	61 370	392 849	252 634	645 782	25 175
3118	Bakeries & tortilla mfg.....	2	31	11	3 340	104 460	1 725	3 336	41 367	291 134	124 544	417 267	19 073
31181	Bread & bakery product mfg.....	5	23	6	2 284	61 438	1 235	2 459	29 840	141 658	66 087	207 560	11 827
311812	Commercial bakeries ..	5	9	5	2 162	59 534	1 165	2 367	28 967	137 671	63 994	201 464	11 712
31182	Cookie, cracker, & pasta mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	16	9	677	23 255	444	936	13 437	69 999	67 775	136 064	3 810
315	Apparel mfg.....	3	109	36	1 911	25 082	1 732	2 979	19 681	42 313	20 012	62 263	D
3152	Cut & sew apparel mfg....	4	102	32	1 631	19 653	1 528	2 519	16 589	30 965	8 908	40 015	D
31521	Cut & sew apparel contractors	6	76	22	1 249	14 093	1 179	1 868	12 197	21 965	4 897	26 810	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	74	20	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	76	10	790	27 362	557	925	16 556	59 948	30 338	88 707	2 719
3231	Printing & related support activities.....	3	76	10	790	27 362	557	925	16 556	59 948	30 338	88 707	2 719
32311	Printing	3	62	9	659	21 514	476	778	13 538	47 291	27 950	73 809	D
327	Nonmetallic mineral product mfg.....	-	14	5	730	29 737	581	1 162	22 350	91 971	61 047	146 474	D
3272	Glass & glass product mfg ..	-	6	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	84	22	1 572	57 567	1 161	2 215	34 896	112 808	70 736	184 101	5 606
336	Transportation equipment mfg.....	-	19	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	2	38	8	578	15 887	481	852	11 282	34 450	23 076	57 579	1 373
339	Miscellaneous mfg.....	2	43	3	583	15 282	436	839	10 585	42 195	11 504	40 486	637

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OCEANSIDE, CA													
31-33	Manufacturing	2	157	51	3 749	97 499	2 934	5 650	58 962	256 252	169 080	416 539	13 038
332	Fabricated metal product mfg	1	21	10	647	19 347	524	1 004	12 825	43 784	23 444	66 110	2 948
334	Computer & electronic product mfg	2	21	5	772	15 797	663	1 312	9 426	54 355	10 825	62 725	2 885
3344	Semiconductor & other electronic component mfg	1	14	3	675	12 830	608	1 228	8 281	48 651	7 178	53 084	2 570
33441	Semiconductor & other electronic component mfg	1	14	3	675	12 830	608	1 228	8 281	48 651	7 178	53 084	2 570
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
ONTARIO, CA													
31-33	Manufacturing	1	420	179	16 296	483 434	12 703	25 118	312 446	1 692 554	1 560 225	3 257 532	101 124
311	Food mfg	2	17	6	1 043	31 931	713	1 522	18 748	430 879	278 656	712 009	11 111
322	Paper mfg	-	17	13	807	29 100	628	1 438	18 886	95 095	159 628	254 198	7 911
3222	Converted paper product mfg	-	16	12	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	13	9	573	18 811	461	1 062	12 372	41 340	95 823	136 564	D
323	Printing & related support activities	2	35	9	595	19 985	428	903	13 722	66 225	51 468	119 072	1 763
3231	Printing & related support activities	2	35	9	595	19 985	428	903	13 722	66 225	51 468	119 072	1 763
326	Plastics & rubber products mfg	1	50	33	2 871	72 905	2 363	4 330	46 570	183 889	143 075	322 437	16 586
3261	Plastics product mfg	1	48	32	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	27	19	1 601	42 167	1 318	2 441	27 167	102 770	53 881	154 078	8 482
326199	All other plastics product mfg	-	26	18	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	86	23	2 363	70 173	1 848	3 710	45 772	152 045	117 662	269 828	9 562
3323	Architectural & structural metals mfg	-	18	4	681	15 960	536	921	8 246	33 773	43 581	77 392	1 012
33232	Ornamental & architectural metal products mfg	-	11	3	586	13 210	474	789	6 914	28 525	34 780	63 356	795
332321	Metal window & door mfg	-	4	3	542	12 248	446	744	6 401	25 604	32 022	57 675	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	42	10	826	29 617	657	1 397	20 998	58 995	41 757	100 097	5 198
333	Machinery mfg	6	36	9	582	24 807	436	896	15 560	53 871	38 180	92 455	3 064
335	Electrical equipment, appliance, & component mfg	-	9	3	841	25 567	714	1 532	17 693	139 399	87 683	227 587	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	31	22	2 049	75 913	1 610	2 993	53 507	175 448	375 903	547 432	30 881
3363	Motor vehicle parts mfg ...	2	14	10	579	15 637	432	799	8 965	36 701	33 969	70 916	2 958
3364	Aerospace product & parts mfg	-	8	7	1 024	49 139	810	1 413	37 214	118 275	303 331	416 745	D
33641	Aerospace product & parts mfg	-	8	7	1 024	49 139	810	1 413	37 214	118 275	303 331	416 745	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	34	22	2 163	49 828	1 719	3 241	32 688	108 932	109 946	232 476	5 278
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	11	1 467	30 195	1 232	2 293	21 322	53 331	70 336	137 414	4 163
33712	Household & institutional furniture mfg	-	15	11	1 456	29 957	1 223	2 278	21 157	52 916	70 019	136 679	4 143
337122	Nonupholstered wood household furniture mfg	-	9	7	864	15 486	707	1 441	10 038	25 310	48 351	87 951	3 497
339	Miscellaneous mfg	1	22	10	863	25 989	662	1 366	16 379	86 186	36 992	119 549	2 940
3399	Other miscellaneous mfg ..	-	15	7	730	22 670	578	1 201	14 545	71 862	30 471	98 796	2 486

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORANGE, CA													
31-33	Manufacturing	1	338	111	10 463	309 389	7 545	14 723	162 875	767 521	681 805	1 452 639	38 842
323	Printing & related support activities.....	1	43	9	564	15 546	420	775	9 453	32 090	20 205	52 368	1 620
3231	Printing & related support activities.....	1	43	9	564	15 546	420	775	9 453	32 090	20 205	52 368	1 620
32311	Printing	1	37	7	504	14 382	367	696	8 771	30 387	19 922	50 351	1 520
326	Plastics & rubber products mfg	2	19	10	1 482	36 962	1 204	2 207	21 612	104 635	125 344	227 662	8 281
3261	Plastics product mfg	3	18	9	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	70	29	2 084	57 949	1 633	3 375	35 966	119 686	88 105	208 794	7 964
3321	Forging & stamping	1	7	6	596	14 362	495	1 172	10 148	21 469	31 971	53 901	820
33211	Forging & stamping	1	7	6	596	14 362	495	1 172	10 148	21 469	31 971	53 901	820
3328	Coating, engraving, heat treating, & allied activities	1	15	12	640	16 073	514	956	9 611	36 102	14 489	50 930	2 671
33281	Coating, engraving, heat treating, & allied activities.....	1	15	12	640	16 073	514	956	9 611	36 102	14 489	50 930	2 671
333	Machinery mfg	-	22	6	1 461	62 200	693	1 190	18 922	195 698	141 312	343 716	5 239
3331	Agriculture, construction, & mining machinery mfg.	-	2	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	34	9	984	28 724	678	1 480	15 901	55 202	41 227	96 832	4 065
3344	Semiconductor & other electronic component mfg	1	18	8	829	22 559	602	1 334	13 456	41 016	33 541	75 084	D
33441	Semiconductor & other electronic component mfg	1	18	8	829	22 559	602	1 334	13 456	41 016	33 541	75 084	D
337	Furniture & related product mfg	-	26	12	677	16 894	567	1 181	10 598	32 762	35 888	67 144	1 754
OROVILLE, CA													
31-33	Manufacturing	1	42	9	1 084	31 428	919	1 894	24 629	79 370	104 062	184 676	4 039
OXNARD, CA													
31-33	Manufacturing	1	172	70	6 935	220 767	5 242	10 264	130 276	749 006	697 880	1 440 730	42 231
311	Food mfg	3	24	8	617	10 640	548	816	8 771	39 949	26 624	67 429	6 854
315	Apparel mfg	-	7	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	6	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	11	1 153	32 499	976	1 988	20 360	69 842	33 644	103 485	1 979
3261	Plastics product mfg	-	13	11	1 153	32 499	976	1 988	20 360	69 842	33 644	103 485	1 979
32619	Other plastics product mfg	-	12	11	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	12	11	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	32	11	588	22 558	405	875	13 253	51 992	37 410	89 658	4 322
333	Machinery mfg	-	15	5	f	D	D	D	D	D	D	D	461
3335	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	121
33351	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	121
333512	Machine tool (metal cutting types) mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	22	7	814	17 771	621	1 239	10 013	54 769	25 470	80 337	1 840
3399	Other miscellaneous mfg ..	-	11	4	643	13 170	513	1 060	7 891	44 721	20 514	65 322	1 542

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
PALMDALE, CA														
31-33	Manufacturing	-	44	4	i	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	5	2	i	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	2	1	i	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	2	1	i	D	D	D	D	D	D	D	D	
336411	Aircraft mfg	-	1	1	i	D	D	D	D	D	D	D	D	
PALM DESERT, CA														
31-33	Manufacturing	2	57	4		702	18 887	518	919	10 831	40 973	40 205	82 227	3 731
PALM SPRINGS, CA														
31-33	Manufacturing	1	37	9		734	22 534	470	921	8 467	73 771	35 022	107 626	1 462
PALO ALTO, CA														
31-33	Manufacturing	-	114	33		7 983	362 574	5 766	10 162	231 750	1 825 277	397 448	2 232 002	69 872
334	Computer & electronic product mfg	-	33	14		5 456	276 179	4 321	7 284	189 755	1 616 598	245 395	1 858 502	48 912
3342	Communications equipment mfg	-	5	5	h	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	4	h	D	D	D	D	D	D	D	40 817	
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	4	h	D	D	D	D	D	D	D	40 817	
3344	Semiconductor & other electronic component mfg	-	11	4		600	31 024	429	792	14 843	83 948	36 064	118 615	3 624
33441	Semiconductor & other electronic component mfg	-	11	4		600	31 024	429	792	14 843	83 948	36 064	118 615	3 624
3345	Navigational, measuring, medical, & control instruments mfg	-	7	4	f	D	D	D	D	D	D	D	3 256	
33451	Navigational, measuring, medical, & control instruments mfg	-	7	4	f	D	D	D	D	D	D	D	3 256	
339	Miscellaneous mfg	4	21	5		972	30 685	568	1 062	17 137	70 273	48 900	128 075	3 490
PARAMOUNT, CA														
31-33	Manufacturing	2	268	86		6 401	199 444	4 813	9 397	125 605	450 626	616 266	1 081 657	24 168
332	Fabricated metal product mfg	3	87	33		2 238	91 943	1 695	3 416	62 008	186 804	139 484	325 887	13 647
3321	Forging & stamping	6	8	5		587	39 890	454	1 156	27 677	80 948	81 762	163 550	6 525
33211	Forging & stamping	6	8	5		587	39 890	454	1 156	27 677	80 948	81 762	163 550	6 525
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	36	10		653	21 623	525	987	14 858	40 296	18 486	58 371	3 979
PASADENA, CA														
31-33	Manufacturing	3	151	37		2 877	87 403	1 931	3 592	44 204	207 570	179 501	388 990	9 781
339	Miscellaneous mfg	-	19	6		546	15 146	456	832	8 861	33 760	34 683	67 742	891
PATTERSON, CA														
31-33	Manufacturing	1	9	3	f	D	D	D	D	D	D	D	D	1 334
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PERRIS, CA													
31-33	Manufacturing	-	40	18	2 616	59 659	2 071	4 116	42 434	170 290	255 029	421 668	10 353
336	Transportation equipment mfg	-	5	5	1 221	21 332	965	1 866	17 918	73 096	141 844	211 020	4 979
3362	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336213	Motor home mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PETALUMA, CA													
31-33	Manufacturing	-	119	47	4 998	249 793	2 730	5 436	82 366	665 302	792 764	1 403 678	49 523
311	Food mfg	-	14	9	643	20 265	341	726	8 616	72 134	450 405	522 347	10 249
333	Machinery mfg	3	11	7	622	29 389	277	579	9 334	77 505	34 633	108 749	2 996
334	Computer & electronic product mfg.....	-	10	8	g	D	D	D	D	D	D	D	21 458
3342	Communications equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	3	3	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	10	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	4	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	2	g	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	2	2	g	D	D	D	D	D	D	D	D
PICO RIVERA, CA													
31-33	Manufacturing	2	81	42	3 122	89 024	2 269	4 377	46 298	259 350	258 509	518 526	8 017
322	Paper mfg	-	7	5	657	18 920	509	1 040	11 365	46 467	35 214	84 439	998
3222	Converted paper product mfg	-	7	5	657	18 920	509	1 040	11 365	46 467	35 214	84 439	998
PITTSBURG, CA													
31-33	Manufacturing	-	46	16	2 362	118 346	1 651	3 349	81 588	616 901	890 439	1 503 127	30 967
325	Chemical mfg	-	6	5	633	41 194	378	756	25 580	265 148	163 822	433 239	7 355
3251	Basic chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
PLACENTIA, CA													
31-33	Manufacturing	2	134	43	3 438	85 903	2 468	4 394	49 758	288 940	159 345	447 223	18 447
332	Fabricated metal product mfg	1	35	13	773	23 061	599	1 306	14 958	62 748	24 359	86 049	5 815
PLEASANTON, CA													
31-33	Manufacturing	1	100	21	1 759	77 082	989	2 036	31 478	188 177	144 644	328 364	45 626

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POMONA, CA													
31-33	Manufacturing	2	253	85	9 792	301 949	6 435	12 388	148 964	742 598	815 912	1 551 395	62 696
311	Food mfg	1	15	7	1 252	46 068	582	1 143	17 210	141 420	53 940	195 515	D
3118	Bakeries & tortilla mfg	-	8	3	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	7	2	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	6	537	26 580	445	814	16 353	50 686	105 903	158 339	3 538
323	Printing & related support activities	-	18	3	541	16 117	446	864	10 714	43 189	64 413	107 309	D
3231	Printing & related support activities	-	18	3	541	16 117	446	864	10 714	43 189	64 413	107 309	D
32311	Printing	-	17	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	14	3	531	15 950	439	855	10 608	42 851	64 214	106 771	D
326	Plastics & rubber products mfg	6	23	13	1 618	35 041	1 257	2 649	22 239	125 839	118 467	243 593	11 326
3261	Plastics product mfg	6	21	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	13	8	1 261	25 090	1 021	2 201	17 474	95 644	94 464	189 623	8 077
326199	All other plastics product mfg	7	12	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	2	5	4	526	15 141	426	898	10 509	33 230	40 234	75 246	1 485
332	Fabricated metal product mfg	1	50	10	980	26 923	572	1 109	14 456	70 041	36 088	102 361	1 542
333	Machinery mfg	1	18	6	829	24 001	370	707	7 403	83 917	41 886	125 451	3 425
3333	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	2 815
33331	Commercial & service industry machinery mfg	-	3	2	f	D	D	D	D	D	D	D	2 815
333319	Other commercial & service industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	17	11	1 417	63 070	671	1 441	18 921	93 554	182 947	274 501	13 933
PORTERVILLE, CA													
31-33	Manufacturing	2	35	8	1 045	28 092	874	1 704	20 968	96 988	62 157	161 393	5 199
POWAY, CA													
31-33	Manufacturing	1	52	11	1 397	41 212	1 023	1 893	21 493	104 298	123 255	227 565	5 226
RANCHO CUCAMONGA, CA													
31-33	Manufacturing	-	243	102	9 913	311 742	7 625	16 013	196 244	977 336	1 043 603	2 009 113	202 751
311	Food mfg	-	9	4	1 069	34 066	946	2 248	23 831	147 444	141 848	289 832	21 688
3119	Other food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	29	21	1 615	46 117	1 375	2 941	32 881	146 735	176 695	320 967	18 407
3261	Plastics product mfg	2	23	17	1 364	39 132	1 153	2 497	28 225	128 998	152 581	279 215	17 575
32619	Other plastics product mfg	-	12	10	745	19 401	617	1 325	13 615	46 688	42 833	89 329	3 191
326199	All other plastics product mfg	-	12	10	745	19 401	617	1 325	13 615	46 688	42 833	89 329	3 191
331	Primary metal mfg	-	7	5	866	33 891	747	1 522	23 675	90 529	158 183	257 091	D
332	Fabricated metal product mfg	-	51	22	2 157	71 150	1 598	3 575	47 752	211 094	271 663	463 988	133 448
3328	Coating, engraving, heat treating, & allied activities ..	-	9	7	649	22 858	543	1 348	17 936	66 974	123 468	182 390	D
33281	Coating, engraving, heat treating, & allied activities ..	-	9	7	649	22 858	543	1 348	17 936	66 974	123 468	182 390	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	6	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	27	7	524	17 324	371	720	9 792	37 079	48 115	84 847	1 986
334	Computer & electronic product mfg	1	15	6	643	24 637	383	730	8 976	67 506	34 012	100 257	3 595
339	Miscellaneous mfg	4	22	7	552	16 389	382	695	7 821	43 258	26 473	69 789	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RED BLUFF, CA													
31-33	Manufacturing	7	23	5	766	23 467	627	1 244	18 759	61 538	39 917	101 126	5 252
REDDING, CA													
31-33	Manufacturing	3	110	13	1 351	37 988	912	1 573	20 608	77 257	88 817	166 157	7 975
REDLANDS, CA													
31-33	Manufacturing	-	54	13	1 803	41 331	1 526	3 283	29 445	99 920	95 896	196 081	4 212
337	Furniture & related product mfg	-	6	3	960	20 538	857	2 002	16 857	47 683	51 672	98 876	388
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
REDONDO BEACH, CA													
31-33	Manufacturing	-	40	5	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	1	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
REDWOOD CITY, CA													
31-33	Manufacturing	5	98	30	4 606	238 552	2 179	4 461	68 694	632 348	289 535	930 137	38 360
334	Computer & electronic product mfg	5	18	11	3 278	192 149	1 164	2 496	38 800	525 041	226 565	759 966	27 449
3342	Communications equipment mfg	6	7	4	2 426	143 354	804	1 597	24 719	478 330	165 634	651 860	24 195
33421	Telephone apparatus mfg	9	4	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	4	2	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	564	31 549	200	333	7 700	22 309	47 851	70 820	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	564	31 549	200	333	7 700	22 309	47 851	70 820	D
REEDLEY, CA													
31-33	Manufacturing	-	15	4	565	13 983	329	552	6 873	30 623	41 144	71 839	1 657
RIALTO, CA													
31-33	Manufacturing	2	66	21	1 935	50 241	1 493	2 635	32 705	140 246	160 316	298 987	9 203
RICHMOND, CA													
31-33	Manufacturing	-	137	42	4 640	207 799	3 280	6 998	133 314	985 497	2 000 556	2 979 032	142 745
324	Petroleum & coal products mfg	-	6	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	6	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	32	12	1 121	48 599	741	1 329	25 429	68 972	159 603	237 238	4 894
3329	Other fabricated metal product mfg	6	3	3	506	20 895	330	546	11 647	7 982	15 823	33 605	D
RIVERBANK, CA													
31-33	Manufacturing	1	11	6	778	19 633	596	1 129	15 513	24 346	83 350	105 128	2 727

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RIVERSIDE, CA													
31-33	Manufacturing	1	289	84	10 901	322 423	7 732	14 839	195 233	789 082	880 781	1 687 198	46 596
311	Food mfg.....	-	12	4	1 103	22 490	565	1 157	15 428	56 962	106 060	162 944	3 832
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	37	6	597	15 724	457	754	9 791	36 226	64 137	100 342	2 278
3231	Printing & related support activities.....	1	37	6	597	15 724	457	754	9 791	36 226	64 137	100 342	2 278
32311	Printing.....	1	34	6	589	15 663	454	750	9 745	36 110	64 111	100 200	2 271
326	Plastics & rubber products mfg.....	-	22	13	1 690	53 719	1 338	2 759	36 206	187 934	120 063	324 799	3 199
3261	Plastics product mfg.....	-	19	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	17	10	1 250	42 700	969	1 823	26 997	143 504	68 834	229 671	2 094
326199	All other plastics product mfg.....	-	17	10	1 250	42 700	969	1 823	26 997	143 504	68 834	229 671	2 094
332	Fabricated metal product mfg.....	-	60	11	1 165	43 728	884	1 761	28 330	77 435	124 358	198 804	9 129
334	Computer & electronic product mfg.....	-	19	9	831	29 580	343	628	6 592	64 395	27 305	94 517	1 618
336	Transportation equipment mfg.....	6	25	8	2 064	62 701	1 727	3 055	45 867	84 815	133 556	218 610	8 843
3363	Motor vehicle parts mfg ...	9	11	3	1 033	22 826	897	1 572	17 270	51 902	85 799	135 921	7 253
33639	Other motor vehicle parts mfg.....	9	7	3	1 007	22 383	878	1 550	17 028	50 992	84 745	133 932	7 152
336399	All other motor vehicle parts mfg.....	9	7	3	1 007	22 383	878	1 550	17 028	50 992	84 745	133 932	7 152
3364	Aerospace product & parts mfg.....	-	6	2	702	33 599	535	969	23 089	13 480	23 743	40 475	D
33641	Aerospace product & parts mfg.....	-	6	2	702	33 599	535	969	23 089	13 480	23 743	40 475	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	6	2	702	33 599	535	969	23 089	13 480	23 743	40 475	D
337	Furniture & related product mfg.....	1	16	7	867	18 207	731	1 335	12 578	37 726	47 292	85 293	1 276
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	12	4	659	14 095	569	1 056	9 623	28 417	38 523	67 140	D
33712	Household & institutional furniture mfg.....	-	9	4	649	13 888	561	1 043	9 471	28 040	38 244	66 483	853
339	Miscellaneous mfg.....	-	26	4	671	20 415	384	762	8 409	51 208	25 564	76 303	5 353
3391	Medical equipment & supplies mfg.....	-	15	3	585	19 128	320	644	7 527	48 938	23 799	72 222	5 265
33911	Medical equipment & supplies mfg.....	-	15	3	585	19 128	320	644	7 527	48 938	23 799	72 222	5 265
339113	Surgical appliance & supplies mfg.....	-	5	3	f	D	D	D	D	D	D	D	5 156
ROCKLIN, CA													
31-33	Manufacturing	-	32	6	798	26 660	696	1 362	20 239	85 041	133 611	215 981	5 799
ROHNERT PARK, CA													
31-33	Manufacturing	1	48	9	781	27 629	480	799	10 538	80 853	55 268	136 201	2 350
ROSEMEAD, CA													
31-33	Manufacturing	1	82	19	1 759	38 082	1 380	2 308	24 459	86 277	62 761	149 641	4 925

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROSEVILLE, CA													
31-33	Manufacturing	-	57	12									
334	Computer & electronic product mfg.....	-	6	4	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	1	1	g	D	D	D	D	D	D	D	D
SACRAMENTO, CA													
31-33	Manufacturing	1	423	127	15 763	579 149	10 275	19 808	279 764	1 965 437	1 710 897	3 582 712	102 449
311	Food mfg.....	-	48	19	4 688	165 124	3 016	5 853	89 454	994 437	599 072	1 594 469	29 200
3114	Fruit & vegetable preserving & specialty food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	2	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	2	5	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	29	11	1 729	63 880	705	1 268	17 613	136 014	68 473	204 799	5 187
31181	Bread & bakery product mfg.....	-	24	7	1 458	58 038	549	986	15 850	120 006	62 017	182 344	4 218
311812	Commercial bakeries ..	-	9	6	1 352	56 920	480	919	15 309	117 019	60 189	177 529	4 065
3119	Other food mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	17	10	586	11 973	477	925	8 991	29 198	73 395	95 218	803
3219	Other wood product mfg....	-	16	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	87	18	1 494	44 901	1 163	2 240	28 831	96 986	60 977	157 659	11 676
3231	Printing & related support activities.....	1	87	18	1 494	44 901	1 163	2 240	28 831	96 986	60 977	157 659	11 676
32311	Printing.....	1	72	17	1 371	41 654	1 069	2 073	26 613	89 312	59 156	148 157	11 291
323110	Commercial lithographic printing ..	1	41	14	1 003	32 655	757	1 421	20 509	70 188	44 465	114 482	10 811
332	Fabricated metal product mfg.....	1	59	14	993	31 317	737	1 507	21 175	60 785	91 167	151 699	D
3323	Architectural & structural metals mfg.....	1	22	11	577	16 841	417	884	10 654	34 601	32 924	67 785	D
33232	Ornamental & architectural metal products mfg.....	2	18	10	516	15 194	375	802	9 813	27 999	27 519	55 713	D
333	Machinery mfg.....	-	18	6	725	19 614	402	890	9 848	51 133	132 828	176 107	D
3339	Other general-purpose machinery mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	7	15	8	1 416	72 704	1 137	2 322	29 495	164 713	174 904	344 169	14 088
3341	Computer & peripheral equipment mfg.....	7	3	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	7	3	2	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	20	9	g	D	D	D	D	D	D	D	2 122
3364	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SACRAMENTO, CA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	30	10	912	21 479	750	1 122	14 933	39 893	38 104	77 953	1 853
3371	Household & institutional furniture & kitchen cabinet mfg	1	19	6	f	D	D	D	D	D	D	D	1 446
ST. HELENA, CA													
31-33	Manufacturing	—	31	15	1 463	69 107	698	1 277	24 523	299 549	333 811	621 577	30 761
312	Beverage & tobacco product mfg	—	20	11	1 239	60 461	518	930	18 264	277 174	311 966	577 516	28 870
3121	Beverage mfg	—	20	11	1 239	60 461	518	930	18 264	277 174	311 966	577 516	28 870
31213	Wineries	—	20	11	1 239	60 461	518	930	18 264	277 174	311 966	577 516	28 870
312130	Wineries	—	20	11	1 239	60 461	518	930	18 264	277 174	311 966	577 516	28 870
SALINAS, CA													
31-33	Manufacturing	2	97	24	2 752	96 041	1 994	3 970	57 719	345 127	296 529	641 614	16 598
311	Food mfg	2	23	7	914	28 558	702	1 360	19 482	206 657	128 180	333 258	D
3119	Other food mfg	—	6	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	4	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	9	4	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	4	3	f	D	D	D	D	D	D	D	D
SAN BERNARDINO, CA													
31-33	Manufacturing	3	150	51	4 140	106 107	3 208	5 787	69 845	269 114	323 989	589 513	19 931
323	Printing & related support activities.....	9	19	4	642	13 474	531	765	9 365	24 664	15 206	39 661	1 910
3231	Printing & related support activities.....	9	19	4	642	13 474	531	765	9 365	24 664	15 206	39 661	1 910
SAN BUENAVENTURA (VENTURA), CA													
31-33	Manufacturing	4	157	38	3 126	90 918	2 439	4 854	57 068	225 031	152 644	374 728	16 417
332	Fabricated metal product mfg	1	36	8	663	21 552	474	1 019	12 245	56 266	26 754	83 322	2 141
SAN CARLOS, CA													
31-33	Manufacturing	2	148	43	3 712	144 356	2 659	5 464	93 857	339 898	219 756	561 615	19 679
332	Fabricated metal product mfg	3	44	11	810	33 520	618	1 283	22 373	65 008	23 124	87 879	4 068
334	Computer & electronic product mfg	—	9	3	952	38 347	689	1 502	28 552	73 371	35 222	107 343	5 198
3344	Semiconductor & other electronic component mfg	—	6	2	901	35 340	661	1 468	27 512	66 816	31 250	97 031	4 910
33441	Semiconductor & other electronic component mfg	—	6	2	901	35 340	661	1 468	27 512	66 816	31 250	97 031	4 910
334411	Electron tube mfg	—	3	2	882	34 855	647	1 445	27 249	65 916	30 475	95 314	4 822
SAN CLEMENTE, CA													
31-33	Manufacturing	4	91	19	1 452	49 276	973	1 885	24 678	100 164	89 868	189 252	12 871

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN DIEGO, CA													
31-33	Manufacturing	1	1 444	417	65 599	2 562 746	37 155	74 819	1 026 081	6 680 426	7 839 590	14 315 378	578 674
311	Food mfg	2	98	20	2 517	67 536	1 698	3 237	35 168	176 015	130 333	318 647	23 159
3114	Fruit & vegetable preserving & specialty food mfg	-	4	3	924	18 786	764	1 444	11 032	57 296	60 408	117 715	D
31141	Frozen food mfg	-	3	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	7	70	13	934	19 678	530	921	9 615	50 832	27 779	78 656	D
31181	Bread & bakery product mfg	7	60	12	800	17 574	452	792	8 345	44 611	22 958	67 596	D
311812	Commercial bakeries ..	8	22	10	564	13 982	301	600	6 647	36 573	18 586	55 176	1 762
3119	Other food mfg	1	14	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	14	6	754	21 841	301	586	8 280	92 998	138 830	230 418	4 511
3121	Beverage mfg	3	13	6	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	3	7	4	678	19 531	256	517	6 925	87 872	134 488	221 013	3 940
312111	Soft drink mfg	3	3	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	45	7	512	8 663	389	623	5 332	22 115	16 611	38 355	928
315	Apparel mfg	1	69	17	2 044	29 955	1 566	2 933	20 282	85 863	80 554	166 654	4 008
3152	Cut & sew apparel mfg	1	53	13	1 513	22 222	1 113	2 140	14 986	57 480	44 772	102 945	D
31521	Cut & sew apparel contractors	2	28	5	752	8 106	598	1 245	7 437	13 970	3 075	16 387	981
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	23	5	735	7 881	582	1 219	7 269	13 562	3 007	15 911	957
323	Printing & related support activities	4	239	38	2 941	83 759	2 093	3 971	52 294	187 117	113 069	299 959	13 472
3231	Printing & related support activities	4	239	38	2 941	83 759	2 093	3 971	52 294	187 117	113 069	299 959	13 472
32311	Printing	4	206	33	2 502	73 504	1 822	3 499	45 587	167 004	108 723	275 497	11 816
323110	Commercial lithographic printing ..	5	94	22	1 513	49 777	1 085	2 203	30 926	108 854	73 309	182 133	8 600
325	Chemical mfg	1	60	21	2 687	128 603	1 232	2 478	40 273	384 580	219 279	605 352	62 108
3254	Pharmaceutical & medicine mfg	1	32	16	2 222	107 860	997	2 076	33 719	283 037	113 822	398 127	57 759
32541	Pharmaceutical & medicine mfg	1	32	16	2 222	107 860	997	2 076	33 719	283 037	113 822	398 127	57 759
325413	In-vitro diagnostic substance mfg	-	8	6	1 280	62 317	601	1 215	21 040	178 533	43 351	218 371	39 488
325414	Biological product (except diagnostic) mfg	1	14	7	715	37 490	260	579	9 481	77 895	59 575	144 114	16 448
326	Plastics & rubber products mfg	4	48	20	1 537	45 094	1 127	2 025	22 148	118 873	114 939	229 347	18 778
3261	Plastics product mfg	4	41	17	1 345	40 128	1 004	1 857	20 281	108 788	102 036	206 517	18 574
32619	Other plastics product mfg	5	28	13	780	20 109	611	1 075	10 447	46 242	50 228	94 196	11 454
326199	All other plastics product mfg	5	28	13	780	20 109	611	1 075	10 447	46 242	50 228	94 196	11 454
327	Nonmetallic mineral product mfg	2	26	6	665	15 284	303	527	7 698	39 671	39 649	79 701	1 893
332	Fabricated metal product mfg	1	152	35	2 525	79 099	1 913	3 555	51 630	173 492	132 656	301 910	10 800
3323	Architectural & structural metals mfg	-	32	10	1 001	29 227	761	1 437	20 601	67 761	42 056	107 698	3 765
33232	Ornamental & architectural metal products mfg	1	27	8	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	67	12	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	64	11	701	25 276	550	974	16 826	47 520	19 455	66 289	3 720
332710	Machine shops	2	64	11	701	25 276	550	974	16 826	47 520	19 455	66 289	3 720
333	Machinery mfg	-	70	18	5 428	253 861	3 102	6 486	111 118	1 000 497	545 585	1 523 604	56 448
3332	Industrial machinery mfg ..	-	9	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	8	1	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	2	2	h	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN DIEGO, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	241	125	25 129	1 160 464	10 645	21 453	326 754	2 780 428	5 064 651	7 708 243	272 913
3341	Computer & peripheral equipment mfg.....	-	39	18	7 495	406 422	2 287	4 829	74 699	962 478	3 757 512	4 564 625	90 716
33411	Computer & peripheral equipment mfg.....	-	39	18	7 495	406 422	2 287	4 829	74 699	962 478	3 757 512	4 564 625	90 716
334111	Electronic computer mfg.....	-	11	4	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	-	25	11	6 098	360 871	1 927	4 002	62 684	402 434	3 506 632	3 787 712	76 725
3342	Communications equipment mfg.....	1	36	24	3 521	142 161	1 429	2 648	36 592	208 855	212 023	421 281	D
33421	Telephone apparatus mfg.....	-	6	5	1 153	59 475	297	565	8 525	45 923	99 491	146 881	4 481
334210	Telephone apparatus mfg.....	-	6	5	1 153	59 475	297	565	8 525	45 923	99 491	146 881	4 481
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	2	26	17	2 262	78 929	1 092	2 034	27 447	156 730	108 666	264 300	20 949
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	2	26	17	2 262	78 929	1 092	2 034	27 447	156 730	108 666	264 300	20 949
3344	Semiconductor & other electronic component mfg.....	3	75	36	5 293	182 957	3 199	6 562	80 752	433 207	321 883	766 843	88 810
33441	Semiconductor & other electronic component mfg.....	3	75	36	5 293	182 957	3 199	6 562	80 752	433 207	321 883	766 843	88 810
334412	Bare printed circuit board mfg.....	-	22	12	1 734	44 893	1 422	2 931	30 072	128 168	105 188	232 104	15 122
334413	Semiconductor & related device mfg...	5	15	9	1 162	57 435	624	1 321	21 886	156 263	59 795	223 465	59 696
334414	Electronic capacitor mfg.....	4	5	5	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	5	13	7	1 563	51 349	630	1 327	15 436	81 421	119 995	206 499	9 268
3345	Navigational, measuring, medical, & control instruments mfg.....	-	74	42	8 253	411 881	3 314	6 678	124 379	1 140 192	647 959	1 795 375	65 055
33451	Navigational, measuring, medical, & control instruments mfg.....	-	74	42	8 253	411 881	3 314	6 678	124 379	1 140 192	647 959	1 795 375	65 055
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	10	8	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	12	11	4 342	210 999	1 368	2 626	50 265	496 518	203 082	702 553	17 674
334515	Electricity measuring & testing instrument mfg.....	-	17	8	1 509	71 070	782	1 571	28 606	249 251	194 647	442 532	28 031
335	Electrical equipment, appliance, & component mfg.....	-	23	15	1 556	72 066	900	2 142	30 863	232 079	219 573	437 091	48 997
3353	Electrical equipment mfg..	-	7	5	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	12	7	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	51	26	9 715	343 629	7 290	15 967	222 714	746 932	579 913	1 292 716	21 010
3364	Aerospace product & parts mfg.....	-	12	9	2 484	111 818	1 655	3 412	72 375	288 836	158 714	428 992	D
33641	Aerospace product & parts mfg.....	-	12	9	2 484	111 818	1 655	3 412	72 375	288 836	158 714	428 992	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	9	7	g	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	9	7	6 580	210 867	5 162	11 685	139 369	402 982	365 192	768 199	D
33661	Ship & boat building....	-	9	7	6 580	210 867	5 162	11 685	139 369	402 982	365 192	768 199	D
336611	Ship building & repairing.....	-	7	7	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	54	9	942	22 559	710	1 467	14 148	41 798	45 581	85 599	2 040

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN DIEGO, CA—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	207	43	5 945	211 592	3 466	6 631	69 869	508 554	313 827	824 349	34 223
3391	Medical equipment & supplies mfg.....	1	94	21	3 757	153 625	1 801	3 218	38 731	364 498	214 621	586 008	26 417
33911	Medical equipment & supplies mfg.....	1	94	21	3 757	153 625	1 801	3 218	38 731	364 498	214 621	586 008	26 417
339112	Surgical & medical instrument mfg.....	1	25	12	2 219	97 016	919	1 629	17 201	174 131	99 804	274 900	20 434
339115	Ophthalmic goods mfg.....	—	10	2	f	D	D	D	D	D	D	D	2 892
3399	Other miscellaneous mfg..	1	113	22	2 188	57 967	1 665	3 413	31 138	144 056	99 206	238 341	7 806
33992	Sporting & athletic goods mfg.....	1	43	11	1 445	35 103	1 170	2 480	20 018	84 022	58 719	138 421	5 903
339920	Sporting & athletic goods mfg.....	1	43	11	1 445	35 103	1 170	2 480	20 018	84 022	58 719	138 421	5 903
SAN DIMAS, CA													
31-33	Manufacturing	4	99	26	2 382	73 139	1 678	3 189	39 884	183 111	142 141	321 689	18 508
334	Computer & electronic product mfg.....	1	11	4	537	19 233	201	410	4 529	47 234	41 205	85 843	3 205
SAN FERNANDO, CA													
31-33	Manufacturing	1	97	40	5 053	136 202	4 055	8 351	83 985	422 450	277 805	706 286	12 899
315	Apparel mfg.....	—	15	9	1 602	32 346	1 543	3 092	29 081	43 193	42 852	88 194	1 039
3152	Cut & sew apparel mfg....	—	14	9	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	—	3	2	889	19 091	851	1 918	18 005	24 327	17 476	41 701	D
315239	Women's & girls' cut & sew other outerwear mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	5	5	3	755	15 867	632	1 180	10 143	35 022	23 341	58 927	672
SAN FRANCISCO, CA													
31-33	Manufacturing	1	1 247	309	25 037	642 429	19 500	35 967	392 849	1 998 438	1 999 422	3 978 945	67 132
311	Food mfg.....	1	150	38	3 020	76 308	2 145	3 612	45 172	242 771	182 817	429 634	10 097
3118	Bakeries & tortilla mfg.....	2	85	17	1 613	42 452	1 030	1 602	23 697	118 835	47 120	166 256	4 060
31181	Bread & bakery product mfg.....	1	75	16	1 508	40 677	951	1 484	22 617	113 842	43 025	157 160	3 789
311812	Commercial bakeries ..	1	22	11	1 128	34 776	654	1 072	18 655	102 834	36 641	139 776	3 219
315	Apparel mfg.....	—	320	149	11 694	220 817	10 000	18 429	142 589	1 026 012	1 346 564	2 353 619	11 635
3151	Apparel knitting mills.....	—	6	6	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills.....	—	6	6	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills.....	—	6	6	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	—	298	141	10 795	198 868	9 244	16 612	129 158	979 903	1 310 953	2 273 431	10 223
31521	Cut & sew apparel contractors.....	5	194	91	5 156	67 388	4 789	8 844	60 047	103 760	21 673	125 261	2 906
315212	Women's, girls', & infants' cut & sew apparel contractors..	6	183	84	4 727	60 887	4 381	8 043	54 518	92 444	18 051	110 323	2 695
31522	Men's & boys' cut & sew apparel mfg.....	—	16	14	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	—	4	4	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	—	75	31	h	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg.....	—	26	13	g	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg.....	—	15	7	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN FRANCISCO, CA—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	3	266	43	3 324	121 365	2 419	4 781	78 285	224 152	125 572	349 654	20 119
3231	Printing & related support activities.....	3	266	43	3 324	121 365	2 419	4 781	78 285	224 152	125 572	349 654	20 119
32311	Printing	4	211	32	2 476	83 772	1 774	3 444	52 504	155 713	109 470	264 601	15 867
323110	Commercial lithographic printing ..	4	120	22	1 640	64 510	1 154	2 356	40 157	116 854	79 525	195 976	12 585
32312	Support activities for printing.....	1	55	11	848	37 593	645	1 337	25 781	68 439	16 102	85 053	4 252
323122	Prepress services	1	45	9	660	32 032	476	980	21 305	56 220	13 061	69 558	3 581
332	Fabricated metal product mfg	1	70	11	947	31 182	736	1 281	20 373	87 630	34 697	122 861	2 512
334	Computer & electronic product mfg.....	2	26	6	1 028	24 429	671	1 245	11 854	61 999	58 741	119 690	3 684
3344	Semiconductor & other electronic component mfg	—	6	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	6	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	79	12	913	31 586	685	1 318	18 132	59 517	30 139	88 162	1 444
3371	Household & institutional furniture & kitchen cabinet mfg	3	61	7	625	20 980	444	920	11 352	39 259	22 603	61 516	963
339	Miscellaneous mfg.....	3	135	14	1 031	25 069	752	1 238	12 992	57 583	35 773	92 423	2 889
3399	Other miscellaneous mfg ..	3	79	12	764	18 437	541	908	8 826	43 575	27 677	69 995	2 159
SAN GABRIEL, CA													
31-33	Manufacturing	5	54	14	628	10 960	490	668	6 923	22 580	13 829	36 469	1 174
SANGER, CA													
31-33	Manufacturing	2	16	8	1 355	28 475	1 165	2 533	20 416	64 978	85 165	150 896	6 927
311	Food mfg.....	9	5	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	9	2	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
SAN JACINTO, CA													
31-33	Manufacturing	1	27	5	669	15 837	551	918	10 375	52 719	34 902	85 679	1 713
SAN JOSE, CA													
31-33	Manufacturing	—	1 225	408	86 726	4 263 508	39 798	80 307	1 320 390	14 933 197	11 932 193	26 808 113	1 415 735
311	Food mfg.....	2	77	19	2 537	70 489	2 063	4 029	52 839	333 499	480 442	811 309	14 142
3114	Fruit & vegetable preserving & specialty food mfg	—	10	8	1 385	39 926	1 180	2 387	31 797	215 286	234 379	448 781	4 361
31142	Fruit & vegetable canning, pickling, & drying	—	8	6	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	6	5	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	7	4	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	7	3	2	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	7	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	115	17	1 740	61 659	1 234	2 241	39 847	121 282	66 559	187 972	12 305
3231	Printing & related support activities.....	2	115	17	1 740	61 659	1 234	2 241	39 847	121 282	66 559	187 972	12 305
32311	Printing	2	104	14	1 542	54 178	1 140	2 052	36 988	110 709	64 508	175 351	11 820
323110	Commercial lithographic printing ..	2	49	7	517	16 070	385	700	10 673	31 625	19 424	50 966	D

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	SAN JOSE, CA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	—	21	7	1 117	80 075	264	464	21 820	273 368	38 029	310 096	D
3254	Pharmaceutical & medicine mfg	—	5	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	4	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	36	16	1 970	68 501	1 556	3 138	48 143	164 991	146 439	310 170	15 254
3261	Plastics product mfg	8	31	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	8	21	11	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	8	19	10	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	26	12	911	28 156	735	1 626	23 103	74 478	68 759	143 207	3 139
332	Fabricated metal product mfg	1	258	73	6 171	208 124	4 927	9 761	140 480	440 947	272 385	711 737	28 817
3323	Architectural & structural metals mfg	1	56	26	2 684	88 458	2 113	4 556	59 066	194 526	167 785	361 460	11 407
33232	Ornamental & architectural metal products mfg	1	46	24	2 549	84 232	2 013	4 345	56 148	180 420	159 534	339 076	11 032
332322	Sheet metal work mfg	1	37	22	2 434	80 944	1 917	4 165	54 070	173 581	155 679	328 381	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	140	25	2 127	77 411	1 760	3 245	54 338	146 877	48 379	192 886	10 765
33271	Machine shops	1	131	20	1 773	64 122	1 486	2 790	44 576	127 032	38 409	165 206	9 961
332710	Machine shops	1	131	20	1 773	64 122	1 486	2 790	44 576	127 032	38 409	165 206	9 961
3328	Coating, engraving, heat treating, & allied activities	5	33	12	692	18 990	551	1 013	12 595	32 645	13 982	47 833	2 347
33281	Coating, engraving, heat treating, & allied activities	5	33	12	692	18 990	551	1 013	12 595	32 645	13 982	47 833	2 347
333	Machinery mfg	2	89	33	6 045	326 221	2 378	5 342	87 170	680 494	732 163	1 405 876	83 357
3332	Industrial machinery mfg	2	38	19	4 706	264 626	1 699	4 001	62 128	575 663	642 440	1 207 754	74 128
33329	Other industrial machinery mfg	2	36	17	h	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	1	23	12	3 446	222 760	834	1 820	39 121	479 107	586 418	1 055 593	D
333298	All other industrial machinery mfg	9	9	5	1 082	34 785	763	1 974	19 633	90 841	42 051	132 379	D
3339	Other general-purpose machinery mfg	—	12	3	600	27 730	241	402	7 437	48 783	53 416	105 989	3 611
334	Computer & electronic product mfg	—	351	181	60 518	3 228 546	23 365	47 653	825 737	12 364 601	9 807 661	22 101 645	1 203 636
3341	Computer & peripheral equipment mfg	—	46	19	11 255	522 599	5 097	11 772	174 647	2 155 032	3 254 369	5 527 675	339 643
33411	Computer & peripheral equipment mfg	—	46	19	11 255	522 599	5 097	11 772	174 647	2 155 032	3 254 369	5 527 675	339 643
334111	Electronic computer mfg	—	16	6	2 998	162 420	617	1 724	27 918	671 271	735 648	1 498 460	D
334112	Computer storage device mfg	—	11	6	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	15	5	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	46	28	17 968	932 321	3 415	6 871	125 688	5 716 124	2 803 943	8 438 918	184 101
33421	Telephone apparatus mfg	—	19	13	14 136	713 931	2 581	5 220	100 392	5 295 216	2 455 476	7 678 386	146 989
334210	Telephone apparatus mfg	—	19	13	14 136	713 931	2 581	5 220	100 392	5 295 216	2 455 476	7 678 386	146 989
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	25	15	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	25	15	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN JOSE, CA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	177	87	18 531	991 286	9 446	18 418	328 828	2 703 404	2 790 737	5 467 333	471 796
33441	Semiconductor & other electronic component mfg	—	177	87	18 531	991 286	9 446	18 418	328 828	2 703 404	2 790 737	5 467 333	471 796
334412	Bare printed circuit board mfg	1	40	17	1 734	51 817	1 357	2 282	31 388	131 483	88 638	219 449	11 520
334413	Semiconductor & related device mfg ...	—	73	32	12 072	784 711	4 746	9 205	216 879	2 273 431	2 224 154	4 460 526	433 639
334418	Printed circuit assembly (electronic assembly) mfg	1	27	24	3 627	120 662	2 538	5 375	61 622	234 847	433 187	677 563	22 114
334419	Other electronic component mfg	5	25	8	688	20 384	514	933	11 486	36 579	30 121	68 524	2 984
3345	Navigational, measuring, medical, & control instruments mfg	—	63	37	9 855	647 538	3 250	6 933	150 594	1 546 041	752 656	2 212 561	96 995
33451	Navigational, measuring, medical, & control instruments mfg	—	63	37	9 855	647 538	3 250	6 933	150 594	1 546 041	752 656	2 212 561	96 995
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	1 207	85 955	365	650	12 799	132 805	82 094	205 739	D
334513	Industrial process control instrument mfg	4	10	8	703	34 972	324	625	15 444	21 411	51 549	72 421	3 756
334515	Electricity measuring & testing instrument mfg	—	25	17	6 477	437 075	2 133	4 885	106 375	1 121 705	503 568	1 552 030	79 245
334516	Analytical laboratory instrument mfg	—	9	3	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	2	16	8	2 774	130 321	2 057	3 447	43 719	233 984	191 708	430 815	110 627
33461	Mfg & reproducing magnetic & optical media	2	16	8	2 774	130 321	2 057	3 447	43 719	233 984	191 708	430 815	110 627
334613	Magnetic & optical recording media mfg .	2	9	5	2 644	125 538	1 959	3 227	40 472	215 094	182 062	402 386	107 310
335	Electrical equipment, appliance, & component mfg	—	19	9	885	31 916	622	1 247	15 954	65 939	53 347	119 348	2 962
3359	Other electrical equipment & component mfg	—	11	6	700	22 906	531	1 063	13 243	48 941	36 760	85 583	1 909
336	Transportation equipment mfg	—	23	6	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	52	9	846	22 351	587	1 068	13 044	52 781	48 170	101 732	2 207
339	Miscellaneous mfg	4	94	7	563	14 971	377	658	7 467	32 545	18 012	51 102	1 322
	SAN JUAN CAPISTRANO, CA												
31-33	Manufacturing	1	44	12	1 108	40 678	709	1 355	17 214	125 726	54 220	176 594	7 594
	SAN LEANDRO, CA												
31-33	Manufacturing	1	257	89	9 002	310 709	6 524	13 467	182 837	1 027 711	1 236 532	2 260 595	61 912
311	Food mfg	1	20	12	1 565	44 776	1 155	2 124	25 788	293 690	388 204	674 251	19 171
3113	Sugar & confectionery product mfg	—	2	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	—	2	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	31	6	703	20 727	597	1 142	15 103	53 977	96 453	151 292	D
3231	Printing & related support activities	—	31	6	703	20 727	597	1 142	15 103	53 977	96 453	151 292	D
32311	Printing	—	29	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	20	5	642	19 152	551	1 043	13 990	50 732	95 169	146 766	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN LEANDRO, CA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	19	9	745	20 337	545	1 143	13 122	70 115	76 334	144 907	8 880
3261	Plastics product mfg	2	17	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	7	5	518	18 512	422	853	12 196	42 704	27 291	69 670	D
332	Fabricated metal product mfg	1	52	18	1 149	44 694	842	1 801	28 046	134 951	114 125	248 175	7 451
334	Computer & electronic product mfg	—	11	4	792	27 924	612	1 384	16 588	110 045	98 428	211 826	1 891
3346	Mfg & reproducing magnetic & optical media	—	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	4	583	21 748	297	611	7 362	49 823	31 794	84 346	2 599
3351	Electric lighting equipment mfg	—	4	4	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	4	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	21	4	717	29 272	346	661	9 414	57 871	62 588	127 730	4 113
3391	Medical equipment & supplies mfg	—	13	2	559	24 521	251	478	7 240	47 448	47 390	101 901	2 964
33911	Medical equipment & supplies mfg	—	13	2	559	24 521	251	478	7 240	47 448	47 390	101 901	2 964
SAN LUIS OBISPO, CA													
31-33	Manufacturing	2	78	16	1 521	43 920	993	1 775	19 844	124 966	72 592	195 025	10 678
SAN MARCOS, CA													
31-33	Manufacturing	2	227	74	5 981	172 145	4 070	8 054	91 488	500 039	364 448	872 069	30 389
332	Fabricated metal product mfg	—	50	15	1 642	46 696	1 022	1 897	24 023	149 627	42 869	195 505	10 433
3329	Other fabricated metal product mfg	—	5	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	2	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	18	9	550	17 261	342	629	7 229	53 412	50 038	103 083	1 488
334	Computer & electronic product mfg	4	21	8	504	19 056	255	448	6 939	54 608	17 708	72 242	4 057
339	Miscellaneous mfg	—	24	6	692	17 328	568	1 438	12 804	42 025	46 502	94 560	1 966
3391	Medical equipment & supplies mfg	—	7	3	516	13 032	447	1 193	10 403	34 565	39 917	80 621	1 736
33911	Medical equipment & supplies mfg	—	7	3	516	13 032	447	1 193	10 403	34 565	39 917	80 621	1 736
SAN MATEO, CA													
31-33	Manufacturing	5	77	4	531	18 393	335	585	10 377	39 341	28 213	67 482	6 690
SAN RAFAEL, CA													
31-33	Manufacturing	5	149	19	1 809	58 321	1 171	2 124	28 095	129 558	93 472	223 164	6 923

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANTA ANA, CA													
31-33	Manufacturing	1	961	310	30 246	878 109	22 469	45 914	491 817	2 343 812	1 723 047	4 052 420	143 426
311	Food mfg.....	-	48	15	1 794	44 960	1 333	2 411	23 993	118 341	210 532	325 012	12 385
3118	Bakeries & tortilla mfg.....	1	29	9	720	14 307	530	954	8 341	34 297	23 475	57 629	8 677
31181	Bread & bakery product mfg.....	1	26	8	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	26	7	901	26 539	594	1 075	10 346	36 181	79 667	113 893	3 241
3141	Textile furnishings mills....	-	13	4	532	20 439	342	589	6 053	27 100	60 621	86 636	2 703
315	Apparel mfg.....	5	105	31	1 921	24 971	1 714	2 865	19 487	49 833	32 186	80 382	2 214
3152	Cut & sew apparel mfg....	5	99	29	1 819	23 537	1 627	2 744	18 517	46 503	28 512	73 381	1 975
31521	Cut & sew apparel contractors.....	4	68	12	858	9 056	811	1 190	7 455	15 272	2 991	18 255	742
315212	Women's, girls', & infants' cut & sew apparel contractors..	6	61	7	621	5 769	591	804	5 107	10 059	2 111	12 162	506
31522	Men's & boys' cut & sew apparel mfg.....	5	13	11	628	9 507	579	1 120	8 093	18 548	14 798	31 809	D
323	Printing & related support activities.....	2	92	21	1 181	32 274	823	1 413	18 315	65 448	34 768	100 062	5 784
3231	Printing & related support activities.....	2	92	21	1 181	32 274	823	1 413	18 315	65 448	34 768	100 062	5 784
32311	Printing.....	2	81	19	1 018	27 942	731	1 232	16 082	57 544	33 556	90 940	5 476
325	Chemical mfg.....	1	35	15	1 093	37 602	776	1 494	17 613	382 003	169 333	554 634	9 736
326	Plastics & rubber products mfg.....	1	47	24	2 313	63 920	1 820	3 798	40 103	173 870	194 190	368 662	8 743
3261	Plastics product mfg.....	1	44	23	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	24	12	1 320	31 825	1 026	2 158	19 763	75 483	88 842	165 327	3 323
326199	All other plastics product mfg.....	2	20	9	g	D	D	D	D	D	D	D	3 119
327	Nonmetallic mineral product mfg.....	1	26	11	695	21 731	511	1 132	13 335	53 778	58 830	113 341	4 415
332	Fabricated metal product mfg.....	1	213	54	5 060	177 017	3 977	8 353	116 563	375 186	180 137	551 630	30 268
3321	Forging & stamping.....	-	10	2	801	32 933	703	1 773	25 006	69 918	26 746	96 902	5 398
33211	Forging & stamping.....	-	10	2	801	32 933	703	1 773	25 006	69 918	26 746	96 902	5 398
332112	Nonferrous forging....	-	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	3	26	9	563	16 713	419	832	10 216	38 575	21 810	58 866	2 235
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	117	24	1 951	76 476	1 496	3 021	49 757	165 242	80 221	245 617	13 977
33271	Machine shops.....	1	100	18	1 029	34 633	826	1 540	22 965	91 948	32 577	123 947	4 084
332710	Machine shops.....	1	100	18	1 029	34 633	826	1 540	22 965	91 948	32 577	123 947	4 084
33272	Turned product & screw, nut, & bolt mfg.....	-	17	6	922	41 843	670	1 481	26 792	73 294	47 644	121 670	9 893
332722	Bolt, nut, screw, rivet, & washer mfg.....	-	6	3	805	38 247	573	1 254	24 052	66 600	44 776	112 103	9 452
3328	Coating, engraving, heat treating, & allied activities..	-	30	11	922	24 049	803	1 639	17 699	45 396	9 921	55 499	1 907
33281	Coating, engraving, heat treating, & allied activities.....	-	30	11	922	24 049	803	1 639	17 699	45 396	9 921	55 499	1 907
332813	Electroplating, plating, polishing, anodizing, & coloring.....	-	24	10	845	22 079	741	1 520	16 333	41 411	9 132	50 788	1 700
333	Machinery mfg.....	2	62	25	1 909	63 634	1 287	2 808	33 933	165 578	120 252	278 890	7 601
3339	Other general-purpose machinery mfg.....	-	15	6	612	19 295	339	855	7 403	59 500	42 449	101 538	2 697
334	Computer & electronic product mfg.....	1	96	43	6 507	207 957	4 371	10 258	93 645	521 046	323 246	838 151	32 801
3341	Computer & peripheral equipment mfg.....	-	9	4	579	19 590	178	414	6 737	58 009	54 047	115 081	2 965
33411	Computer & peripheral equipment mfg.....	-	9	4	579	19 590	178	414	6 737	58 009	54 047	115 081	2 965
3343	Audio & video equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA ANA, CA—Con. Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	56	26	4 407	124 819	3 424	8 223	61 431	321 927	143 303	467 420	22 543
33441	Semiconductor & other electronic component mfg	1	56	26	4 407	124 819	3 424	8 223	61 431	321 927	143 303	467 420	22 543
334412	Bare printed circuit board mfg	2	25	8	683	25 292	575	1 191	15 502	55 691	26 310	82 169	3 770
334413	Semiconductor & related device mfg	—	7	3	676	17 091	366	765	5 979	60 831	11 659	70 800	2 442
334417	Electronic connector mfg	—	3	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	3	7	7	836	19 938	675	1 320	12 650	39 403	34 665	73 293	2 534
3345	Navigational, measuring, medical, & control instruments mfg	—	18	8	772	34 951	417	877	15 510	54 341	35 642	87 295	2 921
33451	Navigational, measuring, medical, & control instruments mfg	—	18	8	772	34 951	417	877	15 510	54 341	35 642	87 295	2 921
335	Electrical equipment, appliance, & component mfg	1	34	14	888	23 918	579	1 154	11 666	72 056	43 751	116 458	1 665
336	Transportation equipment mfg	3	29	10	1 907	48 316	1 652	3 298	34 560	98 921	58 450	158 739	10 490
3363	Motor vehicle parts mfg	1	13	3	1 088	19 305	1 025	2 113	16 552	35 933	10 536	47 360	D
33632	Motor vehicle electrical & electronic equipment mfg	1	4	2	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	4	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	31	10	989	21 279	773	1 519	14 966	59 889	48 183	107 546	2 693
339	Miscellaneous mfg	1	71	19	2 033	55 847	1 479	2 760	27 853	105 306	103 259	211 331	4 107
3399	Other miscellaneous mfg	1	46	14	1 585	42 813	1 162	2 181	21 949	83 842	81 761	165 248	3 126
33999	All other miscellaneous mfg	4	8	5	648	16 915	500	861	9 336	32 841	17 005	49 996	1 053
31-33	SANTA BARBARA, CA Manufacturing	3	155	30	2 204	68 698	1 278	2 281	28 397	146 777	113 311	262 578	9 242
31-33	SANTA CLARA, CA Manufacturing	—	711	252	46 029	2 398 910	25 363	53 252	941 819	7 469 243	5 432 820	12 883 951	983 304
322	Paper mfg	—	9	6	625	24 083	493	1 016	16 307	77 028	90 535	166 104	2 559
323	Printing & related support activities	2	53	10	836	25 909	636	1 176	16 161	53 725	25 450	79 176	8 248
3231	Printing & related support activities	2	53	10	836	25 909	636	1 176	16 161	53 725	25 450	79 176	8 248
32311	Printing	1	42	8	602	20 491	446	845	12 076	43 506	23 055	66 541	D
327	Nonmetallic mineral product mfg	1	11	6	620	25 769	470	972	20 111	102 760	54 465	159 212	6 308
332	Fabricated metal product mfg	1	255	74	4 884	174 700	3 834	8 342	115 772	358 672	164 591	525 933	22 363
3323	Architectural & structural metals mfg	—	34	13	1 116	40 597	832	1 804	25 326	69 460	59 292	130 430	5 215
33232	Ornamental & architectural metal products mfg	—	30	13	1 095	40 129	817	1 783	25 032	68 472	58 038	128 185	5 165
332322	Sheet metal work mfg	—	27	13	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	164	33	2 213	87 436	1 814	3 993	61 139	194 920	61 499	257 111	13 438
33271	Machine shops	2	157	29	2 038	80 103	1 668	3 684	55 198	173 957	56 127	231 141	12 469
332710	Machine shops	2	157	29	2 038	80 103	1 668	3 684	55 198	173 957	56 127	231 141	12 469
3328	Coating, engraving, heat treating, & allied activities	—	34	21	1 142	30 803	885	1 900	20 260	60 027	15 742	75 903	2 431
33281	Coating, engraving, heat treating, & allied activities	—	34	21	1 142	30 803	885	1 900	20 260	60 027	15 742	75 903	2 431
332813	Electroplating, plating, polishing, anodizing, & coloring	—	19	15	834	21 499	638	1 392	14 202	40 189	10 354	50 663	1 980

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA CLARA, CA— Con. Manufacturing— Con.												
333	Machinery mfg	-	59	15	3 421	95 848	2 976	5 817	70 753	564 135	1 039 816	1 571 543	D
3332	Industrial machinery mfg ..	-	21	8	2 940	78 364	2 644	5 186	59 984	528 386	1 026 913	1 522 854	D
33329	Other industrial machinery mfg	-	21	8	2 940	78 364	2 644	5 186	59 984	528 386	1 026 913	1 522 854	D
333295	Semiconductor machinery mfg	-	12	4	2 721	68 935	2 502	4 880	55 184	509 017	1 012 328	1 488 666	D
334	Computer & electronic product mfg	-	207	98	31 871	1 894 727	14 749	31 776	643 630	5 945 100	3 824 239	9 781 279	692 424
3341	Computer & peripheral equipment mfg	-	29	5	6 488	438 181	2 844	6 742	175 552	1 001 439	1 497 568	2 490 035	131 143
33411	Computer & peripheral equipment mfg	-	29	5	6 488	438 181	2 844	6 742	175 552	1 001 439	1 497 568	2 490 035	131 143
334111	Electronic computer mfg	-	7	2	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	3	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	18	2	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	22	14	5 721	384 173	1 630	3 222	104 195	1 637 523	1 083 209	2 697 983	38 639
33421	Telephone apparatus mfg	-	6	5	4 923	346 420	1 241	2 450	90 650	1 618 401	1 008 184	2 595 075	34 492
334210	Telephone apparatus mfg	-	6	5	4 923	346 420	1 241	2 450	90 650	1 618 401	1 008 184	2 595 075	34 492
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	15	9	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	15	9	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	114	63	14 179	773 226	8 146	17 245	292 128	2 658 630	883 022	3 575 756	470 716
33441	Semiconductor & other electronic component mfg	-	114	63	14 179	773 226	8 146	17 245	292 128	2 658 630	883 022	3 575 756	470 716
334412	Bare printed circuit board mfg	1	32	15	1 736	64 035	1 348	2 943	36 630	120 030	90 243	208 844	12 302
334413	Semiconductor & related device mfg	-	48	28	8 303	545 285	3 990	8 104	177 214	2 052 343	592 290	2 670 370	421 777
334418	Printed circuit assembly (electronic assembly) mfg	-	17	14	3 549	134 472	2 363	5 218	67 022	431 967	179 885	620 561	32 627
334419	Other electronic component mfg	-	14	4	510	24 886	381	867	9 128	44 455	14 736	59 283	3 509
3345	Navigational, measuring, medical, & control instruments mfg	-	34	13	4 623	264 880	1 542	3 411	59 972	553 092	300 326	870 138	21 392
33451	Navigational, measuring, medical, & control instruments mfg	-	34	13	4 623	264 880	1 542	3 411	59 972	553 092	300 326	870 138	21 392
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	2	f	D	D	D	D	D	D	D	2 455
334515	Electricity measuring & testing instrument mfg	-	16	6	3 172	181 758	1 036	2 439	43 294	288 360	131 694	436 807	13 927
334516	Analytical laboratory instrument mfg	-	5	3	705	35 975	290	574	11 053	147 697	75 707	220 740	3 953
3346	Mfg & reproducing magnetic & optical media	2	8	3	860	34 267	587	1 156	11 783	94 416	60 114	147 367	30 534
33461	Mfg & reproducing magnetic & optical media	2	8	3	860	34 267	587	1 156	11 783	94 416	60 114	147 367	30 534
334613	Magnetic & optical recording media mfg	2	7	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	19	9	1 464	80 250	714	1 403	24 369	159 190	97 653	255 585	10 847
3359	Other electrical equipment & component mfg	-	13	6	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	9	4	967	54 657	475	1 007	19 107	98 190	53 626	148 053	6 278
335999	All other miscellaneous electrical equipment & component mfg	-	9	4	967	54 657	475	1 007	19 107	98 190	53 626	148 053	6 278
31-33	SANTA CLARITA, CA Manufacturing	-	66	11	1 136	39 470	800	1 764	22 997	101 915	65 873	164 289	11 511

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANTA CRUZ, CA													
31-33	Manufacturing	1	122	26	2 969	101 158	1 622	2 842	46 320	498 363	359 119	866 775	33 433
334	Computer & electronic product mfg.....	2	17	5	1 353	44 303	596	1 023	13 878	366 047	244 437	616 469	D
3344	Semiconductor & other electronic component mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	2	1	f	D	D	D	D	D	D	D	D
SANTA FE SPRINGS, CA													
31-33	Manufacturing	1	649	260	19 438	597 087	14 111	27 300	355 793	1 504 180	1 513 411	3 028 051	93 960
311	Food mfg.....	2	16	7	843	19 250	711	1 243	14 870	76 213	133 546	211 235	5 500
314	Textile product mills.....	-	7	3	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	5	3	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills.....	-	3	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills.....	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	3	25	9	1 156	15 955	968	1 171	10 222	21 391	39 021	59 043	1 447
3152	Cut & sew apparel mfg....	3	22	7	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors.....	9	16	4	f	D	D	D	D	D	D	D	518
315212	Women's, girls', & infants' cut & sew apparel contractors..	9	16	4	f	D	D	D	D	D	D	D	518
322	Paper mfg.....	1	28	20	1 894	70 860	1 288	2 775	41 456	172 154	240 196	412 144	9 978
3222	Converted paper product mfg.....	1	27	19	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	12	10	1 219	49 009	850	1 870	28 788	106 525	182 122	288 232	5 750
322211	Corrugated & solid fiber box mfg.....	-	9	9	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	76	29	1 536	46 083	1 034	1 893	25 978	101 668	56 823	157 915	4 983
3231	Printing & related support activities.....	1	76	29	1 536	46 083	1 034	1 893	25 978	101 668	56 823	157 915	4 983
32311	Printing.....	2	64	26	1 365	38 323	919	1 668	21 407	89 096	54 154	142 638	3 973
325	Chemical mfg.....	1	30	18	982	40 485	478	1 061	17 663	92 288	126 674	222 158	6 752
326	Plastics & rubber products mfg.....	3	39	17	1 253	35 389	994	1 882	20 923	79 653	81 044	160 029	7 187
3261	Plastics product mfg.....	3	30	14	1 063	29 996	836	1 585	17 344	68 426	68 999	136 718	6 714
32619	Other plastics product mfg.....	5	21	9	686	19 890	544	970	11 615	47 356	40 063	86 864	4 653
326199	All other plastics product mfg.....	5	21	9	686	19 890	544	970	11 615	47 356	40 063	86 864	4 653
331	Primary metal mfg.....	1	10	9	636	24 361	485	1 110	15 946	103 686	130 333	242 458	4 385
332	Fabricated metal product mfg.....	1	186	55	4 106	138 192	3 055	6 349	89 491	331 620	168 998	496 442	21 419
3323	Architectural & structural metals mfg.....	-	20	9	511	21 368	330	771	10 723	63 383	42 405	105 977	2 092
3325	Hardware mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	94	20	1 522	51 956	1 222	2 193	35 735	115 791	60 579	172 315	10 338
33271	Machine shops.....	1	80	12	962	33 615	758	1 349	22 238	71 245	31 581	99 690	4 781
332710	Machine shops.....	1	80	12	962	33 615	758	1 349	22 238	71 245	31 581	99 690	4 781
33272	Turned product & screw, nut, & bolt mfg.....	1	14	8	560	18 341	464	844	13 497	44 546	28 998	72 625	5 557
3328	Coating, engraving, heat treating, & allied activities.	1	29	12	617	16 693	483	891	9 825	33 248	9 736	43 073	2 359
33281	Coating, engraving, heat treating, & allied activities.....	1	29	12	617	16 693	483	891	9 825	33 248	9 736	43 073	2 359
333	Machinery mfg.....	2	80	29	1 632	52 301	1 121	1 993	28 953	105 216	67 916	171 412	4 108
3339	Other general-purpose machinery mfg.....	3	26	10	524	19 971	303	565	8 775	38 450	22 077	59 984	1 308
335	Electrical equipment, appliance, & component mfg.....	-	19	9	736	23 617	568	1 219	15 193	65 413	60 034	126 595	5 090

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANTA FE SPRINGS, CA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	27	13	1 104	40 185	809	1 626	23 513	87 223	58 314	145 002	7 583
3364	Aerospace product & parts mfg	—	7	5	545	24 699	356	751	14 433	45 538	28 368	72 358	4 242
33641	Aerospace product & parts mfg	—	7	5	545	24 699	356	751	14 433	45 538	28 368	72 358	4 242
337	Furniture & related product mfg	2	35	15	969	20 761	753	1 348	13 398	43 648	45 126	89 595	3 646
3371	Household & institutional furniture & kitchen cabinet mfg	1	22	9	705	13 580	545	978	9 269	28 901	33 342	62 713	2 684
33712	Household & institutional furniture mfg	1	16	8	660	12 519	511	920	8 616	26 816	32 209	59 493	2 661
337122	Nonupholstered wood household furniture mfg	2	9	6	501	10 052	406	706	6 852	17 389	24 279	42 159	2 489
	SANTA MARIA, CA												
31-33	Manufacturing	—	86	22	2 608	63 699	1 906	3 228	34 375	283 543	174 084	452 384	10 057
311	Food mfg	—	8	3	600	10 275	550	813	6 567	73 173	45 270	118 079	D
3114	Fruit & vegetable preserving & specialty food mfg	—	4	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	7	3	565	13 629	397	868	7 783	44 576	34 370	77 286	1 140
3261	Plastics product mfg	—	5	2	f	D	D	D	D	D	D	D	D
	SANTA MONICA, CA												
31-33	Manufacturing	3	147	30	4 065	140 994	2 469	4 888	71 512	330 028	233 870	560 629	33 455
334	Computer & electronic product mfg	3	18	6	1 648	60 604	687	1 308	17 473	150 681	68 511	217 711	6 774
3345	Navigational, measuring, medical, & control instruments mfg	2	5	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	5	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	21	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	15	1	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	1	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	—	1	1	f	D	D	D	D	D	D	D	D
	SANTA ROSA, CA												
31-33	Manufacturing	—	203	45	9 598	418 173	6 678	12 877	236 901	1 199 566	606 225	1 784 128	82 556
333	Machinery mfg	—	11	6	1 377	62 314	942	1 911	28 612	137 180	72 271	207 900	D
3333	Commercial & service industry machinery mfg ..	—	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	15	8	i	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	6	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	6	3	h	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	35	5	812	27 965	541	1 091	14 885	103 348	16 938	116 690	D
3391	Medical equipment & supplies mfg	—	20	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	20	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANTEE, CA													
31-33	Manufacturing	1	127	33	2 356	61 132	1 564	2 893	32 286	132 407	85 657	216 918	8 277
332	Fabricated metal product mfg	1	42	13	743	20 617	527	967	12 230	44 959	24 203	68 109	3 188
SCOTTS VALLEY, CA													
31-33	Manufacturing	1	34	18	1 997	73 115	1 016	2 437	27 262	226 758	225 061	455 025	14 596
333	Machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	12	10	730	28 297	374	930	14 907	74 081	72 449	148 741	5 601
SEAL BEACH, CA													
31-33	Manufacturing	—	10	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
SELMA, CA													
31-33	Manufacturing	—	13	4	715	17 402	539	1 022	10 905	42 869	89 642	131 680	4 216
333	Machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg	—	1	1	f	D	D	D	D	D	D	D	D
SIGNAL HILL, CA													
31-33	Manufacturing	3	103	17	1 133	38 436	791	1 442	20 332	89 046	79 477	166 939	7 653
SIMI VALLEY, CA													
31-33	Manufacturing	—	157	46	4 709	170 491	2 952	5 888	72 985	646 633	595 198	1 208 305	25 692
332	Fabricated metal product mfg	1	40	8	548	16 448	438	892	11 153	35 664	21 172	57 375	1 596
334	Computer & electronic product mfg	—	37	18	2 304	98 064	1 205	2 367	32 729	409 886	455 922	832 783	17 110
3341	Computer & peripheral equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	7	6	856	39 296	493	1 136	15 371	295 212	316 010	577 403	6 627
33451	Navigational, measuring, medical, & control instruments mfg	—	7	6	856	39 296	493	1 136	15 371	295 212	316 010	577 403	6 627

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH EL MONTE, CA													
31-33	Manufacturing	2	683	221	14 289	264 993	11 911	19 249	176 892	554 214	434 912	991 676	25 439
315	Apparel mfg	2	342	125	7 648	88 199	6 903	10 413	70 532	197 865	164 225	359 091	5 360
3152	Cut & sew apparel mfg	1	323	122	7 429	85 183	6 709	10 076	68 057	190 936	158 094	345 941	5 117
31521	Cut & sew apparel contractors	4	267	94	5 400	51 872	5 061	6 956	44 910	97 135	41 452	138 360	3 772
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	259	87	4 970	46 663	4 651	6 263	40 435	89 685	40 063	129 526	3 302
31522	Men's & boys' cut & sew apparel mfg	-	14	10	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	41	18	1 266	21 937	981	1 828	14 059	63 685	73 704	139 254	794
315232	Women's & girls' cut & sew blouse & shirt mfg	-	27	10	531	8 759	437	639	5 457	16 289	26 422	44 116	476
315239	Women's & girls' cut & sew other outerwear mfg	-	7	5	570	10 931	414	899	6 641	42 899	44 489	87 836	264
323	Printing & related support activities.....	3	38	8	533	9 921	376	582	6 501	20 928	10 228	31 231	896
3231	Printing & related support activities.....	3	38	8	533	9 921	376	582	6 501	20 928	10 228	31 231	896
325	Chemical mfg	1	12	5	642	24 088	478	979	14 360	42 034	51 481	97 145	2 788
326	Plastics & rubber products mfg	2	20	9	1 099	26 998	916	1 693	16 943	53 890	35 683	89 855	4 123
3261	Plastics product mfg	2	17	8	1 040	25 890	865	1 576	16 022	52 097	33 220	85 576	4 070
32619	Other plastics product mfg	2	12	7	934	20 774	772	1 397	12 848	45 086	25 917	70 814	3 518
326199	All other plastics product mfg	2	10	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	105	23	1 651	50 008	1 260	2 204	28 897	100 264	63 406	165 051	5 433
333	Machinery mfg	-	27	11	602	20 958	355	669	11 386	52 290	23 613	76 183	1 399
SOUTH GATE, CA													
31-33	Manufacturing	2	200	76	7 603	214 925	6 088	12 362	146 147	591 688	751 382	1 330 923	41 220
315	Apparel mfg	-	23	8	1 614	25 911	1 428	2 871	20 208	46 129	104 790	149 772	1 650
3152	Cut & sew apparel mfg	-	20	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	6	642	21 926	534	1 090	15 733	77 495	51 411	129 594	5 959
331	Primary metal mfg	-	13	10	701	18 204	563	997	12 179	38 278	41 902	78 600	4 391
3315	Foundries	-	11	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	48	10	1 220	40 559	889	1 873	26 371	111 077	92 665	193 884	8 264
3323	Architectural & structural metals mfg	1	13	5	511	16 162	307	666	9 853	28 887	27 028	55 394	1 551
337	Furniture & related product mfg	-	12	6	740	26 889	646	1 577	22 396	97 786	79 288	177 504	3 284
SOUTH SAN FRANCISCO, CA													
31-33	Manufacturing	1	193	77	10 151	485 909	5 524	11 244	149 288	1 477 988	558 427	2 011 214	196 346
311	Food mfg	4	35	22	2 427	87 275	1 596	3 176	41 561	271 181	180 060	450 521	12 724
3113	Sugar & confectionery product mfg	-	4	3	f	D	D	D	D	D	D	D	3 595
31133	Confectionery mfg from purchased chocolate ...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	8	12	9	1 248	45 519	657	1 256	14 329	93 871	52 119	145 794	5 557
31181	Bread & bakery product mfg	9	11	8	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	5	5	908	38 178	409	782	9 633	75 951	40 448	116 394	D
322	Paper mfg	-	7	6	508	21 983	413	809	14 603	42 450	68 327	110 490	5 856
3222	Converted paper product mfg	-	7	6	508	21 983	413	809	14 603	42 450	68 327	110 490	5 856

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH SAN FRANCISCO, CA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	3	34	10	901	34 737	566	1 134	19 944	71 526	39 375	111 515	2 802
3231	Printing & related support activities.....	3	34	10	901	34 737	566	1 134	19 944	71 526	39 375	111 515	2 802
32311	Printing.....	3	31	8	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	4	20	6	534	23 598	355	706	14 543	43 477	33 231	76 759	2 059
325	Chemical mfg.....	—	14	5	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	4	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	4	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	3	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	19	8	903	23 988	592	1 275	13 587	128 282	33 603	159 702	4 858
	STANTON, CA												
31-33	Manufacturing	5	64	11	1 251	31 427	955	1 645	19 776	66 689	49 984	117 233	5 443
	STOCKTON, CA												
31-33	Manufacturing	1	191	72	8 783	256 735	6 900	14 278	181 845	774 595	1 103 993	1 809 775	63 230
311	Food mfg.....	2	31	17	2 484	71 157	2 050	3 942	52 420	353 743	545 503	826 895	34 205
3114	Fruit & vegetable preserving & specialty food mfg.....	—	6	6	1 337	33 630	1 206	2 188	27 237	161 364	160 645	278 091	D
31142	Fruit & vegetable canning, pickling, & drying.....	—	6	6	1 337	33 630	1 206	2 188	27 237	161 364	160 645	278 091	D
311421	Fruit & vegetable canning.....	—	6	6	1 337	33 630	1 206	2 188	27 237	161 364	160 645	278 091	D
321	Wood product mfg.....	—	10	8	1 261	32 723	1 036	2 041	24 271	71 805	147 898	218 687	3 792
3219	Other wood product mfg... ..	—	10	8	1 261	32 723	1 036	2 041	24 271	71 805	147 898	218 687	3 792
32199	All other wood product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg... ..	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	27	11	1 002	30 332	674	1 531	18 970	61 731	101 101	162 941	5 565
3323	Architectural & structural metals mfg.....	—	10	6	620	17 550	374	906	9 495	35 270	45 809	81 444	D
33231	Plate work & fabricated structural product mfg... ..	—	6	4	549	14 846	322	810	8 065	30 592	41 989	72 957	1 387
332312	Fabricated structural metal mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
	SUNNYVALE, CA												
31-33	Manufacturing	—	438	205	43 471	2 682 976	15 750	30 933	561 767	7 469 489	3 604 084	11 208 575	944 863
323	Printing & related support activities.....	3	45	11	870	32 715	636	1 259	17 820	64 777	42 524	108 813	D
3231	Printing & related support activities.....	3	45	11	870	32 715	636	1 259	17 820	64 777	42 524	108 813	D
32311	Printing.....	3	43	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	65	20	1 245	50 990	998	1 910	35 546	88 959	42 338	130 401	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	49	13	863	35 570	685	1 363	25 563	65 172	30 702	95 369	D
33271	Machine shops.....	1	44	11	772	30 964	612	1 177	22 322	53 234	25 526	78 644	5 032
332710	Machine shops.....	1	44	11	772	30 964	612	1 177	22 322	53 234	25 526	78 644	5 032

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SUNNYVALE, CA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	28	16	2 556	147 372	1 092	2 257	46 882	283 864	218 718	513 583	21 967
3332	Industrial machinery mfg ..	1	15	10	1 332	73 243	751	1 716	31 525	141 709	113 138	262 965	D
33329	Other industrial machinery mfg	1	15	10	1 332	73 243	751	1 716	31 525	141 709	113 138	262 965	D
333295	Semiconductor machinery mfg	1	13	9	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	192	107	23 041	1 538 432	9 200	17 542	326 436	4 031 922	1 725 206	5 718 067	583 538
3341	Computer & peripheral equipment mfg	2	28	8	1 449	102 087	546	1 018	29 078	156 084	158 779	326 693	9 835
33411	Computer & peripheral equipment mfg	2	28	8	1 449	102 087	546	1 018	29 078	156 084	158 779	326 693	9 835
334111	Electronic computer mfg	-	8	2	901	69 438	313	530	14 516	88 072	76 057	160 781	3 977
334119	Other computer peripheral equipment mfg	4	16	5	503	29 558	196	403	12 899	59 973	78 100	152 489	5 448
3342	Communications equipment mfg	4	22	18	4 308	245 314	1 405	2 811	44 087	577 207	385 200	964 464	43 043
33421	Telephone apparatus mfg	7	7	6	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	7	7	6	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	14	11	2 518	122 239	927	1 798	20 477	290 017	214 051	509 512	25 594
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	14	11	2 518	122 239	927	1 798	20 477	290 017	214 051	509 512	25 594
3344	Semiconductor & other electronic component mfg	-	86	46	12 659	951 565	5 759	11 024	202 547	2 674 472	890 442	3 530 343	507 423
33441	Semiconductor & other electronic component mfg	-	86	46	12 659	951 565	5 759	11 024	202 547	2 674 472	890 442	3 530 343	507 423
334412	Bare printed circuit board mfg	1	7	6	f	D	D	D	D	D	D	D	5 551
334413	Semiconductor & related device mfg	-	51	28	10 277	872 168	3 855	7 021	147 710	2 536 064	706 633	3 200 135	493 686
334419	Other electronic component mfg	1	15	5	f	D	D	D	D	D	D	D	3 217
3345	Navigational, measuring, medical, & control instruments mfg	-	47	30	4 255	228 090	1 290	2 295	43 430	595 750	263 804	840 409	17 317
33451	Navigational, measuring, medical, & control instruments mfg	-	47	30	4 255	228 090	1 290	2 295	43 430	595 750	263 804	840 409	17 317
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	2	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	4	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	9	7	972	54 696	282	559	10 367	167 953	83 844	248 177	6 467
334519	Other measuring & controlling device mfg	-	6	6	1 029	55 943	230	564	8 859	175 681	76 469	241 214	D
336	Transportation equipment mfg	-	8	2	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	j	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	-	1	1	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	43	22	1 856	99 211	1 025	2 035	38 301	200 568	100 392	303 783	18 206
3391	Medical equipment & supplies mfg	2	32	18	1 712	93 095	961	1 908	36 796	186 944	90 169	279 330	17 868
33911	Medical equipment & supplies mfg	2	32	18	1 712	93 095	961	1 908	36 796	186 944	90 169	279 330	17 868
339112	Surgical & medical instrument mfg	3	16	13	1 325	76 715	758	1 450	30 626	141 878	58 929	200 395	16 752

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TEMECULA, CA													
31-33	Manufacturing	-	107	32	4 321	145 555	2 904	6 256	70 915	843 028	278 129	1 113 354	37 229
326	Plastics & rubber products mfg	-	8	3	551	15 229	406	615	7 466	48 609	32 848	81 210	D
3261	Plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	3	544	15 109	400	604	7 373	48 338	32 521	80 609	D
326199	All other plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	6	885	30 687	589	1 219	13 081	75 960	94 028	171 170	4 227
339	Miscellaneous mfg	-	18	7	1 673	58 301	984	2 521	25 654	626 799	89 480	708 565	7 910
3391	Medical equipment & supplies mfg	-	7	3	g	D	D	D	D	D	D	D	1 009
33911	Medical equipment & supplies mfg	-	7	3	g	D	D	D	D	D	D	D	1 009
339112	Surgical & medical instrument mfg	-	4	2	f	D	D	D	D	D	D	D	D
THOUSAND OAKS, CA													
31-33	Manufacturing	2	137	39	4 172	158 883	2 156	4 456	57 729	342 749	257 217	601 973	28 783
325	Chemical mfg	1	6	3	857	44 378	198	432	9 046	103 213	38 139	136 475	11 769
332	Fabricated metal product mfg	-	18	7	574	24 284	380	856	10 907	56 252	19 480	74 088	3 299
333	Machinery mfg	3	10	5	923	33 106	423	808	9 555	81 811	101 968	188 175	6 268
334	Computer & electronic product mfg	4	34	14	1 187	41 193	677	1 471	18 629	69 601	74 481	148 008	6 046
3344	Semiconductor & other electronic component mfg	6	12	6	518	16 142	316	689	7 453	26 561	40 254	71 712	3 114
33441	Semiconductor & other electronic component mfg	6	12	6	518	16 142	316	689	7 453	26 561	40 254	71 712	3 114
TORRANCE, CA													
31-33	Manufacturing	-	328	114	16 065	719 938	10 890	23 082	400 999	1 849 269	2 514 557	4 364 100	165 467
324	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	57	23	2 511	96 486	1 999	3 929	64 750	221 512	203 435	430 121	22 963
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	35	11	1 866	73 173	1 495	2 963	49 766	166 596	59 224	232 105	11 248
33272	Turned product & screw, nut, & bolt mfg	-	5	3	g	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	35	15	2 628	121 535	1 548	3 136	53 453	299 422	237 916	545 606	18 760
3332	Industrial machinery mfg ..	-	11	4	521	20 445	246	570	8 594	53 231	52 705	101 524	2 043
33329	Other industrial machinery mfg	-	10	4	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	10	5	1 005	46 108	532	1 065	18 868	87 134	37 977	134 938	3 633
33399	All other general-purpose machinery mfg	-	10	5	1 005	46 108	532	1 065	18 868	87 134	37 977	134 938	3 633
334	Computer & electronic product mfg	1	47	18	2 818	121 533	1 935	4 412	72 724	244 677	188 671	422 970	26 951
3344	Semiconductor & other electronic component mfg	-	14	6	1 751	74 236	1 384	3 087	58 092	128 508	87 447	208 545	21 082
33441	Semiconductor & other electronic component mfg	-	14	6	1 751	74 236	1 384	3 087	58 092	128 508	87 447	208 545	21 082
334411	Electron tube mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TORRANCE, CA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	17	7	3 448	204 812	2 291	5 307	114 261	374 764	259 287	634 686	31 594
3364	Aerospace product & parts mfg	-	6	5	h	D	D	D	D	D	D	D	25 572
33641	Aerospace product & parts mfg	-	6	5	h	D	D	D	D	D	D	D	25 572
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	38	8	820	28 444	552	1 100	15 940	111 811	68 931	174 817	4 217
TRACY, CA													
31-33	Manufacturing	-	48	22	2 527	77 504	2 063	3 903	54 842	264 366	390 725	651 192	10 399
311	Food mfg	-	9	5	1 154	37 543	978	2 106	29 113	166 990	280 018	447 044	5 349
TULARE, CA													
31-33	Manufacturing	-	35	16	1 797	61 028	1 428	3 282	43 996	206 316	1 136 200	1 331 823	39 990
311	Food mfg	-	13	9	1 337	47 697	1 105	2 652	35 946	178 030	1 114 066	1 281 612	D
3115	Dairy product mfg	-	6	6	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	5	5	f	D	D	D	D	D	D	D	D
TURLOCK, CA													
31-33	Manufacturing	1	69	29	3 636	92 972	3 009	6 067	69 521	409 913	445 217	857 167	19 012
311	Food mfg	-	16	11	2 271	53 871	2 028	4 250	44 358	306 476	314 544	622 194	8 373
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	7	621	19 069	455	825	11 948	43 777	49 159	93 165	2 169
TUSTIN, CA													
31-33	Manufacturing	-	141	48	6 771	282 538	4 470	8 819	132 245	833 818	642 075	1 446 290	62 075
326	Plastics & rubber products mfg	3	8	5	558	11 426	455	772	6 398	38 235	35 235	71 384	3 745
3261	Plastics product mfg	3	8	5	558	11 426	455	772	6 398	38 235	35 235	71 384	3 745
333	Machinery mfg	-	10	7	702	19 557	388	796	8 343	56 083	107 661	161 691	7 755
3333	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	38	16	2 404	133 824	1 359	2 635	45 528	309 205	206 429	515 733	24 148
3342	Communications equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	20	8	1 141	35 916	826	1 616	17 637	88 690	68 063	157 052	D
33441	Semiconductor & other electronic component mfg	-	20	8	1 141	35 916	826	1 616	17 637	88 690	68 063	157 052	D
337	Furniture & related product mfg	-	7	2	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	2	1	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	1	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	g	D	D	D	D	D	D	D	D
UKIAH, CA													
31-33	Manufacturing	-	35	6	654	19 472	443	919	12 619	39 321	65 176	106 668	4 584

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNION CITY, CA													
31-33	Manufacturing	1	93	39	3 696	128 063	2 640	5 369	78 476	360 615	317 003	677 524	19 329
311	Food mfg.....	1	9	5	898	32 977	780	1 583	24 353	114 002	128 696	242 243	5 444
3113	Sugar & confectionery product mfg.....	3	3	3	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	17	8	585	18 152	437	878	13 527	48 597	35 705	82 577	3 409
UPLAND, CA													
31-33	Manufacturing	3	95	21	1 510	40 091	1 044	1 986	21 656	99 138	125 435	224 140	5 546
VACAVILLE, CA													
31-33	Manufacturing	3	58	17	2 382	71 058	1 952	3 121	46 591	217 827	136 810	355 804	14 086
311	Food mfg.....	9	6	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	9	2	2	f	D	D	D	D	D	D	D	D
311422	Specialty canning.....	9	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	4	4	f	D	D	D	D	D	D	D	D
VALLEJO, CA													
31-33	Manufacturing	-	40	8	682	23 001	470	969	14 448	84 067	113 340	198 232	8 984
VERNON, CA *													
31-33	Manufacturing	1	396	270	28 688	780 120	22 741	46 151	484 651	2 364 022	2 921 064	5 257 056	98 068
311	Food mfg.....	1	45	32	4 923	141 168	3 876	7 883	89 398	573 232	847 439	1 407 049	22 448
3116	Meat product mfg.....	1	16	11	2 180	55 257	1 901	3 911	40 190	193 110	427 286	623 877	5 376
31161	Animal slaughtering & processing.....	1	16	11	2 180	55 257	1 901	3 911	40 190	193 110	427 286	623 877	5 376
311611	Animal (except poultry) slaughtering.....	-	6	5	1 556	39 910	1 345	3 102	30 839	122 187	344 694	468 003	2 643
3118	Bakeries & tortilla mfg.....	-	4	4	f	D	D	D	D	D	D	D	3 760
31181	Bread & bakery product mfg.....	-	3	3	655	16 734	443	935	8 462	55 310	30 241	85 637	D
311812	Commercial bakeries ..	-	3	3	655	16 734	443	935	8 462	55 310	30 241	85 637	D
313	Textile mills.....	3	37	23	2 492	59 711	2 161	3 960	40 683	112 922	163 477	277 359	10 066
3132	Fabric mills.....	4	16	11	1 437	31 772	1 258	2 088	19 704	55 924	95 115	151 973	5 087
31321	Broadwoven fabric mills ..	9	5	3	500	6 832	464	558	6 216	10 984	15 225	26 224	D
313210	Broadwoven fabric mills.....	9	5	3	500	6 832	464	558	6 216	10 984	15 225	26 224	D
31324	Knit fabric mills.....	3	7	6	735	21 435	626	1 184	11 087	34 387	72 163	107 469	2 772
313241	Weft knit fabric mills ..	3	7	6	735	21 435	626	1 184	11 087	34 387	72 163	107 469	2 772
3133	Textile & fabric finishing & fabric coating mills.....	3	18	12	1 030	27 399	879	1 826	20 517	55 921	66 225	122 172	4 758
31331	Textile & fabric finishing mills.....	2	15	9	923	23 761	799	1 673	18 459	48 946	51 596	100 480	D
313312	Textile & fabric finishing mills.....	2	6	4	648	16 465	564	1 261	13 358	20 511	33 751	53 780	3 356
314	Textile product mills.....	3	26	16	1 685	30 189	1 424	4 919	22 403	65 947	81 288	143 323	3 300
3141	Textile furnishings mills....	3	9	7	1 010	17 470	912	1 618	14 162	44 380	65 303	105 486	1 261
31412	Curtain & linen mills.....	3	9	7	1 010	17 470	912	1 618	14 162	44 380	65 303	105 486	1 261
314129	Other household textile product mills.....	3	8	7	g	D	D	D	D	D	D	D	D
3149	Other textile product mills..	4	17	9	675	12 719	512	3 301	8 241	21 567	15 985	37 837	2 039

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VERNON, CA *—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	105	73	7 121	160 846	5 733	10 431	95 362	411 711	577 955	990 394	8 541
3151	Apparel knitting mills	2	10	6	504	10 011	405	649	6 106	19 676	33 130	54 136	810
3152	Cut & sew apparel mfg	1	84	62	6 228	145 055	5 045	9 426	86 324	378 290	537 018	914 573	7 282
31521	Cut & sew apparel contractors	5	35	22	1 835	23 485	1 759	3 256	20 250	42 943	11 384	53 837	1 419
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	28	16	1 492	19 905	1 428	2 592	17 061	36 776	8 856	45 160	1 219
31522	Men's & boys' cut & sew apparel mfg	1	9	7	835	20 080	629	1 081	9 549	50 580	50 856	98 171	1 172
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	4	4	592	14 845	466	737	5 865	33 453	21 511	53 991	D
31523	Women's & girls' cut & sew apparel mfg	1	40	33	3 558	101 490	2 657	5 089	56 525	284 767	474 778	762 565	4 691
315232	Women's & girls' cut & sew blouse & shirt mfg	2	13	11	997	25 315	739	1 173	12 044	82 081	151 446	227 923	891
315233	Women's & girls' cut & sew dress mfg	-	14	12	1 171	46 019	845	1 685	25 402	99 894	219 820	321 156	2 200
315239	Women's & girls' cut & sew other outerwear mfg	4	10	8	1 145	22 145	932	1 848	13 897	82 658	79 414	167 911	1 321
322	Paper mfg	-	15	13	1 282	44 670	993	1 900	30 523	117 231	160 862	279 421	5 216
3222	Converted paper product mfg	-	14	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	7	7	685	24 174	515	1 044	15 598	54 539	74 892	129 439	2 125
323	Printing & related support activities	1	22	16	1 397	34 119	1 128	2 377	23 795	70 205	52 856	124 494	5 851
3231	Printing & related support activities	1	22	16	1 397	34 119	1 128	2 377	23 795	70 205	52 856	124 494	5 851
32311	Printing	2	18	13	1 260	30 265	1 017	2 154	20 990	62 124	51 079	114 637	D
323113	Commercial screen printing	2	11	7	905	15 273	792	1 610	12 294	32 574	26 570	59 619	1 821
325	Chemical mfg	-	14	9	869	28 682	706	1 450	17 619	191 194	178 021	367 953	7 606
326	Plastics & rubber products mfg	1	13	10	1 075	20 640	936	1 303	13 309	102 096	102 541	201 038	2 973
3261	Plastics product mfg	1	13	10	1 075	20 640	936	1 303	13 309	102 096	102 541	201 038	2 973
32619	Other plastics product mfg	1	6	5	738	11 154	650	726	8 530	81 484	71 310	149 449	2 241
326199	All other plastics product mfg	1	6	5	738	11 154	650	726	8 530	81 484	71 310	149 449	2 241
327	Nonmetallic mineral product mfg	1	14	9	989	36 079	847	1 700	28 790	107 614	80 422	190 541	4 052
3272	Glass & glass product mfg ..	-	5	4	715	28 845	630	1 273	23 555	89 954	64 738	157 152	2 005
32721	Glass & glass product mfg	-	5	4	715	28 845	630	1 273	23 555	89 954	64 738	157 152	2 005
327213	Glass container mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	8	709	32 235	550	1 223	20 068	71 355	147 001	214 705	6 947
332	Fabricated metal product mfg	-	30	18	1 041	35 544	765	1 645	19 753	84 981	66 843	150 607	3 059
333	Machinery mfg	1	11	6	846	38 946	491	961	20 131	89 529	60 449	142 611	3 795
3339	Other general-purpose machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	4	4	541	11 812	450	897	6 715	24 470	11 046	35 679	784
3363	Motor vehicle parts mfg ...	3	4	4	541	11 812	450	897	6 715	24 470	11 046	35 679	784
337	Furniture & related product mfg	4	16	13	1 415	33 483	1 197	2 414	23 049	55 860	57 651	114 658	1 925
3371	Household & institutional furniture & kitchen cabinet mfg	4	11	9	1 265	30 537	1 067	2 165	20 818	51 447	49 386	102 005	1 754
33712	Household & institutional furniture mfg	4	11	9	1 265	30 537	1 067	2 165	20 818	51 447	49 386	102 005	1 754
337122	Nonupholstered wood household furniture mfg	3	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	14	9	768	16 778	616	1 273	10 756	39 186	33 563	73 226	1 833
3399	Other miscellaneous mfg ..	1	11	8	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	9	7	704	14 562	566	1 206	9 674	32 216	30 332	62 811	1 554
339999	All other miscellaneous mfg	-	6	6	660	13 652	533	1 139	9 097	30 392	28 568	59 177	1 488

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VICTORVILLE, CA													
31-33	Manufacturing	-	29	5	773	27 799	616	1 140	20 176	128 099	90 094	216 258	28 058
327	Nonmetallic mineral product mfg	-	6	2	f	D	D	D	D	D	D	D	D
VISALIA, CA													
31-33	Manufacturing	1	87	32	3 873	106 724	3 033	5 927	75 360	373 411	458 928	821 209	19 823
311	Food mfg	-	10	5	875	29 532	770	1 505	24 012	141 665	211 371	339 880	5 413
323	Printing & related support activities	5	11	5	f	D	D	D	D	D	D	D	2 628
3231	Printing & related support activities	5	11	5	f	D	D	D	D	D	D	D	2 628
32311	Printing	5	11	5	f	D	D	D	D	D	D	D	2 628
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
VISTA, CA													
31-33	Manufacturing	2	153	54	5 607	148 864	3 903	7 997	79 781	390 261	351 193	743 903	31 691
323	Printing & related support activities	4	12	5	630	20 228	455	993	12 843	39 027	26 241	65 180	4 256
3231	Printing & related support activities	4	12	5	630	20 228	455	993	12 843	39 027	26 241	65 180	4 256
32311	Printing	4	12	5	630	20 228	455	993	12 843	39 027	26 241	65 180	4 256
326	Plastics & rubber products mfg	1	14	4	710	19 179	422	803	8 304	55 397	62 996	119 644	2 653
3261	Plastics product mfg	-	8	2	609	16 255	359	682	6 835	47 384	58 462	107 173	2 146
32619	Other plastics product mfg	-	5	2	f	D	D	D	D	D	D	D	1 925
326191	Plastics plumbing fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	9	504	16 984	374	707	10 117	35 215	17 562	52 656	3 343
333	Machinery mfg	3	11	3	512	14 229	330	645	6 878	39 185	23 721	62 748	4 359
334	Computer & electronic product mfg	5	15	9	767	21 908	443	1 020	8 953	74 634	83 046	159 710	4 702
339	Miscellaneous mfg	-	21	7	571	15 933	403	729	6 878	38 126	26 498	65 154	2 793
WALNUT, CA													
31-33	Manufacturing	2	48	9	665	22 963	455	886	9 960	77 308	71 227	146 721	4 082
WALNUT CREEK, CA													
31-33	Manufacturing	3	45	7	1 417	63 520	617	1 183	18 712	239 193	117 212	355 131	11 288
334	Computer & electronic product mfg	2	6	4	1 070	51 964	392	762	12 084	205 674	93 484	297 675	9 439
3345	Navigational, measuring, medical, & control instruments mfg	2	5	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	5	3	f	D	D	D	D	D	D	D	D
WATSONVILLE, CA													
31-33	Manufacturing	1	81	31	3 482	87 020	2 498	4 678	50 196	268 444	260 387	555 602	21 131
311	Food mfg	-	25	11	1 765	36 118	1 466	2 739	26 429	133 227	139 570	288 541	D
3114	Fruit & vegetable preserving & specialty food mfg	-	9	6	g	D	D	D	D	D	D	D	6 512
31141	Frozen food mfg	-	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
311411	Frozen fruit, juice, & vegetable mfg	-	7	5	1 296	24 652	1 174	2 191	19 699	74 917	83 544	174 027	D
334	Computer & electronic product mfg	-	12	7	910	26 982	458	834	9 231	76 686	54 004	140 441	D
3344	Semiconductor & other electronic component mfg	-	7	5	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	5	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WESTLAKE VILLAGE, CA													
31-33	Manufacturing	1	42	11	1 312	47 297	817	1 686	22 101	122 245	62 708	184 879	4 652
334	Computer & electronic product mfg.....	2	16	6	573	23 475	326	653	10 122	60 126	28 144	88 654	2 729
WESTMINSTER, CA													
31-33	Manufacturing	4	128	19	1 984	43 728	1 644	2 674	28 791	96 068	70 637	168 506	6 301
WEST SACRAMENTO, CA													
31-33	Manufacturing	-	68	17	2 487	91 457	1 386	2 888	40 099	342 378	402 462	712 910	25 599
325	Chemical mfg.....	1	7	5	f	D	D	D	D	D	D	D	D
WHITTIER, CA													
31-33	Manufacturing	-	76	26	2 733	69 367	2 108	3 939	40 819	158 062	140 510	298 336	7 908
337	Furniture & related product mfg.....	-	7	5	893	20 046	679	1 389	14 332	50 785	59 272	109 304	2 334
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
WILLITS, CA													
31-33	Manufacturing	-	25	8	964	22 830	642	1 036	14 749	68 622	53 151	117 274	2 460
332	Fabricated metal product mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WOODLAND, CA													
31-33	Manufacturing	1	65	23	2 309	77 605	1 769	3 781	48 484	205 393	271 462	484 640	D
311	Food mfg.....	2	11	5	530	19 176	466	1 041	13 579	36 780	121 625	167 183	D
321	Wood product mfg.....	-	8	4	f	D	D	D	D	D	D	D	649
3219	Other wood product mfg...	-	5	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
YORBA LINDA, CA													
31-33	Manufacturing	1	72	13	1 523	70 600	844	1 550	22 893	116 866	88 923	205 796	9 696
YUBA CITY, CA													
31-33	Manufacturing	-	35	5	759	27 239	569	1 336	16 960	116 044	125 886	234 111	7 379

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
CALIFORNIA		CALIFORNIA—Con.	
Companies ¹ number..	46 670	Quantity of electricity purchased for heat and power 1,000 kWh..	44 426 236
All establishments number..	49 418	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	2 313 969
Establishments with 1 to 19 employees number..	34 152	Total value of shipments \$1,000..	379 612 443
Establishments with 20 to 99 employees number..	11 669	Value of resales \$1,000..	15 955 627
Establishments with 100 employees or more number..	3 597	Value added \$1,000..	195 872 810
All employees number..	1 809 667	Total inventories, beginning of year \$1,000..	49 339 189
Total compensation ² \$1,000..	81 050 421	Finished goods inventories, beginning of year \$1,000..	14 633 192
Annual payroll \$1,000..	65 762 848	Work-in-process inventories, beginning of year \$1,000..	18 905 395
Total fringe benefits \$1,000..	15 287 573	Materials and supplies inventories, beginning of year \$1,000..	15 800 602
Production workers, average for year number..	1 181 865	Total inventories, end of year \$1,000..	51 027 587
Production workers on March 12 number..	1 162 372	Finished goods inventories, end of year \$1,000..	15 783 917
Production workers on May 12 number..	1 173 191	Work-in-process inventories, end of year \$1,000..	18 561 398
Production workers on August 12 number..	1 206 255	Materials and supplies inventories, end of year \$1,000..	16 682 272
Production workers on November 12 number..	1 185 642	Gross book value of total assets at beginning of year \$1,000..	122 716 487
Production-worker hours 1,000..	2 317 867	Total capital expenditures (new and used) \$1,000..	16 422 155
Production-worker wages \$1,000..	31 140 024	Capital expenditures for buildings and other structures (new and used) \$1,000..	3 073 392
Total cost of materials \$1,000..	184 701 629	Capital expenditures for machinery and equipment (new and used) \$1,000..	13 348 763
Cost of materials, parts, containers, etc., consumed \$1,000..	158 755 349	Total retirements ² \$1,000..	5 208 776
Cost of resales \$1,000..	12 316 693	Gross book value of total assets at end of year \$1,000..	133 929 866
Cost of fuels \$1,000..	1 492 597	Total depreciation during year ² \$1,000..	10 001 818
Cost of purchased electricity \$1,000..	3 441 065	Total rental payments ² \$1,000..	4 776 690
Cost of contract work \$1,000..	8 695 925	Buildings and other structures rental payments ² \$1,000..	2 669 983
		Machinery and equipment rental payments ² \$1,000..	2 106 707

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

CALIFORNIA

Buellton was incorporated in February 1992.

Calabasas was incorporated in April 1991, but this change was not submitted to the Census Bureau until November 1992.

Grover Beach name was changed from Grover City in December 1992.

Industry does not qualify as a “place” for the economic census based on its 1990 population but is included because of its dense concentration of economic activity.

Malibu was incorporated in March 1991, but this change was not submitted to the Census Bureau until January 1993.

Shasta Lake was incorporated in July 1993.

Truckee was incorporated in March 1993.

Vernon does not qualify as a “place” for the economic census based on its 1990 population but is included because of its dense concentration of economic activity.

Windsor was incorporated in July 1992.

Appendix E. Metropolitan Areas

CALIFORNIA

Bakersfield, CA MSA

Kern County, CA

Chico—Paradise, CA MSA

Butte County, CA

Fresno, CA MSA

Fresno County, CA

Madera County, CA

Los Angeles—Riverside—Orange County, CA CMSA

Los Angeles—Long Beach, CA PMSA

Los Angeles County, CA

Orange County, CA PMSA

Orange County, CA

Riverside—San Bernardino, CA PMSA

Riverside County, CA

San Bernardino County, CA

Ventura, CA PMSA

Ventura County, CA

Los Angeles—Long Beach, CA PMSA

Los Angeles County, CA

Merced, CA MSA

Merced County, CA

Modesto, CA MSA

Stanislaus County, CA

Oakland, CA PMSA

Alameda County, CA

Contra Costa County, CA

Orange County, CA PMSA

Orange County, CA

Redding, CA MSA

Shasta County, CA

Riverside—San Bernardino, CA PMSA

Riverside County, CA

San Bernardino County, CA

Sacramento, CA PMSA

El Dorado County, CA

Placer County, CA

Sacramento County, CA

Sacramento—Yolo, CA CMSA

Sacramento, CA PMSA

El Dorado County, CA

Placer County, CA

Sacramento County, CA

Yolo, CA PMSA

Yolo County, CA

Salinas, CA MSA

Monterey County, CA

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA

Marin County, CA

San Francisco County, CA

San Mateo County, CA

San Francisco—Oakland—San Jose, CA CMSA

Oakland, CA PMSA

Alameda County, CA

Contra Costa County, CA

San Francisco, CA PMSA

Marin County, CA

San Francisco County, CA

San Mateo County, CA

San Jose, CA PMSA

Santa Clara County, CA

San Francisco—Oakland—San Jose, CA CMSA—Con.

Santa Cruz—Watsonville, CA PMSA

Santa Cruz County, CA

Santa Rosa, CA PMSA

Sonoma County, CA

Vallejo—Fairfield—Napa, CA PMSA

Napa County, CA

Solano County, CA

San Jose, CA PMSA

Santa Clara County, CA

San Luis Obispo—Atascadero—Paso Robles, CA MSA

San Luis Obispo County, CA

Santa Barbara—Santa Maria—Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz—Watsonville, CA PMSA

Santa Cruz County, CA

Santa Rosa, CA PMSA

Sonoma County, CA

Stockton—Lodi, CA MSA

San Joaquin County, CA

Vallejo—Fairfield—Napa, CA PMSA

Napa County, CA

Solano County, CA

Ventura, CA PMSA

Ventura County, CA

Visalia—Tulare—Porterville, CA MSA

Tulare County, CA

Yolo, CA PMSA

Yolo County, CA

Yuba City, CA MSA

Sutter County, CA

Yuba County, CA

Colorado

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econgguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO													
31-33	Manufacturing	1	5 480	1 264	173 069	6 176 805	115 308	226 791	3 177 698	20 673 048	19 409 251	40 012 820	1 659 521
311	Food mfg	1	382	108	18 096	447 147	13 493	28 123	294 911	1 646 265	3 864 708	5 517 960	111 085
3111	Animal food mfg	-	29	8	672	23 201	407	895	12 916	192 755	255 621	447 895	29 457
31111	Animal food mfg	-	29	8	672	23 201	407	895	12 916	192 755	255 621	447 895	29 457
311111	Dog & cat food mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
311119	Other animal food mfg	-	25	6	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	11	4	430	17 250	333	598	13 141	36 219	154 493	186 991	2 526
31121	Flour milling & malt mfg .	1	6	1	164	7 654	128	187	5 878	17 990	79 311	97 448	D
311211	Flour milling	1	6	1	164	7 654	128	187	5 878	17 990	79 311	97 448	D
31122	Starch & vegetable fats & oils mfg	-	4	3	e	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	2	2	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	2	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	3	37	11	1 700	38 838	1 305	2 703	26 218	139 869	119 753	259 130	12 443
31131	Sugar mfg	-	2	2	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	2	2	e	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	3	1	c	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	3	1	c	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	1	19	5	904	15 347	719	1 483	10 970	61 954	29 912	92 062	D
311330	Confectionery mfg from purchased chocolate	1	19	5	904	15 347	719	1 483	10 970	61 954	29 912	92 062	D
31134	Nonchocolate confectionery mfg	9	13	3	e	D	D	D	D	D	D	D	999
311340	Nonchocolate confectionery mfg ...	9	13	3	e	D	D	D	D	D	D	D	999
3114	Fruit & vegetable preserving & specialty food mfg	4	27	6	487	10 203	407	820	7 734	33 362	38 054	71 939	D
31141	Frozen food mfg	2	5	1	149	2 590	130	275	1 849	6 539	5 065	11 615	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	c	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	4	22	5	338	7 613	277	545	5 885	26 823	32 989	60 324	1 131
311422	Specialty canning	2	7	3	194	4 172	146	292	2 938	12 378	14 032	26 311	D
3115	Dairy product mfg	1	24	14	1 917	53 541	924	1 815	23 746	177 981	341 037	516 188	11 706
31151	Dairy product (except frozen) mfg	1	16	11	1 663	47 157	731	1 515	19 009	154 173	305 875	457 686	10 579
311511	Fluid milk mfg	1	11	9	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	2	1	c	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	1	3	1	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	3	8	3	254	6 384	193	300	4 737	23 808	35 162	58 502	1 127
311520	Ice cream & frozen dessert mfg	3	8	3	254	6 384	193	300	4 737	23 808	35 162	58 502	1 127
3116	Meat product mfg	1	67	27	7 955	170 308	6 876	15 411	133 598	575 419	2 694 159	3 285 224	32 120
31161	Animal slaughtering & processing	1	67	27	7 955	170 308	6 876	15 411	133 598	575 419	2 694 159	3 285 224	32 120
311611	Animal (except poultry) slaughtering	1	37	13	5 999	127 091	5 282	12 297	102 288	416 500	2 430 569	2 858 277	24 579
311612	Meat processed from carcasses	1	21	8	555	13 521	436	889	9 318	51 064	118 835	172 609	4 151
311613	Rendering & meat byproduct processing	-	6	4	c	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	142	26	3 709	98 593	2 443	4 442	60 298	339 264	172 093	513 030	14 058
31181	Bread & bakery product mfg	1	123	20	2 533	68 181	1 518	2 779	38 639	140 753	79 527	220 254	6 012
311811	Retail bakeries	4	71	6	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	50	14	2 067	62 081	1 227	2 390	34 864	127 769	72 312	200 019	5 453
31182	Cookie, cracker, & pasta mfg	-	10	2	719	22 694	573	1 068	16 328	173 543	69 329	244 406	7 044
311821	Cookie & cracker mfg .	-	5	1	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	c	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	9	4	457	7 718	352	595	5 331	24 968	23 237	48 370	1 002
311830	Tortilla mfg	-	9	4	457	7 718	352	595	5 331	24 968	23 237	48 370	1 002

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLORADO—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	42	11	1 141	34 464	746	1 395	16 827	149 945	87 641	234 256	7 344
31191	Snack food mfg	—	9	5	398	12 898	324	578	6 550	68 885	19 823	88 599	4 612
311919	Other snack food mfg	—	7	4	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	7	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	7	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg	2	17	4	398	8 704	279	495	4 976	28 606	33 753	59 865	1 095
311991	Perishable prepared food mfg	1	6	1	127	2 868	76	166	1 839	7 195	5 365	12 506	337
311999	All other miscellaneous food mfg	2	11	3	271	5 836	203	329	3 137	21 411	28 388	47 359	758
312	Beverage & tobacco product mfg	—	71	20	6 601	358 410	3 388	6 863	163 820	1 587 076	935 515	2 526 840	59 554
3121	Beverage mfg	—	71	20	6 601	358 410	3 388	6 863	163 820	1 587 076	935 515	2 526 840	59 554
31211	Soft drink & ice mfg	4	25	11	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	11	9	1 130	45 234	390	829	13 641	145 043	286 202	432 602	14 632
31212	Breweries	—	37	9	i	D	D	D	D	D	D	D	44 329
312120	Breweries	—	37	9	i	D	D	D	D	D	D	D	44 329
313	Textile mills	6	28	6	444	10 244	373	689	7 027	18 934	14 319	33 399	D
3132	Fabric mills	3	14	2	c	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	2	6	2	112	1 929	91	177	1 395	4 711	2 786	7 508	D
3133	Textile & fabric finishing & fabric coating mills	8	13	3	277	6 701	237	435	4 857	12 941	8 385	21 461	743
31331	Textile & fabric finishing mills	8	13	3	277	6 701	237	435	4 857	12 941	8 385	21 461	743
313311	Broadwoven fabric finishing mills	8	13	3	277	6 701	237	435	4 857	12 941	8 385	21 461	743
314	Textile product mills	1	121	19	2 387	57 392	1 821	3 095	27 223	211 380	152 762	361 244	9 043
3141	Textile furnishings mills	—	50	4	1 052	30 719	815	1 302	12 265	154 819	83 722	236 599	6 239
31412	Curtain & linen mills	—	44	4	1 024	30 113	791	1 257	11 828	153 436	81 546	233 038	D
314121	Curtain & drapery mills	—	34	4	963	28 929	736	1 148	10 934	150 681	78 097	226 834	D
3149	Other textile product mills	3	71	15	1 335	26 673	1 006	1 793	14 958	56 561	69 040	124 645	2 804
31491	Textile bag & canvas mills	3	40	8	881	19 103	669	1 285	10 258	41 499	48 882	89 317	1 884
314911	Textile bag mills	2	12	4	289	5 358	226	464	3 427	12 511	10 618	22 127	533
314912	Canvas & related product mills	4	28	4	592	13 745	443	821	6 831	28 988	38 264	67 190	1 351
31499	All other textile product mills	1	31	7	454	7 570	337	508	4 700	15 062	20 158	35 328	920
314999	All other miscellaneous textile product mills	1	29	7	e	D	D	D	D	D	D	D	D
315	Apparel mfg	2	113	22	1 884	36 138	1 468	2 939	24 052	65 556	43 736	109 784	2 618
3152	Cut & sew apparel mfg	3	71	13	1 114	19 112	880	1 770	13 328	35 583	24 356	60 412	965
31521	Cut & sew apparel contractors	3	38	3	267	4 114	232	438	3 077	6 369	1 349	7 690	200
315212	Women's, girls', & infants' cut & sew apparel contractors	3	30	1	185	2 792	173	332	2 329	4 511	1 093	5 570	138
31522	Men's & boys' cut & sew apparel mfg	1	17	6	473	9 057	372	782	6 159	17 430	17 746	35 602	621
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	3	2	157	3 110	139	269	2 060	2 259	3 512	6 219	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	8	9	3	324	4 945	237	487	3 475	10 039	3 734	13 852	114
315233	Women's & girls' cut & sew dress mfg	9	2	1	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	2	5	2	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	39	9	756	16 776	582	1 158	10 629	29 417	19 076	48 512	1 637
31599	Apparel accessories & other apparel mfg	—	39	9	756	16 776	582	1 158	10 629	29 417	19 076	48 512	1 637
315991	Hat, cap, & millinery mfg	—	10	3	476	10 568	413	866	7 639	17 504	9 042	26 507	D
316	Leather & allied product mfg	—	32	5	1 622	54 024	945	2 088	19 538	331 034	206 222	600 553	D
3169	Other leather & allied product mfg	—	25	4	g	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	25	4	g	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	16	3	g	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLORADO—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	1	219	49	4 033	98 695	3 222	6 412	65 677	199 758	305 140	503 339	13 771
3211	Sawmills & wood preservation	3	31	7	448	10 044	384	704	7 860	23 410	43 773	65 444	3 886
32111	Sawmills & wood preservation	3	31	7	448	10 044	384	704	7 860	23 410	43 773	65 444	3 886
321113	Sawmills	1	25	6	388	8 422	338	614	6 836	18 578	29 135	46 162	3 434
3212	Veneer, plywood, & engineered wood product mfg	1	34	14	1 025	26 747	832	1 700	17 513	49 220	75 328	124 904	4 223
32121	Veneer, plywood, & engineered wood product mfg	1	34	14	1 025	26 747	832	1 700	17 513	49 220	75 328	124 904	4 223
321214	Truss mfg	1	27	12	844	21 975	665	1 338	13 130	41 384	60 043	101 402	3 592
321219	Reconstituted wood product mfg	—	4	2	c	D	D	D	D	D	D	D	546
3219	Other wood product mfg	1	154	28	2 560	61 904	2 006	4 008	40 304	127 128	186 039	312 991	5 662
32191	Millwork	2	80	15	1 300	35 791	939	1 900	20 747	70 512	118 560	189 158	2 971
321911	Wood window & door mfg	4	32	8	613	16 517	429	829	9 007	30 434	34 089	64 579	1 391
321912	Cut stock, resawing lumber, & planing	—	10	2	227	4 571	182	350	3 447	7 754	62 749	70 613	377
321918	Other millwork (including flooring)	2	38	5	460	14 703	328	721	8 293	32 324	21 722	53 966	1 203
32192	Wood container & pallet mfg	2	25	5	376	7 685	330	668	6 048	15 434	16 039	31 585	1 082
321920	Wood container & pallet mfg	2	25	5	376	7 685	330	668	6 048	15 434	16 039	31 585	1 082
32199	All other wood product mfg	—	49	8	884	18 428	737	1 440	13 509	41 182	51 440	92 248	1 609
321991	Manufactured home (mobile home) mfg	—	3	3	484	10 477	442	901	7 916	23 528	37 094	60 281	323
321992	Prefabricated wood building mfg	—	10	2	112	2 239	61	122	1 524	5 689	7 620	13 303	502
321999	All other miscellaneous wood product mfg	2	36	3	288	5 712	234	417	4 069	11 965	6 726	18 664	784
322	Paper mfg	1	55	31	3 054	105 395	2 375	4 930	69 597	309 059	388 055	691 907	23 773
3222	Converted paper product mfg	1	54	30	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	31	22	1 908	70 769	1 432	3 055	41 743	179 711	276 101	454 735	13 492
322211	Corrugated & solid fiber box mfg	2	19	15	1 276	48 080	949	2 045	27 894	119 289	177 814	297 005	10 633
322212	Folding paperboard box mfg	—	7	6	542	20 321	410	877	12 103	50 667	86 483	136 394	2 694
32222	Paper bag & coated & treated paper mfg	—	9	4	612	19 083	583	1 146	17 302	91 670	76 575	164 772	4 835
322222	Coated & laminated paper mfg	—	8	3	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	10	4	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	5	3	390	10 400	271	568	7 106	23 849	24 008	46 912	2 361
323	Printing & related support activities	2	873	116	11 748	330 277	7 849	14 757	194 405	827 389	495 915	1 323 588	51 961
3231	Printing & related support activities	2	873	116	11 748	330 277	7 849	14 757	194 405	827 389	495 915	1 323 588	51 961
32311	Printing	2	774	108	11 103	312 445	7 371	13 986	182 821	791 999	488 417	1 280 541	50 189
323110	Commercial lithographic printing	2	341	64	5 824	185 876	4 097	7 924	109 397	413 044	312 407	726 015	33 193
323112	Commercial flexographic printing	1	21	5	235	7 238	177	329	4 572	25 030	13 755	38 567	1 221
323113	Commercial screen printing	3	79	13	866	19 812	656	1 293	12 017	45 708	33 798	79 673	2 849
323114	Quick printing	2	198	6	1 090	25 836	749	1 209	16 351	49 170	32 148	81 200	2 899
323115	Digital printing	2	10	2	141	4 065	97	188	2 365	7 630	5 350	12 992	520
323116	Manifold business form printing	—	17	8	1 978	41 295	864	1 597	20 774	196 278	54 768	250 671	3 958
323117	Book printing	4	14	5	356	11 486	270	590	7 233	23 053	13 365	36 462	2 171
323118	Blankbook, looseleaf binder, & device mfg	5	7	2	105	2 119	97	180	1 478	5 300	1 800	7 150	193
323119	Other commercial printing	3	78	2	451	13 214	317	608	7 467	22 906	16 852	39 769	2 550
32312	Support activities for printing	2	99	8	645	17 832	478	771	11 584	35 390	7 498	43 047	1 772
323121	Tradebinding & related work	2	29	4	247	4 884	207	304	3 650	10 227	1 849	12 103	407
323122	Prepress services	2	70	4	398	12 948	271	467	7 934	25 163	5 649	30 944	1 365

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	3	22	7	608	31 775	448	986	20 635	170 015	688 718	856 596	17 788
3241	Petroleum & coal products mfg	3	22	7	608	31 775	448	986	20 635	170 015	688 718	856 596	17 788
32411	Petroleum refineries	3	2	2	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	3	2	2	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	14	3	271	12 057	176	407	7 826	35 368	87 201	122 598	D
324121	Asphalt paving mixture & block mfg	1	9	1	123	6 518	89	204	3 882	16 018	55 090	71 976	1 839
324122	Asphalt shingle & coating materials mfg	—	5	2	148	5 539	87	203	3 944	19 350	32 111	50 622	D
325	Chemical mfg	1	176	51	6 710	281 671	4 148	8 072	146 227	1 732 835	1 059 452	2 820 750	108 512
3251	Basic chemical mfg	5	25	10	475	22 479	250	567	11 572	82 539	70 595	153 036	9 812
32512	Industrial gas mfg	—	9	4	177	7 468	86	214	3 777	19 053	5 680	24 082	924
325120	Industrial gas mfg	—	9	4	177	7 468	86	214	3 777	19 053	5 680	24 082	924
32518	Other basic inorganic chemical mfg	2	7	3	111	4 390	61	136	2 494	12 168	7 933	20 281	2 267
325188	All other basic inorganic chemical mfg	2	7	3	111	4 390	61	136	2 494	12 168	7 933	20 281	2 267
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	4	4	2	114	3 789	64	111	1 592	13 884	8 932	22 617	1 110
32521	Resin & synthetic rubber mfg	4	4	2	114	3 789	64	111	1 592	13 884	8 932	22 617	1 110
3254	Pharmaceutical & medicine mfg	2	46	15	2 484	106 569	1 614	2 952	59 945	360 810	285 652	634 578	66 097
32541	Pharmaceutical & medicine mfg	2	46	15	2 484	106 569	1 614	2 952	59 945	360 810	285 652	634 578	66 097
325411	Medicinal & botanical mfg	5	13	6	726	41 904	501	1 037	26 709	121 690	106 278	213 133	47 250
325412	Pharmaceutical preparation mfg	1	19	5	1 540	59 228	964	1 650	29 673	224 475	172 160	399 787	18 020
325414	Biological product (except diagnostic) mfg	—	10	4	187	4 312	133	236	2 995	12 037	5 509	17 252	D
3255	Paint, coating, & adhesive mfg	—	15	6	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	12	4	223	9 264	94	203	2 603	61 204	38 667	96 061	2 119
325510	Paint & coating mfg ..	—	12	4	223	9 264	94	203	2 603	61 204	38 667	96 061	2 119
32552	Adhesive mfg	—	3	2	c	D	D	D	D	D	D	D	D
325520	Adhesive mfg	—	3	2	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	40	7	581	22 871	276	561	6 748	100 595	81 570	179 918	2 313
32561	Soap & cleaning compound mfg	3	31	6	503	20 614	213	416	5 402	63 237	72 690	133 336	1 923
325611	Soap & other detergent mfg	4	13	2	c	D	D	D	D	D	D	D	1 303
325612	Polish & other sanitation good mfg ..	8	17	3	273	10 496	150	292	3 487	23 136	14 389	37 555	D
3259	Other chemical product mfg	—	39	9	h	D	D	D	D	D	D	D	26 207
32599	All other chemical product & preparation mfg	—	32	8	h	D	D	D	D	D	D	D	25 928
325991	Custom compounding of purchased resin ...	7	14	1	c	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	8	4	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	2	10	3	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	236	78	6 984	212 132	5 000	9 665	118 882	584 791	527 873	1 110 454	52 231
3261	Plastics product mfg	1	208	74	6 752	205 410	4 821	9 296	114 160	569 309	514 019	1 081 125	51 353
32611	Unsupported plastics film, sheet, & bag mfg ..	1	16	6	460	15 335	308	587	6 929	39 655	57 669	98 542	4 826
326111	Unsupported plastics bag mfg	—	4	2	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	12	4	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	4	24	4	268	9 028	225	490	6 642	38 615	103 149	140 927	5 097
326121	Unsupported plastics profile shape mfg	9	16	1	108	4 077	89	223	3 120	11 897	43 253	55 074	3 243
326122	Plastics pipe & pipe fitting mfg	—	8	3	160	4 951	136	267	3 522	26 718	59 896	85 853	1 854

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32614	Polystyrene foam product mfg.....	2	8	3	180	6 547	124	250	3 442	14 024	13 089	27 131	1 171
326140	Polystyrene foam product mfg.....	2	8	3	180	6 547	124	250	3 442	14 024	13 089	27 131	1 171
32615	Urethane & other foam product (except polystyrene) mfg.....	1	9	4	220	5 447	178	369	3 781	21 378	36 524	57 769	1 028
326150	Urethane & other foam product (except polystyrene) mfg.....	1	9	4	220	5 447	178	369	3 781	21 378	36 524	57 769	1 028
32619	Other plastics product mfg.....	1	143	57	5 588	168 078	3 958	7 540	92 679	452 897	300 762	750 960	39 130
326199	All other plastics product mfg.....	-	135	57	5 538	166 735	3 922	7 471	91 906	448 921	299 304	745 575	39 065
3262	Rubber product mfg.....	4	28	4	232	6 722	179	369	4 722	15 482	13 854	29 329	878
32629	Other rubber product mfg.....	2	12	3	140	4 199	102	208	2 656	9 228	6 146	15 404	350
327	Nonmetallic mineral product mfg.....	1	274	99	8 891	289 777	6 982	14 642	208 210	760 594	610 694	1 359 262	80 683
3271	Clay product & refractory mfg.....	-	45	12	2 309	72 911	2 016	3 893	60 014	168 503	72 348	234 515	23 248
32711	Pottery, ceramics, & plumbing fixture mfg...	-	34	7	1 807	57 512	1 645	3 094	51 785	131 762	53 635	180 318	D
327112	Vitreous china, fine earthenware, & other pottery product mfg..	-	29	5	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg.....	2	11	5	502	15 399	371	799	8 229	36 741	18 713	54 197	D
327121	Brick & structural clay tile mfg.....	3	5	4	372	12 013	280	623	6 513	26 228	12 578	37 219	D
3272	Glass & glass product mfg.	-	49	10	1 039	36 643	840	1 542	26 844	93 455	80 796	177 872	9 776
32721	Glass & glass product mfg.....	-	49	10	1 039	36 643	840	1 542	26 844	93 455	80 796	177 872	9 776
327213	Glass container mfg..	-	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	1	36	7	658	17 081	490	835	9 573	49 334	36 037	85 944	6 925
3273	Cement & concrete product mfg.....	2	136	60	4 551	151 475	3 450	7 779	103 903	408 593	380 554	780 158	42 382
32731	Cement mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
327310	Cement mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.	3	76	32	2 145	74 554	1 648	3 769	53 407	175 781	223 408	398 567	18 641
327320	Ready-mix concrete mfg.....	3	76	32	2 145	74 554	1 648	3 769	53 407	175 781	223 408	398 567	18 641
32733	Concrete pipe, brick, & block mfg.....	-	24	10	f	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg.....	2	17	6	e	D	D	D	D	D	D	D	1 117
327332	Concrete pipe mfg.....	-	7	4	358	12 139	288	719	8 900	40 422	26 664	66 165	D
32739	Other concrete product mfg.....	1	31	15	1 384	40 392	1 078	2 395	26 838	98 976	70 488	165 310	4 766
327390	Other concrete product mfg.....	1	31	15	1 384	40 392	1 078	2 395	26 838	98 976	70 488	165 310	4 766
3274	Lime & gypsum product mfg.....	-	4	2	229	7 837	187	417	5 887	23 418	36 143	60 263	1 886
32742	Gypsum product mfg....	-	4	2	229	7 837	187	417	5 887	23 418	36 143	60 263	1 886
327420	Gypsum product mfg..	-	4	2	229	7 837	187	417	5 887	23 418	36 143	60 263	1 886
3279	Other nonmetallic mineral product mfg.....	1	40	15	763	20 911	489	1 011	11 562	66 625	40 853	106 454	3 391
32799	All other nonmetallic mineral product mfg...	1	39	14	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg.....	-	12	4	178	4 424	139	288	3 233	8 539	4 693	13 572	308
327992	Ground or treated mineral & earth mfg..	1	8	2	197	4 749	95	198	1 982	16 785	8 659	25 550	362
327999	All other miscellaneous nonmetallic mineral product mfg.....	1	14	6	267	7 540	173	344	4 135	26 289	21 730	47 732	2 217

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	34	16	2 416	89 419	1 991	4 508	68 199	241 985	340 058	582 006	14 987
3311	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	7	4	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	328	10 972	264	567	7 663	22 085	27 021	49 149	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	328	10 972	264	567	7 663	22 085	27 021	49 149	D
33122	Rolling & drawing of purchased steel	—	2	1	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	1	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	1	1	c	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	c	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	6	2	133	5 078	97	190	3 742	12 510	44 249	54 735	D
3315	Foundries	2	19	8	e	D	D	D	D	D	D	D	1 114
33151	Ferrous metal foundries	—	4	3	c	D	D	D	D	D	D	D	238
33152	Nonferrous metal foundries	4	15	5	224	5 955	195	343	4 492	11 874	6 735	18 553	876
332	Fabricated metal product mfg	1	798	174	15 477	485 962	11 732	23 287	313 454	1 194 234	1 035 608	2 213 849	100 286
3321	Forging & stamping	2	28	13	1 228	44 437	881	1 825	25 935	102 741	77 252	180 651	5 232
33211	Forging & stamping	2	28	13	1 228	44 437	881	1 825	25 935	102 741	77 252	180 651	5 232
332111	Iron & steel forging	—	6	2	c	D	D	D	D	D	D	D	568
332116	Metal stamping	4	18	9	940	33 205	651	1 307	17 185	74 520	43 485	118 316	4 404
3322	Cutlery & handtool mfg	—	22	3	1 217	31 755	1 073	2 284	25 373	75 655	45 342	118 761	5 790
33221	Cutlery & handtool mfg	—	22	3	1 217	31 755	1 073	2 284	25 373	75 655	45 342	118 761	5 790
332212	Hand & edge tool mfg	—	14	2	1 147	29 470	1 019	2 161	23 698	65 342	40 279	103 115	5 195
3323	Architectural & structural metals mfg	1	189	66	4 311	128 840	3 116	6 280	78 585	289 019	279 012	563 726	20 704
33231	Plate work & fabricated structural product mfg	1	67	23	1 313	42 550	936	1 828	25 222	94 627	115 893	208 549	5 037
332311	Prefabricated metal building & component mfg	—	6	3	157	4 857	101	190	2 220	7 907	18 370	26 122	210
332312	Fabricated structural metal mfg	1	52	17	1 031	33 665	737	1 453	20 203	74 978	92 281	165 390	4 204
332313	Plate work mfg	2	9	3	125	4 028	98	185	2 799	11 742	5 242	17 037	623
33232	Ornamental & architectural metal products mfg	1	122	43	2 998	86 290	2 180	4 452	53 363	194 392	163 119	355 177	15 667
332321	Metal window & door mfg	—	14	5	397	10 196	271	555	5 997	27 360	23 802	51 985	602
332322	Sheet metal work mfg	—	69	30	1 980	58 512	1 470	3 020	36 102	128 128	104 228	229 711	11 454
332323	Ornamental & architectural metal work mfg	4	39	8	621	17 582	439	877	11 264	38 904	35 089	73 481	3 611
3324	Boiler, tank, & shipping container mfg	—	17	7	764	34 184	626	1 239	25 615	123 335	247 931	371 435	15 652
33242	Metal tank (heavy gauge) mfg	—	4	4	c	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	4	c	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	11	3	623	30 443	533	1 049	23 621	100 530	231 163	330 572	15 107
332431	Metal can mfg	—	4	3	600	29 618	519	1 022	23 235	98 883	229 006	326 791	15 064
3325	Hardware mfg	—	4	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	4	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	4	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	25	7	f	D	D	D	D	D	D	D	7 249
33261	Spring & wire product mfg	1	25	7	f	D	D	D	D	D	D	D	7 249
332612	Spring (light gauge) mfg	—	7	2	241	6 253	205	376	4 220	23 445	18 467	42 547	D
332618	Other fabricated wire product mfg	2	15	4	e	D	D	D	D	D	D	D	3 908

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	371	46	3 845	121 286	3 027	5 808	84 358	242 213	138 514	377 063	30 561
33271	Machine shops	1	333	34	3 139	100 480	2 492	4 761	70 506	202 618	119 839	318 971	24 719
332710	Machine shops	1	333	34	3 139	100 480	2 492	4 761	70 506	202 618	119 839	318 971	24 719
33272	Turned product & screw, nut, & bolt mfg	—	38	12	706	20 806	535	1 047	13 852	39 595	18 675	58 092	5 842
332721	Precision turned product mfg	—	32	10	535	16 341	418	799	10 606	31 952	12 787	44 583	5 503
332722	Bolt, nut, screw, rivet, & washer mfg	1	6	2	171	4 465	117	248	3 246	7 643	5 888	13 509	339
3328	Coating, engraving, heat treating, & allied activities .	1	67	17	911	22 164	719	1 371	14 932	52 168	50 024	100 353	D
33281	Coating, engraving, heat treating, & allied activities	1	67	17	911	22 164	719	1 371	14 932	52 168	50 024	100 353	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	30	11	534	13 144	440	886	9 518	36 671	44 188	79 031	3 668
332813	Electroplating, plating, polishing, anodizing, & coloring	2	30	6	330	7 515	246	425	4 445	12 415	4 721	17 126	D
3329	Other fabricated metal product mfg	—	75	14	2 059	71 475	1 408	2 539	36 622	178 592	118 643	292 014	9 050
33291	Metal valve mfg	—	10	6	1 292	48 794	827	1 472	23 331	129 672	88 535	214 562	7 628
332912	Fluid power valve & hose fitting mfg	—	4	3	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	1	c	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	3	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	65	8	767	22 681	581	1 067	13 291	48 920	30 108	77 452	1 422
332999	All other miscellaneous fabricated metal product mfg	1	47	8	686	20 580	513	950	11 723	43 527	27 669	69 569	1 158
333	Machinery mfg	1	363	98	11 734	397 307	6 736	13 381	185 631	976 456	796 726	1 806 781	66 486
3331	Agriculture, construction, & mining machinery mfg	2	44	12	g	D	D	D	D	D	D	D	6 374
33311	Agricultural implement mfg	2	19	8	574	16 254	459	1 055	12 357	30 844	52 051	83 424	3 898
333111	Farm machinery & equipment mfg	2	18	8	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	7	10	1	c	D	D	D	D	D	D	D	465
333120	Construction machinery mfg	7	10	1	c	D	D	D	D	D	D	D	465
33313	Mining & oil & gas field machinery mfg	1	15	3	345	11 223	221	463	6 487	26 546	19 198	46 115	2 011
333131	Mining machinery & equipment mfg	—	8	3	296	9 741	192	417	5 707	23 077	16 648	40 136	D
3332	Industrial machinery mfg	1	49	16	1 507	49 428	691	1 351	20 820	127 568	84 197	210 675	6 829
33329	Other industrial machinery mfg	1	44	16	1 483	48 752	675	1 329	20 484	126 073	82 943	207 921	6 732
333291	Paper industry machinery mfg	9	1	1	c	D	D	D	D	D	D	D	D
333292	Textile machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	6	4	523	15 930	155	354	5 986	55 102	8 504	63 211	1 119
333295	Semiconductor machinery mfg	—	4	3	153	4 393	117	194	2 636	9 619	4 265	13 184	D
333298	All other industrial machinery mfg	2	26	6	387	11 995	206	323	4 969	29 279	23 038	52 603	1 571
3333	Commercial & service industry machinery mfg	2	72	21	2 506	77 588	1 452	2 363	31 344	185 347	140 871	350 977	11 467
33331	Commercial & service industry machinery mfg	2	72	21	2 506	77 588	1 452	2 363	31 344	185 347	140 871	350 977	11 467
333311	Automatic vending machine mfg	1	2	1	c	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	1	28	8	984	31 626	558	989	13 941	66 307	37 351	106 449	5 116
333315	Photographic & photocopying equipment mfg	—	5	2	175	6 168	78	144	1 670	14 832	12 570	27 335	1 458
333319	Other commercial & service industry machinery mfg	2	34	9	1 144	35 005	723	1 071	14 231	98 391	86 092	206 450	4 559

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	19	7	996	29 072	695	1 453	16 337	166 453	135 916	304 028	6 412
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	19	7	996	29 072	695	1 453	16 337	166 453	135 916	304 028	6 412
333411	Air purification equipment mfg	3	9	3	122	4 109	49	87	1 204	7 594	11 031	18 979	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	2	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	80	10	857	32 330	584	1 164	19 799	51 003	59 556	111 082	13 010
33351	Metalworking machinery mfg	1	80	10	857	32 330	584	1 164	19 799	51 003	59 556	111 082	13 010
333511	Industrial mold mfg	3	29	3	182	7 199	139	287	5 306	12 587	3 857	16 159	1 254
333513	Machine tool (metal forming types) mfg	—	3	3	236	9 368	146	305	5 476	8 734	41 851	52 084	D
333514	Special die & tool, die set, jig, & fixture mfg	2	28	2	223	8 427	162	325	5 522	14 881	5 662	20 296	848
3336	Engine, turbine, & power transmission equipment mfg	—	4	2	f	D	D	D	D	D	D	D	5 809
33361	Engine, turbine, & power transmission equipment mfg	—	4	2	f	D	D	D	D	D	D	D	5 809
333613	Mechanical power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	95	30	3 929	145 874	1 992	4 091	56 178	310 622	252 153	566 101	16 585
33391	Pump & compressor mfg	—	8	3	557	29 092	215	424	9 285	89 436	43 126	132 053	3 111
333911	Pump & pumping equipment mfg	—	4	3	527	28 109	194	390	8 787	86 934	40 602	127 012	2 960
33392	Material handling equipment mfg	3	27	13	1 764	61 571	829	1 801	22 035	81 112	113 577	199 680	4 107
333922	Conveyor & conveying equipment mfg	1	22	10	1 264	43 734	528	1 213	13 945	57 476	85 679	141 702	D
333923	Overhead traveling crane, hoist, & monorail system mfg	9	3	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	60	14	1 608	55 211	948	1 866	24 858	140 074	95 450	234 368	9 367
333993	Packaging machinery mfg	—	11	5	519	18 745	280	565	7 891	32 573	19 563	50 862	1 515
333995	Fluid power cylinder & actuator mfg	—	4	1	131	2 050	94	190	1 550	15 012	8 166	23 364	D
333999	All other miscellaneous general-purpose machinery mfg	—	39	8	913	33 089	544	1 055	14 658	89 019	65 318	154 287	6 232
334	Computer & electronic product mfg	—	430	156	40 367	1 793 686	20 624	40 003	586 579	6 242 444	5 337 712	11 527 615	794 205
3341	Computer & peripheral equipment mfg	—	67	24	10 392	525 153	4 882	7 717	135 172	2 375 375	2 422 453	4 757 060	220 170
33411	Computer & peripheral equipment mfg	—	67	24	10 392	525 153	4 882	7 717	135 172	2 375 375	2 422 453	4 757 060	220 170
334111	Electronic computer mfg	—	17	3	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	18	12	7 682	443 174	3 239	5 581	106 097	2 077 312	1 281 357	3 318 023	202 352
334113	Computer terminal mfg	—	1	1	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	31	8	1 007	46 607	316	619	10 910	244 720	153 482	397 794	13 972
3342	Communications equipment mfg	1	50	23	3 296	143 679	1 688	3 371	54 882	342 906	483 105	821 061	23 589
33421	Telephone apparatus mfg	—	11	4	1 377	64 078	912	1 841	33 911	133 494	368 421	493 898	12 027
334210	Telephone apparatus mfg	—	11	4	1 377	64 078	912	1 841	33 911	133 494	368 421	493 898	12 027
33422	Radio & TV broadcasting & wireless communications equipment mfg	3	24	12	1 188	53 494	546	1 109	15 825	147 384	68 586	217 478	9 278
334220	Radio & TV broadcasting & wireless communications equipment mfg	3	24	12	1 188	53 494	546	1 109	15 825	147 384	68 586	217 478	9 278
33429	Other communications equipment mfg	1	15	7	731	26 107	230	421	5 146	62 028	46 098	109 685	2 284
334290	Other communications equipment mfg	1	15	7	731	26 107	230	421	5 146	62 028	46 098	109 685	2 284

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLORADO—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3343	Audio & video equipment mfg	7	16	3	191	6 224	127	245	2 795	11 834	24 313	37 541	912
33431	Audio & video equipment mfg	7	16	3	191	6 224	127	245	2 795	11 834	24 313	37 541	912
334310	Audio & video equipment mfg	7	16	3	191	6 224	127	245	2 795	11 834	24 313	37 541	912
3344	Semiconductor & other electronic component mfg	—	135	52	13 786	530 122	8 426	18 382	236 031	1 580 102	1 521 804	3 099 329	349 968
33441	Semiconductor & other electronic component mfg	—	135	52	13 786	530 122	8 426	18 382	236 031	1 580 102	1 521 804	3 099 329	349 968
334411	Electron tube mfg	—	6	1	c	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	39	12	1 570	45 333	1 239	2 618	28 570	104 748	71 038	175 413	D
334413	Semiconductor & related device mfg	—	31	11	4 965	221 529	3 571	8 677	125 148	1 094 891	348 238	1 416 921	258 773
334414	Electronic capacitor mfg	2	2	2	c	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	8	3	1	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	16	13	4 589	187 405	2 079	4 247	48 512	177 888	967 703	1 170 195	37 237
334419	Other electronic component mfg	2	31	11	2 222	62 821	1 240	2 150	27 074	159 063	122 468	278 601	11 959
3345	Navigational, measuring, medical, & control instruments mfg	—	143	52	12 466	580 886	5 341	9 956	152 193	1 911 572	869 155	2 774 658	195 315
33451	Navigational, measuring, medical, & control instruments mfg	—	143	52	12 466	580 886	5 341	9 956	152 193	1 911 572	869 155	2 774 658	195 315
334510	Electromedical & electrotherapeutic apparatus mfg	—	18	11	3 138	143 630	1 645	3 083	39 662	464 279	184 201	641 245	20 019
334511	Search, detection, navigation, & guidance instrument mfg	—	10	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	7	5	2	c	D	D	D	D	D	D	D	298
334513	Industrial process control instrument mfg	1	23	8	1 229	51 701	479	984	14 013	173 080	53 427	227 849	6 525
334514	Totalizing fluid meter & counting device mfg	—	4	1	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	33	9	3 268	160 940	1 488	2 541	53 173	760 959	441 575	1 197 709	D
334516	Analytical laboratory instrument mfg	—	20	8	1 150	45 250	392	818	14 426	94 271	52 638	148 088	11 272
334517	Irradiation apparatus mfg	1	4	3	408	18 371	122	276	3 966	38 266	17 937	61 233	D
334519	Other measuring & controlling device mfg	—	23	7	374	12 293	214	381	4 626	39 116	16 783	54 237	1 232
3346	Mfg & reproducing magnetic & optical media	8	19	2	236	7 622	160	332	5 506	20 655	16 882	37 966	4 251
33461	Mfg & reproducing magnetic & optical media	8	19	2	236	7 622	160	332	5 506	20 655	16 882	37 966	4 251
334612	Prerecorded CD (except software), tape, & record reproducing	7	11	1	c	D	D	D	D	D	D	D	1 389
335	Electrical equipment, appliance, & component mfg	3	86	24	2 142	77 028	1 240	2 526	33 271	139 000	133 252	275 761	8 298
3351	Electric lighting equipment mfg	2	14	3	c	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	13	3	145	4 581	114	236	2 253	12 373	10 269	22 827	140
3353	Electrical equipment mfg ..	2	37	9	1 081	44 636	432	982	14 023	67 606	65 317	136 222	3 793
33531	Electrical equipment mfg	2	37	9	1 081	44 636	432	982	14 023	67 606	65 317	136 222	3 793
335311	Power, distribution, & specialty transformer mfg	—	5	2	153	4 916	87	189	1 963	11 138	13 254	23 805	361
335314	Relay & industrial control mfg	2	19	5	751	32 795	262	604	9 339	42 999	40 155	87 024	2 517

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	5	33	12	897	27 396	677	1 279	16 662	58 225	56 837	115 055	4 306
33591	Battery mfg	7	6	2	393	12 604	323	681	9 629	31 334	32 846	63 619	D
335911	Storage battery mfg ...	7	4	2	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	3	3	153	3 146	120	160	1 926	3 117	6 990	10 102	513
335929	Other communication & energy wire mfg ...	—	3	3	153	3 146	120	160	1 926	3 117	6 990	10 102	513
33593	Wiring device mfg	1	9	3	129	4 520	80	145	1 690	9 484	6 553	15 987	D
33599	All other electrical equipment & component mfg	6	15	4	222	7 126	154	293	3 417	14 290	10 448	25 347	761
335999	All other miscellaneous electrical equipment & component mfg	6	15	4	222	7 126	154	293	3 417	14 290	10 448	25 347	761
336	Transportation equipment mfg	—	138	32	12 493	574 147	10 398	18 483	406 768	2 398 249	1 838 941	4 124 790	88 243
3361	Motor vehicle mfg	9	6	1	e	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	9	3	1	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	9	3	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	23	5	f	D	D	D	D	D	D	D	1 466
33621	Motor vehicle body & trailer mfg	1	23	5	f	D	D	D	D	D	D	D	1 466
336212	Truck trailer mfg	—	5	3	e	D	D	D	D	D	D	D	1 095
336214	Travel trailer & camper mfg	4	10	2	c	D	D	D	D	D	D	D	106
3363	Motor vehicle parts mfg ...	1	67	14	2 353	72 745	1 741	3 543	42 109	186 954	153 630	334 749	D
33632	Motor vehicle electrical & electronic equipment mfg	7	12	3	159	4 433	132	250	2 646	6 044	6 311	12 866	587
336322	Other motor vehicle electrical & electronic equipment mfg	7	12	3	159	4 433	132	250	2 646	6 044	6 311	12 866	587
33639	Other motor vehicle parts mfg	—	26	8	1 942	61 693	1 428	2 957	36 067	164 736	128 649	287 875	3 012
336399	All other motor vehicle parts mfg	—	25	8	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	22	7	i	D	D	D	D	D	D	D	79 560
33641	Aerospace product & parts mfg	—	22	7	i	D	D	D	D	D	D	D	79 560
336413	Other aircraft part & auxiliary equipment mfg	—	18	6	985	33 469	731	1 397	21 780	72 079	68 919	147 266	D
336414	Guided missile & space vehicle mfg ...	—	1	1	i	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	1	3	2	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	1	3	2	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	1	3	2	c	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	1	16	2	c	D	D	D	D	D	D	D	781
33699	Other transportation equipment mfg	1	16	2	c	D	D	D	D	D	D	D	781
336999	All other transportation equipment mfg	—	5	2	c	D	D	D	D	D	D	D	597
337	Furniture & related product mfg	1	344	55	5 041	125 111	4 056	7 666	82 227	246 097	232 811	475 367	10 706
3371	Household & institutional furniture & kitchen cabinet mfg	1	257	30	3 462	80 843	2 870	5 464	55 591	140 018	155 302	293 014	7 737
33711	Wood kitchen cabinet & counter top mfg	2	152	14	1 278	30 557	989	1 900	20 477	63 947	55 904	119 864	2 909
337110	Wood kitchen cabinet & counter top mfg ...	2	152	14	1 278	30 557	989	1 900	20 477	63 947	55 904	119 864	2 909
33712	Household & institutional furniture mfg	1	105	16	2 184	50 286	1 881	3 564	35 114	76 071	99 398	173 150	4 828
337121	Upholstered household furniture mfg	7	15	1	102	1 647	93	118	1 163	2 895	3 002	5 890	D
337122	Nonupholstered wood household furniture mfg	1	67	6	1 156	21 601	1 083	2 203	19 058	34 254	47 098	78 728	1 776
337127	Institutional furniture mfg	—	18	8	872	25 929	665	1 184	14 244	36 614	47 334	84 221	2 832

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	66	18	1 087	30 505	805	1 424	17 618	52 400	34 965	86 709	1 519
33721	Office furniture (including fixtures) mfg	1	66	18	1 087	30 505	805	1 424	17 618	52 400	34 965	86 709	1 519
337212	Custom architectural woodwork & millwork mfg	1	25	11	488	14 191	324	616	7 866	21 480	15 521	37 088	860
337215	Showcase, partition, shelving, & locker mfg	1	27	6	520	14 627	428	727	8 812	27 367	16 737	43 328	492
3379	Other furniture related product mfg	—	21	7	492	13 763	381	778	9 018	53 679	42 544	95 644	1 450
33791	Mattress mfg	—	13	6	389	11 903	285	579	7 301	41 154	34 778	75 762	1 107
337910	Mattress mfg	—	13	6	389	11 903	285	579	7 301	41 154	34 778	75 762	1 107
33792	Blind & shade mfg	—	8	1	103	1 860	96	199	1 717	12 525	7 766	19 882	343
337920	Blind & shade mfg	—	8	1	103	1 860	96	199	1 717	12 525	7 766	19 882	343
339	Miscellaneous mfg	2	685	98	10 337	321 068	7 019	13 676	141 365	789 897	401 034	1 190 975	36 262
3391	Medical equipment & supplies mfg	2	294	42	5 290	192 923	3 538	7 406	71 827	471 616	213 453	693 693	21 035
33911	Medical equipment & supplies mfg	2	294	42	5 290	192 923	3 538	7 406	71 827	471 616	213 453	693 693	21 035
339111	Laboratory apparatus & furniture mfg	—	7	2	244	7 314	157	311	2 720	18 527	9 765	28 403	689
339112	Surgical & medical instrument mfg	1	46	14	2 552	116 174	1 793	4 240	35 129	276 071	112 156	409 971	12 304
339113	Surgical appliance & supplies mfg	1	38	13	923	28 093	555	1 051	12 777	69 850	42 610	112 177	3 437
339114	Dental equipment & supplies mfg	2	25	4	596	17 554	332	614	7 052	51 659	25 107	63 267	2 233
339115	Ophthalmic goods mfg	4	17	4	299	6 446	220	359	3 816	16 294	8 153	24 489	1 007
339116	Dental laboratories	7	161	5	676	17 342	481	831	10 333	39 215	15 662	55 386	1 365
3399	Other miscellaneous mfg	3	391	56	5 047	128 145	3 481	6 270	69 538	318 281	187 581	497 282	15 227
33991	Jewelry & silverware mfg	6	53	6	462	9 364	295	437	4 532	21 865	19 946	41 874	238
339911	Jewelry (except costume) mfg	8	37	4	299	6 601	203	303	3 130	17 571	16 171	33 716	166
339912	Silverware & plated ware mfg	—	2	2	c	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	3	77	11	1 340	36 841	1 023	1 936	20 918	103 530	53 974	152 304	4 739
339920	Sporting & athletic goods mfg	3	77	11	1 340	36 841	1 023	1 936	20 918	103 530	53 974	152 304	4 739
33993	Doll, toy, & game mfg	3	34	6	713	16 660	539	972	9 334	57 916	34 926	90 595	4 312
339931	Doll & stuffed toy mfg	2	8	2	e	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	3	26	4	e	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	22	4	533	11 015	422	705	8 693	24 641	15 679	39 960	657
339943	Marking device mfg	1	14	2	148	3 046	84	182	2 118	6 412	2 280	8 610	353
339944	Carbon paper & inked ribbon mfg	—	4	2	369	7 545	326	502	6 342	17 443	13 070	30 214	294
33995	Sign mfg	2	129	14	1 063	30 431	687	1 292	15 250	51 277	29 161	79 651	2 306
339950	Sign mfg	2	129	14	1 063	30 431	687	1 292	15 250	51 277	29 161	79 651	2 306
33999	All other miscellaneous mfg	3	76	15	936	23 834	515	928	10 811	59 052	33 895	92 898	2 975
339991	Gasket, packing, & sealing device mfg	1	12	3	239	5 703	115	245	2 736	16 016	6 587	22 414	705
339992	Musical instrument mfg	—	7	1	c	D	D	D	D	D	D	D	222
339999	All other miscellaneous mfg	5	50	10	541	13 469	300	490	5 853	34 831	14 246	49 299	1 543

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLORADO SPRINGS, CO MSA												
	Manufacturing	-	499	120	21 593	700 590	15 148	31 203	358 918	2 966 198	2 777 411	5 698 935	380 054
311	Food mfg	1	27	6	e	D	D	D	D	D	D	D	1 201
321	Wood product mfg	3	15	4	515	15 075	387	821	8 581	33 297	27 334	60 609	1 408
3219	Other wood product mfg ...	3	13	3	e	D	D	D	D	D	D	D	D
32191	Millwork	4	7	3	405	12 767	296	621	6 844	28 412	22 704	51 153	986
322	Paper mfg	1	6	3	e	D	D	D	D	D	D	D	701
3222	Converted paper product mfg	1	6	3	e	D	D	D	D	D	D	D	701
323	Printing & related support activities	-	82	8	1 851	37 509	740	1 392	15 858	163 701	38 832	202 521	4 675
3231	Printing & related support activities	-	82	8	1 851	37 509	740	1 392	15 858	163 701	38 832	202 521	4 675
32311	Printing	-	76	8	1 817	36 963	714	1 359	15 450	162 486	38 632	201 108	4 571
323110	Commercial lithographic printing ..	4	30	4	290	7 487	215	382	4 578	11 902	9 449	21 298	1 209
323116	Manifold business form printing	-	3	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	3	366	12 431	274	542	7 163	44 512	24 246	67 910	3 332
3261	Plastics product mfg	-	10	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	23	7	719	22 006	538	1 172	14 893	42 063	43 167	84 913	4 575
3273	Cement & concrete product mfg	-	7	5	592	19 001	441	1 010	12 822	34 556	39 871	74 060	4 015
32732	Ready-mix concrete mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	-	3	2	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	2	2	e	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	1	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	76	25	3 533	95 380	2 911	6 049	66 734	261 300	165 885	425 872	15 320
3322	Cutlery & handtool mfg	-	4	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	13	8	570	15 278	433	957	8 803	34 537	26 410	60 574	558
33232	Ornamental & architectural metal products mfg	-	9	5	449	11 880	355	787	6 728	24 516	20 444	44 761	427
332322	Sheet metal work mfg ..	-	5	5	437	11 640	345	773	6 587	24 028	19 804	43 630	406
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	-	3	2	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	36	6	619	17 115	503	977	12 384	32 463	19 526	52 391	4 837
33271	Machine shops	-	33	5	549	14 879	444	848	10 718	28 880	18 506	47 640	4 379
332710	Machine shops	-	33	5	549	14 879	444	848	10 718	28 880	18 506	47 640	4 379
333	Machinery mfg	1	26	6	643	19 887	415	825	11 249	49 857	37 706	88 303	5 788
334	Computer & electronic product mfg	-	69	29	9 543	347 406	6 675	13 815	174 657	1 980 692	2 143 452	4 060 177	328 673
3341	Computer & peripheral equipment mfg	-	16	5	2 479	71 713	1 853	2 542	31 855	735 220	1 483 315	2 203 680	D
33411	Computer & peripheral equipment mfg	-	16	5	2 479	71 713	1 853	2 542	31 855	735 220	1 483 315	2 203 680	D
334111	Electronic computer mfg	-	5	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	4	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLORADO SPRINGS, CO MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	34	18	5 579	200 831	4 299	10 226	126 277	827 618	494 227	1 277 947	287 705
33441	Semiconductor & other electronic component mfg	—	34	18	5 579	200 831	4 299	10 226	126 277	827 618	494 227	1 277 947	287 705
334412	Bare printed circuit board mfg	—	7	3	437	11 769	371	859	8 021	37 590	15 071	52 639	D
334413	Semiconductor & related device mfg ...	—	14	7	3 615	155 115	2 840	7 148	101 912	659 465	302 680	941 302	243 827
334418	Printed circuit assembly (electronic assembly) mfg	—	3	3	1 122	22 002	823	1 571	10 708	87 701	164 840	227 416	D
3345	Navigational, measuring, medical, & control instruments mfg	—	8	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	12	4	327	8 485	235	466	4 548	23 788	21 911	45 263	355
337	Furniture & related product mfg	1	33	7	628	18 815	446	745	9 605	24 925	35 638	60 483	2 397
3371	Household & institutional furniture & kitchen cabinet mfg	—	18	4	497	15 505	341	594	7 627	17 775	31 114	48 892	2 283
33712	Household & institutional furniture mfg	—	6	3	391	12 919	262	442	5 833	13 302	27 482	40 777	D
337127	Institutional furniture mfg	—	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	64	7	1 751	80 408	1 426	3 424	23 184	207 180	70 674	297 917	6 797
3391	Medical equipment & supplies mfg	—	30	4	1 448	73 772	1 200	3 068	19 551	192 990	60 960	274 167	6 164
33911	Medical equipment & supplies mfg	—	30	4	1 448	73 772	1 200	3 068	19 551	192 990	60 960	274 167	6 164
339112	Surgical & medical instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	34	3	303	6 636	226	356	3 633	14 190	9 714	23 750	633
	DENVER—BOULDER—GREELEY, CO CMSA												
31-33	Manufacturing	1	3 533	879	115 133	4 301 910	76 179	146 650	2 204 508	14 208 975	12 346 782	26 465 891	915 134
311	Food mfg	1	227	77	12 268	315 603	9 034	17 187	203 938	1 263 921	2 451 499	3 720 258	87 286
312	Beverage & tobacco product mfg	1	33	12	i	D	D	D	D	D	D	D	D
313	Textile mills	7	19	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	77	12	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	68	13	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	17	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	98	28	1 796	45 124	1 368	2 762	27 632	88 124	166 632	255 088	6 420
322	Paper mfg	1	41	28	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	617	97	8 658	262 286	6 240	11 944	160 021	590 123	418 595	1 009 259	38 234
324	Petroleum & coal products mfg	3	17	7	f	D	D	D	D	D	D	D	17 750
325	Chemical mfg	1	134	43	i	D	D	D	D	D	D	D	105 054
326	Plastics & rubber products mfg	1	180	59	4 835	147 869	3 651	7 205	90 541	370 593	409 549	777 079	D
327	Nonmetallic mineral product mfg	1	134	53	5 607	188 918	4 418	9 409	138 150	485 229	392 774	873 627	49 419
331	Primary metal mfg	—	25	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	528	122	9 863	331 656	7 207	14 157	205 043	797 663	755 165	1 539 445	71 484
333	Machinery mfg	2	262	67	7 599	266 854	4 143	7 880	114 723	573 569	501 375	1 105 697	42 351
334	Computer & electronic product mfg	—	282	102	21 607	1 027 850	9 819	18 251	273 066	3 073 785	1 878 668	4 910 782	D
335	Electrical equipment, appliance, & component mfg	5	56	17	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	81	19	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	182	40	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	455	66	i	D	D	D	D	D	D	D	D
	Boulder—Longmont, CO PMSA												
31-33	Manufacturing	1	686	176	26 225	1 052 051	15 182	28 658	402 027	3 184 299	2 062 660	5 196 298	357 562
311	Food mfg	—	28	8	1 571	35 773	1 194	2 532	24 496	115 746	122 005	238 687	3 678
3116	Meat product mfg	—	4	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	10	2	385	12 985	174	403	6 114	53 997	33 671	86 890	1 722
31192	Coffee & tea mfg	—	3	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	3	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	20	6	1 130	34 108	839	1 312	13 290	164 585	96 277	258 962	6 603
3141	Textile furnishings mills	—	8	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	5	2	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	—	3	2	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	—	12	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	14	3	e	D	D	D	D	D	D	D	181
316	Leather & allied product mfg	—	7	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	7	1	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	7	1	e	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	5	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	16	5	392	12 047	305	581	6 156	22 356	36 097	58 526	2 554
323	Printing & related support activities	4	78	12	1 043	32 432	737	1 402	19 359	65 193	61 592	126 632	7 042
3231	Printing & related support activities	4	78	12	1 043	32 432	737	1 402	19 359	65 193	61 592	126 632	7 042
32311	Printing	4	69	12	1 004	31 400	708	1 353	18 661	63 046	60 971	123 861	6 975
323110	Commercial lithographic printing	1	26	5	483	17 802	317	634	9 829	33 429	31 181	64 537	3 920
325	Chemical mfg	2	28	11	1 912	87 480	1 216	2 206	49 365	287 854	239 774	515 792	62 142
3254	Pharmaceutical & medicine mfg	2	13	6	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	2	13	6	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	5	8	5	696	40 701	483	1 007	26 124	117 282	102 353	205 489	D
325412	Pharmaceutical preparation mfg	—	5	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	41	13	1 503	52 878	1 166	2 291	33 589	92 936	69 480	160 476	11 300
3261	Plastics product mfg	—	37	13	1 491	52 644	1 159	2 277	33 464	92 507	69 091	159 664	D
32619	Other plastics product mfg	—	28	13	1 429	50 994	1 106	2 175	32 176	88 841	64 674	151 644	10 914
326199	All other plastics product mfg	—	27	13	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Boulder—Longmont, CO PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	30	8	799	28 551	523	1 069	14 889	77 325	61 645	138 727	14 507
3272	Glass & glass product mfg	—	10	1	271	8 348	195	342	4 255	24 536	23 457	48 500	D
32721	Glass & glass product mfg	—	10	1	271	8 348	195	342	4 255	24 536	23 457	48 500	D
327215	Glass product mfg made of purchased glass	—	8	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	9	4	379	15 562	211	491	7 933	41 206	33 280	73 651	8 692
32732	Ready-mix concrete mfg	3	6	3	e	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	3	6	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	74	15	1 415	49 946	1 018	1 958	27 172	133 762	56 551	184 316	8 950
3321	Forging & stamping	9	1	1	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	9	1	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	9	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	43	4	288	10 405	225	437	6 756	20 381	6 623	26 897	2 355
3329	Other fabricated metal product mfg	—	10	3	441	17 189	299	564	8 102	51 578	24 744	71 862	D
33299	All other fabricated metal product mfg	—	8	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	65	11	1 169	41 349	663	1 183	17 015	98 668	57 052	154 930	7 892
3333	Commercial & service industry machinery mfg	1	19	5	702	22 687	417	722	10 091	52 998	27 089	81 556	3 723
33331	Commercial & service industry machinery mfg	1	19	5	702	22 687	417	722	10 091	52 998	27 089	81 556	3 723
333314	Optical instrument & lens mfg	1	14	4	578	19 575	327	576	8 659	46 714	21 832	69 903	3 344
334	Computer & electronic product mfg	—	130	48	11 331	564 792	4 962	9 191	141 951	1 844 472	1 012 507	2 830 297	218 283
3341	Computer & peripheral equipment mfg	—	25	11	5 906	349 979	2 402	4 185	76 530	1 300 303	721 753	1 995 190	187 733
33411	Computer & peripheral equipment mfg	—	25	11	5 906	349 979	2 402	4 185	76 530	1 300 303	721 753	1 995 190	187 733
334112	Computer storage device mfg	—	10	7	5 179	315 370	2 203	3 802	70 699	1 075 425	598 139	1 648 659	176 702
334119	Other computer peripheral equipment mfg	—	9	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	19	7	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	1	5	2	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	5	2	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	5	2	440	17 109	68	105	1 455	24 396	6 961	32 820	D
334290	Other communications equipment mfg	—	5	2	440	17 109	68	105	1 455	24 396	6 961	32 820	D
3344	Semiconductor & other electronic component mfg	2	31	11	1 686	52 776	1 160	2 158	24 977	104 837	104 464	207 111	10 749
33441	Semiconductor & other electronic component mfg	2	31	11	1 686	52 776	1 160	2 158	24 977	104 837	104 464	207 111	10 749
334412	Bare printed circuit board mfg	1	11	3	e	D	D	D	D	D	D	D	1 120
334413	Semiconductor & related device mfg	1	5	1	e	D	D	D	D	D	D	D	955
334419	Other electronic component mfg	3	8	4	899	25 892	648	1 021	13 633	54 738	59 924	113 375	5 651
3345	Navigational, measuring, medical, & control instruments mfg	1	45	17	2 722	118 508	1 066	2 214	30 277	362 099	140 317	502 797	D
33451	Navigational, measuring, medical, & control instruments mfg	1	45	17	2 722	118 508	1 066	2 214	30 277	362 099	140 317	502 797	D
334510	Electromedical & electrotherapeutic apparatus mfg	1	8	5	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	12	5	1 033	44 313	387	807	11 730	162 516	43 080	206 583	6 019
334516	Analytical laboratory instrument mfg	—	9	4	345	12 320	91	191	2 783	36 714	15 377	51 353	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Boulder—Longmont, CO PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg.....	—	18	5	809	22 778	599	1 132	12 502	62 628	45 393	107 348	2 612
3363	Motor vehicle parts mfg ...	—	8	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	2	25	6	473	12 259	397	792	9 101	21 946	16 380	36 995	1 003
3372	Office furniture (including fixtures) mfg.....	2	9	5	336	9 257	272	541	6 581	16 751	11 099	27 326	406
33721	Office furniture (including fixtures) mfg.....	2	9	5	336	9 257	272	541	6 581	16 751	11 099	27 326	406
339	Miscellaneous mfg.....	1	85	14	1 409	46 435	825	1 633	19 029	96 110	68 379	165 859	7 454
3391	Medical equipment & supplies mfg.....	1	34	9	890	33 904	477	1 007	12 370	64 634	47 596	113 943	5 274
33911	Medical equipment & supplies mfg.....	1	34	9	890	33 904	477	1 007	12 370	64 634	47 596	113 943	5 274
339112	Surgical & medical instrument mfg.....	—	9	3	572	23 566	285	646	8 072	34 691	33 551	69 454	3 573
3399	Other miscellaneous mfg ..	2	51	5	519	12 531	348	626	6 659	31 476	20 783	51 916	2 180
	Denver, CO PMSA												
31-33	Manufacturing	1	2 639	636	78 135	2 904 500	53 246	102 662	1 604 933	9 235 743	7 776 952	16 931 128	472 237
311	Food mfg.....	2	171	55	6 915	197 979	4 612	8 486	116 042	908 727	913 107	1 822 460	59 703
3111	Animal food mfg.....	—	8	4	368	15 702	210	491	8 829	167 810	142 274	309 608	D
31111	Animal food mfg.....	—	8	4	368	15 702	210	491	8 829	167 810	142 274	309 608	D
3112	Grain & oilseed milling	—	5	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	9	11	2	366	8 090	215	427	4 220	47 689	32 480	80 626	D
3115	Dairy product mfg.....	3	12	7	1 019	30 019	489	908	13 556	98 543	170 040	267 289	6 667
31151	Dairy product (except frozen) mfg.....	3	7	5	f	D	D	D	D	D	D	D	5 582
311511	Fluid milk mfg.....	3	6	5	797	24 176	305	632	8 918	75 842	136 658	211 691	D
3116	Meat product mfg.....	3	26	14	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	3	26	14	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	5	7	4	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	1	15	6	e	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	76	16	2 621	77 349	1 781	3 180	48 739	285 359	138 477	425 525	11 114
31181	Bread & bakery product mfg.....	1	62	12	g	D	D	D	D	D	D	D	D
311811	Retail bakeries.....	3	37	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	25	10	1 514	48 396	958	1 750	28 508	95 530	59 583	155 064	3 669
31182	Cookie, cracker, & pasta mfg.....	—	10	2	719	22 694	573	1 068	16 328	173 543	69 329	244 406	7 044
311821	Cookie & cracker mfg ..	—	5	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	20	7	619	17 937	473	810	8 811	81 046	36 495	115 048	4 848
31191	Snack food mfg.....	—	5	4	346	11 518	282	529	5 814	62 691	17 632	80 195	D
311919	Other snack food mfg ..	—	4	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	1	26	10	5 206	302 411	2 538	5 429	131 531	1 171 604	649 964	1 825 694	11 960
3121	Beverage mfg.....	1	26	10	5 206	302 411	2 538	5 429	131 531	1 171 604	649 964	1 825 694	11 960
31211	Soft drink & ice mfg.....	5	8	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	5	5	4	f	D	D	D	D	D	D	D	D
31212	Breweries.....	—	15	4	h	D	D	D	D	D	D	D	D
312120	Breweries.....	—	15	4	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	6	55	6	744	14 629	576	1 112	8 495	28 929	38 845	66 936	1 623
3149	Other textile product mills ..	6	25	4	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	7	14	3	411	8 768	331	696	5 092	16 882	21 464	37 346	D
314912	Canvas & related product mills.....	7	12	2	e	D	D	D	D	D	D	D	877
315	Apparel mfg.....	1	50	10	839	17 014	701	1 420	11 844	29 303	17 299	46 694	1 740
3152	Cut & sew apparel mfg	4	31	6	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	—	19	4	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	—	19	4	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg.....	—	6	3	454	10 119	402	846	7 435	16 919	8 691	25 594	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	DENVER—BOULDER—GREELEY, CO CMSA—Con.													
	Denver, CO PMSA—Con.													
31-33	Manufacturing—Con.													
316	Leather & allied product mfg .	—	9	2	g	D	D	D	D	D	D	D	D	
3169	Other leather & allied product mfg	—	9	2	g	D	D	D	D	D	D	D	D	
31699	Other leather & allied product mfg	—	9	2	g	D	D	D	D	D	D	D	D	
316991	Luggage mfg	—	8	1	g	D	D	D	D	D	D	D	D	
321	Wood product mfg	2	71	19		1 088	26 521	802	1 613	16 475	50 936	66 233	117 064	2 782
3219	Other wood product mfg ...	2	57	13		801	20 091	558	1 090	11 702	36 461	43 779	80 262	2 043
32191	Millwork	1	33	6		419	12 247	254	506	5 643	20 430	23 800	44 175	1 033
32192	Wood container & pallet mfg	2	12	4		251	5 215	228	439	4 319	10 706	11 897	22 751	762
321920	Wood container & pallet mfg	2	12	4		251	5 215	228	439	4 319	10 706	11 897	22 751	762
322	Paper mfg	1	37	25		2 395	84 078	1 838	3 826	55 287	208 367	262 410	465 204	22 138
3222	Converted paper product mfg	2	36	24	g	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	22	18	g	D	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	2	14	12	g	D	D	D	D	D	D	D	D	10 231
322212	Folding paperboard box mfg	1	5	5	e	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	6	3	e	D	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	5	2	e	D	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	—	6	3	e	D	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	5	3		390	10 400	271	568	7 106	23 849	24 008	46 912	2 361
323	Printing & related support activities.....	3	520	79		6 950	209 145	4 964	9 359	125 388	452 229	263 350	714 569	29 335
3231	Printing & related support activities.....	3	520	79		6 950	209 145	4 964	9 359	125 388	452 229	263 350	714 569	29 335
32311	Printing	3	445	71		6 403	193 419	4 557	8 693	115 270	421 317	256 946	677 094	27 803
323110	Commercial lithographic printing ..	4	201	45		3 847	126 410	2 662	5 224	72 204	254 472	160 916	414 724	20 093
323113	Commercial screen printing	1	39	9		546	13 134	410	828	7 857	28 546	14 529	43 098	1 434
323114	Quick printing	3	117	2		580	13 813	397	627	8 713	27 308	17 735	44 940	1 344
323116	Manifold business form printing	1	12	6	f	D	D	D	D	D	D	D	D	D
323119	Other commercial printing	3	46	1		260	7 817	181	346	4 110	14 886	9 943	24 841	1 425
32312	Support activities for printing	2	75	8		547	15 726	407	666	10 118	30 912	6 404	37 475	1 532
323122	Prepress services	2	53	4		332	11 274	225	394	6 815	21 532	4 707	26 371	1 178
324	Petroleum & coal products mfg	3	17	7	f	D	D	D	D	D	D	D	D	17 750
3241	Petroleum & coal products mfg	3	17	7	f	D	D	D	D	D	D	D	D	17 750
32411	Petroleum refineries	3	2	2	e	D	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	3	2	2	e	D	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	1	11	3	e	D	D	D	D	D	D	D	D	D
325	Chemical mfg	4	97	27		1 845	71 386	1 013	2 077	33 203	301 679	200 824	498 191	16 225
3251	Basic chemical mfg	6	13	6	e	D	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	5	21	4	e	D	D	D	D	D	D	D	D	2 266
32541	Pharmaceutical & medicine mfg	5	21	4	e	D	D	D	D	D	D	D	D	2 266
325412	Pharmaceutical preparation mfg	6	8	2	e	D	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	11	6		311	13 098	115	257	3 250	75 086	46 566	117 682	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	26	6	e	D	D	D	D	D	D	D	D	1 813
32561	Soap & cleaning compound mfg	6	23	5	e	D	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	8	12	3		260	10 171	141	276	3 313	22 034	13 377	35 418	D
3259	Other chemical product mfg	3	23	4	e	D	D	D	D	D	D	D	D	D

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	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Denver, CO PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	126	40	2 999	86 455	2 225	4 342	51 483	256 687	317 792	574 098	25 873
3261	Plastics product mfg	2	109	37	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	67	26	2 118	58 050	1 595	3 043	35 527	164 224	144 429	306 548	15 818
326199	All other plastics product mfg	1	64	26	2 115	57 957	1 592	3 038	35 458	163 993	144 240	306 130	15 809
327	Nonmetallic mineral product mfg	1	91	40	4 562	154 344	3 697	7 938	118 609	392 117	315 977	703 914	34 166
3271	Clay product & refractory mfg	—	11	4	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	8	1	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	7	1	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	3	3	e	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	3	3	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	20	6	622	25 647	530	1 024	20 734	61 640	53 811	118 500	3 998
32721	Glass & glass product mfg	—	20	6	622	25 647	530	1 024	20 734	61 640	53 811	118 500	3 998
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	15	4	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	48	25	2 023	65 890	1 603	3 883	48 623	179 897	191 489	370 156	14 688
32732	Ready-mix concrete mfg	5	26	13	884	31 861	755	1 866	26 046	89 625	121 718	211 144	8 037
327320	Ready-mix concrete mfg	5	26	13	884	31 861	755	1 866	26 046	89 625	121 718	211 144	8 037
32733	Concrete pipe, brick, & block mfg	1	8	4	e	D	D	D	D	D	D	D	3 917
32739	Other concrete product mfg	—	13	8	850	25 174	637	1 489	16 050	65 295	54 217	119 465	2 734
327390	Other concrete product mfg	—	13	8	850	25 174	637	1 489	16 050	65 295	54 217	119 465	2 734
3279	Other nonmetallic mineral product mfg	—	11	5	e	D	D	D	D	D	D	D	1 491
32799	All other nonmetallic mineral product mfg	—	11	5	e	D	D	D	D	D	D	D	1 491
331	Primary metal mfg	—	22	7	592	20 246	474	985	14 719	42 408	75 994	116 368	D
3312	Steel product mfg from purchased steel	—	6	3	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	328	10 972	264	567	7 663	22 085	27 021	49 149	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	328	10 972	264	567	7 663	22 085	27 021	49 149	D
332	Fabricated metal product mfg	—	413	102	8 003	265 189	5 849	11 554	166 283	631 404	620 675	1 246 906	47 073
3321	Forging & stamping	1	22	9	546	19 653	362	772	10 751	42 341	40 563	82 847	3 215
33211	Forging & stamping	1	22	9	546	19 653	362	772	10 751	42 341	40 563	82 847	3 215
332116	Metal stamping	1	15	7	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	101	41	2 707	83 694	1 939	3 856	51 157	182 015	185 777	365 239	9 936
33231	Plate work & fabricated structural product mfg	1	32	13	770	27 430	554	1 095	15 981	57 901	83 623	140 248	3 811
332312	Fabricated structural metal mfg	1	26	10	611	21 716	447	891	12 934	47 644	65 396	111 820	3 207
33232	Ornamental & architectural metal products mfg	1	69	28	1 937	56 264	1 385	2 761	35 176	124 114	102 154	224 991	6 125
332321	Metal window & door mfg	—	7	5	350	9 229	241	510	5 496	25 718	21 502	48 029	D
332322	Sheet metal work mfg	—	38	16	1 110	33 234	817	1 620	21 465	67 180	54 165	120 112	3 417
332323	Ornamental & architectural metal work mfg	3	24	7	477	13 801	327	631	8 215	31 216	26 487	56 850	D
3324	Boiler, tank, & shipping container mfg	—	12	6	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	7	2	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	3	2	e	D	D	D	D	D	D	D	D

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	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Denver, CO PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	1	17	5	e	D	D	D	D	D	D	D	4 233
33261	Spring & wire product mfg	1	17	5	e	D	D	D	D	D	D	D	4 233
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	180	22	1 867	66 006	1 449	2 836	45 396	127 695	70 168	194 841	14 104
33271	Machine shops	1	162	20	1 621	57 888	1 268	2 502	40 334	114 090	61 930	173 140	13 128
332710	Machine shops	1	162	20	1 621	57 888	1 268	2 502	40 334	114 090	61 930	173 140	13 128
3328	Coating, engraving, heat treating, & allied activities .	1	36	11	561	12 945	446	831	8 713	26 082	35 842	61 849	1 101
33281	Coating, engraving, heat treating, & allied activities	1	36	11	561	12 945	446	831	8 713	26 082	35 842	61 849	1 101
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	14	6	287	6 731	240	484	4 830	15 813	32 286	48 016	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	18	5	250	5 412	187	311	3 375	8 505	3 079	11 593	D
3329	Other fabricated metal product mfg	—	35	7	1 326	45 790	877	1 667	24 208	103 104	77 604	179 948	D
33291	Metal valve mfg	—	4	4	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	3	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	3	31	3	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	3	19	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	179	49	5 946	213 861	3 158	5 990	90 196	440 322	412 915	886 221	30 845
3332	Industrial machinery mfg ..	2	19	5	528	20 497	253	557	8 648	39 022	56 632	95 823	D
33329	Other industrial machinery mfg	2	16	5	f	D	D	D	D	D	D	D	D
333292	Textile machinery mfg .	—	1	1	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	2	35	10	1 223	40 306	635	894	13 186	93 383	72 340	189 740	5 502
33331	Commercial & service industry machinery mfg	2	35	10	1 223	40 306	635	894	13 186	93 383	72 340	189 740	5 502
333319	Other commercial & service industry machinery mfg	3	22	6	816	26 524	466	623	8 946	72 209	56 882	151 149	3 736
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	3	300	7 216	171	324	3 634	27 572	26 138	56 221	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	11	3	300	7 216	171	324	3 634	27 572	26 138	56 221	D
3335	Metalworking machinery mfg	—	35	7	559	22 075	379	777	13 865	31 205	50 518	82 660	9 476
33351	Metalworking machinery mfg	—	35	7	559	22 075	379	777	13 865	31 205	50 518	82 660	9 476
3336	Engine, turbine, & power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	60	21	2 860	111 252	1 382	2 752	41 163	222 945	181 902	409 326	11 209
33391	Pump & compressor mfg	—	6	3	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	3	23	11	1 503	55 802	651	1 365	18 941	66 211	106 986	178 505	D
333922	Conveyor & conveying equipment mfg	—	18	8	1 003	37 965	350	777	10 851	42 575	79 088	120 527	D
333923	Overhead traveling crane, hoist, & monorail system mfg .	9	3	2	e	D	D	D	D	D	D	D	D

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	DENVER—BOULDER—GREELEY, CO CMSA—Con.													
	Denver, CO PMSA—Con.													
31-33	Manufacturing—Con.													
333	Machinery mfg—Con.													
3339	Other general-purpose machinery mfg—Con.													
33399	All other general-purpose machinery mfg	-	31	7	f	D	D	D	D	D	D	D	4 620	
333999	All other miscellaneous general-purpose machinery mfg	-	18	5		623	21 347	419	815	10 842	58 420	27 847	86 027	4 346
334	Computer & electronic product mfg.....	1	146	49		8 938	398 901	4 392	8 291	116 670	1 023 313	739 464	1 748 477	67 293
3341	Computer & peripheral equipment mfg	5	18	4	e	D	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	5	18	4	e	D	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	17	11		1 879	79 207	1 219	2 513	41 512	153 314	392 003	538 986	17 373
33421	Telephone apparatus mfg	-	4	2	g	D	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	4	2	g	D	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	7	8	6	f	D	D	D	D	D	D	D	D	6 952
334220	Radio & TV broadcasting & wireless communications equipment mfg	7	8	6	f	D	D	D	D	D	D	D	D	6 952
3344	Semiconductor & other electronic component mfg	2	41	13	g	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	41	13	g	D	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	2	13	5		413	11 835	309	662	7 190	17 716	22 348	39 683	D
334418	Printed circuit assembly (electronic assembly) mfg	-	6	4	e	D	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	54	19		5 255	265 334	2 091	3 634	49 813	722 471	212 484	930 785	38 558
33451	Navigational, measuring, medical, & control instruments mfg	-	54	19		5 255	265 334	2 091	3 634	49 813	722 471	212 484	930 785	38 558
334510	Electromedical & electrotherapeutic apparatus mfg	-	9	5		1 887	85 663	1 114	1 951	25 463	320 349	104 857	414 586	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	3	g	D	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	1	4	3		408	18 371	122	276	3 966	38 266	17 937	61 233	D
335	Electrical equipment, appliance, & component mfg	6	40	11		842	30 551	581	1 131	16 478	62 697	68 258	131 272	4 611
3359	Other electrical equipment & component mfg	8	16	6		522	18 423	403	757	11 817	37 027	41 196	78 489	3 690
336	Transportation equipment mfg	-	55	13	j	D	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	7	3	e	D	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	7	3	e	D	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	31	5	g	D	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	12	3		1 132	40 080	829	1 858	24 418	105 919	83 008	184 133	D
336399	All other motor vehicle parts mfg	-	12	3		1 132	40 080	829	1 858	24 418	105 919	83 008	184 133	D
3364	Aerospace product & parts mfg	-	7	3	i	D	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	7	3	i	D	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	5	2	e	D	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	-	1	1	i	D	D	D	D	D	D	D	D	D

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	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Denver, CO PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	148	32	2 972	73 833	2 414	4 818	50 002	162 829	147 008	307 869	4 721
3371	Household & institutional furniture & kitchen cabinet mfg	1	106	17	2 016	45 526	1 722	3 502	33 885	87 720	91 896	177 766	3 141
33711	Wood kitchen cabinet & counter top mfg	2	63	9	722	17 830	545	1 071	11 288	41 369	37 226	78 609	1 595
337110	Wood kitchen cabinet & counter top mfg ...	2	63	9	722	17 830	545	1 071	11 288	41 369	37 226	78 609	1 595
33712	Household & institutional furniture mfg	-	43	8	1 294	27 696	1 177	2 431	22 597	46 351	54 670	99 157	1 546
337122	Nonupholstered wood household furniture mfg	-	27	4	937	18 029	885	1 879	16 002	27 922	40 833	66 692	1 253
337127	Institutional furniture mfg	-	7	3	300	8 472	241	471	5 727	16 165	11 648	28 021	D
3372	Office furniture (including fixtures) mfg	-	30	8	500	15 316	340	593	7 604	23 945	15 112	39 272	471
33721	Office furniture (including fixtures) mfg	-	30	8	500	15 316	340	593	7 604	23 945	15 112	39 272	471
3379	Other furniture related product mfg	-	12	7	456	12 991	352	723	8 513	51 164	40 000	90 831	1 109
33791	Mattress mfg	-	8	6	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	8	6	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	351	50	5 241	149 736	3 480	6 457	76 114	382 413	194 365	556 740	15 790
3391	Medical equipment & supplies mfg	3	164	25	2 582	76 487	1 615	2 955	35 413	192 756	94 095	273 308	8 563
33911	Medical equipment & supplies mfg	3	164	25	2 582	76 487	1 615	2 955	35 413	192 756	94 095	273 308	8 563
339112	Surgical & medical instrument mfg	5	27	7	654	20 548	398	630	8 273	48 413	20 848	69 618	2 431
339113	Surgical appliance & supplies mfg	1	18	7	579	19 508	344	737	9 044	49 090	28 759	77 456	2 355
339114	Dental equipment & supplies mfg	-	15	2	479	14 140	260	473	5 877	43 493	19 684	49 273	1 483
339116	Dental laboratories ...	6	90	5	445	11 909	312	578	7 172	25 750	9 509	35 546	873
3399	Other miscellaneous mfg ...	3	187	25	2 659	73 249	1 865	3 502	40 701	189 657	100 270	283 432	7 227
33992	Sporting & athletic goods mfg	3	39	6	860	26 624	648	1 309	15 026	77 296	34 220	106 450	3 354
339920	Sporting & athletic goods mfg	3	39	6	860	26 624	648	1 309	15 026	77 296	34 220	106 450	3 354
33993	Doll, toy, & game mfg ...	4	16	2	325	6 026	260	482	4 135	22 744	13 917	36 012	1 234
33994	Office supplies (except paper) mfg	-	9	3	422	9 070	351	583	7 618	19 565	13 878	33 182	387
339944	Carbon paper & inked ribbon mfg	-	3	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg	3	67	7	531	17 130	323	638	8 116	26 232	14 158	39 970	1 115
339950	Sign mfg	3	67	7	531	17 130	323	638	8 116	26 232	14 158	39 970	1 115
33999	All other miscellaneous mfg	4	37	5	359	10 506	189	343	4 192	31 805	13 609	45 394	1 070
	Greeley, CO PMSA												
31-33	Manufacturing	-	208	67	10 773	345 359	7 751	15 330	197 548	1 788 933	2 507 170	4 338 465	85 335
311	Food mfg	1	28	14	3 782	81 851	3 228	6 169	63 400	239 448	1 416 387	1 659 111	23 905
3116	Meat product mfg	1	9	6	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	9	6	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	1	6	4	h	D	D	D	D	D	D	D	D
321	Wood product mfg	1	11	4	316	6 556	261	568	5 001	14 832	64 302	79 498	1 084
3219	Other wood product mfg ...	-	7	4	269	5 629	227	510	4 442	13 099	61 678	75 141	924
323	Printing & related support activities	-	19	6	665	20 709	539	1 183	15 274	72 701	93 653	168 058	1 857
3231	Printing & related support activities	-	19	6	665	20 709	539	1 183	15 274	72 701	93 653	168 058	1 857
32311	Printing	-	18	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	8	3	e	D	D	D	D	D	D	D	732
325	Chemical mfg	-	9	5	g	D	D	D	D	D	D	D	26 687
3259	Other chemical product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	2	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DENVER—BOULDER—GREELEY, CO CMSA—Con.												
	Greeley, CO PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	1	13	6	333	8 536	260	572	5 469	20 970	22 277	42 505	D
3261	Plastics product mfg.....	-	10	5	296	7 469	227	497	4 570	18 685	18 991	36 916	D
32619	Other plastics product mfg.....	-	8	4	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	41	5	445	16 521	340	645	11 588	32 497	77 939	108 223	15 461
333	Machinery mfg.....	3	18	7	484	11 644	322	707	7 512	34 579	31 408	64 546	3 614
334	Computer & electronic product mfg.....	-	6	5	1 338	64 157	465	769	14 445	206 000	126 697	332 008	D
3341	Computer & peripheral equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
	FORT COLLINS—LOVELAND, CO MSA												
31-33	Manufacturing	-	384	88	15 840	645 044	8 321	15 778	256 233	1 995 824	1 834 149	3 890 695	252 442
312	Beverage & tobacco product mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
31212	Breweries.....	-	5	3	f	D	D	D	D	D	D	D	D
312120	Breweries.....	-	5	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	25	2	428	10 431	361	708	7 243	22 564	29 355	52 092	547
3219	Other wood product mfg....	-	20	2	394	9 466	335	657	6 653	20 605	23 963	44 704	D
32199	All other wood product mfg.....	-	8	1	e	D	D	D	D	D	D	D	213
323	Printing & related support activities.....	1	46	4	563	15 960	400	669	9 204	44 138	21 988	65 835	6 752
3231	Printing & related support activities.....	1	46	4	563	15 960	400	669	9 204	44 138	21 988	65 835	6 752
32311	Printing.....	-	44	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	-	17	3	353	11 244	239	351	5 989	32 606	16 648	49 011	D
326	Plastics & rubber products mfg.....	-	24	10	1 328	40 216	710	1 261	13 595	135 542	50 463	189 169	8 022
3261	Plastics product mfg.....	-	24	10	1 328	40 216	710	1 261	13 595	135 542	50 463	189 169	8 022
32619	Other plastics product mfg.....	-	20	10	1 314	39 822	698	1 239	13 340	134 078	47 673	184 799	D
326199	All other plastics product mfg.....	-	20	10	1 314	39 822	698	1 239	13 340	134 078	47 673	184 799	D
327	Nonmetallic mineral product mfg.....	-	18	7	352	11 854	279	577	8 102	32 464	22 298	49 421	5 058
3273	Cement & concrete product mfg.....	-	10	4	263	9 930	205	428	6 530	28 507	19 962	43 125	D
332	Fabricated metal product mfg.....	2	47	9	492	15 338	393	772	10 516	39 070	33 299	72 167	6 861
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	27	6	292	9 059	241	469	6 227	22 699	17 630	40 307	6 007

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT COLLINS-LOVELAND, CO MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	24	8	1 282	50 078	759	1 756	25 923	111 979	98 483	213 923	9 143
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	4	395	16 229	204	491	6 710	35 256	38 942	74 828	2 537
33399	All other general-purpose machinery mfg	-	5	3	e	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	49	21	8 380	396 429	3 493	6 539	125 277	1 136 936	1 267 310	2 460 393	167 870
3341	Computer & peripheral equipment mfg	1	6	3	769	40 542	323	573	18 053	138 014	91 894	227 997	3 969
33411	Computer & peripheral equipment mfg	1	6	3	769	40 542	323	573	18 053	138 014	91 894	227 997	3 969
334112	Computer storage device mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	16	7	4 729	224 933	1 785	3 650	56 498	517 205	800 928	1 368 444	D
33441	Semiconductor & other electronic component mfg	-	16	7	4 729	224 933	1 785	3 650	56 498	517 205	800 928	1 368 444	D
334412	Bare printed circuit board mfg	-	6	1	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	22	9	2 808	128 205	1 349	2 263	49 981	476 742	369 241	852 527	D
33451	Navigational, measuring, medical, & control instruments mfg	-	22	9	2 808	128 205	1 349	2 263	49 981	476 742	369 241	852 527	D
334515	Electricity measuring & testing instrument mfg	-	8	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	5	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	25	5	265	5 737	206	381	3 770	11 068	8 601	19 674	551
3371	Household & institutional furniture & kitchen cabinet mfg	1	23	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	47	10	739	17 852	485	839	9 194	33 130	25 499	58 830	1 342
3399	Other miscellaneous mfg ..	-	28	9	f	D	D	D	D	D	D	D	805
	GRAND JUNCTION, CO MSA												
31-33	Manufacturing	1	167	34	3 605	99 170	2 614	5 940	60 740	262 624	217 951	484 231	25 338
311	Food mfg	1	14	2	289	7 860	130	929	3 269	16 591	14 973	31 599	886
327	Nonmetallic mineral product mfg	1	15	4	622	18 281	505	1 046	13 224	56 573	32 420	86 910	9 788
3271	Clay product & refractory mfg	-	4	2	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	6	25	4	327	8 652	248	490	6 094	19 853	16 128	35 529	1 987

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAND JUNCTION, CO MSA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	1	11	4	267	6 809	156	245	3 602	13 473	10 477	23 691	937
334	Computer & electronic product mfg	1	7	3	656	16 884	544	1 253	11 516	41 011	40 655	78 431	D
3345	Navigational, measuring, medical, & control instruments mfg	—	3	1	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	3	1	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	5	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
PUEBLO, CO MSA													
31-33	Manufacturing	—	107	32	4 688	147 003	3 392	7 255	98 733	500 312	517 147	1 021 259	36 397
311	Food mfg	—	10	6	542	10 506	379	717	6 796	38 048	44 258	82 319	1 761
3118	Bakeries & tortilla mfg	—	7	4	e	D	D	D	D	D	D	D	1 611
31183	Tortilla mfg	—	2	2	e	D	D	D	D	D	D	D	D
311830	Tortilla mfg	—	2	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	13	6	309	9 662	228	432	5 926	23 547	21 728	45 259	1 951
331	Primary metal mfg	—	4	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	17	3	486	15 463	397	801	12 049	37 323	36 924	73 975	2 282
333	Machinery mfg	—	9	4	1 125	32 765	636	1 317	15 927	180 766	107 341	288 771	D
3332	Industrial machinery mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	2	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAMS COUNTY, CO													
31-33	Manufacturing	1	436	123	13 151	428 437	8 926	17 606	244 337	1 098 945	1 946 291	3 045 057	83 932
311	Food mfg	-	30	12	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	11	4	f	D	D	D	D	D	D	D	1 485
31181	Bread & bakery product mfg	-	9	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	3	651	22 789	287	535	9 390	56 063	22 893	78 905	1 458
322	Paper mfg	-	8	8	705	23 107	560	1 080	18 074	64 305	66 534	127 304	6 754
3222	Converted paper product mfg	-	7	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	62	9	558	16 700	423	809	9 605	40 953	18 254	59 220	2 156
3231	Printing & related support activities	2	62	9	558	16 700	423	809	9 605	40 953	18 254	59 220	2 156
32311	Printing	2	55	8	f	D	D	D	D	D	D	D	1 912
326	Plastics & rubber products mfg	-	31	12	1 288	38 377	861	1 868	20 026	99 598	130 473	231 612	6 318
3261	Plastics product mfg	-	26	12	1 240	37 106	832	1 814	19 314	96 547	127 842	225 952	6 077
32619	Other plastics product mfg	-	19	9	1 030	29 478	711	1 545	16 417	76 486	84 726	161 492	5 348
326199	All other plastics product mfg	-	19	9	1 030	29 478	711	1 545	16 417	76 486	84 726	161 492	5 348
327	Nonmetallic mineral product mfg	2	18	9	995	30 999	785	1 903	22 256	77 924	74 725	152 626	4 180
3273	Cement & concrete product mfg	2	14	8	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	-	4	3	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	91	17	1 380	45 528	980	1 969	26 284	92 172	109 722	198 327	10 045
333	Machinery mfg	4	35	7	1 139	34 862	576	858	12 741	64 533	77 749	163 328	D
334	Computer & electronic product mfg	-	24	8	2 026	75 239	1 348	2 679	42 423	171 176	416 513	583 509	14 577
3342	Communications equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	8	3	564	13 249	407	831	8 176	30 944	41 601	69 445	D
33441	Semiconductor & other electronic component mfg	1	8	3	564	13 249	407	831	8 176	30 944	41 601	69 445	D
336	Transportation equipment mfg	-	14	8	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	25	5	f	D	D	D	D	D	D	D	727
ARAPAHOE COUNTY, CO													
31-33	Manufacturing	-	549	99	18 852	798 005	14 246	25 837	514 812	2 992 885	2 158 746	5 017 318	120 123
323	Printing & related support activities	4	126	15	1 499	44 475	1 069	2 055	26 841	89 234	52 373	141 664	6 266
3231	Printing & related support activities	4	126	15	1 499	44 475	1 069	2 055	26 841	89 234	52 373	141 664	6 266
32311	Printing	4	114	15	1 443	42 637	1 031	1 990	25 917	86 103	51 740	137 892	6 077
323110	Commercial lithographic printing	6	54	8	782	25 420	528	984	13 807	48 333	30 282	78 580	4 112
332	Fabricated metal product mfg	1	91	19	1 874	66 039	1 390	2 674	40 438	149 676	96 607	243 425	11 544
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	55	9	f	D	D	D	D	D	D	D	4 876
33271	Machine shops	1	50	9	526	20 975	445	888	15 174	41 027	19 509	58 948	4 703
332710	Machine shops	1	50	9	526	20 975	445	888	15 174	41 027	19 509	58 948	4 703
3329	Other fabricated metal product mfg	-	8	3	903	32 434	608	1 168	17 556	84 793	50 497	134 181	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	32	9	1 420	50 673	873	1 734	25 622	125 137	116 499	243 487	15 531

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARAPAHOE COUNTY, CO—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	47	16	1 491	62 887	752	1 478	21 610	174 384	80 315	252 487	7 733
3345	Navigational, measuring, medical, & control instruments mfg.....	1	23	8	656	30 755	343	683	10 078	78 328	30 200	109 033	2 774
33451	Navigational, measuring, medical, & control instruments mfg.....	1	23	8	656	30 755	343	683	10 078	78 328	30 200	109 033	2 774
336	Transportation equipment mfg.....	—	13	3	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	6	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	1	1	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	1	1	i	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg ...	—	1	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	4	91	10	1 319	34 899	867	1 477	16 743	103 612	57 780	147 127	4 646
3391	Medical equipment & supplies mfg.....	4	54	8	f	D	D	D	D	D	D	D	3 431
33911	Medical equipment & supplies mfg.....	4	54	8	f	D	D	D	D	D	D	D	3 431
	BOULDER COUNTY, CO												
31-33	Manufacturing	1	686	176	26 225	1 052 051	15 182	28 658	402 027	3 184 299	2 062 660	5 196 298	357 562
311	Food mfg.....	—	28	8	1 571	35 773	1 194	2 532	24 496	115 746	122 005	238 687	3 678
3116	Meat product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	4	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	20	6	1 130	34 108	839	1 312	13 290	164 585	96 277	258 962	6 603
3141	Textile furnishings mills....	—	8	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	—	5	2	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	—	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	78	12	1 043	32 432	737	1 402	19 359	65 193	61 592	126 632	7 042
3231	Printing & related support activities.....	4	78	12	1 043	32 432	737	1 402	19 359	65 193	61 592	126 632	7 042
32311	Printing.....	4	69	12	1 004	31 400	708	1 353	18 661	63 046	60 971	123 861	6 975
325	Chemical mfg.....	2	28	11	1 912	87 480	1 216	2 206	49 365	287 854	239 774	515 792	62 142
3254	Pharmaceutical & medicine mfg.....	2	13	6	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	2	13	6	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	5	8	5	696	40 701	483	1 007	26 124	117 282	102 353	205 489	D
325412	Pharmaceutical preparation mfg.....	—	5	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	41	13	1 503	52 878	1 166	2 291	33 589	92 936	69 480	160 476	11 300
3261	Plastics product mfg.....	—	37	13	1 491	52 644	1 159	2 277	33 464	92 507	69 091	159 664	D
32619	Other plastics product mfg.....	—	28	13	1 429	50 994	1 106	2 175	32 176	88 841	64 674	151 644	10 914
326199	All other plastics product mfg.....	—	27	13	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	30	8	799	28 551	523	1 069	14 889	77 325	61 645	138 727	14 507
332	Fabricated metal product mfg.....	3	74	15	1 415	49 946	1 018	1 958	27 172	133 762	56 551	184 316	8 950
333	Machinery mfg.....	1	65	11	1 169	41 349	663	1 183	17 015	98 668	57 052	154 930	7 892
3333	Commercial & service industry machinery mfg ..	1	19	5	702	22 687	417	722	10 091	52 998	27 089	81 556	3 723
33331	Commercial & service industry machinery mfg.....	1	19	5	702	22 687	417	722	10 091	52 998	27 089	81 556	3 723
333314	Optical instrument & lens mfg.....	1	14	4	578	19 575	327	576	8 659	46 714	21 832	69 903	3 344

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOULDER COUNTY, CO—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	130	48	11 331	564 792	4 962	9 191	141 951	1 844 472	1 012 507	2 830 297	218 283
3341	Computer & peripheral equipment mfg	—	25	11	5 906	349 979	2 402	4 185	76 530	1 300 303	721 753	1 995 190	187 733
33411	Computer & peripheral equipment mfg	—	25	11	5 906	349 979	2 402	4 185	76 530	1 300 303	721 753	1 995 190	187 733
334112	Computer storage device mfg	—	10	7	5 179	315 370	2 203	3 802	70 699	1 075 425	598 139	1 648 659	176 702
334119	Other computer peripheral equipment mfg	—	9	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	19	7	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	31	11	1 686	52 776	1 160	2 158	24 977	104 837	104 464	207 111	10 749
33441	Semiconductor & other electronic component mfg	2	31	11	1 686	52 776	1 160	2 158	24 977	104 837	104 464	207 111	10 749
334419	Other electronic component mfg	3	8	4	899	25 892	648	1 021	13 633	54 738	59 924	113 375	5 651
3345	Navigational, measuring, medical, & control instruments mfg	1	45	17	2 722	118 508	1 066	2 214	30 277	362 099	140 317	502 797	D
33451	Navigational, measuring, medical, & control instruments mfg	1	45	17	2 722	118 508	1 066	2 214	30 277	362 099	140 317	502 797	D
334510	Electromedical & electrotherapeutic apparatus mfg	1	8	5	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	12	5	1 033	44 313	387	807	11 730	162 516	43 080	206 583	6 019
336	Transportation equipment mfg	—	18	5	809	22 778	599	1 132	12 502	62 628	45 393	107 348	2 612
3363	Motor vehicle parts mfg	—	8	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	85	14	1 409	46 435	825	1 633	19 029	96 110	68 379	165 859	7 454
3391	Medical equipment & supplies mfg	1	34	9	890	33 904	477	1 007	12 370	64 634	47 596	113 943	5 274
33911	Medical equipment & supplies mfg	1	34	9	890	33 904	477	1 007	12 370	64 634	47 596	113 943	5 274
339112	Surgical & medical instrument mfg	—	9	3	572	23 566	285	646	8 072	34 691	33 551	69 454	3 573
3399	Other miscellaneous mfg	2	51	5	519	12 531	348	626	6 659	31 476	20 783	51 916	2 180
	DENVER COUNTY, CO												
31-33	Manufacturing	2	976	289	26 320	816 238	18 087	35 978	456 183	2 525 048	2 281 012	4 867 831	165 058
311	Food mfg	2	97	37	4 321	126 961	3 108	5 904	79 285	695 018	604 009	1 303 451	50 394
3115	Dairy product mfg	4	7	5	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	17	11	1 020	26 640	747	1 634	15 890	164 009	203 942	371 832	3 806
31161	Animal slaughtering & processing	3	17	11	1 020	26 640	747	1 634	15 890	164 009	203 942	371 832	3 806
311611	Animal (except poultry) slaughtering	5	5	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	41	11	1 750	51 890	1 347	2 444	37 531	223 185	111 178	336 072	9 361
31181	Bread & bakery product mfg	3	32	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	3	14	7	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	6	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	5	15	9	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	5	15	9	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	5	7	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	5	4	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	5	23	5	506	9 621	401	758	5 585	18 396	27 630	46 071	1 137
315	Apparel mfg	1	30	9	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	7	1	g	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	7	1	g	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	7	1	g	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	7	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DENVER COUNTY, CO													
—Con.													
31-33	Manufacturing—												
	Con.												
322	Paper mfg	3	20	12	1 298	46 807	970	2 030	27 423	114 866	136 204	249 538	10 667
3222	Converted paper product												
32221	mfg	3	20	12	1 298	46 807	970	2 030	27 423	114 866	136 204	249 538	10 667
322211	Paperboard container												
	mfg	3	13	11	1 002	37 799	753	1 573	21 754	91 929	119 497	210 816	7 155
	Corrugated & solid												
	fiber box mfg	5	6	6	f	D	D	D	D	D	D	D	D
323	Printing & related support												
	activities	3	220	47	3 728	119 721	2 621	5 057	70 368	242 234	159 511	400 880	16 813
3231	Printing & related support												
	activities	3	220	47	3 728	119 721	2 621	5 057	70 368	242 234	159 511	400 880	16 813
32311	Printing	3	181	40	3 342	108 897	2 343	4 613	63 349	219 886	154 970	373 872	15 888
323110	Commercial												
	lithographic printing ..	3	92	28	2 421	82 891	1 672	3 391	47 569	169 889	108 525	277 610	13 447
325	Chemical mfg	2	40	12	834	31 599	459	964	13 319	163 050	76 172	234 868	4 772
326	Plastics & rubber products												
	mfg	3	43	18	948	26 627	736	1 319	16 540	99 826	146 570	246 103	11 103
3261	Plastics product mfg	3	39	16	887	24 467	685	1 197	14 926	95 080	142 398	237 139	10 883
327	Nonmetallic mineral product												
	mfg	3	32	14	1 222	36 701	897	2 076	22 730	105 059	91 245	194 457	9 017
3273	Cement & concrete product												
	mfg	5	12	6	530	17 306	436	1 110	13 410	47 057	59 729	105 989	4 171
332	Fabricated metal product												
	mfg	1	116	38	2 476	75 342	1 744	3 463	46 039	173 358	166 306	341 553	11 835
3323	Architectural & structural												
	metals mfg	1	30	16	1 044	31 127	708	1 385	18 524	61 462	67 353	129 126	3 498
33232	Ornamental &												
	architectural metal												
	products mfg	—	22	12	843	23 560	556	1 078	14 027	50 984	42 549	94 077	1 946
333	Machinery mfg	—	55	17	1 846	63 654	880	1 774	25 933	107 296	123 994	233 470	D
3339	Other general-purpose												
	machinery mfg	—	22	9	1 107	41 358	405	870	12 693	55 078	82 087	135 438	1 847
33392	Material handling												
	equipment mfg	—	9	7	919	34 406	309	691	9 416	37 568	73 747	109 760	1 335
333922	Conveyor & conveying												
	equipment mfg	—	7	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic												
	product mfg	4	26	7	f	D	D	D	D	D	D	D	7 584
337	Furniture & related product												
	mfg	1	63	21	1 955	47 199	1 662	3 326	33 120	90 291	88 452	176 661	3 074
3371	Household & institutional												
	furniture & kitchen cabinet												
	mfg	1	41	11	g	D	D	D	D	D	D	D	D
33712	Household & institutional												
	furniture mfg	—	19	6	1 089	22 561	1 009	2 097	18 589	37 447	49 154	84 472	1 220
337122	Nonupholstered wood												
	household furniture												
	mfg	—	10	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	108	19	2 004	56 521	1 369	2 545	32 699	134 237	63 751	195 185	5 215
3391	Medical equipment &												
	supplies mfg	3	40	4	534	14 714	349	598	7 722	29 624	11 394	41 038	1 260
33911	Medical equipment &												
	supplies mfg	3	40	4	534	14 714	349	598	7 722	29 624	11 394	41 038	1 260
3399	Other miscellaneous mfg ..	2	68	15	1 470	41 807	1 020	1 947	24 977	104 613	52 357	154 147	3 955
DOUGLAS COUNTY, CO													
31-33	Manufacturing	2	119	28	1 941	58 808	1 403	2 750	35 669	170 737	126 247	289 696	16 237
327	Nonmetallic mineral product												
	mfg	2	16	10	525	17 662	375	827	11 534	52 260	46 197	97 870	6 462
EAGLE COUNTY, CO													
31-33	Manufacturing	2	43	5	502	14 858	383	764	10 514	37 654	47 194	85 284	2 857

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EL PASO COUNTY, CO													
31-33	Manufacturing	-	499	120	21 593	700 590	15 148	31 203	358 918	2 966 198	2 777 411	5 698 935	380 054
321	Wood product mfg	3	15	4	515	15 075	387	821	8 581	33 297	27 334	60 609	1 408
323	Printing & related support activities.....	-	82	8	1 851	37 509	740	1 392	15 858	163 701	38 832	202 521	4 675
3231	Printing & related support activities.....	-	82	8	1 851	37 509	740	1 392	15 858	163 701	38 832	202 521	4 675
32311	Printing	-	76	8	1 817	36 963	714	1 359	15 450	162 486	38 632	201 108	4 571
323116	Manifold business form printing.....	-	3	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	23	7	719	22 006	538	1 172	14 893	42 063	43 167	84 913	4 575
3273	Cement & concrete product mfg	-	7	5	592	19 001	441	1 010	12 822	34 556	39 871	74 060	4 015
332	Fabricated metal product mfg	-	76	25	3 533	95 380	2 911	6 049	66 734	261 300	165 885	425 872	15 320
3322	Cutlery & handtool mfg	-	4	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	13	8	570	15 278	433	957	8 803	34 537	26 410	60 574	558
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	36	6	619	17 115	503	977	12 384	32 463	19 526	52 391	4 837
33271	Machine shops	-	33	5	549	14 879	444	848	10 718	28 880	18 506	47 640	4 379
332710	Machine shops	-	33	5	549	14 879	444	848	10 718	28 880	18 506	47 640	4 379
333	Machinery mfg	1	26	6	643	19 887	415	825	11 249	49 857	37 706	88 303	5 788
334	Computer & electronic product mfg	-	69	29	9 543	347 406	6 675	13 815	174 657	1 980 692	2 143 452	4 060 177	328 673
3341	Computer & peripheral equipment mfg	-	16	5	2 479	71 713	1 853	2 542	31 855	735 220	1 483 315	2 203 680	D
33411	Computer & peripheral equipment mfg	-	16	5	2 479	71 713	1 853	2 542	31 855	735 220	1 483 315	2 203 680	D
334111	Electronic computer mfg	-	5	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	34	18	5 579	200 831	4 299	10 226	126 277	827 618	494 227	1 277 947	287 705
33441	Semiconductor & other electronic component mfg	-	34	18	5 579	200 831	4 299	10 226	126 277	827 618	494 227	1 277 947	287 705
334413	Semiconductor & related device mfg ...	-	14	7	3 615	155 115	2 840	7 148	101 912	659 465	302 680	941 302	243 827
334418	Printed circuit assembly (electronic assembly) mfg	-	3	3	1 122	22 002	823	1 571	10 708	87 701	164 840	227 416	D
3345	Navigational, measuring, medical, & control instruments mfg	-	8	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	8	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	33	7	628	18 815	446	745	9 605	24 925	35 638	60 483	2 397
339	Miscellaneous mfg	1	64	7	1 751	80 408	1 426	3 424	23 184	207 180	70 674	297 917	6 797
3391	Medical equipment & supplies mfg	-	30	4	1 448	73 772	1 200	3 068	19 551	192 990	60 960	274 167	6 164
33911	Medical equipment & supplies mfg	-	30	4	1 448	73 772	1 200	3 068	19 551	192 990	60 960	274 167	6 164
339112	Surgical & medical instrument mfg	-	3	3	g	D	D	D	D	D	D	D	D
FREMONT COUNTY, CO													
31-33	Manufacturing	2	47	8	950	26 804	651	1 315	14 196	98 201	50 981	146 882	6 542

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JEFFERSON COUNTY, CO													
31-33	Manufacturing	1	559	97	17 871	803 012	10 584	20 491	353 932	2 448 128	1 264 656	3 711 226	86 887
312	Beverage & tobacco product mfg	-	7	1	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	7	1	h	D	D	D	D	D	D	D	D
31212	Breweries	-	6	1	h	D	D	D	D	D	D	D	D
312120	Breweries	-	6	1	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	102	8	1 136	27 597	830	1 408	18 136	78 456	32 406	110 649	3 926
3231	Printing & related support activities	1	102	8	1 136	27 597	830	1 408	18 136	78 456	32 406	110 649	3 926
32311	Printing	1	86	8	1 075	25 857	778	1 311	16 892	75 223	31 753	106 759	3 752
327	Nonmetallic mineral product mfg	-	13	4	1 645	63 990	1 510	2 890	58 491	142 157	88 972	229 661	D
3271	Clay product & refractory mfg	-	5	2	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	4	1	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	94	24	2 027	69 749	1 557	3 100	48 165	195 035	234 895	429 457	12 937
3323	Architectural & structural metals mfg	-	23	12	762	23 006	577	1 174	14 587	53 675	38 523	90 489	2 454
33232	Ornamental & architectural metal products mfg	-	17	11	693	21 027	526	1 071	13 327	51 001	36 924	86 139	D
332322	Sheet metal work mfg ..	-	11	8	583	17 381	450	896	10 980	37 700	27 731	63 687	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	45	6	582	20 402	409	809	13 599	40 209	31 414	70 631	D
333	Machinery mfg	2	48	13	1 426	61 511	761	1 479	24 108	137 965	87 794	233 408	6 833
3339	Other general-purpose machinery mfg	3	17	6	1 054	47 172	535	1 057	16 948	113 123	67 898	187 089	D
334	Computer & electronic product mfg	-	43	14	4 400	226 158	1 670	2 866	37 743	605 160	195 894	794 655	34 908
3345	Navigational, measuring, medical, & control instruments mfg	-	15	6	3 747	202 290	1 351	2 210	30 072	571 904	144 181	708 981	D
33451	Navigational, measuring, medical, & control instruments mfg	-	15	6	3 747	202 290	1 351	2 210	30 072	571 904	144 181	708 981	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	103	15	1 342	40 585	917	1 824	19 654	97 090	53 715	147 172	3 715
3391	Medical equipment & supplies mfg	1	46	10	787	24 804	490	1 035	11 801	60 146	27 948	87 678	D
33911	Medical equipment & supplies mfg	1	46	10	787	24 804	490	1 035	11 801	60 146	27 948	87 678	D
3399	Other miscellaneous mfg ..	5	57	5	555	15 781	427	789	7 853	36 944	25 767	59 494	D
LA PLATA COUNTY, CO													
31-33	Manufacturing	3	66	11	752	19 256	509	985	12 135	29 436	22 424	51 753	3 429
LARIMER COUNTY, CO													
31-33	Manufacturing	-	384	88	15 840	645 044	8 321	15 778	256 233	1 995 824	1 834 149	3 890 695	252 442
312	Beverage & tobacco product mfg	-	8	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	8	3	f	D	D	D	D	D	D	D	D
31212	Breweries	-	5	3	f	D	D	D	D	D	D	D	D
312120	Breweries	-	5	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	46	4	563	15 960	400	669	9 204	44 138	21 988	65 835	6 752
3231	Printing & related support activities	1	46	4	563	15 960	400	669	9 204	44 138	21 988	65 835	6 752
32311	Printing	-	44	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LARIMER COUNTY, CO													
—Con.													
31-33	Manufacturing—												
	Con.												
326	Plastics & rubber products mfg	—	24	10	1 328	40 216	710	1 261	13 595	135 542	50 463	189 169	8 022
3261	Plastics product mfg	—	24	10	1 328	40 216	710	1 261	13 595	135 542	50 463	189 169	8 022
32619	Other plastics product mfg	—	20	10	1 314	39 822	698	1 239	13 340	134 078	47 673	184 799	D
326199	All other plastics product mfg	—	20	10	1 314	39 822	698	1 239	13 340	134 078	47 673	184 799	D
333	Machinery mfg	—	24	8	1 282	50 078	759	1 756	25 923	111 979	98 483	213 923	9 143
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	49	21	8 380	396 429	3 493	6 539	125 277	1 136 936	1 267 310	2 460 393	167 870
3341	Computer & peripheral equipment mfg	1	6	3	769	40 542	323	573	18 053	138 014	91 894	227 997	3 969
33411	Computer & peripheral equipment mfg	1	6	3	769	40 542	323	573	18 053	138 014	91 894	227 997	3 969
334112	Computer storage device mfg	—	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	16	7	4 729	224 933	1 785	3 650	56 498	517 205	800 928	1 368 444	D
33441	Semiconductor & other electronic component mfg	—	16	7	4 729	224 933	1 785	3 650	56 498	517 205	800 928	1 368 444	D
334413	Semiconductor & related device mfg ...	—	3	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	2	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	4	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	22	9	2 808	128 205	1 349	2 263	49 981	476 742	369 241	852 527	D
33451	Navigational, measuring, medical, & control instruments mfg	—	22	9	2 808	128 205	1 349	2 263	49 981	476 742	369 241	852 527	D
334515	Electricity measuring & testing instrument mfg	—	8	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	7	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	5	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	—	5	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	47	10	739	17 852	485	839	9 194	33 130	25 499	58 830	1 342
3399	Other miscellaneous mfg ..	—	28	9	f	D	D	D	D	D	D	D	805
LOGAN COUNTY, CO													
31-33	Manufacturing	—	19	4	736	15 232	634	1 151	12 426	33 290	127 952	163 200	1 621
MESA COUNTY, CO													
31-33	Manufacturing	1	167	34	3 605	99 170	2 614	5 940	60 740	262 624	217 951	484 231	25 338
327	Nonmetallic mineral product mfg	1	15	4	622	18 281	505	1 046	13 224	56 573	32 420	86 910	9 788
334	Computer & electronic product mfg	1	7	3	656	16 884	544	1 253	11 516	41 011	40 655	78 431	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTROSE COUNTY, CO													
31-33	Manufacturing	-	64	13	1 540	31 505	1 226	2 531	22 500	90 997	64 582	155 950	4 280
311	Food mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
MORGAN COUNTY, CO													
31-33	Manufacturing	-	25	6	h	D	D	D	D	D	D	D	15 671
311	Food mfg.....	-	6	3	g	D	D	D	D	D	D	D	14 912
3116	Meat product mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	3	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	1	g	D	D	D	D	D	D	D	D
OTERO COUNTY, CO													
31-33	Manufacturing	1	17	6	534	10 727	436	752	6 862	19 837	16 377	36 226	907
PROWERS COUNTY, CO													
31-33	Manufacturing	7	20	6	f	D	D	D	D	D	D	D	D
PUEBLO COUNTY, CO													
31-33	Manufacturing	-	107	32	4 688	147 003	3 392	7 255	98 733	500 312	517 147	1 021 259	36 397
311	Food mfg.....	-	10	6	542	10 506	379	717	6 796	38 048	44 258	82 319	1 761
331	Primary metal mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	9	4	1 125	32 765	636	1 317	15 927	180 766	107 341	288 771	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WELD COUNTY, CO													
31-33	Manufacturing	-	208	67	10 773	345 359	7 751	15 330	197 548	1 788 933	2 507 170	4 338 465	85 335
311	Food mfg.....	1	28	14	3 782	81 851	3 228	6 169	63 400	239 448	1 416 387	1 659 111	23 905
3116	Meat product mfg.....	1	9	6	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	1	9	6	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	1	6	4	h	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	19	6	665	20 709	539	1 183	15 274	72 701	93 653	168 058	1 857
3231	Printing & related support activities.....	-	19	6	665	20 709	539	1 183	15 274	72 701	93 653	168 058	1 857
32311	Printing	-	18	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	9	5	g	D	D	D	D	D	D	D	26 687
3259	Other chemical product mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WELD COUNTY, CO— Con. Manufacturing— Con.												
334	Computer & electronic product mfg.....	—	6	5	1 338	64 157	465	769	14 445	206 000	126 697	332 008	D
3341	Computer & peripheral equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARVADA, CO *												
31-33	Manufacturing	2	106	21	3 022	100 606	1 821	3 183	40 043	251 554	157 528	431 982	16 820
333	Machinery mfg.....	2	10	5	878	34 952	428	574	10 217	99 198	52 434	173 009	4 549
334	Computer & electronic product mfg.....	—	7	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31-33	AURORA, CO *												
31-33	Manufacturing	3	139	23	2 360	75 252	1 579	3 218	39 502	172 675	174 180	342 406	10 281
31-33	BOULDER, CO												
31-33	Manufacturing	1	282	72	9 940	415 702	5 374	10 983	168 578	1 002 806	769 216	1 758 780	108 038
311	Food mfg.....	—	18	5	f	D	D	D	D	D	D	D	1 749
323	Printing & related support activities.....	4	47	11	856	27 383	614	1 187	16 008	55 781	50 478	106 285	6 348
3231	Printing & related support activities.....	4	47	11	856	27 383	614	1 187	16 008	55 781	50 478	106 285	6 348
32311	Printing.....	4	41	11	831	26 629	594	1 149	15 496	54 238	50 008	104 273	D
325	Chemical mfg.....	5	15	5	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	5	9	5	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	5	9	5	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	5	7	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	12	4	606	26 253	455	924	15 894	34 715	26 699	60 130	D
3261	Plastics product mfg.....	—	10	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	—	6	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	18	3	544	17 517	321	549	7 553	46 153	21 323	68 338	3 703

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOULDER, CO—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	65	25	4 896	231 275	1 973	4 282	65 731	541 725	388 110	935 992	D
3341	Computer & peripheral equipment mfg.....	—	9	4	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	9	4	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	2	14	5	f	D	D	D	D	D	D	D	3 928
3345	Navigational, measuring, medical, & control instruments mfg.....	1	26	10	2 250	101 906	829	1 733	24 164	323 064	115 415	438 881	10 769
33451	Navigational, measuring, medical, & control instruments mfg.....	1	26	10	2 250	101 906	829	1 733	24 164	323 064	115 415	438 881	10 769
334510	Electromedical & electrotherapeutic apparatus mfg.....	1	3	2	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	—	6	3	f	D	D	D	D	D	D	D	D
BRIGHTON, CO *													
31-33	Manufacturing	—	23	5	f	D	D	D	D	D	D	D	4 100
BROOMFIELD, CO *													
31-33	Manufacturing	—	92	30	7 101	284 477	3 843	6 561	84 823	919 582	474 920	1 389 903	54 574
314	Textile product mills.....	—	4	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills.....	—	3	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	—	1	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	5	23	6	602	19 497	423	756	10 320	52 331	23 568	75 985	3 039
334	Computer & electronic product mfg.....	—	15	8	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	7	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	7	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	—	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLORADO SPRINGS, CO													
31-33	Manufacturing	—	418	101	17 439	565 887	11 638	24 621	299 414	2 600 880	1 670 836	4 204 286	365 841
323	Printing & related support activities.....	—	71	8	1 819	37 041	716	1 369	15 568	162 742	38 181	200 911	4 603
3231	Printing & related support activities.....	—	71	8	1 819	37 041	716	1 369	15 568	162 742	38 181	200 911	4 603
32311	Printing	—	65	8	1 785	36 495	690	1 336	15 160	161 527	37 981	199 498	4 499
323116	Manifold business form printing.....	—	3	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	20	7	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	6	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	62	19	2 604	68 703	2 178	4 512	48 918	145 173	91 696	235 313	11 102
3322	Cutlery & handtool mfg	—	4	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	4	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	—	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	9	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	31	5	575	15 799	466	891	11 615	29 836	18 083	48 344	D
33271	Machine shops.....	—	28	4	505	13 563	407	762	9 949	26 253	17 063	43 593	D
332710	Machine shops.....	—	28	4	505	13 563	407	762	9 949	26 253	17 063	43 593	D
333	Machinery mfg	1	24	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	61	26	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	14	3	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	14	3	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	29	17	i	D	D	D	D	D	D	D	287 555
33441	Semiconductor & other electronic component mfg	—	29	17	i	D	D	D	D	D	D	D	287 555
334413	Semiconductor & related device mfg ...	—	14	7	3 615	155 115	2 840	7 148	101 912	659 465	302 680	941 302	243 827
334418	Printed circuit assembly (electronic assembly) mfg	—	3	3	1 122	22 002	823	1 571	10 708	87 701	164 840	227 416	D
3345	Navigational, measuring, medical, & control instruments mfg	—	7	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	7	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	6	57	6	f	D	D	D	D	D	D	D	D
COMMERCE CITY, CO													
31-33	Manufacturing	2	97	32	2 320	80 803	1 552	3 040	47 140	273 307	785 720	1 058 647	22 498
DENVER, CO													
31-33	Manufacturing	2	976	289	26 320	816 238	18 087	35 978	456 183	2 525 048	2 281 012	4 867 831	165 058
311	Food mfg.....	2	97	37	4 321	126 961	3 108	5 904	79 285	695 018	604 009	1 303 451	50 394
3115	Dairy product mfg	4	7	5	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	3	17	11	1 020	26 640	747	1 634	15 890	164 009	203 942	371 832	3 806
31161	Animal slaughtering & processing.....	3	17	11	1 020	26 640	747	1 634	15 890	164 009	203 942	371 832	3 806
311611	Animal (except poultry) slaughtering	5	5	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	41	11	1 750	51 890	1 347	2 444	37 531	223 185	111 178	336 072	9 361
31181	Bread & bakery product mfg	3	32	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	3	14	7	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	6	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	—	2	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	DENVER, CO—Con.													
31-33	Manufacturing—Con.													
312	Beverage & tobacco product mfg	5	15	9	g	D	D	D	D	D	D	D	D	
3121	Beverage mfg	5	15	9	g	D	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg	5	7	6	f	D	D	D	D	D	D	D	D	
312111	Soft drink mfg	5	4	4	f	D	D	D	D	D	D	D	D	
314	Textile product mills	5	23	5		506	9 621	401	758	5 585	18 396	27 630	46 071	1 137
315	Apparel mfg	1	30	9	f		D	D	D	D	D	D	D	
316	Leather & allied product mfg	—	7	1	g		D	D	D	D	D	D	D	
3169	Other leather & allied product mfg	—	7	1	g		D	D	D	D	D	D	D	
31699	Other leather & allied product mfg	—	7	1	g		D	D	D	D	D	D	D	
316991	Luggage mfg	—	7	1	g		D	D	D	D	D	D	D	
322	Paper mfg	3	20	12		1 298	46 807	970	2 030	27 423	114 866	136 204	249 538	10 667
3222	Converted paper product mfg	3	20	12		1 298	46 807	970	2 030	27 423	114 866	136 204	249 538	10 667
32221	Paperboard container mfg	3	13	11		1 002	37 799	753	1 573	21 754	91 929	119 497	210 816	7 155
322211	Corrugated & solid fiber box mfg	5	6	6	f		D	D	D	D	D	D	D	
323	Printing & related support activities	3	220	47		3 728	119 721	2 621	5 057	70 368	242 234	159 511	400 880	16 813
3231	Printing & related support activities	3	220	47		3 728	119 721	2 621	5 057	70 368	242 234	159 511	400 880	16 813
32311	Printing	3	181	40		3 342	108 897	2 343	4 613	63 349	219 886	154 970	373 872	15 888
323110	Commercial lithographic printing	3	92	28		2 421	82 891	1 672	3 391	47 569	169 889	108 525	277 610	13 447
325	Chemical mfg	2	40	12		834	31 599	459	964	13 319	163 050	76 172	234 868	4 772
326	Plastics & rubber products mfg	3	43	18		948	26 627	736	1 319	16 540	99 826	146 570	246 103	11 103
3261	Plastics product mfg	3	39	16		887	24 467	685	1 197	14 926	95 080	142 398	237 139	10 883
327	Nonmetallic mineral product mfg	3	32	14		1 222	36 701	897	2 076	22 730	105 059	91 245	194 457	9 017
3273	Cement & concrete product mfg	5	12	6		530	17 306	436	1 110	13 410	47 057	59 729	105 989	4 171
332	Fabricated metal product mfg	1	116	38		2 476	75 342	1 744	3 463	46 039	173 358	166 306	341 553	11 835
3323	Architectural & structural metals mfg	1	30	16		1 044	31 127	708	1 385	18 524	61 462	67 353	129 126	3 498
33232	Ornamental & architectural metal products mfg	—	22	12		843	23 560	556	1 078	14 027	50 984	42 549	94 077	1 946
333	Machinery mfg	—	55	17		1 846	63 654	880	1 774	25 933	107 296	123 994	233 470	D
3339	Other general-purpose machinery mfg	—	22	9		1 107	41 358	405	870	12 693	55 078	82 087	135 438	1 847
33392	Material handling equipment mfg	—	9	7		919	34 406	309	691	9 416	37 568	73 747	109 760	1 335
333922	Conveyor & conveying equipment mfg	—	7	6	f		D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	26	7	f		D	D	D	D	D	D	D	7 584
337	Furniture & related product mfg	1	63	21		1 955	47 199	1 662	3 326	33 120	90 291	88 452	176 661	3 074
3371	Household & institutional furniture & kitchen cabinet mfg	1	41	11	g		D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	19	6		1 089	22 561	1 009	2 097	18 589	37 447	49 154	84 472	1 220
337122	Nonupholstered wood household furniture mfg	—	10	3	f		D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	108	19		2 004	56 521	1 369	2 545	32 699	134 237	63 751	195 185	5 215
3391	Medical equipment & supplies mfg	3	40	4		534	14 714	349	598	7 722	29 624	11 394	41 038	1 260
33911	Medical equipment & supplies mfg	3	40	4		534	14 714	349	598	7 722	29 624	11 394	41 038	1 260
3399	Other miscellaneous mfg	2	68	15		1 470	41 807	1 020	1 947	24 977	104 613	52 357	154 147	3 955

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ENGLEWOOD, CO													
31-33	Manufacturing	1	200	54	4 684	145 176	3 168	6 123	80 029	351 086	269 687	617 206	23 357
323	Printing & related support activities.....	3	34	9	775	23 325	592	1 263	15 611	48 463	29 452	77 912	3 025
3231	Printing & related support activities.....	3	34	9	775	23 325	592	1 263	15 611	48 463	29 452	77 912	3 025
32311	Printing	3	31	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	61	15	905	31 613	719	1 407	20 709	61 499	48 527	107 391	5 592
333	Machinery mfg.....	-	15	5	f	D	D	D	D	D	D	D	5 613
339	Miscellaneous mfg.....	4	28	4	f	D	D	D	D	D	D	D	D
FORT COLLINS, CO													
31-33	Manufacturing	-	124	37	8 117	351 750	3 676	7 201	116 673	1 099 468	1 175 319	2 334 607	98 730
312	Beverage & tobacco product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries	-	3	3	f	D	D	D	D	D	D	D	D
312120	Breweries	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	8	4	975	31 669	411	702	7 851	114 782	36 627	154 462	D
3261	Plastics product mfg.....	-	8	4	975	31 669	411	702	7 851	114 782	36 627	154 462	D
32619	Other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	7	4	f	D	D	D	D	D	D	D	6 559
3336	Engine, turbine, & power transmission equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	20	12	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	6	4	4 131	207 170	1 357	2 875	46 310	477 589	772 124	1 299 853	D
33441	Semiconductor & other electronic component mfg.....	-	6	4	4 131	207 170	1 357	2 875	46 310	477 589	772 124	1 299 853	D
334413	Semiconductor & related device mfg....	-	2	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
FORT MORGAN, CO													
31-33	Manufacturing	-	14	3	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
FOUNTAIN, CO													
31-33	Manufacturing	-	8	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GOLDEN, CO													
31-33	Manufacturing	1	51	11	2 131	74 624	1 690	3 232	54 475	145 997	107 273	248 617	19 300
327	Nonmetallic mineral product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	1	1	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	-	1	1	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	-	1	1	g	D	D	D	D	D	D	D	D
GRAND JUNCTION, CO													
31-33	Manufacturing	1	113	31	3 212	90 991	2 321	4 948	55 370	241 154	199 688	445 993	24 296
327	Nonmetallic mineral product mfg	-	12	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	5	3	f	D	D	D	D	D	D	D	D
GREELEY, CO													
31-33	Manufacturing	1	71	27	5 073	119 957	4 209	8 289	89 210	376 315	1 555 449	1 926 515	31 162
311	Food mfg	1	12	10	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	6	6	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	6	6	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	1	4	4	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	11	4	f	D	D	D	D	D	D	D	1 268
3231	Printing & related support activities	-	11	4	f	D	D	D	D	D	D	D	1 268
32311	Printing	-	10	4	f	D	D	D	D	D	D	D	D
LAKEWOOD, CO													
31-33	Manufacturing	1	125	15	1 720	72 137	1 152	2 070	28 834	278 422	91 719	359 019	11 270
334	Computer & electronic product mfg	-	9	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	3	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
LAMAR, CO													
31-33	Manufacturing	7	11	5	f	D	D	D	D	D	D	D	D
LITTLETON, CO *													
31-33	Manufacturing	1	67	13	1 860	60 010	1 328	2 639	37 870	165 055	113 709	279 005	9 860
332	Fabricated metal product mfg	-	8	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	LONGMONT, CO *												
31-33	Manufacturing	2	152	42	4 688	136 621	3 399	6 639	77 823	305 367	252 998	556 654	22 840
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	17	6	633	17 314	510	987	12 226	39 524	30 095	68 931	3 116
3261	Plastics product mfg	1	15	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	11	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	33	5	592	20 074	459	941	12 128	46 849	17 180	61 869	D
334	Computer & electronic product mfg	6	26	8	938	31 391	564	1 169	14 041	56 124	49 205	106 802	4 705
3344	Semiconductor & other electronic component mfg	7	10	3	f	D	D	D	D	D	D	D	3 103
33441	Semiconductor & other electronic component mfg	7	10	3	f	D	D	D	D	D	D	D	3 103
	LOUISVILLE, CO												
31-33	Manufacturing	-	34	15	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	3	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	2	2	h	D	D	D	D	D	D	D	D
	LOVELAND, CO												
31-33	Manufacturing	-	66	21	5 214	225 164	2 748	4 872	96 284	734 884	521 975	1 260 808	D
334	Computer & electronic product mfg	-	15	8	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	6	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	3	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	3	2	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	1	f	D	D	D	D	D	D	D	D
	MONTROSE, CO												
31-33	Manufacturing	-	43	9	1 223	24 632	950	1 956	16 975	75 089	46 984	122 179	1 409
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTHGLENN, CO *													
31-33	Manufacturing	-	42	9	616	17 430	441	875	10 532	47 252	57 950	102 757	4 309
PARKER, CO													
31-33	Manufacturing	1	15	4	505	15 727	330	573	7 707	52 424	31 034	78 269	2 548
PUEBLO, CO													
31-33	Manufacturing	-	70	20	2 818	96 239	2 188	4 877	71 166	264 716	309 340	578 445	25 917
331	Primary metal mfg	-	4	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
SHERIDAN, CO													
31-33	Manufacturing	3	58	8	608	16 596	479	895	11 404	31 807	30 528	62 650	1 615
THORNTON, CO *													
31-33	Manufacturing	-	26	6	1 587	44 503	969	1 776	19 051	122 070	155 758	279 318	8 854
334	Computer & electronic product mfg	-	5	3	f	D	D	D	D	D	D	D	D
WESTMINSTER, CO *													
31-33	Manufacturing	1	70	13	2 450	95 728	1 581	3 108	52 541	203 426	455 011	659 283	16 032
333	Machinery mfg	4	7	2	737	28 682	375	785	12 215	46 272	64 583	117 137	D
334	Computer & electronic product mfg	-	6	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
WHEAT RIDGE, CO													
31-33	Manufacturing	3	58	11	1 413	53 073	1 060	2 232	34 604	145 842	150 950	295 215	6 172

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
COLORADO		COLORADO—Con.	
Companies ¹	number.. 5 303	Quantity of electricity purchased for heat and power	1,000 kWh.. 5 742 680
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
All establishments	number.. 5 480	Total value of shipments	\$1,000.. 40 012 820
Establishments with 1 to 19 employees	number.. 4 216	Value of resales	\$1,000.. 1 535 182
Establishments with 20 to 99 employees	number.. 973	Value added	\$1,000.. 20 673 048
Establishments with 100 employees or more	number.. 291	Total inventories, beginning of year	\$1,000.. 4 144 109
All employees	number.. 173 069	Finished goods inventories, beginning of year	\$1,000.. 1 177 652
Total compensation ²	\$1,000.. 7 668 063	Work-in-process inventories, beginning of year	\$1,000.. 1 380 547
Annual payroll	\$1,000.. 6 176 805	Materials and supplies inventories, beginning of year	\$1,000.. 1 585 910
Total fringe benefits	\$1,000.. 1 491 258	Total inventories, end of year	\$1,000.. 4 287 986
Production workers, average for year	number.. 115 308	Finished goods inventories, end of year	\$1,000.. 1 177 497
Production workers on March 12	number.. 113 919	Work-in-process inventories, end of year	\$1,000.. 1 452 155
Production workers on May 12	number.. 114 975	Materials and supplies inventories, end of year	\$1,000.. 1 658 334
Production workers on August 12	number.. 116 410	Gross book value of total assets at beginning of year	\$1,000.. 11 316 042
Production workers on November 12	number.. 115 928	Total capital expenditures (new and used)	\$1,000.. 1 659 521
Production-worker hours	1,000.. 226 791	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 348 413
Production-worker wages	\$1,000.. 3 177 698	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 311 108
Total cost of materials	\$1,000.. 19 409 251	Total retirements ²	\$1,000.. 481 479
Cost of materials, parts, containers, etc., consumed	\$1,000.. 16 117 147	Gross book value of total assets at end of year	\$1,000.. 12 494 084
Cost of resales	\$1,000.. 1 077 512	Total depreciation during year ²	\$1,000.. 1 091 646
Cost of fuels	\$1,000.. 131 597	Total rental payments ²	\$1,000.. 417 882
Cost of purchased electricity	\$1,000.. 254 176	Buildings and other structures rental payments ²	\$1,000.. 169 304
Cost of contract work	\$1,000.. 1 828 819	Machinery and equipment rental payments ²	\$1,000.. 248 578

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

COLORADO

Arvada is in Adams and Jefferson Counties.

Aurora is in Adams, Arapahoe, and Douglas Counties.

Berthoud is in Larimer and Weld Counties; it annexed into Weld County in December 1996.

Brighton is in Adams and Weld Counties.

Broomfield is in Adams, Boulder, Jefferson, and Weld Counties.

Littleton is in Arapahoe, Douglas, and Jefferson Counties.

Longmont is in Boulder and Weld Counties.

Northglenn is in Adams and Weld Counties.

Superior is in Boulder and Jefferson Counties.

Thornton is in Adams and Weld Counties.

Westminster is in Adams and Jefferson Counties.

Windsor is in Larimer and Weld Counties; it annexed into Larimer County in November 1994.

Appendix E. Metropolitan Areas

COLORADO

Boulder—Longmont, CO PMSA

Boulder County, CO

Colorado Springs, CO MSA

El Paso County, CO

Denver, CO PMSA

Adams County, CO

Arapahoe County, CO

Denver County, CO

Douglas County, CO

Jefferson County, CO

Denver—Boulder—Greeley, CO CMSA

Boulder—Longmont, CO PMSA

Boulder County, CO

Denver—Boulder—Greeley, CO CMSA—Con.

Denver, CO PMSA

Adams County, CO

Arapahoe County, CO

Denver County, CO

Douglas County, CO

Jefferson County, CO

Greeley, CO PMSA

Weld County, CO

Fort Collins—Loveland, CO MSA

Larimer County, CO

Grand Junction, CO MSA

Mesa County, CO

Greeley, CO PMSA

Weld County, CO

Pueblo, CO MSA

Pueblo County, CO

Connecticut

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CONNECTICUT													
31-33	Manufacturing	1	5 844	1 926	252 330	10 452 076	153 045	317 515	4 895 335	27 295 212	19 867 018	46 938 210	1 864 217
311	Food mfg	1	315	74	8 068	238 375	5 660	10 903	138 168	924 334	944 677	1 858 000	56 843
3111	Animal food mfg	4	7	3	287	10 191	156	355	4 598	26 399	85 670	110 914	978
31111	Animal food mfg	4	7	3	287	10 191	156	355	4 598	26 399	85 670	110 914	978
311119	Other animal food mfg	4	5	3	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	13	5	726	18 598	614	1 140	14 327	138 989	81 757	213 963	D
31133	Confectionery mfg from purchased chocolate	-	8	3	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	8	3	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	4	2	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	4	2	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	11	5	338	9 582	265	556	5 739	29 385	46 028	75 403	D
31141	Frozen food mfg	1	6	2	113	3 101	96	210	1 904	7 049	8 842	15 891	D
311412	Frozen specialty food mfg	1	6	2	113	3 101	96	210	1 904	7 049	8 842	15 891	D
31142	Fruit & vegetable canning, pickling, & drying	1	5	3	225	6 481	169	346	3 835	22 336	37 186	59 512	D
311421	Fruit & vegetable canning	1	4	3	c	D	D	D	D	D	D	D	660
3115	Dairy product mfg	1	30	10	1 045	36 032	603	1 315	18 012	85 682	259 810	345 756	9 433
31151	Dairy product (except frozen) mfg	1	14	7	703	24 998	327	788	9 994	43 057	185 819	229 685	6 055
311511	Fluid milk mfg	-	7	4	510	19 348	182	428	5 834	39 931	128 309	168 084	4 603
311513	Cheese mfg	9	4	2	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	16	3	342	11 034	276	527	8 018	42 625	73 991	116 071	3 378
311520	Ice cream & frozen dessert mfg	-	16	3	342	11 034	276	527	8 018	42 625	73 991	116 071	3 378
3116	Meat product mfg	1	30	11	866	24 774	609	1 331	14 163	67 575	123 767	183 936	3 330
31161	Animal slaughtering & processing	1	30	11	866	24 774	609	1 331	14 163	67 575	123 767	183 936	3 330
311612	Meat processed from carcasses	1	21	9	746	21 836	507	1 073	11 762	65 940	105 868	164 083	2 450
3117	Seafood product preparation & packaging	1	4	1	c	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	1	4	1	c	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing	1	3	1	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	192	31	3 248	91 240	2 164	4 009	53 982	332 665	161 980	498 295	13 126
31181	Bread & bakery product mfg	1	184	29	3 147	87 210	2 097	3 876	52 160	314 362	139 520	455 218	11 953
311811	Retail bakeries	4	134	13	959	13 752	541	751	7 101	29 213	18 507	47 742	1 591
311812	Commercial bakeries	1	45	14	2 064	70 569	1 458	2 959	43 414	277 347	116 057	394 562	10 075
311813	Frozen cakes, pies, & other pastries mfg	2	5	2	124	2 889	98	166	1 645	7 802	4 956	12 914	287
31182	Cookie, cracker, & pasta mfg	9	8	2	101	4 030	67	133	1 822	18 303	22 460	43 077	1 173
3119	Other food mfg	-	27	8	1 422	45 365	1 154	2 072	25 991	237 410	176 009	413 846	7 809
31191	Snack food mfg	-	4	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	4	2	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	3	6	3	c	D	D	D	D	D	D	D	2 149
311920	Coffee & tea mfg	3	6	3	c	D	D	D	D	D	D	D	2 149
31199	All other food mfg	-	10	3	280	10 075	204	427	6 562	42 129	52 559	94 755	3 344
311999	All other miscellaneous food mfg	-	6	2	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	24	5	363	11 992	215	403	5 942	86 504	98 426	182 953	3 833
3121	Beverage mfg	1	23	4	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	14	4	e	D	D	D	D	D	D	D	3 439
312111	Soft drink mfg	1	10	4	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33 Manufacturing—Con.													
313	Textile mills	2	56	26	3 807	123 996	2 995	6 499	76 757	305 443	351 445	659 303	24 159
3131	Fiber, yarn, & thread mills .	5	5	3	574	12 887	539	1 159	10 712	22 675	41 583	64 000	D
31311	Fiber, yarn, & thread mills	5	5	3	574	12 887	539	1 159	10 712	22 675	41 583	64 000	D
313113	Thread mills	5	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	27	9	1 322	49 351	983	2 223	31 442	115 888	138 474	257 299	15 798
31321	Broadwoven fabric mills .	1	13	3	481	14 655	433	888	11 600	28 304	25 814	58 124	D
313210	Broadwoven fabric mills	1	13	3	481	14 655	433	888	11 600	28 304	25 814	58 124	D
31322	Narrow fabric mills & schiffli machine embroidery	1	7	1	187	5 287	126	305	2 561	8 187	6 409	14 536	411
313221	Narrow fabric mills	1	5	1	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	—	4	2	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	4	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	3	24	14	1 911	61 758	1 473	3 117	34 603	166 880	171 388	338 004	D
31331	Textile & fabric finishing mills	5	15	8	1 382	39 171	1 105	2 295	25 239	119 821	107 309	228 077	6 122
313311	Broadwoven fabric finishing mills	—	9	5	559	18 557	406	881	10 567	71 288	52 934	125 050	D
313312	Textile & fabric finishing mills	9	6	3	823	20 614	699	1 414	14 672	48 533	54 375	103 027	D
31332	Fabric coating mills	—	9	6	529	22 587	368	822	9 364	47 059	64 079	109 927	D
313320	Fabric coating mills ...	—	9	6	529	22 587	368	822	9 364	47 059	64 079	109 927	D
314	Textile product mills.....	1	91	17	1 756	45 089	1 314	2 523	24 868	87 365	79 829	168 769	2 979
3141	Textile furnishings mills....	—	36	7	583	9 948	488	903	6 659	17 370	18 344	36 166	828
31412	Curtain & linen mills.....	—	33	7	571	9 797	477	889	6 535	17 085	17 897	35 433	810
314121	Curtain & drapery mills	—	29	5	374	6 400	295	534	4 024	11 767	13 292	25 446	523
314129	Other household textile product mills	—	4	2	197	3 397	182	355	2 511	5 318	4 605	9 987	287
3149	Other textile product mills...	2	55	10	1 173	35 141	826	1 620	18 209	69 995	61 485	132 603	2 151
31491	Textile bag & canvas mills	—	31	4	550	15 293	329	638	7 491	33 999	23 486	57 438	964
314912	Canvas & related product mills	—	28	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	3	24	6	623	19 848	497	982	10 718	35 996	37 999	75 165	1 187
314999	All other miscellaneous textile product mills ..	2	21	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	73	22	2 040	45 090	1 642	3 190	28 299	187 857	175 158	356 397	D
3151	Apparel knitting mills	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
31519	Other apparel knitting mills	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
315191	Outerwear knitting mills	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
3152	Cut & sew apparel mfg	1	41	15	1 202	26 655	945	1 799	14 674	121 468	102 402	219 236	1 909
31521	Cut & sew apparel contractors	7	21	6	379	6 481	340	721	5 465	9 565	2 822	12 284	285
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	19	6	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	—	4	1	c	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	—	3	1	146	1 428	137	162	1 031	4 806	1 437	5 898	D
31523	Women's & girls' cut & sew apparel mfg	—	11	7	613	17 516	412	782	7 318	104 512	95 363	195 685	1 493
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	—	3	3	c	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	7	2	2	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	4	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	28	6	725	15 712	589	1 195	11 297	56 898	63 679	118 594	450
31599	Apparel accessories & other apparel mfg	—	28	6	725	15 712	589	1 195	11 297	56 898	63 679	118 594	450
315999	Other apparel accessories & other apparel mfg	—	21	4	662	14 484	535	1 100	10 473	54 312	62 122	114 391	378
316	Leather & allied product mfg .	—	9	3	274	17 364	128	472	2 896	43 211	31 603	76 318	D
3169	Other leather & allied product mfg.....	—	4	2	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg.....	—	4	2	c	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	—	3	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
321	Wood product mfg	2	115	21	1 500	46 141	1 141	2 412	29 502	94 418	96 586	191 055	4 894
3211	Sawmills & wood preservation	1	17	3	215	5 958	162	346	4 409	19 274	9 805	28 857	1 082
32111	Sawmills & wood preservation	1	17	3	215	5 958	162	346	4 409	19 274	9 805	28 857	1 082
321113	Sawmills	1	16	2	c	D	D	D	D	D	D	D	D
3219	Other wood product mfg	2	94	17	1 186	37 392	907	1 903	23 439	69 444	80 264	149 900	3 439
32191	Millwork	2	50	9	631	22 215	451	960	12 204	41 522	42 327	84 276	1 936
321911	Wood window & door mfg	3	17	3	240	8 176	145	312	3 877	19 325	20 744	40 221	834
321912	Cut stock, resawing lumber, & planing	—	6	1	107	4 309	93	186	2 241	6 473	4 978	11 458	586
321918	Other millwork (including flooring)	1	27	5	284	9 730	213	462	6 086	15 724	16 605	32 597	516
32192	Wood container & pallet mfg	4	24	5	284	7 495	244	521	5 274	14 805	16 130	30 771	1 049
321920	Wood container & pallet mfg	4	24	5	284	7 495	244	521	5 274	14 805	16 130	30 771	1 049
32199	All other wood product mfg	1	20	3	271	7 682	212	422	5 961	13 117	21 807	34 853	454
321999	All other miscellaneous wood product mfg	1	11	2	197	5 663	168	333	4 607	8 151	16 809	24 873	215
322	Paper mfg	—	90	61	6 069	238 369	4 660	9 904	158 381	1 005 167	835 839	1 839 441	35 339
3221	Pulp, paper, & paperboard mills	—	8	8	1 842	86 839	1 513	3 379	69 582	673 325	442 166	1 113 574	18 631
32212	Paper mills	—	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	3	3	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	2	5	5	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	2	5	5	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	82	53	4 227	151 530	3 147	6 525	88 799	331 842	393 673	725 867	16 708
32221	Paperboard container mfg	—	45	34	2 820	101 349	2 116	4 341	61 234	200 859	266 727	468 401	11 856
322211	Corrugated & solid fiber box mfg	—	26	20	1 706	64 228	1 257	2 703	36 114	136 980	184 037	321 303	8 293
322212	Folding paperboard box mfg	1	14	11	762	26 546	591	1 079	18 189	50 328	44 771	97 088	2 930
322215	Nonfolding sanitary food container mfg	—	2	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	11	7	625	25 982	422	903	12 459	63 645	62 337	125 063	2 368
322222	Coated & laminated paper mfg	—	8	5	e	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	7	2	234	8 271	181	450	5 856	24 748	24 675	49 680	979
322232	Envelope mfg	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	19	10	548	15 928	428	831	9 250	42 590	39 934	82 723	1 505
322299	All other converted paper product mfg	—	17	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	678	155	13 364	487 480	9 616	19 409	298 890	1 035 455	687 472	1 719 840	67 327
3231	Printing & related support activities	2	678	155	13 364	487 480	9 616	19 409	298 890	1 035 455	687 472	1 719 840	67 327
32311	Printing	2	601	129	11 902	427 018	8 557	17 258	259 024	910 492	658 271	1 565 923	57 277
323110	Commercial lithographic printing	2	315	84	7 847	292 126	5 549	11 255	178 574	572 914	459 480	1 031 093	34 354
323111	Commercial gravure printing	9	8	4	150	5 594	125	236	4 339	14 444	15 526	29 915	2 362
323112	Commercial flexographic printing	1	17	7	378	13 303	245	528	7 275	27 192	21 554	48 764	2 187
323113	Commercial screen printing	1	45	6	620	19 075	480	948	11 850	47 866	19 681	67 436	3 709
323114	Quick printing	1	132	6	1 195	38 232	899	1 788	24 727	74 457	42 728	117 222	5 272
323116	Manifold business form printing	4	12	7	424	14 091	368	822	10 650	50 996	34 399	85 381	4 819
323118	Blankbook, looseleaf binder, & device mfg	—	4	4	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	4	51	9	868	26 380	531	985	13 836	65 156	38 487	103 865	3 216
32312	Support activities for printing	3	77	26	1 462	60 462	1 059	2 151	39 866	124 963	29 201	153 917	10 050
323121	Tradebinding & related work	1	14	5	230	6 338	205	395	4 737	11 952	1 634	13 551	475
323122	Prepress services	4	63	21	1 232	54 124	854	1 756	35 129	113 011	27 567	140 366	9 575

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	1	39	6	426	20 993	302	650	13 924	81 190	151 576	233 226	4 917
3241	Petroleum & coal products mfg	1	39	6	426	20 993	302	650	13 924	81 190	151 576	233 226	4 917
32412	Asphalt paving, roofing, & saturated materials mfg	1	32	5	354	17 178	274	602	13 084	71 675	140 909	213 084	4 404
324121	Asphalt paving mixture & block mfg	1	31	4	e	D	D	D	D	D	D	D	4 404
325	Chemical mfg	1	166	77	17 011	1 043 788	4 773	10 149	187 460	3 443 516	2 183 278	5 583 542	366 690
3251	Basic chemical mfg	1	23	11	1 036	51 641	471	1 072	26 693	150 900	191 949	349 524	12 920
32512	Industrial gas mfg	1	7	1	102	4 211	45	69	1 695	27 619	12 545	40 140	D
325120	Industrial gas mfg	1	7	1	102	4 211	45	69	1 695	27 619	12 545	40 140	D
32518	Other basic inorganic chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	12	7	497	28 380	294	711	16 172	85 087	160 382	251 694	7 536
325199	All other basic organic chemical mfg	1	10	6	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	4	10	8	515	27 112	336	737	15 935	159 320	321 351	484 308	19 121
32521	Resin & synthetic rubber mfg	4	9	7	e	D	D	D	D	D	D	D	19 121
325211	Plastics material & resin mfg	5	7	6	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	17	8	9 338	717 366	1 027	2 255	48 694	1 646 808	713 588	2 370 799	269 240
32541	Pharmaceutical & medicine mfg	—	17	8	9 338	717 366	1 027	2 255	48 694	1 646 808	713 588	2 370 799	269 240
325411	Medicinal & botanical mfg	—	3	1	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	13	7	i	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	28	12	1 377	47 321	749	1 499	17 359	135 581	197 616	335 176	9 114
32551	Paint & coating mfg	4	17	6	533	22 397	265	527	7 727	73 233	88 096	162 710	3 286
325510	Paint & coating mfg	4	17	6	533	22 397	265	527	7 727	73 233	88 096	162 710	3 286
32552	Adhesive mfg	—	11	6	844	24 924	484	972	9 632	62 348	109 520	172 466	5 828
325520	Adhesive mfg	—	11	6	844	24 924	484	972	9 632	62 348	109 520	172 466	5 828
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	38	21	2 633	113 510	1 174	2 577	45 827	1 090 050	460 515	1 484 937	43 227
32561	Soap & cleaning compound mfg	1	22	10	503	18 496	227	488	6 695	52 552	45 643	98 090	3 351
325611	Soap & other detergent mfg	2	9	5	241	8 801	130	292	3 509	23 497	20 097	43 387	D
325612	Polish & other sanitation good mfg ..	—	11	4	c	D	D	D	D	D	D	D	1 446
32562	Toilet preparation mfg ..	—	16	11	2 130	95 014	947	2 089	39 132	1 037 498	414 872	1 386 847	39 876
325620	Toilet preparation mfg ..	—	16	11	2 130	95 014	947	2 089	39 132	1 037 498	414 872	1 386 847	39 876
3259	Other chemical product mfg	2	45	15	2 023	84 055	957	1 873	31 476	254 616	280 057	534 274	12 867
32591	Printing ink mfg	5	6	4	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	5	6	4	e	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	2	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	2	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	37	10	1 074	43 340	445	867	13 577	185 641	196 671	383 860	10 765
325991	Custom compounding of purchased resin ...	2	17	4	439	17 548	165	321	5 151	122 926	124 348	247 654	2 962
325992	Photographic film, paper, plate, & chemical mfg	1	4	2	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	3	16	4	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	257	122	11 088	356 742	7 939	16 960	213 625	870 413	711 845	1 574 646	78 153
3261	Plastics product mfg	1	218	102	9 405	298 551	6 683	14 325	178 183	730 399	610 791	1 333 594	68 217
32611	Unsupported plastics film, sheet, & bag mfg	—	26	13	1 213	50 145	880	2 148	32 282	169 340	161 272	328 780	15 853
326111	Unsupported plastics bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	21	10	956	41 810	682	1 687	25 969	149 100	138 094	285 183	14 483
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	14	5	267	11 503	205	411	5 204	30 187	34 145	63 523	1 630
326121	Unsupported plastics profile shape mfg	2	13	5	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	5	11	2	202	5 186	146	295	2 603	15 030	7 891	22 912	292
326130	Laminated plastics plate, sheet, & shape mfg	5	11	2	202	5 186	146	295	2 603	15 030	7 891	22 912	292
32614	Polystyrene foam product mfg	—	5	3	111	4 412	77	169	1 753	12 618	14 515	27 181	686
326140	Polystyrene foam product mfg	—	5	3	111	4 412	77	169	1 753	12 618	14 515	27 181	686
32615	Urethane & other foam product (except polystyrene) mfg	3	9	7	287	10 149	231	459	6 129	27 590	39 504	67 588	3 177
326150	Urethane & other foam product (except polystyrene) mfg	3	9	7	287	10 149	231	459	6 129	27 590	39 504	67 588	3 177
32616	Plastics bottle mfg	1	7	4	468	13 539	395	810	9 795	33 486	33 849	66 902	3 045
326160	Plastics bottle mfg	1	7	4	468	13 539	395	810	9 795	33 486	33 849	66 902	3 045
32619	Other plastics product mfg	2	146	68	6 857	203 617	4 749	10 033	120 417	442 148	319 615	756 708	43 534
326191	Plastics plumbing fixture mfg	—	3	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	143	67	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg	2	39	20	1 683	58 191	1 256	2 635	35 442	140 014	101 054	241 052	9 936
32622	Rubber & plastics hoses & belting mfg	9	2	1	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	9	2	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	32	18	1 449	50 619	1 082	2 254	30 342	118 972	81 805	200 992	8 272
326291	Rubber product mfg for mechanical use	—	15	8	681	25 127	521	1 098	16 003	51 610	38 573	90 552	3 317
326299	All other rubber product mfg	1	17	10	768	25 492	561	1 156	14 339	67 362	43 232	110 440	4 955
327	Nonmetallic mineral product mfg	1	147	41	2 821	102 524	2 019	4 306	63 427	270 534	229 614	506 433	18 503
3271	Clay product & refractory mfg	—	11	4	e	D	D	D	D	D	D	D	1 549
32712	Clay building material & refractories mfg	—	4	3	230	11 412	175	367	7 202	27 702	15 952	44 132	1 512
327125	Nonclay refractory mfg	—	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	2	26	6	410	12 579	273	507	8 274	29 787	20 998	59 048	1 826
32721	Glass & glass product mfg	2	26	6	410	12 579	273	507	8 274	29 787	20 998	59 048	1 826
327213	Glass container mfg	—	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	3	21	5	e	D	D	D	D	D	D	D	1 740
3273	Cement & concrete product mfg	1	75	20	1 372	52 297	972	2 239	33 077	128 547	127 717	255 439	10 291
32732	Ready-mix concrete mfg	1	36	8	544	21 249	393	935	14 763	60 125	76 335	137 000	6 408
327320	Ready-mix concrete mfg	1	36	8	544	21 249	393	935	14 763	60 125	76 335	137 000	6 408
32733	Concrete pipe, brick, & block mfg	1	10	2	c	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	—	4	2	113	4 123	84	207	2 893	9 039	6 926	15 870	D
32739	Other concrete product mfg	1	27	10	640	23 721	447	989	13 469	50 975	36 466	86 078	2 786
327390	Other concrete product mfg	1	27	10	640	23 721	447	989	13 469	50 975	36 466	86 078	2 786
3279	Other nonmetallic mineral product mfg	1	31	10	638	20 937	474	939	11 125	70 923	51 989	120 894	4 812
32791	Abrasive product mfg	—	11	5	432	14 701	326	677	7 049	46 939	32 375	76 943	3 686
327910	Abrasive product mfg	—	11	5	432	14 701	326	677	7 049	46 939	32 375	76 943	3 686
32799	All other nonmetallic mineral product mfg	3	20	5	206	6 236	148	262	4 076	23 984	19 614	43 951	1 126

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	94	54	6 146	251 147	4 704	10 260	166 804	653 513	932 475	1 572 716	38 685
3311	Iron & steel mills & ferroalloy mfg	—	3	1	c	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	1	c	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	25	13	1 588	68 160	1 261	2 729	49 653	206 503	283 505	483 467	7 233
33122	Rolling & drawing of purchased steel	—	25	13	1 588	68 160	1 261	2 729	49 653	206 503	283 505	483 467	7 233
331221	Cold-rolled steel shape mfg	—	12	6	1 014	47 959	780	1 620	33 672	153 360	189 323	337 342	2 980
331222	Steel wire drawing	—	13	7	574	20 201	481	1 109	15 981	53 143	94 182	146 125	4 253
3313	Alumina & aluminum production & processing	—	5	5	500	22 682	352	786	12 290	41 597	86 639	127 663	2 909
33131	Alumina & aluminum production & processing	—	5	5	500	22 682	352	786	12 290	41 597	86 639	127 663	2 909
331315	Aluminum sheet, plate, & foil mfg	—	4	4	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	31	19	2 310	106 044	1 649	3 814	65 828	277 532	442 027	716 148	23 076
33142	Copper rolling, drawing, extruding, & alloying	—	10	9	1 298	55 209	982	2 265	39 628	155 046	228 427	382 262	16 503
331421	Copper rolling, drawing, & extruding	—	7	7	g	D	D	D	D	D	D	D	15 655
331422	Copper wire (except mechanical) drawing	—	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	1	19	10	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	1	14	9	937	47 565	626	1 465	24 829	112 785	207 350	317 816	6 278
3315	Foundries	—	30	16	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	3	855	25 263	727	1 417	18 437	51 790	26 656	77 752	D
331511	Iron foundries	—	3	1	c	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	25	13	f	D	D	D	D	D	D	D	2 114
331522	Nonferrous (except aluminum) die-casting foundries	—	12	7	414	11 530	322	650	8 068	20 398	15 300	35 778	1 099
331524	Aluminum foundries (except die-casting)	—	8	4	c	D	D	D	D	D	D	D	838
332	Fabricated metal product mfg	—	1 521	476	44 290	1 675 304	32 228	68 495	1 014 565	3 662 158	2 166 018	5 836 823	228 130
3321	Forging & stamping	—	137	72	6 989	264 943	5 205	11 401	174 384	493 177	419 174	908 529	30 896
33211	Forging & stamping	—	137	72	6 989	264 943	5 205	11 401	174 384	493 177	419 174	908 529	30 896
332111	Iron & steel forging	4	3	3	448	15 973	363	804	11 593	30 193	24 788	55 069	2 649
332112	Nonferrous forging	—	2	2	c	D	D	D	D	D	D	D	D
332114	Custom roll forming	1	6	2	c	D	D	D	D	D	D	D	D
332115	Crown & closure mfg	1	8	4	527	18 226	447	985	13 265	44 577	54 383	99 062	2 523
332116	Metal stamping	—	111	55	4 691	181 382	3 709	8 275	124 757	364 476	301 213	660 872	23 336
332117	Powder metallurgy part mfg	—	7	6	1 024	38 131	473	869	18 169	28 680	22 216	52 361	1 475
3322	Cutlery & handtool mfg	—	51	19	2 905	121 014	2 051	4 153	67 889	457 915	154 168	603 398	23 092
33221	Cutlery & handtool mfg	—	51	19	2 905	121 014	2 051	4 153	67 889	457 915	154 168	603 398	23 092
332211	Cutlery & flatware (except precious) mfg	—	8	4	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	35	13	1 672	68 249	1 144	2 305	37 869	219 414	96 982	312 463	5 525
332213	Saw blade & handsaw mfg	—	4	1	c	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	4	1	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	184	49	3 431	121 445	2 339	4 745	68 921	246 478	213 852	459 005	12 824
33231	Plate work & fabricated structural product mfg	1	61	14	1 064	35 634	809	1 491	22 471	77 936	74 454	152 849	3 476
332311	Prefabricated metal building & component mfg	—	9	2	257	5 225	229	369	4 375	11 192	15 440	26 468	170
332312	Fabricated structural metal mfg	1	32	6	533	20 400	384	775	12 755	48 474	43 914	93 004	1 903
332313	Plate work mfg	1	20	6	274	10 009	196	347	5 341	18 270	15 100	33 377	1 403

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg—Con.												
33232	Ornamental & architectural metal products mfg.....	2	123	35	2 367	85 811	1 530	3 254	46 450	168 542	139 398	306 156	9 348
332321	Metal window & door mfg.....	—	11	4	632	18 842	333	777	8 842	42 870	38 083	81 403	949
332322	Sheet metal work mfg.	3	84	24	1 284	49 747	905	1 843	28 624	88 681	67 347	154 553	6 532
332323	Ornamental & architectural metal work mfg.....	—	28	7	451	17 222	292	634	8 984	36 991	33 968	70 200	1 867
3324	Boiler, tank, & shipping container mfg.....	—	22	10	1 112	48 593	603	1 167	14 129	114 256	65 020	177 710	4 620
33241	Power boiler & heat exchanger mfg.....	—	7	5	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg.....	—	7	5	c	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	1	10	4	399	11 482	301	588	7 142	32 138	23 278	55 042	3 011
332439	Other metal container mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
33251	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
332510	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
3326	Spring & wire product mfg.	—	68	34	2 198	83 068	1 702	3 682	54 814	166 729	101 573	267 446	12 816
33261	Spring & wire product mfg.....	—	68	34	2 198	83 068	1 702	3 682	54 814	166 729	101 573	267 446	12 816
332611	Spring (heavy gauge) mfg.....	—	7	5	342	14 806	259	523	10 747	35 243	19 024	54 561	D
332612	Spring (light gauge) mfg.....	1	29	17	1 123	42 641	887	1 933	27 391	63 268	46 175	109 135	6 289
332618	Other fabricated wire product mfg.....	—	32	12	733	25 621	556	1 226	16 676	68 218	36 374	103 750	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	705	146	11 645	453 788	8 648	18 098	279 212	827 270	453 270	1 284 225	64 379
33271	Machine shops.....	1	509	74	6 097	233 721	4 544	9 146	150 397	414 195	201 241	612 746	27 122
332710	Machine shops.....	1	509	74	6 097	233 721	4 544	9 146	150 397	414 195	201 241	612 746	27 122
33272	Turned product & screw, nut, & bolt mfg.....	—	196	72	5 548	220 067	4 104	8 952	128 815	413 075	252 029	671 479	37 257
332721	Precision turned product mfg.....	—	158	52	3 723	136 557	2 831	6 026	87 939	241 083	120 850	365 878	22 905
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	38	20	1 825	83 510	1 273	2 926	40 876	171 992	131 179	305 601	14 352
3328	Coating, engraving, heat treating, & allied activities.	1	174	66	4 744	166 728	3 562	7 776	100 811	366 519	171 478	544 380	29 711
33281	Coating, engraving, heat treating, & allied activities.....	1	174	66	4 744	166 728	3 562	7 776	100 811	366 519	171 478	544 380	29 711
332811	Metal heat treating....	1	28	9	597	22 393	466	980	13 071	48 528	27 388	78 066	3 512
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	53	16	1 199	41 235	906	1 949	25 472	101 726	31 229	132 997	12 043
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	93	41	2 948	103 100	2 190	4 847	62 268	216 265	112 861	333 317	14 156
3329	Other fabricated metal product mfg.....	—	140	61	8 044	294 533	5 599	12 192	172 344	677 911	398 905	1 086 077	36 578
33291	Metal valve mfg.....	—	30	22	2 662	94 051	1 723	3 778	48 045	230 650	157 790	393 280	10 961
332911	Industrial valve mfg....	—	10	7	842	26 829	543	1 099	13 079	76 055	61 654	136 667	2 890
332912	Fluid power valve & hose fitting mfg.....	—	11	8	963	39 987	579	1 306	20 590	95 576	42 814	143 084	5 129
332913	Plumbing fixture fitting & trim mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	110	39	5 382	200 482	3 876	8 414	124 299	447 261	241 115	692 797	25 617
332991	Ball & roller bearing mfg.....	1	17	10	1 679	70 531	1 227	3 082	46 201	166 715	61 417	226 750	9 523
332994	Small arms mfg.....	—	11	6	1 908	70 180	1 441	2 863	46 383	146 022	81 443	234 518	8 497
332999	All other miscellaneous fabricated metal product mfg.....	1	59	22	1 662	55 940	1 102	2 276	28 963	127 220	93 579	219 373	7 293

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	1	643	200	23 343	971 403	12 804	26 320	428 716	2 839 776	1 838 488	4 569 432	216 711
3331	Agriculture, construction, & mining machinery mfg.	2	8	2	165	6 120	99	217	2 388	14 449	12 393	26 617	320
33312	Construction machinery mfg.	1	5	1	106	4 351	49	110	1 040	10 473	6 553	16 949	178
333120	Construction machinery mfg.	1	5	1	106	4 351	49	110	1 040	10 473	6 553	16 949	178
3332	Industrial machinery mfg.	1	87	42	6 070	290 184	3 106	6 569	96 816	897 943	463 145	1 293 105	89 142
33322	Plastics & rubber industry machinery mfg.	2	13	7	776	37 277	463	969	19 444	131 716	95 238	224 860	3 241
333220	Plastics & rubber industry machinery mfg.	2	13	7	776	37 277	463	969	19 444	131 716	95 238	224 860	3 241
33329	Other industrial machinery mfg.	—	74	35	5 294	252 907	2 643	5 600	77 372	766 227	367 907	1 068 245	85 901
333291	Paper industry machinery mfg.	—	5	4	210	8 446	63	127	2 567	14 624	16 435	32 447	D
333292	Textile machinery mfg.	—	9	5	966	36 312	473	1 109	16 955	178 448	53 314	230 941	D
333293	Printing machinery & equipment mfg.	2	10	6	513	27 414	197	513	8 962	54 306	54 711	106 230	D
333294	Food product machinery mfg.	—	5	2	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.	—	3	3	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.	1	42	15	1 604	72 351	744	1 573	25 652	198 350	154 047	356 629	5 035
3333	Commercial & service industry machinery mfg.	—	45	22	3 408	109 713	1 197	2 130	33 508	766 012	535 240	1 293 675	62 873
33331	Commercial & service industry machinery mfg.	—	45	22	3 408	109 713	1 197	2 130	33 508	766 012	535 240	1 293 675	62 873
333311	Automatic vending machine mfg.	9	1	1	c	D	D	D	D	D	D	D	D
333313	Office machinery mfg.	—	14	9	2 091	53 774	518	932	11 986	614 856	450 593	1 061 890	D
333314	Optical instrument & lens mfg.	—	12	5	595	28 302	262	372	9 109	86 267	44 288	126 443	7 612
333319	Other commercial & service industry machinery mfg.	1	14	5	484	18 993	252	509	8 075	45 437	25 165	70 718	1 597
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	3	24	11	1 108	37 656	693	1 362	18 700	77 086	84 992	157 754	4 112
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	3	24	11	1 108	37 656	693	1 362	18 700	77 086	84 992	157 754	4 112
333412	Industrial & commercial fan & blower mfg.	2	3	3	122	6 003	49	110	1 500	14 526	14 788	29 427	429
333414	Heating equipment (except warm air furnaces) mfg.	4	7	3	224	8 179	114	218	3 239	21 197	10 467	31 516	572
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	3	10	4	697	21 591	477	955	12 569	38 741	58 061	92 288	3 054
3335	Metalworking machinery mfg.	1	331	71	6 695	286 062	4 216	8 437	154 166	510 095	381 969	866 838	34 058
33351	Metalworking machinery mfg.	1	331	71	6 695	286 062	4 216	8 437	154 166	510 095	381 969	866 838	34 058
333511	Industrial mold mfg.	—	46	11	642	31 902	489	1 001	21 092	51 851	16 165	64 984	3 700
333512	Machine tool (metal cutting types) mfg.	—	20	11	1 681	70 222	817	1 646	31 324	126 429	201 704	319 551	12 231
333513	Machine tool (metal forming types) mfg.	—	2	1	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg.	2	149	18	1 715	77 110	1 219	2 410	44 278	139 445	43 296	180 921	8 796
333515	Cutting tool & machine tool accessory mfg.	1	85	18	1 327	46 145	943	1 915	28 895	92 652	42 669	135 351	4 009
333516	Rolling mill machinery & equipment mfg.	1	3	3	f	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg.	2	26	9	659	34 240	428	839	17 970	58 218	36 013	96 470	2 217
3336	Engine, turbine, & power transmission equipment mfg.	—	25	13	2 751	116 951	1 747	4 097	68 034	290 807	156 749	444 452	14 344
33361	Engine, turbine, & power transmission equipment mfg.	—	25	13	2 751	116 951	1 747	4 097	68 034	290 807	156 749	444 452	14 344
333611	Turbine & turbine generator set unit mfg.	—	5	3	395	14 689	254	586	8 958	40 571	20 862	61 277	D
333613	Mechanical power transmission equipment mfg.	3	11	7	738	25 849	540	1 200	15 344	66 147	35 807	100 212	2 539
333618	Other engine equipment mfg.	—	4	3	1 575	74 974	923	2 256	42 808	180 623	98 102	277 470	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	2	123	39	3 146	124 717	1 746	3 508	55 104	283 384	204 000	486 991	11 862
33391	Pump & compressor mfg	2	11	3	194	8 196	114	246	3 793	5 918	15 550	32 228	532
333912	Air & gas compressor mfg	1	4	2	129	6 176	69	167	2 794	888	11 428	23 075	315
33392	Material handling equipment mfg	1	17	7	392	15 313	273	549	9 130	31 466	36 873	68 674	790
333923	Overhead traveling crane, hoist, & monorail system mfg.	—	5	4	204	8 372	159	341	5 507	18 008	21 939	40 161	453
33399	All other general-purpose machinery mfg	2	95	29	2 560	101 208	1 359	2 713	42 181	246 000	151 577	386 089	10 540
333991	Power-driven handtool mfg	4	9	1	166	5 120	115	180	2 505	14 593	11 828	25 977	589
333992	Welding & soldering equipment mfg	7	7	4	220	9 105	85	160	2 509	23 695	20 510	43 541	823
333993	Packaging machinery mfg	2	12	4	364	14 111	151	335	5 467	20 022	20 955	40 928	978
333999	All other miscellaneous general-purpose machinery mfg	1	53	16	1 589	65 114	869	1 756	27 425	164 625	86 627	240 478	7 449
334	Computer & electronic product mfg	1	397	182	24 195	1 003 261	12 998	26 221	414 147	2 444 996	1 762 760	4 189 498	161 346
3341	Computer & peripheral equipment mfg	2	29	10	1 089	54 331	426	812	16 922	122 506	82 597	205 491	9 297
33411	Computer & peripheral equipment mfg	2	29	10	1 089	54 331	426	812	16 922	122 506	82 597	205 491	9 297
334111	Electronic computer mfg	4	10	4	185	7 606	88	135	2 120	18 274	18 263	36 364	861
334119	Other computer peripheral equipment mfg	2	15	6	876	45 421	316	656	14 071	102 812	63 289	166 418	8 261
3342	Communications equipment mfg	1	46	25	3 952	171 177	1 764	3 494	63 853	534 347	522 253	1 047 780	43 777
33421	Telephone apparatus mfg	—	18	9	1 913	87 080	935	1 900	31 758	259 169	281 464	542 697	D
334210	Telephone apparatus mfg	—	18	9	1 913	87 080	935	1 900	31 758	259 169	281 464	542 697	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	17	12	1 369	58 757	550	1 024	26 112	182 412	158 929	329 653	16 334
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	17	12	1 369	58 757	550	1 024	26 112	182 412	158 929	329 653	16 334
33429	Other communications equipment mfg	—	11	4	670	25 340	279	570	5 983	92 766	81 860	175 430	D
334290	Other communications equipment mfg	—	11	4	670	25 340	279	570	5 983	92 766	81 860	175 430	D
3343	Audio & video equipment mfg	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
33431	Audio & video equipment mfg	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
334310	Audio & video equipment mfg	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
3344	Semiconductor & other electronic component mfg	2	145	69	7 662	258 942	5 205	10 567	136 714	590 365	395 583	975 578	54 961
33441	Semiconductor & other electronic component mfg	2	145	69	7 662	258 942	5 205	10 567	136 714	590 365	395 583	975 578	54 961
334412	Bare printed circuit board mfg	—	31	11	1 552	53 896	1 206	2 443	30 663	138 602	89 700	224 900	16 929
334413	Semiconductor & related device mfg ...	3	19	6	753	36 727	457	761	16 880	114 772	39 368	151 230	13 600
334416	Electronic coil, transformer, & other inductor mfg	2	17	8	717	15 157	526	991	8 327	28 512	16 579	45 206	1 085
334417	Electronic connector mfg	2	15	10	1 260	45 242	866	1 777	26 132	106 992	78 112	188 793	8 919
334418	Printed circuit assembly (electronic assembly) mfg	—	12	9	714	20 697	468	881	9 406	45 614	46 012	94 070	2 701
334419	Other electronic component mfg	5	39	22	2 531	84 034	1 567	3 503	43 356	149 451	122 512	261 563	11 342

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CONNECTICUT—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	161	68	10 581	477 693	4 977	10 074	173 827	1 106 329	697 201	1 806 020	41 570
33451	Navigational, measuring, medical, & control instruments mfg	—	161	68	10 581	477 693	4 977	10 074	173 827	1 106 329	697 201	1 806 020	41 570
334510	Electromedical & electrotherapeutic apparatus mfg	1	17	6	906	41 318	346	763	11 234	72 035	49 088	120 664	4 407
334511	Search, detection, navigation, & guidance instrument mfg	—	19	7	2 393	132 712	879	1 947	37 086	287 889	103 441	388 632	14 086
334512	Automatic environmental control mfg	3	7	3	c	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	41	18	3 221	125 052	1 659	3 132	56 805	230 153	176 888	406 136	8 718
334514	Totalizing fluid meter & counting device mfg	1	9	4	499	13 904	372	570	7 008	25 157	18 835	43 986	1 201
334515	Electricity measuring & testing instrument mfg	5	13	9	563	24 641	294	643	10 382	65 398	27 753	92 987	2 967
334516	Analytical laboratory instrument mfg	—	16	5	848	44 304	413	947	20 944	221 923	153 395	373 848	775
334517	Irradiation apparatus mfg	—	6	3	e	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	1	7	2	166	6 591	112	223	2 333	10 420	7 080	17 221	305
334519	Other measuring & controlling device mfg	—	26	11	1 412	63 851	656	1 336	21 035	103 313	102 449	214 905	6 040
3346	Mfg & reproducing magnetic & optical media	—	8	5	505	28 178	401	805	18 453	60 278	35 096	95 723	10 153
33461	Mfg & reproducing magnetic & optical media	—	8	5	505	28 178	401	805	18 453	60 278	35 096	95 723	10 153
334611	Software reproducing	—	2	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	2	4	3	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	215	114	14 675	538 183	8 977	17 880	252 397	1 395 185	978 650	2 374 935	97 110
3351	Electric lighting equipment mfg	1	33	15	1 493	52 717	1 058	1 923	29 889	129 957	87 940	220 302	D
33511	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	2	31	13	f	D	D	D	D	D	D	D	2 133
335121	Residential electric lighting fixture mfg	1	10	3	c	D	D	D	D	D	D	D	393
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	8	4	266	9 124	163	327	3 674	21 984	13 285	35 328	351
335129	Other lighting equipment mfg	2	13	6	484	15 866	327	718	7 635	63 475	41 498	106 433	1 389
3352	Household appliance mfg	—	7	6	793	29 575	482	878	9 768	110 403	89 687	212 103	D
33521	Small electrical appliance mfg	—	6	5	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	6	5	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	83	32	4 279	152 561	2 377	4 705	62 868	356 284	219 076	571 716	16 832
33531	Electrical equipment mfg	1	83	32	4 279	152 561	2 377	4 705	62 868	356 284	219 076	571 716	16 832
335311	Power, distribution, & specialty transformer mfg	—	6	3	294	10 805	182	389	4 805	23 734	16 182	40 230	D
335312	Motor & generator mfg	—	17	12	2 046	60 016	1 207	2 463	28 926	141 031	91 048	231 626	8 735
335313	Switchgear & switchboard apparatus mfg	—	11	3	808	40 009	396	738	13 556	88 788	39 079	123 928	D
335314	Relay & industrial control mfg	1	49	14	1 131	41 731	592	1 115	15 581	102 731	72 767	175 932	3 126
3359	Other electrical equipment & component mfg	1	92	61	8 110	303 330	5 060	10 374	149 872	798 541	581 947	1 370 814	70 481
33591	Battery mfg	5	7	5	321	10 548	171	336	4 286	22 876	17 362	40 086	1 009
335911	Storage battery mfg	5	7	5	321	10 548	171	336	4 286	22 876	17 362	40 086	1 009
33592	Communication & energy wire & cable mfg	—	15	15	2 425	89 771	1 599	3 348	45 528	204 745	231 575	424 020	41 462
335929	Other communication & energy wire mfg	—	13	13	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CONNECTICUT—Con. Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33593	Wiring device mfg	1	27	20	3 231	116 837	2 155	4 481	64 938	381 668	167 582	553 712	21 108
335931	Current-carrying wiring device mfg	—	18	14	1 198	32 412	805	1 707	21 252	131 895	54 615	181 386	4 938
335932	Noncurrent-carrying wiring device mfg	2	9	6	2 033	84 425	1 350	2 774	43 686	249 773	112 967	372 326	16 170
33599	All other electrical equipment & component mfg	1	43	21	2 133	86 174	1 135	2 209	35 120	189 252	165 428	352 996	6 902
335991	Carbon & graphite product mfg	1	7	3	166	8 374	118	267	5 453	17 592	17 104	35 196	1 916
335999	All other miscellaneous electrical equipment & component mfg	1	36	18	1 967	77 800	1 017	1 942	29 667	171 660	148 324	317 800	4 986
336	Transportation equipment mfg	—	212	116	51 330	2 571 665	25 932	55 326	1 035 870	5 337 452	4 486 840	9 810 418	297 947
3363	Motor vehicle parts mfg	—	64	31	i	D	D	D	D	D	D	D	51 575
33631	Motor vehicle gasoline engine & engine parts mfg	—	12	4	1 262	43 349	948	1 975	26 823	107 623	178 229	285 031	17 231
336312	Gasoline engine & engine parts mfg	—	12	4	1 262	43 349	948	1 975	26 823	107 623	178 229	285 031	17 231
33632	Motor vehicle electrical & electronic equipment mfg	1	16	10	2 310	73 432	1 646	3 371	44 179	188 558	103 726	292 536	11 695
336321	Vehicular lighting equipment mfg	—	4	2	f	D	D	D	D	D	D	D	1 193
336322	Other motor vehicle electrical & electronic equipment mfg	1	12	8	g	D	D	D	D	D	D	D	10 502
33634	Motor vehicle brake system mfg	—	5	3	1 014	34 610	765	1 310	18 160	72 813	132 194	202 842	8 423
336340	Motor vehicle brake system mfg	—	5	3	1 014	34 610	765	1 310	18 160	72 813	132 194	202 842	8 423
33636	Motor vehicle seating & interior trim mfg	—	4	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	4	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	4	8	5	531	21 635	371	832	8 961	39 765	35 424	75 687	3 375
336370	Motor vehicle metal stamping	4	8	5	531	21 635	371	832	8 961	39 765	35 424	75 687	3 375
33639	Other motor vehicle parts mfg	1	14	7	795	28 119	623	1 231	20 298	71 406	70 596	142 293	4 715
336399	All other motor vehicle parts mfg	2	13	6	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	117	79	35 351	1 916 844	18 401	39 325	805 571	3 891 743	3 619 018	7 487 368	235 257
33641	Aerospace product & parts mfg	—	117	79	35 351	1 916 844	18 401	39 325	805 571	3 891 743	3 619 018	7 487 368	235 257
336411	Aircraft mfg	—	8	8	j	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	55	39	15 721	908 587	8 622	18 553	357 934	1 833 883	2 361 519	4 133 065	120 546
336413	Other aircraft part & auxiliary equipment mfg	—	52	31	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	—	2	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	14	4	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	14	4	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	7	2	i	D	D	D	D	D	D	D	D
336612	Boat building	6	7	2	c	D	D	D	D	D	D	D	197
337	Furniture & related product mfg	3	246	42	3 124	92 197	2 414	4 651	58 981	185 861	139 958	327 553	9 976
3371	Household & institutional furniture & kitchen cabinet mfg	3	161	14	1 435	39 645	1 186	2 232	28 525	77 078	52 524	129 086	4 540
33711	Wood kitchen cabinet & counter top mfg	2	93	8	909	26 593	747	1 421	19 237	53 139	32 289	84 940	3 682
337110	Wood kitchen cabinet & counter top mfg	2	93	8	909	26 593	747	1 421	19 237	53 139	32 289	84 940	3 682
33712	Household & institutional furniture mfg	4	68	6	526	13 052	439	811	9 288	23 939	20 235	44 146	858
337121	Upholstered household furniture mfg	5	16	1	122	2 769	106	165	1 977	5 298	4 023	9 104	201
337122	Nonupholstered wood household furniture mfg	4	44	3	268	7 308	232	444	5 401	13 038	13 317	26 189	552
337127	Institutional furniture mfg	—	4	2	128	2 819	94	192	1 794	5 289	2 493	8 132	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONNECTICUT—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	2	71	24	1 288	41 837	936	1 789	24 023	83 273	57 467	142 503	3 153
33721	Office furniture (including fixtures) mfg	2	71	24	1 288	41 837	936	1 789	24 023	83 273	57 467	142 503	3 153
337211	Wood office furniture mfg	3	11	4	c	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	27	9	431	16 175	313	585	9 401	29 787	20 771	50 401	1 188
337214	Office furniture (except wood) mfg	—	3	2	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	30	9	536	15 908	369	709	8 915	32 137	19 411	53 408	1 079
3379	Other furniture related product mfg	6	14	4	401	10 715	292	630	6 433	25 510	29 967	55 964	2 283
33791	Mattress mfg	6	7	2	214	6 408	152	381	4 051	19 141	19 777	39 022	1 993
337910	Mattress mfg	6	7	2	214	6 408	152	381	4 051	19 141	19 777	39 022	1 993
33792	Blind & shade mfg	6	7	2	187	4 307	140	249	2 382	6 369	10 190	16 942	290
337920	Blind & shade mfg	6	7	2	187	4 307	140	249	2 382	6 369	10 190	16 942	290
339	Miscellaneous mfg	—	456	112	16 640	570 973	10 584	20 582	281 716	2 340 864	984 481	3 306 912	146 913
3391	Medical equipment & supplies mfg	—	185	52	8 336	310 628	5 876	11 156	162 010	1 586 395	497 339	2 071 457	90 446
33911	Medical equipment & supplies mfg	—	185	52	8 336	310 628	5 876	11 156	162 010	1 586 395	497 339	2 071 457	90 446
339111	Laboratory apparatus & furniture mfg	—	13	2	390	14 150	276	634	8 464	30 347	54 739	84 265	D
339112	Surgical & medical instrument mfg	—	47	24	5 698	219 674	4 058	7 582	117 954	1 376 470	316 943	1 683 576	77 294
339113	Surgical appliance & supplies mfg	1	26	15	1 173	41 506	826	1 627	19 056	94 291	55 067	149 224	7 373
339114	Dental equipment & supplies mfg	—	12	5	560	20 877	349	657	7 862	54 312	58 311	111 154	1 526
339116	Dental laboratories	5	85	5	e	D	D	D	D	D	D	D	1 057
3399	Other miscellaneous mfg	1	271	60	8 304	260 345	4 708	9 426	119 706	754 469	487 142	1 235 455	56 467
33991	Jewelry & silverware mfg	1	31	9	1 002	25 823	598	1 319	9 636	68 127	64 306	129 728	D
339911	Jewelry (except costume) mfg	3	14	3	215	5 646	123	210	2 550	11 720	20 246	31 154	295
339914	Costume jewelry & novelty mfg	—	9	4	703	18 022	424	1 027	5 937	52 427	41 577	91 991	D
33992	Sporting & athletic goods mfg	4	30	8	868	21 279	657	1 197	12 449	51 656	32 822	84 757	2 851
339920	Sporting & athletic goods mfg	4	30	8	868	21 279	657	1 197	12 449	51 656	32 822	84 757	2 851
33993	Doll, toy, & game mfg	—	23	6	1 878	51 941	698	1 375	16 485	182 868	152 708	330 721	D
339932	Game, toy, & children's vehicle mfg	—	18	5	1 852	51 498	685	1 357	16 322	181 638	151 554	328 363	D
33994	Office supplies (except paper) mfg	5	19	3	263	8 232	165	338	4 215	30 677	23 254	56 041	1 213
339941	Pen & mechanical pencil mfg	5	3	2	120	3 933	69	145	1 894	21 017	15 735	38 847	869
33995	Sign mfg	5	81	6	1 071	35 814	538	1 190	19 010	78 563	47 853	124 014	7 774
339950	Sign mfg	5	81	6	1 071	35 814	538	1 190	19 010	78 563	47 853	124 014	7 774
33999	All other miscellaneous mfg	—	87	28	3 222	117 256	2 052	4 007	57 911	342 578	166 199	510 194	31 667
339991	Gasket, packing, & sealing device mfg	1	16	9	740	24 562	479	900	12 112	48 132	22 072	69 949	D
339992	Musical instrument mfg	—	9	2	156	4 765	119	269	3 249	7 998	4 119	12 547	172
339993	Fastener, button, needle, & pin mfg	—	18	8	650	16 840	447	1 016	11 283	33 826	21 165	54 612	2 943
339999	All other miscellaneous mfg	—	40	9	1 656	70 541	994	1 799	31 051	251 500	117 760	370 884	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA												
	Manufacturing	1	8 844	3 074	395 322	15 798 742	241 095	484 982	7 435 157	45 718 100	33 681 939	79 309 730	3 482 539
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (CT Part)	-	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (ME Part)	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (MA Part)	1	7 448	2 622	332 006	13 505 530	198 540	401 940	6 174 666	37 417 970	27 017 210	64 365 196	2 975 800
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (NH Part)	1	1 336	437	61 381	2 229 004	41 436	80 545	1 230 147	8 395 120	6 376 277	14 748 569	499 261
311	Food mfg	1	664	187	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	48	16	h	D	D	D	D	D	D	D	D
313	Textile mills	1	128	69	i	D	D	D	D	D	D	D	D
314	Textile product mills	1	180	42	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	194	73	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	116	40	i	D	D	D	D	D	D	D	D
321	Wood product mfg	3	198	38	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	166	118	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	1 077	234	j	D	D	D	D	D	D	D	107 053
324	Petroleum & coal products mfg	1	45	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	351	152	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	421	218	21 622	706 201	16 689	33 833	442 348	1 757 409	1 510 618	3 269 053	141 171
327	Nonmetallic mineral product mfg	1	245	76	i	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	98	49	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 634	476	40 901	1 517 003	29 397	59 553	880 171	3 702 019	1 916 028	5 599 963	357 939
333	Machinery mfg	2	769	294	33 456	1 463 248	18 414	37 238	634 513	3 253 851	2 673 862	5 937 448	227 624
334	Computer & electronic product mfg	-	1 039	537	m	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	228	124	j	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	167	61	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	339	71	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	737	189	24 304	919 994	13 974	27 807	372 702	2 449 330	1 422 551	3 902 291	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Worcester, MA—CT PMSA												
31-33	Manufacturing	1	857	337	39 051	1 535 603	25 057	50 712	739 514	3 727 749	2 859 933	6 584 341	300 448
	Worcester, MA—CT PMSA (CT Part)	—	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Worcester, MA—CT PMSA (MA Part)	1	838	330	38 504	1 515 246	24 672	49 868	729 244	3 683 823	2 831 220	6 513 097	297 798
311	Food mfg	1	42	15	1 144	30 663	760	1 453	18 638	139 064	110 143	249 075	6 542
3118	Bakeries & tortilla mfg	—	29	10	582	13 870	369	681	8 349	97 184	43 826	141 135	D
31181	Bread & bakery product mfg	—	28	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	11	7	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	1	f	D	D	D	D	D	D	D	D
313	Textile mills	3	17	10	1 360	38 756	989	2 131	27 235	126 992	105 243	237 123	6 007
3132	Fabric mills	9	4	3	561	12 351	357	830	8 879	19 397	20 095	44 016	2 601
31321	Broadwoven fabric mills	9	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	3	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	1	8	5	f	D	D	D	D	D	D	D	3 014
31331	Textile & fabric finishing mills	1	4	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	1	4	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	24	8	448	13 350	307	542	6 897	25 552	22 859	48 388	1 530
3219	Other wood product mfg	2	20	7	415	12 456	280	491	6 187	23 559	20 867	44 402	1 357
322	Paper mfg	—	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
3222	Converted paper product mfg	—	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
32221	Paperboard container mfg	—	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
322211	Corrugated & solid fiber box mfg	—	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
32222	Paper bag & coated & treated paper mfg	—	3	2	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	3	2	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975
322232	Envelope mfg	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975
323	Printing & related support activities	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
3231	Printing & related support activities	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
32311	Printing	1	69	13	1 101	34 073	788	1 380	21 426	57 746	36 317	93 945	3 780
323110	Commercial lithographic printing	—	37	9	788	23 394	589	1 014	15 733	38 363	25 915	64 419	2 829
32312	Support activities for printing	—	14	3	261	6 867	189	351	4 593	11 185	2 909	14 155	898
325	Chemical mfg	1	26	13	2 362	126 708	1 019	2 035	32 379	460 163	277 618	741 405	41 173
3254	Pharmaceutical & medicine mfg	—	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	4	14	8	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	4	13	8	550	20 643	406	780	10 712	39 353	78 171	118 373	D
325991	Custom compounding of purchased resin	4	10	8	f	D	D	D	D	D	D	D	3 506

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Worcester, MA—CT PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	58	32	3 051	120 581	2 306	4 693	68 698	253 626	172 492	424 547	19 108
3261	Plastics product mfg	1	53	30	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	4	3	266	11 203	201	469	6 247	33 321	35 137	68 065	2 176
32619	Other plastics product mfg	2	35	22	2 097	84 621	1 589	3 118	47 101	152 272	84 074	236 453	12 709
326199	All other plastics product mfg	2	34	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	5	2	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	5	2	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	30	16	3 875	173 034	2 328	4 786	72 500	354 032	223 247	576 227	57 969
3271	Clay product & refractory mfg	—	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	1	1	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	—	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
32721	Glass & glass product mfg	—	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
327215	Glass product mfg made of purchased glass	—	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	12	8	h	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	—	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
327910	Abrasive product mfg .	—	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
331	Primary metal mfg	1	15	7	550	19 512	410	881	13 106	40 004	48 569	87 663	4 259
3312	Steel product mfg from purchased steel	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
33122	Rolling & drawing of purchased steel	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
331222	Steel wire drawing	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
332	Fabricated metal product mfg	1	205	74	7 254	271 560	5 331	11 104	159 692	572 796	379 319	952 849	34 829
3321	Forging & stamping	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
33211	Forging & stamping	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
332111	Iron & steel forging ...	8	2	2	g	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	—	1	1	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
33221	Cutlery & handtool mfg ..	—	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
332211	Cutlery & flatware (except precious) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	—	7	5	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	23	7	402	13 626	300	607	9 134	23 806	20 898	44 651	1 334
3326	Spring & wire product mfg .	—	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
33261	Spring & wire product mfg	—	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
332612	Spring (light gauge) mfg	—	4	3	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	12	7	f	D	D	D	D	D	D	D	3 854
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	93	21	1 356	50 825	1 012	2 137	32 929	97 453	37 653	135 250	4 793
33271	Machine shops	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
332710	Machine shops	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
33272	Turned product & screw, nut, & bolt mfg	—	12	7	322	11 158	246	505	7 403	20 386	12 197	32 694	1 177
3328	Coating, engraving, heat treating, & allied activities .	—	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652
33281	Coating, engraving, heat treating, & allied activities	—	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Worcester, MA—CT PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	—	21	10	1 553	65 649	998	2 118	34 598	158 603	126 225	290 771	7 770
33291	Metal valve mfg.....	—	9	5	1 102	48 455	681	1 404	24 490	117 722	99 327	222 867	5 291
332911	Industrial valve mfg....	—	6	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	12	5	451	17 194	317	714	10 108	40 881	26 898	67 904	2 479
332999	All other miscellaneous fabricated metal product mfg.....	—	7	3	294	10 924	198	410	6 223	28 853	18 902	47 901	1 659
333	Machinery mfg.....	3	117	49	4 628	194 380	2 794	5 716	95 090	417 324	287 531	698 313	23 756
3331	Agriculture, construction, & mining machinery mfg....	—	4	4	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	3	18	8	858	38 896	461	967	16 456	93 400	73 699	161 339	4 666
33322	Plastics & rubber industry machinery mfg.....	—	5	4	e	D	D	D	D	D	D	D	450
333220	Plastics & rubber industry machinery mfg.....	—	5	4	e	D	D	D	D	D	D	D	450
33329	Other industrial machinery mfg.....	4	12	4	601	29 222	319	695	12 531	74 299	61 350	129 798	4 216
3333	Commercial & service industry machinery mfg ..	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
33331	Commercial & service industry machinery mfg.....	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
333314	Optical instrument & lens mfg.....	1	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
33351	Metalworking machinery mfg.....	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
333511	Industrial mold mfg....	4	15	4	285	16 042	224	526	10 422	28 233	9 332	36 434	2 174
333514	Special die & tool, die set, jig, & fixture mfg ..	2	23	7	363	15 722	268	551	9 788	28 375	10 543	38 535	2 519
333515	Cutting tool & machine tool accessory mfg ..	—	7	1	e	D	D	D	D	D	D	D	D
333516	Rolling mill machinery & equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
33361	Engine, turbine, & power transmission equipment mfg.....	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
3339	Other general-purpose machinery mfg.....	1	21	10	534	22 423	290	622	8 838	51 694	38 190	87 792	4 475
33399	All other general-purpose machinery mfg.....	1	16	7	436	18 618	221	480	6 507	42 531	30 092	71 218	3 137
333999	All other miscellaneous general-purpose machinery mfg.....	1	10	7	386	16 722	187	408	5 345	38 026	27 749	64 404	2 798
334	Computer & electronic product mfg.....	—	44	20	4 210	196 517	2 090	3 991	61 408	545 761	436 981	976 182	52 067
3341	Computer & peripheral equipment mfg.....	—	6	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	6	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
31-33	Worcester, MA—CT PMSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
33441	Semiconductor & other electronic component mfg	—	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
334413	Semiconductor & related device mfg...	—	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
33451	Navigational, measuring, medical, & control instruments mfg	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
335	Electrical equipment, appliance, & component mfg	3	24	17	1 883	83 906	1 214	2 446	39 732	202 108	184 922	386 797	13 153
3359	Other electrical equipment & component mfg	3	16	13	1 589	72 061	1 044	2 113	34 990	168 685	166 069	334 876	D
33592	Communication & energy wire & cable mfg	3	10	10	1 336	61 142	904	1 797	30 626	141 144	147 072	286 982	10 659
335929	Other communication & energy wire mfg ...	3	9	9	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	11	5	313	10 911	156	294	4 332	19 567	20 610	41 291	1 359
337	Furniture & related product mfg	—	30	9	1 129	36 757	874	1 549	21 357	69 486	76 317	145 385	5 148
3371	Household & institutional furniture & kitchen cabinet mfg	1	17	3	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	12	3	295	7 999	243	427	5 746	10 900	8 525	19 183	287
3372	Office furniture (including fixtures) mfg	—	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
33721	Office furniture (including fixtures) mfg	—	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
337214	Office furniture (except wood) mfg	—	1	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	6	3	285	8 967	224	483	6 063	15 537	10 420	25 692	D
339	Miscellaneous mfg	1	66	18	2 031	59 600	1 322	2 620	27 933	138 954	74 212	217 713	7 465
3391	Medical equipment & supplies mfg	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
33911	Medical equipment & supplies mfg	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
339115	Ophthalmic goods mfg	—	6	5	1 204	38 235	746	1 514	16 224	78 161	35 703	118 664	5 234
3399	Other miscellaneous mfg ..	3	37	7	566	14 706	381	747	7 768	34 311	28 619	62 882	1 195
	HARTFORD, CT MSA												
31-33	Manufacturing	1	2 075	708	89 573	3 757 220	55 839	115 718	1 854 335	8 340 382	6 767 791	14 925 166	561 946
311	Food mfg	1	106	28	2 189	57 777	1 432	2 562	30 848	147 539	323 814	462 800	8 524
3115	Dairy product mfg	—	11	4	601	21 114	353	733	10 943	46 242	176 498	221 941	D
31151	Dairy product (except frozen) mfg	—	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	15	5	419	12 626	307	636	7 522	35 583	65 697	93 429	1 683
31161	Animal slaughtering & processing	1	15	5	419	12 626	307	636	7 522	35 583	65 697	93 429	1 683
311612	Meat processed from carcasses	1	11	5	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	61	12	742	12 847	466	659	6 568	29 952	19 602	49 717	1 210
31181	Bread & bakery product mfg	5	60	12	f	D	D	D	D	D	D	D	D
311811	Retail bakeries	5	46	5	397	5 840	234	296	2 899	12 229	7 516	19 752	563

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARTFORD, CT MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	—	18	8	1 484	54 257	1 099	2 400	33 541	121 623	143 834	267 571	15 565
3132	Fabric mills	—	11	4		D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	1	6	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	1	6	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	2	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	2	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	5	3	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	2	4	3	326	11 068	229	468	6 111	19 552	26 906	47 440	D
313311	Broadwoven fabric finishing mills	—	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	4	16	8	498	10 404	394	693	6 401	21 171	22 675	43 755	855
3149	Other textile product mills	6	8	4	292	6 946	220	383	4 207	15 088	17 079	32 198	D
31499	All other textile product mills	6	6	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	6	21	6	298	4 393	266	525	3 548	8 015	6 017	14 045	242
3152	Cut & sew apparel mfg	7	13	5	253	3 671	233	479	3 102	6 252	3 819	10 063	193
321	Wood product mfg	2	39	8	626	20 388	496	1 030	13 708	45 841	37 810	83 369	1 971
3219	Other wood product mfg	2	32	6	505	17 003	402	822	11 164	27 978	33 015	60 941	1 262
322	Paper mfg	—	23	15	1 409	55 974	1 027	2 128	33 734	121 100	134 822	253 703	7 247
3222	Converted paper product mfg	—	20	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	14	10	890	34 085	644	1 265	19 910	58 719	83 666	140 922	2 919
322211	Corrugated & solid fiber box mfg	—	8	5	372	16 147	261	562	7 750	30 220	37 779	67 924	D
323	Printing & related support activities	2	220	52	5 112	179 641	3 505	7 086	104 601	378 965	238 836	617 386	24 360
3231	Printing & related support activities	2	220	52	5 112	179 641	3 505	7 086	104 601	378 965	238 836	617 386	24 360
32311	Printing	2	200	45	4 794	168 681	3 257	6 626	97 466	359 574	235 414	594 570	22 992
323110	Commercial lithographic printing	2	107	31	2 910	107 552	1 891	3 839	59 199	207 729	161 858	369 279	13 438
323113	Commercial screen printing	—	15	4	392	12 794	304	656	8 425	35 142	11 432	46 482	2 966
323114	Quick printing	—	50	2	759	25 048	592	1 261	17 246	49 625	28 193	77 782	3 793
323119	Other commercial printing	3	19	5	552	17 412	311	562	8 601	48 251	26 880	75 258	2 103
32312	Support activities for printing	2	20	7	318	10 960	248	460	7 135	19 391	3 422	22 816	1 368
325	Chemical mfg	5	36	13	1 619	68 918	851	1 754	29 415	164 604	264 609	435 572	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	9	4	3	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	9	3	855	39 218	414	833	14 528	59 828	56 050	115 260	3 137
32592	Explosives mfg	—	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	88	42	3 211	98 830	2 223	4 426	55 727	231 558	196 380	426 416	18 975
3261	Plastics product mfg	1	74	35	2 607	77 219	1 768	3 517	41 247	176 904	157 129	332 689	15 117
32611	Unsupported plastics film, sheet, & bag mfg	—	14	7	374	14 980	263	567	8 864	44 407	46 048	89 661	6 380
32619	Other plastics product mfg	1	49	22	1 907	52 876	1 261	2 494	27 041	98 100	63 388	161 048	5 822
326199	All other plastics product mfg	1	48	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	3	14	7	604	21 611	455	909	14 480	54 654	39 251	93 727	3 858
32629	Other rubber product mfg	1	10	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	49	16	1 132	39 878	837	1 752	23 905	111 553	81 627	190 214	7 459
3273	Cement & concrete product mfg	1	28	10	579	20 724	418	939	13 820	53 744	45 219	97 827	D
32739	Other concrete product mfg	—	9	5	271	9 017	192	380	5 556	24 887	12 603	36 143	561
327390	Other concrete product mfg	—	9	5	271	9 017	192	380	5 556	24 887	12 603	36 143	561
3279	Other nonmetallic mineral product mfg	1	12	4	e	D	D	D	D	D	D	D	3 971
32791	Abrasive product mfg	—	7	3	350	12 377	265	525	5 320	40 172	28 358	66 238	D
327910	Abrasive product mfg	—	7	3	350	12 377	265	525	5 320	40 172	28 358	66 238	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARTFORD, CT MSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	-	22	15	1 093	40 888	853	1 834	28 026	91 026	102 091	185 690	3 273
3312	Steel product mfg from purchased steel	-	8	5	440	19 348	327	757	14 246	52 509	62 264	108 872	1 327
33122	Rolling & drawing of purchased steel	-	8	5	440	19 348	327	757	14 246	52 509	62 264	108 872	1 327
331221	Cold-rolled steel shape mfg	-	5	3	371	16 713	282	666	12 790	47 128	54 820	96 386	D
3315	Foundries	-	11	9	484	15 758	395	799	9 850	25 053	18 861	43 114	1 667
33152	Nonferrous metal foundries	-	9	7	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	661	219	20 456	792 485	14 572	30 481	477 009	1 717 037	992 834	2 714 228	105 004
3321	Forging & stamping	1	45	24	2 715	104 130	1 847	4 072	63 558	159 238	123 023	281 980	8 559
33211	Forging & stamping	1	45	24	2 715	104 130	1 847	4 072	63 558	159 238	123 023	281 980	8 559
332111	Iron & steel forging	4	3	3	448	15 973	363	804	11 593	30 193	24 788	55 069	2 649
332116	Metal stamping	-	33	17	1 430	55 102	1 171	2 488	37 400	109 862	76 649	186 803	4 100
332117	Powder metallurgy part mfg	-	4	3	682	27 680	193	526	10 835	5 930	14 244	19 865	D
3322	Cutlery & handtool mfg	-	21	8	1 247	57 670	833	1 628	32 453	192 460	76 862	265 064	4 336
33221	Cutlery & handtool mfg	-	21	8	1 247	57 670	833	1 628	32 453	192 460	76 862	265 064	4 336
332212	Hand & edge tool mfg	-	16	6	1 110	50 882	727	1 443	28 741	181 052	74 112	251 044	D
3323	Architectural & structural metals mfg	1	60	17	1 446	51 398	919	1 905	27 966	114 946	104 498	218 163	4 951
33231	Plate work & fabricated structural product mfg	1	25	5	475	17 641	341	673	10 843	41 649	32 865	75 127	1 758
332312	Fabricated structural metal mfg	1	15	4	393	14 652	287	571	9 238	37 274	28 931	66 855	1 458
33232	Ornamental & architectural metal products mfg	1	35	12	971	33 757	578	1 232	17 123	73 297	71 633	143 036	3 193
332321	Metal window & door mfg	-	3	2	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	3	22	6	374	15 139	228	454	7 678	25 746	22 377	46 427	1 559
3324	Boiler, tank, & shipping container mfg	-	11	6	980	43 945	514	996	11 569	106 453	57 294	162 244	4 327
33242	Metal tank (heavy gauge) mfg	-	3	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	3	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	5	3	e	D	D	D	D	D	D	D	D
332439	Other metal container mfg	-	4	3	e	D	D	D	D	D	D	D	2 882
3325	Hardware mfg	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
33251	Hardware mfg	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
332510	Hardware mfg	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
3326	Spring & wire product mfg	-	44	27	1 775	70 194	1 378	3 029	46 548	141 031	84 625	224 717	12 002
33261	Spring & wire product mfg	-	44	27	1 775	70 194	1 378	3 029	46 548	141 031	84 625	224 717	12 002
332611	Spring (heavy gauge) mfg	-	7	5	342	14 806	259	523	10 747	35 243	19 024	54 561	D
332612	Spring (light gauge) mfg	1	24	16	1 077	41 137	851	1 865	26 336	60 766	45 052	105 462	6 052
332618	Other fabricated wire product mfg	-	13	6	356	14 251	268	641	9 465	45 022	20 549	64 694	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	326	70	5 501	216 264	4 089	8 874	141 808	390 421	247 496	642 133	36 357
33271	Machine shops	1	237	38	3 118	124 243	2 266	4 813	80 545	221 324	132 970	352 161	16 524
332710	Machine shops	1	237	38	3 118	124 243	2 266	4 813	80 545	221 324	132 970	352 161	16 524
33272	Turned product & screw, nut, & bolt mfg	-	89	32	2 383	92 021	1 823	4 061	61 263	169 097	114 526	289 972	19 833
332721	Precision turned product mfg	-	70	23	1 794	67 589	1 398	3 053	44 677	121 129	70 533	197 176	16 171
332722	Bolt, nut, screw, rivet, & washer mfg	-	19	9	589	24 432	425	1 008	16 586	47 968	43 993	92 796	3 662
3328	Coating, engraving, heat treating, & allied activities	-	87	33	2 049	73 452	1 485	3 119	41 035	183 591	64 965	252 141	15 457
33281	Coating, engraving, heat treating, & allied activities	-	87	33	2 049	73 452	1 485	3 119	41 035	183 591	64 965	252 141	15 457
332811	Metal heat treating	3	17	6	408	15 176	318	674	8 852	35 010	7 589	42 666	1 627
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	26	9	601	21 496	431	914	11 727	53 487	18 881	71 720	9 898
332813	Electroplating, plating, polishing, anodizing, & coloring	-	44	18	1 040	36 780	736	1 531	20 456	95 094	38 495	137 755	3 932

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARTFORD, CT MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	49	25	3 010	106 759	2 078	3 996	61 430	258 537	137 645	398 271	13 526
33291	Metal valve mfg	—	15	13	1 478	47 239	965	1 970	23 923	120 509	60 556	182 139	5 457
332911	Industrial valve mfg	—	7	5	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	5	5	406	13 135	274	566	8 152	44 900	16 683	61 598	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	34	12	1 532	59 520	1 113	2 026	37 507	138 028	77 089	216 132	8 069
332991	Ball & roller bearing mfg	2	8	4	340	13 273	277	640	9 820	45 426	16 451	62 497	2 277
332994	Small arms mfg	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	17	6	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	260	77	9 717	407 966	5 764	12 245	209 187	1 087 460	677 926	1 753 942	45 276
3332	Industrial machinery mfg	—	39	18	2 400	96 102	1 213	2 587	42 935	364 249	221 455	587 754	4 230
33329	Other industrial machinery mfg	—	32	16	2 328	93 612	1 170	2 514	41 810	358 726	215 285	576 377	4 124
333292	Textile machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	21	7	917	42 005	506	1 083	18 257	129 549	115 824	246 310	D
3333	Commercial & service industry machinery mfg	1	11	6	853	35 739	412	665	13 365	101 771	54 486	152 776	7 876
33331	Commercial & service industry machinery mfg	1	11	6	853	35 739	412	665	13 365	101 771	54 486	152 776	7 876
333314	Optical instrument & lens mfg	—	2	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	1	5	2	340	12 731	174	359	5 392	31 561	16 902	48 474	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	5	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	5	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refriq equip mfg	—	3	2	287	9 502	205	473	6 221	15 370	25 768	38 887	D
3335	Metalworking machinery mfg	1	142	29	2 656	119 554	1 735	3 565	64 815	226 670	161 776	383 122	17 603
33351	Metalworking machinery mfg	1	142	29	2 656	119 554	1 735	3 565	64 815	226 670	161 776	383 122	17 603
333511	Industrial mold mfg	—	15	4	269	13 525	205	445	9 038	20 575	7 027	27 274	1 367
333512	Machine tool (metal cutting types) mfg	—	8	5	562	28 361	318	608	13 322	69 790	94 343	159 596	D
333514	Special die & tool, die set, jig, & fixture mfg	1	61	7	787	38 811	511	1 083	20 530	60 334	19 052	79 184	4 008
333515	Cutting tool & machine tool accessory mfg	1	52	9	777	27 790	543	1 131	16 839	56 998	28 333	85 539	1 935
333518	Other metalworking machinery mfg	5	6	4	261	11 067	158	298	5 086	18 973	13 021	31 529	D
3336	Engine, turbine, & power transmission equipment mfg	—	14	7	2 154	95 701	1 327	3 235	54 622	243 188	123 574	363 416	9 120
33361	Engine, turbine, & power transmission equipment mfg	—	14	7	2 154	95 701	1 327	3 235	54 622	243 188	123 574	363 416	9 120
333613	Mechanical power transmission equipment mfg	2	5	4	580	20 022	430	985	11 819	56 171	28 685	83 065	D
333618	Other engine equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	44	11	1 141	43 572	718	1 428	22 895	121 131	74 379	196 497	5 111
33399	All other general-purpose machinery mfg	1	40	11	1 095	41 696	696	1 380	22 272	115 951	68 049	184 993	4 971
333999	All other miscellaneous general-purpose machinery mfg	—	21	6	690	26 693	481	966	15 758	86 915	42 815	129 172	3 673

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31-33	HARTFORD, CT MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	2	105	57	6 186	228 233	3 537	6 841	102 466	527 138	319 439	845 968	47 531
3341	Computer & peripheral equipment mfg	2	8	5	694	37 824	225	479	11 127	83 214	44 866	127 768	7 056
33411	Computer & peripheral equipment mfg	2	8	5	694	37 824	225	479	11 127	83 214	44 866	127 768	7 056
334119	Other computer peripheral equipment mfg	2	5	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	13	7	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	5	3	345	9 173	180	210	3 571	39 033	13 407	51 668	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	5	3	345	9 173	180	210	3 571	39 033	13 407	51 668	D
3344	Semiconductor & other electronic component mfg	3	37	22	2 448	73 079	1 628	3 249	37 324	159 026	130 015	283 867	17 540
33441	Semiconductor & other electronic component mfg	3	37	22	2 448	73 079	1 628	3 249	37 324	159 026	130 015	283 867	17 540
334412	Bare printed circuit board mfg	—	7	2	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	6	4	474	9 389	334	654	5 007	16 550	9 434	25 990	659
334418	Printed circuit assembly (electronic assembly) mfg	—	4	3	277	8 430	135	302	2 915	21 537	25 479	47 144	D
334419	Other electronic component mfg	8	9	8	812	28 150	453	977	12 963	49 130	58 619	97 788	4 393
3345	Navigational, measuring, medical, & control instruments mfg	2	44	20	1 999	72 455	1 062	2 001	30 856	158 268	81 307	248 323	5 915
33451	Navigational, measuring, medical, & control instruments mfg	2	44	20	1 999	72 455	1 062	2 001	30 856	158 268	81 307	248 323	5 915
334511	Search, detection, navigation, & guidance instrument mfg	3	6	2	353	11 912	174	300	5 136	26 855	8 173	43 505	766
334513	Industrial process control instrument mfg	1	11	5	811	29 250	377	705	11 071	64 760	38 197	103 145	2 096
3346	Mfg & reproducing magnetic & optical media	—	2	2	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	2	2	e	D	D	D	D	D	D	D	D
334611	Software reproducing	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	58	24	4 631	191 292	2 754	5 587	90 328	475 230	348 886	805 556	35 193
3352	Household appliance mfg	—	3	3	e	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	3	3	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	3	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	26	8	g	D	D	D	D	D	D	D	7 542
33531	Electrical equipment mfg	—	26	8	g	D	D	D	D	D	D	D	7 542
335312	Motor & generator mfg	—	4	3	687	22 141	422	873	11 224	50 979	27 948	78 917	D
335313	Switchgear & switchboard apparatus mfg	—	4	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	2	18	4	321	13 155	136	258	4 098	27 987	13 365	41 282	293
3359	Other electrical equipment & component mfg	2	26	12	2 521	109 223	1 620	3 282	57 478	300 295	239 049	523 496	27 436
33592	Communication & energy wire & cable mfg	1	4	4	816	33 251	554	1 180	19 127	61 270	104 679	156 757	14 201
335929	Other communication & energy wire mfg	1	4	4	816	33 251	554	1 180	19 127	61 270	104 679	156 757	14 201
33593	Wiring device mfg	3	7	2	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	3	4	2	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	14	5	621	31 683	305	544	12 892	46 629	58 846	98 735	D
335999	All other miscellaneous electrical equipment & component mfg	—	10	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARTFORD, CT MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	106	62	24 022	1 315 029	12 515	26 927	514 208	2 552 065	2 441 356	4 850 843	177 405
3363	Motor vehicle parts mfg ...	-	17	7	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	80	54	22 587	1 273 205	11 443	25 102	489 349	2 458 993	2 287 111	4 605 025	167 195
33641	Aerospace product & parts mfg	-	80	54	22 587	1 273 205	11 443	25 102	489 349	2 458 993	2 287 111	4 605 025	167 195
336411	Aircraft mfg	-	4	4	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	40	27	j	D	D	D	D	D	D	D	104 553
336413	Other aircraft part & auxiliary equipment mfg	-	35	22	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	78	21	1 249	39 828	934	1 916	25 055	88 342	68 609	158 558	4 349
3371	Household & institutional furniture & kitchen cabinet mfg	3	50	6	446	12 768	361	688	9 557	25 707	18 646	44 305	D
33711	Wood kitchen cabinet & counter top mfg	1	30	3	270	8 180	219	399	6 306	16 580	9 695	26 367	389
337110	Wood kitchen cabinet & counter top mfg ...	1	30	3	270	8 180	219	399	6 306	16 580	9 695	26 367	389
3372	Office furniture (including fixtures) mfg	1	23	13	591	20 729	422	852	11 536	43 953	30 616	76 113	1 823
33721	Office furniture (including fixtures) mfg	1	23	13	591	20 729	422	852	11 536	43 953	30 616	76 113	1 823
337215	Showcase, partition, shelving, & locker mfg	2	12	6	250	8 474	172	324	4 829	17 706	11 430	30 652	620
339	Miscellaneous mfg	1	148	33	4 270	134 250	2 492	4 939	60 873	352 273	231 566	582 896	38 634
3391	Medical equipment & supplies mfg	1	56	12	1 300	52 181	1 042	2 178	27 966	98 180	36 809	135 613	23 843
33911	Medical equipment & supplies mfg	1	56	12	1 300	52 181	1 042	2 178	27 966	98 180	36 809	135 613	23 843
339112	Surgical & medical instrument mfg	-	10	5	729	33 263	599	1 403	18 341	57 538	27 504	85 426	19 933
3399	Other miscellaneous mfg ...	1	92	21	2 970	82 069	1 450	2 761	32 907	254 093	194 757	447 283	14 791
33993	Doll, toy, & game mfg ...	-	8	4	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	6	4	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	30	10	638	16 220	482	866	9 729	27 974	16 913	45 882	1 277
339999	All other miscellaneous mfg	4	13	4	295	6 445	224	382	3 729	10 151	8 589	19 789	D
	NEW LONDON—NORWICH, CT—RI MSA												
31-33	Manufacturing	-	336	95	24 297	1 175 932	10 906	22 911	343 471	2 225 497	1 421 230	3 666 659	239 832
	New London—Norwich, CT—RI MSA (CT Part)	1	290	80	22 772	1 127 397	9 749	20 541	310 382	2 108 059	1 314 210	3 438 210	233 138
	New London—Norwich, CT—RI MSA (RI Part)	-	46	15	1 525	48 535	1 157	2 370	33 089	117 438	107 020	228 449	6 694
311	Food mfg	6	25	2	372	9 810	221	441	5 212	20 861	76 167	96 469	D
313	Textile mills	-	14	10	1 118	34 612	873	1 832	24 665	114 165	110 915	228 273	6 810
3132	Fabric mills	-	9	5	578	19 676	465	996	15 349	46 913	67 945	117 760	D
31324	Knit fabric mills	-	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
313249	Other knit fabric & lace mills	-	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
3133	Textile & fabric finishing & fabric coating mills	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
31331	Textile & fabric finishing mills	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
313311	Broadwoven fabric finishing mills	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
322	Paper mfg	2	10	7	952	37 867	725	1 590	25 143	129 144	148 216	278 708	9 646
3221	Pulp, paper, & paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
32213	Paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
322130	Paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
3222	Converted paper product mfg	-	7	4	525	19 387	401	818	12 061	38 321	38 348	79 314	D
32222	Paper bag & coated & treated paper mfg	-	2	2	e	D	D	D	D	D	D	D	D

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31-33	NEW LONDON—NORWICH, CT—RI MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
3231	Printing & related support activities.....	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
32311	Printing.....	1	33	6	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	17	3	835	29 910	670	1 248	22 047	65 095	59 063	123 078	3 669
325	Chemical mfg	—	10	5	4 321	388 168	604	1 515	35 072	267 936	260 280	549 515	D
3254	Pharmaceutical & medicine mfg	—	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	—	1	1	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	17	9	638	21 605	469	1 060	13 186	59 975	50 324	110 243	4 079
3261	Plastics product mfg	1	12	6	348	11 464	264	630	7 541	30 143	24 006	53 754	1 795
3262	Rubber product mfg	—	5	3	290	10 141	205	430	5 645	29 832	26 318	56 489	2 284
32629	Other rubber product mfg	—	4	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	7	3	991	29 892	798	1 555	21 684	80 743	49 421	129 196	6 994
3314	Nonferrous metal (except aluminum) production & processing.....	—	2	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	—	4	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	2	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	47	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	8	3	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	5	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	28	11	1 202	57 207	569	1 286	23 242	150 750	93 128	238 379	3 438
3332	Industrial machinery mfg ..	1	7	4	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	6	5	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	12	3	506	13 718	377	625	7 577	54 002	52 285	105 317	D
3345	Navigational, measuring, medical, & control instruments mfg	—	5	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	2	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	14	10	1 322	40 425	965	1 939	18 475	117 374	79 004	196 114	4 407
3359	Other electrical equipment & component mfg	—	5	4	933	27 718	682	1 420	11 686	49 660	40 659	90 584	3 565
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	9	4	i	D	D	D	D	D	D	D	11 704
3364	Aerospace product & parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	3	2	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	3	2	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	3	2	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW LONDON–NORWICH, CT–RI MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	4	35	9	710	19 497	531	1 072	11 560	49 573	21 138	69 340	D
3399	Other miscellaneous mfg ..	3	24	5	479	13 196	376	779	8 701	33 987	16 956	49 797	D
31-33	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA												
	Manufacturing	1	29 610	8 242	837 259	29 316 270	556 831	1 099 707	14 974 104	88 559 145	75 447 144	164 000 119	5 662 912
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (CT Part).....	1	3 136	1 014	126 073	5 105 182	77 123	159 649	2 450 980	15 589 132	10 842 000	26 362 516	999 073
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (NJ Part).....	1	9 881	3 185	336 041	12 775 550	224 381	456 137	6 591 608	41 940 178	37 053 679	78 851 460	2 605 396
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (NY Part).....	2	16 565	4 039	374 810	11 425 439	255 150	483 656	5 928 336	31 004 045	27 448 245	58 649 812	2 055 055
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (PA Part).....	—	28	4	335	10 099	177	265	3 180	25 790	103 220	136 331	3 388
311	Food mfg.....	2	2 571	447	l	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	2	100	32	i	D	D	D	D	D	D	D	D
313	Textile mills.....	3	922	248	j	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	809	173	j	D	D	D	D	D	D	D	D
315	Apparel mfg.....	3	4 418	1 362	m	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	1	230	55	i	D	D	D	D	D	D	D	D
321	Wood product mfg.....	4	326	66	h	D	D	D	D	D	D	D	D
322	Paper mfg.....	1	490	276	k	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	3 936	722	l	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	1	118	27	h	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	1 205	587	l	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	1 052	540	l	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	617	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	286	135	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	3 722	960	80 405	2 878 544	58 220	121 941	1 709 920	6 078 011	4 482 749	10 584 180	356 089
333	Machinery mfg.....	1	1 672	489	k	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	1 402	576	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	637	297	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	450	166	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	1 452	259	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	3 195	649	l	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Bridgeport, CT PMSA												
31-33	Manufacturing	1	843	272	37 092	1 581 671	22 815	46 622	798 365	3 502 157	2 614 401	6 278 436	225 120
311	Food mfg	6	39	10	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	7	25	8	424	7 919	253	533	4 016	13 460	22 906	37 184	D
31181	Bread & bakery product mfg	7	25	8	424	7 919	253	533	4 016	13 460	22 906	37 184	D
311811	Retail bakeries	2	20	6	253	3 350	125	183	1 627	5 971	4 691	10 659	499
313	Textile mills	5	5	3	837	25 544	689	1 454	17 229	44 650	50 508	95 569	D
3133	Textile & fabric finishing & fabric coating mills	5	5	3	837	25 544	689	1 454	17 229	44 650	50 508	95 569	D
31331	Textile & fabric finishing mills	9	3	1	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	9	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	13	8	451	16 666	332	762	8 899	38 992	48 984	88 535	1 720
3222	Converted paper product mfg	—	13	8	451	16 666	332	762	8 899	38 992	48 984	88 535	1 720
323	Printing & related support activities	2	98	23	1 402	48 976	1 048	2 109	31 231	97 625	51 641	152 954	4 426
3231	Printing & related support activities	2	98	23	1 402	48 976	1 048	2 109	31 231	97 625	51 641	152 954	4 426
32311	Printing	2	85	19	1 238	42 733	936	1 886	27 328	83 664	48 010	135 574	3 986
323110	Commercial lithographic printing	2	42	15	870	31 395	672	1 404	20 599	60 420	30 834	95 159	2 494
325	Chemical mfg	2	26	9	496	21 898	240	416	7 599	70 490	74 369	140 609	D
326	Plastics & rubber products mfg	1	46	22	2 433	81 482	1 698	3 662	49 374	212 395	155 008	365 354	21 585
3261	Plastics product mfg	1	37	15	1 821	62 291	1 245	2 696	38 421	171 183	129 689	299 270	D
32619	Other plastics product mfg	2	29	13	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	29	13	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	9	7	612	19 191	453	966	10 953	41 212	25 319	66 084	D
32629	Other rubber product mfg	—	9	7	612	19 191	453	966	10 953	41 212	25 319	66 084	D
326299	All other rubber product mfg	—	4	3	418	13 436	304	666	7 301	29 160	16 467	45 200	D
331	Primary metal mfg	—	14	8	981	39 759	745	1 658	26 324	81 282	133 035	213 528	4 564
3314	Nonferrous metal (except aluminum) production & processing	—	5	4	811	35 201	617	1 411	23 401	71 150	124 826	195 479	3 895
33142	Copper rolling, drawing, extruding, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	3	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	231	66	5 938	239 798	4 220	8 907	132 078	569 021	241 955	801 078	37 071
3321	Forging & stamping	—	14	9	939	29 404	652	1 427	19 076	62 605	32 028	91 640	2 942
33211	Forging & stamping	—	14	9	939	29 404	652	1 427	19 076	62 605	32 028	91 640	2 942
332116	Metal stamping	—	13	8	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	8	6	1 202	46 989	857	1 739	25 303	215 696	41 774	248 944	D
33221	Cutlery & handtool mfg	—	8	6	1 202	46 989	857	1 739	25 303	215 696	41 774	248 944	D
332211	Cutlery & flatware (except precious) mfg	—	5	3	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	3	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	3	33	8	463	17 445	351	710	10 547	31 339	22 943	53 990	D
33232	Ornamental & architectural metal products mfg	4	25	6	384	14 865	291	596	8 850	26 327	18 029	44 221	2 776
332322	Sheet metal work mfg	4	18	5	308	12 681	231	477	7 327	21 929	14 297	36 231	2 643

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Bridgeport, CT PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	111	20	1 731	88 091	1 232	2 580	42 801	151 299	70 576	221 970	8 039
33271	Machine shops	1	91	14	961	46 018	748	1 513	28 344	77 116	26 163	102 283	3 315
332710	Machine shops	1	91	14	961	46 018	748	1 513	28 344	77 116	26 163	102 283	3 315
33272	Turned product & screw, nut, & bolt mfg	—	20	6	770	42 073	484	1 067	14 457	74 183	44 413	119 687	4 724
332721	Precision turned product mfg	—	15	4	369	15 975	214	447	7 161	32 193	9 932	41 672	1 423
332722	Bolt, nut, screw, rivet, & washer mfg	—	5	2	401	26 098	270	620	7 296	41 990	34 481	78 015	3 301
3328	Coating, engraving, heat treating, & allied activities	—	30	11	620	23 831	501	1 118	14 952	34 524	27 227	63 893	D
33281	Coating, engraving, heat treating, & allied activities	—	30	11	620	23 831	501	1 118	14 952	34 524	27 227	63 893	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	17	8	406	16 089	333	754	10 109	23 382	7 849	31 270	1 298
3329	Other fabricated metal product mfg	2	27	10	856	30 076	536	1 163	17 282	64 346	39 676	103 639	4 306
33299	All other fabricated metal product mfg	2	27	10	856	30 076	536	1 163	17 282	64 346	39 676	103 639	4 306
332999	All other miscellaneous fabricated metal product mfg	1	16	8	569	20 634	348	725	10 785	40 895	28 137	67 589	2 570
333	Machinery mfg	2	111	37	3 547	147 888	2 059	4 060	75 979	262 379	254 965	530 888	17 929
3332	Industrial machinery mfg	4	13	10	672	34 012	353	780	14 816	65 591	59 501	128 281	D
33329	Other industrial machinery mfg	2	11	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	4	7	4	291	13 125	113	228	3 841	23 086	13 882	38 249	1 231
3333	Commercial & service industry machinery mfg	2	10	7	498	15 876	219	342	4 912	39 096	28 328	67 199	D
33331	Commercial & service industry machinery mfg	2	10	7	498	15 876	219	342	4 912	39 096	28 328	67 199	D
333313	Office machinery mfg	4	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	67	13	1 956	81 135	1 178	2 310	46 308	131 204	130 740	262 540	7 951
33351	Metalworking machinery mfg	—	67	13	1 956	81 135	1 178	2 310	46 308	131 204	130 740	262 540	7 951
333512	Machine tool (metal cutting types) mfg	—	4	2	f	D	D	D	D	D	D	D	2 588
333514	Special die & tool, die set, jig, & fixture mfg	1	33	4	394	17 804	291	551	9 826	42 420	10 675	51 321	1 916
3339	Other general-purpose machinery mfg	2	17	6	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	61	22	3 792	152 927	2 143	4 262	77 502	302 423	253 372	556 893	24 835
3342	Communications equipment mfg	3	6	3	1 126	54 750	516	988	24 543	102 713	153 997	256 468	D
33421	Telephone apparatus mfg	1	5	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	5	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	28	9	1 177	36 970	724	1 486	18 888	78 202	37 610	116 927	12 038
33441	Semiconductor & other electronic component mfg	4	28	9	1 177	36 970	724	1 486	18 888	78 202	37 610	116 927	12 038
334418	Printed circuit assembly (electronic assembly) mfg	—	3	3	260	6 710	182	298	3 607	14 711	12 922	29 345	D
334419	Other electronic component mfg	1	13	5	742	20 844	430	997	11 305	23 986	21 457	45 685	2 755

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Bridgeport, CT PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	22	9	1 411	58 192	857	1 719	32 286	115 171	57 713	173 279	5 267
33451	Navigational, measuring, medical, & control instruments mfg	-	22	9	1 411	58 192	857	1 719	32 286	115 171	57 713	173 279	5 267
334513	Industrial process control instrument mfg	-	11	5	1 065	42 314	698	1 442	26 472	82 109	38 091	120 109	2 480
335	Electrical equipment, appliance, & component mfg	-	37	22	3 079	126 254	1 988	3 915	61 122	296 383	215 546	532 739	17 269
3351	Electric lighting equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	2	2	e	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	14	3	434	13 188	285	538	6 408	43 616	21 485	65 362	D
33531	Electrical equipment mfg	1	14	3	434	13 188	285	538	6 408	43 616	21 485	65 362	D
335314	Relay & industrial control mfg	1	7	2	266	8 921	153	285	3 582	23 164	11 833	35 201	686
3359	Other electrical equipment & component mfg	-	18	15	1 882	75 179	1 192	2 447	36 631	135 230	105 027	248 121	8 531
33593	Wiring device mfg	-	7	7	g	D	D	D	D	D	D	D	6 752
335931	Current-carrying wiring device mfg	-	5	5	312	10 436	236	455	7 236	21 490	11 721	33 196	D
335932	Noncurrent-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	7	5	428	13 646	286	509	6 366	39 162	26 643	66 094	D
335999	All other miscellaneous electrical equipment & component mfg	-	7	5	428	13 646	286	509	6 366	39 162	26 643	66 094	D
336	Transportation equipment mfg	-	22	13	10 208	532 421	5 177	10 443	240 252	1 109 131	882 344	2 129 220	D
3363	Motor vehicle parts mfg ...	-	6	4	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	12	8	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	12	8	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	3	3	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	4	2	f	D	D	D	D	D	D	D	183
339	Miscellaneous mfg	-	62	11	2 266	101 916	1 335	2 645	44 883	329 296	145 793	474 251	29 356
3391	Medical equipment & supplies mfg	2	34	5	745	31 064	487	914	14 350	69 645	26 264	94 287	D
33911	Medical equipment & supplies mfg	2	34	5	745	31 064	487	914	14 350	69 645	26 264	94 287	D
339112	Surgical & medical instrument mfg	2	8	3	486	20 243	346	699	11 351	47 039	18 030	63 358	2 907
3399	Other miscellaneous mfg ..	-	28	6	1 521	70 852	848	1 731	30 533	259 651	119 529	379 964	D
33999	All other miscellaneous mfg	-	10	3	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	5	1	g	D	D	D	D	D	D	D	D

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Danbury, CT PMSA												
31-33	Manufacturing	-	354	112	14 774	662 650	8 441	17 349	284 039	2 210 344	1 558 024	3 772 667	115 679
311	Food mfg.....	-	19	3	362	14 530	209	468	7 739	49 994	88 352	138 397	3 215
322	Paper mfg.....	-	8	6	1 594	73 161	1 326	2 743	58 773	569 401	361 867	932 103	7 639
3221	Pulp, paper, & paperboard mills.....	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	1	7	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	5	4	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	37	6	700	28 270	473	1 027	17 513	52 707	52 507	106 396	3 064
3231	Printing & related support activities.....	1	37	6	700	28 270	473	1 027	17 513	52 707	52 507	106 396	3 064
32311	Printing.....	1	33	5	636	25 891	419	913	15 745	47 955	51 417	100 553	D
323110	Commercial lithographic printing..	-	17	4	533	22 561	342	769	13 608	41 427	46 567	89 169	2 508
325	Chemical mfg.....	-	21	12	2 603	154 763	449	907	14 584	656 224	365 568	1 018 752	51 241
3254	Pharmaceutical & medicine mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	1	4	3	407	13 668	156	301	4 732	111 553	117 676	228 966	D
32599	All other chemical product & preparation mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	1	10	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	9	5	492	16 771	401	729	12 435	33 890	27 219	61 592	5 197
326199	All other plastics product mfg.....	1	9	5	492	16 771	401	729	12 435	33 890	27 219	61 592	5 197
331	Primary metal mfg.....	-	7	5	298	12 764	215	511	7 828	14 689	56 528	68 712	2 030
332	Fabricated metal product mfg.....	-	70	15	1 862	70 616	1 355	2 816	38 916	162 211	73 393	231 997	10 569
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	33	6	508	19 721	348	756	10 511	45 091	14 870	60 094	1 894
33272	Turned product & screw, nut, & bolt mfg.....	-	5	3	304	11 954	184	452	4 902	32 233	10 572	42 845	D
3329	Other fabricated metal product mfg.....	-	10	4	979	38 047	701	1 455	20 361	92 243	41 564	129 962	6 477
33299	All other fabricated metal product mfg.....	-	9	4	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	29	7	615	25 480	310	558	8 475	52 725	34 113	84 778	1 280
334	Computer & electronic product mfg.....	-	44	24	3 088	150 876	1 679	3 383	63 500	335 068	229 142	573 443	20 161
3344	Semiconductor & other electronic component mfg.....	-	19	11	1 122	49 689	739	1 430	24 813	115 803	74 503	188 266	9 118
33441	Semiconductor & other electronic component mfg.....	-	19	11	1 122	49 689	739	1 430	24 813	115 803	74 503	188 266	9 118
334413	Semiconductor & related device mfg....	-	5	3	490	24 038	303	528	11 958	67 142	32 898	97 948	3 241
334417	Electronic connector mfg.....	-	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	17	10	1 840	96 354	864	1 830	37 008	206 564	146 733	364 288	9 987
33451	Navigational, measuring, medical, & control instruments mfg	-	17	10	1 840	96 354	864	1 830	37 008	206 564	146 733	364 288	9 987
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	3	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	18	9	1 078	39 264	555	1 161	15 159	110 652	75 384	190 590	1 769
3353	Electrical equipment mfg ..	1	7	4	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	7	4	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	10	5	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	8	4	f	D	D	D	D	D	D	D	1 213
335999	All other miscellaneous electrical equipment & component mfg	1	7	4	686	24 781	301	649	8 246	70 357	53 211	127 614	1 213
336	Transportation equipment mfg	4	10	6	415	13 641	295	550	7 900	31 132	23 729	53 783	D
339	Miscellaneous mfg	-	33	6	805	30 398	514	1 100	14 825	48 476	92 204	139 668	D
3391	Medical equipment & supplies mfg	-	11	4	608	24 811	394	880	11 823	38 590	76 105	114 105	3 941
33911	Medical equipment & supplies mfg	-	11	4	608	24 811	394	880	11 823	38 590	76 105	114 105	3 941
339111	Laboratory apparatus & furniture mfg	-	2	1	e	D	D	D	D	D	D	D	D
	New Haven—Meriden, CT PMSA												
31-33	Manufacturing	-	934	323	39 876	1 553 232	24 309	50 700	707 615	5 246 760	3 568 340	8 736 926	309 338
311	Food mfg	2	64	18	1 468	39 953	1 030	2 154	21 905	142 477	134 187	278 981	7 748
3113	Sugar & confectionery product mfg	-	4	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	34	6	568	16 961	318	640	6 356	83 074	43 162	128 356	3 911
31181	Bread & bakery product mfg	-	31	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	3	e	D	D	D	D	D	D	D	D
313	Textile mills	-	4	4	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
31332	Fabric coating mills	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
313320	Fabric coating mills ...	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
315	Apparel mfg	-	13	3	533	15 416	357	678	6 427	83 156	72 528	151 785	1 517
3152	Cut & sew apparel mfg	-	10	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	4	3	e	D	D	D	D	D	D	D	1 439
315239	Women's & girls' cut & sew other outerwear mfg	-	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	24	15	1 045	37 087	757	1 677	20 206	102 053	81 580	184 482	5 544
3222	Converted paper product mfg	-	23	14	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	10	8	467	18 852	318	685	10 371	38 524	38 278	78 582	D
322211	Corrugated & solid fiber box mfg	-	5	4	338	14 560	232	510	7 397	29 419	30 652	60 169	1 525
32222	Paper bag & coated & treated paper mfg	-	6	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New Haven—Meriden, CT PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	3	123	30	2 706	104 189	2 010	4 162	67 685	222 967	162 097	379 734	12 230
3231	Printing & related support activities.....	3	123	30	2 706	104 189	2 010	4 162	67 685	222 967	162 097	379 734	12 230
32311	Printing.....	3	102	22	2 133	78 504	1 603	3 269	50 946	165 825	149 308	309 828	8 774
323110	Commercial lithographic printing ..	2	47	14	1 599	62 008	1 229	2 545	40 677	131 983	119 529	246 305	5 445
32312	Support activities for printing.....	4	21	8	573	25 685	407	893	16 739	57 142	12 789	69 906	3 456
323122	Prepress services	4	18	8	559	25 383	395	871	16 528	12 648	12 648	69 191	D
325	Chemical mfg.....	-	27	15	4 836	269 694	1 242	2 668	40 923	1 202 524	629 697	1 825 629	70 489
3254	Pharmaceutical & medicine mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
32552	Adhesive mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	4	430	18 093	278	752	10 910	134 314	68 774	202 945	D
32562	Toilet preparation mfg	-	2	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	2	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	8	4	e	D	D	D	D	D	D	D	6 175
32599	All other chemical product & preparation mfg.....	-	6	2	395	17 015	147	300	4 857	25 996	46 910	73 187	D
326	Plastics & rubber products mfg.....	4	39	15	1 093	39 206	808	1 685	20 152	84 282	54 207	139 255	6 177
3261	Plastics product mfg.....	4	35	15	1 075	38 616	792	1 649	19 674	82 808	52 564	136 131	6 076
32619	Other plastics product mfg.....	4	24	11	826	31 977	598	1 276	16 102	67 863	43 827	112 252	5 625
326199	All other plastics product mfg.....	5	22	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	22	9	482	18 792	340	773	10 769	36 599	39 091	75 580	2 615
331	Primary metal mfg.....	-	24	13	1 891	91 845	1 433	3 108	58 636	273 930	394 987	667 098	12 110
3312	Steel product mfg from purchased steel.....	-	6	5	831	38 774	677	1 435	28 111	121 427	167 703	289 463	4 145
33122	Rolling & drawing of purchased steel.....	-	6	5	831	38 774	677	1 435	28 111	121 427	167 703	289 463	4 145
331221	Cold-rolled steel shape mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing....	-	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	8	4	e	D	D	D	D	D	D	D	4 777
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	6	3	293	17 505	176	312	7 653	57 671	67 052	124 045	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	184	55	5 654	196 192	4 218	9 101	120 396	444 999	276 446	733 647	22 199
3321	Forging & stamping.....	2	14	7	366	14 856	269	578	8 395	28 492	18 673	46 790	958
33211	Forging & stamping.....	2	14	7	366	14 856	269	578	8 395	28 492	18 673	46 790	958
3322	Cutlery & handtool mfg....	-	9	4	256	10 095	201	453	6 340	36 615	25 100	65 709	D
33221	Cutlery & handtool mfg..	-	9	4	256	10 095	201	453	6 340	36 615	25 100	65 709	D
3323	Architectural & structural metals mfg.....	1	36	10	802	25 947	569	1 130	14 445	47 443	42 019	89 524	1 760
33231	Plate work & fabricated structural product mfg..	-	11	3	263	6 401	239	392	4 883	13 100	18 769	31 921	341
33232	Ornamental & architectural metal products mfg.....	1	25	7	539	19 546	330	738	9 562	34 343	23 250	57 603	1 419
3325	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	New Haven—Meriden, CT PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	71	12	1 081	35 185	817	1 521	22 158	61 019	26 644	87 567	5 103
33271	Machine shops	1	54	9	769	22 977	571	1 035	14 023	40 704	13 999	55 022	2 557
332710	Machine shops	1	54	9	769	22 977	571	1 035	14 023	40 704	13 999	55 022	2 557
33272	Turned product & screw, nut, & bolt mfg	—	17	3	312	12 208	246	486	8 135	20 315	12 645	32 545	2 546
3328	Coating, engraving, heat treating, & allied activities.	1	12	6	520	16 611	418	937	11 492	42 217	11 444	54 347	1 603
33281	Coating, engraving, heat treating, & allied activities	1	12	6	520	16 611	418	937	11 492	42 217	11 444	54 347	1 603
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	6	4	382	13 073	296	688	9 032	36 244	7 760	44 690	1 320
3329	Other fabricated metal product mfg	—	22	9	1 428	48 330	1 080	2 526	31 180	111 383	76 745	193 364	5 109
33291	Metal valve mfg	—	6	3	269	8 169	201	493	4 852	18 405	25 011	41 927	601
33299	All other fabricated metal product mfg	—	16	6	1 159	40 161	879	2 033	26 328	92 978	51 734	151 437	4 508
332994	Small arms mfg	—	4	4	1 059	37 174	817	1 904	24 698	87 144	45 839	139 665	D
333	Machinery mfg	3	88	35	2 827	114 342	1 412	2 888	44 332	215 639	148 408	351 797	11 487
3332	Industrial machinery mfg ..	5	12	5	388	17 340	144	267	3 926	44 894	24 144	70 475	D
33329	Other industrial machinery mfg	6	10	3	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	4	6	3	301	10 315	161	323	4 508	17 873	12 835	35 237	D
33331	Commercial & service industry machinery mfg	4	6	3	301	10 315	161	323	4 508	17 873	12 835	35 237	D
333313	Office machinery mfg ..	5	3	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	41	16	1 152	44 567	686	1 405	22 547	79 283	58 594	121 746	4 697
33351	Metalworking machinery mfg	1	41	16	1 152	44 567	686	1 405	22 547	79 283	58 594	121 746	4 697
333514	Special die & tool, die set, jig, & fixture mfg ..	3	22	5	293	11 806	223	446	8 197	21 194	8 313	29 530	1 515
333516	Rolling mill machinery & equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	23	9	865	38 131	338	729	10 984	67 444	46 497	111 801	2 944
33399	All other general-purpose machinery mfg	4	19	7	788	34 726	286	625	9 043	62 055	42 460	102 288	D
333999	All other miscellaneous general-purpose machinery mfg	2	15	5	648	28 538	240	519	7 353	42 904	26 040	68 248	2 172
334	Computer & electronic product mfg	—	84	38	4 878	197 259	2 442	5 196	67 621	526 007	412 296	904 245	36 110
3342	Communications equipment mfg	—	10	5	1 067	48 169	365	814	12 341	174 807	173 959	339 426	15 594
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	5	3	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	5	3	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	27	12	1 351	46 370	1 004	1 979	25 456	115 604	84 302	196 266	6 537
33441	Semiconductor & other electronic component mfg	—	27	12	1 351	46 370	1 004	1 979	25 456	115 604	84 302	196 266	6 537
334412	Bare printed circuit board mfg	—	12	5	742	28 215	561	1 229	16 190	72 810	56 242	125 586	4 499
334419	Other electronic component mfg	—	6	4	357	10 470	264	474	5 524	29 111	18 883	47 784	699

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New Haven—Meriden, CT PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	39	16	2 119	90 304	870	1 978	25 737	206 481	118 458	303 223	12 081
33451	Navigational, measuring, medical, & control instruments mfg	1	39	16	2 119	90 304	870	1 978	25 737	206 481	118 458	303 223	12 081
334510	Electromedical & electrotherapeutic apparatus mfg	1	9	5	849	39 651	313	706	10 619	67 716	47 054	114 253	4 153
334511	Search, detection, navigation, & guidance instrument mfg	—	3	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	4	1	426	20 931	109	217	3 689	37 867	11 650	49 101	D
335	Electrical equipment, appliance, & component mfg	—	43	19	2 179	71 350	1 188	2 437	29 761	201 820	128 474	329 541	30 365
3353	Electrical equipment mfg ..	1	17	6	995	27 905	489	1 016	10 452	61 615	44 404	105 489	4 797
33531	Electrical equipment mfg	1	17	6	995	27 905	489	1 016	10 452	61 615	44 404	105 489	4 797
335312	Motor & generator mfg	—	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	17	10	934	33 954	548	1 106	16 500	124 596	76 155	200 477	24 865
33592	Communication & energy wire & cable mfg	—	7	7	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	7	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	33	18	4 197	161 553	2 781	6 310	97 029	447 225	624 545	1 053 442	34 730
3363	Motor vehicle parts mfg ...	—	15	8	g	D	D	D	D	D	D	D	20 274
33631	Motor vehicle gasoline engine & engine parts mfg	—	5	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	5	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	5	3	1 101	31 384	676	1 381	15 145	82 805	53 309	136 045	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	12	8	2 170	98 480	1 498	3 613	65 632	291 528	440 700	713 911	14 228
33641	Aerospace product & parts mfg	—	12	8	2 170	98 480	1 498	3 613	65 632	291 528	440 700	713 911	14 228
336411	Aircraft mfg	9	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	6	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	40	5	364	9 987	280	489	6 294	18 941	14 502	33 415	643
339	Miscellaneous mfg	—	79	24	4 929	161 007	3 404	6 076	82 233	1 179 008	302 470	1 471 014	52 469
3391	Medical equipment & supplies mfg	—	39	14	3 721	128 091	2 607	4 443	68 243	1 101 858	233 941	1 326 081	49 517
33911	Medical equipment & supplies mfg	—	39	14	3 721	128 091	2 607	4 443	68 243	1 101 858	233 941	1 326 081	49 517
339112	Surgical & medical instrument mfg	—	14	7	h	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	3	3	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	3	40	10	1 208	32 916	797	1 633	13 990	77 150	68 529	144 933	2 952
33991	Jewelry & silverware mfg	1	9	5	630	15 071	413	935	5 973	38 450	40 945	78 849	D
339914	Costume jewelry & novelty mfg	—	2	2	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	16	4	291	9 897	162	266	3 394	18 350	9 455	27 559	1 072

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Stamford—Norwalk, CT PMSA												
31-33	Manufacturing	1	489	120	16 703	703 207	8 971	18 589	285 463	3 091 396	1 690 705	4 638 079	222 646
311	Food mfg.	—	33	4	1 306	49 989	1 011	2 003	35 273	197 470	71 141	269 151	6 421
3118	Bakeries & tortilla mfg.	—	31	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.	—	30	3	g	D	D	D	D	D	D	D	6 237
311812	Commercial bakeries	—	14	3	1 235	48 662	957	1 933	34 481	192 007	66 824	259 358	6 143
315	Apparel mfg.	1	20	5	753	16 538	618	1 240	12 195	62 128	68 807	128 933	D
3159	Apparel accessories & other apparel mfg.	—	14	3	f	D	D	D	D	D	D	D	280
31599	Apparel accessories & other apparel mfg.	—	14	3	f	D	D	D	D	D	D	D	280
315999	Other apparel accessories & other apparel mfg.	—	10	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	115	22	1 558	64 438	1 130	2 330	36 341	142 243	75 633	216 453	12 725
3231	Printing & related support activities	3	115	22	1 558	64 438	1 130	2 330	36 341	142 243	75 633	216 453	12 725
32311	Printing	2	101	18	1 330	53 055	981	2 018	28 739	120 323	69 179	188 142	8 816
323110	Commercial lithographic printing	4	59	11	723	27 170	485	1 004	16 216	47 068	29 405	76 661	5 874
325	Chemical mfg.	—	21	10	2 111	95 761	809	1 674	37 793	957 929	383 693	1 277 601	42 099
3251	Basic chemical mfg.	—	2	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.	—	1	1	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.	—	1	1	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg.	—	11	6	1 614	74 035	638	1 328	28 340	906 137	348 675	1 189 664	D
32562	Toilet preparation mfg.	—	6	4	1 546	71 531	594	1 234	27 188	899 696	342 910	1 177 422	D
325620	Toilet preparation mfg.	—	6	4	1 546	71 531	594	1 234	27 188	899 696	342 910	1 177 422	D
326	Plastics & rubber products mfg.	3	10	6	443	15 721	348	837	10 873	45 474	33 977	79 648	2 638
3261	Plastics product mfg.	3	9	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.	2	48	12	729	26 933	508	1 051	16 230	54 751	33 552	88 740	2 407
333	Machinery mfg.	—	27	9	3 301	139 285	1 275	2 588	26 219	881 188	506 240	1 309 865	D
3332	Industrial machinery mfg.	—	3	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.	—	3	1	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.	—	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg.	—	7	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.	—	7	1	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg.	—	2	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	2	10	6	e	D	D	D	D	D	D	D	602
334	Computer & electronic product mfg.	1	50	20	3 283	170 074	1 467	3 177	59 122	458 105	295 276	756 205	11 619
3344	Semiconductor & other electronic component mfg.	8	8	4	f	D	D	D	D	D	D	D	3 632
33441	Semiconductor & other electronic component mfg.	8	8	4	f	D	D	D	D	D	D	D	3 632
334419	Other electronic component mfg.	8	3	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.	—	22	7	2 227	125 188	761	1 605	33 884	371 291	242 519	617 697	4 989
33451	Navigational, measuring, medical, & control instruments mfg.	—	22	7	2 227	125 188	761	1 605	33 884	371 291	242 519	617 697	4 989
334511	Search, detection, navigation, & guidance instrument mfg.	—	4	1	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.	—	5	3	f	D	D	D	D	D	D	D	1 246
334516	Analytical laboratory instrument mfg.	—	5	2	f	D	D	D	D	D	D	D	166

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Stamford—Norwalk, CT PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	5	17	12	522	18 370	346	647	8 291	33 214	32 056	66 599	1 784
336	Transportation equipment mfg	7	8	3	e	D	D	D	D	D	D	D	830
337	Furniture & related product mfg	5	40	2	326	10 109	259	516	6 631	20 665	15 969	36 349	830
339	Miscellaneous mfg	3	54	10	1 555	59 335	752	1 414	23 511	146 310	92 298	234 416	8 768
3391	Medical equipment & supplies mfg	1	20	5	635	31 175	329	493	9 927	75 082	50 158	125 249	3 785
33911	Medical equipment & supplies mfg	1	20	5	635	31 175	329	493	9 927	75 082	50 158	125 249	3 785
339112	Surgical & medical instrument mfg	—	4	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	6	34	5	920	28 160	423	921	13 584	71 228	42 140	109 167	4 983
33995	Sign mfg	9	14	3	604	19 130	244	589	10 759	42 004	27 369	67 187	D
339950	Sign mfg	9	14	3	604	19 130	244	589	10 759	42 004	27 369	67 187	D
	Waterbury, CT PMSA												
31-33	Manufacturing	1	516	187	17 628	604 422	12 587	26 389	375 498	1 538 475	1 410 530	2 936 408	126 290
311	Food mfg	—	20	4	580	17 309	435	848	11 696	139 638	89 395	223 266	23 446
3113	Sugar & confectionery product mfg	—	2	1	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	—	2	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	2	1	e	D	D	D	D	D	D	D	D
313	Textile mills	6	4	2	e	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	6	2	2	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	6	2	2	e	D	D	D	D	D	D	D	D
313113	Thread mills	6	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	28	7	392	11 721	291	505	6 385	25 355	12 337	37 684	D
3231	Printing & related support activities.....	2	28	7	392	11 721	291	505	6 385	25 355	12 337	37 684	D
32311	Printing	2	27	7	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	19	4	276	9 454	193	365	4 919	16 216	10 149	26 400	D
325	Chemical mfg	3	14	10	833	36 584	481	1 071	19 629	103 148	189 067	299 536	D
3251	Basic chemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	19	9	995	24 909	572	1 330	13 215	69 548	66 764	135 569	9 230
3261	Plastics product mfg	—	17	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	8	4	602	11 368	287	695	6 007	39 264	24 508	63 552	7 082
326199	All other plastics product mfg	—	8	4	602	11 368	287	695	6 007	39 264	24 508	63 552	7 082
331	Primary metal mfg	1	14	8	647	28 521	469	1 186	19 423	91 049	172 514	264 490	8 132
3314	Nonferrous metal (except aluminum) production & processing.....	1	10	6	554	25 413	399	1 045	16 920	79 114	147 860	227 818	7 831
33142	Copper rolling, drawing, extruding, & alloying ...	—	5	4	342	16 038	246	606	10 955	56 639	119 409	176 548	D
331421	Copper rolling, drawing, & extruding .	—	3	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Waterbury, CT PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	219	79	6 736	243 232	5 299	11 434	167 481	499 074	404 667	903 531	38 593
3321	Forging & stamping	—	53	27	2 678	105 503	2 220	4 884	76 970	224 595	232 849	457 290	17 692
33211	Forging & stamping	—	53	27	2 678	105 503	2 220	4 884	76 970	224 595	232 849	457 290	17 692
332115	Crown & closure mfg.	—	6	4	f	D	D	D	D	D	D	D	D
332116	Metal stamping	—	46	22	1 962	81 879	1 616	3 783	59 923	168 175	178 525	344 649	15 185
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	97	29	2 075	69 621	1 636	3 356	47 745	129 213	73 466	202 785	8 511
33271	Machine shops	1	45	7	720	22 380	558	1 088	15 197	42 240	17 893	60 216	2 578
332710	Machine shops	1	45	7	720	22 380	558	1 088	15 197	42 240	17 893	60 216	2 578
33272	Turned product & screw, nut, & bolt mfg	1	52	22	1 355	47 241	1 078	2 268	32 548	86 973	55 573	142 569	5 933
332721	Precision turned product mfg	1	47	18	1 086	35 725	871	1 786	24 977	57 740	29 657	86 793	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	5	4	269	11 516	207	482	7 571	29 233	25 916	55 776	D
3328	Coating, engraving, heat treating, & allied activities	1	30	14	1 418	48 519	1 051	2 396	30 786	98 310	64 304	162 562	9 839
33281	Coating, engraving, heat treating, & allied activities	1	30	14	1 418	48 519	1 051	2 396	30 786	98 310	64 304	162 562	9 839
332813	Electroplating, plating, polishing, anodizing, & coloring	1	20	12	1 291	44 427	946	2 210	28 024	88 676	61 394	150 038	8 403
333	Machinery mfg	2	69	14	775	31 103	493	922	16 126	77 820	33 101	101 307	2 810
3335	Metalworking machinery mfg	1	44	7	411	15 587	290	528	8 868	26 803	9 984	37 342	1 170
33351	Metalworking machinery mfg	1	44	7	411	15 587	290	528	8 868	26 803	9 984	37 342	1 170
334	Computer & electronic product mfg	1	28	11	1 875	67 047	925	1 861	27 049	157 945	133 192	294 182	14 073
3342	Communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	3	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	3	15	5	598	18 509	428	823	11 299	49 697	30 879	80 069	4 046
33441	Semiconductor & other electronic component mfg	3	15	5	598	18 509	428	823	11 299	49 697	30 879	80 069	4 046
334417	Electronic connector mfg	2	3	3	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	9	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	9	4	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	4	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	14	13	1 334	34 262	864	1 546	20 611	121 136	60 877	176 406	4 127
3351	Electric lighting equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	9	9	810	18 055	508	1 006	12 002	86 118	41 798	122 575	D
33593	Wiring device mfg	—	7	7	f	D	D	D	D	D	D	D	3 419
335931	Current-carrying wiring device mfg	—	6	6	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Waterbury, CT PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	1	12	6	1 335	51 591	1 095	2 215	34 615	122 407	127 616	249 014	6 883
3363	Motor vehicle parts mfg . . .	1	9	6	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	15	4	416	10 393	339	578	6 995	19 602	13 544	33 300	2 570
3371	Household & institutional furniture & kitchen cabinet mfg	—	7	1	263	6 995	228	401	5 000	14 991	8 802	23 709	D
33711	Wood kitchen cabinet & counter top mfg	—	6	1	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	—	6	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	25	9	543	16 316	335	747	9 357	30 034	19 074	48 466	4 653
3399	Other miscellaneous mfg . .	1	18	6	e	D	D	D	D	D	D	D	4 288
33999	All other miscellaneous mfg	—	8	5	364	10 480	216	527	6 832	19 441	14 070	32 942	2 394
339993	Fastener, button, needle, & pin mfg	—	8	5	364	10 480	216	527	6 832	19 441	14 070	32 942	2 394

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FAIRFIELD COUNTY, CT												
31-33	Manufacturing	1	1 316	406	57 560	2 495 948	32 808	67 527	1 106 723	7 220 179	4 863 011	12 115 468	483 701
311	Food mfg	1	82	15	2 134	72 977	1 464	2 873	44 367	231 812	145 928	379 359	10 195
3118	Bakeries & tortilla mfg	1	63	12	1 728	57 606	1 258	2 524	39 103	209 993	92 698	304 043	D
31181	Bread & bakery product mfg	1	62	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	1	20	5	1 407	53 251	1 086	2 284	36 880	199 551	85 073	285 972	6 780
313	Textile mills	6	11	5	993	30 810	793	1 688	19 067	69 845	73 550	143 661	D
3133	Textile & fabric finishing & fabric coating mills	6	8	4	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	6	2	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	9	4	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FAIRFIELD COUNTY, CT—Con.												
	Manufacturing—Con.												
315	Apparel mfg	1	24	6	783	17 183	644	1 285	12 637	65 396	70 510	133 994	D
3159	Apparel accessories & other apparel mfg	—	15	3	605	13 163	496	1 007	9 646	50 691	57 847	106 498	D
31599	Apparel accessories & other apparel mfg	—	15	3	605	13 163	496	1 007	9 646	50 691	57 847	106 498	D
315999	Other apparel accessories & other apparel mfg	—	10	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	15	8	718	24 856	568	1 125	15 060	49 292	71 554	121 722	2 296
3222	Converted paper product mfg	—	15	8	718	24 856	568	1 125	15 060	49 292	71 554	121 722	2 296
32221	Paperboard container mfg	—	8	6	f	D	D	D	D	D	D	D	1 801
323	Printing & related support activities	2	221	47	3 260	128 432	2 414	5 017	78 287	268 028	169 830	441 374	18 964
3231	Printing & related support activities	2	221	47	3 260	128 432	2 414	5 017	78 287	268 028	169 830	441 374	18 964
32311	Printing	2	191	38	h	D	D	D	D	D	D	D	14 513
323110	Commercial lithographic printing ..	2	106	27	1 845	71 314	1 344	2 877	45 659	129 942	101 465	236 712	10 247
325	Chemical mfg	—	59	28	5 072	267 133	1 425	2 886	58 220	1 672 820	814 410	2 415 843	95 724
3251	Basic chemical mfg	1	12	7	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	8	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	8	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	5	3	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	16	8	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	8	6	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	8	6	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	48	25	2 509	92 415	1 915	4 112	59 579	245 747	187 336	432 088	25 566
3261	Plastics product mfg	1	41	19	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	33	16	1 737	58 940	1 331	2 712	37 761	128 291	112 962	241 209	17 501
326199	All other plastics product mfg	2	33	16	1 737	58 940	1 331	2 712	37 761	128 291	112 962	241 209	17 501
331	Primary metal mfg	—	15	9	752	31 810	532	1 201	18 143	55 050	134 197	187 063	D
332	Fabricated metal product mfg	1	226	72	5 871	228 472	4 148	8 824	122 601	457 444	257 260	714 083	28 425
3321	Forging & stamping	—	14	8	625	22 451	462	1 013	14 280	39 992	27 379	67 078	D
33211	Forging & stamping	—	14	8	625	22 451	462	1 013	14 280	39 992	27 379	67 078	D
332116	Metal stamping	—	12	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	40	10	589	21 417	411	884	12 505	41 866	32 445	73 969	3 975
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	92	21	1 560	73 456	1 060	2 216	31 798	138 775	66 242	206 155	6 927
33271	Machine shops	1	74	14	745	30 806	545	1 012	16 809	56 673	19 163	75 532	2 626
332710	Machine shops	1	74	14	745	30 806	545	1 012	16 809	56 673	19 163	75 532	2 626
33272	Turned product & screw, nut, & bolt mfg	—	18	7	815	42 650	515	1 204	14 989	82 102	47 079	130 623	4 301
332722	Bolt, nut, screw, rivet, & washer mfg	—	4	3	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	38	11	677	24 799	543	1 167	15 783	38 242	28 447	68 830	2 657
33281	Coating, engraving, heat treating, & allied activities	1	38	11	677	24 799	543	1 167	15 783	38 242	28 447	68 830	2 657
3329	Other fabricated metal product mfg	1	23	13	1 728	65 658	1 155	2 484	35 785	149 015	77 526	222 328	10 518
33299	All other fabricated metal product mfg	1	23	13	1 728	65 658	1 155	2 484	35 785	149 015	77 526	222 328	10 518
332991	Ball & roller bearing mfg	1	4	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	16	9	949	31 029	633	1 300	16 169	65 108	53 208	116 922	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FAIRFIELD COUNTY, CT—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	114	37	6 623	277 526	3 102	6 211	90 521	1 126 743	723 660	1 782 686	142 265
3332	Industrial machinery mfg ..	-	12	8	2 161	121 363	1 178	2 477	25 895	335 135	98 887	366 611	D
33329	Other industrial machinery mfg	-	12	8	2 161	121 363	1 178	2 477	25 895	335 135	98 887	366 611	D
333295	Semiconductor machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	17	7	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	17	7	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	5	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	51	11	1 879	80 535	1 057	2 118	41 148	131 117	132 441	262 158	7 167
33351	Metalworking machinery mfg	-	51	11	1 879	80 535	1 057	2 118	41 148	131 117	132 441	262 158	7 167
333512	Machine tool (metal cutting types) mfg ...	-	6	3	991	36 594	421	903	15 826	48 232	98 978	143 566	2 473
3339	Other general-purpose machinery mfg	3	27	8	587	20 806	337	631	9 497	32 881	38 032	81 124	1 380
334	Computer & electronic product mfg	1	125	56	8 918	425 483	4 612	9 600	181 885	999 497	646 152	1 659 328	51 886
3342	Communications equipment mfg	7	14	8	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	7	7	6	f	D	D	D	D	D	D	D	5 282
334220	Radio & TV broadcasting & wireless communications equipment mfg	7	7	6	f	D	D	D	D	D	D	D	5 282
3344	Semiconductor & other electronic component mfg	3	38	19	2 340	96 014	1 537	3 349	50 824	212 755	110 099	319 044	22 874
33441	Semiconductor & other electronic component mfg	3	38	19	2 340	96 014	1 537	3 349	50 824	212 755	110 099	319 044	22 874
334413	Semiconductor & related device mfg ...	3	8	4	616	32 692	378	671	15 472	105 297	35 308	137 645	11 621
334419	Other electronic component mfg	5	9	5	987	33 609	645	1 604	20 038	49 354	27 556	75 995	4 783
3345	Navigational, measuring, medical, & control instruments mfg	-	53	23	5 340	274 797	2 397	4 995	101 141	682 479	440 634	1 138 394	20 067
33451	Navigational, measuring, medical, & control instruments mfg	-	53	23	5 340	274 797	2 397	4 995	101 141	682 479	440 634	1 138 394	20 067
334511	Search, detection, navigation, & guidance instrument mfg	-	7	3	1 562	107 819	442	966	26 423	199 956	64 303	274 065	10 015
334513	Industrial process control instrument mfg	-	17	9	1 826	72 141	1 022	2 034	37 998	139 437	99 792	237 968	4 094
334516	Analytical laboratory instrument mfg	-	7	3	f	D	D	D	D	D	D	D	278
334519	Other measuring & controlling device mfg	-	8	4	579	27 088	315	616	11 021	27 651	70 851	108 588	1 610
335	Electrical equipment, appliance, & component mfg	1	57	35	3 876	148 943	2 332	4 632	62 713	377 514	263 283	667 097	18 184
3353	Electrical equipment mfg ..	2	23	12	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	23	12	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	26	19	2 395	93 110	1 407	2 930	41 387	189 616	134 998	337 767	9 702
33593	Wiring device mfg	-	7	7	g	D	D	D	D	D	D	D	6 738
335932	Noncurrent-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	16	10	1 171	41 701	636	1 285	16 226	116 605	85 424	206 653	D
335999	All other miscellaneous electrical equipment & component mfg	1	15	10	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FAIRFIELD COUNTY, CT—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	32	18	10 758	549 315	5 561	11 141	250 620	1 146 771	910 200	2 193 189	57 831
3363	Motor vehicle parts mfg ...	2	11	6	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	6	4	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	6	4	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	14	11	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	14	11	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	3	3	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	5	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	5	69	9	713	21 172	570	1 143	13 743	40 211	29 575	69 810	1 587
339	Miscellaneous mfg.....	2	125	21	3 177	122 693	1 807	3 599	54 906	273 732	219 693	486 335	17 146
3391	Medical equipment & supplies mfg	1	57	12	1 877	82 413	1 144	2 212	35 084	173 848	149 892	321 500	10 981
33911	Medical equipment & supplies mfg	1	57	12	1 877	82 413	1 144	2 212	35 084	173 848	149 892	321 500	10 981
339112	Surgical & medical instrument mfg	—	13	5	1 004	52 937	548	1 074	19 596	106 166	71 261	176 404	6 625
3399	Other miscellaneous mfg ..	4	68	9	1 300	40 280	663	1 387	19 822	99 884	69 801	164 835	6 165
33995	Sign mfg	6	29	4	777	25 483	355	825	14 071	59 471	38 046	95 100	5 364
339950	Sign mfg	6	29	4	777	25 483	355	825	14 071	59 471	38 046	95 100	5 364
HARTFORD COUNTY, CT													
31-33	Manufacturing	1	1 592	560	71 982	3 113 085	43 849	91 773	1 477 184	6 478 603	4 986 505	11 319 796	446 620
311	Food mfg	1	85	25	1 850	50 252	1 194	2 165	26 547	123 193	285 845	400 477	7 752
3115	Dairy product mfg	—	9	4	597	21 066	350	729	10 908	46 052	176 117	221 369	4 663
3118	Bakeries & tortilla mfg	5	49	11	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	5	48	11	f	D	D	D	D	D	D	D	D
313	Textile mills	—	7	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	5	2	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	—	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	15	9	929	34 992	682	1 489	21 807	79 512	93 328	170 699	4 887
3222	Converted paper product mfg	—	12	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	182	42	3 911	149 094	2 837	5 869	87 173	293 834	198 859	492 320	21 328
3231	Printing & related support activities.....	2	182	42	3 911	149 094	2 837	5 869	87 173	293 834	198 859	492 320	21 328
32311	Printing	2	165	36	3 641	139 975	2 630	5 499	81 499	276 803	195 552	471 979	19 969
323110	Commercial lithographic printing ..	3	93	27	2 302	95 901	1 566	3 269	51 526	172 055	147 724	319 632	12 381
323114	Quick printing	—	42	2	729	24 484	573	1 234	16 885	48 317	27 593	75 873	D
325	Chemical mfg	5	26	10	1 418	59 965	734	1 527	26 093	148 310	247 680	402 447	D
3259	Other chemical product mfg	2	5	3	827	36 372	401	810	14 076	53 774	52 346	105 517	D
32592	Explosives mfg	—	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	61	29	2 293	68 800	1 539	3 018	37 653	171 264	154 204	323 960	13 542
3261	Plastics product mfg	1	52	25	1 986	60 042	1 303	2 562	31 471	143 156	133 214	275 213	11 940
32619	Other plastics product mfg	1	29	14	1 375	37 264	871	1 691	18 431	69 620	46 021	115 378	D
326199	All other plastics product mfg	1	28	14	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	31	11	599	20 225	441	908	13 380	57 463	43 266	99 271	2 801
331	Primary metal mfg	—	21	14	1 068	40 042	833	1 793	27 345	90 955	89 943	173 542	3 273

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARTFORD COUNTY, CT—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	533	182	17 717	691 419	12 631	26 593	417 881	1 491 453	825 423	2 319 352	86 982
3321	Forging & stamping	1	30	17	2 195	89 443	1 441	3 260	53 825	126 009	102 668	228 206	7 098
332116	Forging & stamping	1	30	17	2 195	89 443	1 441	3 260	53 825	126 009	102 668	228 206	7 098
332117	Metal stamping	—	22	12	1 115	46 480	927	2 026	31 774	88 186	65 931	154 171	3 825
3322	Powder metallurgy part mfg	—	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	18	7	1 119	51 159	733	1 461	28 971	181 799	74 162	251 766	3 434
332212	Cutlery & handtool mfg	—	18	7	1 119	51 159	733	1 461	28 971	181 799	74 162	251 766	3 434
332212	Hand & edge tool mfg	—	14	6	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	48	14	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	26	9	823	27 974	473	1 032	14 286	63 134	66 239	127 955	2 849
3324	Boiler, tank, & shipping container mfg	—	6	3	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
33251	Hardware mfg	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
332510	Hardware mfg	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
3326	Spring & wire product mfg	—	39	24	1 651	66 769	1 276	2 818	43 810	133 153	81 765	213 979	11 867
33261	Spring & wire product mfg	—	39	24	1 651	66 769	1 276	2 818	43 810	133 153	81 765	213 979	11 867
332612	Spring (light gauge) mfg	1	23	16	1 071	40 803	847	1 854	26 083	60 196	44 987	104 828	6 049
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	262	59	4 562	174 845	3 430	7 485	115 635	310 886	168 838	483 839	28 567
33271	Machine shops	1	190	32	2 466	94 019	1 837	3 916	62 384	161 959	63 103	223 354	10 951
332710	Machine shops	1	190	32	2 466	94 019	1 837	3 916	62 384	161 959	63 103	223 354	10 951
33272	Turned product & screw, nut, & bolt mfg	—	72	27	2 096	80 826	1 593	3 569	53 251	148 927	105 735	260 485	17 616
332721	Precision turned product mfg	—	59	21	1 620	61 576	1 250	2 740	40 167	109 944	67 144	182 319	14 905
3328	Coating, engraving, heat treating, & allied activities	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
33281	Coating, engraving, heat treating, & allied activities	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
332813	Electroplating, plating, polishing, anodizing, & coloring	—	23	9	581	21 145	415	891	11 473	52 648	18 491	70 490	9 825
3329	Other fabricated metal product mfg	—	38	19	2 671	94 195	1 904	3 673	56 451	219 974	120 680	341 391	11 434
33291	Metal valve mfg	—	11	10	1 315	41 922	894	1 854	21 987	96 960	53 487	151 359	4 619
33299	All other fabricated metal product mfg	1	27	9	1 356	52 273	1 010	1 819	34 464	123 014	67 193	190 032	6 815
332994	Small arms mfg	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	194	59	7 170	312 721	4 322	9 408	160 706	749 949	517 414	1 257 424	35 623
3332	Industrial machinery mfg	—	23	10	1 005	46 574	523	1 110	19 316	135 048	126 908	262 551	D
33329	Other industrial machinery mfg	—	20	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	15	5	768	36 919	437	921	15 791	118 602	106 520	225 958	D
3333	Commercial & service industry machinery mfg	1	9	5	556	22 146	254	507	7 372	58 462	37 294	94 687	D
33331	Commercial & service industry machinery mfg	1	9	5	556	22 146	254	507	7 372	58 462	37 294	94 687	D
3335	Metalworking machinery mfg	1	111	26	2 403	109 506	1 541	3 181	57 819	209 344	155 631	359 747	16 294
33351	Metalworking machinery mfg	1	111	26	2 403	109 506	1 541	3 181	57 819	209 344	155 631	359 747	16 294
333512	Machine tool (metal cutting types) mfg	—	8	5	562	28 361	318	608	13 322	69 790	94 343	159 596	D
333514	Special die & tool, die set, jig, & fixture mfg	1	46	6	691	35 625	440	964	18 553	55 177	17 197	72 144	3 376
333515	Cutting tool & machine tool accessory mfg	1	45	9	737	26 344	514	1 070	15 694	53 787	27 436	81 431	1 777
3336	Engine, turbine, & power transmission equipment mfg	—	12	5	2 041	90 903	1 257	3 097	52 237	235 357	109 304	341 860	8 351
33361	Engine, turbine, & power transmission equipment mfg	—	12	5	2 041	90 903	1 257	3 097	52 237	235 357	109 304	341 860	8 351
333618	Other engine equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARTFORD COUNTY, CT—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	30	8	700	27 764	429	837	14 543	84 327	50 595	135 655	4 282
33399	All other general-purpose machinery mfg	1	27	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	74	43	4 567	175 209	2 587	5 080	81 560	402 034	240 559	638 881	33 985
3341	Computer & peripheral equipment mfg	2	7	5	687	37 551	223	475	11 013	82 622	44 312	126 621	7 004
33411	Computer & peripheral equipment mfg	2	7	5	687	37 551	223	475	11 013	82 622	44 312	126 621	7 004
334119	Other computer peripheral equipment mfg	2	5	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	27	17	1 689	51 136	1 114	2 281	27 108	104 268	90 830	189 716	7 089
33441	Semiconductor & other electronic component mfg	4	27	17	1 689	51 136	1 114	2 281	27 108	104 268	90 830	189 716	7 089
334419	Other electronic component mfg	8	8	7	779	26 911	426	925	12 419	46 710	55 467	91 965	4 157
3345	Navigational, measuring, medical, & control instruments mfg	3	29	15	1 433	51 665	758	1 458	23 113	113 928	60 658	177 892	4 376
33451	Navigational, measuring, medical, & control instruments mfg	3	29	15	1 433	51 665	758	1 458	23 113	113 928	60 658	177 892	4 376
334513	Industrial process control instrument mfg	1	7	4	654	24 867	329	611	9 961	53 931	31 860	86 304	1 849
335	Electrical equipment, appliance, & component mfg	—	41	19	3 498	150 579	1 938	3 888	63 702	320 741	252 234	561 001	21 177
3353	Electrical equipment mfg ..	—	22	7	1 556	66 434	840	1 689	26 223	142 760	72 247	211 102	7 489
33531	Electrical equipment mfg	—	22	7	1 556	66 434	840	1 689	26 223	142 760	72 247	211 102	7 489
335312	Motor & generator mfg	—	4	3	687	22 141	422	873	11 224	50 979	27 948	78 917	D
335313	Switchgear & switchboard apparatus mfg	—	4	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	15	9	1 569	74 286	869	1 693	32 210	154 988	148 208	293 935	D
33593	Wiring device mfg	—	2	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	2	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	9	4	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	9	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	86	54	20 304	1 141 113	9 674	20 878	391 933	1 949 192	1 504 849	3 347 232	148 133
3363	Motor vehicle parts mfg ...	—	13	7	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	69	47	18 933	1 101 394	8 648	19 128	368 276	1 859 897	1 353 362	3 107 959	138 100
33641	Aerospace product & parts mfg	—	69	47	18 933	1 101 394	8 648	19 128	368 276	1 859 897	1 353 362	3 107 959	138 100
336411	Aircraft mfg	—	4	4	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	35	23	i	D	D	D	D	D	D	D	77 116
336413	Other aircraft part & auxiliary equipment mfg	—	29	19	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	64	19	1 122	36 311	822	1 680	22 409	82 137	63 039	146 819	3 975
3372	Office furniture (including fixtures) mfg	1	22	13	584	20 498	416	840	11 393	43 454	30 330	75 364	1 745
33721	Office furniture (including fixtures) mfg	1	22	13	584	20 498	416	840	11 393	43 454	30 330	75 364	1 745

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARTFORD COUNTY, CT—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	107	24	3 631	113 982	2 140	4 355	54 658	317 984	208 908	525 708	36 209
3391	Medical equipment & supplies mfg.....	1	45	9	1 071	43 715	928	2 012	25 932	89 039	30 317	119 891	22 468
33911	Medical equipment & supplies mfg.....	1	45	9	1 071	43 715	928	2 012	25 932	89 039	30 317	119 891	22 468
339112	Surgical & medical instrument mfg.....	—	7	4	600	26 689	554	1 314	17 237	52 824	23 717	76 980	D
3399	Other miscellaneous mfg ..	1	62	15	2 560	70 267	1 212	2 343	28 726	228 945	178 591	405 817	13 741
33993	Doll, toy, & game mfg ...	—	4	3	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	2	22	8	512	13 111	390	709	8 117	21 898	12 458	35 478	D
LITCHFIELD COUNTY, CT													
31-33	Manufacturing	1	448	156	17 288	589 845	12 311	26 311	379 700	1 922 910	1 331 198	3 246 777	97 004
313	Textile mills.....	5	6	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	5	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	5	3	3	f	D	D	D	D	D	D	D	D
313113	Thread mills.....	5	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	—	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
3231	Printing & related support activities.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
32311	Printing.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
326	Plastics & rubber products mfg.....	—	23	12	1 593	42 158	1 077	2 664	27 843	101 209	79 659	175 698	D
3261	Plastics product mfg.....	—	22	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	17	8	g	D	D	D	D	D	D	D	8 521
326199	All other plastics product mfg.....	—	17	8	g	D	D	D	D	D	D	D	8 521
332	Fabricated metal product mfg.....	—	142	54	4 767	176 174	3 615	7 975	119 717	382 696	289 995	674 379	30 721
3321	Forging & stamping.....	—	30	14	1 395	55 384	1 141	2 338	40 528	135 657	113 736	248 906	11 661
33211	Forging & stamping.....	—	30	14	1 395	55 384	1 141	2 338	40 528	135 657	113 736	248 906	11 661
332116	Metal stamping.....	—	26	11	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	65	18	1 272	47 468	944	2 003	31 915	91 715	91 516	183 792	8 505
33271	Machine shops.....	1	39	6	627	23 848	435	920	14 368	51 447	67 044	118 596	4 435
332710	Machine shops.....	1	39	6	627	23 848	435	920	14 368	51 447	67 044	118 596	4 435
33272	Turned product & screw, nut, & bolt mfg.....	1	26	12	645	23 620	509	1 083	17 547	40 268	24 472	65 196	4 070
3328	Coating, engraving, heat treating, & allied activities.	1	10	6	771	24 062	575	1 330	15 426	50 670	31 625	82 423	5 000
33281	Coating, engraving, heat treating, & allied activities.....	1	10	6	771	24 062	575	1 330	15 426	50 670	31 625	82 423	5 000
332813	Electroplating, plating, polishing, anodizing, & coloring.....	—	6	5	732	23 164	544	1 278	14 793	48 377	30 637	79 140	D
3329	Other fabricated metal product mfg.....	—	18	7	871	33 889	617	1 600	22 195	72 032	34 856	108 477	D
33299	All other fabricated metal product mfg.....	—	16	6	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	—	5	3	654	26 273	500	1 410	19 243	45 518	26 111	73 585	2 123
333	Machinery mfg.....	3	64	18	1 547	53 111	942	1 842	26 767	120 491	97 862	207 866	6 095
3332	Industrial machinery mfg ..	—	13	7	520	17 960	270	634	8 237	35 189	24 811	61 439	D
33329	Other industrial machinery mfg.....	—	13	7	520	17 960	270	634	8 237	35 189	24 811	61 439	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LITCHFIELD COUNTY, CT—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	2	25	12	1 316	46 099	802	1 528	21 153	89 263	76 388	165 440	7 706
3344	Semiconductor & other electronic component mfg	3	14	8	791	25 391	552	1 122	13 791	65 356	43 210	108 525	5 420
33441	Semiconductor & other electronic component mfg	3	14	8	791	25 391	552	1 122	13 791	65 356	43 210	108 525	5 420
334417	Electronic connector mfg	2	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	18	9	1 196	30 376	779	1 622	20 181	175 952	48 697	219 869	D
3359	Other electrical equipment & component mfg	5	12	6	976	23 193	685	1 448	17 947	164 225	40 300	199 904	D
33593	Wiring device mfg	5	9	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	6	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	9	5	1 101	41 716	832	1 802	25 037	71 367	115 123	197 366	9 413
3363	Motor vehicle parts mfg ...	—	3	3	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	33	10	1 361	43 947	990	2 104	31 299	203 798	61 434	265 036	5 763
3391	Medical equipment & supplies mfg	—	6	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	6	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	27	8	f	D	D	D	D	D	D	D	D
	MIDDLESEX COUNTY, CT												
31-33	Manufacturing	—	309	105	13 132	513 508	9 515	19 264	323 268	1 479 643	1 550 978	2 999 340	76 751
323	Printing & related support activities	2	27	6	936	32 798	743	1 300	24 581	73 202	66 868	138 963	3 828
3231	Printing & related support activities	2	27	6	936	32 798	743	1 300	24 581	73 202	66 868	138 963	3 828
32311	Printing	2	24	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	14	3	713	24 548	591	999	18 875	53 375	52 313	104 668	D
326	Plastics & rubber products mfg	1	20	9	825	25 365	648	1 423	17 248	53 926	37 227	90 745	D
3261	Plastics product mfg	1	16	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	69	28	2 162	82 165	1 587	3 273	49 746	136 334	80 190	216 693	9 821
333	Machinery mfg	1	41	14	1 516	60 544	927	1 635	31 026	142 954	87 205	230 059	8 378
3333	Commercial & service industry machinery mfg ..	2	5	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	2	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	23	9	1 021	40 700	580	1 060	14 451	126 388	85 445	215 528	7 643
3345	Navigational, measuring, medical, & control instruments mfg	—	12	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	12	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	5	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	5	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	5	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	3	3	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	26	9	557	14 357	356	583	6 256	34 260	19 188	53 652	1 076

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW HAVEN COUNTY, CT												
31-33	Manufacturing	1	1 592	531	59 380	2 285 018	37 796	78 103	1 124 638	7 084 489	5 073 414	12 073 861	456 858
311	Food mfg.	1	88	23	2 103	58 472	1 500	3 056	34 164	284 949	227 318	508 838	31 310
3113	Sugar & confectionery product mfg.	—	6	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.	3	46	6	643	17 950	359	695	6 828	85 518	44 660	132 304	4 012
31181	Bread & bakery product mfg.	—	43	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg.	—	22	6	705	19 796	499	992	9 191	108 145	95 554	199 314	1 652
3152	Cut & sew apparel mfg.	—	18	5	f	D	D	D	D	D	D	D	D
322	Paper mfg.	—	32	23	1 420	49 831	1 037	2 353	28 079	131 837	126 455	259 693	6 737
3222	Converted paper product mfg.	—	31	22	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.	1	14	12	645	25 768	445	998	14 421	51 785	61 444	115 080	D
323	Printing & related support activities.	3	165	38	3 279	122 991	2 442	4 928	78 638	261 283	178 531	434 427	13 735
3231	Printing & related support activities.	3	165	38	3 279	122 991	2 442	4 928	78 638	261 283	178 531	434 427	13 735
32311	Printing	3	143	30	2 699	97 149	2 030	4 026	61 787	203 832	165 608	364 078	D
323110	Commercial lithographic printing	2	69	18	1 972	75 904	1 509	3 060	48 555	157 336	129 775	281 924	6 152
32312	Support activities for printing.	4	22	8	580	25 842	412	902	16 851	57 451	12 923	70 349	D
323122	Prepress services	4	19	8	564	25 462	398	874	16 579	56 725	12 688	69 387	3 404
325	Chemical mfg.	—	45	24	5 400	293 585	1 508	3 070	51 188	1 192 655	759 672	1 953 265	73 622
3254	Pharmaceutical & medicine mfg.	—	5	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.	—	5	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.	—	5	2	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.	2	10	4	897	30 657	532	1 060	11 777	92 281	140 904	233 912	D
32552	Adhesive mfg.	—	3	2	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg.	—	3	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.	2	13	6	597	24 466	288	584	9 710	57 528	81 704	139 695	7 168
32599	All other chemical product & preparation mfg.	3	10	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.	2	68	28	2 327	74 871	1 623	3 433	41 101	160 548	124 416	285 245	13 733
3261	Plastics product mfg.	3	58	25	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.	4	39	18	1 397	44 652	918	1 945	24 561	94 620	64 232	159 520	9 258
326199	All other plastics product mfg.	4	37	17	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.	2	32	12	700	26 812	480	1 046	15 769	58 249	54 562	112 884	4 068
331	Primary metal mfg.	—	43	23	2 895	133 435	2 165	4 807	86 545	387 230	574 411	959 803	21 648
3312	Steel product mfg from purchased steel	—	10	5	780	35 467	609	1 193	24 123	117 654	152 379	270 356	2 402
33122	Rolling & drawing of purchased steel	—	10	5	780	35 467	609	1 193	24 123	117 654	152 379	270 356	2 402
331221	Cold-rolled steel shape mfg.	—	7	3	643	31 246	498	954	20 882	106 232	134 503	240 956	D
3314	Nonferrous metal (except aluminum) production & processing.	—	19	11	1 457	69 992	1 077	2 498	45 684	194 260	290 635	483 755	15 903
33142	Copper rolling, drawing, extruding, & alloying	—	7	6	948	43 022	745	1 744	32 012	113 789	194 730	307 714	D
331421	Copper rolling, drawing, & extruding	—	5	5	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	2	11	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAVEN COUNTY, CT—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	441	124	12 203	444 057	9 229	19 775	278 778	1 051 923	604 176	1 655 801	62 847
3321	Forging & stamping	—	51	25	2 274	82 604	1 787	4 064	56 176	165 897	157 301	320 424	8 670
33211	Forging & stamping	—	51	25	2 274	82 604	1 787	4 064	56 176	165 897	157 301	320 424	8 670
332116	Metal stamping	—	43	20	g	D	D	D	D	D	D	D	7 501
3322	Cutlery & handtool mfg	—	16	7	1 172	48 888	866	1 792	27 151	230 939	62 124	288 062	17 561
33221	Cutlery & handtool mfg	—	16	7	1 172	48 888	866	1 792	27 151	230 939	62 124	288 062	17 561
332211	Cutlery & flatware (except precious) mfg	—	5	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	63	15	1 079	37 389	769	1 472	21 330	69 714	59 439	129 648	2 847
33232	Ornamental & architectural metal products mfg	3	44	11	f	D	D	D	D	D	D	D	2 387
3325	Hardware mfg	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
33251	Hardware mfg	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
332510	Hardware mfg	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	201	41	3 391	124 502	2 601	5 192	79 530	225 972	102 132	327 053	14 015
33271	Machine shops	1	134	18	1 726	63 180	1 349	2 580	42 214	108 863	39 231	147 722	5 850
332710	Machine shops	1	134	18	1 726	63 180	1 349	2 580	42 214	108 863	39 231	147 722	5 850
33272	Turned product & screw, nut, & bolt mfg	—	67	23	1 665	61 322	1 252	2 612	37 316	117 109	62 901	179 331	8 165
332721	Precision turned product mfg	—	57	19	1 314	47 292	976	2 022	27 394	84 708	33 111	116 836	5 069
3328	Coating, engraving, heat treating, & allied activities	2	38	15	1 227	43 629	946	2 134	28 291	93 070	46 004	139 595	6 555
33281	Coating, engraving, heat treating, & allied activities	2	38	15	1 227	43 629	946	2 134	28 291	93 070	46 004	139 595	6 555
332813	Electroplating, plating, polishing, anodizing, & coloring	2	23	10	738	26 724	560	1 270	16 654	48 767	35 433	84 060	3 906
3329	Other fabricated metal product mfg	—	44	13	1 715	57 492	1 292	2 951	36 923	135 818	88 780	229 795	6 753
33299	All other fabricated metal product mfg	—	36	9	1 378	47 212	1 044	2 378	30 937	111 864	58 903	177 569	D
332994	Small arms mfg	—	7	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg	3	175	57	3 988	162 979	2 190	4 319	72 183	313 447	228 536	530 990	16 999
3332	Industrial machinery mfg	5	24	11	688	29 988	319	561	10 151	75 236	67 175	145 340	D
3335	Metalworking machinery mfg	1	98	23	1 688	65 815	1 078	2 115	36 440	115 622	73 500	172 693	6 493
33351	Metalworking machinery mfg	1	98	23	1 688	65 815	1 078	2 115	36 440	115 622	73 500	172 693	6 493
3339	Other general-purpose machinery mfg	3	32	14	990	44 770	441	957	15 340	77 446	57 137	132 649	D
33399	All other general-purpose machinery mfg	4	24	9	829	36 727	329	721	10 423	64 919	43 277	106 160	3 497
333999	All other miscellaneous general-purpose machinery mfg	2	18	7	687	30 195	271	589	8 358	45 910	27 643	72 847	2 688
334	Computer & electronic product mfg	—	129	53	7 108	279 064	3 548	7 401	97 785	718 968	622 034	1 310 032	48 971
3342	Communications equipment mfg	—	15	8	2 271	100 660	854	1 836	29 040	306 357	342 615	640 587	25 615
33421	Telephone apparatus mfg	—	8	4	1 338	59 247	532	1 106	17 834	145 430	177 598	325 093	D
334210	Telephone apparatus mfg	—	8	4	1 338	59 247	532	1 106	17 834	145 430	177 598	325 093	D
3344	Semiconductor & other electronic component mfg	1	51	19	2 030	62 990	1 445	2 775	34 006	149 967	109 969	258 593	8 649
33441	Semiconductor & other electronic component mfg	1	51	19	2 030	62 990	1 445	2 775	34 006	149 967	109 969	258 593	8 649
334412	Bare printed circuit board mfg	—	13	5	755	28 389	571	1 240	16 299	73 144	56 512	126 196	4 534
334419	Other electronic component mfg	1	17	7	605	17 285	377	693	7 974	40 845	26 814	67 734	1 183
3345	Navigational, measuring, medical, & control instruments mfg	1	52	20	2 419	101 497	1 024	2 321	29 771	228 798	131 315	338 429	12 687
33451	Navigational, measuring, medical, & control instruments mfg	1	52	20	2 419	101 497	1 024	2 321	29 771	228 798	131 315	338 429	12 687
334510	Electromedical & electrotherapeutic apparatus mfg	1	10	5	856	39 906	320	726	10 724	68 682	47 300	115 453	4 202
334519	Other measuring & controlling device mfg	—	7	3	585	27 423	193	439	6 239	52 223	18 601	69 859	3 495

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAVEN COUNTY, CT—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	63	35	3 705	127 423	2 263	4 323	63 859	314 428	216 480	530 025	33 844
3351	Electric lighting equipment mfg	-	13	7	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	21	8	1 143	32 761	584	1 225	13 436	74 066	48 454	121 894	D
33531	Electrical equipment mfg	1	21	8	1 143	32 761	584	1 225	13 436	74 066	48 454	121 894	D
335312	Motor & generator mfg	-	5	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	28	20	1 622	58 505	1 002	1 964	29 585	182 376	128 005	309 129	26 148
33592	Communication & energy wire & cable mfg	-	8	8	843	33 759	468	915	16 051	107 061	84 144	189 039	23 933
335929	Other communication & energy wire mfg ...	-	8	8	843	33 759	468	915	16 051	107 061	84 144	189 039	23 933
336	Transportation equipment mfg	-	49	27	5 133	202 028	3 519	7 816	121 625	535 457	697 980	1 214 925	39 960
3363	Motor vehicle parts mfg ...	1	24	14	h	D	D	D	D	D	D	D	25 168
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	6	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	6	4	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	19	11	2 263	102 958	1 564	3 739	67 880	300 671	444 842	727 353	14 564
33641	Aerospace product & parts mfg	-	19	11	2 263	102 958	1 564	3 739	67 880	300 671	444 842	727 353	14 564
336412	Aircraft engine & engine parts mfg	-	8	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	55	8	735	19 153	585	994	12 515	38 795	25 395	64 224	3 107
339	Miscellaneous mfg	-	112	35	6 587	237 057	4 349	7 959	114 086	1 440 155	420 892	1 851 559	80 760
3391	Medical equipment & supplies mfg	-	50	19	3 919	135 675	2 729	4 619	70 202	1 115 903	237 959	1 344 070	50 147
33911	Medical equipment & supplies mfg	-	50	19	3 919	135 675	2 729	4 619	70 202	1 115 903	237 959	1 344 070	50 147
339112	Surgical & medical instrument mfg	-	18	9	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	1	62	16	2 668	101 382	1 620	3 340	43 884	324 252	182 933	507 489	30 613
33991	Jewelry & silverware mfg	1	9	5	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	26	9	1 672	76 650	922	1 867	32 209	262 649	122 813	386 265	26 827
339999	All other miscellaneous mfg	-	13	3	g	D	D	D	D	D	D	D	D
31-33	NEW LONDON COUNTY, CT												
	Manufacturing	1	237	59	19 888	1 035 074	7 433	16 290	255 693	1 834 604	1 112 160	2 962 841	219 676
322	Paper mfg	2	8	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	5	4 310	387 835	597	1 503	34 885	266 597	258 946	546 835	D
3254	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	35	4	567	21 127	360	717	10 895	71 547	53 109	128 399	2 912

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW LONDON COUNTY, CT—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	19	5	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	5	2	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	2	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	4	2	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	4	2	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	3	2	i	D	D	D	D	D	D	D	D
	TOLLAND COUNTY, CT												
31-33	Manufacturing	—	152	35	4 487	145 752	2 746	5 243	71 812	456 409	280 871	739 212	31 699
313	Textile mills	—	4	3	507	16 792	399	783	10 512	33 526	34 044	70 730	D
323	Printing & related support activities	1	16	4	578	11 010	303	536	7 387	35 674	15 152	50 669	1 551
3231	Printing & related support activities	1	16	4	578	11 010	303	536	7 387	35 674	15 152	50 669	1 551
32311	Printing	1	14	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	18	4	1 121	40 465	599	1 320	20 174	218 150	79 191	295 710	D
3332	Industrial machinery mfg ..	—	6	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
333292	Textile machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	10	5	733	22 398	458	841	9 293	54 369	40 577	95 143	D
3344	Semiconductor & other electronic component mfg	—	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	5	4	f	D	D	D	D	D	D	D	D
	WINDHAM COUNTY, CT												
31-33	Manufacturing	—	198	74	8 613	273 846	6 587	13 004	156 317	818 375	668 881	1 480 915	51 908
311	Food mfg	—	6	3	g	D	D	D	D	D	D	D	2 876
3119	Other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	20	11	1 084	38 571	811	1 635	22 247	100 276	99 053	199 263	D
3261	Plastics product mfg	4	14	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	11	6	595	19 707	432	953	11 195	59 401	40 862	107 047	3 786
332	Fabricated metal product mfg	1	40	8	661	20 320	481	1 019	10 771	43 998	30 207	74 126	3 540
335	Electrical equipment, appliance, & component mfg	—	9	6	1 494	47 715	1 048	2 219	24 124	119 264	123 582	234 143	D
3359	Other electrical equipment & component mfg	—	4	4	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	11	5	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANSONIA, CT													
31-33	Manufacturing	-	19	6	1 020	37 896	769	1 619	23 904	74 334	73 094	145 377	3 886
AVON TOWN, CT													
31-33	Manufacturing	2	22	10	685	25 543	519	1 113	14 863	63 489	45 991	109 832	3 106
BERLIN TOWN, CT													
31-33	Manufacturing	1	90	34	3 550	125 911	2 652	5 259	76 831	261 012	345 607	609 858	30 876
332	Fabricated metal product mfg	-	38	15	1 063	39 993	883	1 932	28 316	90 680	43 739	139 730	7 806
333	Machinery mfg	-	17	9	563	25 899	323	750	13 302	46 467	34 103	78 852	3 410
336	Transportation equipment mfg	-	7	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
BETHEL TOWN, CT													
31-33	Manufacturing	-	49	17	1 586	64 766	960	1 899	29 762	114 641	165 291	283 767	D
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
BLOOMFIELD TOWN, CT													
31-33	Manufacturing	1	74	37	4 186	163 558	2 627	5 739	86 024	444 463	273 658	691 951	27 111
332	Fabricated metal product mfg	2	20	9	511	20 949	346	804	12 200	36 132	23 896	59 920	2 170
333	Machinery mfg	-	8	4	1 102	45 596	703	1 711	24 879	167 731	55 604	221 778	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	5	6	5	661	20 462	360	577	9 260	60 514	53 755	103 153	8 541
336	Transportation equipment mfg	-	6	5	849	39 360	414	956	16 069	90 336	49 762	134 947	4 276
3364	Aerospace product & parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRANFORD TOWN, CT													
31-33	Manufacturing	1	92	33	2 852	102 430	1 852	4 015	52 791	269 377	179 984	454 629	14 030
332	Fabricated metal product mfg	-	16	9	659	24 648	493	1 129	16 152	70 340	42 057	116 514	D
336	Transportation equipment mfg	-	4	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRIDGEPORT, CT													
31-33	Manufacturing	1	249	75	10 340	374 984	6 677	13 580	195 691	757 957	642 368	1 424 424	50 903
313	Textile mills	9	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	9	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	1	1	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	9	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	31	10	522	17 668	364	762	10 577	32 109	18 202	53 703	1 520
3231	Printing & related support activities	4	31	10	522	17 668	364	762	10 577	32 109	18 202	53 703	1 520
326	Plastics & rubber products mfg	—	19	8	967	32 931	751	1 631	20 389	70 764	62 306	132 252	10 101
3261	Plastics product mfg	—	17	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	15	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	15	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	62	19	1 230	42 303	924	1 846	24 905	71 619	60 974	134 857	3 958
333	Machinery mfg	—	28	6	1 330	54 783	736	1 479	30 094	79 932	117 929	199 337	4 493
3335	Metalworking machinery mfg	—	21	5	1 239	52 044	662	1 364	28 485	72 014	111 922	185 416	D
33351	Metalworking machinery mfg	—	21	5	1 239	52 044	662	1 364	28 485	72 014	111 922	185 416	D
333512	Machine tool (metal cutting types) mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	13	7	1 586	67 097	963	1 782	25 975	169 624	127 727	315 864	11 437
3359	Other electrical equipment & component mfg	—	5	5	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	2	2	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	3	g	D	D	D	D	D	D	D	10 029
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	18	2	582	22 840	412	876	13 090	56 872	24 139	78 974	D
BRISTOL, CT													
31-33	Manufacturing	1	158	60	4 542	158 991	3 328	6 845	99 967	361 069	225 807	580 526	20 838
332	Fabricated metal product mfg	—	78	32	2 195	80 949	1 701	3 582	55 025	161 396	93 985	254 070	11 619
3326	Spring & wire product mfg	—	17	13	928	34 406	737	1 494	24 740	68 206	46 654	114 819	5 806
33261	Spring & wire product mfg	—	17	13	928	34 406	737	1 494	24 740	68 206	46 654	114 819	5 806
332612	Spring (light gauge) mfg	1	11	8	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	37	12	765	27 173	573	1 289	18 400	51 611	18 631	69 655	3 836
335	Electrical equipment, appliance, & component mfg	—	6	4	640	22 780	380	789	11 042	57 443	28 018	85 484	D
3353	Electrical equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
BROOKFIELD TOWN, CT													
31-33	Manufacturing	4	45	15	1 311	49 537	849	1 806	26 390	125 695	102 080	226 016	6 168
334	Computer & electronic product mfg	3	13	7	507	19 587	327	711	10 711	57 191	21 407	76 831	1 696

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESHIRE TOWN, CT													
31-33	Manufacturing	-	65	24	2 550	76 886	1 510	3 308	36 225	187 434	125 714	289 378	11 470
334	Computer & electronic product mfg.....	-	7	3	559	15 992	305	769	6 596	64 801	23 873	67 549	3 733
335	Electrical equipment, appliance, & component mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
CLINTON TOWN, CT													
31-33	Manufacturing	-	24	7	663	27 421	528	1 299	19 700	150 609	116 331	266 412	6 115
CROMWELL TOWN, CT													
31-33	Manufacturing	1	29	7	503	21 073	374	740	13 450	40 692	16 760	57 179	D
DANBURY, CT													
31-33	Manufacturing	1	130	52	6 556	280 979	3 814	7 733	123 296	731 675	562 385	1 301 958	35 515
332	Fabricated metal product mfg.....	-	21	7	1 305	49 371	905	1 917	25 337	119 799	53 963	170 446	7 961
3329	Other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	18	11	1 816	99 229	911	1 806	39 296	234 496	136 676	372 412	15 094
3344	Semiconductor & other electronic component mfg.....	-	10	6	f	D	D	D	D	D	D	D	7 661
33441	Semiconductor & other electronic component mfg.....	-	10	6	f	D	D	D	D	D	D	D	7 661
3345	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 063	63 810	436	964	23 735	157 406	75 700	234 581	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 063	63 810	436	964	23 735	157 406	75 700	234 581	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	8	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	6	4	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	6	4	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	5	4	f	D	D	D	D	D	D	D	D
EAST HARTFORD TOWN, CT													
31-33	Manufacturing	-	83	19	10 091	641 333	4 505	9 537	185 650	867 842	1 029 254	1 823 057	72 408
323	Printing & related support activities.....	-	14	3	626	21 791	498	1 134	15 152	41 519	24 178	65 704	D
3231	Printing & related support activities.....	-	14	3	626	21 791	498	1 134	15 152	41 519	24 178	65 704	D
32311	Printing	-	11	2	598	20 966	471	1 075	14 482	40 086	23 866	63 957	D
323114	Quick printing	-	5	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	5	4	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	5	4	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	3	2	i	D	D	D	D	D	D	D	D
EAST HAVEN TOWN, CT													
31-33	Manufacturing	5	34	8	588	19 202	395	794	8 941	46 498	42 792	88 513	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EAST WINDSOR TOWN, CT												
	Manufacturing	3	29	13	743	25 033	519	1 058	13 031	51 659	37 271	92 710	9 660
31-33	ELLINGTON TOWN, CT												
	Manufacturing	1	27	9	622	25 513	380	630	11 212	57 647	58 875	116 264	4 874
31-33	ENFIELD TOWN, CT												
	Manufacturing	-	55	16	2 860	87 878	1 390	2 870	39 387	269 800	222 174	487 071	14 451
339	Miscellaneous mfg	-	5	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
31-33	FAIRFIELD TOWN, CT												
	Manufacturing	1	50	16	1 469	59 319	868	1 848	29 394	103 514	116 350	220 969	6 302
31-33	FARMINGTON TOWN, CT												
	Manufacturing	1	57	30	3 350	139 069	2 227	4 804	77 759	347 404	248 942	594 506	23 326
332	Fabricated metal product mfg	-	13	11	1 500	57 769	1 118	2 474	38 365	137 688	82 372	222 332	7 581
333	Machinery mfg	-	7	6	982	47 891	569	1 178	23 022	128 335	118 919	243 469	11 332
3335	Metalworking machinery mfg	-	4	4	686	35 946	367	765	16 752	81 311	92 990	170 801	10 004
33351	Metalworking machinery mfg	-	4	4	686	35 946	367	765	16 752	81 311	92 990	170 801	10 004
31-33	GLASTONBURY TOWN, CT												
	Manufacturing	2	60	19	1 324	48 774	914	1 758	27 553	93 391	69 770	163 775	4 688
31-33	GREENWICH TOWN, CT												
	Manufacturing	2	65	13	1 622	57 715	1 090	2 124	34 119	169 150	75 151	242 004	D
311	Food mfg	-	7	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	7	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	6	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	2	f	D	D	D	D	D	D	D	D
31-33	GROTON, CT *												
	Manufacturing	-	5	2	j	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	1	1	i	D	D	D	D	D	D	D	D
31-33	GROTON TOWN BALANCE, CT *												
	Manufacturing	3	14	3	849	24 708	695	1 335	17 856	59 542	32 534	91 637	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
31-33	GUILFORD TOWN, CT												
	Manufacturing	1	37	13	1 022	37 549	691	1 325	20 574	96 855	103 052	199 588	8 912

Table 4. Industry Statistics for Places: 1997—Con.

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMDEN TOWN, CT													
31-33	Manufacturing	2	91	35	1 854	55 232	1 240	2 491	29 406	114 958	103 752	218 704	5 434
HARTFORD, CT													
31-33	Manufacturing	2	112	34	2 183	60 583	1 555	3 007	33 576	130 684	123 323	254 530	7 188
KILLINGLY TOWN BALANCE, CT *													
31-33	Manufacturing	-	27	15	2 361	73 903	1 859	3 717	42 228	286 497	224 628	517 781	10 659
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
MANCHESTER TOWN, CT													
31-33	Manufacturing	3	99	39	3 881	169 788	2 637	5 761	85 911	456 245	322 926	772 518	29 351
332	Fabricated metal product mfg.....	1	30	10	823	34 561	618	1 353	18 969	75 532	42 546	116 410	3 748
333	Machinery mfg.....	-	7	4	561	27 034	357	828	13 759	89 519	57 441	145 298	D
336	Transportation equipment mfg.....	1	7	6	609	29 063	415	872	14 066	72 514	43 837	110 923	6 494
3364	Aerospace product & parts mfg.....	1	6	6	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	1	6	6	f	D	D	D	D	D	D	D	D
MERIDEN, CT													
31-33	Manufacturing	-	103	34	4 353	162 878	2 637	5 719	72 966	378 759	386 724	751 187	33 319
332	Fabricated metal product mfg.....	1	26	5	565	20 629	439	864	11 693	36 131	14 447	51 129	1 992
333	Machinery mfg.....	-	11	5	611	29 643	228	571	8 405	43 191	22 727	65 001	2 544
334	Computer & electronic product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	11	3	f	D	D	D	D	D	D	D	1 178
3399	Other miscellaneous mfg ..	-	10	3	f	D	D	D	D	D	D	D	D
MIDDLETOWN, CT													
31-33	Manufacturing	-	58	29	5 256	222 039	3 774	7 766	145 239	705 669	987 939	1 662 244	33 286
334	Computer & electronic product mfg.....	-	6	5	601	21 925	300	551	7 859	50 888	28 107	82 125	2 153
336	Transportation equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MILFORD, CT (CC) *													
31-33	Manufacturing	-	206	53	6 100	258 831	3 871	7 590	135 328	720 445	397 069	1 104 456	53 856
332	Fabricated metal product mfg	-	72	15	1 906	83 042	1 415	2 948	51 245	272 113	72 015	331 813	19 058
3321	Forging & stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
33211	Forging & stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
332116	Metal stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	36	10	523	21 270	347	623	12 678	34 817	23 508	57 779	1 631
334	Computer & electronic product mfg	-	21	7	952	40 525	476	896	14 489	79 240	116 976	193 917	3 305
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	2	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
MILFORD CITY, CT *													
31-33	Manufacturing	-	206	53	6 100	258 831	3 871	7 590	135 328	720 445	397 069	1 104 456	53 856
332	Fabricated metal product mfg	-	72	15	1 906	83 042	1 415	2 948	51 245	272 113	72 015	331 813	19 058
3321	Forging & stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
33211	Forging & stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
332116	Metal stamping	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	36	10	523	21 270	347	623	12 678	34 817	23 508	57 779	1 631
334	Computer & electronic product mfg	-	21	7	952	40 525	476	896	14 489	79 240	116 976	193 917	3 305
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	2	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
MONROE TOWN, CT													
31-33	Manufacturing	-	30	9	1 012	34 688	660	1 396	19 633	73 339	59 807	126 948	4 783
MONTVILLE TOWN, CT													
31-33	Manufacturing	4	13	3	f	D	D	D	D	D	D	D	D
NAUGATUCK, CT													
31-33	Manufacturing	1	63	28	2 957	109 801	1 860	4 139	59 898	378 644	355 625	737 462	39 767
334	Computer & electronic product mfg	-	5	4	841	28 540	346	861	10 713	93 635	73 317	170 400	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW BRITAIN, CT													
31-33	Manufacturing	-	141	48	5 329	193 197	3 903	7 785	124 053	497 710	347 599	845 048	18 828
332	Fabricated metal product mfg	-	59	22	3 527	133 780	2 638	5 233	89 607	373 146	200 626	571 588	12 707
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	4	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	4	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	30	7	645	24 349	560	1 276	18 479	49 257	19 182	67 918	5 976
3329	Other fabricated metal product mfg	-	8	6	816	20 848	591	1 118	11 597	66 800	36 578	102 872	2 434
33291	Metal valve mfg	-	4	4	679	16 411	490	909	8 869	54 964	24 028	78 864	D
NEW HAVEN, CT													
31-33	Manufacturing	1	106	42	4 177	147 228	2 804	6 341	80 520	413 807	325 127	750 641	20 218
332	Fabricated metal product mfg	-	12	4	1 426	53 689	1 009	2 452	32 519	136 623	92 671	237 193	6 258
3325	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
NEWINGTON TOWN, CT													
31-33	Manufacturing	-	87	27	3 094	119 842	2 039	4 217	67 473	216 162	169 439	383 246	15 487
332	Fabricated metal product mfg	1	34	7	652	25 193	503	1 058	17 075	43 122	20 793	65 340	2 228
336	Transportation equipment mfg	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
3364	Aerospace product & parts mfg	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
33641	Aerospace product & parts mfg	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
NEW MILFORD TOWN, CT													
31-33	Manufacturing	-	52	9	1 742	80 451	1 326	2 823	62 247	612 707	374 322	987 313	10 982
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
NEWTOWN TOWN, CT													
31-33	Manufacturing	-	35	10	1 207	41 575	957	1 975	28 033	86 459	114 105	199 205	8 161
NORTH BRANFORD TOWN, CT													
31-33	Manufacturing	-	39	4	822	29 286	392	760	9 135	96 660	91 598	190 062	11 750
334	Computer & electronic product mfg	-	6	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH HAVEN TOWN, CT													
31-33	Manufacturing	—	78	36	8 759	340 789	6 422	13 020	206 587	1 674 213	917 608	2 559 778	95 755
323	Printing & related support activities	2	15	7	1 160	46 400	919	1 972	31 250	105 258	94 602	194 676	3 936
3231	Printing & related support activities	2	15	7	1 160	46 400	919	1 972	31 250	105 258	94 602	194 676	3 936
32311	Printing	—	13	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	9	5	913	34 833	748	1 569	23 783	82 019	88 108	165 009	2 454
332	Fabricated metal product mfg	—	14	5	889	31 191	719	1 506	20 798	80 380	36 503	118 408	4 927
3329	Other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	5	2	564	20 403	464	978	12 640	43 744	33 270	77 228	D
3344	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	6	2	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	4	1	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	4	1	h	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	3	1	h	D	D	D	D	D	D	D	D
NORWALK, CT													
31-33	Manufacturing	1	170	52	6 713	297 713	3 604	7 936	121 145	889 946	531 631	1 420 524	36 126
315	Apparel mfg	—	9	3	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	7	3	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	—	7	3	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	—	6	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	35	8	674	28 604	520	1 096	14 502	76 674	41 089	116 090	5 045
3231	Printing & related support activities	1	35	8	674	28 604	520	1 096	14 502	76 674	41 089	116 090	5 045
32311	Printing	1	30	7	589	25 507	464	975	12 423	70 974	39 612	108 954	3 349
325	Chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	19	11	2 115	122 368	855	2 059	37 308	370 870	203 416	578 055	6 997
3345	Navigational, measuring, medical, & control instruments mfg	—	8	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	4	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	8	21	4	570	16 881	234	423	9 081	42 777	25 467	65 753	D
NORWICH, CT													
31-33	Manufacturing	2	48	15	1 403	44 761	882	1 880	23 305	138 999	116 703	254 522	10 678
ORANGE TOWN, CT													
31-33	Manufacturing	4	22	9	884	25 400	572	1 090	12 984	60 288	59 653	120 018	3 385

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLAINFIELD TOWN, CT													
31-33	Manufacturing	-	30	12	1 777	54 692	1 434	2 656	27 978	185 704	119 350	306 622	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
PLAINVILLE TOWN, CT													
31-33	Manufacturing	1	67	17	2 498	99 412	1 482	2 967	44 129	195 514	88 431	280 071	11 041
332	Fabricated metal product mfg	1	34	8	681	24 763	524	1 063	14 390	41 992	15 330	57 236	2 644
334	Computer & electronic product mfg	3	6	3	798	27 649	387	794	11 478	59 126	29 963	89 470	2 801
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
PLYMOUTH TOWN, CT													
31-33	Manufacturing	5	41	15	1 209	38 785	826	1 680	24 334	159 772	45 163	205 642	5 769
RIDGEFIELD TOWN, CT													
31-33	Manufacturing	-	19	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	1	g	D	D	D	D	D	D	D	D
SEYMOUR TOWN, CT													
31-33	Manufacturing	-	35	18	1 370	48 230	916	1 874	24 750	109 312	80 365	191 404	6 895
SHELTON, CT													
31-33	Manufacturing	2	77	35	4 923	211 781	2 607	5 507	88 530	441 241	284 617	728 552	31 111
332	Fabricated metal product mfg	-	18	12	1 079	50 297	691	1 606	19 327	97 901	55 536	154 760	6 852
333	Machinery mfg	4	9	5	515	22 806	288	641	10 358	45 196	24 082	69 350	1 794
334	Computer & electronic product mfg	7	9	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
SIMSBURY TOWN, CT													
31-33	Manufacturing	-	11	3	f	D	D	D	D	D	D	D	1 195
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTHINGTON TOWN, CT													
31-33	Manufacturing	2	104	35	2 632	97 934	2 062	4 550	60 167	181 417	117 980	299 213	27 658
332	Fabricated metal product mfg	2	48	21	1 423	53 303	1 090	2 415	32 668	90 341	65 427	155 046	6 575
339	Miscellaneous mfg	-	8	3	529	21 603	508	1 163	14 200	41 858	18 634	60 782	D
SOUTH WINDSOR TOWN, CT													
31-33	Manufacturing	1	89	28	2 763	116 094	1 554	3 175	49 870	270 377	178 200	443 637	16 055
335	Electrical equipment, appliance, & component mfg	-	5	3	595	26 801	279	496	10 177	34 812	55 461	83 173	D
STAFFORD TOWN, CT													
31-33	Manufacturing	-	24	7	1 165	35 750	919	1 714	20 892	100 451	67 255	169 526	17 310
STAMFORD, CT													
31-33	Manufacturing	-	183	47	6 126	229 600	2 996	6 008	106 618	1 644 778	937 781	2 515 274	100 992
323	Printing & related support activities	5	45	9	593	25 259	404	790	15 437	40 621	23 095	63 979	6 150
3231	Printing & related support activities	5	45	9	593	25 259	404	790	15 437	40 621	23 095	63 979	6 150
32311	Printing	4	42	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	11	5	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	4	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg .	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	22	9	g	D	D	D	D	D	D	D	4 431
3345	Navigational, measuring, medical, & control instruments mfg	-	9	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	9	3	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	15	4	701	34 307	355	648	11 552	79 012	54 505	133 620	D
STONINGTON TOWN, CT													
31-33	Manufacturing	-	35	8	1 179	49 978	745	1 652	27 447	160 431	98 692	256 805	D
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STRATFORD TOWN, CT													
31-33	Manufacturing	-	101	35	9 395	506 527	5 438	11 119	253 098	1 119 345	849 961	2 107 317	58 536
334	Computer & electronic product mfg.....	-	7	2	930	37 701	615	1 293	23 955	74 428	34 721	109 029	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	4	3	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	4	3	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
TOLLAND TOWN, CT													
31-33	Manufacturing	-	14	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333292	Textile machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
TORRINGTON, CT													
31-33	Manufacturing	1	83	34	3 770	118 689	2 795	6 285	75 856	240 502	208 445	443 752	17 912
326	Plastics & rubber products mfg.....	-	8	5	789	23 547	650	1 651	18 436	45 696	45 055	86 230	4 363
3261	Plastics product mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	16	8	827	31 114	681	1 810	23 401	56 491	32 588	90 171	D
3329	Other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	4	12	4	529	16 323	354	642	8 512	36 643	42 242	76 649	2 500
TRUMBULL TOWN, CT													
31-33	Manufacturing	1	26	14	750	25 258	518	1 059	14 223	41 104	38 725	92 403	4 929
VERNON TOWN, CT													
31-33	Manufacturing	1	37	7	854	25 298	428	794	10 517	44 272	47 412	93 894	4 845

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WALLINGFORD TOWN, CT													
31-33	Manufacturing	-	135	48	5 501	228 499	3 333	6 772	106 303	596 755	563 196	1 140 491	30 105
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	2	2	f	D	D	D	D	D	D	D	D
32552	Adhesive mfg	-	1	1	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	892	43 265	714	1 412	29 842	154 970	190 302	343 631	5 106
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	6	589	24 111	280	588	10 045	41 067	41 042	66 802	2 106
3335	Metalworking machinery mfg	-	9	5	548	22 215	254	529	9 065	37 518	37 869	60 064	D
33351	Metalworking machinery mfg	-	9	5	548	22 215	254	529	9 065	37 518	37 869	60 064	D
334	Computer & electronic product mfg	-	16	8	1 340	64 089	538	1 195	18 212	146 027	104 682	247 506	7 023
3345	Navigational, measuring, medical, & control instruments mfg	-	6	3	764	38 482	275	648	9 862	71 606	46 457	117 235	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	3	764	38 482	275	648	9 862	71 606	46 457	117 235	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	3	2	f	D	D	D	D	D	D	D	D
WATERBURY, CT													
31-33	Manufacturing	1	219	78	6 433	220 935	4 940	10 208	148 497	531 402	551 515	1 085 328	38 584
331	Primary metal mfg	1	11	7	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	1	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	89	32	2 779	100 548	2 220	4 910	70 145	209 081	196 338	406 244	16 318
3321	Forging & stamping	-	16	8	970	37 533	832	2 001	28 312	76 648	101 807	179 257	5 073
33211	Forging & stamping	-	16	8	970	37 533	832	2 001	28 312	76 648	101 807	179 257	5 073
332116	Metal stamping	-	14	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	39	13	951	32 519	742	1 522	22 087	66 979	41 639	109 063	4 758
33272	Turned product & screw, nut, & bolt mfg	-	22	9	547	20 257	422	935	13 806	42 687	29 643	72 719	3 340
3328	Coating, engraving, heat treating, & allied activities	3	18	7	573	21 544	439	981	14 108	42 336	30 236	72 395	4 538
33281	Coating, engraving, heat treating, & allied activities	3	18	7	573	21 544	439	981	14 108	42 336	30 236	72 395	4 538
335	Electrical equipment, appliance, & component mfg	1	7	7	f	D	D	D	D	D	D	D	D
WATERTOWN TOWN, CT													
31-33	Manufacturing	1	77	35	4 493	144 914	3 203	6 664	94 169	347 625	306 022	646 187	27 735
332	Fabricated metal product mfg	-	35	15	1 506	56 361	1 188	2 518	40 655	124 027	98 764	222 452	11 858
3321	Forging & stamping	-	12	8	873	37 050	717	1 447	27 700	90 476	80 417	170 617	9 171
33211	Forging & stamping	-	12	8	873	37 050	717	1 447	27 700	90 476	80 417	170 617	9 171
332116	Metal stamping	-	10	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST HARTFORD TOWN, CT													
31-33	Manufacturing	-	80	22	3 217	137 834	2 172	3 997	78 138	319 242	197 656	513 952	19 033
332	Fabricated metal product mfg	-	24	7	1 398	59 385	1 010	1 917	37 886	122 453	69 727	192 323	6 553
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	610	28 575	397	651	16 010	64 728	43 850	106 211	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
WEST HAVEN, CT													
31-33	Manufacturing	-	62	22	5 258	276 511	1 544	3 010	41 707	1 116 307	512 421	1 623 105	61 776
325	Chemical mfg	-	5	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	h	D	D	D	D	D	D	D	D
WILTON TOWN, CT													
31-33	Manufacturing	-	18	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
WINCHESTER TOWN, CT													
31-33	Manufacturing	2	39	14	1 130	39 824	796	1 590	22 612	98 624	114 832	213 991	6 566
332	Fabricated metal product mfg	-	14	6	512	21 010	342	679	11 079	57 214	69 930	128 186	3 913
WINDHAM TOWN, CT													
31-33	Manufacturing	-	28	8	1 375	48 687	1 043	2 121	29 505	113 603	123 327	227 607	16 159
WINDSOR TOWN, CT													
31-33	Manufacturing	-	46	31	4 653	205 606	2 478	5 463	96 570	364 719	313 551	674 957	16 042
332	Fabricated metal product mfg	-	7	6	1 412	68 007	426	1 012	18 283	90 025	51 113	138 518	2 138
3321	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	5	1 567	71 113	919	2 104	40 147	127 443	123 588	251 538	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WINDSOR LOCKS TOWN, CT												
31-33	Manufacturing	—	21	8	1 642	78 720	746	1 720	30 789	169 237	139 984	308 192	12 345
313	Textile mills	—	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	—	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills..	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	—	1	1	f	D	D	D	D	D	D	D	D
	WOLCOTT TOWN, CT												
31-33	Manufacturing	2	37	11	807	29 669	637	1 208	15 905	53 773	38 183	90 334	2 464

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
CONNECTICUT		CONNECTICUT—Con.	
Companies ¹	number.. 5 574	Quantity of electricity purchased for heat and power	1,000 kWh.. 5 598 555
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
All establishments	number.. 5 844	Total value of shipments	\$1,000.. 46 938 210
Establishments with 1 to 19 employees	number.. 3 918	Value of resales	\$1,000.. 2 666 790
Establishments with 20 to 99 employees	number.. 1 428	Value added	\$1,000.. 27 295 212
Establishments with 100 employees or more	number.. 498	Total inventories, beginning of year	\$1,000.. 6 674 073
All employees	number.. 252 330	Finished goods inventories, beginning of year	\$1,000.. 2 328 018
Total compensation ²	\$1,000.. 13 043 507	Work-in-process inventories, beginning of year	\$1,000.. 2 433 533
Annual payroll	\$1,000.. 10 452 076	Materials and supplies inventories, beginning of year	\$1,000.. 1 912 522
Total fringe benefits	\$1,000.. 2 591 431	Total inventories, end of year	\$1,000.. 7 034 191
Production workers, average for year	number.. 153 045	Finished goods inventories, end of year	\$1,000.. 2 740 415
Production workers on March 12	number.. 154 150	Work-in-process inventories, end of year	\$1,000.. 2 248 987
Production workers on May 12	number.. 152 831	Materials and supplies inventories, end of year	\$1,000.. 2 044 789
Production workers on August 12	number.. 152 616	Gross book value of total assets at beginning of year	\$1,000.. 18 867 218
Production workers on November 12	number.. 152 583	Total capital expenditures (new and used)	\$1,000.. 1 864 217
Production-worker hours	1,000.. 317 515	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 382 220
Production-worker wages	\$1,000.. 4 895 335	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 481 997
Total cost of materials	\$1,000.. 19 867 018	Total retirements ²	\$1,000.. 628 128
Cost of materials, parts, containers, etc., consumed	\$1,000.. 16 404 096	Gross book value of total assets at end of year	\$1,000.. 20 103 307
Cost of resales	\$1,000.. 1 916 628	Total depreciation during year ²	\$1,000.. 1 280 154
Cost of fuels	\$1,000.. 193 654	Total rental payments ²	\$1,000.. 485 713
Cost of purchased electricity	\$1,000.. 432 654	Buildings and other structures rental payments ²	\$1,000.. 253 122
Cost of contract work	\$1,000.. 919 986	Machinery and equipment rental payments ²	\$1,000.. 232 591

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

CONNECTICUT

Danielson. See “Killingly town balance.”

Groton. See “Groton town balance.”

Groton town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Groton town balance contains all of Groton town except the incorporated place of Groton.

Killingly town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census.

Killingly town balance contains all of Killingly town except the incorporated place of Danielson.

Milford. See “Milford (consolidated city).”

Milford (consolidated city) is coextensive with Milford town. It includes Woodmont, which is not populous enough for separate tabulation. Therefore, “Milford” refers to the whole consolidated city.

Appendix E. Metropolitan Areas

CONNECTICUT

Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Boston, MA—NH PMSA

Bristol County, MA (Part)

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (Part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Gloucester city, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Marblehead town, MA

Newburyport city, MA

Peabody city, MA

Salem city, MA

Saugus town, MA

Swampscott town, MA

Middlesex County, MA (Part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Bedford town, MA

Belmont town, MA

Burlington town, MA

Cambridge city, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA—Con.

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Somerville city, MA

Stoneham town, MA

Sudbury town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (Part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)—Con.

Dedham town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (Part)

Harvard town, MA

Milford town, MA

Rockingham County, NH (Part)

Brockton, MA PMSA

Bristol County, MA (Part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (Part)

Plymouth County, MA (Part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Middleborough town, MA

Whitman town, MA

Fitchburg—Leominster, MA PMSA

Middlesex County, MA (Part)

Worcester County, MA (Part)

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lawrence, MA—NH PMSA

Essex County, MA (Part)

Andover town, MA

Haverhill city, MA

Lawrence city, MA

Methuen city, MA

North Andover town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Lawrence, MA—NH PMSA—Con.

Rockingham County, NH (Part)

Derry town, NH

Salem town, NH

Lowell, MA—NH PMSA

Middlesex County, MA (Part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Westford town, MA

Hillsborough County, NH (Part)

Pelham town, NH

Manchester, NH PMSA

Hillsborough County, NH (Part)

Bedford town, NH

Goffstown town, NH

Manchester city, NH

Merrimack County, NH (Part)

Rockingham County, NH (Part)

Londonderry town, NH

Nashua, NH PMSA

Hillsborough County, NH (Part)

Hudson town, NH

Merrimack town, NH

Milford town, NH

Nashua city, NH

New Bedford, MA PMSA

Bristol County, MA (Part)

Dartmouth town, MA

Fairhaven town, MA

New Bedford city, MA

Plymouth County, MA (Part)

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Portsmouth—Rochester, NH—ME PMSA

York County, ME (Part)

York town, ME

Rockingham County, NH (Part)

Exeter town, NH

Hampton town, NH

Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH

Durham town, NH

Rochester city, NH

Somersworth city, NH

Worcester, MA—CT PMSA

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

Webster town, MA

Westborough town, MA

Worcester city, MA

Bridgeport, CT PMSA

Fairfield County, CT (Part)
Bridgeport city, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (Part)
Ansonia city, CT
Derby city, CT
Milford city, CT
Seymour town, CT

Danbury, CT PMSA

Fairfield County, CT (Part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown town, CT
Ridgefield town, CT
Litchfield County, CT (Part)
New Milford town, CT

Hartford, CT MSA

Hartford County, CT (Part)
Avon town, CT
Berlin town, CT
Bloomfield town, CT
Bristol city, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Hartford city, CT
Manchester town, CT
New Britain city, CT
Newington town, CT

Hartford, CT MSA—Con.

Hartford County, CT (Part)—Con.
Plainville town, CT
Rocky Hill town, CT
Simsbury town, CT
Southington town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor town, CT
Windsor Locks town, CT
Litchfield County, CT (Part)
Plymouth town, CT
Winchester town, CT
Middlesex County, CT (Part)
Cromwell town, CT
East Hampton town, CT
Middletown city, CT
New London County, CT (Part)
Colchester town, CT
Tolland County, CT (Part)
Coventry town, CT
Ellington town, CT
Mansfield town, CT
Stafford town, CT
Tolland town, CT
Vernon town, CT
Windham County, CT (Part)
Windham town, CT

New Haven—Meriden, CT PMSA

Middlesex County, CT (Part)
Clinton town, CT
New Haven County, CT (Part)
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT

New Haven—Meriden, CT PMSA—Con.

Hartford County, CT (Part)—Con.
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT

New London—Norwich, CT—RI MSA

Middlesex County, CT (Part)
New London County, CT (Part)
East Lyme town, CT
Groton city, CT
Groton town balance, CT
Jewett City borough, CT
Ledyard town, CT
Montville town, CT
New London city, CT
Norwich city, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (Part)
Plainfield town, CT
Washington County, RI (Part)
Westerly town, RI

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA**

Bergen—Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (Part)
Bridgeport city, CT
Fairfield town, CT
Monroe town, CT

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

Bridgeport, CT PMSA—Con.
Fairfield County, CT (Part)—Con.
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (Part)
Ansonia city, CT
Derby city, CT
Milford city, CT
Seymour town, CT
Danbury, CT PMSA
Fairfield County, CT (Part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown town, CT
Ridgefield town, CT
Litchfield County, CT (Part)
New Milford town, CT
Dutchess County, NY PMSA
Dutchess County, NY
Jersey City, NJ PMSA
Hudson County, NJ
Middlesex—Somerset—Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth—Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau—Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

New Haven—Meriden, CT PMSA

Middlesex County, CT (Part)

Clinton town, CT

New Haven County, CT (Part)

Branford town, CT

Cheshire town, CT

East Haven town, CT

Guilford town, CT

Hamden town, CT

Madison town, CT

Meriden city, CT

New Haven city, CT

North Branford town, CT

North Haven town, CT

Orange town, CT

Wallingford town, CT

West Haven city, CT

New York, NY PMSA

Bronx County, NY

Kings County, NY

New York County, NY

Putnam County, NY

Queens County, NY

Richmond County, NY

Rockland County, NY

Westchester County, NY

Newark, NJ PMSA

Essex County, NJ

Morris County, NJ

Sussex County, NJ

Union County, NJ

Warren County, NJ

Newburgh, NY—PA PMSA

Orange County, NY

Pike County, PA

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

Stamford—Norwalk, CT PMSA

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

Stamford city, CT

Westport town, CT

Wilton town, CT

Trenton, NJ PMSA

Mercer County, NJ

Waterbury, CT PMSA

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

Stamford—Norwalk, CT PMSA

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

Stamford city, CT

Westport town, CT

Wilton town, CT

Waterbury, CT PMSA

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

Worcester, MA—CT PMSA

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

Worcester, MA—CT PMSA—Con.

Worcester County, MA (Part)—Con.

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

Webster town, MA

Westborough town, MA

Worcester city, MA

District of Columbia

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the District: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DISTRICT OF COLUMBIA												
	Manufacturing	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
311	Food mfg	2	19	4	413	11 128	175	282	3 448	19 155	9 353	28 557	684
3118	Bakeries & tortilla mfg	1	16	4	384	10 707	162	255	3 180	17 100	6 772	23 866	577
31181	Bread & bakery product mfg	-	14	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	3	301	9 237	100	202	2 436	13 232	4 426	17 651	D
323	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
3231	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
32311	Printing	1	99	19	1 542	56 424	1 109	2 132	37 389	83 268	95 727	179 167	4 912
323110	Commercial lithographic printing	2	44	12	669	24 745	461	890	15 653	50 175	38 940	89 257	2 949
323114	Quick printing	-	38	5	570	17 147	411	724	10 457	24 562	15 361	39 919	1 646
323119	Other commercial printing	-	8	2	e	D	D	D	D	D	D	D	130
32312	Support activities for printing	-	15	3	c	12 331	206	431	8 661	25 296	4 428	29 570	824
323122	Prepress services	-	13	3	c	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	3	2	107	4 466	62	145	2 432	8 341	17 395	25 771	1 374
3273	Cement & concrete product mfg	1	3	2	107	4 466	62	145	2 432	8 341	17 395	25 771	1 374
32732	Ready-mix concrete mfg	1	3	2	107	4 466	62	145	2 432	8 341	17 395	25 771	1 374
327320	Ready-mix concrete mfg	1	3	2	107	4 466	62	145	2 432	8 341	17 395	25 771	1 374
337	Furniture & related product mfg	-	2	1	c	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	20	2	134	4 099	91	181	2 054	8 364	2 921	11 013	180

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA												
	Manufacturing	1	4 979	1 397	180 692	6 729 603	118 375	237 123	3 628 537	20 589 409	18 635 215	39 149 042	1 520 154
	Washington-Baltimore, DC-MD-VA-WV CMSA (DC Part)	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington-Baltimore, DC-MD-VA-WV CMSA (MD Part)	1	3 482	1 039	138 522	5 151 313	90 519	181 710	2 812 641	16 384 506	15 133 093	31 458 684	1 141 079
	Washington-Baltimore, DC-MD-VA-WV CMSA (VA Part)	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington-Baltimore, DC-MD-VA-WV CMSA (WV Part)	-	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	1	395	119	14 363	402 297	9 987	20 724	254 886	2 475 385	2 408 898	4 889 204	87 187
312	Beverage & tobacco product mfg	2	45	20	g	D	D	D	D	D	D	D	D
313	Textile mills	5	42	10	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	137	14	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Manufacturing—Con.												
315	Apparel mfg	2	127	32	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	11	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	162	53	h	D	D	D	D	D	D	D	D
322	Paper mfg	1	59	35	6 102	179 331	4 877	9 412	120 612	366 779	450 197	813 474	D
323	Printing & related support activities	2	1 198	271	25 327	887 907	19 037	37 200	575 537	1 710 795	1 209 672	2 916 844	318 361
324	Petroleum & coal products mfg	2	41	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	180	77	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	145	67	8 893	241 984	7 183	13 703	165 876	719 656	674 514	1 384 491	77 269
327	Nonmetallic mineral product mfg	—	236	93	7 410	254 629	5 744	12 146	178 450	724 602	547 963	1 268 145	47 167
331	Primary metal mfg	—	40	18	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	568	160	14 428	483 853	10 372	20 649	297 759	1 210 189	1 005 732	2 206 004	94 908
333	Machinery mfg	—	188	63	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	370	161	k	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	61	13	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	111	44	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	314	60	6 113	156 809	4 658	8 691	102 649	437 720	287 174	722 749	10 974
339	Miscellaneous mfg	2	549	75	i	D	D	D	D	D	D	D	D
	Washington, DC—MD—VA—WV PMSA												
31-33	Manufacturing	1	2 655	668	77 925	2 986 792	48 768	97 608	1 439 124	8 015 259	6 589 096	14 539 682	746 521
	Washington, DC—MD—VA—WV PMSA (DC Part)	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington, DC—MD—VA—WV PMSA (MD Part)	1	1 158	310	35 755	1 408 502	20 912	42 195	623 228	3 810 356	3 086 974	6 849 324	367 446
	Washington, DC—MD—VA—WV PMSA (VA Part)	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington, DC—MD—VA—WV PMSA (WV Part)	—	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	2	201	48	5 551	136 527	3 753	7 387	85 600	520 377	660 882	1 179 566	18 084
3114	Fruit & vegetable preserving & specialty food mfg	4	10	4	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	6	5	3	e	D	D	D	D	D	D	D	2 016
311412	Frozen specialty food mfg	6	5	3	e	D	D	D	D	D	D	D	2 016
3115	Dairy product mfg	1	8	7	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	1	7	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	1	6	6	781	30 632	424	991	16 346	109 542	258 954	366 727	4 173
3116	Meat product mfg	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
31161	Animal slaughtering & processing	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
311612	Meat processed from carcasses	2	6	4	600	12 112	508	1 093	8 024	44 966	37 893	82 709	D
3118	Bakeries & tortilla mfg	2	145	27	2 937	69 235	1 853	3 478	43 114	282 674	102 099	385 222	7 189
31181	Bread & bakery product mfg	2	138	25	h	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	98	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	2	37	17	2 018	54 254	1 311	2 656	34 980	239 127	78 442	317 895	5 645
3119	Other food mfg	—	15	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Washington, DC—MD—VA—WV PMSA—Con. Manufacturing—Con.												
312	Beverage & tobacco product mfg	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
3121	Beverage mfg	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
31211	Soft drink & ice mfg	3	10	6	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	3	5	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	62	5	510	10 907	346	638	6 093	17 835	14 512	32 266	D
3141	Textile furnishings mills	3	41	2	319	6 193	205	370	3 328	10 884	9 841	20 665	D
31412	Curtain & linen mills	2	40	2	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	37	2	305	5 866	193	347	3 088	10 007	8 665	18 612	D
315	Apparel mfg	—	63	8	927	16 000	818	1 581	13 482	42 492	50 982	93 368	1 030
3151	Apparel knitting mills	—	2	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	30	7	551	10 328	505	1 040	9 014	14 759	27 512	41 910	D
31522	Men's & boys' cut & sew apparel mfg	—	3	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	93	33	2 407	58 850	1 949	3 819	42 816	122 209	245 595	367 315	5 823
3211	Sawmills & wood preservation	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
32111	Sawmills & wood preservation	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
321113	Sawmills	2	20	7	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
32121	Veneer, plywood, & engineered wood product mfg	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
321214	Truss mfg	—	8	7	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	59	18	1 723	42 645	1 379	2 755	30 883	89 440	165 744	255 169	3 025
32191	Millwork	3	35	8	762	21 108	561	1 251	14 782	39 625	51 873	91 621	1 586
321911	Wood window & door mfg	—	9	3	404	11 674	305	707	8 661	19 568	22 024	41 468	507
321918	Other millwork (including flooring)	8	16	4	262	6 849	188	405	4 553	12 826	16 920	30 078	753
32199	All other wood product mfg	1	16	7	797	17 991	673	1 201	13 462	42 239	103 626	146 229	1 228
321992	Prefabricated wood building mfg	—	8	5	644	15 810	547	1 050	11 911	38 327	100 710	139 270	D
322	Paper mfg	1	17	6	1 243	25 971	1 131	1 985	19 025	80 975	93 082	169 453	4 086
3222	Converted paper product mfg	1	16	5	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	1	7	2	f	D	D	D	D	D	D	D	2 567
322233	Stationery, tablet, & related product mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
3231	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
32311	Printing	2	699	152	15 622	568 435	11 714	23 124	375 945	1 051 650	831 116	1 880 944	266 133
323110	Commercial lithographic printing ..	2	355	100	9 880	386 318	7 275	14 520	253 698	727 071	532 653	1 258 096	183 776
323113	Commercial screen printing	1	29	8	389	10 570	281	488	6 286	23 169	22 150	45 964	D
323114	Quick printing	1	200	16	1 731	49 482	1 232	2 153	29 819	97 094	47 575	144 901	D
323117	Book printing	1	27	17	2 590	88 001	2 126	4 347	61 661	171 887	137 170	308 453	13 462
323119	Other commercial printing	2	51	4	478	20 299	357	744	14 826	17 555	48 842	66 534	D
32312	Support activities for printing	2	83	17	1 081	41 873	847	1 753	26 788	77 841	19 007	96 718	3 549
323121	Tradebinding & related work	—	21	6	422	13 473	333	726	8 473	25 145	8 371	33 589	D
323122	Prepress services	3	62	11	659	28 400	514	1 027	18 315	52 696	10 636	63 129	D
324	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
3241	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
32412	Asphalt paving, roofing, & saturated materials mfg	5	17	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Washington, DC—MD—VA—WV PMSA—Con. Manufacturing—Con.												
325	Chemical mfg	1	67	24	3 431	164 316	1 699	3 574	63 545	636 967	502 431	1 124 729	73 105
3254	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
32541	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
325413	In-vitro diagnostic substance mfg	3	11	7	949	47 149	461	950	15 224	114 295	44 738	154 097	D
325414	Biological product (except diagnostic) mfg	—	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	4	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
325510	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
3259	Other chemical product mfg	1	17	7	535	24 406	319	653	12 810	99 204	67 521	164 377	12 882
32599	All other chemical product & preparation mfg	—	12	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	49	22	2 091	56 794	1 672	3 407	40 217	153 853	163 596	313 605	15 852
3261	Plastics product mfg	2	42	22	2 037	55 500	1 627	3 314	39 250	150 734	159 696	306 589	15 576
32611	Unsupported plastics film, sheet, & bag mfg	5	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	9	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	32	17	1 404	36 975	1 132	2 210	26 090	96 831	85 932	182 727	11 383
326191	Plastics plumbing fixture mfg	—	3	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	29	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	144	56	3 693	126 599	2 806	5 829	85 973	355 291	278 540	630 089	22 639
3272	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
32721	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
327212	Other pressed & blown glass & glassware mfg	—	2	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	102	46	2 814	96 811	2 105	4 532	66 009	263 589	240 559	499 663	20 234
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
327320	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
32733	Concrete pipe, brick, & block mfg	1	12	8	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
327390	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
331	Primary metal mfg	—	11	5	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	212	48	5 167	167 519	3 924	7 763	105 550	366 119	326 889	692 764	31 167
3323	Architectural & structural metals mfg	1	88	30	2 563	82 064	1 854	3 607	48 245	167 260	181 664	349 123	15 869
33231	Plate work & fabricated structural product mfg	—	23	11	906	30 029	697	1 238	17 058	59 872	95 137	155 775	11 013
332312	Fabricated structural metal mfg	—	19	10	813	27 274	634	1 108	15 430	57 105	92 146	150 010	10 729
33232	Ornamental & architectural metal products mfg	1	65	19	1 657	52 035	1 157	2 369	31 187	107 388	86 527	193 348	4 856
332321	Metal window & door mfg	—	7	2	487	14 298	366	761	9 288	33 834	24 988	58 247	D
332322	Sheet metal work mfg	1	30	9	574	17 523	412	766	10 909	36 843	32 260	68 829	2 378
332323	Ornamental & architectural metal work mfg	2	28	8	596	20 214	379	842	10 990	36 711	29 279	66 272	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	75	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
332710	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
3329	Other fabricated metal product mfg	—	18	6	1 203	39 292	956	2 089	26 623	107 616	72 635	179 288	8 748
33291	Metal valve mfg	—	3	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	15	5	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	8	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	74	26	4 184	143 646	2 793	5 713	76 304	360 500	328 877	696 692	D
3332	Industrial machinery mfg	1	13	4	1 022	38 661	444	1 001	13 695	97 939	66 104	166 040	D
33329	Other industrial machinery mfg	1	11	3	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
33331	Commercial & service industry machinery mfg	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
333311	Automatic vending machine mfg	—	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	6	5	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	16	7	698	28 592	430	809	14 484	63 758	34 575	99 019	D
33399	All other general-purpose machinery mfg	—	13	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	4	4	355	14 090	226	375	7 034	27 972	14 239	42 396	D
334	Computer & electronic product mfg	1	249	121	20 014	1 034 554	7 538	15 912	275 117	2 752 116	1 545 173	4 280 482	165 972
3341	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
33411	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
334111	Electronic computer mfg	3	19	10	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	17	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	71	41	8 356	435 364	3 467	7 024	139 955	1 207 276	895 059	2 092 511	84 957
33421	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
33429	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
33441	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
334412	Bare printed circuit board mfg	1	12	7	754	23 933	644	1 434	18 267	52 446	37 115	89 886	D
334413	Semiconductor & related device mfg ...	—	8	4	896	50 015	516	1 329	18 177	59 645	40 744	94 367	13 725
334418	Printed circuit assembly (electronic assembly) mfg	—	9	8	530	17 442	354	766	8 829	21 193	33 331	57 179	D
334419	Other electronic component mfg	4	10	6	434	13 354	228	501	6 489	27 027	12 771	39 806	973
3345	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
33451	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	4 874	328 227	805	1 717	35 137	887 003	201 730	1 087 819	28 191
334513	Industrial process control instrument mfg	—	9	4	364	14 124	143	302	3 782	31 440	20 653	52 381	1 028
334515	Electricity measuring & testing instrument mfg	—	10	6	714	38 077	197	430	5 566	167 153	49 630	217 270	8 595
334516	Analytical laboratory instrument mfg	4	19	8	513	20 813	146	393	5 090	45 661	16 762	62 283	1 451
334519	Other measuring & controlling device mfg	—	10	4	459	20 644	224	458	9 323	34 219	19 778	55 408	D
335	Electrical equipment, appliance, & component mfg	2	29	8	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	12	6	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
335999	All other miscellaneous electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
336	Transportation equipment mfg	2	52	17	2 786	149 654	1 394	2 903	57 794	424 128	656 715	1 066 534	34 707
3361	Motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
336111	Automobile mfg	8	2	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	7	21	6	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
33641	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
336414	Guided missile & space vehicle mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	—	173	26	3 456	92 206	2 628	5 129	63 166	296 505	171 091	464 554	5 722
3371	Household & institutional furniture & kitchen cabinet mfg	1	125	9	1 873	47 118	1 539	3 028	34 683	179 040	94 714	273 134	D
33711	Wood kitchen cabinet & counter top mfg	—	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
337110	Wood kitchen cabinet & counter top mfg	—	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
33712	Household & institutional furniture mfg	2	39	4	655	15 516	567	1 146	12 013	30 967	22 090	52 957	D
337122	Nonupholstered wood household furniture mfg	2	29	2	378	9 016	337	710	7 435	18 964	10 123	28 800	791
3372	Office furniture (including fixtures) mfg	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
33721	Office furniture (including fixtures) mfg	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
337212	Custom architectural woodwork & millwork mfg	—	20	10	629	21 599	448	813	13 002	49 296	17 870	67 485	D
337215	Showcase, partition, shelving, & locker mfg	—	12	1	503	10 519	315	615	7 650	24 698	18 264	40 019	D
3379	Other furniture related product mfg	—	9	4	368	10 826	259	524	6 264	40 259	37 630	78 077	D
33791	Mattress mfg	—	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
337910	Mattress mfg	—	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
339	Miscellaneous mfg	3	310	30	2 541	78 633	1 631	3 015	37 107	208 214	123 821	334 679	9 163
3391	Medical equipment & supplies mfg	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
33911	Medical equipment & supplies mfg	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
339113	Surgical appliance & supplies mfg	—	19	5	552	16 409	310	672	6 827	85 974	59 909	149 391	D
339116	Dental laboratories	6	113	3	468	12 369	345	565	7 404	28 322	9 795	37 180	822
3399	Other miscellaneous mfg	3	133	15	1 103	33 130	750	1 380	16 916	58 052	38 584	95 993	2 360
33995	Sign mfg	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D
339950	Sign mfg	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 3. Industry Statistics for the County: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DISTRICT OF COLUMBIA, DC												
	Manufacturing	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
323	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
3231	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
32311	Printing	1	99	19	1 542	56 424	1 109	2 132	37 389	83 268	95 727	179 167	4 912
323110	Commercial lithographic printing	2	44	12	669	24 745	461	890	15 653	50 175	38 940	89 257	2 949
323114	Quick printing	-	38	5	570	17 147	411	724	10 457	24 562	15 361	39 919	1 646

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for the Place: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON, DC												
	Manufacturing	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
323	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
3231	Printing & related support activities	1	114	22	1 792	68 755	1 315	2 563	46 050	108 564	100 155	208 737	5 736
32311	Printing	1	99	19	1 542	56 424	1 109	2 132	37 389	83 268	95 727	179 167	4 912
323110	Commercial lithographic printing	2	44	12	669	24 745	461	890	15 653	50 175	38 940	89 257	2 949
323114	Quick printing	-	38	5	570	17 147	411	724	10 457	24 562	15 361	39 919	1 646

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the District: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
DISTRICT OF COLUMBIA		DISTRICT OF COLUMBIA—Con.	
Companies ¹	191	Quantity of electricity purchased for heat and power	40 922
		Quantity of electricity generated less sold for heat and power	—
All establishments	200	Total value of shipments	320 234
Establishments with 1 to 19 employees	165	Value of resales	11 891
Establishments with 20 to 99 employees	31	Value added	170 849
Establishments with 100 employees or more	4	Total inventories, beginning of year	26 471
All employees	2 858	Finished goods inventories, beginning of year	3 655
Total compensation ²	120 265	Work-in-process inventories, beginning of year	7 513
Annual payroll	101 108	Materials and supplies inventories, beginning of year	15 303
Total fringe benefits	19 157	Total inventories, end of year	23 115
Production workers, average for year	1 926	Finished goods inventories, end of year	4 321
Production workers on March 12	2 032	Work-in-process inventories, end of year	6 830
Production workers on May 12	1 873	Materials and supplies inventories, end of year	11 964
Production workers on August 12	1 893	Gross book value of total assets at beginning of year	133 453
Production workers on November 12	1 906	Total capital expenditures (new and used)	9 832
Production-worker hours	3 727	Capital expenditures for buildings and other structures (new and used)	869
Production-worker wages	60 863	Capital expenditures for machinery and equipment (new and used)	8 963
Total cost of materials	149 315	Total retirements ²	3 236
Cost of materials, parts, containers, etc., consumed	124 441	Gross book value of total assets at end of year	140 049
Cost of resales	9 349	Total depreciation during year ²	9 300
Cost of fuels	1 538	Total rental payments ²	7 263
Cost of purchased electricity	2 914	Buildings and other structures rental payments ²	3 525
Cost of contract work	11 073	Machinery and equipment rental payments ²	3 738

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

- 2269 Finishing plants, n.e.c.
- 2282 Yarn throwing and winding mills (pt)
- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)
- 5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

DISTRICT OF COLUMBIA

There are no geographic notes for the District of Columbia.

Appendix E. Metropolitan Areas

DISTRICT OF COLUMBIA

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA
Fauquier County, VA
King George County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria, VA (IC)
Fairfax, VA (IC)
Falls Church, VA (IC)
Fredericksburg, VA (IC)
Manassas, VA (IC)
Manassas Park, VA (IC)
Berkeley County, WV
Jefferson County, WV

Washington—Baltimore, DC—MD—VA—WV CMSA

Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD

Washington—Baltimore, DC—MD—VA—WV CMSA—Con.

Baltimore, MD PMSA—Con.
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore, MD (IC)
Hagerstown, MD PMSA
Washington County, MD
Washington, DC—MD—VA—WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA
Fauquier County, VA
King George County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria, VA (IC)
Fairfax, VA (IC)
Falls Church, VA (IC)
Fredericksburg, VA (IC)
Manassas, VA (IC)
Manassas Park, VA (IC)
Berkeley County, WV
Jefferson County, WV

Delaware

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
DELAWARE													
31-33	Manufacturing	-	675	232	41 084	1 474 267	28 959	59 788	899 842	5 389 453	8 082 514	13 397 302	509 721
311	Food mfg	-	73	28	9 262	194 534	8 095	15 669	149 205	546 412	1 493 319	2 037 592	32 349
3111	Animal food mfg	2	7	5	258	9 019	158	402	4 767	17 926	372 439	388 450	1 930
31111	Animal food mfg	2	7	5	258	9 019	158	402	4 767	17 926	372 439	388 450	1 930
311119	Other animal food mfg	2	7	5	258	9 019	158	402	4 767	17 926	372 439	388 450	1 930
3114	Fruit & vegetable preserving & specialty food mfg	-	7	4	802	18 642	672	1 407	14 520	86 127	75 491	161 622	D
31142	Fruit & vegetable canning, pickling, & drying	-	5	3	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	4	3	f	D	D	D	D	D	D	D	3 351
3115	Dairy product mfg	3	5	2	108	3 274	41	59	796	6 995	19 129	26 066	333
31151	Dairy product (except frozen) mfg	3	4	2	c	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	13	9	6 359	109 077	5 800	11 050	88 790	235 013	610 041	845 434	15 220
31161	Animal slaughtering & processing	-	13	9	6 359	109 077	5 800	11 050	88 790	235 013	610 041	845 434	15 220
311612	Meat processed from carcasses	1	3	3	350	7 591	260	612	5 665	15 326	24 453	40 403	D
311615	Poultry processing	-	6	6	5 975	100 625	5 513	10 389	82 581	214 355	565 727	779 816	D
3117	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
311711	Seafood canning	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	24	4	313	5 744	168	247	2 497	13 266	5 209	18 489	600
31181	Bread & bakery product mfg	2	23	4	e	D	D	D	D	D	D	D	D
311811	Retail bakeries	5	18	2	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	5	2	c	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	1	c	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	1	c	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	1	c	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	c	D	D	D	D	D	D	D	D
313	Textile mills	2	7	4	325	7 876	283	515	5 349	15 971	19 044	34 799	3 191
3133	Textile & fabric finishing & fabric coating mills	2	4	3	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	4	3	2	c	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	4	3	2	c	D	D	D	D	D	D	D	D
314	Textile product mills	2	17	6	e	D	D	D	D	D	D	D	612
3149	Other textile product mills	2	10	3	c	D	D	D	D	D	D	D	539
315	Apparel mfg	8	12	3	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	9	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	3	1	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	3	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	7	26	4	809	18 383	686	1 415	15 096	42 029	48 670	90 248	1 678
3219	Other wood product mfg	8	18	3	719	16 407	615	1 268	13 731	36 132	42 845	78 512	1 412
32199	All other wood product mfg	8	8	2	641	14 323	555	1 168	12 199	32 640	35 447	67 166	1 246
321992	Prefabricated wood building mfg	9	4	1	584	12 689	509	1 076	11 097	29 256	30 074	58 417	D
322	Paper mfg	-	9	9	2 717	72 356	1 223	2 903	48 609	573 801	210 672	804 382	D
3221	Pulp, paper, & paperboard mills	-	2	2	c	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	c	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	DELAWARE—Con.													
	Manufacturing—Con.													
322	Paper mfg—Con.													
3222	Converted paper product mfg	-	7	7	h	D	D	D	D	D	D	D	D	
32221	Paperboard container mfg	-	5	5	f	D	D	D	D	D	D	D	3 651	
322211	Corrugated & solid fiber box mfg	-	2	2	c	D	D	D	D	D	D	D	D	
322212	Folding paperboard box mfg	-	1	1	c	D	D	D	D	D	D	D	D	
322214	Fiber can, tube, drum, & similar products mfg	-	1	1	c	D	D	D	D	D	D	D	D	
322215	Nonfolding sanitary food container mfg ...	-	1	1	e	D	D	D	D	D	D	D	D	
32222	Paper bag & coated & treated paper mfg	9	1	1	c	D	D	D	D	D	D	D	D	
322222	Coated & laminated paper mfg	9	1	1	c	D	D	D	D	D	D	D	D	
32229	Other converted paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D	
322291	Sanitary paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D	
323	Printing & related support activities	4	83	12		928	28 027	634	1 145	16 962	49 688	27 516	77 344	4 794
3231	Printing & related support activities	4	83	12		928	28 027	634	1 145	16 962	49 688	27 516	77 344	4 794
32311	Printing	4	78	12		895	26 800	609	1 097	16 082	47 306	27 180	74 647	4 735
323110	Commercial lithographic printing ..	4	37	8		535	15 897	365	679	9 735	28 583	15 565	44 338	3 413
323114	Quick printing	3	21	1		137	3 603	92	139	2 059	5 552	3 672	9 234	521
324	Petroleum & coal products mfg	-	14	4	f									
3241	Petroleum & coal products mfg	-	14	4	f									
32411	Petroleum refineries	-	1	1	f									
324110	Petroleum refineries ..	-	1	1	f									
32412	Asphalt paving, roofing, & saturated materials mfg	-	10	2		132	4 015	101	201	2 953	12 350	34 403	45 177	469
325	Chemical mfg	-	51	34		6 854	312 103	4 239	9 053	159 970	2 218 175	1 937 863	4 073 817	116 271
3251	Basic chemical mfg	-	16	12		1 936	107 158	1 013	2 124	52 321	535 857	327 253	860 072	44 267
32511	Petrochemical mfg	-	1	1	c									
325110	Petrochemical mfg	-	1	1	c									
32512	Industrial gas mfg	-	5	1		109	5 366	43	95	2 036	44 584	11 493	56 046	1 388
325120	Industrial gas mfg	-	5	1		109	5 366	43	95	2 036	44 584	11 493	56 046	1 388
32513	Dye & pigment mfg	-	2	2	f									
325131	Inorganic dye & pigment mfg	-	1	1	e									
325132	Synthetic organic dye & pigment mfg	-	1	1	e									
32518	Other basic inorganic chemical mfg	-	5	5		646	35 897	280	605	13 973	105 823	98 672	205 277	18 645
325181	Alkalies & chlorine mfg	-	1	1	c									
325188	All other basic inorganic chemical mfg	-	4	4	f									
32519	Other basic organic chemical mfg	-	3	3		344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
325199	All other basic organic chemical mfg	-	3	3		344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5		1 864	78 969	1 517	3 208	51 929	745 737	326 883	1 064 805	D
32521	Resin & synthetic rubber mfg	-	4	4	e									3 400
325211	Plastics material & resin mfg	-	3	3	e									D
325212	Synthetic rubber mfg ..	-	1	1	c									D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g									D
325222	Noncellulosic organic fiber mfg	-	1	1	g									D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	6	4	3	c									D
32531	Fertilizer mfg	6	3	3	c									D
325314	Fertilizer (mixing only) mfg	6	3	3	c									D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DELAWARE—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	11	8	1 477	62 341	599	1 253	21 393	588 626	1 016 635	1 542 520	28 162
32541	Pharmaceutical & medicine mfg	—	11	8	1 477	62 341	599	1 253	21 393	588 626	1 016 635	1 542 520	28 162
325411	Medicinal & botanical mfg	5	2	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	6	3	f	D	D	D	D	D	D	D	8 125
325414	Biological product (except diagnostic) mfg	—	3	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	3	1	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	6	3	1 077	49 271	811	1 899	27 084	267 672	145 270	404 314	9 428
32561	Soap & cleaning compound mfg	5	5	2	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	9	2	1	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	—	2	1	c	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	1	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	6	2	226	6 137	104	198	2 578	17 819	12 884	30 838	1 539
32599	All other chemical product & preparation mfg	2	6	2	226	6 137	104	198	2 578	17 819	12 884	30 838	1 539
325991	Custom compounding of purchased resin...	3	4	1	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	57	33	3 896	128 534	2 591	5 121	69 016	445 621	395 139	849 859	48 715
3261	Plastics product mfg	1	42	24	2 805	94 706	2 109	4 236	54 444	327 081	336 853	673 972	39 915
32611	Unsupported plastics film, sheet, & bag mfg ..	2	11	6	846	28 493	632	1 475	19 329	114 562	124 182	241 997	8 920
326112	Unsupported plastics packaging film & sheet mfg	—	3	2	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	4	8	4	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	7	3	365	16 868	268	566	11 529	79 539	100 238	185 873	14 963
326121	Unsupported plastics profile shape mfg	—	4	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	19	12	1 463	45 688	1 123	2 028	21 638	118 760	102 494	221 565	15 734
326199	All other plastics product mfg	—	17	12	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	15	9	1 091	33 828	482	885	14 572	118 540	58 286	175 887	8 800
32629	Other rubber product mfg	—	10	8	1 047	32 675	453	815	13 797	115 730	55 223	169 973	8 681
326291	Rubber product mfg for mechanical use	—	3	3	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	7	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	40	14	870	28 433	680	1 443	19 576	79 429	106 615	185 783	7 136
3273	Cement & concrete product mfg	4	23	11	535	16 092	430	896	11 105	47 116	46 183	92 969	4 461
32732	Ready-mix concrete mfg.	5	15	7	304	10 013	248	548	7 239	31 754	35 004	66 835	3 595
327320	Ready-mix concrete mfg	5	15	7	304	10 013	248	548	7 239	31 754	35 004	66 835	3 595
32733	Concrete pipe, brick, & block mfg	—	3	1	c	D	D	D	D	D	D	D	328
32739	Other concrete product mfg	4	5	3	c	D	D	D	D	D	D	D	538
327390	Other concrete product mfg	4	5	3	c	D	D	D	D	D	D	D	538
3279	Other nonmetallic mineral product mfg	—	2	2	c	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	—	2	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DELAWARE—Con. Manufacturing—Con.												
331	Primary metal mfg	—	7	5	738	31 633	560	1 174	21 673	80 151	128 743	206 989	8 422
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	3	3	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	2	2	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	2	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	102	32	2 554	87 322	1 854	4 175	56 066	184 445	127 050	311 717	9 203
3323	Architectural & structural metals mfg	1	26	12	1 239	40 034	884	2 126	27 730	79 893	72 692	153 355	3 505
33231	Plate work & fabricated structural product mfg	1	9	6	317	10 017	246	530	6 543	21 165	31 189	52 303	1 047
332312	Fabricated structural metal mfg	1	7	6	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	17	6	922	30 017	638	1 596	21 187	58 728	41 503	101 052	2 458
332321	Metal window & door mfg	—	2	1	c	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	—	10	4	682	24 215	466	1 304	17 742	46 783	27 726	75 261	2 147
3324	Boiler, tank, & shipping container mfg	—	6	2	206	9 030	171	453	6 312	14 457	9 618	23 882	D
33241	Power boiler & heat exchanger mfg	—	2	1	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	2	1	c	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	44	8	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	42	6	444	14 148	324	600	8 767	28 722	12 867	41 509	1 461
332710	Machine shops	2	42	6	444	14 148	324	600	8 767	28 722	12 867	41 509	1 461
3328	Coating, engraving, heat treating, & allied activities	4	9	2	144	4 381	114	199	2 671	7 371	3 862	11 268	326
33281	Coating, engraving, heat treating, & allied activities	4	9	2	144	4 381	114	199	2 671	7 371	3 862	11 268	326
332813	Electroplating, plating, polishing, anodizing, & coloring	5	5	2	c	D	D	D	D	D	D	D	286
3329	Other fabricated metal product mfg	1	9	5	310	11 266	210	509	6 004	34 987	17 300	52 222	930
33291	Metal valve mfg	—	2	1	c	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	1	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	3	7	4	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	3	3	c	D	D	D	D	D	D	D	D
333	Machinery mfg	1	32	7	1 010	31 338	677	1 473	17 326	70 209	80 548	152 122	2 781
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	4	538	14 755	389	872	9 286	31 315	52 019	84 339	920
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	4	538	14 755	389	872	9 286	31 315	52 019	84 339	920
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	6	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	12	2	350	12 157	210	439	5 768	30 987	24 172	55 551	944
33399	All other general-purpose machinery mfg	1	7	2	316	11 328	191	413	5 380	28 885	22 112	51 281	818
333999	All other miscellaneous general-purpose machinery mfg	1	5	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	26	12	1 556	66 158	718	1 419	24 383	226 044	176 233	401 854	D
3344	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DELAWARE—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
33451	Navigational, measuring, medical, & control instruments mfg	-	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
334513	Industrial process control instrument mfg	-	5	3	c	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	11	7	817	32 333	384	836	14 640	98 712	75 036	173 045	7 316
3359	Other electrical equipment & component mfg	-	5	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	6	4 280	248 685	3 818	8 870	210 734	281 885	1 623 495	1 874 347	D
3361	Motor vehicle mfg	-	3	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2	c	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	2	2	c	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	2	2	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	33	4	548	14 208	449	874	10 422	35 862	35 798	70 512	2 068
3371	Household & institutional furniture & kitchen cabinet mfg	3	23	1	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	8	3	367	9 484	321	617	7 479	26 657	28 821	54 297	D
33721	Office furniture (including fixtures) mfg	-	8	3	367	9 484	321	617	7 479	26 657	28 821	54 297	D
337214	Office furniture (except wood) mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	53	6	2 313	98 835	938	1 445	19 631	215 894	192 914	415 101	15 111
3391	Medical equipment & supplies mfg	-	25	5	2 132	94 924	796	1 197	17 060	207 635	186 390	400 383	14 854
33911	Medical equipment & supplies mfg	-	25	5	2 132	94 924	796	1 197	17 060	207 635	186 390	400 383	14 854
339111	Laboratory apparatus & furniture mfg	-	4	1	g	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg	-	3	1	e	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	2	10	1	c	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	4	28	1	181	3 911	142	248	2 571	8 259	6 524	14 718	257

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DOVER, DE MSA													
31-33	Manufacturing	-	82	28	7 985	209 773	5 343	11 136	144 367	1 086 015	866 831	1 965 527	39 993
311	Food mfg	-	14	5	2 616	68 597	2 381	4 641	54 919	205 552	378 951	585 632	13 176
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	2	2	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
311711	Seafood canning	-	1	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	9	5	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	9	4	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	9	2	1	f	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	4	483	13 403	306	909	9 680	30 172	21 474	51 262	1 511
3323	Architectural & structural metals mfg	-	2	2	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	2	1	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	1	e	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	1	e	D	D	D	D	D	D	D	D
PHILADELPHIA-WILMINGTON-ATLANTIC CITY, PA-NJ-DE-MD CMSA													
31-33	Manufacturing	1	7 571	2 521	296 009	11 144 543	198 342	402 245	6 246 279	36 032 591	42 854 609	78 627 684	3 154 094
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (DE Part)	-	458	152	22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (MD Part)	-	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (NJ Part)	1	1 931	643	73 747	2 654 647	51 459	101 322	1 560 504	8 161 513	9 971 460	18 209 340	508 565
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg	1	658	204	26 743	799 864	18 468	36 623	476 156	2 875 491	4 075 170	6 931 087	163 018
312	Beverage & tobacco product mfg	1	41	15	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Manufacturing—Con.												
313	Textile mills	2	111	51	h	D	D	D	D	D	D	D	D
314	Textile product mills	1	150	30	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	300	109	j	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	25	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	151	35		2 393	61 337	1 849	3 513	38 878	144 044	231 714	372 912
322	Paper mfg	1	167	111	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 071	237		25 080	873 504	17 864	34 229	537 117	1 962 280	1 237 277	3 197 812
324	Petroleum & coal products mfg	—	69	33	i	D	D	D	D	D	D	D	D
325	Chemical mfg	—	371	205	k	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	350	178		16 562	555 452	12 154	24 588	328 294	1 685 983	1 375 225	3 062 168
327	Nonmetallic mineral product mfg	1	300	114		12 188	429 542	9 612	20 003	308 463	1 106 394	734 488	1 834 034
331	Primary metal mfg	—	91	52	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 270	376		31 121	1 131 270	22 772	45 939	690 784	2 548 013	1 825 591	4 351 565
333	Machinery mfg	1	579	200	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	480	205		29 370	1 229 659	15 453	30 789	532 374	3 098 273	1 937 075	5 006 993
335	Electrical equipment, appliance, & component mfg	1	165	66	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	176	72	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	356	70		8 035	246 015	6 057	12 131	155 199	632 178	506 362	1 136 678
339	Miscellaneous mfg	2	690	154	j	D	D	D	D	D	D	D	D
	Wilmington—Newark, DE—MD PMSA												
31-33	Manufacturing	—	513	174		25 376	1 101 052	16 681	35 395	635 335	3 432 842	6 044 156	9 413 239
	Wilmington—Newark, DE—MD PMSA (DE Part)	—	458	152		22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968
	Wilmington—Newark, DE—MD PMSA (MD Part)	—	55	22		2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271
311	Food mfg	6	34	7		519	13 312	280	465	5 650	39 038	82 035	118 846
31181	Bakeries & tortilla mfg	1	18	4	e	D	D	D	D	D	D	D	571
	Bread & bakery product mfg	2	16	4		277	5 456	142	227	2 337	12 404	4 818	17 236
313	Textile mills	3	7	3		260	6 880	227	399	4 619	13 775	12 683	26 249
3133	Textile & fabric finishing & fabric coating mills	3	5	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	7	7	f	D	D	D	D	D	D	D	2 149
3222	Converted paper product mfg	1	5	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	4	4	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	72	11		740	25 031	506	1 011	15 130	44 357	24 054	68 548
3231	Printing & related support activities	3	72	11		740	25 031	506	1 011	15 130	44 357	24 054	68 548
32311	Printing	3	66	11	f	D	D	D	D	D	D	D	4 066
323110	Commercial lithographic printing ..	5	34	6		406	13 872	276	590	8 424	25 183	13 618	39 009

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Wilmington–Newark, DE–MD PMSA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	-	11	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	11	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	46	28	4 196	202 704	2 449	5 326	98 515	1 337 862	1 508 441	2 799 444	D
3251	Basic chemical mfg	-	15	12	1 885	104 847	995	2 085	51 786	607 898	330 914	935 627	43 754
32513	Dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	5	5	597	33 695	264	571	13 477	180 305	102 370	283 296	D
325188	All other basic inorganic chemical mfg	-	4	4	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	3	344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
325199	All other basic organic chemical mfg	-	3	3	344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	5	5	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	5	5	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	8	5	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	8	5	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	5	2	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	6	3	f	D	D	D	D	D	D	D	8 125
3256	Soap, cleaning compound, & toilet preparation mfg ..	5	5	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	5	5	2	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	9	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	5	9	3	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	5	9	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	51	31	3 468	121 609	2 487	5 094	68 707	485 726	415 889	909 786	56 239
3261	Plastics product mfg	1	38	23	3 015	106 811	2 189	4 415	58 911	393 877	387 177	789 929	52 673
32611	Unsupported plastics film, sheet, & bag mfg ..	2	11	6	980	35 400	732	1 693	23 978	146 410	156 645	305 248	20 630
326112	Unsupported plastics packaging film & sheet mfg	-	2	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	3	8	4	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	5	3	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	4	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	17	11	1 544	51 124	1 108	1 998	21 623	154 495	122 167	276 886	16 861
326199	All other plastics product mfg	-	16	11	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	13	8	453	14 798	298	679	9 796	91 849	28 712	119 857	3 566
32629	Other rubber product mfg	-	9	7	e	D	D	D	D	D	D	D	3 447
327	Nonmetallic mineral product mfg	3	28	13	756	25 943	594	1 273	18 314	71 621	88 533	160 082	7 820
3273	Cement & concrete product mfg	2	14	9	372	11 090	302	629	7 785	32 647	27 471	59 682	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Wilmington–Newark, DE–MD PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	5	4	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	75	25	1 928	69 814	1 432	3 010	43 830	145 240	99 789	245 487	7 449
3323	Architectural & structural metals mfg	1	22	10	839	28 642	644	1 311	19 271	53 504	52 428	107 109	2 184
33231	Plate work & fabricated structural product mfg . .	1	7	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	15	6	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	—	9	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	29	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	27	5	357	11 738	251	491	7 192	23 793	12 364	36 074	1 230
332710	Machine shops	1	27	5	357	11 738	251	491	7 192	23 793	12 364	36 074	1 230
3329	Other fabricated metal product mfg	1	5	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	29	6	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	3	e	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	11	2	325	11 625	197	424	5 525	29 620	22 852	52 795	D
33399	All other general-purpose machinery mfg	1	8	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	5	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	24	12	1 806	77 371	820	1 656	28 445	255 070	183 701	438 273	6 905
3341	Computer & peripheral equipment mfg	2	3	2	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	2	3	2	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
33451	Navigational, measuring, medical, & control instruments mfg	—	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
334516	Analytical laboratory instrument mfg	—	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	9	5	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con. Wilmington–Newark, DE–MD PMSA—Con. Manufacturing—Con.												
336	Transportation equipment mfg	—	12	7	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	3	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	3	e	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	41	4	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	24	4	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	24	4	g	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	—	4	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	2	1	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees; h–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KENT COUNTY, DE Manufacturing	—	82	28	7 985	209 773	5 343	11 136	144 367	1 086 015	866 831	1 965 527	39 993
311	Food mfg	—	14	5	2 616	68 597	2 381	4 641	54 919	205 552	378 951	585 632	13 176
3116	Meat product mfg	—	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
3119	Other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	9	5	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	9	4	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	9	2	1	f	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	KENT COUNTY, DE— Con. Manufacturing— Con.													
325	Chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D	
3262	Rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D	
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D	
31-33	NEW CASTLE COUNTY, DE Manufacturing	-	458	152		22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
322	Paper mfg	1	7	7	f	D	D	D	D	D	D	D	2 149	
3222	Converted paper product mfg	1	5	5	f	D	D	D	D	D	D	D	D	
32221	Paperboard container mfg	-	4	4	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	3	63	10	697	24 149	470	950	14 473	42 325	22 925	65 389	4 036	
3231	Printing & related support activities	3	63	10	697	24 149	470	950	14 473	42 325	22 925	65 389	4 036	
32311	Printing	4	59	10	f	D	D	D	D	D	D	D	D	
324	Petroleum & coal products mfg	-	9	3	f	D	D	D	D	D	D	D	D	
3241	Petroleum & coal products mfg	-	9	3	f	D	D	D	D	D	D	D	D	
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D	
324110	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	-	38	22	3 937	194 153	2 279	4 980	93 895	1 227 638	1 458 518	2 639 437	D	
3251	Basic chemical mfg	-	14	11	g	D	D	D	D	D	D	D	D	
32513	Dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D	
32518	Other basic inorganic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	-	8	5	f	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	8	5	f	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	-	6	3	f	D	D	D	D	D	D	D	8 125	
3256	Soap, cleaning compound, & toilet preparation mfg ..	5	5	2	f	D	D	D	D	D	D	D	D	
32561	Soap & cleaning compound mfg	5	5	2	f	D	D	D	D	D	D	D	D	
325612	Polish & other sanitation good mfg ..	9	2	1	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	45	26	h	D	D	D	D	D	D	D	D	
3261	Plastics product mfg	1	33	19	g	D	D	D	D	D	D	D	D	
32611	Unsupported plastics film, sheet, & bag mfg ..	3	9	4	f	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	-	14	9	g	D	D	D	D	D	D	D	D	
326199	All other plastics product mfg	-	13	9	g	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	3	25	10	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	72	24	g	D	D	D	D	D	D	D	D	
3323	Architectural & structural metals mfg	1	21	9	f	D	D	D	D	D	D	D	D	
33232	Ornamental & architectural metal products mfg	1	14	5	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	2	25	5	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	-	23	11	g	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	-	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D	
33451	Navigational, measuring, medical, & control instruments mfg	-	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D	
334516	Analytical laboratory instrument mfg	-	6	3	f	D	D	D	D	D	D	D	D	

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	NEW CASTLE COUNTY, DE—Con.													
31-33	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg	-	9	5	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	-	5	3	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	9	5	h	D	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	-	2	2	h	D	D	D	D	D	D	D	D	
33611	Automobile & light duty motor vehicle mfg	-	2	2	h	D	D	D	D	D	D	D	D	
336111	Automobile mfg	-	1	1	g	D	D	D	D	D	D	D	D	
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	-	38	3	g	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg	-	21	3	g	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	-	21	3	g	D	D	D	D	D	D	D	D	
339111	Laboratory apparatus & furniture mfg	-	4	1	g	D	D	D	D	D	D	D	D	
	SUSSEX COUNTY, DE													
31-33	Manufacturing	-	135	52		10 489	264 353	8 553	16 468	168 518	1 255 841	1 467 236	2 696 807	58 585
311	Food mfg	-	29	16	i	D	D	D	D	D	D	D	D	
3114	Fruit & vegetable preserving & specialty food mfg	-	4	3	f	D	D	D	D	D	D	D	D	
31142	Fruit & vegetable canning, pickling, & drying	-	3	2	f	D	D	D	D	D	D	D	D	
311421	Fruit & vegetable canning	-	3	2	f	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	8	6	i	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	8	6	i	D	D	D	D	D	D	D	D	
311615	Poultry processing	-	5	5	h	D	D	D	D	D	D	D	D	
325	Chemical mfg	-	10	9	g	D	D	D	D	D	D	D	D	
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D	
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D	
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D	
325414	Biological product (except diagnostic) mfg	-	3	3	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	-	11	3	f	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D	

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DOVER, DE													
31-33	Manufacturing	-	29	9	3 902	111 546	2 114	4 665	78 343	845 914	480 909	1 338 490	20 043
311	Food mfg.....	-	6	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
MIDDLETOWN, DE													
31-33	Manufacturing	4	5	5	811	31 222	607	1 354	19 999	122 413	129 023	251 329	D
MILFORD, DE *													
31-33	Manufacturing	-	19	9	2 246	53 231	2 013	3 445	30 397	151 897	182 619	336 835	4 932
311	Food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D
NEWARK, DE													
31-33	Manufacturing	1	52	23	i	D	D	D	D	D	D	D	37 465
325	Chemical mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg..	9	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	4	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	4	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	4	1	g	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
NEW CASTLE, DE													
31-33	Manufacturing	-	31	18	2 109	71 697	1 562	2 960	37 528	197 627	218 501	419 481	23 925
326	Plastics & rubber products mfg.....	-	5	4	973	32 895	781	1 433	15 101	82 444	89 090	171 897	D
3261	Plastics product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
SMYRNA, DE *													
31-33	Manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
WILMINGTON, DE													
31-33	Manufacturing	-	102	28	h	D	D	D	D	D	D	D	193 993
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
DELAWARE AND DISTRICT OF COLUMBIA COMBINED TOTALS		DELAWARE AND DISTRICT OF COLUMBIA COMBINED TOTALS—Con.	
Companies ¹	633	Quantity of electricity purchased for heat and power	3 130 715
All establishments	675	Quantity of electricity generated less sold for heat and power ...	217 004
Establishments with 1 to 19 employees	443	Total value of shipments	13 397 302
Establishments with 20 to 99 employees	156	Value of resales	1 439 960
Establishments with 100 employees or more	76	Value added	5 389 453
All employees	41 084	Total inventories, beginning of year	1 264 598
Total compensation ²	1 927 431	Finished goods inventories, beginning of year	559 275
Annual payroll	1 474 267	Work-in-process inventories, beginning of year	266 505
Total fringe benefits	453 164	Materials and supplies inventories, beginning of year	438 818
Production workers, average for year	28 959	Total inventories, end of year	1 353 962
Production workers on March 12	28 290	Finished goods inventories, end of year	582 914
Production workers on May 12	28 132	Work-in-process inventories, end of year	327 807
Production workers on August 12	28 830	Materials and supplies inventories, end of year	443 241
Production workers on November 12	30 584	Gross book value of total assets at beginning of year	4 942 147
Production-worker hours	59 788	Total capital expenditures (new and used)	509 721
Production-worker wages	899 842	Capital expenditures for buildings and other structures (new and used)	79 076
Total cost of materials	8 082 514	Capital expenditures for machinery and equipment (new and used)	430 645
Cost of materials, parts, containers, etc., consumed	6 527 330	Total retirements ²	72 181
Cost of resales	1 154 273	Gross book value of total assets at end of year	5 379 687
Cost of fuels	80 733	Total depreciation during year ²	305 490
Cost of purchased electricity	134 170	Total rental payments ²	49 355
Cost of contract work	186 008	Buildings and other structures rental payments ²	18 840
		Machinery and equipment rental payments ²	30 515

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

- 2269 Finishing plants, n.e.c.
- 2282 Yarn throwing and winding mills (pt)
- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)
- 5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

DELAWARE

Milford is in Kent and Sussex Counties.

Smyrna is in Kent and New Castle Counties.

Appendix E. Metropolitan Areas

DELAWARE

Dover, DE MSA

Kent County, DE

Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ

Cape May County, NJ

Philadelphia, PA—NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Salem County, NJ

Bucks County, PA

Chester County, PA

Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA—Con.

Philadelphia, PA—NJ PMSA—Con.

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

Vineland—Millville—Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington—Newark, DE—MD PMSA

New Castle County, DE

Cecil County, MD

Wilmington—Newark, DE—MD PMSA

New Castle County, DE

Cecil County, MD

Florida

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLORIDA													
31-33	Manufacturing	1	15 992	3 628	433 149	13 185 078	291 452	562 891	6 825 999	40 213 354	37 555 711	77 477 510	2 979 519
311	Food mfg.....	1	946	224	36 948	994 858	25 204	48 454	569 857	4 395 209	6 194 113	10 539 160	377 744
3111	Animal food mfg.....	1	34	11	852	23 027	667	1 091	15 808	78 268	203 044	281 178	5 656
31111	Animal food mfg.....	1	34	11	852	23 027	667	1 091	15 808	78 268	203 044	281 178	5 656
311119	Other animal food mfg.....	1	32	11	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling....	3	14	4	188	6 482	132	284	4 398	40 860	125 705	165 417	1 546
31121	Flour milling & malt mfg..	3	7	4	152	5 443	113	247	3 832	32 593	111 304	143 195	1 121
311211	Flour milling.....	2	5	3	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	52	17	3 191	108 330	1 901	5 127	67 755	485 440	634 032	1 077 721	43 433
31131	Sugar mfg.....	-	9	9	2 496	95 679	1 402	4 241	59 372	452 449	589 801	999 909	41 020
311311	Sugarcane mills.....	-	7	7	g	D	D	D	D	D	D	D	D
311312	Cane sugar refining....	-	2	2	c	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans.....	9	4	1	c	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans...	9	4	1	c	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	2	20	4	c	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	2	20	4	c	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	9	19	3	358	6 485	281	542	4 429	12 073	18 083	30 635	1 136
311340	Nonchocolate confectionery mfg...	9	19	3	358	6 485	281	542	4 429	12 073	18 083	30 635	1 136
3114	Fruit & vegetable preserving & specialty food mfg.....	-	79	42	9 737	304 900	7 085	13 670	177 230	1 230 622	2 580 917	3 812 488	216 840
31141	Frozen food mfg.....	-	31	24	4 318	124 851	3 331	7 480	81 532	669 953	1 260 538	1 932 557	90 059
311411	Frozen fruit, juice, & vegetable mfg.....	-	25	23	4 235	122 665	3 271	7 395	80 656	663 912	1 257 032	1 923 014	89 937
31142	Fruit & vegetable canning, pickling, & drying.....	-	48	18	5 419	180 049	3 754	6 190	95 698	560 669	1 320 379	1 879 931	126 781
311421	Fruit & vegetable canning.....	-	39	17	5 336	178 218	3 691	6 083	94 567	552 837	1 314 344	1 866 048	126 472
3115	Dairy product mfg.....	1	41	15	2 074	62 965	1 184	2 712	34 784	387 224	560 011	947 308	20 837
31151	Dairy product (except frozen) mfg.....	1	28	13	1 752	55 959	899	2 104	28 728	338 874	530 220	868 738	18 668
311511	Fluid milk mfg.....	1	16	13	1 675	53 262	846	2 000	26 939	329 475	504 841	834 087	18 048
31152	Ice cream & frozen dessert mfg.....	1	13	2	322	7 006	285	608	6 056	48 350	29 791	78 570	2 169
311520	Ice cream & frozen dessert mfg.....	1	13	2	322	7 006	285	608	6 056	48 350	29 791	78 570	2 169
3116	Meat product mfg.....	1	86	30	7 127	120 530	5 515	8 700	81 031	315 314	726 501	1 040 155	19 571
31161	Animal slaughtering & processing.....	1	86	30	7 127	120 530	5 515	8 700	81 031	315 314	726 501	1 040 155	19 571
311611	Animal (except poultry) slaughtering.....	4	31	8	503	10 896	330	596	5 606	22 795	76 758	99 989	1 149
311612	Meat processed from carcasses.....	2	38	11	2 348	54 361	1 871	3 613	35 198	207 877	363 898	564 691	8 840
311613	Rendering & meat byproduct processing.....	-	7	3	139	3 872	62	150	1 550	20 716	10 333	30 216	719
311615	Poultry processing....	-	10	8	4 137	51 401	3 252	4 341	38 677	63 926	275 512	345 259	8 863
3117	Seafood product preparation & packaging..	1	43	17	2 368	52 830	1 954	4 108	30 229	159 837	302 842	462 408	12 387
31171	Seafood product preparation & packaging.....	1	43	17	2 368	52 830	1 954	4 108	30 229	159 837	302 842	462 408	12 387
311711	Seafood canning.....	1	4	1	139	4 426	107	212	1 553	8 335	13 827	22 061	417
311712	Fresh & frozen seafood processing..	1	39	16	2 229	48 404	1 847	3 896	28 676	151 502	289 015	440 347	11 970
3118	Bakeries & tortilla mfg.....	1	501	60	8 301	219 367	4 565	8 352	102 948	699 977	387 229	1 089 664	34 397
31181	Bread & bakery product mfg.....	1	471	56	7 768	209 262	4 146	7 648	95 672	671 113	348 470	1 022 235	30 350
311811	Retail bakeries.....	5	298	13	1 550	19 636	957	1 131	9 807	46 481	27 334	73 903	2 426
311812	Commercial bakeries..	1	161	39	5 951	183 571	2 970	6 063	81 489	613 260	309 500	925 406	27 320
311813	Frozen cakes, pies, & other pastries mfg...	1	12	4	267	6 055	219	454	4 376	11 372	11 636	22 926	604
31182	Cookie, cracker, & pasta mfg.....	4	28	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg..	2	14	3	432	7 853	345	589	5 746	18 277	28 790	46 865	3 361

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLORIDA—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	96	28	3 110	96 427	2 201	4 410	55 674	997 667	673 832	1 662 821	23 077
31191	Snack food mfg	1	17	6	899	27 512	769	1 540	17 251	190 705	64 665	255 379	3 996
311919	Other snack food mfg	1	11	6	877	27 061	749	1 502	16 922	188 631	61 128	249 794	3 849
31192	Coffee & tea mfg	—	9	3	f	D	D	D	D	D	D	D	7 499
311920	Coffee & tea mfg	—	9	3	f	D	D	D	D	D	D	D	7 499
31194	Seasoning & dressing mfg	2	25	5	449	14 685	326	610	8 569	84 695	89 091	164 091	6 622
311941	Mayonnaise, dressing, & other prepared sauce mfg	9	12	1	124	2 724	96	171	1 782	14 874	14 295	29 011	670
311942	Spice & extract mfg	—	13	4	325	11 961	230	439	6 787	69 821	74 796	135 080	5 952
31199	All other food mfg	1	38	13	1 127	27 976	657	1 244	12 355	125 274	77 679	203 210	4 608
311991	Perishable prepared food mfg	2	9	4	319	6 267	157	294	2 162	11 330	11 141	22 854	516
311999	All other miscellaneous food mfg	1	29	9	808	21 709	500	950	10 193	113 944	66 538	180 356	4 092
312	Beverage & tobacco product mfg	1	110	44	8 382	261 410	4 390	8 713	127 658	1 806 955	1 553 242	3 361 340	124 590
3121	Beverage mfg	1	89	35	6 273	211 518	2 701	5 221	92 007	1 370 054	1 451 097	2 823 463	103 841
31211	Soft drink & ice mfg	2	70	29	4 454	136 752	1 316	2 933	39 102	694 319	1 028 881	1 723 325	48 630
312111	Soft drink mfg	2	26	20	3 759	119 584	1 066	2 412	34 234	641 414	990 207	1 631 562	44 498
312112	Bottled water mfg	6	4	3	e	D	D	D	D	D	D	D	D
312113	Ice mfg	1	40	6	e	D	D	D	D	D	D	D	D
31212	Breweries	—	13	3	g	D	D	D	D	D	D	D	D
312120	Breweries	—	13	3	g	D	D	D	D	D	D	D	D
31214	Distilleries	—	2	2	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	2	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	2	21	9	2 109	49 892	1 689	3 492	35 651	436 901	102 145	537 877	20 749
31222	Tobacco product mfg	2	21	9	2 109	49 892	1 689	3 492	35 651	436 901	102 145	537 877	20 749
312229	Other tobacco product mfg	2	21	9	2 109	49 892	1 689	3 492	35 651	436 901	102 145	537 877	20 749
313	Textile mills	3	160	32	2 995	71 201	2 523	4 988	48 106	176 356	190 440	368 613	13 518
3132	Fabric mills	2	78	16	1 789	39 715	1 517	3 007	27 192	100 959	105 777	207 068	7 067
31321	Broadwoven fabric mills	7	42	3	396	9 099	336	614	6 478	23 877	20 161	43 936	2 081
313210	Broadwoven fabric mills	7	42	3	396	9 099	336	614	6 478	23 877	20 161	43 936	2 081
31322	Narrow fabric mills & schiffli machine embroidery	2	15	6	664	10 630	590	1 198	7 971	26 444	14 060	40 663	1 424
313221	Narrow fabric mills	1	8	4	488	7 928	425	901	5 796	21 074	11 217	32 494	947
313222	Schiffli machine embroidery	3	7	2	176	2 702	165	297	2 175	5 370	2 843	8 169	477
31323	Nonwoven fabric mills	—	5	2	152	5 660	93	189	2 120	12 285	18 948	31 265	1 316
313230	Nonwoven fabric mills	—	5	2	152	5 660	93	189	2 120	12 285	18 948	31 265	1 316
31324	Knit fabric mills	1	16	5	577	14 326	498	1 006	10 623	38 353	52 608	91 204	2 246
313241	Weft knit fabric mills	1	7	3	342	8 997	297	636	6 780	22 839	42 430	65 591	905
313249	Other knit fabric & lace mills	1	9	2	235	5 329	201	370	3 843	15 514	10 178	25 613	1 341
3133	Textile & fabric finishing & fabric coating mills	5	76	14	1 119	28 785	933	1 830	19 867	63 507	61 059	126 060	4 922
31331	Textile & fabric finishing mills	5	67	11	1 004	26 707	853	1 730	18 388	59 242	54 741	115 428	4 566
313311	Broadwoven fabric finishing mills	3	57	6	625	16 775	535	1 092	11 368	39 037	22 144	62 743	2 244
313312	Textile & fabric finishing mills	8	10	5	379	9 932	318	638	7 020	20 205	32 597	52 685	2 322
31332	Fabric coating mills	6	9	3	115	2 078	80	100	1 479	4 265	6 318	10 632	356
313320	Fabric coating mills	6	9	3	115	2 078	80	100	1 479	4 265	6 318	10 632	356
314	Textile product mills	2	543	74	7 111	127 416	5 848	9 772	82 841	263 817	247 199	508 078	15 356
3141	Textile furnishings mills	1	210	15	2 521	43 556	2 128	3 684	32 014	98 872	104 058	201 404	7 783
31412	Curtain & linen mills	1	199	15	2 489	42 923	2 100	3 636	31 551	97 242	101 501	197 217	7 683
314121	Curtain & drapery mills	2	155	6	1 002	15 324	835	1 294	10 063	29 674	27 026	56 631	882
314129	Other household textile product mills	1	44	9	1 487	27 599	1 265	2 342	21 488	67 568	74 475	140 586	6 801
3149	Other textile product mills	2	333	59	4 590	83 860	3 720	6 088	50 827	164 945	143 141	306 674	7 573
31491	Textile bag & canvas mills	3	194	23	1 945	34 064	1 577	2 585	21 666	64 360	53 221	117 262	3 837
314911	Textile bag mills	—	16	6	646	9 221	584	1 056	6 706	20 754	15 799	36 302	1 000
314912	Canvas & related product mills	4	178	17	1 299	24 843	993	1 529	14 960	43 606	37 422	80 960	2 837
31499	All other textile product mills	2	139	36	2 645	49 796	2 143	3 503	29 161	100 585	89 920	189 412	3 736
314991	Rope, cordage, & twine mills	1	15	3	272	7 830	181	365	2 842	14 178	14 712	28 491	429
314999	All other miscellaneous textile product mills	2	124	33	2 373	41 966	1 962	3 138	26 319	86 407	75 208	160 921	3 307

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con. Manufacturing— Con.												
315	Apparel mfg	1	661	190	18 771	302 688	15 421	26 236	203 933	865 924	846 050	1 688 110	20 587
3151	Apparel knitting mills	3	24	8	778	14 670	720	1 370	12 168	28 064	18 401	45 664	1 746
31511	Hosiery & sock mills	2	6	1	161	2 045	155	252	1 792	2 159	2 555	3 942	140
315111	Sheer hosiery mills	1	4	1	c	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	3	18	7	617	12 625	565	1 118	10 376	25 905	15 846	41 722	1 606
315191	Outerwear knitting mills	3	17	7	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	520	169	16 984	270 703	13 862	23 589	180 692	792 608	798 759	1 568 421	17 325
31521	Cut & sew apparel contractors	3	274	80	5 709	68 654	5 261	8 516	57 945	136 600	52 235	186 366	4 682
315211	Men's & boys' cut & sew apparel contractors	5	27	13	1 057	10 940	993	1 610	9 378	18 950	3 003	21 466	404
315212	Women's, girls', & infants' cut & sew apparel contractors	3	247	67	4 652	57 714	4 268	6 906	48 567	117 650	49 232	164 900	4 278
31522	Men's & boys' cut & sew apparel mfg	1	68	27	4 164	84 579	3 292	5 703	48 506	271 265	375 820	636 366	6 103
315221	Men's & boys' cut & sew underwear & nightwear mfg	1	5	1	125	2 154	112	221	1 718	5 978	2 141	8 117	15
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	9	1	163	3 364	134	122	2 587	6 252	5 940	12 074	47
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	24	17	2 582	49 995	2 060	3 546	30 475	144 432	222 014	354 638	2 540
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	7	5	872	22 847	620	1 219	9 261	87 178	130 805	218 784	2 994
315225	Men's & boys' cut & sew work clothing mfg	—	7	1	e	D	D	D	D	D	D	D	290
315228	Men's & boys' cut & sew other outerwear mfg	3	16	2	c	D	D	D	D	D	D	D	217
31523	Women's & girls' cut & sew apparel mfg	1	156	54	6 369	105 440	4 672	8 276	65 853	356 636	355 635	702 338	5 979
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	16	9	1 836	27 811	1 620	2 960	21 360	159 786	102 116	259 509	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	42	14	1 804	31 582	1 176	2 033	16 940	75 675	105 007	176 996	1 085
315233	Women's & girls' cut & sew dress mfg	1	36	9	874	14 566	672	1 227	9 729	36 410	49 742	83 493	621
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	15	6	430	9 470	244	478	4 524	25 173	42 524	67 347	D
315239	Women's & girls' cut & sew other outerwear mfg	2	47	16	1 425	22 011	960	1 578	13 300	59 592	56 246	114 993	1 633
31529	Other cut & sew apparel mfg	2	22	8	742	12 030	637	1 094	8 388	28 107	15 069	43 351	561
315299	All other cut & sew apparel mfg	1	18	8	728	11 900	629	1 084	8 304	27 663	14 522	42 363	548
3159	Apparel accessories & other apparel mfg	3	117	13	1 009	17 315	839	1 277	11 073	45 252	28 890	74 025	1 516
31599	Apparel accessories & other apparel mfg	3	117	13	1 009	17 315	839	1 277	11 073	45 252	28 890	74 025	1 516
315991	Hat, cap, & millinery mfg	6	16	4	282	4 688	239	413	3 209	9 670	5 490	14 594	D
315993	Men's & boys' neckwear mfg	—	6	2	103	1 856	75	100	846	14 626	4 800	19 766	D
315999	Other apparel accessories & other apparel mfg	4	95	7	624	10 771	525	764	7 018	20 956	18 600	39 665	1 169
316	Leather & allied product mfg	—	76	20	3 720	62 368	3 130	6 328	42 422	167 887	149 821	315 246	3 054
3162	Footwear mfg	—	17	6	1 537	25 394	1 308	2 923	17 566	64 253	51 298	112 718	987
31621	Footwear mfg	—	17	6	1 537	25 394	1 308	2 923	17 566	64 253	51 298	112 718	987
316211	Rubber & plastics footwear mfg	—	4	3	1 153	18 490	997	2 200	12 686	54 195	33 984	85 846	D
316214	Women's footwear (except athletic) mfg	—	5	2	c	D	D	D	D	D	D	D	D
316219	Other footwear mfg	—	5	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	49	13	2 100	35 542	1 750	3 261	23 808	95 836	74 298	170 587	1 814
31699	Other leather & allied product mfg	—	49	13	2 100	35 542	1 750	3 261	23 808	95 836	74 298	170 587	1 814
316991	Luggage mfg	—	12	5	555	9 892	478	822	6 308	21 035	28 180	49 375	171
316992	Women's handbag & purse mfg	—	12	3	1 119	18 118	948	1 788	12 935	59 404	37 418	97 181	1 416
316993	Personal leather good (except women's handbag & purse) mfg	—	8	2	297	5 186	222	482	3 153	11 709	5 748	17 370	107
316999	All other leather good mfg	1	17	3	129	2 346	102	169	1 412	3 688	2 952	6 661	120

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLORIDA—Con.													
31-33	Manufacturing—Con.												
321	Wood product mfg	1	524	189	15 379	360 731	12 397	24 883	248 361	826 331	1 443 111	2 269 976	53 113
3211	Sawmills & wood preservation	—	71	31	2 457	59 487	1 957	4 268	43 278	187 641	510 781	698 920	21 324
32111	Sawmills & wood preservation	—	71	31	2 457	59 487	1 957	4 268	43 278	187 641	510 781	698 920	21 324
321113	Sawmills	1	53	22	1 847	44 892	1 497	3 372	35 234	138 219	263 372	406 118	19 327
321114	Wood preservation	—	18	9	610	14 595	460	896	8 044	49 422	247 409	292 802	1 997
3212	Veneer, plywood, & engineered wood product mfg	2	120	76	5 055	119 666	4 005	8 126	78 509	243 443	344 107	588 875	14 181
32121	Veneer, plywood, & engineered wood product mfg	2	120	76	5 055	119 666	4 005	8 126	78 509	243 443	344 107	588 875	14 181
321211	Hardwood veneer & plywood mfg	2	9	4	e	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	5	2	f	D	D	D	D	D	D	D	D
321214	Truss mfg	3	102	69	4 010	92 333	3 064	6 048	55 277	172 727	229 234	402 447	8 714
3219	Other wood product mfg	1	333	82	7 867	181 578	6 435	12 489	126 574	395 247	588 234	982 181	17 608
32191	Millwork	1	170	39	2 608	57 198	2 076	3 777	39 520	116 347	231 237	346 560	10 925
321911	Wood window & door mfg	1	78	25	1 491	32 257	1 151	2 135	22 152	64 234	114 622	180 169	8 609
321912	Cut stock, resawing lumber, & planing	1	20	6	391	9 243	341	610	6 467	25 895	86 604	110 522	887
321918	Other millwork (including flooring)	3	72	8	726	15 698	584	1 032	10 901	26 218	30 011	55 869	1 429
32192	Wood container & pallet mfg	1	61	16	1 302	26 728	1 115	2 267	19 992	56 652	59 294	115 695	2 877
321920	Wood container & pallet mfg	1	61	16	1 302	26 728	1 115	2 267	19 992	56 652	59 294	115 695	2 877
32199	All other wood product mfg	—	102	27	3 957	97 652	3 244	6 445	67 062	222 248	297 692	519 926	3 806
321991	Manufactured home (mobile home) mfg	—	20	16	3 218	80 553	2 682	5 374	55 907	188 641	263 124	451 592	2 448
321992	Prefabricated wood building mfg	1	12	3	122	2 898	80	166	1 882	7 423	7 970	15 433	122
321999	All other miscellaneous wood product mfg	3	70	8	617	14 201	482	905	9 273	26 184	26 598	52 901	1 236
322	Paper mfg	—	166	87	12 602	521 620	9 816	20 404	367 186	1 615 367	2 240 294	3 823 574	182 643
3221	Pulp, paper, & paperboard mills	—	10	10	5 824	310 248	4 529	9 668	229 668	1 088 431	1 351 950	2 414 542	126 671
32211	Pulp mills	—	3	3	1 701	85 745	1 348	2 934	64 109	413 056	357 949	767 967	50 898
322110	Pulp mills	—	3	3	1 701	85 745	1 348	2 934	64 109	413 056	357 949	767 967	50 898
32212	Paper mills	—	3	3	2 486	135 340	1 899	4 018	98 866	357 396	563 838	895 078	56 659
322121	Paper (except newsprint) mills	—	3	3	2 486	135 340	1 899	4 018	98 866	357 396	563 838	895 078	56 659
32213	Paperboard mills	—	4	4	1 637	89 163	1 282	2 716	66 693	317 979	430 163	751 497	19 114
322130	Paperboard mills	—	4	4	1 637	89 163	1 282	2 716	66 693	317 979	430 163	751 497	19 114
3222	Converted paper product mfg	1	156	77	6 778	211 372	5 287	10 736	137 518	526 936	888 344	1 409 032	55 972
32221	Paperboard container mfg	1	75	49	4 076	130 946	3 149	6 385	84 192	317 495	624 664	937 659	40 925
322211	Corrugated & solid fiber box mfg	1	47	31	2 925	94 252	2 219	4 585	61 975	208 332	474 257	680 459	22 668
322212	Folding paperboard box mfg	—	12	9	711	22 298	569	1 017	12 834	54 238	48 238	102 176	D
322214	Fiber can, tube, drum, & similar products mfg	—	7	6	192	6 194	148	296	3 450	18 458	31 369	49 824	D
322215	Nonfolding sanitary food container mfg	—	7	2	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	2	34	16	1 458	41 721	1 184	2 463	29 791	108 107	161 833	268 284	8 597
322222	Coated & laminated paper mfg	4	20	6	301	8 004	204	422	4 866	18 842	22 923	41 394	D
322223	Plastics, foil, & coated paper bag mfg	5	3	2	154	3 655	136	261	2 828	7 354	8 683	16 236	1 783
322224	Uncoated paper & multiwall bag mfg	2	7	5	799	21 626	676	1 429	16 453	53 582	88 656	141 383	4 848
322226	Surface-coated paperboard mfg	—	2	2	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	33	9	1 012	29 701	835	1 678	21 159	63 568	68 954	132 450	5 449
322231	Die-cut paper & paperboard office supplies mfg	4	17	2	148	3 468	133	228	2 747	8 552	10 523	19 107	547
322232	Envelope mfg	—	9	6	797	24 419	650	1 341	17 315	51 067	56 289	107 158	4 843
32229	Other converted paper product mfg	2	14	3	232	9 004	119	210	2 376	37 766	32 893	70 639	1 001
322299	All other converted paper product mfg	1	11	2	198	7 982	94	165	1 852	33 794	29 137	62 880	D

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FLORIDA—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	3	2 365	314	27 641	743 902	19 963	35 509	460 254	1 658 388	1 137 612	2 793 370	139 050
3231	Printing & related support activities.....	3	2 365	314	27 641	743 902	19 963	35 509	460 254	1 658 388	1 137 612	2 793 370	139 050
32311	Printing.....	3	2 155	283	25 593	683 541	18 370	32 630	419 114	1 536 541	1 106 149	2 640 084	130 693
323110	Commercial	3	944	158	13 745	400 887	9 798	18 496	249 860	837 799	613 490	1 447 735	85 674
323111	Lithographic printing ..	5	23	3	202	5 264	169	275	4 187	16 236	16 087	31 942	1 996
323112	Commercial gravure printing.....	—	37	15	704	22 733	478	1 019	12 819	74 854	68 587	142 996	5 003
323113	Commercial screen printing.....	2	225	35	3 810	76 008	2 955	4 543	44 393	201 912	126 142	329 099	12 831
323114	Quick printing.....	3	618	19	3 157	69 678	2 174	3 282	42 470	149 299	85 854	235 302	9 348
323116	Manifold business form printing.....	1	39	20	1 364	43 304	888	1 601	23 844	116 545	111 991	230 184	7 020
323117	Book printing.....	3	42	13	883	26 571	708	1 469	18 745	55 930	33 574	88 655	3 341
323118	Blankbook, looseleaf binder, & device mfg.	6	10	5	272	5 753	200	332	3 349	16 608	6 502	22 982	292
323119	Other commercial printing.....	5	195	15	1 369	31 238	940	1 526	18 184	62 439	41 767	104 101	4 550
32312	Support activities for printing.....	3	210	31	2 048	60 361	1 593	2 879	41 140	121 847	31 463	153 286	8 357
323121	Tradebinding & related work.....	4	43	6	489	11 337	416	757	8 444	20 405	3 591	24 190	1 628
323122	Prepress services.....	3	167	25	1 559	49 024	1 177	2 122	32 696	101 442	27 872	129 096	6 729
324	Petroleum & coal products mfg.....	2	48	11	857	28 878	601	1 325	17 982	140 718	225 569	367 017	6 626
3241	Petroleum & coal products mfg.....	2	48	11	857	28 878	601	1 325	17 982	140 718	225 569	367 017	6 626
32412	Asphalt paving, roofing, & saturated materials mfg.....	1	34	9	731	24 768	530	1 209	16 079	124 786	189 877	315 284	5 618
324121	Asphalt paving mixture & block mfg.....	1	26	5	416	13 380	292	679	8 745	48 458	103 804	152 124	3 127
324122	Asphalt shingle & coating materials mfg.....	1	8	4	315	11 388	238	530	7 334	76 328	86 073	163 160	2 491
32419	Other petroleum & coal products mfg.....	8	14	2	126	4 110	71	116	1 903	15 932	35 692	51 733	1 008
324191	Petroleum lubricating oil & grease mfg.....	8	13	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	576	179	20 163	776 048	13 019	27 466	443 750	3 868 274	4 902 776	8 761 554	334 256
3251	Basic chemical mfg.....	1	60	19	2 113	95 423	1 293	2 586	46 220	445 249	503 666	954 682	49 611
32511	Petrochemical mfg.....	9	1	1	c	D	D	D	D	D	D	D	D
325110	Petrochemical mfg.....	9	1	1	c	D	D	D	D	D	D	D	D
32512	Industrial gas mfg.....	1	16	3	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg.....	1	16	3	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	3	18	2	191	9 038	110	221	3 887	17 973	34 994	54 408	1 747
325188	All other basic inorganic chemical mfg.....	3	17	2	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	—	23	12	1 556	71 201	984	1 935	34 678	349 689	400 296	754 212	40 066
325191	Gum & wood chemical mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	1	21	10	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	1	28	15	2 420	112 147	1 756	4 266	77 770	557 734	824 397	1 365 347	60 219
32521	Resin & synthetic rubber mfg.....	2	23	13	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	2	16	9	662	25 745	462	1 003	15 755	129 184	240 463	359 864	16 692
325212	Synthetic rubber mfg.....	1	7	4	c	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg.....	1	5	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	1	5	2	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg.....	—	73	36	5 575	229 293	3 978	9 121	149 391	1 550 122	2 435 884	3 976 085	143 488
32531	Fertilizer mfg.....	—	61	32	5 216	216 724	3 784	8 728	142 064	1 381 192	2 317 434	3 685 986	137 303
325311	Nitrogenous fertilizer mfg.....	—	7	2	133	5 216	74	133	2 031	20 581	67 530	89 611	2 963
325312	Phosphatic fertilizer mfg.....	—	14	14	4 241	185 415	3 201	7 508	128 165	1 227 784	1 936 021	3 154 387	128 684
325314	Fertilizer (mixing only) mfg.....	1	40	16	842	26 093	509	1 087	11 868	132 827	313 883	441 988	5 656
32532	Pesticide & other agricultural chemical mfg.....	—	12	4	359	12 569	194	393	7 327	168 930	118 450	290 099	6 185
325320	Pesticide & other agricultural chemical mfg.....	—	12	4	359	12 569	194	393	7 327	168 930	118 450	290 099	6 185

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con. Manufacturing— Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	1	69	29	3 860	151 390	2 240	4 473	79 772	568 591	388 258	964 145	45 741
32541	Pharmaceutical & medicine mfg	1	69	29	3 860	151 390	2 240	4 473	79 772	568 591	388 258	964 145	45 741
325412	Pharmaceutical preparation mfg	1	39	18	2 441	95 248	1 459	3 035	45 060	406 458	305 324	708 697	27 711
325413	In-vitro diagnostic substance mfg	—	7	4	803	41 998	441	889	27 534	129 837	59 302	199 775	14 785
325414	Biological product (except diagnostic) mfg	7	12	5	532	11 549	295	485	6 067	25 010	16 489	41 240	1 168
3255	Paint, coating, & adhesive mfg	2	109	28	1 874	60 281	1 001	1 842	25 036	273 062	312 136	583 890	11 996
32551	Paint & coating mfg	2	89	22	1 528	47 948	821	1 433	19 123	223 260	243 035	467 079	8 099
325510	Paint & coating mfg	2	89	22	1 528	47 948	821	1 433	19 123	223 260	243 035	467 079	8 099
32552	Adhesive mfg	4	20	6	346	12 333	180	409	5 913	49 802	69 101	116 811	3 897
325520	Adhesive mfg	4	20	6	346	12 333	180	409	5 913	49 802	69 101	116 811	3 897
3256	Soap, cleaning compound, & toilet preparation mfg ..	5	132	28	2 275	59 029	1 470	2 822	29 998	265 739	203 601	472 788	9 942
32561	Soap & cleaning compound mfg	3	84	16	959	26 616	582	1 189	13 641	114 812	113 996	229 789	4 089
325611	Soap & other detergent mfg	4	33	7	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	4	49	8	539	14 038	366	786	8 039	75 234	66 099	141 604	2 020
32562	Toilet preparation mfg	6	48	12	1 316	32 413	888	1 633	16 357	150 927	89 605	242 999	5 853
325620	Toilet preparation mfg	6	48	12	1 316	32 413	888	1 633	16 357	150 927	89 605	242 999	5 853
3259	Other chemical product mfg	3	105	24	2 046	68 485	1 281	2 356	35 563	207 777	234 834	444 617	13 259
32591	Printing ink mfg	2	22	4	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	2	22	4	e	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	4	2	e	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	4	2	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	79	18	1 334	41 558	820	1 453	20 562	130 888	139 264	271 517	9 997
325991	Custom compounding of purchased resin ...	4	33	5	489	14 166	322	585	6 853	42 060	45 905	87 659	3 182
325998	All other miscellaneous chemical product & preparation mfg	3	36	13	811	26 667	478	843	13 375	87 085	91 203	179 946	6 361
326	Plastics & rubber products mfg	2	703	251	20 044	487 226	15 536	28 799	309 866	1 316 364	1 233 917	2 544 897	115 007
3261	Plastics product mfg	2	592	215	17 276	416 247	13 397	24 484	261 847	1 124 703	1 086 959	2 208 491	98 196
32611	Unsupported plastics film, sheet, & bag mfg ..	3	45	16	1 345	41 836	1 078	2 173	22 862	102 472	131 925	234 433	8 805
326111	Unsupported plastics bag mfg	4	15	10	861	27 370	696	1 536	15 472	62 185	86 545	148 487	5 620
326112	Unsupported plastics packaging film & sheet mfg	—	3	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	4	27	5	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	67	21	1 327	34 581	1 081	2 036	23 977	95 086	157 003	250 759	9 057
326121	Unsupported plastics profile shape mfg	5	39	4	385	11 426	313	697	7 428	30 471	21 868	52 522	2 159
326122	Plastics pipe & pipe fitting mfg	1	28	17	942	23 155	768	1 339	16 549	64 615	135 135	198 237	6 898
32613	Laminated plastics plate, sheet, & shape mfg	9	22	2	180	3 658	143	191	2 688	10 588	9 356	19 988	648
326130	Laminated plastics plate, sheet, & shape mfg	9	22	2	180	3 658	143	191	2 688	10 588	9 356	19 988	648
32614	Polystyrene foam product mfg	3	22	8	667	15 409	572	1 097	11 719	45 953	60 839	105 915	5 092
326140	Polystyrene foam product mfg	3	22	8	667	15 409	572	1 097	11 719	45 953	60 839	105 915	5 092
32615	Urethane & other foam product (except polystyrene) mfg	1	19	10	538	14 824	430	807	9 943	48 853	83 474	132 481	3 891
326150	Urethane & other foam product (except polystyrene) mfg	1	19	10	538	14 824	430	807	9 943	48 853	83 474	132 481	3 891
32616	Plastics bottle mfg	2	19	11	883	24 288	796	1 558	19 684	106 013	126 148	231 445	9 820
326160	Plastics bottle mfg	2	19	11	883	24 288	796	1 558	19 684	106 013	126 148	231 445	9 820
32619	Other plastics product mfg	2	398	147	12 336	281 651	9 297	16 622	170 974	715 738	518 214	1 233 470	60 883
326191	Plastics plumbing fixture mfg	2	48	16	1 126	23 369	858	1 673	14 326	52 115	43 793	95 279	1 879
326199	All other plastics product mfg	2	350	131	11 210	258 282	8 439	14 949	156 648	663 623	474 421	1 138 191	59 004

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	2	111	36	2 768	70 979	2 139	4 315	48 019	191 661	146 958	336 406	16 811
32621	Tire mfg	2	58	12	521	11 349	404	881	8 147	26 487	34 785	61 701	D
326212	Tire retreading	1	57	11	e	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	11	6	752	21 171	613	1 217	15 336	58 438	52 421	108 135	D
326220	Rubber & plastics hoses & belting mfg..	—	11	6	752	21 171	613	1 217	15 336	58 438	52 421	108 135	D
32629	Other rubber product mfg	2	42	18	1 495	38 459	1 122	2 217	24 536	106 736	59 752	166 570	3 352
326291	Rubber product mfg for mechanical use	6	11	3	295	5 303	218	378	3 735	11 718	9 012	20 696	676
326299	All other rubber product mfg	2	31	15	1 200	33 156	904	1 839	20 801	95 018	50 740	145 874	2 676
327	Nonmetallic mineral product mfg	1	894	259	20 862	614 147	15 669	33 498	419 185	1 758 195	1 818 457	3 569 502	142 597
3271	Clay product & refractory mfg	1	82	8	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	2	53	5	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	2	46	4	305	4 799	208	327	2 878	9 914	3 724	13 662	593
32712	Clay building material & refractories mfg	1	29	3	647	20 938	440	938	11 188	30 561	16 979	51 054	5 136
327122	Ceramic wall & floor tile mfg	—	16	2	555	17 626	382	822	9 407	21 110	10 436	35 340	4 216
3272	Glass & glass product mfg .	1	138	26	3 309	98 535	2 740	5 533	76 750	225 025	216 180	432 951	24 059
32721	Glass & glass product mfg	1	138	26	3 309	98 535	2 740	5 533	76 750	225 025	216 180	432 951	24 059
327213	Glass container mfg ..	—	3	3	955	39 370	838	1 738	33 567	120 570	76 325	189 123	7 528
327215	Glass product mfg made of purchased glass	2	115	22	2 258	55 958	1 826	3 668	41 136	98 543	134 215	232 234	16 143
3273	Cement & concrete product mfg	1	554	196	13 944	397 618	10 236	22 283	261 229	1 179 883	1 271 763	2 451 984	88 784
32731	Cement mfg	—	13	7	768	31 199	541	1 353	21 899	186 423	153 242	340 218	12 718
327310	Cement mfg	—	13	7	768	31 199	541	1 353	21 899	186 423	153 242	340 218	12 718
32732	Ready-mix concrete mfg .	—	296	101	5 918	172 266	4 422	10 130	118 689	507 505	758 468	1 268 378	41 981
327320	Ready-mix concrete mfg	—	296	101	5 918	172 266	4 422	10 130	118 689	507 505	758 468	1 268 378	41 981
32733	Concrete pipe, brick, & block mfg	3	84	25	1 905	50 558	1 395	2 707	32 457	143 411	132 223	272 698	11 792
327331	Concrete block & brick mfg	3	62	12	942	28 266	633	1 356	17 148	86 992	77 059	161 837	7 709
327332	Concrete pipe mfg	2	22	13	963	22 292	762	1 351	15 309	56 419	55 164	110 861	4 083
32739	Other concrete product mfg	2	161	63	5 353	143 595	3 878	8 093	88 184	342 544	227 830	570 690	22 293
327390	Other concrete product mfg	2	161	63	5 353	143 595	3 878	8 093	88 184	342 544	227 830	570 690	22 293
3274	Lime & gypsum product mfg	—	15	8	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	14	7	828	30 814	682	1 575	24 009	146 342	149 686	296 466	12 606
327420	Gypsum product mfg ..	—	14	7	828	30 814	682	1 575	24 009	146 342	149 686	296 466	12 606
3279	Other nonmetallic mineral product mfg	1	105	21	1 725	57 690	1 280	2 655	40 267	156 571	149 652	302 635	10 623
32791	Abrasive product mfg ...	1	8	5	235	7 095	134	255	3 149	22 022	39 814	58 426	1 617
327910	Abrasive product mfg .	1	8	5	235	7 095	134	255	3 149	22 022	39 814	58 426	1 617
32799	All other nonmetallic mineral product mfg ...	1	97	16	1 490	50 595	1 146	2 400	37 118	134 549	109 838	244 209	9 006
327991	Cut stone & stone product mfg	6	41	4	268	6 117	214	416	4 461	11 170	6 960	18 257	503
327992	Ground or treated mineral & earth mfg ..	5	13	2	146	4 454	107	212	2 932	16 598	11 505	28 160	1 279
327993	Mineral wool mfg	—	12	1	458	22 103	381	841	18 166	57 663	37 802	94 890	4 775
327999	All other miscellaneous nonmetallic mineral product mfg	—	31	9	618	17 921	444	931	11 559	49 118	53 571	102 902	2 449
331	Primary metal mfg	—	104	44	5 250	161 401	4 068	8 448	111 451	499 726	628 302	1 101 658	62 077
3311	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	e	D	D	D	D	D	D	D	D

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31-33	FLORIDA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3312	Steel product mfg from purchased steel	-	19	15	1 748	61 887	1 256	2 739	40 714	185 674	255 196	423 705	17 658
33121	Iron & steel pipes & tubes mfg from purchased steel	-	6	5	743	28 320	457	799	16 651	95 604	100 073	177 970	10 670
331210	Iron & steel pipes & tubes mfg from purchased steel	-	6	5	743	28 320	457	799	16 651	95 604	100 073	177 970	10 670
33122	Rolling & drawing of purchased steel	-	13	10	1 005	33 567	799	1 940	24 063	90 070	155 123	245 735	6 988
331222	Steel wire drawing	-	11	10	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	10	8	1 911	47 523	1 588	3 222	34 602	145 335	195 743	338 625	30 793
33131	Alumina & aluminum production & processing	-	10	8	1 911	47 523	1 588	3 222	34 602	145 335	195 743	338 625	30 793
331316	Aluminum extruded product mfg	-	7	7	1 820	45 538	1 514	3 127	33 139	137 852	180 906	316 118	30 408
3314	Nonferrous metal (except aluminum) production & processing	4	18	7	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	5	13	6	268	8 267	186	331	4 805	24 857	24 810	50 525	2 112
331491	Other nonferrous metal rolling, drawing, & extruding	7	8	4	164	4 820	110	169	2 586	13 385	18 397	31 935	1 031
331492	Other nonferrous metal secondary smelting, refining, & alloying	-	5	2	104	3 447	76	162	2 219	11 472	6 413	18 590	1 081
3315	Foundries	1	54	12	974	26 209	770	1 560	19 154	69 429	37 485	106 359	3 744
33151	Ferrous metal foundries	-	18	6	486	13 853	374	803	10 297	43 919	24 287	67 495	2 335
331511	Iron foundries	-	13	3	398	11 833	301	677	8 680	40 542	21 137	60 976	D
33152	Nonferrous metal foundries	1	36	6	488	12 356	396	757	8 857	25 510	13 198	38 864	1 409
331521	Aluminum die-casting foundries	-	4	2	118	3 589	102	187	2 462	5 648	4 354	10 314	628
331524	Aluminum foundries (except die-casting)	1	19	4	288	6 269	227	434	4 680	15 934	4 715	20 526	487
332	Fabricated metal product mfg	1	1 998	451	41 656	1 134 259	30 772	59 859	706 488	2 566 529	2 528 452	5 074 960	145 812
3321	Forging & stamping	1	74	27	3 029	89 400	2 142	4 555	51 258	216 772	259 456	462 339	15 574
33211	Forging & stamping	1	74	27	3 029	89 400	2 142	4 555	51 258	216 772	259 456	462 339	15 574
332114	Custom roll forming	-	15	8	894	30 020	615	1 262	16 820	79 631	155 980	223 511	5 747
332116	Metal stamping	1	46	18	2 044	56 898	1 465	3 175	32 437	131 897	97 054	227 112	9 462
3322	Cutlery & handtool mfg	1	46	9	739	23 720	491	1 000	11 726	69 568	35 283	104 325	3 222
33221	Cutlery & handtool mfg	1	46	9	739	23 720	491	1 000	11 726	69 568	35 283	104 325	3 222
332212	Hand & edge tool mfg	1	31	5	491	16 869	305	645	7 484	51 375	22 139	72 476	1 608
332213	Saw blade & handsaw mfg	-	8	3	163	4 416	112	207	2 387	11 710	9 293	21 410	1 384
3323	Architectural & structural metals mfg	1	640	194	17 257	432 682	12 247	23 970	254 075	1 020 371	1 044 405	2 067 825	40 938
33231	Plate work & fabricated structural product mfg	1	186	63	4 969	132 691	3 548	6 675	75 995	303 555	412 087	713 959	16 307
332311	Prefabricated metal building & component mfg	-	35	13	1 185	29 000	839	1 717	17 299	75 869	102 786	177 845	3 459
332312	Fabricated structural metal mfg	1	123	42	3 089	86 125	2 205	4 166	48 955	197 129	285 949	482 305	11 606
332313	Plate work mfg	1	28	8	695	17 566	504	792	9 741	30 557	23 352	53 809	1 242
33232	Ornamental & architectural metal products mfg	1	454	131	12 288	299 991	8 699	17 295	178 080	716 816	632 318	1 353 866	24 631
332321	Metal window & door mfg	-	126	44	5 245	122 612	3 481	7 116	68 509	308 726	322 944	634 778	6 895
332322	Sheet metal work mfg	1	211	72	5 048	134 601	3 638	7 117	81 984	300 428	249 027	550 040	14 526
332323	Ornamental & architectural metal work mfg	1	117	15	1 995	42 778	1 580	3 062	27 587	107 662	60 347	169 048	3 210
3324	Boiler, tank, & shipping container mfg	-	56	24	2 088	84 858	1 723	3 562	64 978	165 534	521 939	687 847	10 775
33241	Power boiler & heat exchanger mfg	5	12	4	281	8 340	200	417	5 157	14 570	12 852	27 502	722
332410	Power boiler & heat exchanger mfg	5	12	4	281	8 340	200	417	5 157	14 570	12 852	27 502	722
33242	Metal tank (heavy gauge) mfg	-	16	9	443	13 880	360	758	9 377	28 054	29 241	57 127	761
332420	Metal tank (heavy gauge) mfg	-	16	9	443	13 880	360	758	9 377	28 054	29 241	57 127	761
33243	Metal can, box, & other metal container (light gauge) mfg	-	28	11	1 364	62 638	1 163	2 387	50 444	122 910	479 846	603 218	9 292
332431	Metal can mfg	-	15	8	1 106	56 170	957	2 087	46 027	111 870	461 029	573 412	8 696
332439	Other metal container mfg	3	13	3	258	6 468	206	300	4 417	11 040	18 817	29 806	596

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FLORIDA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3325	Hardware mfg.....	1	47	15	1 576	40 078	1 290	2 485	24 092	93 001	54 216	148 339	3 596
33251	Hardware mfg.....	1	47	15	1 576	40 078	1 290	2 485	24 092	93 001	54 216	148 339	3 596
332510	Hardware mfg.....	1	47	15	1 576	40 078	1 290	2 485	24 092	93 001	54 216	148 339	3 596
3326	Spring & wire product mfg .	—	50	9	1 511	31 975	1 198	1 854	21 265	102 329	85 260	191 260	4 484
33261	Spring & wire product mfg .	—	50	9	1 511	31 975	1 198	1 854	21 265	102 329	85 260	191 260	4 484
332612	Spring (light gauge) mfg .	—	50	9	1 511	31 975	1 198	1 854	21 265	102 329	85 260	191 260	4 484
332618	Other fabricated wire product mfg.....	1	12	4	194	7 797	149	291	4 818	21 660	15 950	37 641	887
3327	Machine shops, turned product, & screw, nut, & bolt mfg .	2	704	91	7 556	205 983	5 884	10 334	138 698	386 065	189 786	573 171	36 858
33271	Machine shops.....	2	627	69	5 569	151 262	4 345	7 229	102 547	282 127	123 282	402 950	27 696
332710	Machine shops.....	2	627	69	5 569	151 262	4 345	7 229	102 547	282 127	123 282	402 950	27 696
33272	Turned product & screw, nut, & bolt mfg .	1	77	22	1 987	54 721	1 539	3 105	36 151	103 938	66 504	170 221	9 162
332721	Precision turned product mfg .	1	57	18	1 423	37 024	1 091	2 270	25 125	71 408	45 844	116 408	6 498
332722	Bolt, nut, screw, rivet, & washer mfg .	—	20	4	564	17 697	448	835	11 026	32 530	20 660	53 813	2 664
3328	Coating, engraving, heat treating, & allied activities.	3	170	30	1 867	51 039	1 451	2 867	33 429	111 606	50 724	161 626	7 305
33281	Coating, engraving, heat treating, & allied activities.	3	170	30	1 867	51 039	1 451	2 867	33 429	111 606	50 724	161 626	7 305
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services.....	2	69	11	732	18 649	585	1 126	13 754	47 995	29 342	76 961	3 560
332813	Electroplating, plating, polishing, anodizing, & coloring.....	3	92	18	1 050	29 496	808	1 608	17 943	53 514	19 443	72 897	3 276
3329	Other fabricated metal product mfg.....	1	211	52	6 033	174 524	4 346	9 232	106 967	401 283	287 383	678 228	23 060
33291	Metal valve mfg .	—	36	14	2 213	72 772	1 466	3 296	36 642	175 141	115 713	282 573	11 947
332911	Industrial valve mfg .	—	9	4	662	24 220	454	994	12 730	52 985	48 790	100 951	3 785
332912	Fluid power valve & hose fitting mfg .	—	17	7	1 326	42 568	856	1 967	20 219	106 522	52 082	151 653	7 122
332919	Other metal valve & pipe fitting mfg .	6	9	2	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	1	175	38	3 820	101 752	2 880	5 936	70 325	226 142	171 670	395 655	11 113
332993	Ammunition (except small arms) mfg .	—	3	3	673	15 876	446	1 045	11 607	36 733	20 972	58 199	1 332
332994	Small arms mfg .	3	8	3	110	2 465	88	139	1 590	7 641	2 688	10 416	376
332995	Other ordnance & accessories mfg .	—	4	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg .	1	15	3	241	6 237	191	357	4 432	10 955	7 508	18 810	684
332999	All other miscellaneous fabricated metal product mfg.....	1	126	27	2 543	67 485	1 946	3 992	45 587	149 331	118 215	269 701	8 141
333	Machinery mfg .	1	957	268	26 743	909 449	16 034	31 957	417 187	1 872 722	1 652 664	3 521 496	135 256
3331	Agriculture, construction, & mining machinery mfg .	1	81	16	1 505	39 181	1 140	1 988	24 707	119 611	114 912	240 530	5 426
33311	Agricultural implement mfg .	4	36	6	582	13 589	462	820	9 714	21 544	27 174	52 823	2 436
333111	Farm machinery & equipment mfg .	3	31	3	313	8 760	237	487	6 025	20 787	21 103	42 597	1 933
333112	Lawn & garden tractor & home lawn & garden equipment mfg .	5	5	3	269	4 829	225	333	3 689	757	6 071	10 226	503
33312	Construction machinery mfg .	2	34	5	527	15 320	365	691	9 067	33 963	37 573	72 899	1 800
333120	Construction machinery mfg .	2	34	5	527	15 320	365	691	9 067	33 963	37 573	72 899	1 800
33313	Mining & oil & gas field machinery mfg .	—	11	5	396	10 272	313	477	5 926	64 104	50 165	114 808	1 190
333131	Mining machinery & equipment mfg .	—	8	4	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg .	—	3	1	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	1	112	36	2 761	104 164	1 530	3 198	43 127	255 268	183 739	437 338	25 765
33322	Plastics & rubber industry machinery mfg ..	1	11	3	146	4 661	104	188	2 559	13 156	10 151	22 489	340
333220	Plastics & rubber industry machinery mfg ..	1	11	3	146	4 661	104	188	2 559	13 156	10 151	22 489	340
33329	Other industrial machinery mfg ..	1	97	32	2 584	98 328	1 408	2 972	40 032	239 904	170 661	409 670	25 363
333291	Paper industry machinery mfg ..	—	12	3	269	11 374	136	329	4 716	21 570	15 350	36 717	1 115
333293	Printing machinery & equipment mfg ..	—	16	4	359	12 701	216	412	5 545	22 860	26 710	49 711	443
333294	Food product machinery mfg ..	1	15	5	441	20 634	201	387	6 496	58 563	18 708	76 828	4 544
333295	Semiconductor machinery mfg ..	—	3	3	254	12 445	59	132	1 482	41 078	26 398	64 637	2 840
333298	All other industrial machinery mfg ..	2	44	16	1 187	38 327	745	1 599	20 213	90 588	79 258	172 142	16 190
3333	Commercial & service industry machinery mfg ..	1	145	49	8 305	300 549	3 849	8 115	94 647	456 549	456 225	957 965	52 072
33331	Commercial & service industry machinery mfg ..	1	145	49	8 305	300 549	3 849	8 115	94 647	456 549	456 225	957 965	52 072
333311	Automatic vending machine mfg ..	2	6	2	102	3 050	66	124	1 204	4 716	6 914	12 224	D
333312	Commercial laundry, drycleaning, & pressing machine mfg ..	—	5	3	653	15 168	548	1 467	11 040	15 154	69 874	83 244	D
333313	Office machinery mfg ..	—	9	4	708	18 261	472	1 076	8 611	38 258	89 273	132 787	681
333314	Optical instrument & lens mfg ..	—	23	8	1 400	38 586	958	1 828	18 924	201 048	96 297	288 411	27 476
333315	Photographic & photocopying equipment mfg ..	7	17	3	218	6 008	152	272	3 304	14 107	10 360	24 860	1 270
333319	Other commercial & service industry machinery mfg ..	1	85	29	5 224	219 476	1 653	3 348	51 564	183 266	183 507	416 439	22 464
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	3	73	31	2 468	63 929	1 794	3 334	32 786	142 353	165 097	307 219	10 148
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	3	73	31	2 468	63 929	1 794	3 334	32 786	142 353	165 097	307 219	10 148
333411	Air purification equipment mfg ..	—	15	4	483	10 781	393	805	5 782	21 422	36 935	58 142	3 277
333412	Industrial & commercial fan & blower mfg ..	2	7	5	343	10 472	275	513	4 922	21 395	21 069	42 617	2 516
333414	Heating equipment (except warm air furnaces) mfg ..	2	11	3	201	6 040	103	170	2 199	14 940	8 779	23 808	456
333415	AC & warm air heating & commercial/ industrial refrig equip mfg ..	4	40	19	1 441	36 636	1 023	1 846	19 883	84 596	98 314	182 652	3 899
3335	Metalworking machinery mfg ..	2	236	39	3 022	100 805	2 213	4 239	66 355	198 187	95 235	290 413	12 171
33351	Metalworking machinery mfg ..	2	236	39	3 022	100 805	2 213	4 239	66 355	198 187	95 235	290 413	12 171
333511	Industrial mold mfg ..	1	71	10	883	33 427	653	1 357	23 229	50 442	18 975	68 036	3 011
333514	Special die & tool, die set, jig, & fixture mfg ..	2	104	12	929	29 662	729	1 294	20 251	59 968	18 707	78 039	4 428
333515	Cutting tool & machine tool accessory mfg ..	2	41	11	691	17 696	511	898	12 201	32 654	20 394	52 846	2 561
333518	Other metalworking machinery mfg ..	3	10	3	353	14 416	215	466	7 809	42 376	28 992	71 982	1 874
3336	Engine, turbine, & power transmission equipment mfg ..	—	39	7	811	37 432	586	1 049	25 919	92 962	120 567	163 560	2 194
33361	Engine, turbine, & power transmission equipment mfg ..	—	39	7	811	37 432	586	1 049	25 919	92 962	120 567	163 560	2 194
333611	Turbine & turbine generator set unit mfg ..	—	4	1	e	D	D	D	D	D	D	D	9
333612	Speed changer, industrial high-speed drive, & gear mfg ..	1	7	3	c	D	D	D	D	D	D	D	960
333618	Other engine equipment mfg ..	2	19	2	204	6 848	152	253	4 149	18 226	18 847	37 324	965

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FLORIDA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	271	90	7 871	263 389	4 922	10 034	129 646	607 792	516 889	1 124 471	27 480
33391	Pump & compressor mfg	3	37	12	715	23 660	392	709	10 208	70 361	65 171	137 068	3 446
333911	Pump & pumping equipment mfg	3	21	7	510	17 353	281	537	7 557	53 792	51 814	107 538	2 918
333912	Air & gas compressor mfg	3	14	5	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	86	22	1 651	54 412	1 054	2 229	28 759	148 078	170 778	318 292	5 943
333921	Elevator & moving stairway mfg	2	15	3	251	6 385	175	318	3 807	11 688	10 017	21 890	167
333922	Conveyor & conveying equipment mfg	1	32	10	655	19 616	387	769	10 263	35 864	39 610	74 787	2 350
333923	Overhead traveling crane, hoist, & monorail system mfg	3	19	4	242	7 573	172	309	4 339	14 768	13 839	28 666	447
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	20	5	503	20 838	320	833	10 350	85 758	107 312	192 949	2 979
33399	All other general-purpose machinery mfg	2	148	56	5 505	185 317	3 476	7 096	90 679	389 353	280 940	669 111	18 091
333992	Welding & soldering equipment mfg	5	6	4	662	14 984	552	1 072	9 427	29 181	17 793	46 728	1 284
333993	Packaging machinery mfg	—	36	23	1 770	71 592	973	2 123	29 750	112 067	114 057	230 787	4 320
333995	Fluid power cylinder & actuator mfg	—	5	2	247	8 102	200	405	5 691	18 426	10 112	28 213	D
333996	Fluid power pump & motor mfg	1	7	3	154	4 734	103	192	2 453	9 571	10 381	20 153	D
333997	Scale & balance (except laboratory) mfg	—	5	1	136	3 865	54	135	1 449	7 643	5 680	13 403	220
333999	All other miscellaneous general-purpose machinery mfg	2	80	22	2 477	79 961	1 555	3 095	40 931	208 368	118 848	321 643	11 101
334	Computer & electronic product mfg	—	783	290	68 225	2 744 822	31 383	61 510	794 970	7 332 004	5 425 652	12 800 915	649 231
3341	Computer & peripheral equipment mfg	3	79	26	3 474	144 919	1 483	3 127	46 184	269 809	332 772	528 760	24 243
33411	Computer & peripheral equipment mfg	3	79	26	3 474	144 919	1 483	3 127	46 184	269 809	332 772	528 760	24 243
334111	Electronic computer mfg	1	23	10	1 520	65 781	771	1 689	25 091	64 956	187 006	192 974	9 768
334112	Computer storage device mfg	9	7	2	525	18 925	87	212	2 789	47 124	15 357	52 544	D
334113	Computer terminal mfg	9	7	1	116	7 764	43	93	4 869	13 221	19 735	30 477	D
334119	Other computer peripheral equipment mfg	3	42	13	1 313	52 449	582	1 133	13 435	144 508	110 674	252 765	9 662
3342	Communications equipment mfg	—	145	56	15 973	775 668	6 976	13 612	192 067	2 564 533	2 177 570	4 710 515	109 193
33421	Telephone apparatus mfg	2	37	19	3 801	181 946	1 370	2 542	37 470	496 925	480 415	938 783	37 617
334210	Telephone apparatus mfg	2	37	19	3 801	181 946	1 370	2 542	37 470	496 925	480 415	938 783	37 617
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	68	27	10 091	454 065	4 863	9 719	138 320	1 975 684	1 614 943	3 583 699	52 879
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	68	27	10 091	454 065	4 863	9 719	138 320	1 975 684	1 614 943	3 583 699	52 879
33429	Other communications equipment mfg	1	40	10	2 081	139 657	743	1 351	16 277	91 924	82 212	188 033	18 697
334290	Other communications equipment mfg	1	40	10	2 081	139 657	743	1 351	16 277	91 924	82 212	188 033	18 697
3343	Audio & video equipment mfg	5	27	4	363	11 663	238	531	4 599	24 707	38 165	63 921	2 352
33431	Audio & video equipment mfg	5	27	4	363	11 663	238	531	4 599	24 707	38 165	63 921	2 352
334310	Audio & video equipment mfg	5	27	4	363	11 663	238	531	4 599	24 707	38 165	63 921	2 352

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FLORIDA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	251	113	20 018	555 096	12 955	24 299	271 034	1 530 133	1 173 061	2 676 725	354 238
33441	Semiconductor & other electronic component mfg	—	251	113	20 018	555 096	12 955	24 299	271 034	1 530 133	1 173 061	2 676 725	354 238
334411	Electron tube mfg	1	7	1	178	7 501	98	161	2 258	20 920	13 404	32 231	472
334412	Bare printed circuit board mfg	—	65	27	3 555	84 958	2 745	5 652	53 208	234 762	186 183	407 467	15 783
334413	Semiconductor & related device mfg ...	1	30	14	3 481	158 984	2 209	4 367	69 668	514 613	99 498	605 877	225 904
334414	Electronic capacitor mfg	—	7	5	625	14 760	527	1 139	9 360	26 771	23 003	48 979	2 411
334415	Electronic resistor mfg	1	7	6	1 201	25 918	869	1 602	12 236	55 057	22 619	76 909	4 160
334416	Electronic coil, transformer, & other inductor mfg	3	17	9	703	17 781	514	879	7 608	41 961	19 204	61 232	1 064
334417	Electronic connector mfg	1	14	7	930	20 920	667	919	11 599	41 176	27 934	68 736	1 979
334418	Printed circuit assembly (electronic assembly) mfg	—	27	20	5 932	114 528	3 198	5 518	56 135	393 220	639 566	1 030 414	82 909
334419	Other electronic component mfg	—	77	24	3 413	109 746	2 128	4 062	48 962	201 653	141 650	344 880	19 556
3345	Navigational, measuring, medical, & control instruments mfg	—	249	85	27 792	1 239 363	9 258	18 967	268 193	2 902 537	1 677 286	4 753 865	155 507
33451	Navigational, measuring, medical, & control instruments mfg	—	249	85	27 792	1 239 363	9 258	18 967	268 193	2 902 537	1 677 286	4 753 865	155 507
334510	Electromedical & electrotherapeutic apparatus mfg	—	42	17	2 434	82 679	1 208	2 497	30 677	145 552	163 521	325 501	9 198
334511	Search, detection, navigation, & guidance instrument mfg	—	59	26	18 588	919 036	4 578	8 910	142 174	2 291 494	1 107 310	3 554 517	118 905
334512	Automatic environmental control mfg	4	19	3	269	7 490	184	369	4 647	16 844	9 087	26 138	777
334513	Industrial process control instrument mfg	2	21	8	580	22 524	250	489	6 770	50 259	23 523	74 404	1 565
334514	Totalizing fluid meter & counting device mfg .	4	12	5	304	8 295	163	341	3 260	20 793	15 425	36 084	428
334515	Electricity measuring & testing instrument mfg	4	24	8	689	20 985	219	371	5 603	40 519	25 716	67 364	4 013
334516	Analytical laboratory instrument mfg	—	24	9	3 586	146 775	1 717	3 813	58 511	275 411	261 676	535 721	17 600
334519	Other measuring & controlling device mfg	2	35	9	1 284	30 076	910	2 124	15 954	57 348	67 539	126 429	2 840
3346	Mfg & reproducing magnetic & optical media .	2	32	6	605	18 113	473	974	12 893	40 285	26 798	67 129	3 698
33461	Mfg & reproducing magnetic & optical media	2	32	6	605	18 113	473	974	12 893	40 285	26 798	67 129	3 698
334612	Prerecorded CD (except software), tape, & record reproducing	2	23	5	548	16 265	427	877	11 616	36 203	23 175	59 333	2 807
335	Electrical equipment, appliance, & component mfg	1	279	100	11 228	320 339	7 749	14 068	169 837	779 649	613 227	1 398 969	92 980
3351	Electric lighting equipment mfg	2	68	18	1 593	35 170	1 215	2 538	19 317	98 212	52 512	150 511	3 458
33512	Lighting fixture mfg	2	66	18	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	2	35	12	1 114	20 267	945	2 018	13 172	47 550	26 846	74 073	1 935
335129	Other lighting equipment mfg	2	17	5	368	11 595	200	378	4 408	39 868	16 557	56 658	1 310
3353	Electrical equipment mfg ..	2	110	44	4 286	134 778	2 677	4 728	57 368	305 684	261 446	567 709	21 175
33531	Electrical equipment mfg	2	110	44	4 286	134 778	2 677	4 728	57 368	305 684	261 446	567 709	21 175
335311	Power, distribution, & specialty transformer mfg	3	15	5	850	18 833	691	1 096	12 698	36 699	22 170	59 869	2 847
335312	Motor & generator mfg	7	26	5	357	10 034	268	463	6 109	20 921	18 086	38 297	1 316
335313	Switchgear & switchboard apparatus mfg	1	13	6	708	24 710	461	938	12 004	60 107	60 174	121 883	2 633
335314	Relay & industrial control mfg	1	56	28	2 371	81 201	1 257	2 231	26 557	187 957	161 016	347 660	14 379

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	1	94	38	5 337	150 199	3 848	6 791	93 042	375 290	298 629	679 630	68 314
33591	Battery mfg	—	4	2	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	—	4	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	4	3	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	1	33	15	1 857	46 220	1 334	2 627	27 089	142 254	88 620	231 129	13 625
335931	Current-carrying wiring device mfg	1	27	12	1 539	38 487	1 105	2 139	21 247	99 923	57 180	157 121	11 318
335932	Noncurrent-carrying wiring device mfg	1	6	3	318	7 733	229	488	5 842	42 331	31 440	74 008	2 307
33599	All other electrical equipment & component mfg	2	53	18	1 541	44 093	765	1 377	16 825	91 429	75 333	165 962	D
335999	All other miscellaneous electrical equipment & component mfg	2	50	18	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	762	208	38 023	1 322 321	25 184	50 664	637 565	4 429 573	2 612 965	6 903 532	176 001
3362	Motor vehicle body & trailer mfg	1	98	28	4 914	123 611	3 653	7 215	77 689	295 459	382 653	673 537	12 896
33621	Motor vehicle body & trailer mfg	1	98	28	4 914	123 611	3 653	7 215	77 689	295 459	382 653	673 537	12 896
336211	Motor vehicle body mfg	1	36	13	2 885	74 027	2 134	4 414	47 527	204 589	211 752	406 305	6 458
336212	Truck trailer mfg	1	15	4	e	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	46	10	872	17 537	715	1 247	11 958	37 803	55 860	94 097	1 205
3363	Motor vehicle parts mfg ...	2	196	48	7 062	171 247	5 460	10 490	101 281	393 655	396 169	793 992	39 384
33631	Motor vehicle gasoline engine & engine parts mfg	1	37	7	1 068	28 173	772	1 453	16 003	88 149	78 297	170 333	4 513
336312	Gasoline engine & engine parts mfg	1	34	6	g	D	D	D	D	D	D	D	4 370
33632	Motor vehicle electrical & electronic equipment mfg	2	40	12	1 932	42 558	1 463	2 869	24 691	93 068	95 409	189 891	5 727
336322	Other motor vehicle electrical & electronic equipment mfg	2	37	11	1 854	40 182	1 415	2 767	23 605	86 975	90 524	179 034	5 456
33634	Motor vehicle brake system mfg	—	10	2	350	9 554	269	528	6 575	28 158	29 099	58 012	D
336340	Motor vehicle brake system mfg	—	10	2	350	9 554	269	528	6 575	28 158	29 099	58 012	D
33635	Motor vehicle transmission & power train parts mfg	5	16	1	138	3 204	104	167	1 960	8 131	7 408	15 811	667
336350	Motor vehicle transmission & power train parts mfg	5	16	1	138	3 204	104	167	1 960	8 131	7 408	15 811	667
33636	Motor vehicle seating & interior trim mfg	2	16	3	259	5 615	225	468	4 301	13 355	10 663	24 486	D
336360	Motor vehicle seating & interior trim mfg ...	2	16	3	259	5 615	225	468	4 301	13 355	10 663	24 486	D
33637	Motor vehicle metal stamping	—	14	7	837	21 914	741	1 577	13 352	48 741	44 008	90 885	5 907
336370	Motor vehicle metal stamping	—	14	7	837	21 914	741	1 577	13 352	48 741	44 008	90 885	5 907
33639	Other motor vehicle parts mfg	4	57	16	2 464	59 970	1 874	3 414	34 239	113 501	130 638	243 372	13 995
336391	Motor vehicle air-conditioning mfg	1	6	3	c	D	D	D	D	D	D	D	133
336399	All other motor vehicle parts mfg	4	51	13	g	D	D	D	D	D	D	D	13 862
3364	Aerospace product & parts mfg	—	133	50	14 285	714 653	6 345	13 775	233 791	2 975 538	1 107 694	3 969 825	73 257
33641	Aerospace product & parts mfg	—	133	50	14 285	714 653	6 345	13 775	233 791	2 975 538	1 107 694	3 969 825	73 257
336411	Aircraft mfg	—	30	13	3 993	165 233	1 778	3 936	52 579	673 093	392 180	1 034 540	28 216
336412	Aircraft engine & engine parts mfg	—	34	18	6 824	415 300	2 280	5 215	88 248	1 952 372	512 323	2 395 153	29 965
336413	Other aircraft part & auxiliary equipment mfg	—	64	17	h	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	2	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	FLORIDA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3365	Railroad rolling stock mfg . . .	8	5	3	103	3 536	65	129	2 286	8 472	7 759	16 026	334
33651	Railroad rolling stock mfg	8	5	3	103	3 536	65	129	2 286	8 472	7 759	16 026	334
336510	Railroad rolling stock mfg	8	5	3	103	3 536	65	129	2 286	8 472	7 759	16 026	334
3366	Ship & boat building	1	282	71	11 214	298 317	9 350	18 510	215 974	733 400	690 699	1 399 386	48 564
33661	Ship & boat building	1	282	71	11 214	298 317	9 350	18 510	215 974	733 400	690 699	1 399 386	48 564
336611	Ship building & repairing	3	80	19	2 905	89 578	2 628	4 789	68 734	162 243	99 551	261 794	24 399
336612	Boat building	1	202	52	8 309	208 739	6 722	13 721	147 240	571 157	591 148	1 137 592	24 165
3369	Other transportation equipment mfg	4	35	6	e	D	D	D	D	D	D	D	1 289
33699	Other transportation equipment mfg	4	35	6	e	D	D	D	D	D	D	D	1 289
336991	Motorcycle, bicycle, & parts mfg	8	15	1	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	2	19	5	c	D	D	D	D	D	D	D	659
337	Furniture & related product mfg	2	1 422	180	18 698	412 674	14 375	26 008	262 784	900 494	815 923	1 707 544	47 032
3371	Household & institutional furniture & kitchen cabinet mfg	2	1 094	97	10 539	225 773	8 438	14 426	149 774	471 635	424 485	896 064	23 557
33711	Wood kitchen cabinet & counter top mfg	4	589	44	4 081	83 574	3 217	5 286	57 104	154 005	118 013	270 958	6 494
337110	Wood kitchen cabinet & counter top mfg	4	589	44	4 081	83 574	3 217	5 286	57 104	154 005	118 013	270 958	6 494
33712	Household & institutional furniture mfg	2	505	53	6 458	142 199	5 221	9 140	92 670	317 630	306 472	625 106	17 063
337121	Upholstered household furniture mfg	4	93	8	816	14 594	711	1 236	11 003	30 131	31 655	61 725	710
337122	Nonupholstered wood household furniture mfg	3	265	16	2 345	44 242	2 082	3 522	34 560	97 562	75 092	174 182	3 897
337124	Metal household furniture mfg	—	31	8	1 079	22 952	888	1 493	14 864	70 282	66 515	138 471	3 569
337125	Household furniture (except wood & metal) mfg	4	44	5	344	6 648	293	540	4 959	13 746	18 325	32 505	880
337127	Institutional furniture mfg	1	65	16	1 852	53 347	1 233	2 315	27 021	105 198	114 168	216 798	7 978
3372	Office furniture (including fixtures) mfg	2	197	44	4 296	104 560	3 173	6 061	65 457	213 291	163 601	370 324	9 379
33721	Office furniture (including fixtures) mfg	2	197	44	4 296	104 560	3 173	6 061	65 457	213 291	163 601	370 324	9 379
337211	Wood office furniture mfg	1	44	5	667	15 702	514	1 033	9 764	38 331	28 075	62 559	1 490
337212	Custom architectural woodwork & millwork mfg	2	43	11	1 178	28 284	780	1 536	16 789	50 339	35 446	85 239	2 876
337214	Office furniture (except wood) mfg	3	23	5	483	11 030	365	599	6 663	26 166	22 140	48 693	1 233
337215	Showcase, partition, shelving, & locker mfg	3	87	23	1 968	49 544	1 514	2 893	32 241	98 455	77 940	173 833	3 780
3379	Other furniture related product mfg	2	131	39	3 863	82 341	2 764	5 521	47 553	215 568	227 837	441 156	14 096
33791	Mattress mfg	2	46	21	2 009	45 035	1 428	2 900	25 719	145 411	138 614	281 647	6 431
337910	Mattress mfg	2	46	21	2 009	45 035	1 428	2 900	25 719	145 411	138 614	281 647	6 431
33792	Blind & shade mfg	1	85	18	1 854	37 306	1 336	2 621	21 834	70 157	89 223	159 509	7 665
337920	Blind & shade mfg	1	85	18	1 854	37 306	1 336	2 621	21 834	70 157	89 223	159 509	7 665
339	Miscellaneous mfg	1	1 915	213	27 851	827 320	18 370	34 002	384 316	2 972 872	1 095 925	4 057 999	142 989
3391	Medical equipment & supplies mfg	1	893	98	17 369	581 134	11 060	21 213	249 182	2 331 502	630 792	2 952 898	108 486
33911	Medical equipment & supplies mfg	1	893	98	17 369	581 134	11 060	21 213	249 182	2 331 502	630 792	2 952 898	108 486
339111	Laboratory apparatus & furniture mfg	3	13	4	140	4 799	81	158	1 844	13 005	7 571	20 758	254
339112	Surgical & medical instrument mfg	—	86	24	6 649	243 326	3 884	7 831	85 989	1 254 125	228 454	1 480 135	37 008
339113	Surgical appliance & supplies mfg	1	114	31	3 122	100 525	1 939	3 452	39 486	255 324	144 310	391 092	15 593
339114	Dental equipment & supplies mfg	6	36	4	372	8 093	291	456	5 159	19 369	9 478	29 168	504
339115	Ophthalmic goods mfg	—	39	14	4 436	163 101	2 912	6 321	79 196	653 955	185 802	838 512	50 382
339116	Dental laboratories	6	605	21	2 650	61 290	1 953	2 995	37 508	135 724	55 177	193 233	4 745

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FLORIDA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . .	3	1 022	115	10 482	246 186	7 310	12 789	135 134	641 370	465 133	1 105 101	34 503
33991	Jewelry & silverware mfg	6	196	15	1 247	25 853	889	1 416	14 866	69 503	63 618	134 772	1 531
339911	Jewelry (except costume) mfg	6	132	11	842	17 538	599	862	9 452	46 873	48 795	96 991	1 071
339913	Jewelers' material & lapidary work mfg . . .	8	18	1	148	3 834	109	251	2 691	13 369	10 148	23 391	108
339914	Costume jewelry & novelty mfg	6	38	3	218	3 689	157	266	2 278	7 985	3 838	12 201	306
33992	Sporting & athletic goods mfg	4	175	24	2 038	42 357	1 520	2 496	24 484	108 251	92 320	197 936	5 809
339920	Sporting & athletic goods mfg	4	175	24	2 038	42 357	1 520	2 496	24 484	108 251	92 320	197 936	5 809
33993	Doll, toy, & game mfg . . .	5	33	2	172	3 708	146	233	2 592	9 013	6 167	15 374	336
339932	Game, toy, & children's vehicle mfg	6	23	1	114	2 448	93	146	1 541	6 436	4 749	11 243	D
33994	Office supplies (except paper) mfg	—	48	5	1 114	33 858	694	1 394	17 493	140 538	71 418	212 871	10 074
339941	Pen & mechanical pencil mfg	—	5	3	834	28 173	501	1 041	14 073	129 219	63 921	193 998	D
339943	Marking device mfg	7	34	1	163	3 298	96	181	1 936	6 910	2 822	9 730	D
33995	Sign mfg	3	366	35	3 412	86 177	2 252	4 108	43 186	169 151	119 278	285 717	7 698
339950	Sign mfg	3	366	35	3 412	86 177	2 252	4 108	43 186	169 151	119 278	285 717	7 698
33999	All other miscellaneous mfg	2	204	34	2 499	54 233	1 809	3 142	32 513	144 914	112 332	258 431	9 055
339991	Gasket, packing, & sealing device mfg . . .	—	15	3	358	9 411	234	488	5 106	39 312	35 416	74 265	1 907
339992	Musical instrument mfg	4	15	2	100	2 775	76	157	1 772	5 719	2 993	8 923	1 108
339994	Broom, brush, & mop mfg	2	13	3	184	4 042	145	264	2 300	9 044	7 934	16 889	464
339999	All other miscellaneous mfg	3	146	25	1 748	36 037	1 263	2 064	21 773	86 006	63 069	150 603	4 742

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTONA BEACH, FL MSA												
	Manufacturing	1	434	92	11 776	309 106	8 545	15 577	185 029	792 836	698 095	1 473 229	53 307
311	Food mfg	5	21	4	360	8 160	266	529	5 595	41 330	37 377	78 738	D
321	Wood product mfg	4	21	5	274	7 710	200	370	4 348	14 612	14 848	29 399	614
323	Printing & related support activities	1	64	8	891	20 163	682	1 045	13 536	52 591	33 024	85 005	7 767
3231	Printing & related support activities	1	64	8	891	20 163	682	1 045	13 536	52 591	33 024	85 005	7 767
32311	Printing	1	57	7	840	19 296	645	1 006	12 926	50 651	32 624	82 618	7 626
323110	Commercial lithographic printing . .	1	30	6	634	15 404	496	776	10 594	43 357	27 667	70 428	5 754
325	Chemical mfg	3	14	6	746	20 589	409	774	8 870	68 795	77 640	144 224	3 639
3255	Paint, coating, & adhesive mfg	4	4	2	287	8 953	183	347	4 807	34 830	39 169	74 195	2 484
3256	Soap, cleaning compound, & toilet preparation mfg . .	1	5	3	362	10 154	181	340	3 413	28 435	31 048	57 221	1 002
32562	Toilet preparation mfg	—	2	2	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DAYTONA BEACH, FL MSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	4	25	6	583	12 402	419	805	8 179	26 674	24 680	51 138	4 702
3261	Plastics product mfg	4	21	6	550	11 778	389	749	7 617	24 180	23 168	47 128	4 652
32619	Other plastics product mfg	4	17	5	491	10 776	339	680	6 822	20 528	18 444	38 748	4 161
326199	All other plastics product mfg	4	13	5	477	10 433	326	655	6 578	19 697	17 930	37 398	4 124
327	Nonmetallic mineral product mfg	—	26	7	318	8 032	246	419	5 239	22 860	25 402	47 608	1 270
3273	Cement & concrete product mfg	—	15	6	260	6 692	196	343	4 358	19 788	23 812	42 910	1 107
332	Fabricated metal product mfg	—	55	8	1 394	42 489	982	2 095	27 742	102 816	104 405	203 677	4 821
3321	Forging & stamping	—	3	1	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	3	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	3	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	10	3	285	7 823	177	382	4 441	26 092	42 582	68 927	993
3329	Other fabricated metal product mfg	—	7	4	696	23 909	496	1 064	15 548	46 909	52 435	95 751	2 632
33299	All other fabricated metal product mfg	—	6	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	31	7	793	24 520	461	843	11 354	62 941	47 352	112 747	2 517
3339	Other general-purpose machinery mfg	—	12	5	564	18 192	333	641	8 430	42 507	32 121	75 760	2 209
33399	All other general-purpose machinery mfg	—	8	4	e	D	D	D	D	D	D	D	2 158
333999	All other miscellaneous general-purpose machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	25	11	1 829	49 326	1 297	2 341	22 129	102 515	151 093	237 724	4 293
3342	Communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	16	9	1 484	39 561	1 044	2 006	17 605	97 220	128 566	212 182	D
33441	Semiconductor & other electronic component mfg	—	16	9	1 484	39 561	1 044	2 006	17 605	97 220	128 566	212 182	D
334412	Bare printed circuit board mfg	—	4	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	5	4	294	10 102	253	336	4 497	13 568	57 471	71 249	1 777
335	Electrical equipment, appliance, & component mfg	2	9	5	857	18 992	705	1 309	12 792	41 228	20 786	62 677	3 144
3359	Other electrical equipment & component mfg	—	4	4	635	16 065	545	1 154	10 890	34 956	14 415	49 805	D
33593	Wiring device mfg	—	2	2	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	30	10	1 670	45 132	1 327	2 408	31 522	132 802	106 456	238 985	6 286
3363	Motor vehicle parts mfg ...	2	14	4	596	13 110	425	628	7 847	29 135	22 410	52 593	1 998
33631	Motor vehicle gasoline engine & engine parts mfg	—	3	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	3	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	7	4	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	7	4	f	D	D	D	D	D	D	D	D
336612	Boat building	—	6	4	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTONA BEACH, FL MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	2	51	6	1 540	41 717	1 157	1 991	27 381	103 327	37 343	143 341	10 072
3391	Medical equipment & supplies mfg.....	1	20	3	1 088	32 439	833	1 530	22 344	83 513	24 109	110 220	8 902
33911	Medical equipment & supplies mfg.....	1	20	3	1 088	32 439	833	1 530	22 344	83 513	24 109	110 220	8 902
339112	Surgical & medical instrument mfg.....	—	3	3	g	D	D	D	D	D	D	D	8 734
3399	Other miscellaneous mfg ..	5	31	3	452	9 278	324	461	5 037	19 814	13 234	33 121	1 170
33999	All other miscellaneous mfg.....	8	5	2	268	4 747	200	257	2 617	9 764	6 544	16 317	D
339999	All other miscellaneous mfg.....	8	4	2	e	D	D	D	D	D	D	D	D
	FORT MYERS—CAPE CORAL, FL MSA												
31-33	Manufacturing	3	357	64	5 363	141 129	3 904	7 347	85 578	388 859	350 373	741 763	22 213
311	Food mfg.....	5	10	4	534	11 764	459	970	9 365	84 273	89 540	173 431	5 366
3118	Bakeries & tortilla mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	5	66	6	481	11 524	329	533	6 207	22 429	16 839	39 840	1 287
3231	Printing & related support activities.....	5	66	6	481	11 524	329	533	6 207	22 429	16 839	39 840	1 287
32311	Printing.....	5	61	6	466	11 137	315	508	5 914	21 743	16 479	38 794	1 240
327	Nonmetallic mineral product mfg.....	1	27	9	537	16 245	442	1 071	12 456	44 895	35 514	80 726	2 882
3273	Cement & concrete product mfg.....	1	19	9	510	15 675	419	1 037	12 046	43 355	34 278	77 934	2 733
332	Fabricated metal product mfg.....	1	40	7	740	24 146	489	862	11 034	44 968	36 575	81 817	2 208
3323	Architectural & structural metals mfg.....	1	18	3	357	9 395	243	400	4 804	18 105	15 148	33 176	838
333	Machinery mfg.....	5	18	6	583	16 618	418	883	9 894	50 445	31 985	80 916	2 704
3339	Other general-purpose machinery mfg.....	4	9	4	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	4	8	4	462	13 973	329	731	8 365	43 966	24 671	66 944	2 298
333999	All other miscellaneous general-purpose machinery mfg.....	4	8	4	462	13 973	329	731	8 365	43 966	24 671	66 944	2 298
334	Computer & electronic product mfg.....	3	11	4	316	7 672	243	407	3 443	13 472	6 841	20 374	802
336	Transportation equipment mfg.....	—	13	5	276	7 371	211	438	4 937	11 421	15 059	26 719	743
337	Furniture & related product mfg.....	4	32	5	369	6 751	276	424	4 328	13 657	12 333	25 993	843
3371	Household & institutional furniture & kitchen cabinet mfg.....	3	27	4	292	4 899	219	322	3 178	9 776	9 475	19 270	D
339	Miscellaneous mfg.....	3	63	4	666	16 192	467	717	12 331	44 783	28 348	74 143	2 242
3391	Medical equipment & supplies mfg.....	1	27	1	411	10 056	272	420	8 680	32 217	15 577	48 727	1 575
33911	Medical equipment & supplies mfg.....	1	27	1	411	10 056	272	420	8 680	32 217	15 577	48 727	1 575
339112	Surgical & medical instrument mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	6	36	3	255	6 136	195	297	3 651	12 566	12 771	25 416	667

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORT PIERCE—PORT ST. LUCIE, FL MSA													
31-33	Manufacturing	1	296	60	5 504	161 830	3 910	7 822	108 870	524 036	588 176	1 097 837	61 487
311	Food mfg	—	17	9	918	25 635	751	1 412	18 130	155 279	288 889	443 530	36 986
3114	Fruit & vegetable preserving & specialty food mfg	—	7	6	699	20 464	554	1 098	14 024	143 943	229 344	372 543	35 171
31141	Frozen food mfg	—	2	2	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	5	4	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	5	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	43	4	422	10 959	307	533	6 799	21 510	13 679	35 086	3 348
3231	Printing & related support activities	3	43	4	422	10 959	307	533	6 799	21 510	13 679	35 086	3 348
32311	Printing	3	40	4	400	10 392	289	499	6 381	20 469	13 584	33 951	D
323110	Commercial lithographic printing ..	3	21	3	287	7 953	209	382	4 882	16 209	10 066	26 107	3 032
326	Plastics & rubber products mfg	4	16	6	489	12 540	404	750	9 034	32 346	42 350	75 446	3 425
3261	Plastics product mfg	4	15	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	19	7	407	9 988	325	675	7 837	27 625	30 095	57 627	1 381
3273	Cement & concrete product mfg	1	11	6	352	8 887	279	588	6 901	24 313	25 956	50 071	1 224
332	Fabricated metal product mfg	3	38	5	310	9 345	229	429	6 195	19 160	11 598	31 083	3 561
336	Transportation equipment mfg	1	29	11	1 713	61 329	1 037	2 532	44 361	188 817	131 585	306 538	8 969
3364	Aerospace product & parts mfg	—	6	4	1 307	50 866	740	2 000	37 999	163 561	104 868	255 942	D
33641	Aerospace product & parts mfg	—	6	4	1 307	50 866	740	2 000	37 999	163 561	104 868	255 942	D
336413	Other aircraft part & auxiliary equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	4	15	5	275	7 107	224	395	4 975	16 586	15 570	30 744	464
33661	Ship & boat building	4	15	5	275	7 107	224	395	4 975	16 586	15 570	30 744	464
339	Miscellaneous mfg	2	29	3	254	5 422	194	302	3 012	14 659	7 651	22 761	440
FORT WALTON BEACH, FL MSA													
31-33	Manufacturing	1	133	27	3 448	81 516	2 301	4 073	42 146	167 705	131 976	296 471	11 746
315	Apparel mfg	—	7	4	f	D	D	D	D	D	D	D	242
3152	Cut & sew apparel mfg	—	7	4	f	D	D	D	D	D	D	D	242
31522	Men's & boys' cut & sew apparel mfg	—	4	3	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	22	4	290	6 004	228	316	3 888	12 641	9 643	21 773	1 180
334	Computer & electronic product mfg	—	11	7	1 116	30 914	523	1 013	11 038	60 538	32 576	94 448	1 501
3345	Navigational, measuring, medical, & control instruments mfg	—	6	3	825	24 247	434	840	9 844	46 183	27 230	73 941	1 129
33451	Navigational, measuring, medical, & control instruments mfg	—	6	3	825	24 247	434	840	9 844	46 183	27 230	73 941	1 129
334511	Search, detection, navigation, & guidance instrument mfg	—	3	3	786	22 715	418	809	9 378	43 698	25 959	70 123	1 063
335	Electrical equipment, appliance, & component mfg	—	4	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT WALTON BEACH, FL MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg.....	-	10	2	390	10 878	266	670	4 975	31 837	15 486	45 766	1 831
3364	Aerospace product & parts mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
	GAINESVILLE, FL MSA												
31-33	Manufacturing	1	151	42	5 251	157 142	4 196	7 589	112 601	458 286	546 942	1 010 325	73 181
321	Wood product mfg.....	-	10	6	605	17 828	528	1 200	14 787	50 533	73 656	124 298	4 546
3212	Veneer, plywood, & engineered wood product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	20	4	253	6 613	166	312	4 067	13 799	9 017	22 709	1 267
3231	Printing & related support activities.....	4	20	4	253	6 613	166	312	4 067	13 799	9 017	22 709	1 267
325	Chemical mfg.....	6	6	4	409	17 619	228	365	6 609	76 325	74 092	152 958	11 848
3251	Basic chemical mfg.....	6	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	15	5	403	17 015	344	713	14 004	23 979	124 202	148 290	2 425
333	Machinery mfg.....	-	9	4	366	9 131	294	390	5 561	58 834	46 010	105 266	1 077
335	Electrical equipment, appliance, & component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33591	Battery mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	4	6	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	4	4	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	4	4	2	f	D	D	D	D	D	D	D	D
336612	Boat building.....	4	4	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	33	6	497	14 368	317	608	6 095	46 500	25 814	67 549	4 822
3391	Medical equipment & supplies mfg.....	2	20	4	276	9 117	174	321	3 439	34 427	15 756	45 686	4 544
33911	Medical equipment & supplies mfg.....	2	20	4	276	9 117	174	321	3 439	34 427	15 756	45 686	4 544
	JACKSONVILLE, FL MSA												
31-33	Manufacturing	-	950	271	33 883	1 118 980	24 207	48 734	673 363	4 477 096	3 952 694	8 408 441	317 141
311	Food mfg.....	-	53	19	3 016	85 294	1 853	3 975	47 442	733 356	667 918	1 401 069	16 336
3116	Meat product mfg.....	3	6	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	3	6	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	24	4	979	27 608	351	785	9 220	74 761	33 578	108 265	3 845
31181	Bread & bakery product mfg.....	-	23	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	-	7	4	898	26 719	292	727	8 735	72 529	32 453	104 905	D
3119	Other food mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	10	8	2 952	109 685	1 881	3 451	66 694	821 996	479 819	1 299 665	68 445
3121	Beverage mfg.....	-	9	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries.....	-	2	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	-	2	1	g	D	D	D	D	D	D	D	D
31214	Distilleries.....	-	1	1	e	D	D	D	D	D	D	D	D
312140	Distilleries.....	-	1	1	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg....	-	1	1	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSONVILLE, FL MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	—	14	2	482	8 548	377	840	7 395	24 469	9 058	29 861	D
3152	Cut & sew apparel mfg	—	7	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	2	1	e	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	32	9	661	18 880	502	1 075	11 102	54 770	127 174	181 443	4 539
3211	Sawmills & wood preservation	—	9	4	354	11 357	277	641	7 201	42 333	107 373	149 163	4 215
32111	Sawmills & wood preservation	—	9	4	354	11 357	277	641	7 201	42 333	107 373	149 163	4 215
321113	Sawmills	—	6	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	28	22	3 500	146 986	2 796	5 877	102 734	505 946	660 339	1 174 409	45 677
3221	Pulp, paper, & paperboard mills	—	4	4	g	D	D	D	D	D	D	D	D
32211	Pulp mills	—	1	1	e	D	D	D	D	D	D	D	D
322110	Pulp mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	3	3	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	24	18	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	12	10	884	33 196	682	1 318	17 964	74 455	114 702	188 976	6 841
322211	Corrugated & solid fiber box mfg	—	6	4	417	15 578	307	667	9 348	29 434	68 131	97 303	2 773
322212	Folding paperboard box mfg	—	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	1	8	5	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	1	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916
322232	Envelope mfg	—	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916
323	Printing & related support activities	2	161	35	2 147	57 909	1 508	2 778	33 782	135 141	84 764	219 525	7 066
3231	Printing & related support activities	2	161	35	2 147	57 909	1 508	2 778	33 782	135 141	84 764	219 525	7 066
32311	Printing	2	143	29	1 836	49 736	1 264	2 306	28 028	117 604	80 630	197 853	6 037
323110	Commercial lithographic printing	2	60	16	911	28 438	605	1 194	15 435	56 594	31 726	88 216	2 467
32312	Support activities for printing	4	18	6	311	8 173	244	472	5 754	17 537	4 134	21 672	1 029
325	Chemical mfg	1	43	14	1 471	58 382	962	2 066	31 210	375 348	357 316	732 305	24 674
3251	Basic chemical mfg	—	9	3	425	25 469	258	581	12 286	112 006	130 245	239 966	16 280
32519	Other basic organic chemical mfg	—	5	3	401	24 667	236	539	11 652	110 813	128 289	236 768	16 203
325199	All other basic organic chemical mfg	—	5	3	401	24 667	236	539	11 652	110 813	128 289	236 768	16 203
3256	Soap, cleaning compound, & toilet preparation mfg	8	8	3	502	12 825	395	832	8 743	92 429	47 684	140 629	D
32562	Toilet preparation mfg	9	3	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	9	3	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	15	5	327	12 194	174	362	5 276	50 944	76 452	127 037	3 274
326	Plastics & rubber products mfg	—	42	16	1 060	31 717	790	1 506	17 566	99 196	157 091	252 448	5 765
3261	Plastics product mfg	—	32	13	879	24 881	724	1 387	15 835	78 353	146 646	222 540	D
32619	Other plastics product mfg	6	17	5	284	6 508	210	356	3 649	9 964	10 414	20 291	767
326199	All other plastics product mfg	6	15	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	57	18	2 917	86 377	2 340	4 697	63 987	235 569	282 333	509 641	20 970
3272	Glass & glass product mfg	—	4	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	2	g	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	3	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	40	13	1 234	31 140	896	1 544	17 689	78 559	81 044	158 485	5 647
32732	Ready-mix concrete mfg	—	20	6	353	9 715	251	524	6 590	24 696	42 063	66 833	530
327320	Ready-mix concrete mfg	—	20	6	353	9 715	251	524	6 590	24 696	42 063	66 833	530
32739	Other concrete product mfg	—	14	5	750	18 750	560	869	9 408	45 369	30 553	74 162	4 578
327390	Other concrete product mfg	—	14	5	750	18 750	560	869	9 408	45 369	30 553	74 162	4 578

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSONVILLE, FL MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3274	Lime & gypsum product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	11	9	1 583	52 121	1 289	3 028	38 469	153 888	242 254	390 317	25 497
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
33122	Rolling & drawing of purchased steel	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
331222	Steel wire drawing	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	139	42	4 260	116 729	3 114	6 143	70 872	275 242	336 869	602 494	19 809
3321	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	1 256
33211	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	1 256
332114	Custom roll forming ...	-	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	57	24	2 456	59 176	1 786	3 522	34 882	140 450	139 908	279 502	9 953
33231	Plate work & fabricated structural product mfg ..	1	23	9	746	17 334	571	911	10 670	37 847	59 300	96 845	5 045
332312	Fabricated structural metal mfg	1	16	7	541	13 820	387	710	8 296	33 387	55 668	88 866	4 396
33232	Ornamental & architectural metal products mfg.....	-	34	15	1 710	41 842	1 215	2 611	24 212	102 603	80 608	182 657	4 908
332321	Metal window & door mfg	-	6	3	754	17 482	468	1 040	8 595	46 997	31 063	77 727	903
332322	Sheet metal work mfg .	-	16	10	744	18 494	586	1 245	11 960	38 968	42 061	80 820	3 389
3324	Boiler, tank, & shipping container mfg	-	6	4	319	16 701	256	600	13 068	25 451	121 671	146 469	4 560
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	44	4	e	D	D	D	D	D	D	D	D
33271	Machine shops.....	4	42	4	385	11 417	299	516	7 701	20 314	8 465	28 478	993
332710	Machine shops.....	4	42	4	385	11 417	299	516	7 701	20 314	8 465	28 478	993
3329	Other fabricated metal product mfg.....	1	13	4	276	7 399	182	363	3 892	19 670	12 025	31 382	1 299
333	Machinery mfg	3	64	22	1 688	55 769	1 082	2 173	29 020	133 293	96 313	232 199	7 247
3331	Agriculture, construction, & mining machinery mfg....	1	12	5	269	8 088	182	361	4 602	31 824	17 613	49 371	861
3332	Industrial machinery mfg ..	7	11	4	300	11 919	154	322	5 343	23 082	19 811	42 609	1 289
33329	Other industrial machinery mfg	7	11	4	300	11 919	154	322	5 343	23 082	19 811	42 609	1 289
3333	Commercial & service industry machinery mfg ..	3	10	4	528	17 353	305	732	10 796	38 201	29 915	70 907	1 580
33331	Commercial & service industry machinery mfg	3	10	4	528	17 353	305	732	10 796	38 201	29 915	70 907	1 580
333319	Other commercial & service industry machinery mfg	3	8	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	2	254	8 053	226	416	3 708	15 981	16 566	32 724	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	5	2	254	8 053	226	416	3 708	15 981	16 566	32 724	D
334	Computer & electronic product mfg.....	2	23	4	387	15 058	249	527	6 647	25 659	17 723	43 400	2 932
335	Electrical equipment, appliance, & component mfg	2	14	6	476	11 078	335	488	5 077	36 027	34 374	68 595	2 977

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JACKSONVILLE, FL MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	2	44	12	2 340	77 205	1 926	3 658	52 302	149 094	111 519	261 593	22 826
3364	Aerospace product & parts mfg	—	8	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	8	2	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	18	7	1 736	56 095	1 591	2 955	43 105	103 582	74 335	177 425	D
33661	Ship & boat building	2	18	7	1 736	56 095	1 591	2 955	43 105	103 582	74 335	177 425	D
336611	Ship building & repairing	2	13	6	g	D	D	D	D	D	D	D	D
336612	Boat building	—	5	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	67	11	1 216	32 256	955	1 728	19 249	75 509	60 381	133 924	7 287
3371	Household & institutional furniture & kitchen cabinet mfg	1	48	6	717	19 477	550	930	10 630	34 913	29 439	63 708	4 772
33712	Household & institutional furniture mfg	1	23	3	513	14 438	381	688	7 958	24 756	24 097	49 040	4 497
337127	Institutional furniture mfg	—	6	3	437	12 817	310	585	6 909	21 886	20 789	42 595	4 348
3372	Office furniture (including fixtures) mfg	—	13	3	e	D	D	D	D	D	D	D	778
33721	Office furniture (including fixtures) mfg	—	13	3	e	D	D	D	D	D	D	D	778
339	Miscellaneous mfg	—	112	17	3 226	142 603	1 851	3 912	61 624	605 474	155 456	765 814	32 609
3391	Medical equipment & supplies mfg	—	56	9	2 719	131 070	1 522	3 346	55 882	557 905	128 642	690 508	29 773
33911	Medical equipment & supplies mfg	—	56	9	2 719	131 070	1 522	3 346	55 882	557 905	128 642	690 508	29 773
339113	Surgical appliance & supplies mfg	—	7	3	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	2	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	56	8	507	11 533	329	566	5 742	47 569	26 814	75 306	2 836
	LAKELAND-WINTER HAVEN, FL MSA												
31-33	Manufacturing	1	480	186	20 627	633 493	15 251	31 605	382 152	2 587 357	3 444 036	5 999 926	190 651
311	Food mfg	1	34	25	5 136	150 278	3 775	7 845	88 947	791 191	874 904	1 662 342	56 915
3114	Fruit & vegetable preserving & specialty food mfg	1	13	13	3 063	93 376	2 319	4 970	55 095	573 780	598 046	1 173 531	D
31141	Frozen food mfg	—	8	8	1 174	39 526	937	2 235	26 671	209 047	283 774	504 551	18 952
311411	Frozen fruit, juice, & vegetable mfg	—	8	8	1 174	39 526	937	2 235	26 671	209 047	283 774	504 551	18 952
31142	Fruit & vegetable canning, pickling, & drying	1	5	5	1 889	53 850	1 382	2 735	28 424	364 733	314 272	668 980	D
311421	Fruit & vegetable canning	1	5	5	1 889	53 850	1 382	2 735	28 424	364 733	314 272	668 980	D
3116	Meat product mfg	9	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging ..	—	2	1	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	—	2	1	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	—	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	5	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAKELAND-WINTER HAVEN, FL MSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg	—	26	17	1 747	42 438	1 480	2 874	28 277	86 153	168 137	251 789	3 144
3212	Veneer, plywood, & engineered wood product mfg	1	9	8	e	D	D	D	D	D	D	D	1 268
32121	Veneer, plywood, & engineered wood product mfg	1	9	8	e	D	D	D	D	D	D	D	1 268
321214	Truss mfg	—	8	8	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	16	8	1 219	31 242	1 057	1 994	21 538	56 279	96 550	152 100	D
32192	Wood container & pallet mfg	2	6	4	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg	2	6	4	e	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	8	3	738	21 151	653	1 187	13 613	40 025	45 983	86 478	318
321991	Manufactured home (mobile home) mfg	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	9	6	568	20 410	425	1 035	12 707	44 177	96 830	141 270	1 638
3222	Converted paper product mfg	—	9	6	568	20 410	425	1 035	12 707	44 177	96 830	141 270	1 638
32221	Paperboard container mfg	—	6	6	549	19 437	413	1 009	12 386	42 826	95 344	138 390	1 483
322211	Corrugated & solid fiber box mfg	—	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	55	9	636	14 112	463	805	9 000	36 604	36 268	72 935	3 620
3231	Printing & related support activities	1	55	9	636	14 112	463	805	9 000	36 604	36 268	72 935	3 620
32311	Printing	1	51	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	44	28	3 483	146 251	2 503	5 474	92 775	1 013 199	1 619 873	2 610 630	71 854
3251	Basic chemical mfg	2	5	4	251	12 463	113	251	4 165	35 628	49 753	86 621	2 999
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	20	15	h	D	D	D	D	D	D	D	60 701
32531	Fertilizer mfg	—	19	14	h	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	—	8	8	2 269	97 490	1 793	3 939	69 304	746 761	1 211 090	1 937 995	54 268
325314	Fertilizer (mixing only) mfg	—	10	6	271	9 289	171	383	4 418	77 088	170 037	244 322	D
326	Plastics & rubber products mfg	—	42	20	1 047	23 710	851	1 467	16 196	73 644	77 847	151 748	6 955
3261	Plastics product mfg	—	37	18	992	22 054	805	1 356	14 900	68 992	73 680	142 902	6 867
32619	Other plastics product mfg	—	18	9	490	10 501	407	606	6 713	34 183	31 118	64 975	3 213
326199	All other plastics product mfg	—	17	9	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	35	9	1 266	43 069	901	2 019	26 040	91 595	85 449	177 831	12 109
3271	Clay product & refractory mfg	—	4	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	2	1	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	2	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	23	5	537	16 393	360	858	8 828	38 878	41 012	77 039	2 563
32739	Other concrete product mfg	—	7	3	321	9 479	240	606	5 668	23 120	21 596	43 530	1 128
327390	Other concrete product mfg	—	7	3	321	9 479	240	606	5 668	23 120	21 596	43 530	1 128
331	Primary metal mfg	—	5	2	e	D	D	D	D	D	D	D	881
3312	Steel product mfg from purchased steel	—	3	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	2	2	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	71	23	1 519	41 091	1 063	2 037	22 642	87 197	97 929	184 304	4 757
3321	Forging & stamping	5	5	2	250	6 112	156	368	2 656	18 070	17 794	35 318	D
33211	Forging & stamping	5	5	2	250	6 112	156	368	2 656	18 070	17 794	35 318	D
3323	Architectural & structural metals mfg	1	24	12	685	19 808	436	848	9 911	43 327	57 177	99 261	1 042
33231	Plate work & fabricated structural product mfg	—	12	6	466	13 325	280	532	5 953	27 545	39 024	65 646	584

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAKELAND-WINTER HAVEN, FL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	24	6	365	9 167	294	479	6 164	14 784	11 545	26 602	1 120
33271	Machine shops	3	24	6	365	9 167	294	479	6 164	14 784	11 545	26 602	1 120
332710	Machine shops	3	24	6	365	9 167	294	479	6 164	14 784	11 545	26 602	1 120
333	Machinery mfg	—	39	13	1 183	42 571	764	1 564	17 504	106 514	85 517	192 384	9 792
3332	Industrial machinery mfg ..	—	8	4	395	20 674	146	280	5 094	66 098	32 261	98 628	5 507
33329	Other industrial machinery mfg	—	7	4	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	16	4	251	9 070	174	351	4 739	14 636	16 112	31 458	967
334	Computer & electronic product mfg	4	10	5	731	20 201	527	1 440	12 360	37 643	81 282	116 140	2 626
3345	Navigational, measuring, medical, & control instruments mfg	—	4	3	406	10 525	310	930	6 858	17 413	36 498	54 263	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	3	406	10 525	310	930	6 858	17 413	36 498	54 263	D
334519	Other measuring & controlling device mfg	1	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	19	8	1 247	36 861	931	2 180	21 736	79 151	86 967	166 053	7 427
3363	Motor vehicle parts mfg ...	3	6	4	998	30 438	759	1 840	18 498	63 648	66 448	130 399	D
33639	Other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	21	5	377	9 103	287	529	4 978	21 049	27 600	47 300	698
339	Miscellaneous mfg	3	39	9	629	13 232	455	818	8 073	32 121	24 021	55 842	2 577
3391	Medical equipment & supplies mfg	4	14	4	328	7 509	247	455	4 565	19 297	14 105	33 068	2 344
33911	Medical equipment & supplies mfg	4	14	4	328	7 509	247	455	4 565	19 297	14 105	33 068	2 344
3399	Other miscellaneous mfg ..	1	25	5	301	5 723	208	363	3 508	12 824	9 916	22 774	233
	MELBOURNE-TITUSVILLE-PALM BAY, FL MSA												
31-33	Manufacturing	—	494	113	20 832	753 861	10 572	20 154	260 783	1 855 675	1 522 730	3 450 723	105 557
321	Wood product mfg	—	10	6	339	7 636	259	457	4 555	15 224	47 843	63 978	D
3212	Veneer, plywood, & engineered wood product mfg	1	4	4	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	1	4	4	e	D	D	D	D	D	D	D	D
321214	Truss mfg	1	4	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	57	4	316	6 083	208	286	3 689	11 974	7 548	19 473	619
3231	Printing & related support activities	5	57	4	316	6 083	208	286	3 689	11 974	7 548	19 473	619
32311	Printing	5	55	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	5	19	4	321	8 867	195	336	3 978	18 289	23 936	42 402	1 903
326	Plastics & rubber products mfg	5	26	8	516	8 103	382	589	5 561	17 590	16 346	34 048	1 308
3261	Plastics product mfg	4	23	7	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	15	6	430	6 312	313	482	4 331	12 418	11 692	24 200	1 076
326199	All other plastics product mfg	4	13	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	28	5	316	7 696	195	383	4 458	20 938	20 440	40 998	504

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MELBOURNE-TITUSVILLE-PALM BAY, FL MSA—Con.													
	Manufacturing—Con.													
331	Primary metal mfg	—	2	2	e	D	D	D	D	D	D	D	D	
3313	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D	
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D	
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	2	83	20		1 359	36 903	1 040	1 957	25 402	84 870	35 390	119 115	4 619
3323	Architectural & structural metals mfg	6	22	7		347	10 336	256	534	6 197	19 717	12 417	31 835	618
33232	Ornamental & architectural metal products mfg	5	18	6		282	8 246	202	435	4 936	14 933	8 909	23 857	393
332322	Sheet metal work mfg	5	15	6		263	7 661	190	408	4 600	13 724	8 027	21 767	330
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	36	8		586	15 475	435	753	10 716	27 430	11 746	38 333	2 404
33271	Machine shops	1	32	7		506	12 904	367	586	8 913	23 033	8 892	30 985	2 114
332710	Machine shops	1	32	7		506	12 904	367	586	8 913	23 033	8 892	30 985	2 114
333	Machinery mfg	1	27	12		1 255	33 166	865	1 711	18 845	66 352	109 535	182 526	3 159
3333	Commercial & service industry machinery mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
333313	Office machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	70	29		11 111	438 572	4 415	8 436	105 423	845 463	815 882	1 728 596	52 871
3341	Computer & peripheral equipment mfg	—	10	4		329	13 905	160	361	4 071	7 726	54 620	60 412	2 031
33411	Computer & peripheral equipment mfg	—	10	4		329	13 905	160	361	4 071	7 726	54 620	60 412	2 031
3342	Communications equipment mfg	3	14	6	f	D	D	D	D	D	D	D	D	2 032
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	7	4		480	17 791	307	619	6 277	28 255	19 588	47 800	1 600
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	7	4		480	17 791	307	619	6 277	28 255	19 588	47 800	1 600
3344	Semiconductor & other electronic component mfg	—	23	10		3 085	95 117	2 361	4 563	51 155	149 608	112 693	260 733	D
33441	Semiconductor & other electronic component mfg	—	23	10		3 085	95 117	2 361	4 563	51 155	149 608	112 693	260 733	D
334412	Bare printed circuit board mfg	—	6	3	f	D	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	3	2	g	D	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	21	8		7 035	303 803	1 522	2 761	42 659	642 133	616 549	1 329 815	D
33451	Navigational, measuring, medical, & control instruments mfg	—	21	8		7 035	303 803	1 522	2 761	42 659	642 133	616 549	1 329 815	D
334511	Search, detection, navigation, & guidance instrument mfg	—	9	4	i	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	14	5		516	20 322	177	327	4 065	42 591	17 388	60 449	2 424
3353	Electrical equipment mfg	—	6	2	e	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	6	2	e	D	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	4	2	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MELBOURNE-TITUSVILLE-PALM BAY, FL MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	27	9	3 639	158 881	1 983	4 138	68 460	663 853	357 274	1 019 377	28 327
3364	Aerospace product & parts mfg	—	4	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	4	3	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	11	4	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	11	4	f	D	D	D	D	D	D	D	D
336612	Boat building	—	8	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	21	5	263	5 828	220	425	4 086	11 168	9 050	20 284	403
339	Miscellaneous mfg	7	69	2	293	7 225	210	344	4 038	13 793	9 955	24 037	707
	MIAMI-FORT LAUDERDALE, FL CMSA												
31-33	Manufacturing	2	4 998	1 034	103 525	2 779 157	72 878	136 753	1 505 919	8 144 903	6 170 550	14 312 230	391 065
311	Food mfg	2	395	56	5 797	149 274	3 611	6 265	71 654	539 881	552 430	1 090 384	27 995
312	Beverage & tobacco product mfg	2	36	14	g	D	D	D	D	D	D	D	10 315
313	Textile mills	3	100	24	g	D	D	D	D	D	D	D	D
314	Textile product mills	2	191	36	3 567	58 394	3 010	4 880	38 336	119 727	109 478	228 198	4 801
315	Apparel mfg	2	493	152	11 373	177 986	9 733	16 348	129 555	432 869	403 945	824 531	11 187
316	Leather & allied product mfg .	—	36	13	h	D	D	D	D	D	D	D	D
321	Wood product mfg	2	79	24	g	D	D	D	D	D	D	D	D
322	Paper mfg	3	55	19	1 571	43 388	1 232	2 306	28 398	114 034	123 689	233 751	15 704
323	Printing & related support activities	3	752	94	9 179	255 392	6 630	11 726	155 606	513 641	341 380	853 680	46 693
325	Chemical mfg	3	145	39	3 130	119 663	1 743	3 341	61 462	452 436	325 961	798 694	30 737
326	Plastics & rubber products mfg	3	189	64	5 154	123 586	3 931	7 614	78 074	317 528	264 160	583 393	20 072
327	Nonmetallic mineral product mfg	1	185	64	4 019	118 705	2 967	6 468	79 926	289 490	302 546	596 350	23 389
331	Primary metal mfg	2	21	10	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	495	114	10 215	274 018	7 682	15 121	173 861	585 895	460 820	1 051 358	28 441
333	Machinery mfg	2	247	59	5 185	160 668	3 708	7 294	86 944	354 921	305 490	656 943	20 662
334	Computer & electronic product mfg	—	197	63	13 260	504 293	6 327	12 731	173 803	1 555 234	1 181 900	2 749 463	64 136
335	Electrical equipment, appliance, & component mfg	2	83	25	2 469	62 209	1 707	3 229	29 524	152 415	110 277	261 554	5 859
336	Transportation equipment mfg	2	212	39	4 595	130 762	3 496	6 669	86 289	290 082	342 832	626 377	16 552
337	Furniture & related product mfg	3	530	68	7 301	165 859	5 453	10 097	102 400	322 605	310 051	628 152	16 265
339	Miscellaneous mfg	1	546	55	8 233	243 236	5 175	9 655	91 471	1 292 845	279 459	1 562 694	29 579

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	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Fort Lauderdale, FL PMSA												
31-33	Manufacturing	2	1 967	371	37 134	1 115 367	24 291	45 582	551 428	3 288 934	2 506 538	5 788 324	162 827
311	Food mfg	6	89	16	1 278	26 431	858	1 406	13 363	82 466	78 086	160 471	4 881
3116	Meat product mfg	4	12	3	257	6 544	168	317	3 270	17 127	24 486	41 794	1 234
31161	Animal slaughtering & processing	4	12	3	257	6 544	168	317	3 270	17 127	24 486	41 794	1 234
3118	Bakeries & tortilla mfg	8	52	7	528	9 883	346	500	5 167	27 430	16 957	44 402	D
31181	Bread & bakery product mfg	7	46	6	e	D	D	D	D	D	D	D	1 115
311812	Commercial bakeries	7	18	4	292	5 884	173	270	2 893	14 939	7 224	22 162	731
312	Beverage & tobacco product mfg	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
3121	Beverage mfg	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
31211	Soft drink & ice mfg	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
312111	Soft drink mfg	1	5	3	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	65	6	625	13 322	511	918	8 570	23 423	19 597	42 901	1 051
3149	Other textile product mills	3	45	5	406	9 207	328	595	5 780	18 330	13 281	31 442	659
315	Apparel mfg	4	79	8	771	12 595	659	974	8 618	34 018	21 276	54 184	966
3152	Cut & sew apparel mfg	4	56	5	513	8 800	430	658	5 924	22 749	15 126	36 739	557
321	Wood product mfg	1	34	9	613	13 713	456	870	8 849	29 113	30 339	59 411	1 071
3212	Veneer, plywood, & engineered wood product mfg	—	8	4	292	6 829	226	445	4 232	15 031	15 772	30 838	506
32121	Veneer, plywood, & engineered wood product mfg	—	8	4	292	6 829	226	445	4 232	15 031	15 772	30 838	506
321214	Truss mfg	—	5	4	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	2	25	5	e	D	D	D	D	D	D	D	D
32191	Millwork	2	14	5	260	5 684	186	339	3 759	10 947	11 922	22 795	458
322	Paper mfg	2	18	4	276	8 451	226	425	5 486	22 727	14 096	35 852	4 034
3222	Converted paper product mfg	2	18	4	276	8 451	226	425	5 486	22 727	14 096	35 852	4 034
323	Printing & related support activities	3	311	33	3 332	104 540	2 272	4 164	60 453	219 073	126 926	345 962	24 917
3231	Printing & related support activities	3	311	33	3 332	104 540	2 272	4 164	60 453	219 073	126 926	345 962	24 917
32311	Printing	2	273	29	3 026	93 963	2 049	3 717	53 892	200 267	119 313	319 527	23 733
323110	Commercial lithographic printing	1	117	18	1 890	64 260	1 289	2 395	37 436	140 373	81 692	221 270	20 090
323114	Quick printing	2	88	3	457	11 942	287	495	6 674	17 240	17 240	44 380	1 525
32312	Support activities for printing	7	38	4	306	10 577	223	447	6 561	18 806	7 613	26 435	1 184
323122	Prepress services	7	28	4	258	9 414	181	363	5 646	16 513	7 202	23 728	648
325	Chemical mfg	6	55	13	827	29 060	514	1 027	14 580	104 738	84 392	194 137	6 075
3259	Other chemical product mfg	5	12	4	254	7 957	172	309	4 854	27 135	31 268	58 721	1 622
326	Plastics & rubber products mfg	3	84	28	2 411	58 992	1 784	3 454	36 611	124 937	116 260	241 460	9 597
3261	Plastics product mfg	3	69	22	2 036	48 775	1 518	2 964	30 692	105 683	99 524	204 311	9 032
32619	Other plastics product mfg	2	51	20	1 648	36 270	1 210	2 163	22 621	75 950	54 458	129 344	6 093
326199	All other plastics product mfg	2	44	17	1 502	32 973	1 117	1 991	20 860	69 927	49 317	118 141	5 909
3262	Rubber product mfg	1	15	6	375	10 217	266	490	5 919	19 254	16 736	37 149	565
32629	Other rubber product mfg	—	5	3	252	7 442	175	327	4 172	13 490	8 488	22 990	331
327	Nonmetallic mineral product mfg	2	81	30	1 762	50 301	1 325	2 770	32 474	116 082	136 786	252 748	11 016
3272	Glass & glass product mfg	5	19	4	253	5 695	188	397	3 834	11 857	16 034	28 028	709
32721	Glass & glass product mfg	5	19	4	253	5 695	188	397	3 834	11 857	16 034	28 028	709
327215	Glass product mfg made of purchased glass	5	18	4	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	39	21	1 169	36 356	888	1 859	23 219	77 102	94 163	171 677	8 729
32732	Ready-mix concrete mfg	—	16	10	376	13 187	312	736	9 599	33 248	54 749	88 332	6 299
327320	Ready-mix concrete mfg	—	16	10	376	13 187	312	736	9 599	33 248	54 749	88 332	6 299
32739	Other concrete product mfg	3	17	9	649	17 782	479	908	10 429	29 559	28 504	57 772	1 702
327390	Other concrete product mfg	3	17	9	649	17 782	479	908	10 429	29 559	28 504	57 772	1 702
3279	Other nonmetallic mineral product mfg	—	11	4	256	6 526	195	417	4 316	24 043	24 034	47 428	1 152

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31-33	MIAMI-FORT LAUDERDALE, FL CMSA—Con. Fort Lauderdale, FL PMSA—Con. Manufacturing—Con.												
332	Fabricated metal product mfg.....	1	241	52	4 192	126 372	3 069	5 971	78 822	252 896	221 131	476 940	15 328
3321	Forging & stamping.....	3	12	5	337	13 015	274	609	9 218	27 202	23 206	50 264	1 162
33211	Forging & stamping.....	3	12	5	337	13 015	274	609	9 218	27 202	23 206	50 264	1 162
332116	Metal stamping.....	2	7	4	263	11 039	224	518	7 948	22 039	15 785	37 570	898
3323	Architectural & structural metals mfg.....	—	70	21	1 801	51 250	1 190	2 234	28 576	105 744	120 347	229 846	4 913
33231	Plate work & fabricated structural product mfg..	—	19	5	440	14 256	268	553	7 329	31 706	53 455	86 278	1 169
332312	Fabricated structural metal mfg.....	—	13	3	292	10 039	168	343	5 099	19 774	38 310	58 991	870
33232	Ornamental & architectural metal products mfg.....	1	51	16	1 361	36 994	922	1 681	21 247	74 038	66 892	143 568	3 744
332321	Metal window & door mfg.....	1	12	5	396	9 699	247	444	4 800	18 873	26 224	45 946	812
332322	Sheet metal work mfg.....	1	25	10	865	24 584	610	1 129	15 128	49 687	36 906	88 455	2 769
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	86	14	1 076	32 549	851	1 669	22 087	56 597	33 355	89 069	4 726
33271	Machine shops.....	3	72	8	493	14 505	381	705	9 626	26 103	12 292	37 981	1 858
332710	Machine shops.....	3	72	8	493	14 505	381	705	9 626	26 103	12 292	37 981	1 858
33272	Turned product & screw, nut, & bolt mfg.....	—	14	6	583	18 044	470	964	12 461	30 494	21 063	51 088	2 868
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	4	2	e	D	D	D	D	D	D	D	2 039
3328	Coating, engraving, heat treating, & allied activities.	3	23	6	293	7 528	240	464	5 050	14 747	5 119	19 909	697
33281	Coating, engraving, heat treating, & allied activities.....	3	23	6	293	7 528	240	464	5 050	14 747	5 119	19 909	697
3329	Other fabricated metal product mfg.....	2	26	4	408	14 195	295	573	8 513	31 272	26 447	57 770	3 083
333	Machinery mfg.....	2	116	35	3 288	110 181	2 343	4 789	56 205	257 789	188 708	443 154	15 078
3332	Industrial machinery mfg ..	1	12	3	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	1	10	2	277	10 568	172	315	4 263	16 526	23 667	39 902	D
3333	Commercial & service industry machinery mfg ..	1	23	8	893	30 627	590	1 176	10 874	93 376	51 409	141 111	6 887
33331	Commercial & service industry machinery mfg.....	1	23	8	893	30 627	590	1 176	10 874	93 376	51 409	141 111	6 887
333314	Optical instrument & lens mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	2	13	3	312	14 800	142	282	3 790	38 631	27 870	65 822	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	4	11	5	366	10 126	274	561	5 824	29 455	30 790	60 232	2 295
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	4	11	5	366	10 126	274	561	5 824	29 455	30 790	60 232	2 295
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	4	7	5	333	9 516	250	533	5 456	28 018	29 423	57 408	2 228
3335	Metalworking machinery mfg.....	1	35	5	541	21 381	397	862	14 440	52 170	27 037	79 447	2 442
33351	Metalworking machinery mfg.....	1	35	5	541	21 381	397	862	14 440	52 170	27 037	79 447	2 442
3339	Other general-purpose machinery mfg.....	6	29	13	1 107	33 182	827	1 709	17 801	55 920	43 365	99 786	2 341
33399	All other general-purpose machinery mfg.....	5	16	8	856	23 667	677	1 404	13 176	32 717	23 649	56 576	1 410
333992	Welding & soldering equipment mfg.....	9	2	2	e	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	—	3	2	e	D	D	D	D	D	D	D	D

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	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Fort Lauderdale, FL PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	—	116	46	8 218	308 797	3 533	6 526	86 937	1 201 079	808 956	2 011 274	40 332
3341	Computer & peripheral equipment mfg.....	2	11	7	1 122	51 042	215	481	5 559	122 902	74 241	186 943	6 505
33411	Computer & peripheral equipment mfg.....	2	11	7	1 122	51 042	215	481	5 559	122 902	74 241	186 943	6 505
334111	Electronic computer mfg.....	—	6	4	508	28 062	110	235	2 286	62 559	46 630	108 596	D
334112	Computer storage device mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	25	10	h	D	D	D	D	D	D	D	14 358
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	11	4	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	11	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	2	39	16	g	D	D	D	D	D	D	D	14 547
33441	Semiconductor & other electronic component mfg.....	2	39	16	g	D	D	D	D	D	D	D	14 547
334412	Bare printed circuit board mfg.....	2	13	4	270	6 729	198	328	3 756	13 516	7 331	20 868	D
334418	Printed circuit assembly (electronic assembly) mfg.....	1	6	6	1 627	23 676	532	690	10 620	28 350	45 059	79 418	9 364
3345	Navigational, measuring, medical, & control instruments mfg.....	—	30	10	1 284	53 393	611	1 123	16 234	142 556	93 191	246 966	3 855
33451	Navigational, measuring, medical, & control instruments mfg.....	—	30	10	1 284	53 393	611	1 123	16 234	142 556	93 191	246 966	3 855
334511	Search, detection, navigation, & guidance instrument mfg.....	—	8	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	37	12	1 255	36 646	737	1 328	14 548	88 375	61 149	148 076	3 304
3351	Electric lighting equipment mfg.....	1	11	3	284	9 355	144	279	3 066	30 966	12 433	43 283	1 110
33512	Lighting fixture mfg.....	1	11	3	284	9 355	144	279	3 066	30 966	12 433	43 283	1 110
3353	Electrical equipment mfg ..	1	10	5	533	17 531	360	665	8 071	41 775	29 222	69 837	1 299
33531	Electrical equipment mfg.....	1	10	5	533	17 531	360	665	8 071	41 775	29 222	69 837	1 299
335314	Relay & industrial control mfg.....	1	5	4	467	15 457	310	568	6 799	37 433	24 962	61 179	918
3359	Other electrical equipment & component mfg.....	1	15	4	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	1	10	3	282	6 779	120	172	1 972	10 094	16 155	26 085	D
335999	All other miscellaneous electrical equipment & component mfg.....	1	9	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	108	17	1 768	51 223	1 439	2 692	35 084	129 185	99 787	224 632	4 662
3363	Motor vehicle parts mfg ...	3	29	5	599	13 741	493	819	8 431	28 182	29 279	57 079	2 622
33639	Other motor vehicle parts mfg.....	3	12	3	437	9 790	364	620	6 008	20 299	20 375	40 266	1 828
336399	All other motor vehicle parts mfg.....	3	11	3	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	19	5	387	15 241	276	522	8 583	49 222	32 071	80 590	1 033
33641	Aerospace product & parts mfg.....	—	19	5	387	15 241	276	522	8 583	49 222	32 071	80 590	1 033
336412	Aircraft engine & engine parts mfg.....	—	10	4	294	11 632	214	412	6 582	39 468	26 580	63 270	D
3366	Ship & boat building.....	3	48	7	713	20 640	616	1 255	16 986	49 065	33 313	79 107	792
33661	Ship & boat building.....	3	48	7	713	20 640	616	1 255	16 986	49 065	33 313	79 107	792
336612	Boat building.....	2	31	6	529	13 825	460	913	10 886	34 741	26 314	57 784	475

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Fort Lauderdale, FL PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	4	219	23	2 976	75 655	2 173	4 102	43 839	146 989	153 206	296 232	7 960
3371	Household & institutional furniture & kitchen cabinet mfg	3	164	9	1 099	28 463	747	1 310	14 868	57 044	70 307	126 054	3 289
33711	Wood kitchen cabinet & counter top mfg	6	64	2	310	5 954	245	373	4 321	11 147	8 176	19 355	422
337110	Wood kitchen cabinet & counter top mfg ...	6	64	2	310	5 954	245	373	4 321	11 147	8 176	19 355	422
33712	Household & institutional furniture mfg	2	100	7	789	22 509	502	937	10 547	45 897	62 131	106 699	2 867
337122	Nonupholstered wood household furniture mfg	6	60	2	268	4 995	236	393	3 961	8 412	7 049	15 498	401
337127	Institutional furniture mfg	1	14	4	422	15 389	183	390	5 021	34 013	49 959	82 498	2 208
3372	Office furniture (including fixtures) mfg	4	34	8	927	27 483	710	1 493	17 303	58 836	47 780	103 536	3 103
33721	Office furniture (including fixtures) mfg	4	34	8	927	27 483	710	1 493	17 303	58 836	47 780	103 536	3 103
337215	Showcase, partition, shelving, & locker mfg	5	16	4	427	14 171	332	704	9 270	25 139	21 124	45 302	1 089
3379	Other furniture related product mfg	6	21	6	950	19 709	716	1 299	11 668	31 109	35 119	66 642	1 568
33791	Mattress mfg	9	6	3	567	11 325	405	705	6 486	20 508	20 182	40 794	1 202
337910	Mattress mfg	9	6	3	567	11 325	405	705	6 486	20 508	20 182	40 794	1 202
33792	Blind & shade mfg	1	15	3	383	8 384	311	594	5 182	10 601	14 937	25 848	366
337920	Blind & shade mfg	1	15	3	383	8 384	311	594	5 182	10 601	14 937	25 848	366
339	Miscellaneous mfg	4	253	29	2 594	62 471	1 876	3 129	34 164	161 686	111 247	271 863	7 412
3391	Medical equipment & supplies mfg	3	115	9	1 049	24 689	779	1 161	13 797	67 046	30 827	98 368	4 890
33911	Medical equipment & supplies mfg	3	115	9	1 049	24 689	779	1 161	13 797	67 046	30 827	98 368	4 890
339113	Surgical appliance & supplies mfg	1	13	1	265	5 320	222	189	2 363	15 200	7 305	22 672	839
339115	Ophthalmic goods mfg	—	6	3	263	5 854	193	379	4 169	18 879	9 045	27 958	D
339116	Dental laboratories ...	6	84	2	297	7 411	212	352	4 574	18 746	6 111	25 035	583
3399	Other miscellaneous mfg ..	4	138	20	1 545	37 782	1 097	1 968	20 367	94 640	80 420	173 495	2 522
33991	Jewelry & silverware mfg	7	41	8	500	11 730	357	650	6 910	35 604	28 145	63 840	654
339911	Jewelry (except costume) mfg	6	27	6	335	7 433	240	359	3 891	21 405	18 790	40 392	554
33995	Sign mfg	5	54	4	417	10 966	276	541	5 997	24 660	17 538	41 172	929
339950	Sign mfg	5	54	4	417	10 966	276	541	5 997	24 660	17 538	41 172	929
33999	All other miscellaneous mfg	1	24	5	259	5 568	205	345	3 357	12 813	11 651	24 221	607
	Miami, FL PMSA												
31-33	Manufacturing	2	3 031	663	66 391	1 663 790	48 587	91 171	954 491	4 855 969	3 664 012	8 523 906	228 238
311	Food mfg	1	306	40	4 519	122 843	2 753	4 859	58 291	457 415	474 344	929 913	23 114
3115	Dairy product mfg	—	18	6	679	21 070	354	837	10 715	114 279	198 554	312 767	4 169
31151	Dairy product (except frozen) mfg	—	12	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	6	5	581	19 194	282	713	9 449	108 650	185 277	293 690	D
3116	Meat product mfg	1	24	6	430	10 614	345	679	6 214	40 150	58 453	97 536	1 303
31161	Animal slaughtering & processing	1	24	6	430	10 614	345	679	6 214	40 150	58 453	97 536	1 303
311612	Meat processed from carcasses	—	14	4	316	7 880	246	454	4 228	28 849	46 923	75 610	1 085
3117	Seafood product preparation & packaging ..	—	8	3	320	7 963	248	530	3 389	44 542	47 788	92 121	626
31171	Seafood product preparation & packaging	—	8	3	320	7 963	248	530	3 389	44 542	47 788	92 121	626
3118	Bakeries & tortilla mfg	2	211	18	2 506	70 139	1 395	2 093	30 269	194 392	109 180	303 772	11 547
31181	Bread & bakery product mfg	1	197	17	2 329	66 339	1 263	1 923	28 404	187 115	99 074	286 247	10 354
311811	Retail bakeries	6	128	5	578	7 501	382	418	3 668	16 550	10 205	26 804	1 148
311812	Commercial bakeries .	1	64	11	1 716	58 327	868	1 480	24 367	169 272	87 633	256 947	9 143
3119	Other food mfg	4	21	6	419	10 125	280	522	5 498	52 555	46 471	98 268	4 807

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Miami, FL PMSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	3	28	9	g	D	D	D	D	D	D	D	7 202
3121	Beverage mfg	2	14	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	10	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	2	5	4	758	23 291	283	729	7 553	129 039	145 251	274 111	D
3122	Tobacco mfg	7	14	4	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	7	14	4	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	7	14	4	e	D	D	D	D	D	D	D	D
313	Textile mills	3	66	23	1 890	46 740	1 617	3 215	32 258	118 532	144 650	264 280	8 609
3132	Fabric mills	2	35	12	1 079	23 848	931	1 805	17 401	60 554	75 774	136 265	3 998
31322	Narrow fabric mills & schiffli machine embroidery	4	6	4	281	4 879	245	471	3 544	11 249	6 624	17 879	856
31324	Knit fabric mills	1	14	5	f	D	D	D	D	D	D	D	2 244
313241	Weft knit fabric mills ..	1	7	3	342	8 997	297	636	6 780	22 839	42 430	65 591	905
3133	Textile & fabric finishing & fabric coating mills	5	29	9	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	5	27	8	697	19 671	600	1 263	13 526	44 879	44 070	90 110	3 006
313311	Broadwoven fabric finishing mills	2	21	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	126	30	2 942	45 072	2 499	3 962	29 766	96 304	89 881	185 297	3 750
3141	Textile furnishings mills ...	3	45	6	728	9 834	583	862	6 565	21 053	25 156	46 825	613
31412	Curtain & linen mills	3	45	6	728	9 834	583	862	6 565	21 053	25 156	46 825	613
314121	Curtain & drapery mills	3	26	1	313	3 759	273	344	2 643	10 183	7 902	18 101	D
314129	Other household textile product mills	3	19	5	415	6 075	310	518	3 922	10 870	17 254	28 724	D
3149	Other textile product mills ..	1	81	24	2 214	35 238	1 916	3 100	23 201	75 251	64 725	138 472	3 137
31491	Textile bag & canvas mills	1	29	8	772	11 794	669	1 172	8 000	24 222	20 926	44 914	1 258
314911	Textile bag mills	-	6	3	553	7 897	505	933	5 777	17 594	12 945	30 292	D
31499	All other textile product mills	1	52	16	1 442	23 444	1 247	1 928	15 201	51 029	43 799	93 558	1 879
314999	All other miscellaneous textile product mills ..	1	49	16	1 416	22 948	1 227	1 883	14 872	50 028	42 543	91 300	1 801
315	Apparel mfg	2	414	144	10 602	165 391	9 074	15 374	120 937	398 851	382 669	770 347	10 221
3151	Apparel knitting mills	3	12	7	705	13 377	651	1 234	11 046	23 210	16 766	39 176	D
31519	Other apparel knitting mills	3	9	6	f	D	D	D	D	D	D	D	1 576
315191	Outerwear knitting mills	3	9	6	f	D	D	D	D	D	D	D	1 576
3152	Cut & sew apparel mfg	2	350	129	9 337	141 379	7 962	13 383	103 146	343 970	349 228	683 006	7 899
31521	Cut & sew apparel contractors	3	196	72	4 532	56 286	4 185	6 802	47 545	119 792	48 841	165 847	4 133
315211	Men's & boys' cut & sew apparel contractors ..	6	17	9	477	5 635	447	712	4 740	10 324	2 170	12 285	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	179	63	4 055	50 651	3 738	6 090	42 805	109 468	46 671	153 562	D
31522	Men's & boys' cut & sew apparel mfg	3	34	13	837	15 503	624	1 178	11 501	43 085	64 589	105 677	955
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	14	8	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	108	39	3 521	64 026	2 775	4 797	39 835	171 685	228 037	393 994	2 498
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	6	10	4	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	-	27	11	1 255	25 289	951	1 667	13 548	67 566	93 590	157 427	803
315233	Women's & girls' cut & sew dress mfg	1	30	9	820	13 863	649	1 192	9 374	34 620	47 734	79 744	586
315239	Women's & girls' cut & sew other outerwear mfg	2	30	11	872	14 096	701	1 135	10 033	36 306	33 586	69 835	818
31529	Other cut & sew apparel mfg	4	12	5	447	5 564	378	606	4 265	9 408	7 761	17 488	313
315299	All other cut & sew apparel mfg	4	10	5	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	3	52	8	560	10 635	461	757	6 745	31 671	16 675	48 165	D
31599	Apparel accessories & other apparel mfg	3	52	8	560	10 635	461	757	6 745	31 671	16 675	48 165	D
315999	Other apparel accessories & other apparel mfg	3	36	4	278	5 841	236	388	3 874	10 428	8 619	19 095	428

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	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Miami, FL PMSA—Con.												
31-33	Manufacturing—Con.												
316	Leather & allied product mfg .	—	32	13	2 632	43 269	2 281	4 733	30 007	122 150	90 373	210 072	2 534
3162	Footwear mfg	—	11	5	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	11	5	g	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	2	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	20	8	g	D	D	D	D	D	D	D	1 605
31699	Other leather & allied product mfg	—	20	8	g	D	D	D	D	D	D	D	1 605
316992	Women's handbag & purse mfg	—	7	3	1 111	17 999	941	1 774	12 843	59 131	37 182	96 674	D
321	Wood product mfg	4	45	15	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	5	11	7	387	9 060	331	614	6 182	14 559	22 583	37 296	789
32121	Veneer, plywood, & engineered wood product mfg	5	11	7	387	9 060	331	614	6 182	14 559	22 583	37 296	789
321214	Truss mfg	5	8	6	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	34	8	e	D	D	D	D	D	D	D	D
322	Paper mfg	3	37	15	1 295	34 937	1 006	1 881	22 912	91 307	109 593	197 899	11 670
3222	Converted paper product mfg	1	36	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	16	10	834	22 575	642	1 237	14 199	57 201	68 721	123 140	6 637
322211	Corrugated & solid fiber box mfg	1	10	6	604	17 338	446	861	10 355	47 537	61 760	106 660	6 450
323	Printing & related support activities	3	441	61	5 847	150 852	4 358	7 562	95 153	294 568	214 454	507 718	21 776
3231	Printing & related support activities	3	441	61	5 847	150 852	4 358	7 562	95 153	294 568	214 454	507 718	21 776
32311	Printing	3	396	58	5 475	139 939	4 061	7 072	87 526	272 718	208 958	480 328	20 778
323110	Commercial lithographic printing	3	179	32	2 672	80 212	1 862	3 786	50 313	146 549	111 733	258 725	10 898
323113	Commercial screen printing	2	46	11	1 490	25 596	1 234	1 629	15 201	50 937	44 552	95 115	3 980
323114	Quick printing	4	92	—	367	7 515	269	360	4 810	16 611	11 012	27 601	1 138
323117	Book printing	6	10	5	279	9 774	221	464	6 783	19 226	11 815	30 043	1 581
323119	Other commercial printing	5	43	3	277	6 771	191	327	4 324	14 080	10 899	24 976	1 445
32312	Support activities for printing	4	45	3	372	10 913	297	490	7 627	21 850	5 496	27 390	998
325	Chemical mfg	1	90	26	2 303	90 603	1 229	2 314	46 882	347 698	241 569	604 557	24 662
3254	Pharmaceutical & medicine mfg	1	16	10	1 443	68 662	744	1 435	36 467	280 201	172 832	465 925	21 123
32541	Pharmaceutical & medicine mfg	1	16	10	1 443	68 662	744	1 435	36 467	280 201	172 832	465 925	21 123
325412	Pharmaceutical preparation mfg	1	10	7	676	27 977	323	592	9 633	153 461	114 009	269 494	D
325413	In-vitro diagnostic substance mfg	—	3	3	756	40 264	414	830	26 588	125 615	57 789	194 276	14 336
3256	Soap, cleaning compound, & toilet preparation mfg	6	35	6	319	7 212	186	338	3 546	26 211	18 751	45 334	1 313
326	Plastics & rubber products mfg	3	105	36	2 743	64 594	2 147	4 160	41 463	192 591	147 900	341 933	10 475
3261	Plastics product mfg	2	85	32	2 444	58 033	1 906	3 706	36 847	177 450	133 567	312 267	9 491
32619	Other plastics product mfg	1	59	20	1 530	35 919	1 145	2 304	21 588	115 823	67 268	184 443	5 223
326191	Plastics plumbing fixture mfg	—	3	2	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	56	18	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	6	20	4	299	6 561	241	454	4 616	15 141	14 333	29 666	984
327	Nonmetallic mineral product mfg	1	104	34	2 257	68 404	1 642	3 698	47 452	173 408	165 760	343 602	12 373
3273	Cement & concrete product mfg	1	57	25	1 831	58 939	1 332	3 109	41 390	150 136	148 365	302 206	10 553
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	1	28	14	633	17 814	492	1 038	13 180	41 362	67 327	109 606	3 517
327320	Ready-mix concrete mfg	1	28	14	633	17 814	492	1 038	13 180	41 362	67 327	109 606	3 517
32739	Other concrete product mfg	2	19	5	608	16 760	408	991	9 711	33 071	26 831	60 265	1 741
327390	Other concrete product mfg	2	19	5	608	16 760	408	991	9 711	33 071	26 831	60 265	1 741

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	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Miami, FL PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	1	14	7	442	13 840	348	812	10 141	43 968	26 972	70 468	2 436
3315	Foundries	—	10	4	325	10 294	256	625	7 836	37 025	15 177	51 634	D
33151	Ferrous metal foundries	—	4	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	254	62	6 023	147 646	4 613	9 150	95 039	332 999	239 689	574 418	13 113
3323	Architectural & structural metals mfg	1	95	29	2 898	67 188	2 047	4 025	39 406	169 167	142 563	313 098	3 944
33231	Plate work & fabricated structural product mfg	1	12	7	275	6 985	198	380	3 591	25 270	30 873	56 338	624
33232	Ornamental & architectural metal products mfg	1	83	22	2 623	60 203	1 849	3 645	35 815	143 897	111 690	256 760	3 320
332321	Metal window & door mfg	—	35	14	1 785	39 747	1 261	2 608	23 590	101 098	79 730	182 136	1 250
332322	Sheet metal work mfg	2	23	5	503	13 646	357	600	8 289	29 412	22 970	51 987	1 416
332323	Ornamental & architectural metal work mfg	1	25	3	335	6 810	231	437	3 936	13 387	8 990	22 637	654
3325	Hardware mfg	—	5	2	f	D	D	D	D	D	D	D	413
33251	Hardware mfg	—	5	2	f	D	D	D	D	D	D	D	413
332510	Hardware mfg	—	5	2	f	D	D	D	D	D	D	D	413
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	75	12	1 021	27 827	801	1 425	18 667	53 592	20 882	74 454	4 414
33271	Machine shops	2	66	10	853	22 726	661	1 135	14 959	43 756	15 635	59 257	3 701
332710	Machine shops	2	66	10	853	22 726	661	1 135	14 959	43 756	15 635	59 257	3 701
3328	Coating, engraving, heat treating, & allied activities	3	24	9	470	13 796	379	806	10 263	31 102	13 169	44 303	2 557
33281	Coating, engraving, heat treating, & allied activities	3	24	9	470	13 796	379	806	10 263	31 102	13 169	44 303	2 557
3329	Other fabricated metal product mfg	1	23	5	672	14 230	571	1 225	11 037	30 949	19 320	50 675	1 154
33299	All other fabricated metal product mfg	1	16	5	647	13 762	550	1 201	10 723	29 874	18 445	48 720	1 084
332999	All other miscellaneous fabricated metal product mfg	—	10	3	595	12 646	502	1 130	10 016	26 665	16 881	43 870	989
333	Machinery mfg	3	131	24	1 897	50 487	1 365	2 505	30 739	97 132	116 782	213 789	5 584
3333	Commercial & service industry machinery mfg	1	20	2	328	8 508	237	453	5 076	7 337	32 282	39 866	1 106
33331	Commercial & service industry machinery mfg	1	20	2	328	8 508	237	453	5 076	7 337	32 282	39 866	1 106
333319	Other commercial & service industry machinery mfg	—	10	2	289	7 385	212	413	4 500	5 595	30 438	36 238	857
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	23	12	696	16 234	505	813	9 242	35 629	36 941	73 157	1 448
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	23	12	696	16 234	505	813	9 242	35 629	36 941	73 157	1 448
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	6	18	10	615	14 205	465	749	8 497	30 722	34 234	65 495	D
3335	Metalworking machinery mfg	5	39	3	277	6 337	184	293	4 128	11 673	5 503	17 392	928
33351	Metalworking machinery mfg	5	39	3	277	6 337	184	293	4 128	11 673	5 503	17 392	928
3339	Other general-purpose machinery mfg	—	27	6	435	13 656	324	722	8 701	32 382	29 933	61 137	910
33392	Material handling equipment mfg	—	16	5	392	11 819	294	673	8 029	28 734	28 440	55 952	857
334	Computer & electronic product mfg	—	81	17	5 042	195 496	2 794	6 205	86 866	354 155	372 944	738 189	23 804
3345	Navigational, measuring, medical, & control instruments mfg	—	28	10	4 502	181 432	2 448	5 540	80 005	321 388	331 261	663 734	21 517
33451	Navigational, measuring, medical, & control instruments mfg	—	28	10	4 502	181 432	2 448	5 540	80 005	321 388	331 261	663 734	21 517
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	4	2	h	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	3	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Miami, FL PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	3	46	13	1 214	25 563	970	1 901	14 976	64 040	49 128	113 478	2 555
3351	Electric lighting equipment mfg	2	29	10	900	17 375	750	1 586	10 550	44 816	24 561	69 229	1 759
33512	Lighting fixture mfg	2	28	10	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	19	9	822	15 198	689	1 490	9 315	36 786	19 302	55 923	1 672
336	Transportation equipment mfg	2	104	22	2 827	79 539	2 057	3 977	51 205	160 897	243 045	401 745	11 890
3363	Motor vehicle parts mfg ...	5	26	1	365	7 014	285	600	4 516	7 421	8 449	16 159	499
33632	Motor vehicle electrical & electronic equipment mfg	2	5	1	286	5 391	221	516	3 465	3 991	3 705	7 931	62
336322	Other motor vehicle electrical & electronic equipment mfg	1	4	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	1	31	12	1 434	46 120	917	1 722	27 750	100 921	161 864	258 771	9 765
33641	Aerospace product & parts mfg	1	31	12	1 434	46 120	917	1 722	27 750	100 921	161 864	258 771	9 765
336411	Aircraft mfg	2	9	5	648	16 269	384	755	10 034	33 202	24 021	58 536	D
336412	Aircraft engine & engine parts mfg	—	8	5	459	20 421	318	670	12 245	48 065	128 353	170 203	D
336413	Other aircraft part & auxiliary equipment mfg	2	14	2	327	9 430	215	297	5 471	19 654	9 490	30 032	1 441
3366	Ship & boat building	5	35	7	914	24 224	762	1 492	17 383	48 314	63 921	113 386	1 552
33661	Ship & boat building	5	35	7	914	24 224	762	1 492	17 383	48 314	63 921	113 386	1 552
336612	Boat building	6	28	5	759	19 497	631	1 283	14 474	40 690	58 125	99 966	1 462
337	Furniture & related product mfg	2	311	45	4 325	90 204	3 280	5 995	58 561	175 616	156 845	331 920	8 305
3371	Household & institutional furniture & kitchen cabinet mfg	3	229	24	2 173	45 861	1 765	3 064	31 248	79 234	73 028	152 586	3 309
33711	Wood kitchen cabinet & counter top mfg	5	85	9	779	17 273	595	992	10 410	29 026	20 633	49 795	1 042
337110	Wood kitchen cabinet & counter top mfg ...	5	85	9	779	17 273	595	992	10 410	29 026	20 633	49 795	1 042
33712	Household & institutional furniture mfg	2	144	15	1 394	28 588	1 170	2 072	20 838	50 208	52 395	102 791	2 267
337122	Nonupholstered wood household furniture mfg	4	72	6	418	7 493	368	615	5 832	17 031	16 014	32 975	571
337124	Metal household furniture mfg	—	8	2	343	6 608	284	513	4 797	5 284	14 150	19 398	D
337127	Institutional furniture mfg	1	16	5	391	9 976	320	601	6 844	18 638	12 053	30 941	345
3372	Office furniture (including fixtures) mfg	2	43	11	1 566	33 835	1 102	2 133	20 882	60 428	46 744	106 026	2 982
33721	Office furniture (including fixtures) mfg	2	43	11	1 566	33 835	1 102	2 133	20 882	60 428	46 744	106 026	2 982
337212	Custom architectural woodwork & millwork mfg	—	8	4	620	11 875	347	663	6 535	23 469	13 616	36 107	1 203
337215	Showcase, partition, shelving, & locker mfg	2	19	6	742	17 331	604	1 198	11 768	30 198	27 524	57 538	1 603
3379	Other furniture related product mfg	2	39	10	586	10 508	413	798	6 431	35 954	37 073	73 308	2 014
33791	Mattress mfg	1	11	6	250	4 337	195	390	2 939	21 774	15 081	36 880	939
337910	Mattress mfg	1	11	6	250	4 337	195	390	2 939	21 774	15 081	36 880	939
33792	Blind & shade mfg	3	28	4	336	6 171	218	408	3 492	14 180	21 992	36 428	1 075
337920	Blind & shade mfg	3	28	4	336	6 171	218	408	3 492	14 180	21 992	36 428	1 075
339	Miscellaneous mfg	1	293	26	5 639	180 765	3 299	6 526	57 307	1 131 159	168 212	1 290 831	22 167
3391	Medical equipment & supplies mfg	—	130	14	4 515	155 801	2 481	5 245	43 400	1 075 330	122 315	1 188 046	20 095
33911	Medical equipment & supplies mfg	—	130	14	4 515	155 801	2 481	5 245	43 400	1 075 330	122 315	1 188 046	20 095
339112	Surgical & medical instrument mfg	—	13	5	h	D	D	D	D	D	D	D	15 328
339113	Surgical appliance & supplies mfg	4	12	3	e	D	D	D	D	D	D	D	496
339115	Ophthalmic goods mfg	9	11	3	535	10 265	351	493	5 642	25 482	13 941	39 524	3 751
339116	Dental laboratories ...	7	89	1	e	D	D	D	D	D	D	D	427

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MIAMI-FORT LAUDERDALE, FL CMSA—Con.												
	Miami, FL PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . .	5	163	12	1 124	24 964	818	1 281	13 907	55 829	45 897	102 785	2 072
33991	Jewelry & silverware mfg	5	66	3	353	7 030	250	355	3 768	15 450	21 076	37 802	384
339911	Jewelry (except costume) mfg	5	51	3	299	6 047	208	300	3 200	13 568	19 335	34 201	324
33995	Sign mfg	4	41	4	355	10 254	246	467	5 153	20 823	13 117	33 581	836
339950	Sign mfg	4	41	4	355	10 254	246	467	5 153	20 823	13 117	33 581	836
	NAPLES, FL MSA												
31-33	Manufacturing	3	205	26	2 305	62 433	1 732	3 342	39 697	141 720	117 715	258 993	12 343
323	Printing & related support activities	3	26	4	252	7 128	167	287	3 941	14 453	8 814	23 236	574
3231	Printing & related support activities	3	26	4	252	7 128	167	287	3 941	14 453	8 814	23 236	574
32311	Printing	3	26	4	252	7 128	167	287	3 941	14 453	8 814	23 236	574
326	Plastics & rubber products mfg	3	9	5	302	6 575	250	459	4 713	24 069	13 165	36 121	3 126
3261	Plastics product mfg	1	7	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	7	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	5	588	19 487	467	1 156	13 356	43 582	43 790	87 176	5 594
3273	Cement & concrete product mfg	1	10	4	377	11 732	295	725	8 019	34 253	36 322	70 359	D
32732	Ready-mix concrete mfg	—	5	1	288	9 501	224	587	6 608	26 342	34 890	61 099	D
327320	Ready-mix concrete mfg	—	5	1	288	9 501	224	587	6 608	26 342	34 890	61 099	D
337	Furniture & related product mfg	4	32	3	282	6 459	191	337	4 547	9 839	10 930	20 875	662
	OCALA, FL MSA												
31-33	Manufacturing	1	215	69	9 620	237 983	6 841	12 558	146 429	640 449	649 795	1 287 800	37 510
311	Food mfg	1	6	2	278	7 006	187	359	4 309	67 245	42 067	109 511	1 138
321	Wood product mfg	—	16	13	1 219	30 176	929	1 801	20 923	64 125	101 873	166 372	2 648
3219	Other wood product mfg	—	12	10	1 079	26 221	818	1 548	18 232	56 754	84 633	140 856	D
32191	Millwork	—	5	4	312	6 426	270	516	4 894	9 820	15 859	25 490	1 561
321911	Wood window & door mfg	—	3	3	e	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	7	6	767	19 795	548	1 032	13 338	46 934	68 774	115 366	D
321991	Manufactured home (mobile home) mfg	—	6	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	5	771	21 595	586	1 081	15 553	54 356	52 761	104 809	13 709
3261	Plastics product mfg	6	10	3	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	4	2	e	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	2	2	e	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	31	10	1 549	29 523	1 206	1 893	20 343	81 106	81 719	165 772	3 439
3323	Architectural & structural metals mfg	1	15	5	422	9 535	330	697	7 061	20 368	30 812	50 531	870
33232	Ornamental & architectural metal products mfg	1	9	4	251	5 691	202	462	4 333	14 861	25 097	39 538	769
3326	Spring & wire product mfg	—	3	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	3	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	14	6	697	21 595	446	844	10 195	52 059	35 505	87 808	2 553
3339	Other general-purpose machinery mfg	—	5	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OCALA, FL MSA—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	6	9	4	711	14 127	186	382	4 211	36 152	18 703	55 040	D
3342	Communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
336	Transportation equipment mfg	—	23	8	2 788	76 097	2 025	3 963	45 774	195 380	209 857	402 551	8 706
3362	Motor vehicle body & trailer mfg	—	10	4	2 523	69 637	1 793	3 618	41 867	161 438	194 573	353 791	D
33621	Motor vehicle body & trailer mfg	—	10	4	2 523	69 637	1 793	3 618	41 867	161 438	194 573	353 791	D
336211	Motor vehicle body mfg	—	2	1	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	20	4	422	8 267	344	614	5 362	20 069	18 242	37 169	207
3371	Household & institutional furniture & kitchen cabinet mfg	—	15	3	368	7 051	303	529	4 568	15 588	17 152	32 976	123
33712	Household & institutional furniture mfg	—	5	3	323	6 289	268	476	3 997	14 630	15 794	30 662	83
337121	Upholstered household furniture mfg	—	3	2	e	D	D	D	D	D	D	D	83
339	Miscellaneous mfg	1	16	2	318	7 567	263	495	5 547	8 384	16 276	24 447	125
3391	Medical equipment & supplies mfg	—	9	2	296	7 044	247	468	5 264	7 383	15 533	22 704	78
33911	Medical equipment & supplies mfg	—	9	2	296	7 044	247	468	5 264	7 383	15 533	22 704	78
339113	Surgical appliance & supplies mfg	—	2	2	e	D	D	D	D	D	D	D	D
ORLANDO, FL MSA													
31-33	Manufacturing	1	1 564	390	47 086	1 627 718	27 868	54 680	671 178	4 679 800	3 586 834	8 327 166	527 273
311	Food mfg	—	76	23	3 340	99 138	2 098	4 286	49 923	376 540	463 464	831 589	34 379
3114	Fruit & vegetable preserving & specialty food mfg	—	10	5	716	19 182	550	1 087	11 806	71 812	230 443	293 470	22 292
31141	Frozen food mfg	—	5	4	461	14 116	326	763	7 797	64 776	221 080	277 062	22 118
311411	Frozen fruit, juice, & vegetable mfg	—	5	4	461	14 116	326	763	7 797	64 776	221 080	277 062	22 118
31142	Fruit & vegetable canning, pickling, & drying	3	5	1	255	5 066	224	324	4 009	7 036	9 363	16 408	174
3115	Dairy product mfg	—	4	1	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	1	1	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	44	10	1 380	37 170	707	1 392	16 973	96 638	46 511	143 140	5 033
31181	Bread & bakery product mfg	1	44	10	1 380	37 170	707	1 392	16 973	96 638	46 511	143 140	5 033
311812	Commercial bakeries	1	18	8	1 174	34 408	572	1 201	15 371	89 280	41 434	130 764	4 645
3119	Other food mfg	—	6	3	648	23 269	557	1 302	14 053	162 543	51 247	213 961	3 353
31191	Snack food mfg	—	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	4	9	7	1 094	34 952	260	568	9 764	172 919	318 859	492 999	14 275
3121	Beverage mfg	4	9	7	1 094	34 952	260	568	9 764	172 919	318 859	492 999	14 275
31211	Soft drink & ice mfg	4	7	6	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	6	5	1 026	33 410	235	527	9 225	168 857	317 497	486 158	D
314	Textile product mills	3	40	10	536	10 486	413	702	6 480	23 066	20 789	43 771	935
3149	Other textile product mills	3	27	9	356	7 381	248	433	3 820	15 136	16 288	31 638	D
321	Wood product mfg	2	57	16	1 175	26 259	965	1 987	18 076	56 261	91 624	147 595	7 296
3212	Veneer, plywood, & engineered wood product mfg	3	13	8	574	13 770	455	977	9 017	24 135	34 488	58 398	959
32121	Veneer, plywood, & engineered wood product mfg	3	13	8	574	13 770	455	977	9 017	24 135	34 488	58 398	959
321214	Truss mfg	3	12	8	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	35	6	501	10 506	419	845	7 502	26 722	50 151	76 799	5 817
32191	Millwork	—	19	4	331	7 396	274	558	5 132	20 003	42 187	61 779	5 544
321911	Wood window & door mfg	—	12	4	266	6 025	222	458	4 025	16 747	39 311	55 675	5 404

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORLANDO, FL MSA— Con. Manufacturing— Con.												
322	Paper mfg	1	15	4	335	11 065	252	507	7 093	22 959	50 091	73 190	1 786
3222	Converted paper product mfg	1	15	4	335	11 065	252	507	7 093	22 959	50 091	73 190	1 786
32221	Paperboard container mfg	—	6	3	261	9 027	194	395	5 708	15 889	39 671	55 492	1 524
323	Printing & related support activities	3	296	55	4 067	119 644	2 931	5 465	76 824	319 327	180 130	497 137	17 837
3231	Printing & related support activities	3	296	55	4 067	119 644	2 931	5 465	76 824	319 327	180 130	497 137	17 837
32311	Printing	3	272	46	3 645	105 714	2 601	4 829	66 846	291 356	173 854	463 019	15 380
323110	Commercial lithographic printing	4	125	21	1 956	61 937	1 405	2 675	40 204	133 934	106 544	238 662	7 826
323113	Commercial screen printing	—	27	6	421	9 337	304	564	5 242	68 913	20 219	89 538	1 483
323114	Quick printing	2	79	7	567	13 106	397	630	7 841	30 577	16 066	46 608	1 841
323116	Manifold business form printing	—	6	6	275	8 728	209	368	6 515	25 458	8 072	33 818	D
32312	Support activities for printing	—	24	9	422	13 930	330	636	9 978	27 971	6 276	34 118	2 457
323122	Prepress services	—	17	8	347	11 330	258	511	7 985	23 885	5 425	29 015	D
325	Chemical mfg	1	55	12	749	24 933	416	870	11 134	162 152	185 066	346 652	9 985
326	Plastics & rubber products mfg	3	68	33	2 807	70 536	2 190	3 957	45 434	221 992	214 876	437 566	20 642
3261	Plastics product mfg	3	62	29	2 629	66 509	2 078	3 682	42 632	206 551	201 304	409 036	20 489
32616	Plastics bottle mfg	2	4	4	385	11 673	348	690	9 392	59 972	77 225	136 067	5 476
326160	Plastics bottle mfg	2	4	4	385	11 673	348	690	9 392	59 972	77 225	136 067	5 476
32619	Other plastics product mfg	4	43	16	1 770	42 940	1 364	2 405	25 514	119 999	93 715	214 916	12 338
326199	All other plastics product mfg	4	38	14	1 547	39 130	1 177	2 102	22 761	108 643	84 523	194 761	12 275
327	Nonmetallic mineral product mfg	1	122	37	2 711	76 671	2 076	4 807	51 559	206 506	254 201	461 088	18 604
3273	Cement & concrete product mfg	—	76	28	2 124	62 227	1 647	4 014	42 808	172 755	222 699	395 140	14 154
32732	Ready-mix concrete mfg	—	35	12	994	30 343	766	2 072	22 348	103 112	154 595	257 061	7 388
327320	Ready-mix concrete mfg	—	35	12	994	30 343	766	2 072	22 348	103 112	154 595	257 061	7 388
32733	Concrete pipe, brick, & block mfg	1	14	4	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	26	12	869	23 758	697	1 571	15 745	45 436	38 093	84 241	4 245
327390	Other concrete product mfg	2	26	12	869	23 758	697	1 571	15 745	45 436	38 093	84 241	4 245
331	Primary metal mfg	—	9	2	416	7 648	365	467	5 688	18 474	29 955	47 905	D
3313	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	190	42	3 814	108 638	2 753	5 514	65 589	262 552	299 028	558 906	11 378
3322	Cutlery & handtool mfg	—	7	2	263	10 756	125	308	3 729	35 265	13 165	47 052	935
33221	Cutlery & handtool mfg	—	7	2	263	10 756	125	308	3 729	35 265	13 165	47 052	935
3323	Architectural & structural metals mfg	1	67	20	1 928	48 208	1 407	2 751	29 667	118 275	120 423	238 119	4 391
33231	Plate work & fabricated structural product mfg	2	23	7	814	20 212	609	1 122	12 208	36 394	50 783	86 235	2 270
332311	Prefabricated metal building & component mfg	—	8	3	446	9 487	357	744	7 301	21 010	25 879	46 032	1 202
33232	Ornamental & architectural metal products mfg	1	44	13	1 114	27 996	798	1 629	17 459	81 881	69 640	151 884	2 121
332321	Metal window & door mfg	—	10	4	415	10 900	254	618	6 168	47 544	39 662	87 628	1 069
332322	Sheet metal work mfg	2	25	8	481	12 534	364	657	8 076	25 804	23 925	49 639	784
3324	Boiler, tank, & shipping container mfg	—	7	5	463	17 398	374	766	13 198	46 187	110 878	155 140	1 219
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	3	330	12 357	278	560	10 064	31 849	100 753	130 680	691
332431	Metal can mfg	—	3	3	330	12 357	278	560	10 064	31 849	100 753	130 680	691
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	63	4	470	13 107	355	580	8 510	25 604	11 718	37 331	2 536
33271	Machine shops	2	56	3	404	11 024	309	493	7 331	21 687	9 798	31 318	2 274
332710	Machine shops	2	56	3	404	11 024	309	493	7 331	21 687	9 798	31 318	2 274

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORLANDO, FL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	3	18	4	325	9 272	229	610	5 258	17 363	20 946	38 369	1 063
333	Machinery mfg.....	—	99	30	5 371	223 843	2 163	4 604	64 628	245 431	240 084	529 966	35 940
3331	Agriculture, construction, & mining machinery mfg....	—	10	3	e	D	D	D	D	D	D	D	1 261
33312	Construction machinery mfg.....	—	7	3	347	10 865	242	492	6 478	18 238	28 402	47 703	D
333120	Construction machinery mfg.....	—	7	3	347	10 865	242	492	6 478	18 238	28 402	47 703	D
3332	Industrial machinery mfg..	—	14	6	482	14 254	361	929	10 087	30 454	23 311	53 699	12 800
33329	Other industrial machinery mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	—	3	3	370	10 563	297	814	8 647	23 247	16 032	39 049	D
3333	Commercial & service industry machinery mfg..	—	18	7	2 903	145 164	600	1 181	22 819	46 295	31 354	124 197	15 875
33331	Commercial & service industry machinery mfg.....	—	18	7	2 903	145 164	600	1 181	22 819	46 295	31 354	124 197	15 875
333319	Other commercial & service industry machinery mfg.....	—	11	4	2 720	139 616	496	993	20 411	35 931	21 266	102 932	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	4	2	346	9 538	182	407	3 784	18 238	25 351	42 511	472
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	—	4	2	346	9 538	182	407	3 784	18 238	25 351	42 511	472
3339	Other general-purpose machinery mfg.....	—	30	11	1 139	40 095	667	1 429	18 708	124 226	128 026	250 174	5 263
33392	Material handling equipment mfg.....	—	13	6	693	26 544	366	890	11 668	90 143	112 750	203 231	4 019
333922	Conveyor & conveying equipment mfg.....	—	7	5	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	1	14	5	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	89	38	11 633	596 944	4 348	8 092	126 521	2 019 327	707 359	2 757 515	315 819
3341	Computer & peripheral equipment mfg.....	4	7	3	649	25 825	256	383	3 781	82 703	61 088	141 905	6 569
33411	Computer & peripheral equipment mfg.....	4	7	3	649	25 825	256	383	3 781	82 703	61 088	141 905	6 569
334119	Other computer peripheral equipment mfg.....	3	4	3	621	24 898	247	363	3 380	80 891	58 025	136 950	6 339
3342	Communications equipment mfg.....	—	18	7	2 154	98 564	754	1 144	16 418	376 453	350 239	691 359	D
33421	Telephone apparatus mfg.....	—	6	4	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	—	6	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	27	15	2 757	123 636	1 773	3 481	59 131	505 415	63 705	561 552	D
33441	Semiconductor & other electronic component mfg.....	—	27	15	2 757	123 636	1 773	3 481	59 131	505 415	63 705	561 552	D
334412	Bare printed circuit board mfg.....	—	9	4	333	8 134	274	545	5 931	26 342	12 864	39 237	1 340
334413	Semiconductor & related device mfg....	—	4	3	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	—	6	3	742	31 551	424	861	15 687	63 283	17 502	79 243	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	31	13	6 051	348 337	1 548	3 047	46 778	1 053 370	230 536	1 359 410	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	31	13	6 051	348 337	1 548	3 047	46 778	1 053 370	230 536	1 359 410	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	9	5	543	17 787	248	459	5 028	37 908	29 887	67 989	1 783
334511	Search, detection, navigation, & guidance instrument mfg.....	—	7	3	5 184	320 400	1 155	2 279	39 097	993 829	183 034	1 252 181	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ORLANDO, FL MSA— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg	2	37	15	1 222	38 812	661	1 369	15 880	85 710	82 978	172 402	5 806
3353	Electrical equipment mfg ..	2	14	8	669	22 430	423	919	10 654	47 132	51 667	100 873	2 767
33531	Electrical equipment mfg	2	14	8	669	22 430	423	919	10 654	47 132	51 667	100 873	2 767
335313	Switchgear & switchboard apparatus mfg	1	3	2	350	13 853	221	570	6 884	29 756	36 468	67 843	D
335314	Relay & industrial control mfg	2	9	5	e	D	D	D	D	D	D	D	416
3359	Other electrical equipment & component mfg	1	18	7	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	16	7	514	15 327	211	393	4 508	35 859	28 870	66 284	2 887
335999	All other miscellaneous electrical equipment & component mfg	1	16	7	514	15 327	211	393	4 508	35 859	28 870	66 284	2 887
336	Transportation equipment mfg	1	64	25	4 035	96 716	3 130	6 268	63 882	260 351	243 220	494 069	14 681
3362	Motor vehicle body & trailer mfg	3	15	6	895	19 612	691	1 418	13 683	67 940	47 540	111 525	3 078
33621	Motor vehicle body & trailer mfg	3	15	6	895	19 612	691	1 418	13 683	67 940	47 540	111 525	3 078
336211	Motor vehicle body mfg	4	8	4	811	18 004	621	1 322	12 706	64 696	43 270	104 004	2 928
3363	Motor vehicle parts mfg ...	1	28	12	1 874	41 407	1 412	2 561	23 395	89 356	98 050	187 937	8 048
33632	Motor vehicle electrical & electronic equipment mfg	—	7	3	1 037	22 985	830	1 620	13 870	59 976	65 807	125 608	3 781
336322	Other motor vehicle electrical & electronic equipment mfg	—	7	3	1 037	22 985	830	1 620	13 870	59 976	65 807	125 608	3 781
33639	Other motor vehicle parts mfg	3	10	5	606	12 842	420	622	6 300	17 343	19 922	36 836	3 038
336399	All other motor vehicle parts mfg	4	7	4	f	D	D	D	D	D	D	D	2 988
3364	Aerospace product & parts mfg	—	9	3	388	11 296	339	659	9 414	31 624	26 969	58 551	1 818
33641	Aerospace product & parts mfg	—	9	3	388	11 296	339	659	9 414	31 624	26 969	58 551	1 818
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	9	4	862	23 919	676	1 600	17 045	70 448	69 176	133 557	D
33661	Ship & boat building	—	9	4	862	23 919	676	1 600	17 045	70 448	69 176	133 557	D
336612	Boat building	—	7	4	f	D	D	D	D	D	D	D	1 677
337	Furniture & related product mfg	1	108	15	1 488	31 225	1 183	2 161	21 693	108 827	97 728	207 943	4 048
3371	Household & institutional furniture & kitchen cabinet mfg	1	79	6	842	16 877	674	1 145	11 290	59 097	49 728	110 577	3 262
33711	Wood kitchen cabinet & counter top mfg	3	40	2	284	5 590	216	333	4 019	11 386	6 801	18 285	298
337110	Wood kitchen cabinet & counter top mfg ...	3	40	2	284	5 590	216	333	4 019	11 386	6 801	18 285	298
33712	Household & institutional furniture mfg	1	39	4	558	11 287	458	812	7 271	47 711	42 927	92 292	2 964
3379	Other furniture related product mfg	—	13	5	420	9 068	330	701	6 396	39 177	37 613	76 519	363
33791	Mattress mfg	—	7	3	290	6 961	207	464	4 389	35 423	32 682	67 963	220
337910	Mattress mfg	—	7	3	290	6 961	207	464	4 389	35 423	32 682	67 963	220
339	Miscellaneous mfg	3	197	22	1 859	40 718	1 316	2 362	24 187	88 110	68 537	158 832	4 331
3391	Medical equipment & supplies mfg	4	80	7	644	15 021	468	854	8 830	36 092	16 878	53 347	1 597
33911	Medical equipment & supplies mfg	4	80	7	644	15 021	468	854	8 830	36 092	16 878	53 347	1 597
339116	Dental laboratories ...	6	61	2	291	6 959	213	319	4 298	16 494	6 288	23 403	627
3399	Other miscellaneous mfg ..	2	117	15	1 215	25 697	848	1 508	15 357	52 018	51 659	105 485	2 734
33995	Sign mfg	3	54	3	352	7 290	237	408	3 905	11 738	11 994	23 790	528
339950	Sign mfg	3	54	3	352	7 290	237	408	3 905	11 738	11 994	23 790	528
33999	All other miscellaneous mfg	1	27	8	577	13 251	383	748	7 768	27 620	30 330	59 780	1 765
339999	All other miscellaneous mfg	2	21	6	394	9 166	284	547	6 041	15 826	11 898	29 765	1 041

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PANAMA CITY, FL MSA													
31-33	Manufacturing	-	136	28	3 492	108 697	2 588	5 221	71 286	330 523	419 638	719 007	38 530
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	2	e	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
325191	Gum & wood chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	10	4		6 979	198	542	4 191	19 314	25 851	45 305	995
3273	Cement & concrete product mfg	-	8	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	3	438	16 341	326	669	10 840	39 738	79 415	115 527	5 738
336	Transportation equipment mfg	-	14	4	651	16 339	583	1 087	12 053	36 662	36 303	74 146	D
3366	Ship & boat building	-	8	3	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	8	3	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	1	e	D	D	D	D	D	D	D	D
PENSACOLA, FL MSA													
31-33	Manufacturing	-	295	62	9 421	336 181	7 087	14 027	229 474	1 206 814	1 498 425	2 641 750	91 888
315	Apparel mfg	-	6	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	3	2	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	37	5	347	7 735	255	446	5 243	17 153	11 455	28 463	1 009
3231	Printing & related support activities	4	37	5	347	7 735	255	446	5 243	17 153	11 455	28 463	1 009
32311	Printing	4	34	5	344	7 674	252	442	5 197	17 032	11 428	28 315	1 002
325	Chemical mfg	-	17	9	2 278	108 281	1 635	3 930	74 296	606 948	797 990	1 391 575	47 736
3251	Basic chemical mfg	-	6	1	329	14 583	214	409	7 842	115 636	134 555	250 754	944
32519	Other basic organic chemical mfg	-	2	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	2	1	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	6	6	1 883	92 717	1 378	3 473	65 826	487 516	661 047	1 134 656	46 596
32521	Resin & synthetic rubber mfg	-	4	4	e	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	1	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	1	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	11	5	259	4 703	184	352	3 045	13 383	7 255	20 504	676

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENSACOLA, FL MSA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	23	6	728	30 172	547	1 130	21 245	76 239	57 247	133 487	6 444
3273	Cement & concrete product mfg	-	15	5	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	4	1	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	4	1	e	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	40	8	970	20 484	765	1 401	13 944	53 166	94 055	146 579	4 478
3321	Forging & stamping	-	2	1	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	-	2	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	12	4	472	11 080	367	667	6 957	30 403	63 969	94 215	626
33232	Ornamental & architectural metal products mfg	-	7	2	e	D	D	D	D	D	D	D	516
332321	Metal window & door mfg	-	4	2	e	D	D	D	D	D	D	D	441
333	Machinery mfg	1	11	6	656	31 771	452	861	21 676	76 084	107 713	134 350	968
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	6	545	11 744	403	707	6 601	26 443	38 710	66 996	1 326
3363	Motor vehicle parts mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	30	2	358	6 080	309	545	4 810	10 940	15 277	26 533	516
PUNTA GORDA, FL MSA													
31-33	Manufacturing	2	74	6	587	13 833	362	683	7 383	38 960	38 674	77 742	1 839
SARASOTA—BRADENTON, FL MSA													
31-33	Manufacturing	1	663	138	18 965	571 210	12 938	23 877	301 383	1 159 514	1 838 436	2 988 266	159 841
311	Food mfg	-	12	4	h	D	D	D	D	D	D	D	D
3111	Animal food mfg	-	1	1	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	1	1	e	D	D	D	D	D	D	D	D
311119	Other animal food mfg	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	1	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	1	34	2	357	6 957	296	553	5 036	15 226	13 338	28 130	D
321	Wood product mfg	5	21	6	520	12 094	369	744	7 176	17 952	33 535	51 767	1 592
3212	Veneer, plywood, & engineered wood product mfg	5	7	5	427	10 164	290	609	5 796	14 278	28 698	43 231	1 392
32121	Veneer, plywood, & engineered wood product mfg	5	7	5	427	10 164	290	609	5 796	14 278	28 698	43 231	1 392
321214	Truss mfg	5	5	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	82	6	723	16 949	552	895	11 208	34 714	22 334	57 027	2 832
3231	Printing & related support activities	3	82	6	723	16 949	552	895	11 208	34 714	22 334	57 027	2 832
32311	Printing	4	73	6	669	15 357	507	820	10 151	31 232	21 578	52 766	2 680
323110	Commercial lithographic printing ..	2	25	5	422	9 626	329	512	6 553	19 140	12 379	31 504	1 383

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SARASOTA- BRADENTON, FL MSA —Con. Manufacturing— Con.												
325	Chemical mfg	6	19	4	323	11 278	142	242	3 794	28 821	23 911	53 034	2 555
326	Plastics & rubber products mfg	2	35	10	1 572	44 743	1 168	2 188	21 821	105 591	79 010	184 641	6 463
3261	Plastics product mfg	2	31	10	1 538	43 909	1 139	2 122	21 191	103 338	76 526	179 864	6 382
32619	Other plastics product mfg	2	21	8	1 405	37 406	1 024	1 904	18 464	86 979	60 635	147 065	5 992
326199	All other plastics product mfg	2	17	7	1 363	36 390	998	1 852	17 932	85 129	59 921	144 506	5 958
327	Nonmetallic mineral product mfg	1	39	13	1 429	43 008	1 136	2 275	32 798	144 461	134 668	275 751	8 945
3272	Glass & glass product mfg	—	8	3	726	22 912	618	1 162	18 700	69 174	39 197	107 108	2 661
32721	Glass & glass product mfg	—	8	3	726	22 912	618	1 162	18 700	69 174	39 197	107 108	2 661
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	7	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	25	10	658	19 066	484	1 052	13 402	72 936	93 750	164 580	6 079
32732	Ready-mix concrete mfg	1	15	5	256	7 034	188	405	5 046	26 833	34 502	61 185	D
327320	Ready-mix concrete mfg	1	15	5	256	7 034	188	405	5 046	26 833	34 502	61 185	D
32733	Concrete pipe, brick, & block mfg	9	5	2	254	7 150	204	442	5 074	18 600	15 465	32 265	D
332	Fabricated metal product mfg	—	104	25	2 430	69 771	1 885	3 965	43 063	155 153	111 155	265 072	12 718
3323	Architectural & structural metals mfg	1	24	6	490	13 414	348	791	8 480	26 959	39 121	66 167	922
33232	Ornamental & architectural metal products mfg	—	19	4	e	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	10	4	340	9 036	254	587	5 784	15 041	26 520	41 631	610
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	41	8	698	15 320	578	991	11 180	28 708	12 451	40 717	4 252
33271	Machine shops	1	33	6	304	7 304	244	345	5 192	13 668	4 040	17 621	1 909
332710	Machine shops	1	33	6	304	7 304	244	345	5 192	13 668	4 040	17 621	1 909
33272	Turned product & screw, nut, & bolt mfg	—	8	2	394	8 016	334	646	5 988	15 040	8 411	23 096	2 343
332721	Precision turned product mfg	—	8	2	394	8 016	334	646	5 988	15 040	8 411	23 096	2 343
3329	Other fabricated metal product mfg	—	12	5	835	27 243	634	1 534	14 791	67 440	43 239	109 887	5 828
33291	Metal valve mfg	—	5	3	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	62	13	1 176	43 808	780	1 548	23 140	65 291	76 826	150 629	3 046
3335	Metalworking machinery mfg	5	21	4	330	12 412	253	526	7 834	23 005	18 058	40 516	945
33351	Metalworking machinery mfg	5	21	4	330	12 412	253	526	7 834	23 005	18 058	40 516	945
3339	Other general-purpose machinery mfg	1	14	5	550	22 761	308	617	9 996	19 004	45 712	73 701	1 280
33399	All other general-purpose machinery mfg	1	10	4	490	20 298	262	530	8 682	15 808	41 102	65 835	1 204
333993	Packaging machinery mfg	1	6	3	287	14 408	105	252	5 494	4 251	35 852	49 229	D
334	Computer & electronic product mfg	1	33	15	2 893	91 362	1 540	3 114	32 518	200 087	120 553	318 409	12 266
3342	Communications equipment mfg	1	7	5	559	22 403	263	624	7 406	53 304	43 476	94 448	D
33429	Other communications equipment mfg	3	4	3	353	15 185	171	437	5 295	28 882	22 278	48 648	2 145
334290	Other communications equipment mfg	3	4	3	353	15 185	171	437	5 295	28 882	22 278	48 648	2 145
3344	Semiconductor & other electronic component mfg	—	10	5	1 635	40 455	1 108	2 166	20 204	99 498	46 055	144 907	6 722
33441	Semiconductor & other electronic component mfg	—	10	5	1 635	40 455	1 108	2 166	20 204	99 498	46 055	144 907	6 722
334415	Electronic resistor mfg	—	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	4	3	813	24 773	494	1 093	13 037	65 760	27 607	93 427	D

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31-33	SARASOTA—BRADENTON, FL MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	12	5	675	27 515	156	302	4 267	45 392	28 771	74 815	2 997
33451	Navigational, measuring, medical, & control instruments mfg	1	12	5	675	27 515	156	302	4 267	45 392	28 771	74 815	2 997
334515	Electricity measuring & testing instrument mfg	—	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	14	4	465	13 723	282	475	5 233	30 045	28 499	54 766	7 032
3353	Electrical equipment mfg ..	—	9	4	419	12 706	249	410	4 571	27 852	26 959	51 012	6 925
33531	Electrical equipment mfg	—	9	4	419	12 706	249	410	4 571	27 852	26 959	51 012	6 925
335314	Relay & industrial control mfg	—	5	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	45	14	1 732	38 960	1 182	2 106	19 644	75 470	126 708	193 715	5 024
3366	Ship & boat building	1	19	5	1 195	26 957	772	1 336	11 996	54 036	81 981	127 323	3 557
33661	Ship & boat building	1	19	5	1 195	26 957	772	1 336	11 996	54 036	81 981	127 323	3 557
336612	Boat building	1	16	3	1 102	24 745	695	1 242	10 494	50 224	79 832	121 362	D
337	Furniture & related product mfg	1	58	5	668	16 060	532	930	10 252	37 551	22 212	59 361	730
3371	Household & institutional furniture & kitchen cabinet mfg	1	47	3	521	12 613	430	763	8 760	29 784	17 962	47 363	537
33712	Household & institutional furniture mfg	—	18	2	334	8 028	304	496	5 732	21 241	11 908	33 137	161
337124	Metal household furniture mfg	—	5	2	301	7 572	273	461	5 362	20 373	11 159	31 506	114
339	Miscellaneous mfg	1	80	11	1 184	33 966	789	1 534	17 713	115 861	37 241	148 392	8 353
3391	Medical equipment & supplies mfg	1	43	6	733	22 149	508	988	12 190	91 544	21 291	107 911	6 804
33911	Medical equipment & supplies mfg	1	43	6	733	22 149	508	988	12 190	91 544	21 291	107 911	6 804
339115	Ophthalmic goods mfg	—	2	2	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	37	5	451	11 817	281	546	5 523	24 317	15 950	40 481	1 549
33995	Sign mfg	—	12	3	258	6 389	160	310	2 634	10 721	4 178	15 078	329
339950	Sign mfg	—	12	3	258	6 389	160	310	2 634	10 721	4 178	15 078	329
	TALLAHASSEE, FL MSA												
31-33	Manufacturing	1	159	32	4 075	100 306	2 986	5 805	57 230	331 826	405 013	745 401	13 083
321	Wood product mfg	—	9	3	398	9 015	344	688	6 846	22 000	38 113	59 677	748
3212	Veneer, plywood, & engineered wood product mfg	—	3	3	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	3	3	e	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	44	8	777	21 958	616	1 269	13 467	44 951	38 951	83 733	3 541
3231	Printing & related support activities	1	44	8	777	21 958	616	1 269	13 467	44 951	38 951	83 733	3 541
32311	Printing	—	41	8	766	21 758	607	1 259	13 321	44 554	38 858	83 244	3 518
323110	Commercial lithographic printing ..	—	20	4	359	11 847	280	639	6 622	24 189	24 948	49 079	2 006
334	Computer & electronic product mfg	—	10	5	1 036	28 756	575	1 195	11 550	135 356	212 588	357 203	3 782
3342	Communications equipment mfg	—	5	3	802	24 181	448	942	9 859	123 660	201 162	334 423	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	5	4	563	12 165	478	926	8 945	58 986	46 088	105 412	1 041

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TALLAHASSEE, FL MSA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	3	12	3	509	8 641	428	708	5 544	14 319	13 899	27 973	570
3371	Household & institutional furniture & kitchen cabinet mfg	4	10	2	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	5	3	2	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	5	2	2	e	D	D	D	D	D	D	D	D
TAMPA-ST. PETERSBURG—CLEARWATER, FL MSA													
31-33	Manufacturing	1	2 580	642	77 098	2 246 245	50 591	100 405	1 146 124	6 317 356	6 478 254	12 701 083	516 671
311	Food mfg	—	112	32	5 576	136 342	4 089	8 773	83 002	667 984	944 829	1 607 515	28 730
3114	Fruit & vegetable preserving & specialty food mfg	—	10	5	g	D	D	D	D	D	D	D	8 999
31141	Frozen food mfg	—	4	4	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	3	3	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	8	4	613	16 147	481	1 066	12 820	168 121	146 664	314 705	8 241
31151	Dairy product (except frozen) mfg	—	7	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	4	3	e	D	D	D	D	D	D	D	6 211
3116	Meat product mfg	—	14	5	732	16 612	564	1 200	10 465	91 296	68 215	153 580	1 021
31161	Animal slaughtering & processing	—	14	5	732	16 612	564	1 200	10 465	91 296	68 215	153 580	1 021
311612	Meat processed from carcasses	—	5	2	f	D	D	D	D	D	D	D	402
3117	Seafood product preparation & packaging ..	—	7	2	f	D	D	D	D	D	D	D	2 482
31171	Seafood product preparation & packaging	—	7	2	f	D	D	D	D	D	D	D	2 482
311712	Fresh & frozen seafood processing ..	—	7	2	f	D	D	D	D	D	D	D	2 482
3118	Bakeries & tortilla mfg	—	47	5	894	20 819	505	1 058	10 541	47 851	41 045	88 537	4 298
31181	Bread & bakery product mfg	1	45	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	19	2	484	13 562	185	426	4 719	27 275	11 863	39 104	1 759
31182	Cookie, cracker, & pasta mfg	—	2	2	e	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	6	16	7	434	10 608	285	420	5 029	39 481	32 011	72 020	2 458
31199	All other food mfg	5	7	5	257	6 866	152	266	2 715	18 339	22 288	41 212	1 452
312	Beverage & tobacco product mfg	2	24	9	1 867	46 494	1 075	2 266	24 864	279 549	275 297	555 265	21 729
3121	Beverage mfg	1	18	5	973	30 123	374	739	11 538	77 848	208 935	286 864	12 838
31211	Soft drink & ice mfg	1	14	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
31222	Tobacco product mfg ...	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
312229	Other tobacco product mfg	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
314	Textile product mills	5	66	6	e	D	D	D	D	D	D	D	467
3149	Other textile product mills ..	4	45	6	376	6 355	293	434	3 858	11 772	12 364	24 145	393
315	Apparel mfg	—	44	13	3 580	73 451	2 279	4 306	32 316	232 969	276 370	502 984	7 788
3152	Cut & sew apparel mfg	—	34	13	3 551	72 925	2 253	4 261	31 959	231 871	275 218	500 734	7 702
31521	Cut & sew apparel contractors	1	9	1	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	—	6	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	10	5	2 012	50 027	1 464	2 770	20 620	188 751	238 580	421 364	4 429
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	2	2	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	2	2	f	D	D	D	D	D	D	D	D

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31-33	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31523	Women's & girls' cut & sew apparel mfg	1	12	5	1 043	14 340	362	683	5 410	23 873	29 962	53 272	3 008
315232	Women's & girls' cut & sew blouse & shirt mfg	1	4	1	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	2	2	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	1	5	2	346	5 250	101	192	1 429	15 973	17 951	33 517	D
316	Leather & allied product mfg .	3	11	4	529	9 191	416	747	5 453	20 685	14 225	34 868	D
3169	Other leather & allied product mfg	—	9	3	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	9	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	70	29	2 811	62 785	2 293	4 688	43 185	154 005	216 374	370 433	5 317
3212	Veneer, plywood, & engineered wood product mfg	4	10	6	e	D	D	D	D	D	D	D	882
32121	Veneer, plywood, & engineered wood product mfg	4	10	6	e	D	D	D	D	D	D	D	882
321214	Truss mfg	4	10	6	e	D	D	D	D	D	D	D	882
3219	Other wood product mfg ...	—	57	21	2 292	51 862	1 862	3 820	35 704	127 736	162 128	289 917	3 506
32191	Millwork	—	22	8	567	12 124	417	804	7 624	24 192	39 522	64 370	757
321911	Wood window & door mfg	—	11	5	346	7 151	235	433	4 306	16 009	30 486	47 237	438
32192	Wood container & pallet mfg	—	10	4	413	9 207	360	746	6 824	19 434	9 975	29 175	1 133
321920	Wood container & pallet mfg	—	10	4	413	9 207	360	746	6 824	19 434	9 975	29 175	1 133
32199	All other wood product mfg	—	25	9	1 312	30 531	1 085	2 270	21 256	84 110	112 631	196 372	1 616
321991	Manufactured home (mobile home) mfg ..	—	8	6	1 091	24 770	900	1 906	17 060	73 839	102 288	175 833	1 358
322	Paper mfg	1	29	16	1 239	39 335	922	1 891	24 245	131 550	206 070	334 819	15 791
3222	Converted paper product mfg	1	29	16	1 239	39 335	922	1 891	24 245	131 550	206 070	334 819	15 791
32221	Paperboard container mfg	—	15	10	894	27 824	713	1 457	20 065	87 610	159 483	244 761	14 415
322211	Corrugated & solid fiber box mfg	1	9	6	603	18 953	482	947	13 120	45 559	80 070	125 915	D
323	Printing & related support activities	2	382	48	4 822	133 328	3 514	6 534	83 283	301 585	264 971	568 841	33 016
3231	Printing & related support activities	2	382	48	4 822	133 328	3 514	6 534	83 283	301 585	264 971	568 841	33 016
32311	Printing	2	350	42	4 494	124 439	3 258	6 107	77 325	285 826	260 810	548 976	31 407
323110	Commercial lithographic printing ..	3	149	24	2 383	68 709	1 820	3 638	45 905	147 800	143 662	291 539	23 525
323112	Commercial flexographic printing .	—	9	6	290	8 224	196	415	5 120	38 486	29 089	67 975	1 893
323113	Commercial screen printing	5	36	4	526	12 325	388	658	7 324	26 751	13 134	40 451	1 233
323114	Quick printing	4	106	3	572	12 118	393	574	7 848	23 938	12 477	36 396	1 329
323116	Manifold business form printing	—	8	3	457	16 421	237	367	5 985	33 667	52 683	87 666	D
32312	Support activities for printing	2	32	6	328	8 889	256	427	5 958	15 759	4 161	19 865	1 609
324	Petroleum & coal products mfg	1	9	5	277	10 822	175	378	5 649	71 530	78 280	150 425	1 654
3241	Petroleum & coal products mfg	1	9	5	277	10 822	175	378	5 649	71 530	78 280	150 425	1 654
325	Chemical mfg	—	107	31	4 115	156 536	2 666	5 682	85 656	626 910	915 188	1 543 983	88 372
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	—	13	6	1 342	60 158	910	2 124	37 026	281 783	600 644	888 822	61 552
32531	Fertilizer mfg	—	12	6	g	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	—	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	13	7	1 479	56 134	953	2 109	30 060	207 229	170 364	372 460	16 984
32541	Pharmaceutical & medicine mfg	—	13	7	1 479	56 134	953	2 109	30 060	207 229	170 364	372 460	16 984
325412	Pharmaceutical preparation mfg	—	11	7	g	D	D	D	D	D	D	D	D

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31-33	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con. Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	3	23	5	305	9 860	185	290	3 618	29 013	45 271	75 207	2 189
325510	Paint & coating mfg	2	18	4	257	8 502	155	234	2 875	23 003	35 255	59 088	1 659
	Paint & coating mfg	2	18	4	257	8 502	155	234	2 875	23 003	35 255	59 088	1 659
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	29	5	375	9 185	233	414	4 551	47 168	39 954	87 107	1 431
32561	Soap & cleaning compound mfg	2	24	3	262	6 779	162	329	3 590	36 658	34 565	71 223	1 169
3259	Other chemical product mfg	1	17	3	360	14 440	218	449	6 702	34 314	30 718	64 853	2 817
32599	All other chemical product & preparation mfg	1	11	3	326	13 363	200	412	6 163	31 383	26 582	57 837	2 712
325991	Custom compounding of purchased resin...	—	6	2	254	8 170	154	316	3 247	23 830	18 832	42 428	D
326	Plastics & rubber products mfg	2	132	48	3 663	89 953	2 900	5 674	59 258	225 177	202 963	427 772	20 222
3261	Plastics product mfg	3	111	41	3 081	75 183	2 395	4 581	47 321	181 655	179 932	360 815	18 567
32611	Unsupported plastics film, sheet, & bag mfg ..	3	12	2	272	8 577	219	434	4 616	19 591	21 801	41 191	2 147
32619	Other plastics product mfg	2	74	30	2 340	54 330	1 768	3 326	33 604	132 708	104 447	237 291	11 709
326199	All other plastics product mfg	2	71	29	2 275	52 711	1 713	3 208	32 413	128 275	100 807	229 203	11 530
3262	Rubber product mfg	2	21	7	582	14 770	505	1 093	11 937	43 522	23 031	66 957	1 655
32629	Other rubber product mfg	2	12	4	465	11 963	405	869	9 692	37 715	15 388	53 526	1 269
326299	All other rubber product mfg	2	9	4	454	11 787	399	858	9 566	37 344	15 099	52 864	1 235
327	Nonmetallic mineral product mfg	1	122	29	2 717	75 403	1 951	4 078	48 769	342 261	289 701	632 266	26 032
3273	Cement & concrete product mfg	—	79	19	2 043	52 998	1 451	2 952	34 021	260 290	230 009	490 291	18 841
32732	Ready-mix concrete mfg	—	44	8	636	17 470	460	976	11 845	61 680	107 302	169 018	5 610
327320	Ready-mix concrete mfg	—	44	8	636	17 470	460	976	11 845	61 680	107 302	169 018	5 610
32733	Concrete pipe, brick, & block mfg	2	14	3	413	7 065	340	530	5 200	22 594	21 926	44 033	1 632
327332	Concrete pipe mfg	1	5	3	313	4 512	268	363	3 294	11 309	11 085	21 814	748
32739	Other concrete product mfg	1	18	5	781	20 351	498	1 098	12 132	78 603	39 108	120 755	5 353
327390	Other concrete product mfg	1	18	5	781	20 351	498	1 098	12 132	78 603	39 108	120 755	5 353
331	Primary metal mfg	—	22	10	1 103	32 765	882	1 928	23 211	94 867	113 591	209 377	4 706
3313	Alumina & aluminum production & processing ..	—	3	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	3	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	2	12	4	267	6 842	225	419	4 866	10 573	6 543	17 238	867
332	Fabricated metal product mfg	—	384	89	8 046	225 798	5 648	11 263	134 265	524 920	479 923	1 002 402	23 895
3321	Forging & stamping	1	17	7	599	14 903	407	865	7 212	30 920	29 752	60 078	1 725
33211	Forging & stamping	1	17	7	599	14 903	407	865	7 212	30 920	29 752	60 078	1 725
332116	Metal stamping	—	10	5	497	11 944	358	769	5 654	24 705	18 393	42 850	1 512
3323	Architectural & structural metals mfg	1	107	37	2 910	72 599	1 877	3 741	37 735	184 400	159 108	345 276	6 717
33231	Plate work & fabricated structural product mfg ..	—	32	9	551	18 250	384	806	9 525	45 222	50 745	95 988	2 387
332312	Fabricated structural metal mfg	—	21	7	424	14 062	314	655	8 222	36 782	41 406	78 305	1 361
33232	Ornamental & architectural metal products mfg	1	75	28	2 359	54 349	1 493	2 935	28 210	139 178	108 363	249 288	4 330
332321	Metal window & door mfg	1	21	7	815	18 287	398	780	7 602	35 501	41 067	77 221	1 269
332322	Sheet metal work mfg ..	1	37	17	1 185	28 077	826	1 609	15 931	74 968	51 584	127 322	2 794
332323	Ornamental & architectural metal work mfg	—	17	4	359	7 985	269	546	4 677	28 709	15 712	44 745	267
3324	Boiler, tank, & shipping container mfg	—	12	5	518	24 687	422	913	18 831	50 911	127 554	181 689	1 157
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	3	357	19 364	293	660	15 054	43 808	119 332	166 284	995
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3325	Hardware mfg.....	—	8	4	268	5 840	236	459	3 936	13 428	10 364	23 896	709
33251	Hardware mfg.....	—	8	4	268	5 840	236	459	3 936	13 428	10 364	23 896	709
332510	Hardware mfg.....	—	8	4	268	5 840	236	459	3 936	13 428	10 364	23 896	709
3327	Machine shops, turned product & screw, nut, & bolt mfg.....	1	146	16	1 494	41 100	1 132	2 075	27 183	80 735	49 043	128 536	6 006
33271	Machine shops.....	2	126	9	1 004	28 845	811	1 429	20 216	54 467	28 047	81 936	3 984
332710	Machine shops.....	2	126	9	1 004	28 845	811	1 429	20 216	54 467	28 047	81 936	3 984
33272	Turned product & screw, nut, & bolt mfg.....	—	20	7	490	12 255	321	646	6 967	26 268	20 996	46 600	2 022
332721	Precision turned product mfg.....	—	15	7	462	11 452	300	615	6 596	24 883	20 385	44 582	1 829
3328	Coating, engraving, heat treating, & allied activities.	1	40	5	420	11 042	306	633	6 587	24 421	16 665	40 606	1 573
33281	Coating, engraving, heat treating, & allied activities.....	1	40	5	420	11 042	306	633	6 587	24 421	16 665	40 606	1 573
3329	Other fabricated metal product mfg.....	—	34	9	1 447	46 411	966	2 033	26 721	112 092	64 796	170 398	3 839
33291	Metal valve mfg.....	—	6	3	804	26 854	469	970	11 827	63 258	25 932	82 460	1 515
332912	Fluid power valve & hose fitting mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	28	6	643	19 557	497	1 063	14 894	48 834	38 864	87 938	2 324
332993	Ammunition (except small arms) mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	1	22	5	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	206	59	5 163	170 383	2 802	5 564	76 972	458 265	312 982	756 080	38 839
3332	Industrial machinery mfg ..	—	28	9	603	22 771	270	518	6 847	59 513	41 958	98 222	4 396
33329	Other industrial machinery mfg.....	—	27	9	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.....	—	3	3	254	12 445	59	132	1 482	41 078	26 398	64 637	2 840
3333	Commercial & service industry machinery mfg ..	—	28	14	1 715	49 899	777	1 541	18 974	188 929	147 200	330 062	23 871
33331	Commercial & service industry machinery mfg.....	—	28	14	1 715	49 899	777	1 541	18 974	188 929	147 200	330 062	23 871
333314	Optical instrument & lens mfg.....	—	6	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	1	15	8	940	28 132	253	508	7 708	39 674	56 293	97 516	D
3335	Metalworking machinery mfg.....	1	66	15	1 080	37 388	780	1 578	23 833	68 565	25 362	91 731	4 196
33351	Metalworking machinery mfg.....	1	66	15	1 080	37 388	780	1 578	23 833	68 565	25 362	91 731	4 196
333511	Industrial mold mfg ...	—	27	6	451	18 439	321	752	12 232	27 768	8 591	35 571	1 792
333514	Special die & tool, die set, jig, & fixture mfg ..	1	24	4	313	10 087	235	408	6 208	22 775	7 569	29 935	1 414
3339	Other general-purpose machinery mfg.....	1	55	17	1 494	53 405	796	1 628	23 420	125 173	80 820	201 906	5 175
33399	All other general-purpose machinery mfg.....	—	34	15	1 345	48 966	691	1 470	21 189	113 747	73 431	183 150	4 350
333993	Packaging machinery mfg.....	—	12	10	769	32 501	389	872	12 952	63 482	54 768	116 695	1 992
333999	All other miscellaneous general-purpose machinery mfg.....	1	17	4	452	11 792	217	418	5 531	40 173	12 291	49 662	D
334	Computer & electronic product mfg.....	1	151	63	15 136	537 238	7 280	14 493	183 232	1 162 919	1 087 708	2 185 328	124 071
3341	Computer & peripheral equipment mfg.....	9	15	5	878	29 974	610	1 396	20 634	5 081	94 300	41 087	5 554
33411	Computer & peripheral equipment mfg.....	9	15	5	878	29 974	610	1 396	20 634	5 081	94 300	41 087	5 554
334111	Electronic computer mfg.....	9	5	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	8	8	4	253	8 405	102	269	2 648	12 060	12 890	25 397	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	4	22	8	2 500	112 284	1 166	2 373	41 605	152 915	168 382	322 183	15 450
33421	Telephone apparatus mfg	9	7	3	1 165	67 808	381	839	14 661	80 519	65 490	144 948	12 069
334210	Telephone apparatus mfg	9	7	3	1 165	67 808	381	839	14 661	80 519	65 490	144 948	12 069
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	11	5	1 316	43 511	775	1 512	26 589	69 232	100 599	171 913	3 332
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	11	5	1 316	43 511	775	1 512	26 589	69 232	100 599	171 913	3 332
3344	Semiconductor & other electronic component mfg	—	52	30	5 183	118 289	3 314	6 277	59 342	395 929	523 000	909 393	77 824
33441	Semiconductor & other electronic component mfg	—	52	30	5 183	118 289	3 314	6 277	59 342	395 929	523 000	909 393	77 824
334412	Bare printed circuit board mfg	1	17	11	1 057	23 129	888	1 892	15 980	51 405	60 133	111 745	D
334415	Electronic resistor mfg	4	4	3	339	7 762	226	403	4 179	13 469	4 527	18 014	D
334417	Electronic connector mfg	—	2	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	7	6	2 536	49 694	1 509	2 988	29 306	275 716	422 187	690 105	66 903
334419	Other electronic component mfg	2	14	4	522	18 916	204	360	1 358	8 108	5 225	13 538	D
3345	Navigational, measuring, medical, & control instruments mfg	—	52	19	6 176	264 228	1 868	3 770	52 793	584 358	285 308	871 397	24 026
33451	Navigational, measuring, medical, & control instruments mfg	—	52	19	6 176	264 228	1 868	3 770	52 793	584 358	285 308	871 397	24 026
334510	Electromedical & electrotherapeutic apparatus mfg	—	7	3	1 059	24 499	605	1 157	11 228	44 660	64 785	112 451	3 791
334511	Search, detection, navigation, & guidance instrument mfg	—	11	9	4 373	213 156	932	1 984	32 765	474 222	180 655	652 377	17 044
334513	Industrial process control instrument mfg	3	9	3	314	11 343	144	279	3 708	25 416	14 934	41 022	1 112
3346	Mfg & reproducing magnetic & optical media	—	4	1	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	4	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	4	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	46	25	2 598	75 890	1 767	3 399	37 440	200 272	142 431	344 105	15 178
3353	Electrical equipment mfg ..	1	22	12	1 197	38 016	797	1 459	17 436	91 749	65 159	157 902	5 285
33531	Electrical equipment mfg	1	22	12	1 197	38 016	797	1 459	17 436	91 749	65 159	157 902	5 285
335311	Power, distribution, & specialty transformer mfg	—	5	3	565	13 697	473	817	9 317	25 920	11 213	37 763	D
335314	Relay & industrial control mfg	2	11	6	452	17 361	230	440	5 618	44 204	45 634	90 337	2 623
3359	Other electrical equipment & component mfg	1	18	11	1 227	34 561	813	1 585	17 401	100 963	71 560	173 228	9 715
33593	Wiring device mfg	2	13	7	841	22 960	544	1 031	11 232	69 144	43 600	113 014	9 329
335931	Current-carrying wiring device mfg	1	12	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	104	30	3 394	91 388	2 727	5 501	57 862	190 741	189 602	380 648	11 132
3362	Motor vehicle body & trailer mfg	—	20	8	670	16 547	528	1 040	10 593	33 245	62 736	96 525	1 452
33621	Motor vehicle body & trailer mfg	—	20	8	670	16 547	528	1 040	10 593	33 245	62 736	96 525	1 452
336211	Motor vehicle body mfg	—	10	4	272	7 702	197	385	4 256	15 186	34 276	49 869	645
336214	Travel trailer & camper mfg	—	9	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TAMPA-ST. PETERSBURG-CLEARWATER, FL MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	—	28	6	858	22 103	716	1 499	12 600	47 588	44 123	90 214	5 097
33637	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	1	10	5	546	15 433	378	719	8 649	35 548	25 736	61 431	3 271
33641	Aerospace product & parts mfg	1	10	5	546	15 433	378	719	8 649	35 548	25 736	61 431	3 271
336413	Other aircraft part & auxiliary equipment mfg	2	8	3	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	3	40	11	1 274	36 096	1 070	2 177	25 207	71 704	53 217	125 934	1 083
33661	Ship & boat building	3	40	11	1 274	36 096	1 070	2 177	25 207	71 704	53 217	125 934	1 083
336611	Ship building & repairing	4	14	4	531	15 434	467	982	12 286	33 513	16 044	49 557	627
336612	Boat building	2	26	7	743	20 662	603	1 195	12 921	38 191	37 173	76 377	456
337	Furniture & related product mfg	3	201	32	2 821	59 993	2 065	3 765	36 195	126 675	116 645	240 466	9 108
3371	Household & institutional furniture & kitchen cabinet mfg	5	150	14	1 285	25 256	1 022	1 716	17 687	45 892	42 723	88 641	1 883
33711	Wood kitchen cabinet & counter top mfg	4	104	9	760	14 196	616	1 010	10 224	25 557	20 289	45 877	1 205
337110	Wood kitchen cabinet & counter top mfg ...	4	104	9	760	14 196	616	1 010	10 224	25 557	20 289	45 877	1 205
33712	Household & institutional furniture mfg	5	46	5	525	11 060	406	706	7 463	20 335	22 434	42 764	678
337127	Institutional furniture mfg	6	8	2	294	6 934	206	370	4 370	11 149	11 477	22 594	387
3372	Office furniture (including fixtures) mfg	2	35	11	746	17 235	544	1 016	10 450	38 255	30 088	68 894	987
33721	Office furniture (including fixtures) mfg	2	35	11	746	17 235	544	1 016	10 450	38 255	30 088	68 894	987
337215	Showcase, partition, shelving, & locker mfg	3	19	6	405	8 667	265	483	4 949	20 807	16 387	37 608	497
3379	Other furniture related product mfg	2	16	7	790	17 502	499	1 033	8 058	42 528	43 834	82 931	6 238
33791	Mattress mfg	5	6	3	253	6 534	117	270	1 833	18 430	13 617	29 023	D
337910	Mattress mfg	5	6	3	253	6 534	117	270	1 833	18 430	13 617	29 023	D
33792	Blind & shade mfg	—	10	4	537	10 968	382	763	6 225	24 098	30 217	53 908	D
337920	Blind & shade mfg	—	10	4	537	10 968	382	763	6 225	24 098	30 217	53 908	D
339	Miscellaneous mfg	1	341	62	7 030	209 197	4 644	8 692	94 667	486 019	331 301	815 184	39 900
3391	Medical equipment & supplies mfg	1	168	30	4 184	136 076	2 708	5 086	54 319	253 915	191 482	446 711	25 302
33911	Medical equipment & supplies mfg	1	168	30	4 184	136 076	2 708	5 086	54 319	253 915	191 482	446 711	25 302
339112	Surgical & medical instrument mfg	1	26	6	1 263	52 846	742	1 180	16 818	86 121	79 264	168 147	9 309
339113	Surgical appliance & supplies mfg	—	29	10	847	30 785	389	719	7 194	84 648	50 824	135 638	3 179
339115	Ophthalmic goods mfg	—	8	4	1 255	33 898	989	2 319	19 679	45 902	47 592	91 477	11 660
339116	Dental laboratories ...	4	96	8	711	16 557	519	802	9 729	31 281	11 979	43 594	988
3399	Other miscellaneous mfg ...	1	173	32	2 846	73 121	1 936	3 606	40 348	232 104	139 819	368 473	14 598
33992	Sporting & athletic goods mfg	2	30	6	359	7 105	250	403	3 648	22 419	20 174	40 318	D
339920	Sporting & athletic goods mfg	2	30	6	359	7 105	250	403	3 648	22 419	20 174	40 318	D
33994	Office supplies (except paper) mfg	—	9	2	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	—	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	2	65	13	1 104	28 420	731	1 364	14 246	60 024	47 632	106 616	2 796
339950	Sign mfg	2	65	13	1 104	28 420	731	1 364	14 246	60 024	47 632	106 616	2 796
33999	All other miscellaneous mfg	1	40	10	581	12 378	448	873	8 273	50 314	31 377	81 387	2 304
339999	All other miscellaneous mfg	1	31	5	295	5 626	213	371	3 631	19 977	13 732	33 573	863

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEST PALM BEACH-BOCA RATON, FL MSA												
31-33	Manufacturing	-	1 051	184	26 262	1 138 101	13 889	27 413	372 936	4 116 069	2 346 628	6 344 506	160 016
311	Food mfg.....	1	76	20	2 942	96 579	1 724	4 413	59 267	453 195	443 007	861 812	33 428
3113	Sugar & confectionery product mfg.....	-	13	8	g	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	7	7	g	D	D	D	D	D	D	D	D
311311	Sugarcane mills.....	-	6	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	44	7	608	14 075	402	737	8 819	71 166	26 868	98 061	1 648
31181	Bread & bakery product mfg.....	1	41	7	604	14 011	398	734	8 774	70 782	26 578	97 386	1 630
311812	Commercial bakeries..	1	15	4	310	8 799	200	405	5 586	60 882	21 305	82 210	1 184
312	Beverage & tobacco product mfg.....	-	5	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	5	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills.....	-	6	2	400	7 046	347	724	5 044	14 433	7 552	22 180	878
3132	Fabric mills.....	-	4	1	e	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery.....	-	1	1	e	D	D	D	D	D	D	D	D
313221	Narrow fabric mills.....	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	37	7	420	10 632	267	483	3 925	17 842	14 437	32 413	380
3149	Other textile product mills..	-	19	5	284	7 874	164	300	2 315	12 135	10 764	22 791	260
315	Apparel mfg.....	2	20	1	336	4 421	316	626	3 716	9 342	7 403	16 111	145
3152	Cut & sew apparel mfg....	2	15	1	327	4 308	308	616	3 636	9 090	7 198	15 655	D
31523	Women's & girls' cut & sew apparel mfg.....	-	6	1	283	3 530	268	541	3 003	7 133	6 192	12 699	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	5	28	8	504	12 306	378	748	7 610	29 551	27 381	56 886	1 212
3212	Veneer, plywood, & engineered wood product mfg.....	5	7	5	320	7 615	239	500	4 387	21 212	18 037	39 271	513
32121	Veneer, plywood, & engineered wood product mfg.....	5	7	5	320	7 615	239	500	4 387	21 212	18 037	39 271	513
321214	Truss mfg.....	5	5	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	147	14	1 163	30 327	761	1 321	17 345	67 896	35 249	102 883	3 264
3231	Printing & related support activities.....	3	147	14	1 163	30 327	761	1 321	17 345	67 896	35 249	102 883	3 264
32311	Printing.....	3	135	13	1 069	27 218	687	1 157	15 375	57 954	34 005	91 654	2 701
323110	Commercial lithographic printing..	3	59	5	545	14 173	328	585	8 074	30 521	17 747	48 145	1 518
325	Chemical mfg.....	4	35	10	851	19 336	510	736	10 655	70 117	67 382	137 638	10 597
3254	Pharmaceutical & medicine mfg.....	9	8	2	412	7 195	266	379	4 952	21 006	13 265	34 114	1 027
32541	Pharmaceutical & medicine mfg.....	9	8	2	412	7 195	266	379	4 952	21 006	13 265	34 114	1 027
325414	Biological product (except diagnostic) mfg.....	9	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	34	11	883	18 476	734	1 094	12 412	48 139	31 710	80 276	2 205
3261	Plastics product mfg.....	2	28	9	708	15 023	581	772	10 117	41 316	25 333	67 089	D
32619	Other plastics product mfg.....	2	18	8	640	12 568	540	699	9 059	36 637	20 389	57 446	1 692
326199	All other plastics product mfg.....	2	17	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	67	19	1 130	33 811	783	1 656	22 007	88 602	102 236	187 710	5 164
3273	Cement & concrete product mfg.....	-	38	15	830	25 079	604	1 313	17 499	65 570	67 313	133 373	3 612
32732	Ready-mix concrete mfg.....	-	16	7	353	11 205	276	593	8 164	31 520	46 829	79 214	2 171
327320	Ready-mix concrete mfg.....	-	16	7	353	11 205	276	593	8 164	31 520	46 829	79 214	2 171
32739	Other concrete product mfg.....	1	13	7	396	11 526	264	583	7 603	22 801	11 149	33 704	711
327390	Other concrete product mfg.....	1	13	7	396	11 526	264	583	7 603	22 801	11 149	33 704	711

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WEST PALM BEACH-BOCA RATON, FL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	2	135	21	1 508	47 318	1 095	2 032	28 674	107 551	71 847	178 742	5 402
3323	Architectural & structural metals mfg	1	50	10	724	23 468	530	1 108	14 331	54 385	45 621	99 305	2 365
33232	Ornamental & architectural metal products mfg	1	39	8	607	19 316	442	910	11 705	40 683	30 561	70 623	1 081
332322	Sheet metal work mfg	—	16	5	314	9 716	222	481	5 693	20 548	13 890	33 847	886
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	39	4	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	37	4	365	11 567	276	408	7 362	24 020	9 209	33 534	1 730
332710	Machine shops	1	37	4	365	11 567	276	408	7 362	24 020	9 209	33 534	1 730
333	Machinery mfg	2	45	12	861	31 387	537	1 097	15 377	70 960	51 159	118 639	3 638
3333	Commercial & service industry machinery mfg	6	11	5	253	7 567	111	177	2 209	12 872	9 459	21 672	554
33331	Commercial & service industry machinery mfg	6	11	5	253	7 567	111	177	2 209	12 872	9 459	21 672	554
3339	Other general-purpose machinery mfg	1	14	3	262	11 226	203	448	6 715	30 727	23 910	51 592	1 083
334	Computer & electronic product mfg	—	76	28	6 963	377 645	3 227	6 198	86 376	1 065 706	938 994	2 017 049	57 048
3342	Communications equipment mfg	—	16	6	4 576	302 937	1 800	3 603	54 617	899 131	721 173	1 629 125	41 315
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	8	4	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	8	4	h	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	7	2	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	7	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	25	13	1 824	50 855	1 115	1 968	21 690	114 969	181 099	296 776	D
33441	Semiconductor & other electronic component mfg	1	25	13	1 824	50 855	1 115	1 968	21 690	114 969	181 099	296 776	D
334412	Bare printed circuit board mfg	1	5	2	261	4 470	198	242	2 776	10 466	18 788	28 122	990
334413	Semiconductor & related device mfg	7	6	4	298	9 038	184	318	3 812	25 114	11 591	36 734	6 256
334418	Printed circuit assembly (electronic assembly) mfg	—	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	19	6	320	11 773	140	262	3 832	20 536	13 805	36 196	989
33451	Navigational, measuring, medical, & control instruments mfg	2	19	6	320	11 773	140	262	3 832	20 536	13 805	36 196	989
336	Transportation equipment mfg	—	35	7	i	D	D	D	D	D	D	D	25 269
3364	Aerospace product & parts mfg	—	8	5	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	8	5	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	126	8	904	23 063	690	1 387	14 477	52 370	45 430	98 258	2 432
3371	Household & institutional furniture & kitchen cabinet mfg	6	102	5	546	12 704	457	874	9 362	24 353	19 000	43 478	1 228
33712	Household & institutional furniture mfg	6	53	3	325	7 294	274	506	5 296	14 446	11 433	26 010	532
339	Miscellaneous mfg	6	151	9	950	27 371	676	1 175	14 768	63 602	41 832	105 194	3 216
3391	Medical equipment & supplies mfg	4	81	4	518	16 044	361	634	8 225	35 237	18 203	53 843	1 261
33911	Medical equipment & supplies mfg	4	81	4	518	16 044	361	634	8 225	35 237	18 203	53 843	1 261
3399	Other miscellaneous mfg	8	70	5	432	11 327	315	541	6 543	28 365	23 629	51 351	1 955

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALACHUA COUNTY, FL													
31-33	Manufacturing	1	151	42	5 251	157 142	4 196	7 589	112 601	458 286	546 942	1 010 325	73 181
321	Wood product mfg	-	10	6	605	17 828	528	1 200	14 787	50 533	73 656	124 298	4 546
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	4	6	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	4	4	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	4	4	2	f	D	D	D	D	D	D	D	D
336612	Boat building	4	4	2	f	D	D	D	D	D	D	D	D
BAY COUNTY, FL													
31-33	Manufacturing	-	136	28	3 492	108 697	2 588	5 221	71 286	330 523	419 638	719 007	38 530
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	4	651	16 339	583	1 087	12 053	36 662	36 303	74 146	D
BRADFORD COUNTY, FL													
31-33	Manufacturing	-	15	6	698	10 655	584	951	7 682	21 964	23 411	44 109	518
BREVARD COUNTY, FL													
31-33	Manufacturing	-	494	113	20 832	753 861	10 572	20 154	260 783	1 855 675	1 522 730	3 450 723	105 557
326	Plastics & rubber products mfg	5	26	8	516	8 103	382	589	5 561	17 590	16 346	34 048	1 308
332	Fabricated metal product mfg	2	83	20	1 359	36 903	1 040	1 957	25 402	84 870	35 390	119 115	4 619
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	36	8	586	15 475	435	753	10 716	27 430	11 746	38 333	2 404
33271	Machine shops	1	32	7	506	12 904	367	586	8 913	23 033	8 892	30 985	2 114
332710	Machine shops	1	32	7	506	12 904	367	586	8 913	23 033	8 892	30 985	2 114
333	Machinery mfg	1	27	12	1 255	33 166	865	1 711	18 845	66 352	109 535	182 526	3 159
3333	Commercial & service industry machinery mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BREVARD COUNTY, FL—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	70	29	11 111	438 572	4 415	8 436	105 423	845 463	815 882	1 728 596	52 871
3342	Communications equipment mfg.....	3	14	6	f	D	D	D	D	D	D	D	2 032
3344	Semiconductor & other electronic component mfg.....	-	23	10	3 085	95 117	2 361	4 563	51 155	149 608	112 693	260 733	D
33441	Semiconductor & other electronic component mfg.....	-	23	10	3 085	95 117	2 361	4 563	51 155	149 608	112 693	260 733	D
334412	Bare printed circuit board mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	3	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	21	8	7 035	303 803	1 522	2 761	42 659	642 133	616 549	1 329 815	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	21	8	7 035	303 803	1 522	2 761	42 659	642 133	616 549	1 329 815	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	9	4	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	14	5	516	20 322	177	327	4 065	42 591	17 388	60 449	2 424
336	Transportation equipment mfg.....	-	27	9	3 639	158 881	1 983	4 138	68 460	663 853	357 274	1 019 377	28 327
3364	Aerospace product & parts mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	11	4	f	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	-	11	4	f	D	D	D	D	D	D	D	D
336612	Boat building.....	-	8	4	f	D	D	D	D	D	D	D	D
	BROWARD COUNTY, FL												
31-33	Manufacturing....	2	1 967	371	37 134	1 115 367	24 291	45 582	551 428	3 288 934	2 506 538	5 788 324	162 827
311	Food mfg.....	6	89	16	1 278	26 431	858	1 406	13 363	82 466	78 086	160 471	4 881
3118	Bakeries & tortilla mfg.....	8	52	7	528	9 883	346	500	5 167	27 430	16 957	44 402	D
312	Beverage & tobacco product mfg.....	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
3121	Beverage mfg.....	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
31211	Soft drink & ice mfg.....	1	8	5	509	14 528	176	395	4 829	255 410	190 467	445 917	3 113
314	Textile product mills.....	3	65	6	625	13 322	511	918	8 570	23 423	19 597	42 901	1 051
315	Apparel mfg.....	4	79	8	771	12 595	659	974	8 618	34 018	21 276	54 184	966
3152	Cut & sew apparel mfg....	4	56	5	513	8 800	430	658	5 924	22 749	15 126	36 739	557
321	Wood product mfg.....	1	34	9	613	13 713	456	870	8 849	29 113	30 339	59 411	1 071
323	Printing & related support activities.....	3	311	33	3 332	104 540	2 272	4 164	60 453	219 073	126 926	345 962	24 917
3231	Printing & related support activities.....	3	311	33	3 332	104 540	2 272	4 164	60 453	219 073	126 926	345 962	24 917
32311	Printing.....	2	273	29	3 026	93 963	2 049	3 717	53 892	200 267	119 313	319 527	23 733
323110	Commercial lithographic printing..	1	117	18	1 890	64 260	1 289	2 395	37 436	140 373	81 692	221 270	20 090
325	Chemical mfg.....	6	55	13	827	29 060	514	1 027	14 580	104 738	84 392	194 137	6 075
326	Plastics & rubber products mfg.....	3	84	28	2 411	58 992	1 784	3 454	36 611	124 937	116 260	241 460	9 597
3261	Plastics product mfg.....	3	69	22	2 036	48 775	1 518	2 964	30 692	105 683	99 524	204 311	9 032
32619	Other plastics product mfg.....	2	51	20	1 648	36 270	1 210	2 163	22 621	75 950	54 458	129 344	6 093
326199	All other plastics product mfg.....	2	44	17	1 502	32 973	1 117	1 991	20 860	69 927	49 317	118 141	5 909

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWARD COUNTY, FL—Con.													
31-33 Manufacturing—Con.													
327	Nonmetallic mineral product mfg	2	81	30	1 762	50 301	1 325	2 770	32 474	116 082	136 786	252 748	11 016
3273	Cement & concrete product mfg	1	39	21	1 169	36 356	888	1 859	23 219	77 102	94 163	171 677	8 729
32739	Other concrete product mfg	3	17	9	649	17 782	479	908	10 429	29 559	28 504	57 772	1 702
327390	Other concrete product mfg	3	17	9	649	17 782	479	908	10 429	29 559	28 504	57 772	1 702
332	Fabricated metal product mfg	1	241	52	4 192	126 372	3 069	5 971	78 822	252 896	221 131	476 940	15 328
3323	Architectural & structural metals mfg	—	70	21	1 801	51 250	1 190	2 234	28 576	105 744	120 347	229 846	4 913
33232	Ornamental & architectural metal products mfg	1	51	16	1 361	36 994	922	1 681	21 247	74 038	66 892	143 568	3 744
332322	Sheet metal work mfg	1	25	10	865	24 584	610	1 129	15 128	49 687	36 906	86 455	2 769
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	86	14	1 076	32 549	851	1 669	22 087	56 597	33 355	89 069	4 726
33272	Turned product & screw, nut, & bolt mfg	—	14	6	583	18 044	470	964	12 461	30 494	21 063	51 088	2 868
333	Machinery mfg	2	116	35	3 288	110 181	2 343	4 789	56 205	257 789	188 708	443 154	15 078
3333	Commercial & service industry machinery mfg ..	1	23	8	893	30 627	590	1 176	10 874	93 376	51 409	141 111	6 887
33331	Commercial & service industry machinery mfg	1	23	8	893	30 627	590	1 176	10 874	93 376	51 409	141 111	6 887
3335	Metalworking machinery mfg	1	35	5	541	21 381	397	862	14 440	52 170	27 037	79 447	2 442
33351	Metalworking machinery mfg	1	35	5	541	21 381	397	862	14 440	52 170	27 037	79 447	2 442
3339	Other general-purpose machinery mfg	6	29	13	1 107	33 182	827	1 709	17 801	55 920	43 365	99 786	2 341
33399	All other general-purpose machinery mfg	5	16	8	856	23 667	677	1 404	13 176	32 717	23 649	56 576	1 410
334	Computer & electronic product mfg	—	116	46	8 218	308 797	3 533	6 526	86 937	1 201 079	808 956	2 011 274	40 332
3341	Computer & peripheral equipment mfg	2	11	7	1 122	51 042	215	481	5 559	122 902	74 241	186 943	6 505
33411	Computer & peripheral equipment mfg	2	11	7	1 122	51 042	215	481	5 559	122 902	74 241	186 943	6 505
334111	Electronic computer mfg	—	6	4	508	28 062	110	235	2 286	62 559	46 630	108 596	D
334112	Computer storage device mfg	9	3	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	25	10	h	D	D	D	D	D	D	D	14 358
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	39	16	g	D	D	D	D	D	D	D	14 547
33441	Semiconductor & other electronic component mfg	2	39	16	g	D	D	D	D	D	D	D	14 547
334418	Printed circuit assembly (electronic assembly) mfg	1	6	6	1 627	23 676	532	690	10 620	28 350	45 059	79 418	9 364
3345	Navigational, measuring, medical, & control instruments mfg	—	30	10	1 284	53 393	611	1 123	16 234	142 556	93 191	246 966	3 855
33451	Navigational, measuring, medical, & control instruments mfg	—	30	10	1 284	53 393	611	1 123	16 234	142 556	93 191	246 966	3 855
334511	Search, detection, navigation, & guidance instrument mfg	—	8	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	37	12	1 255	36 646	737	1 328	14 548	88 375	61 149	148 076	3 304
3353	Electrical equipment mfg ..	1	10	5	533	17 531	360	665	8 071	41 775	29 222	69 837	1 299
33531	Electrical equipment mfg	1	10	5	533	17 531	360	665	8 071	41 775	29 222	69 837	1 299

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWARD COUNTY, FL—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	2	108	17	1 768	51 223	1 439	2 692	35 084	129 185	99 787	224 632	4 662
3363	Motor vehicle parts mfg ...	3	29	5	599	13 741	493	819	8 431	28 182	29 279	57 079	2 622
3366	Ship & boat building	3	48	7	713	20 640	616	1 255	16 986	49 065	33 313	79 107	792
33661	Ship & boat building	3	48	7	713	20 640	616	1 255	16 986	49 065	33 313	79 107	792
336612	Boat building	2	31	6	529	13 825	460	913	10 886	34 741	26 314	57 784	475
337	Furniture & related product mfg	4	219	23	2 976	75 655	2 173	4 102	43 839	146 989	153 206	296 232	7 960
3371	Household & institutional furniture & kitchen cabinet mfg	3	164	9	1 099	28 463	747	1 310	14 868	57 044	70 307	126 054	3 289
33712	Household & institutional furniture mfg	2	100	7	789	22 509	502	937	10 547	45 897	62 131	106 699	2 867
3372	Office furniture (including fixtures) mfg	4	34	8	927	27 483	710	1 493	17 303	58 836	47 780	103 536	3 103
33721	Office furniture (including fixtures) mfg	4	34	8	927	27 483	710	1 493	17 303	58 836	47 780	103 536	3 103
3379	Other furniture related product mfg	6	21	6	950	19 709	716	1 299	11 668	31 109	35 119	66 642	1 568
33791	Mattress mfg	9	6	3	567	11 325	405	705	6 486	20 508	20 182	40 794	1 202
337910	Mattress mfg	9	6	3	567	11 325	405	705	6 486	20 508	20 182	40 794	1 202
339	Miscellaneous mfg	4	253	29	2 594	62 471	1 876	3 129	34 164	161 686	111 247	271 863	7 412
3391	Medical equipment & supplies mfg	3	115	9	1 049	24 689	779	1 161	13 797	67 046	30 827	98 368	4 890
33911	Medical equipment & supplies mfg	3	115	9	1 049	24 689	779	1 161	13 797	67 046	30 827	98 368	4 890
3399	Other miscellaneous mfg ..	4	138	20	1 545	37 782	1 097	1 968	20 367	94 640	80 420	173 495	2 522
33991	Jewelry & silverware mfg	7	41	8	500	11 730	357	650	6 910	35 604	28 145	63 840	654
CHARLOTTE COUNTY, FL													
31-33	Manufacturing	2	74	6	587	13 833	362	683	7 383	38 960	38 674	77 742	1 839
CITRUS COUNTY, FL													
31-33	Manufacturing	-	58	10	1 025	18 246	856	1 656	13 292	43 844	50 523	92 422	2 422
CLAY COUNTY, FL													
31-33	Manufacturing	2	74	16	1 579	43 726	1 062	1 819	21 341	120 934	127 005	247 249	9 538
COLLIER COUNTY, FL													
31-33	Manufacturing	3	205	26	2 305	62 433	1 732	3 342	39 697	141 720	117 715	258 993	12 343
327	Nonmetallic mineral product mfg	1	20	5	588	19 487	467	1 156	13 356	43 582	43 790	87 176	5 594
COLUMBIA COUNTY, FL													
31-33	Manufacturing	1	35	10	1 798	46 277	1 454	3 123	30 775	106 607	139 210	244 547	4 094
321	Wood product mfg	-	4	3	743	17 903	682	1 432	13 772	43 936	88 204	131 293	557
3219	Other wood product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
DADE COUNTY, FL													
31-33	Manufacturing	2	3 031	663	66 391	1 663 790	48 587	91 171	954 491	4 855 969	3 664 012	8 523 906	228 238
311	Food mfg.	1	306	40	4 519	122 843	2 753	4 859	58 291	457 415	474 344	929 913	23 114
3115	Dairy product mfg.	—	18	6	679	21 070	354	837	10 715	114 279	198 554	312 767	4 169
31151	Dairy product (except frozen) mfg.	—	12	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.	—	6	5	581	19 194	282	713	9 449	108 650	185 277	293 690	D
3118	Bakeries & tortilla mfg.	2	211	18	2 506	70 139	1 395	2 093	30 269	194 392	109 180	303 772	11 547
31181	Bread & bakery product mfg.	1	197	17	2 329	66 339	1 263	1 923	28 404	187 115	99 074	286 247	10 354
311811	Retail bakeries	6	128	5	578	7 501	382	418	3 668	16 550	10 205	26 804	1 148
311812	Commercial bakeries	1	64	11	1 716	58 327	868	1 480	24 367	169 272	87 633	256 947	9 143
312	Beverage & tobacco product mfg.	3	28	9	g	D	D	D	D	D	D	D	7 202
3121	Beverage mfg.	2	14	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.	2	10	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.	2	5	5	758	23 291	283	729	7 553	129 039	145 251	274 111	D
313	Textile mills	3	66	23	1 890	46 740	1 617	3 215	32 258	118 532	144 650	264 280	8 609
3132	Fabric mills	2	35	12	1 079	23 848	931	1 805	17 401	60 554	75 774	136 265	3 998
31324	Knit fabric mills	1	14	5	f	D	D	D	D	D	D	D	2 244
3133	Textile & fabric finishing & fabric coating mills	5	29	9	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	5	27	8	697	19 671	600	1 263	13 526	44 879	44 070	90 110	3 006
314	Textile product mills	1	126	30	2 942	45 072	2 499	3 962	29 766	96 304	89 881	185 297	3 750
3141	Textile furnishings mills	3	45	6	728	9 834	583	862	6 565	21 053	25 156	46 825	613
31412	Curtain & linen mills	3	45	6	728	9 834	583	862	6 565	21 053	25 156	46 825	613
3149	Other textile product mills	1	81	24	2 214	35 238	1 916	3 100	23 201	75 251	64 725	138 472	3 137
31491	Textile bag & canvas mills	1	29	8	772	11 794	669	1 172	8 000	24 222	20 926	44 914	1 258
314911	Textile bag mills	—	6	3	553	7 897	505	933	5 777	17 594	12 945	30 292	D
31499	All other textile product mills	1	52	16	1 442	23 444	1 247	1 928	15 201	51 029	43 799	93 558	1 879
314999	All other miscellaneous textile product mills	1	49	16	1 416	22 948	1 227	1 883	14 872	50 028	42 543	91 300	1 801
315	Apparel mfg.	2	414	144	10 602	165 391	9 074	15 374	120 937	398 851	382 669	770 347	10 221
3151	Apparel knitting mills	3	12	7	705	13 377	651	1 234	11 046	23 210	16 766	39 176	D
31519	Other apparel knitting mills	3	9	6	f	D	D	D	D	D	D	D	1 576
315191	Outerwear knitting mills	3	9	6	f	D	D	D	D	D	D	D	1 576
3152	Cut & sew apparel mfg.	2	350	129	9 337	141 379	7 962	13 383	103 146	343 970	349 228	683 006	7 899
31521	Cut & sew apparel contractors	3	196	72	4 532	56 286	4 185	6 802	47 545	119 792	48 841	165 847	4 133
315212	Women's, girls', & infants' cut & sew apparel contractors	3	179	63	4 055	50 651	3 738	6 090	42 805	109 468	46 671	153 562	D
31522	Men's & boys' cut & sew apparel mfg.	3	34	13	837	15 503	624	1 178	11 501	43 085	64 589	105 677	955
31523	Women's & girls' cut & sew apparel mfg.	1	108	39	3 521	64 026	2 775	4 797	39 835	171 685	228 037	393 994	2 498
315232	Women's & girls' cut & sew blouse & shirt mfg.	—	27	11	1 255	25 289	951	1 667	13 548	67 566	93 590	157 427	803
315233	Women's & girls' cut & sew dress mfg.	1	30	9	820	13 863	649	1 192	9 374	34 620	47 734	79 744	586
315239	Women's & girls' cut & sew other outerwear mfg.	2	30	11	872	14 096	701	1 135	10 033	36 306	33 586	69 835	818
3159	Apparel accessories & other apparel mfg.	3	52	8	560	10 635	461	757	6 745	31 671	16 675	48 165	D
31599	Apparel accessories & other apparel mfg.	3	52	8	560	10 635	461	757	6 745	31 671	16 675	48 165	D
316	Leather & allied product mfg.	—	32	13	2 632	43 269	2 281	4 733	30 007	122 150	90 373	210 072	2 534
3162	Footwear mfg.	—	11	5	g	D	D	D	D	D	D	D	D
31621	Footwear mfg.	—	11	5	g	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg.	—	2	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg.	—	20	8	g	D	D	D	D	D	D	D	1 605
31699	Other leather & allied product mfg.	—	20	8	g	D	D	D	D	D	D	D	1 605
316992	Women's handbag & purse mfg.	—	7	3	1 111	17 999	941	1 774	12 843	59 131	37 182	96 674	D
321	Wood product mfg.	4	45	15	f	D	D	D	D	D	D	D	D
322	Paper mfg.	3	37	15	1 295	34 937	1 006	1 881	22 912	91 307	109 593	197 899	11 670
3222	Converted paper product mfg.	1	36	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.	1	16	10	834	22 575	642	1 237	14 199	57 201	68 721	123 140	6 637
322211	Corrugated & solid fiber box mfg.	1	10	6	604	17 338	446	861	10 355	47 537	61 760	106 660	6 450

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DADE COUNTY, FL—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	3	441	61	5 847	150 852	4 358	7 562	95 153	294 568	214 454	507 718	21 776
3231	Printing & related support activities.....	3	441	61	5 847	150 852	4 358	7 562	95 153	294 568	214 454	507 718	21 776
32311	Printing.....	3	396	58	5 475	139 939	4 061	7 072	87 526	272 718	208 958	480 328	20 778
323110	Commercial lithographic printing ..	3	179	32	2 672	80 212	1 862	3 786	50 313	146 549	111 733	258 725	10 898
323113	Commercial screen printing.....	2	46	11	1 490	25 596	1 234	1 629	15 201	50 937	44 552	95 115	3 980
325	Chemical mfg.....	1	90	26	2 303	90 603	1 229	2 314	46 882	347 698	241 569	604 557	24 662
3254	Pharmaceutical & medicine mfg.....	1	16	10	1 443	68 662	744	1 435	36 467	280 201	172 832	465 925	21 123
32541	Pharmaceutical & medicine mfg.....	1	16	10	1 443	68 662	744	1 435	36 467	280 201	172 832	465 925	21 123
325412	Pharmaceutical preparation mfg.....	1	10	7	676	27 977	323	592	9 633	153 461	114 009	269 494	D
325413	In-vitro diagnostic substance mfg.....	—	3	3	756	40 264	414	830	26 588	125 615	57 789	194 276	14 336
326	Plastics & rubber products mfg.....	3	105	36	2 743	64 594	2 147	4 160	41 463	192 591	147 900	341 933	10 475
3261	Plastics product mfg.....	2	85	32	2 444	58 033	1 906	3 706	36 847	177 450	133 567	312 267	9 491
32619	Other plastics product mfg.....	1	59	20	1 530	35 919	1 145	2 304	21 588	115 823	67 268	184 443	5 223
326199	All other plastics product mfg.....	2	56	18	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	104	34	2 257	68 404	1 642	3 698	47 452	173 408	165 760	343 602	12 373
3273	Cement & concrete product mfg.....	1	57	25	1 831	58 939	1 332	3 109	41 390	150 136	148 365	302 206	10 553
32732	Ready-mix concrete mfg.....	1	28	14	633	17 814	492	1 038	13 180	41 362	67 327	109 606	3 517
327320	Ready-mix concrete mfg.....	1	28	14	633	17 814	492	1 038	13 180	41 362	67 327	109 606	3 517
32739	Other concrete product mfg.....	2	19	5	608	16 760	408	991	9 711	33 071	26 831	60 265	1 741
327390	Other concrete product mfg.....	2	19	5	608	16 760	408	991	9 711	33 071	26 831	60 265	1 741
332	Fabricated metal product mfg.....	1	254	62	6 023	147 646	4 613	9 150	95 039	332 999	239 689	574 418	13 113
3323	Architectural & structural metals mfg.....	1	95	29	2 898	67 188	2 047	4 025	39 406	169 167	142 563	313 098	3 944
33232	Ornamental & architectural metal products mfg.....	1	83	22	2 623	60 203	1 849	3 645	35 815	143 897	111 690	256 760	3 320
332321	Metal window & door mfg.....	—	35	14	1 785	39 747	1 261	2 608	23 590	101 098	79 730	182 136	1 250
332322	Sheet metal work mfg.....	2	23	5	503	13 646	357	600	8 289	29 412	22 970	51 987	1 416
3325	Hardware mfg.....	—	5	2	f	D	D	D	D	D	D	D	413
33251	Hardware mfg.....	—	5	2	f	D	D	D	D	D	D	D	413
332510	Hardware mfg.....	—	5	2	f	D	D	D	D	D	D	D	413
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	75	12	1 021	27 827	801	1 425	18 667	53 592	20 882	74 454	4 414
33271	Machine shops.....	2	66	10	853	22 726	661	1 135	14 959	43 756	15 635	59 257	3 701
332710	Machine shops.....	2	66	10	853	22 726	661	1 135	14 959	43 756	15 635	59 257	3 701
3329	Other fabricated metal product mfg.....	1	23	5	672	14 230	571	1 225	11 037	30 949	19 320	50 675	1 154
33299	All other fabricated metal product mfg.....	1	16	5	647	13 762	550	1 201	10 723	29 874	18 445	48 720	1 084
332999	All other miscellaneous fabricated metal product mfg.....	—	10	3	595	12 646	502	1 130	10 016	26 665	16 881	43 870	989
333	Machinery mfg.....	3	131	24	1 897	50 487	1 365	2 505	30 739	97 132	116 782	213 789	5 584
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	5	23	12	696	16 234	505	813	9 242	35 629	36 941	73 157	1 448
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	5	23	12	696	16 234	505	813	9 242	35 629	36 941	73 157	1 448
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	6	18	10	615	14 205	465	749	8 497	30 722	34 234	65 495	D
334	Computer & electronic product mfg.....	—	81	17	5 042	195 496	2 794	6 205	86 866	354 155	372 944	738 189	23 804

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DADE COUNTY, FL—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	28	10	4 502	181 432	2 448	5 540	80 005	321 388	331 261	663 734	21 517
33451	Navigational, measuring, medical, & control instruments mfg	—	28	10	4 502	181 432	2 448	5 540	80 005	321 388	331 261	663 734	21 517
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	4	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	3	46	13	1 214	25 563	970	1 901	14 976	64 040	49 128	113 478	2 555
3351	Electric lighting equipment mfg	2	29	10	900	17 375	750	1 586	10 550	44 816	24 561	69 229	1 759
33512	Lighting fixture mfg	2	28	10	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	19	9	822	15 198	689	1 490	9 315	36 786	19 302	55 923	1 672
336	Transportation equipment mfg	2	104	22	2 827	79 539	2 057	3 977	51 205	160 897	243 045	401 745	11 890
3364	Aerospace product & parts mfg	1	31	12	1 434	46 120	917	1 722	27 750	100 921	161 864	258 771	9 765
33641	Aerospace product & parts mfg	1	31	12	1 434	46 120	917	1 722	27 750	100 921	161 864	258 771	9 765
336411	Aircraft mfg	2	9	5	648	16 269	384	755	10 034	33 202	24 021	58 536	D
3366	Ship & boat building	5	35	7	914	24 224	762	1 492	17 383	48 314	63 921	113 386	1 552
33661	Ship & boat building	5	35	7	914	24 224	762	1 492	17 383	48 314	63 921	113 386	1 552
336612	Boat building	6	28	5	759	19 497	631	1 283	14 474	40 690	58 125	99 966	1 462
337	Furniture & related product mfg	2	311	45	4 325	90 204	3 280	5 995	58 561	175 616	156 845	331 920	8 305
3371	Household & institutional furniture & kitchen cabinet mfg	3	229	24	2 173	45 861	1 765	3 064	31 248	79 234	73 028	152 586	3 309
33711	Wood kitchen cabinet & counter top mfg	5	85	9	779	17 273	595	992	10 410	29 026	20 633	49 795	1 042
337110	Wood kitchen cabinet & counter top mfg ...	5	85	9	779	17 273	595	992	10 410	29 026	20 633	49 795	1 042
33712	Household & institutional furniture mfg	2	144	15	1 394	28 588	1 170	2 072	20 838	50 208	52 395	102 791	2 267
3372	Office furniture (including fixtures) mfg	2	43	11	1 566	33 835	1 102	2 133	20 882	60 428	46 744	106 026	2 982
33721	Office furniture (including fixtures) mfg	2	43	11	1 566	33 835	1 102	2 133	20 882	60 428	46 744	106 026	2 982
337212	Custom architectural woodwork & millwork mfg	—	8	4	620	11 875	347	663	6 535	23 469	13 616	36 107	1 203
337215	Showcase, partition, shelving, & locker mfg	2	19	6	742	17 331	604	1 198	11 768	30 198	27 524	57 538	1 603
3379	Other furniture related product mfg	2	39	10	586	10 508	413	798	6 431	35 954	37 073	73 308	2 014
339	Miscellaneous mfg	1	293	26	5 639	180 765	3 299	6 526	57 307	1 131 159	168 212	1 290 831	22 167
3391	Medical equipment & supplies mfg	—	130	14	4 515	155 801	2 481	5 245	43 400	1 075 330	122 315	1 188 046	20 095
33911	Medical equipment & supplies mfg	—	130	14	4 515	155 801	2 481	5 245	43 400	1 075 330	122 315	1 188 046	20 095
339112	Surgical & medical instrument mfg	—	13	5	h	D	D	D	D	D	D	D	15 328
339115	Ophthalmic goods mfg	9	11	3	535	10 265	351	493	5 642	25 482	13 941	39 524	3 751
3399	Other miscellaneous mfg ..	5	163	12	1 124	24 964	818	1 281	13 907	55 829	45 897	102 785	2 072
DUVAL COUNTY, FL													
31-33	Manufacturing	—	754	235	28 237	944 142	19 977	40 496	559 736	3 893 928	3 361 688	7 230 951	254 578
311	Food mfg	—	38	15	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	6	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	6	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	18	4	945	27 310	327	766	9 067	74 081	33 148	107 155	D
31181	Bread & bakery product mfg	—	17	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	—	7	4	898	26 719	292	727	8 735	72 529	32 453	104 905	D
3119	Other food mfg	—	6	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DUVAL COUNTY, FL— Con. Manufacturing— Con.												
312	Beverage & tobacco product mfg	-	9	8	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	8	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	5	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries	-	2	1	g	D	D	D	D	D	D	D	D
312120	Breweries	-	2	1	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	26	9		619	17 703	467	1 008	10 235	52 502	123 808	175 796
322	Paper mfg	-	24	18	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	22	16	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	9	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	-	3	3		525	16 210	433	921	11 929	29 977	39 993	70 506
322232	Envelope mfg	-	3	3		525	16 210	433	921	11 929	29 977	39 993	70 506
323	Printing & related support activities	2	131	31		1 714	48 032	1 200	2 279	27 749	115 852	71 678	187 078
3231	Printing & related support activities	2	131	31		1 714	48 032	1 200	2 279	27 749	115 852	71 678	187 078
32311	Printing	2	114	26	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	50	15		798	26 163	527	1 084	14 336	53 125	28 889	81 892
325	Chemical mfg	2	35	12		1 284	50 291	867	1 847	27 965	347 431	328 177	675 178
326	Plastics & rubber products mfg	-	32	12	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	25	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	42	15	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	28	10	f	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	8	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	6	6		698	23 161	555	1 366	16 797	47 697	100 743	151 734
33122	Rolling & drawing of purchased steel	-	6	6		698	23 161	555	1 366	16 797	47 697	100 743	151 734
331222	Steel wire drawing	-	6	6		698	23 161	555	1 366	16 797	47 697	100 743	151 734
332	Fabricated metal product mfg	-	110	37		3 659	99 761	2 719	5 391	62 986	227 412	309 376	527 893
3323	Architectural & structural metals mfg	-	48	22		2 324	55 806	1 697	3 353	33 039	132 736	135 617	268 280
33231	Plate work & fabricated structural product mfg	-	18	8	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	30	14	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	6	3		754	17 482	468	1 040	8 595	46 997	31 063	77 727
332322	Sheet metal work mfg	-	14	9	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	50	19		1 411	46 401	911	1 833	24 452	107 210	76 839	186 352
336	Transportation equipment mfg	2	34	11	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	14	6	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	14	6	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	2	11	6	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DUVAL COUNTY, FL— Con.												
	Manufacturing— Con.												
337	Furniture & related product mfg	-	58	10	1 161	31 009	914	1 665	18 583	73 809	59 163	131 005	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	40	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	88	15	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	45	8	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	45	8	h	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	2	1	g	D	D	D	D	D	D	D	D
	ESCAMBIA COUNTY, FL												
31-33	Manufacturing	-	236	48	7 526	294 599	5 502	11 209	199 174	977 623	1 296 103	2 214 099	D
322	Paper mfg	-	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	7	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	19	5	672	28 827	509	1 060	20 249	71 095	55 697	126 776	D
332	Fabricated metal product mfg	-	36	7	f	D	D	D	D	D	D	D	4 295
333	Machinery mfg	1	10	5	f	D	D	D	D	D	D	D	D
	FLAGLER COUNTY, FL												
31-33	Manufacturing	1	42	13	1 560	45 915	1 248	2 471	28 588	109 679	151 984	260 660	5 963
	GADSDEN COUNTY, FL												
31-33	Manufacturing	2	32	10	1 399	32 262	1 144	2 228	20 850	78 810	109 793	187 753	4 352
	GULF COUNTY, FL												
31-33	Manufacturing	1	12	7	f	D	D	D	D	D	D	D	10 036
	HAMILTON COUNTY, FL												
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	1	1	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	1	1	f	D	D	D	D	D	D	D	D
	HENDRY COUNTY, FL												
31-33	Manufacturing	-	22	5	724	26 759	512	1 301	18 085	141 943	303 700	437 726	D
311	Food mfg	-	5	3	587	24 409	396	1 138	16 303	137 422	297 590	426 747	D
	HERNANDO COUNTY, FL												
31-33	Manufacturing	1	72	13	1 192	29 427	861	1 447	15 744	150 615	87 618	235 243	13 889
	HIGHLANDS COUNTY, FL												
31-33	Manufacturing	-	54	10	1 199	27 009	953	1 685	19 028	71 422	120 112	191 620	22 760

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HILLSBOROUGH COUNTY, FL													
31-33	Manufacturing	1	960	268	30 861	859 345	21 533	43 661	497 612	2 707 195	3 305 061	6 019 756	216 524
311	Food mfg	-	61	21	3 226	75 928	2 339	5 079	44 668	354 744	431 289	779 749	14 863
3116	Meat product mfg	-	9	4	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	9	4	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	-	7	2	f	D	D	D	D	D	D	D	2 482
31171	Seafood product preparation & packaging	-	7	2	f	D	D	D	D	D	D	D	2 482
311712	Fresh & frozen seafood processing	-	7	2	f	D	D	D	D	D	D	D	2 482
3118	Bakeries & tortilla mfg	-	24	4	769	19 190	442	959	9 708	43 147	38 170	80 959	4 109
312	Beverage & tobacco product mfg	2	16	8	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	10	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	7	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
31222	Tobacco product mfg	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
312229	Other tobacco product mfg	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
315	Apparel mfg	-	20	7	g	D	D	D	D	D	D	D	4 860
3152	Cut & sew apparel mfg	-	14	7	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	7	3	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	32	18	2 017	45 099	1 664	3 482	31 114	111 195	154 555	265 349	3 910
3219	Other wood product mfg	-	26	14	1 669	38 043	1 369	2 894	25 964	91 151	109 418	200 174	2 608
32199	All other wood product mfg	-	10	6	961	22 891	794	1 710	15 542	57 293	71 551	128 585	1 115
321991	Manufactured home (mobile home) mfg	-	4	4	f	D	D	D	D	D	D	D	1 028
322	Paper mfg	1	20	9	827	27 004	644	1 330	18 053	89 021	153 638	240 819	D
3222	Converted paper product mfg	1	20	9	827	27 004	644	1 330	18 053	89 021	153 638	240 819	D
32221	Paperboard container mfg	1	11	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	166	23	2 334	63 747	1 739	3 207	41 301	150 107	119 353	270 157	18 381
3231	Printing & related support activities	1	166	23	2 334	63 747	1 739	3 207	41 301	150 107	119 353	270 157	18 381
32311	Printing	1	151	20	g	D	D	D	D	D	D	D	17 279
323110	Commercial lithographic printing	1	66	11	1 273	35 854	974	1 907	23 875	72 283	75 421	147 771	14 339
325	Chemical mfg	-	50	14	2 368	102 418	1 556	3 429	58 186	425 672	682 720	1 116 719	71 493
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	8	5	g	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	8	5	g	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	49	21	1 368	34 156	1 050	2 038	20 182	84 362	100 587	182 959	8 703
3261	Plastics product mfg	4	37	17	1 195	29 719	912	1 743	16 961	73 271	90 875	162 160	8 061
32619	Other plastics product mfg	4	21	10	685	15 261	467	829	7 619	41 514	35 259	75 996	2 587
326199	All other plastics product mfg	4	21	10	685	15 261	467	829	7 619	41 514	35 259	75 996	2 587
327	Nonmetallic mineral product mfg	-	52	17	1 685	46 143	1 201	2 566	30 246	186 055	163 866	353 124	10 283
3273	Cement & concrete product mfg	-	32	11	1 248	30 923	880	1 791	20 074	120 001	115 663	238 228	7 212
32739	Other concrete product mfg	1	6	4	628	16 869	379	878	9 768	71 672	33 822	108 549	4 781
327390	Other concrete product mfg	1	6	4	628	16 869	379	878	9 768	71 672	33 822	108 549	4 781
331	Primary metal mfg	-	13	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HILLSBOROUGH COUNTY, FL—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	129	41	3 169	95 957	2 227	4 446	58 151	233 921	285 079	522 345	9 966
3323	Architectural & structural metals mfg	—	47	21	1 199	31 653	785	1 515	16 889	86 646	89 618	177 030	2 721
33232	Ornamental & architectural metal products mfg	1	33	16	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	1	11	5	507	11 191	304	581	5 575	21 315	26 625	47 984	785
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	31	6	550	13 417	363	717	7 895	28 386	20 563	47 964	1 711
333	Machinery mfg	1	49	11	1 215	38 835	440	831	13 164	71 092	86 003	157 570	4 662
3333	Commercial & service industry machinery mfg ..	1	11	5	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	1	11	5	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	1	9	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	40	15	3 027	85 877	1 903	3 723	46 329	156 676	252 208	412 584	D
3342	Communications equipment mfg	1	11	4	1 266	42 843	725	1 453	25 942	65 170	97 386	165 718	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	5	2	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	5	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	15	7	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	15	7	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	6	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	3	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	14	9	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	37	11	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	15	5	828	25 423	685	1 476	17 776	48 176	34 066	83 868	859
33661	Ship & boat building	2	15	5	828	25 423	685	1 476	17 776	48 176	34 066	83 868	859
337	Furniture & related product mfg	3	70	17	1 207	25 803	924	1 749	15 040	56 814	50 964	107 788	3 003
339	Miscellaneous mfg	2	107	12	925	20 274	633	1 117	11 730	52 059	32 487	84 722	D
INDIAN RIVER COUNTY, FL													
31-33	Manufacturing	6	116	18	1 825	55 420	1 177	2 258	29 725	103 731	123 299	219 777	9 096
JACKSON COUNTY, FL													
31-33	Manufacturing	—	26	9	1 344	27 348	1 172	2 394	22 034	61 321	116 123	182 084	5 750
333	Machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAKE COUNTY, FL													
31-33	Manufacturing	1	164	42	3 730	90 185	2 783	5 473	57 182	234 559	339 507	578 468	17 882
311	Food mfg.....	-	10	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	26	7	733	20 298	587	1 301	14 433	41 019	55 126	97 321	3 485
3273	Cement & concrete product mfg.....	-	18	4	570	15 450	476	1 094	11 260	29 053	41 577	71 215	2 473
332	Fabricated metal product mfg.....	-	20	5	624	14 837	497	983	10 551	29 069	33 471	61 881	1 961
3323	Architectural & structural metals mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg..	-	7	4	f	D	D	D	D	D	D	D	D
LEE COUNTY, FL													
31-33	Manufacturing	3	357	64	5 363	141 129	3 904	7 347	85 578	388 859	350 373	741 763	22 213
311	Food mfg.....	5	10	4	534	11 764	459	970	9 365	84 273	89 540	173 431	5 366
327	Nonmetallic mineral product mfg.....	1	27	9	537	16 245	442	1 071	12 456	44 895	35 514	80 726	2 882
3273	Cement & concrete product mfg.....	1	19	9	510	15 675	419	1 037	12 046	43 355	34 278	77 934	2 733
332	Fabricated metal product mfg.....	1	40	7	740	24 146	489	862	11 034	44 968	36 575	81 817	2 208
333	Machinery mfg.....	5	18	6	583	16 618	418	883	9 894	50 445	31 985	80 916	2 704
339	Miscellaneous mfg.....	3	63	4	666	16 192	467	717	12 331	44 783	28 348	74 143	2 242
LEON COUNTY, FL													
31-33	Manufacturing	-	127	22	2 676	68 044	1 842	3 577	36 380	253 016	295 220	557 648	8 731
323	Printing & related support activities.....	1	41	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	1	41	7	f	D	D	D	D	D	D	D	D
32311	Printing.....	1	38	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	5	4	563	12 165	478	926	8 945	58 986	46 088	105 412	1 041
MADISON COUNTY, FL													
31-33	Manufacturing	-	11	5	1 114	25 775	907	1 885	17 781	73 390	197 965	270 313	D
311	Food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MANATEE COUNTY, FL													
31-33	Manufacturing	1	284	71	11 156	348 352	7 477	13 398	188 747	685 720	1 445 861	2 115 692	122 144
311	Food mfg	-	8	4	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	17	8	1 057	33 912	818	1 690	25 285	113 894	106 457	216 977	6 711
3272	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	46	9	781	19 162	618	1 174	13 389	39 692	37 175	76 846	3 117
333	Machinery mfg	3	33	9	797	26 689	577	1 132	15 084	50 930	33 973	84 592	1 820
334	Computer & electronic product mfg	-	11	7	1 453	49 788	680	1 524	18 679	109 913	67 397	176 338	5 388
3344	Semiconductor & other electronic component mfg	-	5	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	27	11	1 518	34 385	1 022	1 840	16 516	66 076	113 110	170 429	4 578
3366	Ship & boat building	-	13	4	1 087	24 757	692	1 209	10 438	48 920	76 371	116 542	3 379
33661	Ship & boat building	-	13	4	1 087	24 757	692	1 209	10 438	48 920	76 371	116 542	3 379
336612	Boat building	-	11	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	34	6	839	23 617	578	1 141	12 520	92 839	19 291	107 083	6 549
3391	Medical equipment & supplies mfg	-	18	4	f	D	D	D	D	D	D	D	6 213
33911	Medical equipment & supplies mfg	-	18	4	f	D	D	D	D	D	D	D	6 213
MARION COUNTY, FL													
31-33	Manufacturing	1	215	69	9 620	237 983	6 841	12 558	146 429	640 449	649 795	1 287 800	37 510
321	Wood product mfg	-	16	13	1 219	30 176	929	1 801	20 923	64 125	101 873	166 372	2 648
3219	Other wood product mfg	-	12	10	1 079	26 221	818	1 548	18 232	56 754	84 633	140 856	D
32199	All other wood product mfg	-	7	6	767	19 795	548	1 032	13 338	46 934	68 774	115 366	D
321991	Manufactured home (mobile home) mfg ..	-	6	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	5	771	21 595	586	1 081	15 553	54 356	52 761	104 809	13 709
332	Fabricated metal product mfg	-	31	10	1 549	29 523	1 206	1 893	20 343	81 106	81 719	165 772	3 439
3326	Spring & wire product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	14	6	697	21 595	446	844	10 195	52 059	35 505	87 808	2 553
334	Computer & electronic product mfg	6	9	4	711	14 127	186	382	4 211	36 152	18 703	55 040	D
3342	Communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	5	2	587	9 591	115	204	3 082	22 063	16 446	39 083	1 511
336	Transportation equipment mfg	-	23	8	2 788	76 097	2 025	3 963	45 774	195 380	209 857	402 551	8 706
3362	Motor vehicle body & trailer mfg	-	10	4	2 523	69 637	1 793	3 618	41 867	161 438	194 573	353 791	D
33621	Motor vehicle body & trailer mfg	-	10	4	2 523	69 637	1 793	3 618	41 867	161 438	194 573	353 791	D
336211	Motor vehicle body mfg	-	2	1	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARTIN COUNTY, FL													
31-33	Manufacturing	2	172	26	3 274	101 739	2 188	4 715	69 150	295 642	273 687	555 176	18 415
336	Transportation equipment mfg	-	18	8	1 535	56 664	902	2 294	41 451	180 078	117 543	283 933	8 546
3364	Aerospace product & parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
NASSAU COUNTY, FL													
31-33	Manufacturing	-	34	8	1 790	77 283	1 437	3 067	58 444	298 488	323 369	630 602	32 901
322	Paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
OKALOOSA COUNTY, FL													
31-33	Manufacturing	1	133	27	3 448	81 516	2 301	4 073	42 146	167 705	131 976	296 471	11 746
315	Apparel mfg	-	7	4	f	D	D	D	D	D	D	D	242
3152	Cut & sew apparel mfg	-	7	4	f	D	D	D	D	D	D	D	242
334	Computer & electronic product mfg	-	11	7	1 116	30 914	523	1 013	11 038	60 538	32 576	94 448	1 501
3345	Navigational, measuring, medical, & control instruments mfg	-	6	3	825	24 247	434	840	9 844	46 183	27 230	73 941	1 129
33451	Navigational, measuring, medical, & control instruments mfg	-	6	3	825	24 247	434	840	9 844	46 183	27 230	73 941	1 129
334511	Search, detection, navigation, & guidance instrument mfg	-	3	3	786	22 715	418	809	9 378	43 698	25 959	70 123	1 063
ORANGE COUNTY, FL													
31-33	Manufacturing	1	889	241	32 437	1 213 359	18 156	36 453	468 197	3 402 691	2 292 534	5 786 572	427 331
311	Food mfg	-	47	14	2 566	79 983	1 510	3 304	37 281	293 411	301 925	585 616	D
3118	Bakeries & tortilla mfg	1	32	9	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	32	9	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	14	7	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	5	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	3	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	4	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	4	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	26	5	514	11 795	421	931	8 373	21 594	29 588	50 919	847
323	Printing & related support activities	3	190	45	3 156	97 092	2 330	4 404	63 505	271 139	150 157	419 011	14 932
3231	Printing & related support activities	3	190	45	3 156	97 092	2 330	4 404	63 505	271 139	150 157	419 011	14 932
32311	Printing	3	172	36	2 754	83 542	2 016	3 789	53 800	243 914	144 058	385 814	12 518
323110	Commercial lithographic printing ..	5	80	16	1 553	51 787	1 145	2 171	33 882	111 622	91 988	201 807	6 538
325	Chemical mfg	1	34	10	f	D	D	D	D	D	D	D	8 670
326	Plastics & rubber products mfg	2	39	20	1 990	51 195	1 570	2 794	33 426	175 823	163 430	339 482	D
3261	Plastics product mfg	3	35	17	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	23	9	1 268	31 119	978	1 643	18 461	96 162	63 344	159 861	D
326199	All other plastics product mfg	4	21	8	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	60	21	1 455	42 075	1 106	2 711	28 314	130 167	142 579	271 354	11 112
3273	Cement & concrete product mfg	-	40	18	1 243	37 665	935	2 370	25 200	116 980	134 145	249 889	9 165
32732	Ready-mix concrete mfg .	-	16	7	696	21 283	532	1 521	15 657	72 907	99 706	171 701	5 815
327320	Ready-mix concrete mfg	-	16	7	696	21 283	532	1 521	15 657	72 907	99 706	171 701	5 815

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ORANGE COUNTY, FL —Con.												
31-33	Manufacturing— Con.												
332	Fabricated metal product mfg	1	107	28	2 243	68 627	1 624	3 238	41 651	171 216	215 384	385 515	6 416
3323	Architectural & structural metals mfg	2	43	11	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	31	9	775	21 061	550	1 152	13 070	66 329	55 656	122 328	D
333	Machinery mfg	—	51	17	4 226	192 358	1 342	2 915	43 278	176 846	195 378	418 824	D
3333	Commercial & service industry machinery mfg ..	—	10	6	h	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	10	6	h	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	5	3	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	18	7	693	27 990	371	925	11 527	97 495	113 677	211 088	D
334	Computer & electronic product mfg	—	49	20	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	14	10	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	14	10	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	4	3	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	5	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	19	7	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	19	7	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	5	2	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	18	9	646	17 725	320	587	6 776	41 938	36 711	80 849	3 339
336	Transportation equipment mfg	1	37	16	2 786	67 799	2 195	4 542	46 245	185 570	175 724	354 477	8 377
3362	Motor vehicle body & trailer mfg	6	7	3	560	11 484	407	801	7 832	42 472	20 375	62 892	D
33621	Motor vehicle body & trailer mfg	6	7	3	560	11 484	407	801	7 832	42 472	20 375	62 892	D
336211	Motor vehicle body mfg	7	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	15	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	6	4	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	6	4	f	D	D	D	D	D	D	D	D
336612	Boat building	—	6	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	49	8	697	15 201	552	1 035	10 968	50 986	47 373	98 291	D
339	Miscellaneous mfg	3	115	13	1 093	23 783	788	1 429	14 951	49 817	32 234	84 057	2 494
3399	Other miscellaneous mfg ..	3	70	9	720	15 707	525	954	10 315	29 425	23 039	54 515	1 353
	OSCEOLA COUNTY, FL												
31-33	Manufacturing	5	77	19	1 295	37 107	998	1 955	25 021	190 704	189 717	379 892	14 201

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PALM BEACH COUNTY, FL												
31-33	Manufacturing	-	1 051	184	26 262	1 138 101	13 889	27 413	372 936	4 116 069	2 346 628	6 344 506	160 016
311	Food mfg.....	1	76	20	2 942	96 579	1 724	4 413	59 267	453 195	443 007	861 812	33 428
3113	Sugar & confectionery product mfg.....	-	13	8	g	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	7	7	g	D	D	D	D	D	D	D	D
311311	Sugarcane mills.....	-	6	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	44	7	608	14 075	402	737	8 819	71 166	26 868	98 061	1 648
31181	Bread & bakery product mfg.....	1	41	7	604	14 011	398	734	8 774	70 782	26 578	97 386	1 630
321	Wood product mfg.....	5	28	8	504	12 306	378	748	7 610	29 551	27 381	56 886	1 212
323	Printing & related support activities.....	3	147	14	1 163	30 327	761	1 321	17 345	67 896	35 249	102 883	3 264
3231	Printing & related support activities.....	3	147	14	1 163	30 327	761	1 321	17 345	67 896	35 249	102 883	3 264
32311	Printing.....	3	135	13	1 069	27 218	687	1 157	15 375	57 954	34 005	91 654	2 701
323110	Commercial lithographic printing..	3	59	5	545	14 173	328	585	8 074	30 521	17 747	48 145	1 518
325	Chemical mfg.....	4	35	10	851	19 336	510	736	10 655	70 117	67 382	137 638	10 597
326	Plastics & rubber products mfg.....	2	34	11	883	18 476	734	1 094	12 412	48 139	31 710	80 276	2 205
3261	Plastics product mfg.....	2	28	9	708	15 023	581	772	10 117	41 316	25 333	67 089	D
32619	Other plastics product mfg.....	2	18	8	640	12 568	540	699	9 059	36 637	20 389	57 446	1 692
326199	All other plastics product mfg.....	2	17	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	67	19	1 130	33 811	783	1 656	22 007	88 602	102 236	187 710	5 164
3273	Cement & concrete product mfg.....	-	38	15	830	25 079	604	1 313	17 499	65 570	67 313	133 373	3 612
332	Fabricated metal product mfg.....	2	135	21	1 508	47 318	1 095	2 032	28 674	107 551	71 847	178 742	5 402
3323	Architectural & structural metals mfg.....	1	50	10	724	23 468	530	1 108	14 331	54 385	45 621	99 305	2 365
33232	Ornamental & architectural metal products mfg.....	1	39	8	607	19 316	442	910	11 705	40 683	30 561	70 623	1 081
333	Machinery mfg.....	2	45	12	861	31 387	537	1 097	15 377	70 960	51 159	118 639	3 638
334	Computer & electronic product mfg.....	-	76	28	6 963	377 645	3 227	6 198	86 376	1 065 706	938 994	2 017 049	57 048
3342	Communications equipment mfg.....	-	16	6	4 576	302 937	1 800	3 603	54 617	899 131	721 173	1 629 125	41 315
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	8	4	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	8	4	h	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg.....	-	7	2	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg.....	-	7	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	1	25	13	1 824	50 855	1 115	1 968	21 690	114 969	181 099	296 776	D
33441	Semiconductor & other electronic component mfg.....	1	25	13	1 824	50 855	1 115	1 968	21 690	114 969	181 099	296 776	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	35	7	i	D	D	D	D	D	D	D	25 269
3364	Aerospace product & parts mfg.....	-	8	5	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	8	5	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg.....	-	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	126	8	904	23 063	690	1 387	14 477	52 370	45 430	98 258	2 432
3371	Household & institutional furniture & kitchen cabinet mfg.....	6	102	5	546	12 704	457	874	9 362	24 353	19 000	43 478	1 228

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PALM BEACH COUNTY, FL—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	6	151	9	950	27 371	676	1 175	14 768	63 602	41 832	105 194	3 216
3391	Medical equipment & supplies mfg.....	4	81	4	518	16 044	361	634	8 225	35 237	18 203	53 843	1 261
33911	Medical equipment & supplies mfg.....	4	81	4	518	16 044	361	634	8 225	35 237	18 203	53 843	1 261
	PASCO COUNTY, FL												
31-33	Manufacturing	1	213	39	4 091	100 695	2 851	5 578	57 496	264 426	456 009	713 261	16 130
311	Food mfg.....	—	10	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	20	7	603	16 679	308	676	8 654	48 234	13 596	57 592	2 053
	PINELLAS COUNTY, FL												
31-33	Manufacturing	1	1 335	322	40 954	1 256 778	25 346	49 719	575 272	3 195 120	2 629 566	5 732 823	270 128
311	Food mfg.....	—	39	7	f	D	D	D	D	D	D	D	11 040
315	Apparel mfg.....	1	22	6	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	1	18	6	g	D	D	D	D	D	D	D	2 845
31523	Women's & girls' cut & sew apparel mfg.....	3	7	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.	3	7	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	—	26	6	595	12 856	471	877	9 116	35 526	50 404	86 360	943
3219	Other wood product mfg...	—	25	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	181	25	2 332	66 696	1 660	3 178	40 164	146 003	142 339	289 942	14 217
3231	Printing & related support activities.....	3	181	25	2 332	66 696	1 660	3 178	40 164	146 003	142 339	289 942	14 217
32311	Printing.....	3	165	22	2 195	63 348	1 559	3 014	38 026	140 396	141 197	283 157	D
323110	Commercial lithographic printing..	6	66	13	1 036	31 290	791	1 651	21 023	72 491	66 610	139 117	8 932
325	Chemical mfg.....	2	46	15	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	68	22	1 941	49 697	1 554	3 091	34 416	127 601	89 889	219 522	10 915
3261	Plastics product mfg.....	2	62	20	g	D	D	D	D	D	D	D	9 965
32619	Other plastics product mfg.....	1	44	17	1 438	35 451	1 126	2 183	23 345	85 188	64 664	150 951	8 811
326199	All other plastics product mfg.....	1	41	16	1 373	33 832	1 071	2 065	22 154	80 755	61 024	142 863	8 632
332	Fabricated metal product mfg.....	1	226	46	4 615	121 660	3 219	6 426	71 246	275 726	181 085	450 981	12 896
3323	Architectural & structural metals mfg.....	1	50	15	1 625	37 161	1 038	2 102	18 909	90 570	60 780	152 361	3 467
33232	Ornamental & architectural metal products mfg.....	1	36	12	1 437	31 776	925	1 889	16 744	80 297	46 404	127 744	2 419
332322	Sheet metal work mfg.	1	18	8	892	21 090	629	1 284	11 802	57 383	30 862	88 309	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	104	10	892	26 501	727	1 301	18 469	49 897	27 814	77 406	4 127
33271	Machine shops.....	2	92	6	750	22 377	609	1 058	15 576	42 040	21 635	63 194	3 497
332710	Machine shops.....	2	92	6	750	22 377	609	1 058	15 576	42 040	21 635	63 194	3 497
3329	Other fabricated metal product mfg.....	—	15	6	1 085	32 917	707	1 542	19 769	81 249	43 497	119 132	2 710
33291	Metal valve mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	10	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PINELLAS COUNTY, FL—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	132	40	3 277	112 571	2 005	3 968	53 846	334 557	210 457	533 594	31 962
3333	Commercial & service industry machinery mfg ..	—	15	7	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	15	7	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	5	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	46	11	852	30 009	615	1 237	19 124	55 289	18 969	72 952	3 449
33351	Metalworking machinery mfg	1	46	11	852	30 009	615	1 237	19 124	55 289	18 969	72 952	3 449
3339	Other general-purpose machinery mfg	1	39	13	1 056	39 737	584	1 206	17 092	79 980	64 888	143 323	3 141
33399	All other general-purpose machinery mfg	1	25	12	944	36 639	512	1 085	15 414	72 201	60 292	131 076	D
333993	Packaging machinery mfg	—	9	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	105	45	11 920	447 609	5 229	10 596	135 006	1 000 195	831 500	1 762 701	105 680
3341	Computer & peripheral equipment mfg	9	10	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	9	10	4	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	9	3	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	8	10	3	g	D	D	D	D	D	D	D	11 990
33421	Telephone apparatus mfg	9	4	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	4	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	35	21	3 507	82 842	2 153	4 130	41 666	320 775	381 217	692 930	64 002
33441	Semiconductor & other electronic component mfg	—	35	21	3 507	82 842	2 153	4 130	41 666	320 775	381 217	692 930	64 002
334418	Printed circuit assembly (electronic assembly) mfg	—	3	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	43	16	6 014	256 474	1 778	3 612	49 906	568 100	273 968	842 883	23 278
33451	Navigational, measuring, medical, & control instruments mfg	—	43	16	6 014	256 474	1 778	3 612	49 906	568 100	273 968	842 883	23 278
334510	Electromedical & electrotherapeutic apparatus mfg	—	5	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	10	8	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	29	14	1 790	52 301	1 172	2 207	24 299	126 002	86 658	214 064	7 408
3353	Electrical equipment mfg ..	—	13	6	952	28 762	642	1 161	13 373	68 608	47 674	117 044	D
33531	Electrical equipment mfg	—	13	6	952	28 762	642	1 161	13 373	68 608	47 674	117 044	D
335311	Power, distribution, & specialty transformer mfg	—	4	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	14	8	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	2	11	6	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	2	10	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	63	17	1 864	48 362	1 492	2 969	29 095	105 761	100 485	204 010	D
3363	Motor vehicle parts mfg ...	—	20	5	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	95	13	1 263	27 583	878	1 561	16 604	56 348	56 481	109 778	5 631
3371	Household & institutional furniture & kitchen cabinet mfg	5	73	7	675	13 871	515	878	9 262	23 294	22 594	45 768	897

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PINELLAS COUNTY, FL —Con.												
31-33	Manufacturing— Con.												
339	Miscellaneous mfg.....	1	191	43	5 708	181 685	3 743	7 187	79 229	415 103	283 424	698 464	36 990
3391	Medical equipment & supplies mfg.....	1	100	24	3 622	122 515	2 328	4 446	46 666	225 074	173 040	399 251	24 255
33911	Medical equipment & supplies mfg.....	1	100	24	3 622	122 515	2 328	4 446	46 666	225 074	173 040	399 251	24 255
339112	Surgical & medical instrument mfg.....	1	17	5	1 175	50 127	682	1 082	15 411	80 591	76 139	159 508	9 072
339113	Surgical appliance & supplies mfg.....	—	22	9	768	28 936	324	611	6 303	81 541	47 280	128 972	3 070
339115	Ophthalmic goods mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	1	91	19	2 086	59 170	1 415	2 741	32 563	190 029	110 384	299 213	12 735
33994	Office supplies (except paper) mfg.....	—	8	2	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg.....	2	36	10	918	24 695	617	1 164	12 298	54 014	43 884	96 858	2 577
339950	Sign mfg.....	2	36	10	918	24 695	617	1 164	12 298	54 014	43 884	96 858	2 577
	POLK COUNTY, FL												
31-33	Manufacturing	1	480	186	20 627	633 493	15 251	31 605	382 152	2 587 357	3 444 036	5 999 926	190 651
311	Food mfg.....	1	34	25	5 136	150 278	3 775	7 845	88 947	791 191	874 904	1 662 342	56 915
3114	Fruit & vegetable preserving & specialty food mfg.....	1	13	13	3 063	93 376	2 319	4 970	55 095	573 780	598 046	1 173 531	D
31141	Frozen food mfg.....	—	8	8	1 174	39 526	937	2 235	26 671	209 047	283 774	504 551	18 952
311411	Frozen fruit, juice, & vegetable mfg.....	—	8	8	1 174	39 526	937	2 235	26 671	209 047	283 774	504 551	18 952
31142	Fruit & vegetable canning, pickling, & drying.....	1	5	5	1 889	53 850	1 382	2 735	28 424	364 733	314 272	668 980	D
311421	Fruit & vegetable canning.....	1	5	5	1 889	53 850	1 382	2 735	28 424	364 733	314 272	668 980	D
3116	Meat product mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	9	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	9	1	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	—	2	1	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging.....	—	2	1	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing..	—	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	—	26	17	1 747	42 438	1 480	2 874	28 277	86 153	168 137	251 789	3 144
3219	Other wood product mfg...	—	16	8	1 219	31 242	1 057	1 994	21 538	56 279	96 550	152 100	D
32199	All other wood product mfg.....	—	8	3	738	21 151	653	1 187	13 613	40 025	45 983	86 478	318
321991	Manufactured home (mobile home) mfg..	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	9	6	568	20 410	425	1 035	12 707	44 177	96 830	141 270	1 638
3222	Converted paper product mfg.....	—	9	6	568	20 410	425	1 035	12 707	44 177	96 830	141 270	1 638
32221	Paperboard container mfg.....	—	6	6	549	19 437	413	1 009	12 386	42 826	95 344	138 390	1 483
322211	Corrugated & solid fiber box mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	55	9	636	14 112	463	805	9 000	36 604	36 268	72 935	3 620
3231	Printing & related support activities.....	1	55	9	636	14 112	463	805	9 000	36 604	36 268	72 935	3 620
32311	Printing.....	1	51	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	44	28	3 483	146 251	2 503	5 474	92 775	1 013 199	1 619 873	2 610 630	71 854
3253	Pesticide, fertilizer, & other agricultural chemical mfg..	—	20	15	h	D	D	D	D	D	D	D	60 701
32531	Fertilizer mfg.....	—	19	14	h	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg.....	—	8	8	2 269	97 490	1 793	3 939	69 304	746 761	1 211 090	1 937 995	54 268
326	Plastics & rubber products mfg.....	—	42	20	1 047	23 710	851	1 467	16 196	73 644	77 847	151 748	6 955
3261	Plastics product mfg.....	—	37	18	992	22 054	805	1 356	14 900	68 992	73 680	142 902	6 867

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POLK COUNTY, FL—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	35	9	1 266	43 069	901	2 019	26 040	91 595	85 449	177 831	12 109
3273	Cement & concrete product mfg	-	23	5	537	16 393	360	858	8 828	38 878	41 012	77 039	2 563
332	Fabricated metal product mfg	2	71	23	1 519	41 091	1 063	2 037	22 642	87 197	97 929	184 304	4 757
3323	Architectural & structural metals mfg	1	24	12	685	19 808	436	848	9 911	43 327	57 177	99 261	1 042
333	Machinery mfg	-	39	13	1 183	42 571	764	1 564	17 504	106 514	85 517	192 384	9 792
334	Computer & electronic product mfg	4	10	5	731	20 201	527	1 440	12 360	37 643	81 282	116 140	2 626
336	Transportation equipment mfg	2	19	8	1 247	36 861	931	2 180	21 736	79 151	86 967	166 053	7 427
3363	Motor vehicle parts mfg ...	3	6	4	998	30 438	759	1 840	18 498	63 648	66 448	130 399	D
33639	Other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	39	9	629	13 232	455	818	8 073	32 121	24 021	55 842	2 577
PUTNAM COUNTY, FL													
31-33	Manufacturing	-	48	16	2 556	88 922	2 100	4 134	67 057	283 468	465 760	730 150	35 102
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
ST. JOHNS COUNTY, FL													
31-33	Manufacturing	1	88	12	2 277	53 829	1 731	3 352	33 842	163 746	140 632	299 639	20 124
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	f	D	D	D	D	D	D	D	D
ST. LUCIE COUNTY, FL													
31-33	Manufacturing	-	124	34	2 230	60 091	1 722	3 107	39 720	228 394	314 489	542 661	43 072
311	Food mfg	-	11	7	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	6	5	f	D	D	D	D	D	D	D	D
SANTA ROSA COUNTY, FL													
31-33	Manufacturing	2	59	14	1 895	41 582	1 585	2 818	30 300	229 191	202 322	427 651	D
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SARASOTA COUNTY, FL													
31-33	Manufacturing	2	379	67	7 809	222 858	5 461	10 479	112 636	473 794	392 575	872 574	37 697
323	Printing & related support activities.....	5	56	5	502	11 487	381	577	7 461	24 155	14 881	39 004	1 415
3231	Printing & related support activities.....	5	56	5	502	11 487	381	577	7 461	24 155	14 881	39 004	1 415
326	Plastics & rubber products mfg.....	-	17	6	1 205	35 240	884	1 628	15 581	76 233	52 346	128 087	3 324
3261	Plastics product mfg.....	-	16	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	10	5	g	D	D	D	D	D	D	D	2 992
326199	All other plastics product mfg.....	-	9	5	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	58	16	1 649	50 609	1 267	2 791	29 674	115 461	73 980	188 226	9 601
3329	Other fabricated metal product mfg.....	-	11	4	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	22	8	1 440	41 574	860	1 590	13 839	90 174	53 156	142 071	6 878
3344	Semiconductor & other electronic component mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	38	4	544	13 789	432	783	8 653	31 124	19 004	49 749	567
SEMINOLE COUNTY, FL													
31-33	Manufacturing	1	434	88	9 624	287 067	5 931	10 799	120 778	851 846	765 076	1 582 234	67 859
323	Printing & related support activities.....	4	73	7	602	13 996	401	681	8 646	29 372	19 142	48 493	1 624
3231	Printing & related support activities.....	4	73	7	602	13 996	401	681	8 646	29 372	19 142	48 493	1 624
32311	Printing.....	4	70	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	55	9	911	24 219	607	1 257	12 763	60 898	47 856	107 781	2 951
333	Machinery mfg.....	1	31	11	899	24 379	683	1 425	17 423	53 755	32 465	83 355	D
334	Computer & electronic product mfg.....	-	33	15	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	16	7	922	20 322	660	1 214	11 225	38 283	45 914	81 016	D
3363	Motor vehicle parts mfg....	4	9	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	43	7	722	14 817	578	1 052	9 826	55 607	48 654	105 707	2 974
SUMTER COUNTY, FL													
31-33	Manufacturing	-	30	9	907	19 596	725	1 356	13 938	51 806	151 046	200 904	2 419
SUWANNEE COUNTY, FL													
31-33	Manufacturing	-	19	2	h	D	D	D	D	D	D	D	D
311	Food mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	h	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TAYLOR COUNTY, FL													
31-33	Manufacturing	-	20	11	1 594	57 992	1 243	2 491	40 791	270 828	226 664	496 113	33 724
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
VOLUSIA COUNTY, FL													
31-33	Manufacturing	1	392	79	10 216	263 191	7 297	13 106	156 441	683 157	546 111	1 212 569	47 344
323	Printing & related support activities	1	60	8	879	19 789	673	1 033	13 370	51 889	32 567	83 847	D
3231	Printing & related support activities	1	60	8	879	19 789	673	1 033	13 370	51 889	32 567	83 847	D
32311	Printing	1	54	7	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	27	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	8	4	f	D	D	D	D	D	D	D	3 376
326	Plastics & rubber products mfg	4	25	6	583	12 402	419	805	8 179	26 674	24 680	51 138	4 702
3261	Plastics product mfg	4	21	6	550	11 778	389	749	7 617	24 180	23 168	47 128	4 652
332	Fabricated metal product mfg	-	49	8	g	D	D	D	D	D	D	D	4 772
3329	Other fabricated metal product mfg	-	7	4	696	23 909	496	1 064	15 548	46 909	52 435	95 751	2 632
33299	All other fabricated metal product mfg	-	6	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	26	5	658	20 198	399	727	9 714	47 245	35 425	84 240	D
3339	Other general-purpose machinery mfg	-	10	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	20	8	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	7	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	12	7	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	4	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	8	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	28	9	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	13	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	50	6	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	1	20	3	1 088	32 439	833	1 530	22 344	83 513	24 109	110 220	8 902
33911	Medical equipment & supplies mfg	1	20	3	1 088	32 439	833	1 530	22 344	83 513	24 109	110 220	8 902
339112	Surgical & medical instrument mfg	-	3	3	g	D	D	D	D	D	D	D	8 734
WALTON COUNTY, FL													
31-33	Manufacturing	1	35	6	937	12 500	601	821	7 019	47 445	54 752	108 710	1 114
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, FL													
31-33	Manufacturing	-	14	2	754	15 726	668	1 316	13 085	40 313	47 138	85 761	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALACHUA, FL												
	Manufacturing	-	12	4	f	D	D	D	D	D	D	D	1 055
	APOPKA, FL												
31-33	Manufacturing	-	28	4	808	35 494	525	1 044	19 908	72 884	52 293	123 741	D
	AUBURNDALE, FL												
31-33	Manufacturing	2	17	9	1 815	48 658	1 488	2 575	31 861	230 036	188 772	428 724	12 786
311	Food mfg	3	3	3	f	D	D	D	D	D	D	D	8 707
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
	BARTOW, FL												
31-33	Manufacturing	-	29	16	1 840	43 175	1 557	3 425	30 646	105 749	186 541	291 604	7 448
321	Wood product mfg	-	4	4	750	17 266	654	1 287	13 476	44 625	75 758	118 164	1 127
3219	Other wood product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
	BOCA RATON, FL												
31-33	Manufacturing	2	175	33	4 828	211 208	2 644	4 647	56 564	300 389	322 035	638 983	30 661
334	Computer & electronic product mfg	-	28	11	h	D	D	D	D	D	D	D	23 477
3342	Communications equipment mfg	-	8	4	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	5	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	3	f	D	D	D	D	D	D	D	D
	BOYNTON BEACH, FL												
31-33	Manufacturing	-	65	13	h	D	D	D	D	D	D	D	25 183
334	Computer & electronic product mfg	-	5	2	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
	BRADENTON, FL												
31-33	Manufacturing	-	34	8	h	D	D	D	D	D	D	D	D
311	Food mfg	-	2	2	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	BROOKSVILLE, FL												
	Manufacturing	-	33	7	627	16 180	468	880	9 102	109 122	61 598	167 918	6 302
31-33	CAPE CORAL, FL												
	Manufacturing	3	77	6	549	12 926	427	792	8 863	24 819	21 267	46 492	1 230
31-33	CASSELBERRY, FL												
	Manufacturing	4	37	9	552	14 402	340	633	6 580	28 184	22 205	50 518	1 925
31-33	CHIPLEY, FL												
	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
31-33	CLEARWATER, FL												
	Manufacturing	2	182	33	3 191	84 774	1 888	3 422	39 108	198 000	144 850	342 886	12 935
334	Computer & electronic product mfg.....	4	18	6	615	23 234	284	539	5 886	42 281	35 737	77 498	4 413
31-33	CLEWISTON, FL												
	Manufacturing	-	12	3	f	D	D	D	D	D	D	D	D
31-33	CORAL SPRINGS, FL												
	Manufacturing	2	82	11	1 186	34 458	838	1 529	17 592	70 588	71 347	139 754	3 547
335	Electrical equipment, appliance, & component mfg	-	5	3	513	17 305	330	590	6 814	37 183	29 914	65 594	830
31-33	CRYSTAL RIVER, FL												
	Manufacturing	-	12	3	559	10 716	480	1 053	8 316	22 846	36 785	59 403	1 421
31-33	DADE CITY, FL												
	Manufacturing	-	8	3	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31-33	DANIA, FL												
	Manufacturing	6	58	8	976	23 770	792	1 595	16 861	54 064	47 053	100 274	2 745
31-33	DAVIE, FL												
	Manufacturing	2	111	17	1 447	38 993	1 077	2 018	23 993	85 217	71 583	156 093	5 672
31-33	DAYTONA BEACH, FL												
	Manufacturing	2	63	15	1 931	44 387	1 338	2 266	25 491	102 946	94 369	200 392	8 941
31-33	DEERFIELD BEACH, FL												
	Manufacturing	2	100	30	2 511	78 350	1 706	3 424	42 544	174 195	161 764	333 859	10 426
337	Furniture & related product mfg.....	2	11	3	555	19 033	292	594	7 263	39 918	55 231	93 562	2 175
31-33	DE LAND, FL												
	Manufacturing	1	44	11	1 409	37 394	1 048	1 791	22 507	92 053	73 599	162 006	6 174
31-33	DELRAY BEACH, FL												
	Manufacturing	2	67	6	613	18 245	439	755	11 204	44 625	39 346	84 350	2 691

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EDGEWATER, FL												
	Manufacturing	-	32	7	f	D	D	D	D	D	D	D	3 582
31-33	FERNANDINA BEACH, FL												
	Manufacturing	-	15	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
31-33	FORT LAUDERDALE, FL												
	Manufacturing	3	352	74	7 546	247 151	4 526	8 635	107 974	543 417	450 046	1 001 719	29 001
332	Fabricated metal product mfg	3	62	15	908	27 279	663	1 312	17 374	58 263	46 457	104 702	2 683
333	Machinery mfg	2	20	8	721	26 472	514	1 081	13 351	58 225	59 273	117 761	2 930
334	Computer & electronic product mfg	1	22	9	1 947	86 118	619	1 133	15 555	202 813	139 006	343 374	7 739
3341	Computer & peripheral equipment mfg	3	5	3	902	41 338	167	385	4 263	97 645	56 982	144 083	D
33411	Computer & peripheral equipment mfg	3	5	3	902	41 338	167	385	4 263	97 645	56 982	144 083	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	1	f	D	D	D	D	D	D	D	106
33451	Navigational, measuring, medical, & control instruments mfg	-	6	1	f	D	D	D	D	D	D	D	106
334511	Search, detection, navigation, & guidance instrument mfg	-	3	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	7	26	6	835	19 474	614	1 120	12 136	32 547	31 536	64 258	1 935
3379	Other furniture related product mfg	9	5	3	f	D	D	D	D	D	D	D	D
33791	Mattress mfg	9	5	3	f	D	D	D	D	D	D	D	D
337910	Mattress mfg	9	5	3	f	D	D	D	D	D	D	D	D
31-33	FORT MYERS, FL												
	Manufacturing	3	95	21	1 743	47 937	1 267	2 540	29 481	179 260	119 069	296 676	9 150
31-33	FORT WALTON BEACH, FL												
	Manufacturing	-	46	15	1 917	54 050	1 151	2 427	25 872	113 486	75 281	186 854	D
334	Computer & electronic product mfg	-	9	6	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	3	786	22 715	418	809	9 378	43 698	25 959	70 123	1 063
31-33	GAINESVILLE, FL												
	Manufacturing	3	85	22	1 688	57 695	1 170	2 216	33 769	162 917	251 887	414 318	21 328
31-33	GREEN COVE SPRINGS, FL												
	Manufacturing	2	18	7	908	25 149	650	1 089	12 987	71 715	84 867	157 114	5 518
31-33	HALLANDALE, FL												
	Manufacturing	4	55	12	733	18 732	557	1 064	11 340	43 814	33 490	78 300	1 673

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HIALEAH, FL												
31-33	Manufacturing	2	690	192	18 397	425 402	13 798	25 002	253 161	939 116	880 867	1 822 262	56 190
313	Textile mills	1	30	11	856	22 493	729	1 511	15 259	58 075	86 905	145 905	3 411
3132	Fabric mills	-	19	6	579	14 844	496	1 013	11 062	36 121	55 145	91 072	1 448
314	Textile product mills	2	33	11	914	14 869	817	1 157	9 985	24 767	31 387	56 099	1 008
3149	Other textile product mills ..	2	20	9	653	11 964	577	876	7 742	16 417	24 213	40 533	D
31499	All other textile product mills	2	15	8	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	2	14	8	532	10 081	469	725	6 643	13 790	21 548	35 302	865
315	Apparel mfg	3	138	62	4 224	57 616	3 632	5 901	42 521	123 630	96 853	220 201	2 879
3152	Cut & sew apparel mfg	3	120	58	3 950	53 349	3 399	5 538	39 663	115 517	91 077	205 939	2 575
31521	Cut & sew apparel contractors	2	81	39	2 189	25 542	2 009	3 097	21 388	61 948	33 681	93 492	1 454
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	75	36	2 036	23 871	1 860	2 888	19 935	58 803	33 349	90 230	D
31523	Women's & girls' cut & sew apparel mfg	2	31	16	1 484	23 726	1 156	2 024	14 783	44 853	51 831	97 793	883
315232	Women's & girls' cut & sew blouse & shirt mfg	1	13	6	573	9 607	432	804	5 635	12 721	12 025	24 371	268
316	Leather & allied product mfg .	-	13	7	738	11 966	667	1 112	6 820	27 770	28 251	56 805	170
3162	Footwear mfg	-	5	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	5	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	63	14	1 181	34 766	861	1 668	21 479	65 433	46 493	112 513	5 342
3231	Printing & related support activities	2	63	14	1 181	34 766	861	1 668	21 479	65 433	46 493	112 513	5 342
32311	Printing	2	56	13	1 131	33 389	822	1 590	20 485	62 555	46 055	109 197	5 172
323110	Commercial lithographic printing ..	1	28	6	579	17 776	421	864	11 321	31 296	21 659	53 632	2 361
332	Fabricated metal product mfg	2	70	12	1 275	29 726	889	1 753	18 046	67 239	49 055	116 466	2 203
3323	Architectural & structural metals mfg	2	24	8	758	16 429	526	1 077	9 842	36 053	30 592	66 494	1 310
33232	Ornamental & architectural metal products mfg	2	21	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	4	34	9	882	22 350	662	1 180	13 764	38 056	49 186	88 291	2 123
334	Computer & electronic product mfg	-	10	8	3 155	114 239	1 786	3 908	56 864	258 207	249 258	507 926	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	4	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	4	h	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	14	5	709	13 094	586	1 305	8 134	34 771	15 417	49 950	D
3351	Electric lighting equipment mfg	1	12	5	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	12	5	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	9	5	f	D	D	D	D	D	D	D	1 569
337	Furniture & related product mfg	2	101	19	1 430	32 811	1 065	2 023	20 166	60 310	52 122	111 556	2 844
3371	Household & institutional furniture & kitchen cabinet mfg	2	77	10	780	17 320	589	996	10 056	28 817	23 077	52 322	931
339	Miscellaneous mfg	7	42	4	608	12 347	409	595	6 694	26 500	17 918	45 714	2 733
	HIALEAH GARDENS, FL												
31-33	Manufacturing	2	52	12	1 520	28 357	1 255	2 190	18 291	69 860	93 583	159 571	2 448
315	Apparel mfg	-	14	6	1 005	19 220	848	1 540	12 647	49 495	72 253	117 144	1 155
3152	Cut & sew apparel mfg	-	12	4	f	D	D	D	D	D	D	D	D
	HOLLY HILL, FL												
31-33	Manufacturing	3	36	5	610	14 248	488	708	8 179	19 487	33 190	50 414	2 662

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOLLYWOOD, FL													
31-33	Manufacturing	1	169	41	3 498	92 567	2 539	4 651	52 270	461 892	312 623	769 603	16 635
323	Printing & related support activities	1	26	5	638	20 908	508	999	14 077	49 504	27 926	76 663	8 946
3231	Printing & related support activities	1	26	5	638	20 908	508	999	14 077	49 504	27 926	76 663	8 946
32311	Printing	1	23	5	621	20 660	494	983	13 890	49 042	27 820	76 095	8 923
323110	Commercial lithographic printing	—	9	3	508	16 957	423	845	12 073	41 259	25 101	65 523	D
339	Miscellaneous mfg	5	34	7	642	15 275	449	822	7 790	43 517	37 495	80 661	697
3399	Other miscellaneous mfg	5	22	7	593	14 322	413	776	7 238	41 212	36 583	77 475	629
JACKSONVILLE, FL (CC) *													
31-33	Manufacturing	—	754	235	28 237	944 142	19 977	40 496	559 736	3 893 928	3 361 688	7 230 951	254 578
311	Food mfg	—	38	15	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	6	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	6	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	18	4	945	27 310	327	766	9 067	74 081	33 148	107 155	D
31181	Bread & bakery product mfg	—	17	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	7	4	898	26 719	292	727	8 735	72 529	32 453	104 905	D
3119	Other food mfg	—	6	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	9	8	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	8	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	5	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries	—	2	1	g	D	D	D	D	D	D	D	D
312120	Breweries	—	2	1	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	1	1	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	1	1	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	26	9	619	17 703	467	1 008	10 235	52 502	123 808	175 796	D
322	Paper mfg	—	24	18	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	22	16	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	11	9	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916
322232	Envelope mfg	—	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916
323	Printing & related support activities	2	131	31	1 714	48 032	1 200	2 279	27 749	115 852	71 678	187 078	5 993
3231	Printing & related support activities	2	131	31	1 714	48 032	1 200	2 279	27 749	115 852	71 678	187 078	5 993
32311	Printing	2	114	26	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	50	15	798	26 163	527	1 084	14 336	53 125	28 889	81 892	2 252
325	Chemical mfg	2	35	12	1 284	50 291	867	1 847	27 965	347 431	328 177	675 178	20 403
326	Plastics & rubber products mfg	—	32	12	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	25	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	42	15	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	3	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	2	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	28	10	f	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	2	2	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSONVILLE, FL (CC) *—Con. Manufacturing—Con.												
331	Primary metal mfg	-	9	8	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
33122	Rolling & drawing of purchased steel	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
331222	Steel wire drawing	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
332	Fabricated metal product mfg	-	110	37	3 659	99 761	2 719	5 391	62 986	227 412	309 376	527 893	17 336
3323	Architectural & structural metals mfg	-	48	22	2 324	55 806	1 697	3 353	33 039	132 736	135 617	268 280	9 414
33231	Plate work & fabricated structural product mfg	-	18	8	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	30	14	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	6	3	754	17 482	468	1 040	8 595	46 997	31 063	77 727	903
332322	Sheet metal work mfg	-	14	9	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	50	19	1 411	46 401	911	1 833	24 452	107 210	76 839	186 352	6 067
336	Transportation equipment mfg	2	34	11	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	14	6	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	14	6	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	2	11	6	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	58	10	1 161	31 009	914	1 665	18 583	73 809	59 163	131 005	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	40	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	88	15	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	45	8	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	45	8	h	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	2	1	g	D	D	D	D	D	D	D	D
31-33	JACKSONVILLE CITY (BALANCE), FL *												
31-33	Manufacturing	-	723	231	27 933	935 578	19 768	40 104	555 281	3 878 378	3 349 225	7 203 375	253 926
311	Food mfg	-	35	15	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	6	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	6	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	15	4	940	27 234	324	762	9 031	73 852	33 003	106 781	D
31181	Bread & bakery product mfg	-	14	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	7	4	898	26 719	292	727	8 735	72 529	32 453	104 905	D
3119	Other food mfg	-	6	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	9	8	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	8	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	5	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries	-	2	1	g	D	D	D	D	D	D	D	D
312120	Breweries	-	2	1	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	25	9	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	24	18	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	22	16	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	9	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	-	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916
322232	Envelope mfg	-	3	3	525	16 210	433	921	11 929	29 977	39 993	70 506	3 916

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSONVILLE CITY (BALANCE), FL *—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	2	127	31	1 690	47 649	1 187	2 253	27 466	114 860	71 187	185 590	D
3231	Printing & related support activities.....	2	127	31	1 690	47 649	1 187	2 253	27 466	114 860	71 187	185 590	D
32311	Printing.....	2	110	26	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	47	15	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	35	12	1 284	50 291	867	1 847	27 965	347 431	328 177	675 178	20 403
326	Plastics & rubber products mfg.....	-	31	11	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	24	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	41	15	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	2	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	-	27	10	729	19 129	519	972	11 649	39 828	55 306	93 169	D
3274	Lime & gypsum product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	9	8	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
33122	Rolling & drawing of purchased steel.....	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
331222	Steel wire drawing.....	-	6	6	698	23 161	555	1 366	16 797	47 697	100 743	151 734	D
332	Fabricated metal product mfg.....	-	108	37	h	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	-	47	22	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg..	-	18	8	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	-	29	14	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg.....	-	6	3	754	17 482	468	1 040	8 595	46 997	31 063	77 727	903
332322	Sheet metal work mfg.....	-	14	9	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	49	18	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	32	10	g	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	2	13	6	g	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	2	13	6	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	2	10	6	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	53	10	1 139	30 590	896	1 630	18 254	73 167	58 573	129 771	7 086
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	35	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	81	15	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	44	8	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	44	8	h	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31-33	KISSIMMEE, FL												
	Manufacturing.....	1	32	10	526	15 082	397	806	10 473	37 813	41 338	79 493	3 412
31-33	LAKE CITY, FL												
	Manufacturing.....	-	14	3	718	17 705	658	1 394	14 027	41 231	72 823	113 990	D
321	Wood product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg..	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAKELAND, FL													
31-33	Manufacturing	2	81	27	4 007	127 504	2 843	6 053	72 074	349 513	300 117	652 288	37 869
311	Food mfg	-	7	5	1 192	35 165	845	1 835	21 411	138 010	111 876	251 951	13 459
3118	Bakeries & tortilla mfg	-	4	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	4	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	6	2	675	24 502	504	1 087	15 942	46 167	39 367	89 179	D
336	Transportation equipment mfg	3	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	2	2	f	D	D	D	D	D	D	D	D
LAKE MARY, FL													
31-33	Manufacturing	-	20	4	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
LAKE WALES, FL													
31-33	Manufacturing	1	27	15	2 609	73 197	1 971	4 115	42 049	402 043	392 543	784 834	21 287
311	Food mfg	1	4	4	1 772	50 910	1 309	2 627	27 458	336 340	322 850	649 792	16 992
3114	Fruit & vegetable preserving & specialty food mfg	1	4	4	1 772	50 910	1 309	2 627	27 458	336 340	322 850	649 792	16 992
31142	Fruit & vegetable canning, pickling, & drying	1	3	3	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	1	3	3	g	D	D	D	D	D	D	D	D
LAKE WORTH, FL													
31-33	Manufacturing	2	46	7	523	10 761	379	650	6 833	22 295	18 497	40 334	1 139
LARGO, FL													
31-33	Manufacturing	2	138	26	2 544	60 557	1 849	3 448	35 551	135 963	95 507	229 840	8 509
LEESBURG, FL													
31-33	Manufacturing	-	38	10	854	20 354	674	1 233	13 642	39 462	46 637	87 071	2 317
LONGWOOD, FL													
31-33	Manufacturing	2	86	21	1 631	39 694	1 026	1 911	21 080	79 996	85 125	164 704	5 379
MAITLAND, FL													
31-33	Manufacturing	-	12	3	525	13 579	411	1 103	9 746	45 750	51 550	96 226	3 010
MARIANNA, FL													
31-33	Manufacturing	-	9	6	1 043	19 091	937	1 820	16 441	19 029	64 624	87 945	D
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MELBOURNE, FL													
31-33	Manufacturing	—	91	20	4 435	160 560	2 055	3 815	43 769	737 586	539 004	1 282 595	24 107
333	Machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	20	8	1 669	50 413	940	1 515	18 492	235 998	195 772	430 376	6 661
3345	Navigational, measuring, medical, & control instruments mfg	—	6	3	g	D	D	D	D	D	D	D	3 712
33451	Navigational, measuring, medical, & control instruments mfg	—	6	3	g	D	D	D	D	D	D	D	3 712
334511	Search, detection, navigation, & guidance instrument mfg	—	6	3	g	D	D	D	D	D	D	D	3 712
336	Transportation equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
MIAMI, FL													
31-33	Manufacturing	3	575	87	7 490	188 830	5 643	10 103	122 891	546 582	464 507	1 021 737	43 579
311	Food mfg	2	78	10	890	17 465	601	1 007	9 660	71 436	101 276	172 655	3 216
312	Beverage & tobacco product mfg	8	9	5	538	12 950	379	820	7 548	66 939	67 172	134 259	3 030
315	Apparel mfg	3	109	26	1 687	26 070	1 432	2 350	17 982	74 062	48 690	121 785	1 634
3152	Cut & sew apparel mfg	3	93	22	1 490	22 376	1 279	2 108	15 660	54 180	40 329	93 993	1 082
31521	Cut & sew apparel contractors	4	40	10	656	7 408	621	938	6 430	16 703	3 677	20 355	480
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	36	7	540	6 253	513	806	5 498	14 168	2 205	16 339	D
31523	Women's & girls' cut & sew apparel mfg	3	38	8	616	11 861	469	799	7 047	31 978	29 468	60 776	496
323	Printing & related support activities	6	91	15	966	28 867	660	1 259	18 141	58 245	35 707	92 762	3 347
3231	Printing & related support activities	6	91	15	966	28 867	660	1 259	18 141	58 245	35 707	92 762	3 347
32311	Printing	6	81	14	862	25 330	584	1 123	15 705	51 205	33 894	83 914	2 992
323110	Commercial lithographic printing ..	5	36	9	537	15 276	350	688	9 403	28 767	19 466	48 079	1 666
325	Chemical mfg	1	18	4	676	37 782	417	836	26 764	146 477	66 873	224 901	16 595
3254	Pharmaceutical & medicine mfg	1	4	4	609	36 239	374	784	26 060	140 469	61 630	213 595	16 319
32541	Pharmaceutical & medicine mfg	1	4	4	609	36 239	374	784	26 060	140 469	61 630	213 595	16 319
325413	In-vitro diagnostic substance mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	18	4	598	21 133	452	927	14 013	44 108	40 125	85 583	D
337	Furniture & related product mfg	2	53	4	589	10 751	496	798	7 752	12 823	22 355	35 182	1 269
MILTON, FL													
31-33	Manufacturing	—	20	5	1 046	15 478	938	1 442	12 038	128 577	85 970	215 882	549
315	Apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
MIRAMAR, FL													
31-33	Manufacturing	5	36	10	729	25 066	472	1 037	11 852	73 431	51 310	124 854	4 443

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MULBERRY, FL													
31-33	Manufacturing	-	20	9	1 357	53 003	995	2 057	33 693	240 771	580 710	815 190	5 564
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	2	2	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	1	1	f	D	D	D	D	D	D	D	D
NAPLES, FL													
31-33	Manufacturing	3	94	9	805	17 566	649	1 035	11 402	48 299	34 267	81 790	4 219
NORTH MIAMI, FL													
31-33	Manufacturing	4	63	7	529	10 339	415	740	7 163	24 279	20 288	44 607	918
NORTH MIAMI BEACH, FL													
31-33	Manufacturing	1	48	7	647	15 955	409	789	8 576	42 539	59 783	100 874	1 208
OAKLAND PARK, FL													
31-33	Manufacturing	2	166	19	1 855	48 836	1 370	2 201	28 729	99 232	93 600	193 803	6 938
OCALA, FL													
31-33	Manufacturing	1	138	48	7 680	185 328	5 370	9 717	113 468	510 922	512 424	1 023 083	21 055
321	Wood product mfg	-	12	10	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	11	9	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	6	5	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	9	1 362	25 329	1 062	1 607	17 412	72 052	67 651	142 494	2 939
3326	Spring & wire product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	7	6	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	4	2	f	D	D	D	D	D	D	D	1 511
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	f	D	D	D	D	D	D	D	1 511
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	f	D	D	D	D	D	D	D	1 511
336	Transportation equipment mfg	-	12	6	h	D	D	D	D	D	D	D	8 545
3362	Motor vehicle body & trailer mfg	-	5	4	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	5	4	h	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	1	1	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	1	1	f	D	D	D	D	D	D	D	D
OLDSMAR, FL													
31-33	Manufacturing	2	55	19	1 303	37 431	897	1 747	19 712	89 759	90 672	181 215	5 879
OPA-LOCKA, FL													
31-33	Manufacturing	2	119	39	3 031	69 098	2 500	5 012	45 653	162 826	156 866	320 982	8 702
332	Fabricated metal product mfg	2	21	8	560	17 119	446	811	10 950	34 934	24 374	59 745	2 534

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORLANDO, FL													
31-33	Manufacturing	-	281	85	12 168	522 485	5 592	11 067	145 653	1 553 663	768 870	2 390 457	97 785
311	Food mfg	-	20	7	1 924	64 843	1 063	2 479	28 491	260 839	186 479	447 449	D
3118	Bakeries & tortilla mfg	-	14	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	14	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	5	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	4	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	87	24	1 577	49 044	1 153	2 183	32 147	117 770	64 335	181 032	9 163
3231	Printing & related support activities	4	87	24	1 577	49 044	1 153	2 183	32 147	117 770	64 335	181 032	9 163
32311	Printing	5	74	18	1 291	39 815	940	1 781	25 750	98 265	60 142	157 626	7 608
323110	Commercial lithographic printing	7	32	8	702	23 117	538	1 111	15 662	54 601	40 865	94 619	4 524
332	Fabricated metal product mfg	5	31	11	521	14 116	391	725	8 867	29 364	26 388	55 866	D
334	Computer & electronic product mfg	-	15	9	5 489	325 174	1 417	2 675	40 972	992 913	234 146	1 294 089	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	h	D	D	D	D	D	D	D	D
ORMOND BEACH, FL													
31-33	Manufacturing	2	47	13	1 039	26 437	689	1 246	15 910	56 129	43 825	100 095	7 348
PALATKA, FL													
31-33	Manufacturing	-	34	13	2 440	87 072	2 020	4 017	65 906	277 085	458 614	716 596	34 318
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
PALM BAY, FL													
31-33	Manufacturing	-	61	18	8 325	358 633	2 468	5 020	72 478	544 829	559 533	1 171 598	D
334	Computer & electronic product mfg	-	12	6	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	6	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	3	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	1	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PANAMA CITY, FL													
31-33	Manufacturing	-	63	15	2 255	74 781	1 668	3 390	48 142	247 806	299 303	514 841	23 258
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
PEMBROKE PINES, FL													
31-33	Manufacturing	1	54	6	632	15 743	517	968	8 459	54 183	28 071	79 989	5 971
PENSACOLA, FL													
31-33	Manufacturing	-	75	18	1 865	62 947	1 365	2 652	41 941	226 643	251 097	475 720	9 640
325	Chemical mfg	-	8	4	507	20 526	337	634	11 503	121 303	131 028	251 220	D
PINELLAS PARK, FL													
31-33	Manufacturing	1	190	58	7 653	209 590	5 154	10 337	111 142	630 218	517 897	1 136 318	57 154
325	Chemical mfg	-	9	4	544	21 092	315	755	10 140	100 419	93 556	192 154	8 292
332	Fabricated metal product mfg	1	42	11	1 667	44 239	1 085	2 396	22 972	98 378	56 272	148 612	5 402
3323	Architectural & structural metals mfg	1	9	4	517	12 021	326	824	6 092	26 991	22 716	49 757	1 398
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	24	7	943	27 287	632	1 173	14 397	156 847	83 119	233 196	D
3333	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	10	5	1 214	29 009	730	1 425	14 004	52 480	69 823	125 621	3 854
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	4	586	14 270	495	994	9 066	30 478	27 371	56 043	1 530
339	Miscellaneous mfg	3	21	11	677	17 406	460	818	8 291	32 819	34 509	66 555	2 586
PLANTATION, FL													
31-33	Manufacturing	-	53	8	h	D	D	D	D	D	D	D	15 588
334	Computer & electronic product mfg	-	9	4	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLANT CITY, FL													
31-33	Manufacturing	-	54	29	3 990	101 333	3 210	6 967	68 804	461 663	478 493	934 983	30 239
311	Food mfg.....	-	8	6	1 282	30 209	991	2 201	19 992	218 442	153 463	365 374	8 981
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	6	5	868	19 838	715	1 557	13 310	51 294	67 092	118 145	D
3219	Other wood product mfg... ..	-	6	5	868	19 838	715	1 557	13 310	51 294	67 092	118 145	D
32199	All other wood product mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	4	4	f	D	D	D	D	D	D	D	1 028
POMPANO BEACH, FL													
31-33	Manufacturing	2	284	80	6 711	187 845	4 776	9 211	106 786	436 553	349 211	783 846	34 209
323	Printing & related support activities.....	2	45	7	764	26 844	398	796	10 912	59 775	26 854	86 584	2 148
3231	Printing & related support activities.....	2	45	7	764	26 844	398	796	10 912	59 775	26 854	86 584	2 148
32311	Printing.....	2	41	7	759	26 768	393	791	10 856	59 628	26 818	86 401	2 139
323110	Commercial lithographic printing ..	2	19	6	582	21 331	288	604	8 350	47 626	19 180	66 775	1 519
326	Plastics & rubber products mfg.....	5	20	10	787	19 779	621	1 278	12 237	46 177	43 700	90 891	5 134
3261	Plastics product mfg	6	17	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	18	12	731	20 854	509	1 110	12 741	56 294	59 903	116 473	6 936
332	Fabricated metal product mfg.....	-	50	13	1 310	40 001	946	1 754	24 065	79 070	60 626	141 204	6 359
334	Computer & electronic product mfg.....	5	20	9	532	17 514	357	649	8 879	31 081	21 381	54 642	2 469
337	Furniture & related product mfg.....	2	31	5	788	19 858	626	1 301	12 315	41 296	37 816	76 509	1 971
PORT ST. JOE, FL													
31-33	Manufacturing	1	11	6	f	D	D	D	D	D	D	D	D
QUINCY, FL													
31-33	Manufacturing	3	19	5	732	16 246	617	1 131	10 124	37 537	59 204	96 414	2 153
RIVIERA BEACH, FL													
31-33	Manufacturing	2	73	22	1 439	42 083	984	1 943	24 453	127 279	87 666	213 234	8 194
ROCKLEDGE, FL													
31-33	Manufacturing	1	34	8	772	18 869	556	982	11 214	49 247	55 301	103 718	7 758
ST. AUGUSTINE, FL													
31-33	Manufacturing	-	36	5	692	16 477	528	1 020	10 585	38 415	31 116	68 858	814

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. PETERSBURG, FL													
31-33	Manufacturing	1	203	48	7 389	227 142	4 091	8 308	96 567	650 404	596 808	1 237 345	80 387
323	Printing & related support activities.....	7	45	7	724	21 877	593	1 256	16 708	50 859	51 750	102 676	5 412
3231	Printing & related support activities.....	7	45	7	724	21 877	593	1 256	16 708	50 859	51 750	102 676	5 412
32311	Printing	7	40	6	674	20 986	559	1 200	16 170	49 253	51 485	100 803	5 321
326	Plastics & rubber products mfg	-	11	5	516	13 509	374	700	9 310	35 220	24 053	59 780	3 124
3261	Plastics product mfg	-	11	5	516	13 509	374	700	9 310	35 220	24 053	59 780	3 124
332	Fabricated metal product mfg	-	20	7	698	21 148	523	1 142	15 206	51 101	38 982	90 813	2 009
334	Computer & electronic product mfg	-	20	10	3 677	124 145	1 403	3 176	33 401	406 079	395 627	793 541	63 181
3344	Semiconductor & other electronic component mfg	-	8	7	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	8	7	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	7	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
SANFORD, FL													
31-33	Manufacturing	1	61	25	2 270	50 165	1 732	2 940	29 490	124 812	127 803	253 579	14 952
336	Transportation equipment mfg	3	8	6	f	D	D	D	D	D	D	D	3 180
3363	Motor vehicle parts mfg ...	4	5	4	565	11 444	369	586	5 169	11 660	18 531	30 839	3 072
SARASOTA, FL													
31-33	Manufacturing	1	89	11	1 529	35 520	1 119	2 033	18 928	85 588	52 925	136 647	6 005
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	f	D	D	D	D	D	D	D	D
STARKE, FL													
31-33	Manufacturing	-	9	4	583	7 571	518	825	5 961	12 630	17 620	29 220	D
STUART, FL													
31-33	Manufacturing	-	66	9	1 852	63 736	1 173	2 812	46 091	194 673	127 072	308 205	9 892
336	Transportation equipment mfg	-	8	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUNRISE, FL													
31-33	Manufacturing	1	71	12	2 405	50 612	1 029	1 457	25 987	104 360	88 634	201 272	13 658
334	Computer & electronic product mfg.....	-	8	3	1 607	23 862	456	532	9 596	34 663	50 058	91 543	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
TALLAHASSEE, FL													
31-33	Manufacturing	-	102	20	g	D	D	D	D	D	D	D	7 930
323	Printing & related support activities.....	1	34	7	f	D	D	D	D	D	D	D	2 375
3231	Printing & related support activities.....	1	34	7	f	D	D	D	D	D	D	D	2 375
32311	Printing	1	32	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
TAMPA, FL													
31-33	Manufacturing	1	463	126	13 213	364 165	9 147	18 498	214 781	1 125 623	1 311 322	2 442 095	71 740
311	Food mfg.....	-	35	8	1 443	36 655	922	2 062	17 891	113 849	233 578	347 083	4 393
3117	Seafood product preparation & packaging..	-	4	1	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging.....	-	4	1	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing..	-	4	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	2	13	8	g	D	D	D	D	D	D	D	20 598
3121	Beverage mfg.....	-	7	4	f	D	D	D	D	D	D	D	11 707
31211	Soft drink & ice mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
31222	Tobacco product mfg ...	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
312229	Other tobacco product mfg.....	4	6	4	894	16 371	701	1 527	13 326	201 701	66 362	268 401	8 891
323	Printing & related support activities.....	1	92	14	1 599	46 152	1 232	2 326	30 187	102 448	91 440	194 183	16 292
3231	Printing & related support activities.....	1	92	14	1 599	46 152	1 232	2 326	30 187	102 448	91 440	194 183	16 292
32311	Printing	1	81	12	1 466	42 460	1 127	2 141	27 604	95 627	89 138	185 150	D
323110	Commercial lithographic printing ..	-	35	7	878	27 093	687	1 419	17 991	56 914	62 675	119 561	13 684
326	Plastics & rubber products mfg.....	5	24	11	704	18 798	475	1 018	11 548	48 191	52 338	99 582	4 451
3261	Plastics product mfg.....	4	17	9	608	16 248	402	861	9 757	41 005	45 623	85 601	4 098
332	Fabricated metal product mfg.....	-	59	21	1 670	50 766	1 164	2 263	30 045	132 058	143 728	274 838	3 456
3323	Architectural & structural metals mfg.....	-	21	14	698	17 711	508	986	10 744	53 060	46 617	100 574	1 567
33232	Ornamental & architectural metal products mfg.....	-	17	11	520	12 651	353	647	7 035	32 025	35 333	68 248	1 090

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TAMPA, FL—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	16	7	1 508	45 290	888	1 965	26 108	79 626	139 382	220 484	5 772
3342	Communications equipment mfg.....	1	7	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	20	7	926	27 147	761	1 568	18 784	53 037	39 522	94 392	1 224
3366	Ship & boat building.....	2	11	5	793	24 584	656	1 431	17 132	46 682	32 814	81 120	813
33661	Ship & boat building.....	2	11	5	793	24 584	656	1 431	17 132	46 682	32 814	81 120	813
337	Furniture & related product mfg.....	4	41	8	538	12 085	415	749	6 472	29 402	23 356	52 868	2 467
	TARPON SPRINGS, FL												
31-33	Manufacturing.....	3	40	7	558	11 426	404	738	6 249	29 452	21 192	51 084	1 105
	TITUSVILLE, FL												
31-33	Manufacturing.....	4	46	9	614	12 347	495	673	8 008	29 319	20 691	49 942	1 685
	VERO BEACH, FL												
31-33	Manufacturing.....	8	47	3	645	22 367	409	922	11 367	39 036	57 805	92 301	1 850
	WEST MELBOURNE, FL												
31-33	Manufacturing.....	2	29	8	1 162	25 948	922	1 394	12 263	43 813	50 039	94 156	D
334	Computer & electronic product mfg.....	—	6	3	888	18 497	728	1 044	7 787	29 746	40 922	70 865	D
3344	Semiconductor & other electronic component mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
	WEST PALM BEACH, FL												
31-33	Manufacturing.....	—	154	27	7 014	402 808	2 457	5 091	81 542	1 886 388	442 547	2 269 214	33 023
334	Computer & electronic product mfg.....	1	12	7	f	D	D	D	D	D	D	D	6 961
3344	Semiconductor & other electronic component mfg.....	1	7	6	f	D	D	D	D	D	D	D	6 633
33441	Semiconductor & other electronic component mfg.....	1	7	6	f	D	D	D	D	D	D	D	6 633
336	Transportation equipment mfg.....	—	3	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
	WINTER GARDEN, FL												
31-33	Manufacturing.....	1	25	7	618	15 852	501	1 037	9 912	37 998	125 408	153 789	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	WINTER HAVEN, FL Manufacturing	—	42	13	818	24 071	488	925	11 286	74 698	112 219	188 290	6 849

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
FLORIDA		FLORIDA—Con.	
Companies ¹ number..	15 192	Quantity of electricity purchased for heat and power 1,000 kWh..	12 221 816
All establishments number..	15 992	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	5 608 910
Establishments with 1 to 19 employees number..	12 364	Total value of shipments \$1,000..	77 477 510
Establishments with 20 to 99 employees number..	2 780	Value of resales \$1,000..	2 940 650
Establishments with 100 employees or more number..	848	Value added \$1,000..	40 213 354
All employees number..	433 149	Total inventories, beginning of year \$1,000..	9 119 734
Total compensation ² \$1,000..	16 384 051	Finished goods inventories, beginning of year \$1,000..	3 228 596
Annual payroll \$1,000..	13 185 078	Work-in-process inventories, beginning of year \$1,000..	2 703 930
Total fringe benefits \$1,000..	3 198 973	Materials and supplies inventories, beginning of year \$1,000..	3 187 208
Production workers, average for year number..	291 452	Total inventories, end of year \$1,000..	9 619 945
Production workers on March 12 number..	290 459	Finished goods inventories, end of year \$1,000..	3 398 741
Production workers on May 12 number..	291 706	Work-in-process inventories, end of year \$1,000..	2 795 532
Production workers on August 12 number..	291 052	Materials and supplies inventories, end of year \$1,000..	3 425 672
Production workers on November 12 number..	292 591	Gross book value of total assets at beginning of year \$1,000..	28 166 033
Production-worker hours 1,000..	562 891	Total capital expenditures (new and used) \$1,000..	2 979 519
Production-worker wages \$1,000..	6 825 999	Capital expenditures for buildings and other structures (new and used) \$1,000..	479 292
Total cost of materials \$1,000..	37 555 711	Capital expenditures for machinery and equipment (new and used) \$1,000..	2 500 227
Cost of materials, parts, containers, etc., consumed \$1,000..	32 904 605	Total retirements ² \$1,000..	870 781
Cost of resales \$1,000..	2 107 862	Gross book value of total assets at end of year \$1,000..	30 274 771
Cost of fuels \$1,000..	482 536	Total depreciation during year ² \$1,000..	2 080 538
Cost of purchased electricity \$1,000..	707 737	Total rental payments ² \$1,000..	805 586
Cost of contract work \$1,000..	1 352 971	Buildings and other structures rental payments ² \$1,000..	340 725
		Machinery and equipment rental payments ² \$1,000..	464 861

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

FLORIDA

Atlantic Beach. See “Jacksonville (consolidated city).”

Aventura was incorporated in November 1995.

De Bary was incorporated in December 1993.

Deltona was incorporated in December 1995.

Jacksonville Beach. See “Jacksonville (consolidated city).”

Jacksonville (balance). See “Jacksonville (consolidated city).”

Jacksonville (consolidated city) is coextensive with Duval County. It includes Atlantic Beach, Jacksonville

Beach, and Neptune Beach, which are tabulated separately. “Jacksonville (balance),” which is a place equivalent, includes Baldwin, which is not populous enough for separate tabulation.

Longboat Key is in Manatee and Sarasota Counties.

Neptune Beach. See “Jacksonville (consolidated city).”

Pinecrest was incorporated in March 1996.

St. Pete Beach name was changed from St. Petersburg Beach in April 1994.

Wellington was incorporated in December 1995.

Weston was incorporated in September 1996.

Appendix E. Metropolitan Areas

FLORIDA

Daytona Beach, FL MSA

Flagler County, FL

Volusia County, FL

Fort Lauderdale, FL PMSA

Broward County, FL

Fort Myers—Cape Coral, FL MSA

Lee County, FL

Fort Pierce—Port St. Lucie, FL MSA

Martin County, FL

St. Lucie County, FL

Fort Walton Beach, FL MSA

Okaloosa County, FL

Gainesville, FL MSA

Alachua County, FL

Jacksonville, FL MSA

Clay County, FL

Duval County, FL

Nassau County, FL

St. Johns County, FL

Lakeland—Winter Haven, FL MSA

Polk County, FL

Melbourne—Titusville—Palm Bay, FL MSA

Brevard County, FL

Miami—Fort Lauderdale, FL CMSA

Fort Lauderdale, FL PMSA

Broward County, FL

Miami, FL PMSA

Dade County, FL

Miami, FL PMSA

Dade County, FL

Naples, FL MSA

Collier County, FL

Ocala, FL MSA

Marion County, FL

Orlando, FL MSA

Lake County, FL

Orange County, FL

Osceola County, FL

Seminole County, FL

Panama City, FL MSA

Bay County, FL

Pensacola, FL MSA

Escambia County, FL

Santa Rosa County, FL

Punta Gorda, FL MSA

Charlotte County, FL

Sarasota—Bradenton, FL MSA

Manatee County, FL

Sarasota County, FL

Tallahassee, FL MSA

Gadsden County, FL

Leon County, FL

Tampa—St. Petersburg—Clearwater, FL MSA

Hernando County, FL

Hillsborough County, FL

Pasco County, FL

Pinellas County, FL

West Palm Beach—Boca Raton, FL MSA

Palm Beach County, FL

Georgia

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
GEORGIA													
31-33	Manufacturing	-	9 083	3 301	533 830	15 534 058	410 713	830 245	10 173 353	55 550 096	69 434 257	124 526 834	4 166 388
311	Food mfg	1	527	242	60 320	1 402 200	48 970	97 540	968 780	6 270 758	9 088 459	15 346 399	364 057
3111	Animal food mfg	1	58	27	1 681	52 300	1 070	2 290	29 735	495 856	1 080 226	1 576 443	25 979
31111	Animal food mfg	1	58	27	1 681	52 300	1 070	2 290	29 735	495 856	1 080 226	1 576 443	25 979
311111	Dog & cat food mfg	-	2	1	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg	1	56	26	g	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	30	18	1 446	50 248	1 080	2 543	33 450	407 874	1 203 214	1 624 004	31 144
31121	Flour milling & malt mfg	-	9	2	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	9	2	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	19	14	936	29 539	676	1 603	19 068	161 426	1 031 838	1 204 137	24 877
311222	Soybean processing	-	2	2	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing	-	4	4	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	13	8	563	18 029	422	991	12 803	43 082	453 468	504 293	4 813
31123	Breakfast cereal mfg	1	2	2	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	1	2	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	32	10	2 560	76 998	2 072	4 352	56 965	480 997	722 532	1 200 012	13 041
31131	Sugar mfg	-	2	2	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	19	7	g	D	D	D	D	D	D	D	11 302
311340	Nonchocolate confectionery mfg	-	19	7	g	D	D	D	D	D	D	D	11 302
3114	Fruit & vegetable preserving & specialty food mfg	6	17	8	1 843	38 268	1 537	3 574	28 664	112 959	130 016	242 382	8 333
31141	Frozen food mfg	6	4	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	2	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	1	c	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	6	13	6	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	7	10	5	540	12 140	447	967	8 765	39 308	47 928	87 303	D
311422	Specialty canning	-	3	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	18	11	1 465	41 280	983	2 309	24 775	147 307	344 118	493 014	8 896
31151	Dairy product (except frozen) mfg	-	13	8	843	26 187	568	1 249	15 549	88 058	251 256	341 260	D
311511	Fluid milk mfg	-	8	5	574	18 588	348	779	9 978	37 858	128 086	167 969	3 114
311513	Cheese mfg	-	3	2	c	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	2	1	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	5	3	622	15 093	415	1 060	9 226	59 249	92 862	151 754	D
311520	Ice cream & frozen dessert mfg	-	5	3	622	15 093	415	1 060	9 226	59 249	92 862	151 754	D
3116	Meat product mfg	1	122	74	34 197	635 476	30 458	59 116	505 695	1 568 184	3 415 881	4 951 140	109 258
31161	Animal slaughtering & processing	1	122	74	34 197	635 476	30 458	59 116	505 695	1 568 184	3 415 881	4 951 140	109 258
311611	Animal (except poultry) slaughtering	3	39	9	1 206	26 659	1 073	2 211	20 589	68 546	256 217	324 730	3 700
311612	Meat processed from carcasses	-	32	17	2 972	70 634	2 354	4 722	46 174	254 356	432 556	684 393	9 422
311613	Rendering & meat byproduct processing	2	10	8	432	11 258	266	538	5 570	44 176	65 072	109 259	3 727
311615	Poultry processing	1	41	40	29 587	526 925	26 765	51 645	433 362	1 201 106	2 662 036	3 832 758	92 409
3117	Seafood product preparation & packaging	1	11	5	1 278	27 981	974	1 660	13 603	34 266	166 796	201 159	3 330
31171	Seafood product preparation & packaging	1	11	5	1 278	27 981	974	1 660	13 603	34 266	166 796	201 159	3 330
311712	Fresh & frozen seafood processing	-	8	5	1 266	27 611	963	1 634	13 346	33 298	164 563	197 969	3 230
3118	Bakeries & tortilla mfg	1	169	51	10 351	298 575	6 572	12 941	171 724	1 122 805	760 869	1 887 878	88 832
31181	Bread & bakery product mfg	1	137	32	5 600	152 213	2 741	5 483	68 160	488 705	315 335	805 697	50 524
311811	Retail bakeries	6	82	2	357	4 065	212	241	2 004	10 403	6 273	16 673	578
311812	Commercial bakeries	-	48	24	4 486	124 437	1 944	3 900	50 145	393 811	223 144	616 835	27 546
311813	Frozen cakes, pies, & other pastries mfg	4	7	6	757	23 711	585	1 342	16 011	84 491	85 918	172 189	22 400
31182	Cookie, cracker, & pasta mfg	-	26	15	4 250	135 303	3 411	6 673	95 342	605 688	416 443	1 024 526	36 743
311821	Cookie & cracker mfg	-	16	9	3 136	106 186	2 543	5 189	74 859	462 987	289 099	753 672	27 564
311822	Flour mixes & dough mfg from purchased flour	1	7	6	1 100	28 806	857	1 472	20 298	140 964	126 657	268 428	9 128
31183	Tortilla mfg	1	6	4	501	11 059	420	785	8 222	28 412	29 091	57 655	1 565
311830	Tortilla mfg	1	6	4	501	11 059	420	785	8 222	28 412	29 091	57 655	1 565

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	70	38	5 499	181 074	4 224	8 755	104 169	1 900 510	1 264 807	3 170 367	75 244
31191	Snack food mfg	—	20	17	2 927	94 160	2 466	5 045	56 869	527 812	619 189	1 156 725	38 865
311911	Roasted nuts & peanut butter mfg	1	12	10	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	8	7	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	6	2	390	13 524	252	564	6 500	37 885	35 111	73 361	D
311920	Coffee & tea mfg	—	6	2	390	13 524	252	564	6 500	37 885	35 111	73 361	D
31193	Flavoring syrup & concentrate mfg	2	8	4	558	21 224	301	700	12 464	1 163 612	332 618	1 490 799	13 378
311930	Flavoring syrup & concentrate mfg	2	8	4	558	21 224	301	700	12 464	1 163 612	332 618	1 490 799	13 378
31194	Seasoning & dressing mfg	3	13	7	954	36 017	701	1 434	19 267	125 578	196 874	322 766	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	7	6	3	440	14 209	343	736	8 827	53 975	73 209	127 227	D
311942	Spice & extract mfg	—	7	4	514	21 808	358	698	10 440	71 603	123 665	195 539	2 767
31199	All other food mfg	4	23	8	670	16 149	504	1 012	9 069	45 623	81 015	126 716	9 534
311999	All other miscellaneous food mfg	4	18	8	654	15 759	490	988	8 829	44 307	79 665	124 050	D
312	Beverage & tobacco product mfg	—	63	26	7 306	369 545	4 891	9 875	234 510	4 499 869	2 174 619	6 675 244	206 226
3121	Beverage mfg	—	60	23	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	47	18	2 794	96 657	1 428	3 056	39 498	719 015	755 229	1 470 882	39 893
312111	Soft drink mfg	—	18	13	2 402	85 454	1 240	2 696	35 248	674 423	726 836	1 397 762	38 594
312112	Bottled water mfg	1	7	3	274	8 502	112	220	2 712	34 879	23 540	58 591	939
312113	Ice mfg	2	22	2	118	2 701	76	140	1 538	9 713	4 853	14 529	360
31212	Breweries	—	9	3	g	D	D	D	D	D	D	D	D
312120	Breweries	—	9	3	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	3	3	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	3	3	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	1	1	h	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	6	2	2	c	D	D	D	D	D	D	D	D
313	Textile mills	1	300	197	52 411	1 256 297	46 443	98 312	1 019 944	2 902 553	4 701 784	7 615 479	288 323
3131	Fiber, yarn, & thread mills	—	93	74	19 626	443 144	17 958	37 905	384 986	843 735	1 961 006	2 837 752	73 766
31311	Fiber, yarn, & thread mills	—	93	74	19 626	443 144	17 958	37 905	384 986	843 735	1 961 006	2 837 752	73 766
313111	Yarn spinning mills	—	60	47	13 410	302 120	12 291	25 923	266 637	581 384	1 040 812	1 650 285	59 071
313112	Yarn texturing, throwing, & twisting mills	—	30	25	6 070	138 301	5 579	11 781	117 112	258 687	908 876	1 170 132	D
313113	Thread mills	—	3	2	146	2 723	88	201	1 237	3 664	11 318	17 335	D
3132	Fabric mills	2	121	77	24 866	632 489	21 664	46 710	496 706	1 497 136	2 170 492	3 674 686	166 941
31321	Broadwoven fabric mills	2	74	52	21 328	542 333	18 745	40 541	435 896	1 317 234	1 797 174	3 125 643	129 388
313210	Broadwoven fabric mills	2	74	52	21 328	542 333	18 745	40 541	435 896	1 317 234	1 797 174	3 125 643	129 388
31322	Narrow fabric mills & schiffli machine embroidery	6	14	3	204	4 579	176	386	3 271	9 685	7 163	16 696	519
313221	Narrow fabric mills	6	11	3	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	1	20	10	1 341	41 961	1 045	2 269	27 536	94 490	241 715	334 069	24 092
313230	Nonwoven fabric mills	1	20	10	1 341	41 961	1 045	2 269	27 536	94 490	241 715	334 069	24 092
31324	Knit fabric mills	2	13	12	1 993	43 616	1 698	3 514	30 003	75 727	124 440	198 278	12 942
313241	Weft knit fabric mills	2	7	7	1 107	24 140	922	1 969	14 381	39 051	62 225	100 709	3 395
313249	Other knit fabric & lace mills	2	6	5	886	19 476	776	1 545	15 622	36 676	62 215	97 569	9 547
3133	Textile & fabric finishing & fabric coating mills	—	86	46	7 919	180 664	6 821	13 697	138 252	561 682	570 286	1 103 041	47 616
31331	Textile & fabric finishing mills	—	78	42	7 681	173 405	6 632	13 316	133 053	537 850	527 378	1 038 345	46 733
313311	Broadwoven fabric finishing mills	—	52	24	4 286	99 949	3 691	7 667	76 474	390 504	324 885	687 644	38 227
313312	Textile & fabric finishing mills	—	26	18	3 395	73 456	2 941	5 649	56 579	147 346	202 493	350 701	8 506
31332	Fabric coating mills	—	8	4	238	7 259	189	381	5 199	23 832	42 908	64 696	883
313320	Fabric coating mills	—	8	4	238	7 259	189	381	5 199	23 832	42 908	64 696	883

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills.....	-	522	236	49 696	1 202 395	38 944	84 267	836 803	4 164 147	6 315 679	10 414 525	187 839
3141	Textile furnishings mills....	-	359	160	39 362	961 520	30 410	66 457	670 869	3 608 827	5 485 082	9 032 013	149 891
31411	Carpet & rug mills.....	-	251	120	33 623	860 010	25 908	58 452	605 826	3 186 656	5 153 189	8 282 605	139 818
314110	Carpet & rug mills.....	-	251	120	33 623	860 010	25 908	58 452	605 826	3 186 656	5 153 189	8 282 605	139 818
31412	Curtain & linen mills.....	-	108	40	5 739	101 510	4 502	8 005	65 043	422 171	331 893	749 408	10 073
314121	Curtain & drapery mills.....	1	61	11	1 736	27 414	1 118	1 911	13 565	50 858	39 954	89 272	1 440
314129	Other household textile product mills.....	-	47	29	4 003	74 096	3 384	6 094	51 478	371 313	291 939	660 136	8 633
3149	Other textile product mills..	1	163	76	10 334	240 875	8 534	17 810	165 934	555 320	830 597	1 382 512	37 948
31491	Textile bag & canvas mills.....	2	52	17	1 855	39 124	1 517	3 165	26 140	46 816	67 260	115 461	2 437
314911	Textile bag mills.....	1	18	10	1 368	27 242	1 174	2 494	19 723	28 042	50 013	78 436	1 527
314912	Canvas & related product mills.....	5	34	7	487	11 882	343	671	6 417	18 774	17 247	37 025	910
31499	All other textile product mills.....	1	111	59	8 479	201 751	7 017	14 645	139 794	508 504	763 337	1 267 051	35 511
314991	Rope, cordage, & twine mills.....	-	11	5	462	9 738	424	912	8 688	34 165	43 140	64 549	598
314992	Tire cord & tire fabric mills.....	-	3	3	1 614	42 427	1 415	2 965	34 749	90 674	194 221	288 320	7 286
314999	All other miscellaneous textile product mills..	1	97	51	6 403	149 586	5 178	10 768	96 357	383 665	525 976	914 182	27 627
315	Apparel mfg.....	1	344	194	32 536	504 505	26 734	47 901	372 592	1 550 903	1 731 540	3 225 557	34 847
3151	Apparel knitting mills.....	-	29	18	2 468	41 982	2 119	3 734	29 883	98 924	113 907	213 720	9 408
31511	Hosiery & sock mills.....	-	18	11	1 402	28 044	1 134	2 322	18 343	40 593	79 287	120 741	4 369
315111	Sheer hosiery mills.....	-	5	2	c	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills.....	-	13	9	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills.....	1	11	7	1 066	13 938	985	1 412	11 540	58 331	34 620	92 979	5 039
315191	Outerwear knitting mills.....	9	8	4	e	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills.....	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.....	1	259	162	28 911	445 247	23 617	42 429	329 630	1 420 470	1 592 450	2 955 197	23 943
31521	Cut & sew apparel contractors.....	2	108	58	7 682	99 607	6 305	10 618	76 274	165 269	38 668	203 092	3 940
315211	Men's & boys' cut & sew apparel contractors.....	1	35	32	4 964	65 661	4 098	6 699	50 525	110 650	21 884	132 219	2 425
315212	Women's, girls', & infants' cut & sew apparel contractors..	2	73	26	2 718	33 946	2 207	3 919	25 749	54 619	16 784	70 873	1 515
31522	Men's & boys' cut & sew apparel mfg.....	1	76	57	12 279	198 654	10 343	19 105	146 963	671 911	843 688	1 465 620	12 379
315221	Men's & boys' cut & sew underwear & nightwear mfg.....	-	7	6	1 606	19 629	1 468	2 537	16 855	96 393	66 813	169 760	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	7	10	9	1 563	31 194	1 286	1 628	21 415	95 165	146 452	234 343	530
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	21	17	2 544	49 653	2 197	4 944	36 048	180 402	408 626	550 978	3 533
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	1	20	13	3 171	49 736	2 787	5 285	43 196	166 341	110 789	276 360	4 528
315225	Men's & boys' cut & sew work clothing mfg.....	4	4	4	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg.....	-	14	8	g	D	D	D	D	D	D	D	1 888
31523	Women's & girls' cut & sew apparel mfg.....	2	59	40	7 311	122 690	5 668	10 284	88 093	493 905	629 388	1 123 148	6 879
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	-	14	13	4 333	68 215	3 584	6 928	51 897	268 105	328 498	605 332	4 648
315232	Women's & girls' cut & sew blouse & shirt mfg.....	7	7	6	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg.....	8	8	6	609	13 229	403	674	8 078	97 158	109 511	200 475	473
315239	Women's & girls' cut & sew other outerwear mfg.....	-	28	15	1 766	34 422	1 291	2 050	23 523	110 608	186 218	294 337	1 698
31529	Other cut & sew apparel mfg.....	1	16	7	1 639	24 296	1 301	2 422	18 300	89 385	80 706	163 337	745
315291	Infants' cut & sew apparel mfg.....	-	7	6	1 564	23 149	1 243	2 335	17 510	87 485	79 102	159 836	706

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31-33	GEORGIA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	56	14	1 157	17 276	998	1 738	13 079	31 509	25 183	56 640	1 496
31599	Apparel accessories & other apparel mfg	1	56	14	1 157	17 276	998	1 738	13 079	31 509	25 183	56 640	1 496
315991	Hat, cap, & millinery mfg	1	11	7	656	9 406	578	1 062	7 375	13 181	9 168	22 250	D
315992	Glove & mitten mfg	—	4	3	142	1 578	134	218	1 389	3 518	2 846	6 413	D
315999	Other apparel accessories & other apparel mfg	2	41	4	359	6 292	286	458	4 315	14 810	13 169	27 977	1 071
316	Leather & allied product mfg	2	26	4	461	6 767	326	610	4 960	18 942	21 729	41 227	635
3162	Footwear mfg	1	6	2	324	4 268	216	418	3 208	13 295	17 071	30 973	D
31621	Footwear mfg	1	6	2	324	4 268	216	418	3 208	13 295	17 071	30 973	D
316211	Rubber & plastics footwear mfg	2	2	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	2	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	—	555	222	28 083	691 313	23 236	47 160	502 548	1 745 709	3 445 975	5 174 866	148 881
3211	Sawmills & wood preservation	—	148	69	7 094	182 942	5 660	12 739	132 517	542 887	1 430 958	1 963 567	62 788
32111	Sawmills & wood preservation	—	148	69	7 094	182 942	5 660	12 739	132 517	542 887	1 430 958	1 963 567	62 788
321113	Sawmills	—	128	61	6 611	169 368	5 345	12 130	126 296	508 512	1 234 006	1 736 531	55 666
321114	Wood preservation	1	20	8	483	13 574	315	609	6 221	34 375	196 952	227 036	7 122
3212	Veneer, plywood, & engineered wood product mfg	—	76	42	5 231	148 801	4 415	9 487	114 078	324 425	663 297	988 584	39 858
32121	Veneer, plywood, & engineered wood product mfg	—	76	42	5 231	148 801	4 415	9 487	114 078	324 425	663 297	988 584	39 858
321211	Hardwood veneer & plywood mfg	—	10	6	f	D	D	D	D	D	D	D	1 443
321212	Softwood veneer & plywood mfg	—	6	5	1 562	51 533	1 414	3 190	43 741	102 847	218 203	322 134	D
321213	Engineered wood member (except truss) mfg	—	3	3	f	D	D	D	D	D	D	D	D
321214	Truss mfg	1	45	18	1 175	26 647	937	1 820	16 993	51 318	87 230	138 161	3 297
321219	Reconstituted wood product mfg	—	12	10	1 243	38 780	995	2 167	28 156	107 951	175 243	284 889	22 732
3219	Other wood product mfg	1	331	111	15 758	359 570	13 161	24 934	255 953	878 397	1 351 720	2 222 715	46 235
32191	Millwork	1	137	47	4 365	97 284	3 535	6 910	68 767	277 516	420 244	692 912	14 690
321911	Wood window & door mfg	—	42	14	1 741	37 290	1 360	2 721	26 014	151 351	143 779	289 877	3 714
321912	Cut stock, resawing lumber, & planing	1	36	10	799	15 673	699	1 253	12 328	38 775	148 174	187 422	4 956
321918	Other millwork (including flooring)	1	59	23	1 825	44 321	1 476	2 936	30 425	87 390	128 291	215 613	6 020
32192	Wood container & pallet mfg	2	105	21	2 044	36 448	1 786	3 599	26 473	71 986	83 897	155 840	7 421
321920	Wood container & pallet mfg	2	105	21	2 044	36 448	1 786	3 599	26 473	71 986	83 897	155 840	7 421
32199	All other wood product mfg	—	89	43	9 349	225 838	7 840	14 425	160 713	528 895	847 579	1 373 963	24 124
321991	Manufactured home (mobile home) mfg	—	26	24	8 170	202 985	6 942	12 833	145 318	477 381	786 372	1 261 760	21 456
321992	Prefabricated wood building mfg	2	15	6	419	9 928	294	571	5 898	21 063	29 222	49 414	1 038
321999	All other miscellaneous wood product mfg	1	48	13	760	12 925	604	1 021	9 497	30 451	31 985	62 789	1 630
322	Paper mfg	—	211	156	27 044	1 072 220	21 138	45 827	761 106	4 117 975	4 886 558	8 970 553	692 402
3221	Pulp, paper, & paperboard mills	—	25	25	11 857	585 465	9 228	20 527	418 415	2 212 378	2 495 146	4 695 717	507 840
32211	Pulp mills	—	3	3	g	D	D	D	D	D	D	D	D
322110	Pulp mills	—	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	8	8	h	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	6	6	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	216 079
32213	Paperboard mills	—	14	14	6 811	353 034	5 180	12 003	245 868	1 135 609	1 500 793	2 627 264	220 398
322130	Paperboard mills	—	14	14	6 811	353 034	5 180	12 003	245 868	1 135 609	1 500 793	2 627 264	220 398
3222	Converted paper product mfg	—	186	131	15 187	486 755	11 910	25 300	342 691	1 905 597	2 391 412	4 274 836	184 562
32221	Paperboard container mfg	—	111	85	8 109	262 551	6 109	13 323	171 694	675 227	1 129 881	1 794 830	76 320
322211	Corrugated & solid fiber box mfg	—	70	54	4 725	160 164	3 392	7 430	99 417	399 781	685 830	1 082 740	29 621
322212	Folding paperboard box mfg	—	19	16	2 298	69 335	1 796	4 156	48 081	197 101	291 642	480 707	43 070
322214	Fiber can, tube, drum, & similar products mfg	—	18	11	727	22 859	609	1 193	16 881	58 429	102 112	160 530	2 643
322215	Nonfolding sanitary food container mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GEORGIA—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32222	Paper bag & coated & treated paper mfg	1	27	19	2 260	67 942	1 736	3 701	46 307	259 287	446 895	704 190	17 501
322221	Coated & laminated packaging paper & plastics film mfg	—	2	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	1	16	9	790	25 137	526	1 085	16 126	162 236	201 492	366 032	11 324
322224	Uncoated paper & multiwall bag mfg	—	3	3	897	22 558	778	1 657	16 966	36 649	92 889	128 636	1 872
322225	Laminated aluminum foil mfg for flexible packaging uses	2	4	4	305	11 963	221	542	7 954	34 030	56 072	86 181	3 012
32223	Stationery product mfg	—	22	10	1 424	41 616	1 172	2 450	29 839	179 752	147 092	320 734	9 019
322231	Die-cut paper & paperboard office supplies mfg	—	8	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	10	6	764	22 946	615	1 259	16 250	71 573	68 525	137 280	4 565
322233	Stationery, tablet, & related product mfg	—	4	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	26	17	3 394	114 646	2 893	5 826	94 851	791 331	667 544	1 455 082	81 722
322291	Sanitary paper product mfg	—	7	6	2 279	82 373	2 008	3 918	70 664	583 868	558 122	1 137 242	76 470
322299	All other converted paper product mfg	1	19	11	1 115	32 273	885	1 908	24 187	207 463	109 422	317 840	5 252
323	Printing & related support activities	2	1 206	227	22 159	679 277	15 774	29 969	413 700	1 597 636	1 091 816	2 688 649	114 320
3231	Printing & related support activities	2	1 206	227	22 159	679 277	15 774	29 969	413 700	1 597 636	1 091 816	2 688 649	114 320
32311	Printing	2	1 064	184	19 297	598 744	13 644	26 030	363 565	1 430 829	1 047 672	2 477 531	105 609
323110	Commercial lithographic printing	2	529	102	11 135	365 322	7 825	15 356	224 273	788 287	557 677	1 345 296	58 896
323111	Commercial gravure printing	3	15	6	1 793	62 510	1 314	2 359	36 959	187 616	130 689	318 774	15 064
323112	Commercial flexographic printing	—	26	10	758	26 094	511	1 139	14 879	80 377	93 445	173 936	6 403
323113	Commercial screen printing	1	111	17	1 247	30 743	795	1 372	14 018	65 303	57 352	124 357	6 920
323114	Quick printing	2	224	10	1 241	31 582	849	1 442	18 773	65 487	37 043	102 218	4 725
323116	Manifold business form printing	3	32	20	1 877	47 781	1 458	2 751	33 529	175 568	124 480	298 026	8 886
323117	Book printing	2	18	6	398	11 450	299	569	7 982	21 024	15 426	36 372	701
323118	Blankbook, looseleaf binder, & device mfg	1	10	2	105	2 742	85	167	1 482	6 089	3 084	9 162	84
323119	Other commercial printing	5	93	11	703	19 423	477	821	11 033	38 355	27 193	65 382	3 760
32312	Support activities for printing	1	142	43	2 862	80 533	2 130	3 939	50 135	166 807	44 144	211 118	8 711
323121	Tradebinding & related work	1	59	23	1 426	27 499	1 181	2 170	19 956	49 713	16 943	66 651	1 728
323122	Prepress services	1	83	20	1 436	53 034	949	1 769	30 179	117 094	27 201	144 467	6 983
324	Petroleum & coal products mfg	2	56	14	1 073	40 670	845	1 878	29 356	218 708	444 865	664 788	31 688
3241	Petroleum & coal products mfg	2	56	14	1 073	40 670	845	1 878	29 356	218 708	444 865	664 788	31 688
32412	Asphalt paving, roofing, & saturated materials mfg	—	42	8	819	30 944	676	1 563	23 414	134 994	250 802	387 181	24 990
324121	Asphalt paving mixture & block mfg	2	32	1	217	8 115	185	429	6 158	38 210	94 723	133 192	6 225
324122	Asphalt shingle & coating materials mfg	—	10	7	602	22 829	491	1 134	17 256	96 784	156 079	253 989	18 765
32419	Other petroleum & coal products mfg	6	12	4	c	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	5	11	4	162	5 271	111	194	3 243	30 515	54 643	84 950	957
325	Chemical mfg	—	481	226	23 567	877 149	14 497	30 307	455 894	5 541 057	5 663 931	11 189 433	453 551
3251	Basic chemical mfg	—	87	37	4 391	190 324	2 706	5 817	109 180	1 089 821	1 000 058	2 118 646	85 593
32512	Industrial gas mfg	—	20	4	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	20	4	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	8	4	908	35 676	532	1 245	19 180	130 233	199 287	345 042	15 130
325131	Inorganic dye & pigment mfg	—	4	4	863	33 516	512	1 204	18 545	122 649	178 171	316 606	D
32518	Other basic inorganic chemical mfg	—	31	14	1 066	50 335	731	1 531	30 758	320 466	284 031	607 321	28 151
325181	Alkalies & chlorine mfg	—	2	1	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	29	13	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3251	Basic chemical mfg—Con.												
32519	Other basic organic chemical mfg	-	26	15	2 194	96 899	1 309	2 766	55 058	594 801	500 567	1 105 660	38 988
325191	Gum & wood chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	23	12	1 705	72 263	1 014	1 959	40 729	528 272	436 014	976 672	31 230
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	40	32	4 708	150 302	3 591	7 776	103 328	617 692	905 479	1 518 823	65 561
32521	Resin & synthetic rubber mfg	-	25	21	1 639	60 187	1 060	2 159	35 028	375 713	567 784	940 284	40 982
325211	Plastics material & resin mfg	-	22	19	g	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	-	3	2	c	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	2	15	11	3 069	90 115	2 531	5 617	68 300	241 979	337 695	578 539	24 579
325222	Noncellulosic organic fiber mfg	2	15	11	3 069	90 115	2 531	5 617	68 300	241 979	337 695	578 539	24 579
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	39	20	1 537	53 910	966	1 905	22 830	394 705	382 226	767 113	34 092
32531	Fertilizer mfg	1	23	10	637	18 694	439	906	11 353	123 845	183 088	300 758	16 185
325311	Nitrogenous fertilizer mfg	-	6	3	c	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	2	2	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	3	15	5	277	6 565	209	420	4 177	24 861	51 873	75 452	3 636
32532	Pesticide & other agricultural chemical mfg	-	16	10	900	35 216	527	999	11 477	270 860	199 138	466 355	17 907
325320	Pesticide & other agricultural chemical mfg	-	16	10	900	35 216	527	999	11 477	270 860	199 138	466 355	17 907
3254	Pharmaceutical & medicine mfg	-	37	16	2 380	102 305	1 147	2 350	44 594	839 014	1 054 590	1 881 083	142 494
32541	Pharmaceutical & medicine mfg	-	37	16	2 380	102 305	1 147	2 350	44 594	839 014	1 054 590	1 881 083	142 494
325411	Medicinal & botanical mfg	-	7	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	14	6	585	29 710	336	672	14 587	161 265	60 269	223 377	26 787
325413	In-vitro diagnostic substance mfg	-	8	4	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	1	8	2	e	D	D	D	D	D	D	D	3 737
3255	Paint, coating, & adhesive mfg	1	92	37	2 359	87 336	1 320	2 552	37 432	534 418	612 727	1 143 151	25 460
32551	Paint & coating mfg	-	51	19	1 316	45 547	730	1 354	19 779	347 962	361 199	706 400	12 926
325510	Paint & coating mfg	-	51	19	1 316	45 547	730	1 354	19 779	347 962	361 199	706 400	12 926
32552	Adhesive mfg	1	41	18	1 043	41 789	590	1 198	17 653	186 456	251 528	436 751	12 534
325520	Adhesive mfg	1	41	18	1 043	41 789	590	1 198	17 653	186 456	251 528	436 751	12 534
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	94	40	4 566	162 828	2 656	5 403	76 058	1 463 768	910 166	2 371 345	59 720
32561	Soap & cleaning compound mfg	-	73	28	3 266	124 453	1 779	3 885	57 631	1 274 039	813 086	2 085 517	40 693
325611	Soap & other detergent mfg	-	33	13	1 567	70 265	869	1 841	33 511	853 361	496 567	1 346 865	25 842
325612	Polish & other sanitation good mfg ..	-	29	10	1 313	39 933	724	1 636	18 683	347 235	226 500	575 940	9 714
325613	Surface active agent mfg	-	11	5	386	14 255	186	408	5 437	73 443	90 019	162 712	5 137
32562	Toilet preparation mfg ...	3	21	12	1 300	38 375	877	1 518	18 427	189 729	97 080	285 828	19 027
325620	Toilet preparation mfg .	3	21	12	1 300	38 375	877	1 518	18 427	189 729	97 080	285 828	19 027
3259	Other chemical product mfg	1	92	44	3 626	130 144	2 111	4 504	62 472	601 639	798 685	1 389 272	40 631
32591	Printing ink mfg	3	23	12	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	3	23	12	e	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	1	1	c	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	1	1	c	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	68	31	3 043	109 998	1 753	3 760	52 706	544 057	713 849	1 247 920	38 489
325991	Custom compounding of purchased resin ...	-	18	11	1 077	39 505	584	1 224	18 677	140 192	244 287	377 942	15 528
325992	Photographic film, paper, plate, & chemical mfg	1	10	4	265	8 165	132	263	2 818	23 758	21 442	45 187	1 398
325998	All other miscellaneous chemical product & preparation mfg	1	40	16	1 701	62 328	1 037	2 273	31 211	380 107	448 120	824 791	21 563

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	432	245	26 866	742 812	21 677	44 907	518 308	2 365 387	2 590 850	4 938 476	233 558
3261	Plastics product mfg	-	336	195	20 284	548 981	16 306	33 037	374 782	1 778 360	1 905 265	3 667 958	194 409
32611	Unsupported plastics film, sheet, & bag mfg ..	-	52	40	4 584	146 345	3 572	7 754	101 549	578 078	645 245	1 215 906	60 757
326111	Unsupported plastics bag mfg	-	14	12	1 616	48 469	1 328	2 700	35 203	179 482	166 083	347 480	10 303
326112	Unsupported plastics packaging film & sheet mfg	-	6	5	801	28 409	628	1 433	20 749	93 987	130 850	223 145	7 375
326113	Unsupported plastics film & sheet (except packaging) mfg	-	32	23	2 167	69 467	1 616	3 621	45 597	304 609	348 312	645 281	43 079
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	36	18	1 198	36 020	869	1 745	20 118	129 259	167 286	292 481	15 627
326121	Unsupported plastics profile shape mfg	3	19	8	487	14 098	314	638	6 955	29 952	23 777	53 228	5 273
326122	Plastics pipe & pipe fitting mfg	-	17	10	711	21 922	555	1 107	13 163	99 307	143 509	239 253	10 354
32614	Polystyrene foam product mfg	-	23	13	2 056	60 276	1 652	3 625	43 782	247 418	216 002	464 864	28 575
326140	Polystyrene foam product mfg	-	23	13	2 056	60 276	1 652	3 625	43 782	247 418	216 002	464 864	28 575
32615	Urethane & other foam product (except polystyrene) mfg	1	15	10	753	21 141	604	1 193	13 484	47 775	77 239	125 070	3 937
326150	Urethane & other foam product (except polystyrene) mfg	1	15	10	753	21 141	604	1 193	13 484	47 775	77 239	125 070	3 937
32616	Plastics bottle mfg	-	21	14	1 374	37 108	1 227	2 507	29 752	104 444	107 256	211 158	23 075
326160	Plastics bottle mfg	-	21	14	1 374	37 108	1 227	2 507	29 752	104 444	107 256	211 158	23 075
32619	Other plastics product mfg	1	181	99	10 251	246 256	8 327	16 119	164 734	666 376	688 836	1 350 051	62 197
326191	Plastics plumbing fixture mfg	3	27	14	1 311	30 553	1 057	2 032	21 426	75 392	50 588	126 527	2 639
326199	All other plastics product mfg	-	154	85	8 940	215 703	7 270	14 087	143 308	590 984	638 248	1 223 524	59 558
3262	Rubber product mfg	-	96	50	6 582	193 831	5 371	11 870	143 526	587 027	685 585	1 270 518	39 149
32621	Tire mfg	-	35	9	2 045	70 008	1 776	4 445	59 164	254 000	257 029	507 764	D
326211	Tire mfg (except retreading)	-	7	4	1 812	63 952	1 609	4 098	55 361	241 750	241 916	480 391	17 800
326212	Tire retreading	1	28	5	233	6 056	167	347	3 803	12 250	15 113	27 375	D
32622	Rubber & plastics hoses & belting mfg	-	9	4	631	19 628	450	950	11 760	32 216	65 845	99 885	D
326220	Rubber & plastics hoses & belting mfg ..	-	9	4	631	19 628	450	950	11 760	32 216	65 845	99 885	D
32629	Other rubber product mfg	-	52	37	3 906	104 195	3 145	6 475	72 602	300 811	362 711	662 869	17 122
326291	Rubber product mfg for mechanical use	-	16	11	1 570	38 229	1 321	2 623	29 203	112 100	75 939	188 001	8 792
326299	All other rubber product mfg	-	36	26	2 336	65 966	1 824	3 852	43 399	188 711	286 772	474 868	8 330
327	Nonmetallic mineral product mfg	1	599	200	18 207	586 286	13 820	28 773	401 981	1 976 690	1 588 828	3 574 225	181 304
3271	Clay product & refractory mfg	-	46	18	3 183	89 982	2 372	4 786	59 863	268 658	151 226	424 202	16 313
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	26	7	913	26 205	762	1 606	21 223	78 360	41 692	117 633	3 300
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	5	3	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	1	20	3	176	3 414	133	235	2 034	13 860	5 924	18 421	1 555
327113	Porcelain electrical supply mfg	-	1	1	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	20	11	2 270	63 777	1 610	3 180	38 640	190 298	109 534	306 569	13 013
327121	Brick & structural clay tile mfg	1	7	5	885	19 937	629	1 260	11 943	66 653	39 853	108 656	4 022
327122	Ceramic wall & floor tile mfg	-	4	2	e	D	D	D	D	D	D	D	D
327124	Clay refractory mfg	-	3	1	c	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	6	3	956	32 066	617	1 216	17 102	75 907	48 274	125 708	7 130
3272	Glass & glass product mfg ..	-	46	15	2 028	69 920	1 636	3 264	52 155	192 889	225 342	422 416	37 755
32721	Glass & glass product mfg	-	46	15	2 028	69 920	1 636	3 264	52 155	192 889	225 342	422 416	37 755
327211	Flat glass mfg	-	1	1	c	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	3	3	816	35 233	720	1 470	29 940	101 153	98 518	204 016	11 394
327215	Glass product mfg made of purchased glass	-	37	11	g	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	1	328	101	6 454	195 597	4 953	10 450	134 578	618 074	611 505	1 232 178	44 766
32731	Cement mfg	—	7	2	283	14 265	217	517	9 498	81 815	38 179	121 564	7 339
327310	Cement mfg	—	7	2	283	14 265	217	517	9 498	81 815	38 179	121 564	7 339
32732	Ready-mix concrete mfg	1	186	57	3 226	101 912	2 666	5 592	75 481	292 236	395 685	688 636	22 203
327320	Ready-mix concrete mfg	1	186	57	3 226	101 912	2 666	5 592	75 481	292 236	395 685	688 636	22 203
32733	Concrete pipe, brick, & block mfg	2	47	12	708	19 856	464	1 083	12 444	69 977	58 881	129 873	5 937
327331	Concrete block & brick mfg	2	36	5	469	12 996	289	655	7 923	51 920	46 080	97 634	3 972
327332	Concrete pipe mfg	2	11	7	239	6 860	175	428	4 521	18 057	12 801	32 239	1 965
32739	Other concrete product mfg	1	88	30	2 237	59 564	1 606	3 258	37 155	174 046	118 760	292 105	9 287
327390	Other concrete product mfg	1	88	30	2 237	59 564	1 606	3 258	37 155	174 046	118 760	292 105	9 287
3274	Lime & gypsum product mfg	—	16	10	808	28 161	656	1 540	21 605	150 133	180 218	330 475	8 738
32742	Gypsum product mfg	—	16	10	808	28 161	656	1 540	21 605	150 133	180 218	330 475	8 738
327420	Gypsum product mfg	—	16	10	808	28 161	656	1 540	21 605	150 133	180 218	330 475	8 738
3279	Other nonmetallic mineral product mfg	1	163	56	5 734	202 626	4 203	8 733	133 780	746 936	420 537	1 164 954	73 732
32791	Abrasive product mfg	2	5	4	299	11 202	171	326	4 177	34 840	33 777	67 407	867
327910	Abrasive product mfg	2	5	4	299	11 202	171	326	4 177	34 840	33 777	67 407	867
32799	All other nonmetallic mineral product mfg	1	158	52	5 435	191 424	4 032	8 407	129 603	712 096	386 760	1 097 547	72 865
327991	Cut stone & stone product mfg	4	115	28	1 613	39 515	1 265	2 578	28 834	79 650	50 965	130 123	5 683
327992	Ground or treated mineral & earth mfg	—	10	7	1 496	62 004	901	2 009	30 947	351 783	114 045	465 678	42 518
327993	Mineral wool mfg	—	14	8	1 717	75 894	1 415	2 978	60 957	240 707	188 021	428 868	17 890
327999	All other miscellaneous nonmetallic mineral product mfg	—	19	9	609	14 011	451	842	8 865	39 956	33 729	72 878	6 774
331	Primary metal mfg	—	73	44	6 716	218 650	5 376	11 536	151 245	595 660	1 486 972	2 079 926	58 074
3311	Iron & steel mills & ferroalloy mfg	—	3	3	f	D	D	D	D	D	D	D	3 528
33111	Iron & steel mills & ferroalloy mfg	—	3	3	f	D	D	D	D	D	D	D	3 528
331111	Iron & steel mills	—	3	3	f	D	D	D	D	D	D	D	3 528
3312	Steel product mfg from purchased steel	—	14	11	g	D	D	D	D	D	D	D	9 771
33121	Iron & steel pipes & tubes mfg from purchased steel	2	6	4	c	D	D	D	D	D	D	D	1 647
331210	Iron & steel pipes & tubes mfg from purchased steel	2	6	4	c	D	D	D	D	D	D	D	1 647
33122	Rolling & drawing of purchased steel	—	8	7	798	26 598	569	870	11 673	93 444	111 211	206 851	8 124
331222	Steel wire drawing	—	5	4	709	24 079	500	753	9 793	84 911	83 557	170 114	7 484
3313	Alumina & aluminum production & processing	—	12	10	2 170	66 705	1 715	3 829	45 159	163 356	450 580	614 323	14 761
33131	Alumina & aluminum production & processing	—	12	10	2 170	66 705	1 715	3 829	45 159	163 356	450 580	614 323	14 761
331314	Secondary smelting & alloying of aluminum	—	2	2	c	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	6	6	1 671	51 436	1 296	2 923	34 022	117 206	181 046	298 434	7 453
331319	Other aluminum rolling & drawing	—	3	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	12	7	816	27 198	637	1 397	20 186	77 480	576 504	655 416	16 958
33142	Copper rolling, drawing, extruding, & alloying	—	3	3	e	D	D	D	D	D	D	D	10 713
331421	Copper rolling, drawing, & extruding	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	1	9	4	e	D	D	D	D	D	D	D	6 245
331491	Other nonferrous metal rolling, drawing, & extruding	1	5	3	c	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	1	4	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	—	32	13	1 949	57 823	1 669	3 744	44 196	174 669	126 438	300 584	13 056
33151	Ferrous metal foundries	—	17	7	1 336	38 865	1 154	2 660	29 328	133 273	88 658	220 804	7 791
331511	Iron foundries	—	17	7	1 336	38 865	1 154	2 660	29 328	133 273	88 658	220 804	7 791
33152	Nonferrous metal foundries	—	15	6	613	18 958	515	1 084	14 868	41 396	37 780	79 780	5 265
331521	Aluminum die-casting foundries	—	6	4	516	16 680	440	953	13 352	35 713	35 998	72 230	5 005
332	Fabricated metal product mfg	—	1 114	338	31 987	916 655	24 623	48 774	602 044	2 271 184	2 503 696	4 784 000	196 813
3321	Forging & stamping	—	38	19	1 614	47 645	1 238	2 461	30 016	116 012	120 627	237 046	5 660
33211	Forging & stamping	—	38	19	1 614	47 645	1 238	2 461	30 016	116 012	120 627	237 046	5 660
332114	Custom roll forming	—	7	4	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	29	15	1 231	37 681	1 005	1 979	24 684	85 653	69 707	156 637	3 459
3322	Cutlery & handtool mfg	1	34	16	1 632	46 192	1 196	2 200	27 279	133 697	87 932	220 358	5 165
33221	Cutlery & handtool mfg ..	1	34	16	1 632	46 192	1 196	2 200	27 279	133 697	87 932	220 358	5 165
332211	Cutlery & flatware (except precious) mfg	—	4	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	3	23	10	741	19 670	539	850	10 700	44 632	34 563	78 968	2 362
332213	Saw blade & handsaw mfg	1	6	4	f	D	D	D	D	D	D	D	1 989
3323	Architectural & structural metals mfg	1	331	140	10 798	292 827	8 044	16 092	182 558	696 801	955 584	1 649 205	41 293
33231	Plate work & fabricated structural product mfg ..	1	129	62	3 809	103 377	2 853	5 701	65 117	239 881	369 096	607 161	13 580
332311	Prefabricated metal building & component mfg	—	39	20	1 326	31 446	1 023	2 129	20 813	71 300	126 329	196 250	2 548
332312	Fabricated structural metal mfg	2	77	38	2 339	67 844	1 731	3 372	42 019	158 722	232 743	391 040	10 322
332313	Plate work mfg	1	13	4	144	4 087	99	200	2 285	9 859	10 024	19 871	710
33232	Ornamental & architectural metal products mfg	—	202	78	6 989	189 450	5 191	10 391	117 441	456 920	586 488	1 042 044	27 713
332321	Metal window & door mfg	—	45	28	3 638	91 322	2 704	5 503	58 127	214 040	295 223	508 709	14 929
332322	Sheet metal work mfg .	1	105	41	2 589	77 488	1 965	3 940	47 884	193 210	235 129	427 307	10 161
332323	Ornamental & architectural metal work mfg	2	52	9	762	20 640	522	948	11 430	49 670	56 136	106 028	2 623
3324	Boiler, tank, & shipping container mfg	—	40	23	3 049	99 714	2 405	5 224	74 190	276 463	498 679	775 709	51 206
33241	Power boiler & heat exchanger mfg	3	10	3	228	7 214	160	368	4 373	14 556	13 008	27 618	715
332410	Power boiler & heat exchanger mfg	3	10	3	228	7 214	160	368	4 373	14 556	13 008	27 618	715
33242	Metal tank (heavy gauge) mfg	—	19	11	1 310	40 395	950	2 090	27 835	91 953	112 010	202 459	6 946
332420	Metal tank (heavy gauge) mfg	—	19	11	1 310	40 395	950	2 090	27 835	91 953	112 010	202 459	6 946
33243	Metal can, box, & other metal container (light gauge) mfg	—	11	9	1 511	52 105	1 295	2 766	41 982	169 954	373 661	545 632	43 545
332431	Metal can mfg	—	6	6	1 356	48 958	1 170	2 592	39 749	162 790	363 072	527 219	43 194
332439	Other metal container mfg	5	5	3	155	3 147	125	174	2 233	7 164	10 589	18 413	351
3325	Hardware mfg	—	15	9	1 132	31 351	854	1 762	18 972	77 095	103 401	181 107	3 001
33251	Hardware mfg	—	15	9	1 132	31 351	854	1 762	18 972	77 095	103 401	181 107	3 001
332510	Hardware mfg	—	15	9	1 132	31 351	854	1 762	18 972	77 095	103 401	181 107	3 001
3326	Spring & wire product mfg .	—	30	15	1 267	31 507	1 057	2 056	21 597	83 638	85 114	167 696	4 194
33261	Spring & wire product mfg	—	30	15	1 267	31 507	1 057	2 056	21 597	83 638	85 114	167 696	4 194
332612	Spring (light gauge) mfg	—	5	5	568	14 710	509	1 001	11 098	34 915	49 307	83 703	D
332618	Other fabricated wire product mfg	—	24	10	f	D	D	D	D	D	D	D	2 356
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	458	61	5 139	153 433	3 761	6 483	94 362	310 184	179 294	492 871	23 494
33271	Machine shops	2	427	53	4 525	133 691	3 393	5 746	83 460	272 116	161 975	438 426	19 948
332710	Machine shops	2	427	53	4 525	133 691	3 393	5 746	83 460	272 116	161 975	438 426	19 948
33272	Turned product & screw, nut, & bolt mfg	2	31	8	614	19 742	368	737	10 902	38 068	17 319	54 445	3 546
332721	Precision turned product mfg	—	23	5	431	14 052	230	477	7 399	24 440	8 845	32 663	1 679
332722	Bolt, nut, screw, rivet, & washer mfg	4	8	3	183	5 690	138	260	3 503	13 628	8 474	21 782	1 867

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GEORGIA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	2	55	18	1 357	36 695	1 092	2 173	23 860	81 121	53 156	134 799	6 275
33281	Coating, engraving, heat treating, & allied activities	2	55	18	1 357	36 695	1 092	2 173	23 860	81 121	53 156	134 799	6 275
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	21	8	499	16 520	375	778	8 939	42 050	33 204	75 916	3 475
332813	Electroplating, plating, polishing, anodizing, & coloring	3	29	9	793	18 458	666	1 296	13 614	34 419	18 220	52 507	2 539
3329	Other fabricated metal product mfg	—	113	37	5 999	177 291	4 976	10 323	129 210	496 173	419 909	925 209	56 525
33291	Metal valve mfg	—	16	9	1 463	45 497	1 143	2 545	28 997	110 403	75 672	185 780	7 720
332912	Fluid power valve & hose fitting mfg	—	8	4	560	16 215	404	933	8 584	34 156	35 665	67 083	2 989
332919	Other metal valve & pipe fitting mfg	—	6	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	97	28	4 536	131 794	3 833	7 778	100 213	385 770	344 237	739 429	48 805
332991	Ball & roller bearing mfg	—	11	7	2 661	80 173	2 307	4 649	62 978	252 214	158 795	418 612	38 674
332996	Fabricated pipe & pipe fitting mfg	—	16	2	560	14 258	476	967	11 039	37 447	45 891	83 876	2 331
332999	All other miscellaneous fabricated metal product mfg	1	51	18	1 192	34 093	963	2 007	24 010	87 358	136 116	224 781	7 374
333	Machinery mfg	—	555	217	26 960	817 337	18 887	37 747	478 989	2 608 689	3 299 327	5 807 664	166 755
3331	Agriculture, construction, & mining machinery mfg	—	76	40	4 565	119 620	3 348	6 434	73 144	685 304	1 094 156	1 711 445	37 741
33311	Agricultural implement mfg	—	54	30	3 564	90 057	2 724	5 419	53 311	583 109	829 379	1 347 428	26 549
333111	Farm machinery & equipment mfg	—	48	26	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	6	4	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	16	8	895	24 958	561	890	17 810	97 134	259 679	351 884	D
333120	Construction machinery mfg	—	16	8	895	24 958	561	890	17 810	97 134	259 679	351 884	D
33313	Mining & oil & gas field machinery mfg	1	6	2	106	4 605	63	125	2 023	5 061	5 098	12 133	D
3332	Industrial machinery mfg	1	156	58	4 662	159 435	2 979	5 896	86 567	306 606	329 400	651 053	24 064
33322	Plastics & rubber industry machinery mfg	1	7	3	264	8 462	120	236	3 416	17 546	13 549	31 420	492
333220	Plastics & rubber industry machinery mfg	1	7	3	264	8 462	120	236	3 416	17 546	13 549	31 420	492
33329	Other industrial machinery mfg	1	139	54	4 313	148 443	2 803	5 546	81 529	281 539	309 510	605 860	23 479
333291	Paper industry machinery mfg	6	13	5	311	11 244	157	335	5 008	20 653	20 341	40 333	1 556
333292	Textile machinery mfg	—	51	19	1 089	33 474	759	1 482	21 586	58 201	51 402	109 833	1 645
333293	Printing machinery & equipment mfg	—	14	4	608	22 976	494	1 082	16 398	16 658	73 442	102 058	6 000
333294	Food product machinery mfg	—	25	12	979	34 585	598	1 097	17 390	97 418	82 074	181 128	7 850
333298	All other industrial machinery mfg	4	36	14	1 326	46 164	795	1 550	21 147	88 609	82 251	172 508	6 428
3333	Commercial & service industry machinery mfg	1	46	13	1 111	35 798	677	1 257	17 171	129 226	110 600	243 553	3 494
33331	Commercial & service industry machinery mfg	1	46	13	1 111	35 798	677	1 257	17 171	129 226	110 600	243 553	3 494
333313	Office machinery mfg	2	3	3	161	6 183	123	219	3 225	13 218	8 727	21 868	564
333314	Optical instrument & lens mfg	—	3	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	1	27	7	492	14 841	337	609	8 473	89 857	54 080	144 701	1 663

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GEORGIA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	44	34	7 065	208 409	5 525	11 444	136 455	568 026	797 716	1 357 596	36 794
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	44	34	7 065	208 409	5 525	11 444	136 455	568 026	797 716	1 357 596	36 794
333411	Air purification equipment mfg	-	4	3	161	6 653	64	144	1 836	19 756	26 989	45 157	477
333412	Industrial & commercial fan & blower mfg	3	6	3	256	5 480	190	317	3 217	17 284	9 881	27 316	1 009
333414	Heating equipment (except warm air furnaces) mfg	3	6	4	496	13 582	313	718	7 599	37 740	38 838	75 346	1 704
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	28	24	6 152	182 694	4 958	10 265	123 803	493 246	722 008	1 209 777	33 604
3335	Metalworking machinery mfg	1	100	20	2 008	67 345	1 296	2 614	39 974	140 935	84 002	222 943	8 978
33351	Metalworking machinery mfg	1	100	20	2 008	67 345	1 296	2 614	39 974	140 935	84 002	222 943	8 978
333513	Machine tool (metal forming types) mfg...	1	6	4	216	10 113	148	309	5 973	21 449	16 292	37 798	1 086
333514	Special die & tool, die set, jig, & fixture mfg .	3	58	8	664	21 084	549	1 012	16 542	40 843	15 386	55 794	3 316
333515	Cutting tool & machine tool accessory mfg ..	-	21	5	988	31 093	503	1 108	14 378	67 303	45 197	110 855	4 214
3336	Engine, turbine, & power transmission equipment mfg	-	12	8	2 058	49 569	1 684	3 217	34 724	183 867	382 587	563 056	25 203
33361	Engine, turbine, & power transmission equipment mfg	-	12	8	2 058	49 569	1 684	3 217	34 724	183 867	382 587	563 056	25 203
333612	Speed changer, industrial high-speed drive, & gear mfg	1	3	2	c	D	D	D	D	D	D	D	416
333613	Mechanical power transmission equipment mfg	-	4	1	c	D	D	D	D	D	D	D	228
333618	Other engine equipment mfg	-	5	5	1 800	41 059	1 499	2 796	29 463	165 214	362 784	524 871	24 559
3339	Other general-purpose machinery mfg	-	121	44	5 491	177 161	3 378	6 885	90 954	594 725	500 866	1 058 018	30 481
33391	Pump & compressor mfg	1	23	9	1 272	37 263	852	1 823	22 894	109 271	88 074	191 771	6 472
333911	Pump & pumping equipment mfg	1	17	8	1 102	33 268	713	1 525	20 074	100 592	83 459	177 941	6 332
333912	Air & gas compressor mfg	1	5	1	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	29	14	1 071	37 988	594	1 251	16 787	85 160	107 368	191 630	2 220
333921	Elevator & moving stairway mfg	1	3	1	116	3 327	65	136	1 402	4 785	13 322	18 184	461
333922	Conveyor & conveying equipment mfg	-	13	7	505	19 830	268	575	8 582	44 781	33 455	77 984	742
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	9	6	410	13 622	234	486	6 061	32 411	57 945	89 685	969
33399	All other general-purpose machinery mfg	-	69	21	3 148	101 910	1 932	3 811	51 273	400 294	305 424	674 617	21 789
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	5	2	c	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	23	9	1 025	40 282	554	1 069	16 220	162 154	57 687	225 040	3 331
333999	All other miscellaneous general-purpose machinery mfg	2	30	6	798	24 954	537	1 154	15 002	86 400	59 472	121 314	3 679
334	Computer & electronic product mfg	2	269	102	20 738	740 219	12 981	26 010	335 916	2 243 383	2 566 282	4 790 356	137 559
3341	Computer & peripheral equipment mfg	-	39	12	2 628	123 493	1 271	2 482	40 983	374 972	367 798	757 190	16 710
33411	Computer & peripheral equipment mfg	-	39	12	2 628	123 493	1 271	2 482	40 983	374 972	367 798	757 190	16 710
334111	Electronic computer mfg	-	10	1	e	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	-	7	4	683	32 623	365	755	12 361	114 744	176 752	303 900	3 062
334119	Other computer peripheral equipment mfg	-	21	7	1 589	74 344	755	1 409	24 370	216 215	177 383	396 669	9 364

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GEORGIA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	3	60	26	h	D	D	D	D	D	D	D	45 280
33421	Telephone apparatus mfg	1	15	6	851	38 395	295	549	5 513	74 040	74 441	149 149	9 034
334210	Telephone apparatus mfg	1	15	6	851	38 395	295	549	5 513	74 040	74 441	149 149	9 034
33422	Radio & TV broadcasting & wireless communications equipment mfg	3	32	17	3 919	163 773	2 621	6 717	95 584	562 689	577 991	1 104 924	34 613
334220	Radio & TV broadcasting & wireless communications equipment mfg	3	32	17	3 919	163 773	2 621	6 717	95 584	562 689	577 991	1 104 924	34 613
33429	Other communications equipment mfg	7	13	3	c	D	D	D	D	D	D	D	1 633
334290	Other communications equipment mfg	7	13	3	c	D	D	D	D	D	D	D	1 633
3343	Audio & video equipment mfg	5	12	4	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	5	12	4	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	5	12	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	58	24	4 182	120 022	2 985	5 388	52 451	291 008	371 265	674 439	D
33441	Semiconductor & other electronic component mfg	—	58	24	4 182	120 022	2 985	5 388	52 451	291 008	371 265	674 439	D
334412	Bare printed circuit board mfg	2	21	10	1 392	36 541	1 110	2 008	21 497	77 572	24 416	103 046	5 060
334414	Electronic capacitor mfg	—	3	1	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	8	7	2 033	65 327	1 278	2 053	19 858	172 840	278 491	462 144	7 101
334419	Other electronic component mfg	1	15	4	e	D	D	D	D	D	D	D	1 054
3345	Navigational, measuring, medical, & control instruments mfg	1	78	28	4 265	147 171	2 586	5 095	64 735	435 617	331 418	778 870	23 756
33451	Navigational, measuring, medical, & control instruments mfg	1	78	28	4 265	147 171	2 586	5 095	64 735	435 617	331 418	778 870	23 756
334510	Electromedical & electrotherapeutic apparatus mfg	—	5	4	706	30 414	351	697	8 601	107 012	61 629	176 897	D
334511	Search, detection, navigation, & guidance instrument mfg	—	8	3	383	21 061	96	182	2 827	43 194	24 597	65 444	2 816
334512	Automatic environmental control mfg	2	6	2	129	3 751	88	162	2 264	10 580	6 314	17 789	283
334513	Industrial process control instrument mfg	5	19	9	755	23 067	435	834	8 703	88 588	90 117	180 063	5 225
334514	Totalizing fluid meter & counting device mfg	—	3	1	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	10	2	437	13 581	312	620	6 333	40 539	34 485	73 052	1 831
334516	Analytical laboratory instrument mfg	2	10	2	299	12 207	123	222	9 497	28 864	13 426	43 062	1 325
334518	Watch, clock, & part mfg	—	5	2	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	9	3	337	11 703	242	487	6 420	18 718	25 237	44 197	995
3346	Mfg & reproducing magnetic & optical media	—	22	8	3 185	94 167	2 268	3 860	52 913	337 327	298 983	629 109	20 492
33461	Mfg & reproducing magnetic & optical media	—	22	8	3 185	94 167	2 268	3 860	52 913	337 327	298 983	629 109	20 492
334612	Prerecorded CD (except software), tape, & record reproducing	4	12	4	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	—	8	4	1 827	57 509	1 254	1 883	28 658	252 930	256 296	502 641	14 870

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	123	66	20 932	697 205	16 063	32 304	455 436	2 518 033	2 685 738	5 156 712	253 958
3351	Electric lighting equipment mfg	1	16	8	4 146	107 973	3 213	6 635	70 358	224 126	462 219	677 262	D
33512	Lighting fixture mfg	1	16	8	4 146	107 973	3 213	6 635	70 358	224 126	462 219	677 262	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	1	7	5	h	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	10	4	3 443	84 800	2 902	5 824	60 171	540 512	376 618	890 598	D
33522	Major appliance mfg	-	6	4	3 406	83 746	2 871	5 763	59 578	537 963	373 105	884 434	D
335221	Household cooking appliance mfg	-	6	4	3 406	83 746	2 871	5 763	59 578	537 963	373 105	884 434	D
3353	Electrical equipment mfg ..	-	61	26	5 394	177 763	3 720	7 464	103 269	619 136	613 560	1 245 295	45 659
33531	Electrical equipment mfg	-	61	26	5 394	177 763	3 720	7 464	103 269	619 136	613 560	1 245 295	45 659
335311	Power, distribution, & specialty transformer mfg	-	10	4	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	14	5	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	15	8	1 281	36 782	1 026	2 122	25 177	118 600	105 985	218 665	16 040
335314	Relay & industrial control mfg	-	22	9	1 904	70 172	985	1 824	28 615	318 603	304 996	639 414	15 642
3359	Other electrical equipment & component mfg	-	36	28	7 949	326 669	6 228	12 381	221 638	1 134 259	1 233 341	2 343 557	162 307
33591	Battery mfg	-	9	9	2 548	92 603	2 006	4 073	67 218	230 136	249 075	487 252	12 089
335911	Storage battery mfg ...	-	7	7	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	8	8	4 062	200 135	3 159	6 038	131 604	811 430	889 777	1 670 306	D
335921	Fiber optic cable mfg ..	-	3	3	h	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	5	5	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	13	9	1 087	27 763	916	2 077	20 105	81 865	86 052	166 101	D
335931	Current-carrying wiring device mfg	-	7	5	564	11 697	528	1 023	10 159	18 574	11 720	30 567	D
335932	Noncurrent-carrying wiring device mfg	-	6	4	523	16 066	388	1 054	9 946	63 291	74 332	135 534	7 352
33599	All other electrical equipment & component mfg	5	6	2	252	6 168	147	193	2 711	10 828	8 437	19 898	D
335999	All other miscellaneous electrical equipment & component mfg	5	6	2	252	6 168	147	193	2 711	10 828	8 437	19 898	D
336	Transportation equipment mfg	-	268	119	46 334	1 888 647	32 306	59 972	1 140 211	6 179 928	11 465 122	17 481 357	281 406
3361	Motor vehicle mfg	-	13	5	8 211	466 148	7 365	15 827	390 385	2 860 310	6 427 055	9 287 125	77 698
33611	Automobile & light duty motor vehicle mfg	-	10	3	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	7	2	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	3	1	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	3	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	59	27	3 172	85 394	2 635	5 014	58 498	207 684	416 273	625 345	8 295
33621	Motor vehicle body & trailer mfg	-	59	27	3 172	85 394	2 635	5 014	58 498	207 684	416 273	625 345	8 295
336211	Motor vehicle body mfg	-	24	11	1 328	37 476	1 106	2 377	28 152	102 090	195 299	300 359	4 563
336212	Truck trailer mfg	-	15	10	1 288	35 636	1 101	1 839	22 122	78 355	131 163	208 495	3 174
336214	Travel trailer & camper mfg	-	19	6	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	116	53	9 430	247 189	7 637	14 605	176 741	679 007	872 395	1 569 320	83 137
33631	Motor vehicle gasoline engine & engine parts mfg	1	22	8	825	19 870	690	1 173	12 396	57 295	47 070	103 723	11 520
336311	Carburetor, piston, piston ring, & valve mfg	2	3	3	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	1	19	5	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	24	12	2 039	54 884	1 765	3 121	44 545	145 921	233 423	376 960	21 600
336322	Other motor vehicle electrical & electronic equipment mfg	-	22	11	g	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GEORGIA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33633	Motor vehicle steering & suspension component (except spring) mfg	—	6	3	1 199	31 412	1 081	2 170	26 144	123 021	71 437	196 404	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	6	3	1 199	31 412	1 081	2 170	26 144	123 021	71 437	196 404	D
33634	Motor vehicle brake system mfg	—	4	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	4	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	3	15	6	974	29 359	652	1 126	14 066	49 417	106 941	166 037	11 567
336350	Motor vehicle transmission & power train parts mfg	3	15	6	974	29 359	652	1 126	14 066	49 417	106 941	166 037	11 567
33636	Motor vehicle seating & interior trim mfg	—	7	3	e	D	D	D	D	D	D	D	718
336360	Motor vehicle seating & interior trim mfg	—	7	3	e	D	D	D	D	D	D	D	718
33637	Motor vehicle metal stamping	—	7	6	1 156	29 017	815	1 570	20 448	70 381	98 024	172 973	9 037
336370	Motor vehicle metal stamping	—	7	6	1 156	29 017	815	1 570	20 448	70 381	98 024	172 973	9 037
33639	Other motor vehicle parts mfg	—	31	13	2 295	59 975	1 836	3 825	41 658	182 366	157 715	341 660	18 851
336399	All other motor vehicle parts mfg	—	30	13	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	34	18	18 849	891 125	10 127	16 127	400 432	1 736 116	2 769 819	4 320 186	77 169
33641	Aerospace product & parts mfg	—	34	18	18 849	891 125	10 127	16 127	400 432	1 736 116	2 769 819	4 320 186	77 169
336411	Aircraft mfg	—	7	6	14 802	743 786	7 523	10 598	325 882	1 318 950	2 473 466	3 627 972	42 257
336412	Aircraft engine & engine parts mfg	—	9	7	2 204	69 192	1 639	3 320	41 783	219 095	147 994	363 958	24 476
336413	Other aircraft part & auxiliary equipment mfg	—	15	3	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	—	2	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	8	5	g	D	D	D	D	D	D	D	4 644
33651	Railroad rolling stock mfg	—	8	5	g	D	D	D	D	D	D	D	4 644
336510	Railroad rolling stock mfg	—	8	5	g	D	D	D	D	D	D	D	4 644
3366	Ship & boat building	3	26	7	g	D	D	D	D	D	D	D	3 996
33661	Ship & boat building	3	26	7	g	D	D	D	D	D	D	D	3 996
336611	Ship building & repairing	9	4	1	e	D	D	D	D	D	D	D	D
336612	Boat building	—	22	6	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	12	4	3 649	108 400	1 916	2 818	42 533	435 600	586 354	1 029 099	26 467
33699	Other transportation equipment mfg	—	12	4	3 649	108 400	1 916	2 818	42 533	435 600	586 354	1 029 099	26 467
336991	Motorcycle, bicycle, & parts mfg	—	2	1	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	—	10	3	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	678	126	13 970	324 434	11 440	22 330	232 671	909 753	743 656	1 656 537	36 417
3371	Household & institutional furniture & kitchen cabinet mfg	2	514	71	7 826	151 787	6 631	12 148	113 335	374 326	345 498	723 952	16 179
33711	Wood kitchen cabinet & counter top mfg	1	350	36	3 520	71 116	2 919	5 214	51 624	196 919	141 373	337 971	8 567
337110	Wood kitchen cabinet & counter top mfg	1	350	36	3 520	71 116	2 919	5 214	51 624	196 919	141 373	337 971	8 567

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGIA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3371	Household & institutional furniture & kitchen cabinet mfg—Con.												
33712	Household & institutional furniture mfg	2	164	35	4 306	80 671	3 712	6 934	61 711	177 407	204 125	385 981	7 612
337121	Upholstered household furniture mfg	4	25	8	915	14 346	789	1 420	11 079	28 661	42 541	70 838	1 826
337122	Nonupholstered wood household furniture mfg	1	97	17	1 892	34 977	1 656	3 080	26 348	89 760	106 614	196 087	3 598
337124	Metal household furniture mfg	—	13	3	491	6 454	402	550	5 191	16 614	20 715	41 217	1 485
337125	Household furniture (except wood & metal) mfg	—	2	1	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	2	24	5	e	D	D	D	D	D	D	D	690
337129	Wood television, radio, & sewing machine cabinet mfg	—	3	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	128	42	4 771	140 613	3 788	7 983	98 864	416 922	279 193	696 698	14 962
33721	Office furniture (including fixtures) mfg	—	128	42	4 771	140 613	3 788	7 983	98 864	416 922	279 193	696 698	14 962
337211	Wood office furniture mfg	1	18	6	802	22 623	679	1 480	15 391	54 832	28 539	82 708	2 623
337212	Custom architectural woodwork & millwork mfg	2	31	8	484	12 642	395	740	8 505	29 943	13 557	43 667	650
337214	Office furniture (except wood) mfg	—	12	6	1 137	39 545	971	2 376	34 094	191 893	126 888	319 882	6 437
337215	Showcase, partition, shelving, & locker mfg	—	67	22	2 348	65 803	1 743	3 387	40 874	140 254	110 209	250 441	5 252
3379	Other furniture related product mfg	1	36	13	1 373	32 034	1 021	2 199	20 472	118 505	118 965	235 887	5 276
33791	Mattress mfg	1	25	10	894	23 103	723	1 555	14 974	97 235	77 216	174 505	4 077
337910	Mattress mfg	1	25	10	894	23 103	723	1 555	14 974	97 235	77 216	174 505	4 077
33792	Blind & shade mfg	—	11	3	479	8 931	298	644	5 498	21 270	41 749	61 382	1 199
337920	Blind & shade mfg	—	11	3	479	8 931	298	644	5 498	21 270	41 749	61 382	1 199
339	Miscellaneous mfg	1	681	100	16 464	499 475	11 742	24 246	256 359	1 253 132	936 831	2 250 861	97 775
3391	Medical equipment & supplies mfg	1	323	33	7 380	246 128	5 050	9 294	116 708	614 280	470 364	1 137 461	41 159
33911	Medical equipment & supplies mfg	1	323	33	7 380	246 128	5 050	9 294	116 708	614 280	470 364	1 137 461	41 159
339112	Surgical & medical instrument mfg	—	19	5	1 167	56 429	491	866	10 871	181 756	158 548	349 854	3 581
339113	Surgical appliance & supplies mfg	—	30	10	2 778	94 896	1 924	3 828	48 062	267 370	201 197	466 832	14 743
339114	Dental equipment & supplies mfg	—	19	1	e	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	13	5	1 574	45 896	1 300	2 320	29 844	45 834	48 679	139 435	D
339116	Dental laboratories	6	241	12	1 591	41 592	1 226	2 086	25 355	85 599	30 955	116 591	3 308
3399	Other miscellaneous mfg	1	358	67	9 084	253 347	6 692	14 952	139 651	638 852	466 467	1 113 400	56 616
33991	Jewelry & silverware mfg	4	22	3	132	2 418	103	142	1 371	5 535	6 492	11 986	98
33992	Sporting & athletic goods mfg	4	54	9	850	28 362	559	1 091	12 457	85 970	57 081	147 158	8 453
339920	Sporting & athletic goods mfg	4	54	9	850	28 362	559	1 091	12 457	85 970	57 081	147 158	8 453
33993	Doll, toy, & game mfg	1	15	5	374	10 504	231	462	5 171	39 469	37 568	76 379	3 885
339932	Game, toy, & children's vehicle mfg	1	14	5	e	D	D	D	D	D	D	D	3 885
33994	Office supplies (except paper) mfg	2	23	6	653	15 697	540	1 411	8 007	35 947	44 112	83 214	2 212
339942	Lead pencil & art good mfg	4	6	3	394	8 746	308	1 070	5 140	25 757	22 293	48 563	1 131
339944	Carbon paper & inked ribbon mfg	—	6	2	162	3 931	147	205	1 589	5 280	18 956	27 027	978
33995	Sign mfg	3	151	20	1 753	50 846	1 112	2 060	23 861	104 100	62 263	166 103	3 711
339950	Sign mfg	3	151	20	1 753	50 846	1 112	2 060	23 861	104 100	62 263	166 103	3 711

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GEORGIA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	—	93	24	5 322	145 520	4 147	9 786	88 784	367 831	258 951	628 560	38 257
339991	Gasket, packing, & sealing device mfg ...	—	12	3	1 083	34 595	908	2 286	21 062	83 360	63 597	148 036	D
339992	Musical instrument mfg	—	8	1	c	D	D	D	D	D	D	D	499
339993	Fastener, button, needle, & pin mfg	—	5	4	1 780	58 178	1 232	3 572	33 040	150 638	96 131	242 817	D
339994	Broom, brush, & mop mfg	1	7	5	440	10 725	335	714	5 870	29 158	24 070	53 138	1 500
339995	Burial casket mfg	2	7	2	c	D	D	D	D	D	D	D	102
339999	All other miscellaneous mfg	2	54	9	1 680	34 215	1 403	2 712	23 254	88 869	57 278	150 616	5 610

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; h–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY, GA MSA												
	Manufacturing	—	98	46	9 046	320 284	7 427	15 817	236 412	1 922 970	2 412 900	4 331 357	309 009
311	Food mfg	—	6	5	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	—	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
31191	Snack food mfg	—	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
311911	Roasted nuts & peanut butter mfg	—	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
312	Beverage & tobacco product mfg	—	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	1	f	D	D	D	D	D	D	D	D
31212	Breweries	—	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	—	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	—	3	3	f	D	D	D	D	D	D	D	2 498
3132	Fabric mills	—	1	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	—	1	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	2	2	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	2	2	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	8	5	404	8 141	321	594	5 830	17 064	54 499	73 516	2 038
3219	Other wood product mfg ...	—	4	2	e	D	D	D	D	D	D	D	D
32191	Millwork	—	2	2	e	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALBANY, GA MSA—Con.													
31-33	Manufacturing—Con.												
322	Paper mfg	—	4	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	3	3	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	2	2	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	2	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	15	3	338	8 259	260	509	6 284	29 875	29 568	59 519	1 045
3231	Printing & related support activities	5	15	3	338	8 259	260	509	6 284	29 875	29 568	59 519	1 045
32311	Printing	5	15	3	338	8 259	260	509	6 284	29 875	29 568	59 519	1 045
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	4	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	e	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	10	2	272	7 883	195	422	4 501	16 931	21 450	42 379	1 282
ATHENS, GA MSA													
31-33	Manufacturing	—	151	52	10 960	274 612	8 803	18 234	197 014	687 858	964 944	1 646 286	100 928
311	Food mfg	—	8	3	2 894	54 147	2 577	5 904	43 599	81 098	206 770	281 327	D
3116	Meat product mfg	—	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	h	D	D	D	D	D	D	D	D
313	Textile mills	—	4	3	563	15 120	501	1 026	12 020	29 522	28 803	57 569	727
3131	Fiber, yarn, & thread mills	—	1	1	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	1	1	e	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	—	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	9	6	881	14 836	724	1 224	10 187	30 751	23 346	52 951	476
3152	Cut & sew apparel mfg	—	8	5	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ATHENS, GA MSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	-	8	2	340	9 707	281	695	7 530	16 433	23 941	40 379	1 677
3212	Veneer, plywood, & engineered wood product mfg	-	3	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	1	e	D	D	D	D	D	D	D	D
321213	Engineered wood member (except truss) mfg	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	9	4	1 014	25 400	616	1 147	16 050	41 307	29 934	67 191	39 091
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	e	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	e	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	4	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	4	2	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	4	321	8 360	269	552	6 370	41 509	28 972	70 595	9 400
327	Nonmetallic mineral product mfg	-	15	4	459	16 692	367	803	13 018	32 572	63 454	94 955	3 182
3279	Other nonmetallic mineral product mfg	-	7	1	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	7	1	e	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	6	756	21 429	599	1 279	14 203	58 337	75 071	133 261	3 787
333	Machinery mfg	-	7	5	724	25 618	471	870	14 278	80 276	141 245	221 123	7 174
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	5	1 531	52 904	1 222	2 494	39 022	184 834	246 095	441 417	10 110
3353	Electrical equipment mfg	-	4	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	4	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	3	342	5 844	231	477	3 934	13 400	30 217	40 741	1 046
3379	Other furniture related product mfg	-	1	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	1	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ATLANTA, GA MSA													
31-33	Manufacturing	1	4 394	1 413	190 720	6 385 657	135 382	275 685	3 768 919	22 741 669	27 344 061	49 691 816	1 450 140
311	Food mfg.....	2	214	98	18 201	484 455	14 065	28 411	321 018	2 921 762	2 781 996	5 701 444	164 808
3111	Animal food mfg.....	1	10	5	487	19 650	351	819	13 176	199 369	378 521	577 462	14 093
31111	Animal food mfg.....	1	10	5	487	19 650	351	819	13 176	199 369	378 521	577 462	14 093
311119	Other animal food mfg.....	2	8	4	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	1	7	4	561	21 119	439	1 011	16 116	249 912	209 197	460 275	6 559
31122	Starch & vegetable fats & oils mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	4	2	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	1	2	2	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	1	2	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	7	3	e	D	D	D	D	D	D	D	405
3115	Dairy product mfg.....	-	10	7	651	20 240	464	1 109	13 044	68 366	152 191	220 052	D
31151	Dairy product (except frozen) mfg.....	-	7	5	e	D	D	D	D	D	D	D	3 683
311511	Fluid milk mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	39	23	8 285	173 560	7 234	14 284	132 982	565 788	950 363	1 507 686	30 780
31161	Animal slaughtering & processing.....	2	39	23	8 285	173 560	7 234	14 284	132 982	565 788	950 363	1 507 686	30 780
311611	Animal (except poultry) slaughtering.....	8	11	2	269	7 335	228	585	5 605	18 443	79 488	98 405	1 458
311612	Meat processed from carcasses.....	-	15	8	1 130	31 515	896	1 981	22 287	186 975	231 202	414 449	4 383
311613	Rendering & meat byproduct processing.....	3	5	5	342	8 995	201	418	4 156	37 020	45 354	82 434	3 143
311615	Poultry processing....	3	8	8	6 544	125 715	5 909	11 300	100 934	323 350	594 319	912 398	21 796
3118	Bakeries & tortilla mfg.....	1	95	32	4 693	135 915	3 086	5 975	82 552	402 859	378 986	787 271	62 655
31181	Bread & bakery product mfg.....	2	76	23	2 849	78 387	1 623	3 317	41 231	204 607	194 200	400 451	D
311812	Commercial bakeries .	-	33	15	1 905	52 654	944	1 859	24 254	114 671	105 043	219 566	D
311813	Frozen cakes, pies, & other pastries mfg ...	4	7	6	757	23 711	585	1 342	16 011	84 491	85 918	172 189	22 400
31182	Cookie, cracker, & pasta mfg.....	1	15	7	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	7	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	1	5	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg.....	2	37	23	3 114	104 229	2 202	4 659	56 473	1 384 100	673 696	2 057 978	45 499
31191	Snack food mfg.....	2	6	6	f	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg.....	9	1	1	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	5	5	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg.....	2	5	3	e	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg.....	2	5	3	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	3	10	7	946	35 794	694	1 423	19 120	124 731	195 658	320 702	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	7	3	3	432	13 986	336	725	8 680	53 128	71 993	125 163	D
311942	Spice & extract mfg....	-	7	4	514	21 808	358	698	10 440	71 603	123 665	195 539	2 767
31199	All other food mfg.....	3	12	5	e	D	D	D	D	D	D	D	8 817
311999	All other miscellaneous food mfg.....	3	11	5	e	D	D	D	D	D	D	D	8 817
312	Beverage & tobacco product mfg.....	-	31	13	g	D	D	D	D	D	D	D	86 128
3121	Beverage mfg.....	-	29	11	1 984	84 155	1 224	2 796	49 047	938 253	672 289	1 607 261	D
31211	Soft drink & ice mfg.....	-	21	8	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	10	6	g	D	D	D	D	D	D	D	D
31212	Breweries.....	-	6	2	f	D	D	D	D	D	D	D	D
312120	Breweries.....	-	6	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ATLANTA, GA MSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	—	75	31	5 626	138 820	4 824	9 844	104 933	392 203	459 922	826 087	26 491
3131	Fiber, yarn, & thread mills .	—	12	10	1 791	38 488	1 624	3 119	31 987	89 376	115 688	204 170	7 632
31311	Fiber, yarn, & thread mills	—	12	10	1 791	38 488	1 624	3 119	31 987	89 376	115 688	204 170	7 632
313111	Yarn spinning mills ...	—	7	6	1 044	21 893	1 004	1 893	20 385	52 088	53 628	104 605	4 825
313112	Yarn texturing, throwing, & twisting mills	—	5	4	747	16 595	620	1 226	11 602	37 288	62 060	99 565	2 807
3132	Fabric mills	—	33	12	2 533	70 170	2 126	4 482	50 633	185 388	205 742	388 212	10 179
31321	Broadwoven fabric mills .	—	18	7	1 981	54 828	1 726	3 660	41 608	155 575	156 270	309 753	7 174
313210	Broadwoven fabric mills	—	18	7	1 981	54 828	1 726	3 660	41 608	155 575	156 270	309 753	7 174
31324	Knit fabric mills	7	3	3	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	30	9	1 302	30 162	1 074	2 243	22 313	117 439	138 492	233 705	8 680
31331	Textile & fabric finishing mills	—	27	8	g	D	D	D	D	D	D	D	8 466
313311	Broadwoven fabric finishing mills	—	22	6	1 088	25 017	948	1 983	19 133	92 868	116 377	187 562	7 750
314	Textile product mills	1	138	43	6 091	142 587	5 222	11 285	107 209	382 025	568 005	939 753	22 368
3141	Textile furnishings mills	1	68	21	3 310	76 508	2 839	6 244	57 905	217 019	332 142	547 299	8 250
31411	Carpet & rug mills	—	19	9	1 885	51 749	1 663	4 079	41 485	169 975	250 804	419 329	6 617
314110	Carpet & rug mills	—	19	9	1 885	51 749	1 663	4 079	41 485	169 975	250 804	419 329	6 617
31412	Curtain & linen mills	1	49	12	1 425	24 759	1 176	2 165	16 420	47 044	81 338	127 970	1 633
314121	Curtain & drapery mills	2	31	4	408	7 442	308	532	4 396	8 644	12 768	21 324	468
314129	Other household textile product mills	1	18	8	1 017	17 317	868	1 633	12 024	38 400	68 570	106 646	1 165
3149	Other textile product mills ..	1	70	22	2 781	66 079	2 383	5 041	49 304	165 006	235 863	392 454	14 118
31491	Textile bag & canvas mills	4	23	6	486	11 690	378	722	6 766	20 790	18 161	39 859	1 029
314912	Canvas & related product mills	6	18	4	279	7 210	207	431	4 118	12 774	11 988	25 799	764
31499	All other textile product mills	—	47	16	2 295	54 389	2 005	4 319	42 538	144 216	217 702	352 595	13 089
314992	Tire cord & tire fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	—	40	13	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	131	50	7 543	161 818	5 810	10 956	115 034	509 569	928 173	1 386 825	D
3151	Apparel knitting mills	—	12	7	669	11 678	494	859	7 239	20 522	29 986	48 602	D
31511	Hosiery & sock mills	—	9	6	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	1	6	4	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	86	36	6 237	139 701	4 782	9 171	99 956	469 549	881 153	1 301 706	6 798
31521	Cut & sew apparel contractors	—	35	11	g	D	D	D	D	D	D	D	1 205
315211	Men's & boys' cut & sew apparel contractors	—	7	7	1 649	26 323	1 525	2 745	23 050	41 731	13 762	54 764	687
315212	Women's, girls', & infants' cut & sew apparel contractors ..	1	28	4	e	D	D	D	D	D	D	D	518
31522	Men's & boys' cut & sew apparel mfg	2	19	9	1 398	38 987	1 072	2 077	27 673	181 609	484 627	624 559	2 597
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	7	5	739	24 814	533	1 008	16 817	115 076	358 916	434 988	2 216
31523	Women's & girls' cut & sew apparel mfg	3	24	14	2 519	62 910	1 632	3 317	41 314	215 680	342 525	556 930	2 760
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	g	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	9	5	4	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	13	7	773	22 639	438	820	14 149	75 850	138 919	211 776	D
31529	Other cut & sew apparel mfg	—	8	2	e	D	D	D	D	D	D	D	236
315291	Infants' cut & sew apparel mfg	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ATLANTA, GA MSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	33	7	637	10 439	534	926	7 839	19 498	17 034	36 517	1 233
31599	Apparel accessories & other apparel mfg	1	33	7	637	10 439	534	926	7 839	19 498	17 034	36 517	1 233
315991	Hat, cap, & millinery mfg	1	6	4	334	5 081	293	533	4 061	7 271	6 159	13 419	316
315999	Other apparel accessories & other apparel mfg	1	27	3	303	5 358	241	393	3 778	12 227	10 875	23 098	917
321	Wood product mfg	1	139	49	3 198	83 854	2 591	5 228	56 696	172 838	336 254	503 145	13 693
3211	Sawmills & wood preservation	1	11	5	267	8 800	206	418	5 835	26 152	140 761	164 244	5 290
32111	Sawmills & wood preservation	1	11	5	267	8 800	206	418	5 835	26 152	140 761	164 244	5 290
3212	Veneer, plywood, & engineered wood product mfg	1	20	9	632	15 607	510	1 052	9 583	29 725	52 776	82 523	1 349
32121	Veneer, plywood, & engineered wood product mfg	1	20	9	632	15 607	510	1 052	9 583	29 725	52 776	82 523	1 349
321214	Truss mfg	1	17	8	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	2	108	35	2 299	59 447	1 875	3 758	41 278	116 961	142 717	256 378	7 054
32191	Millwork	1	57	23	1 565	45 539	1 295	2 711	31 662	82 860	108 565	189 069	5 676
321911	Wood window & door mfg	1	22	9	692	20 926	609	1 306	15 996	31 005	56 519	87 323	D
321918	Other millwork (including flooring)	2	29	13	828	23 811	652	1 339	15 061	47 415	47 026	92 290	3 449
32192	Wood container & pallet mfg	3	29	5	355	6 538	296	531	4 660	15 022	12 802	27 797	589
321920	Wood container & pallet mfg	3	29	5	355	6 538	296	531	4 660	15 022	12 802	27 797	589
32199	All other wood product mfg	2	22	7	379	7 370	284	516	4 956	19 079	21 350	39 512	789
321999	All other miscellaneous wood product mfg	1	19	6	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	121	89	9 303	304 005	6 967	15 473	204 172	1 051 183	1 335 808	2 363 999	70 108
3221	Pulp, paper, & paperboard mills	—	4	4	488	23 122	362	998	15 999	105 861	90 688	195 848	8 246
32213	Paperboard mills	—	4	4	488	23 122	362	998	15 999	105 861	90 688	195 848	8 246
322130	Paperboard mills	—	4	4	488	23 122	362	998	15 999	105 861	90 688	195 848	8 246
3222	Converted paper product mfg	—	117	85	8 815	280 883	6 605	14 475	188 173	945 322	1 245 120	2 168 151	61 862
32221	Paperboard container mfg	—	69	57	5 686	185 562	4 185	9 297	118 683	497 029	756 195	1 242 372	30 843
322211	Corrugated & solid fiber box mfg	—	47	40	3 456	116 763	2 429	5 397	70 346	304 233	470 984	773 911	19 896
322212	Folding paperboard box mfg	—	12	9	1 642	51 508	1 245	2 988	35 139	155 262	218 879	364 096	D
322214	Fiber can, tube, drum, & similar products mfg	—	8	6	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	15	10	792	27 174	546	1 114	18 141	174 826	210 316	384 333	11 449
322222	Coated & laminated paper mfg	—	11	6	517	18 266	328	643	12 464	146 205	160 253	308 845	10 295
32223	Stationery product mfg	—	19	10	g	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	—	5	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	10	6	764	22 946	615	1 259	16 250	71 573	68 525	137 280	4 565
322233	Stationery, tablet, & related product mfg	—	4	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	4	14	8	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	4	4	3	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	5	10	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	812	152	14 305	485 464	9 653	19 096	282 782	1 121 061	762 274	1 882 900	84 950
3231	Printing & related support activities	2	812	152	14 305	485 464	9 653	19 096	282 782	1 121 061	762 274	1 882 900	84 950

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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31-33	ATLANTA, GA MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32311	Printing	2	714	128	12 532	423 633	8 416	16 692	245 935	988 447	733 292	1 721 214	77 171
323110	Commercial lithographic printing	2	347	72	7 458	275 174	4 925	9 916	161 053	578 764	431 359	1 010 486	47 793
323111	Commercial gravure printing	6	8	4	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	—	20	7	559	19 410	351	798	10 358	62 892	65 491	127 925	3 452
323113	Commercial screen printing	1	69	13	902	23 771	533	961	9 742	48 190	47 051	96 601	5 914
323114	Quick printing	2	163	8	927	25 430	636	1 149	15 234	53 120	29 995	82 914	3 617
323116	Manifold business form printing	1	17	10	1 111	26 745	904	1 742	20 662	100 397	60 549	160 227	6 748
323117	Book printing	1	12	4	297	9 403	222	457	6 524	17 778	13 481	31 186	D
323119	Other commercial printing	5	67	8	522	15 317	342	601	8 281	29 923	22 253	52 003	D
32312	Support activities for printing	1	98	24	1 773	61 831	1 237	2 404	36 847	132 614	28 982	161 686	7 779
323121	Tradebinding & related work	2	28	7	504	12 589	417	800	9 221	23 850	5 735	29 571	1 009
323122	Prepress services	1	70	17	1 269	49 242	820	1 604	27 626	108 764	23 247	132 115	6 770
324	Petroleum & coal products mfg	3	34	9	f	D	D	D	D	D	D	D	25 208
3241	Petroleum & coal products mfg	3	34	9	f	D	D	D	D	D	D	D	25 208
32412	Asphalt paving, roofing, & saturated materials mfg	1	26	5	488	17 970	400	852	13 160	69 882	137 013	209 119	D
324122	Asphalt shingle & coating materials mfg	—	5	4	331	11 985	270	534	8 707	42 340	75 949	120 385	D
325	Chemical mfg	1	251	107	10 350	381 855	5 570	11 120	163 931	2 035 512	1 986 247	4 014 655	123 889
3251	Basic chemical mfg	—	28	9	1 110	39 019	593	1 074	17 669	260 450	173 661	435 238	9 420
32518	Other basic inorganic chemical mfg	—	10	3	330	14 100	245	506	8 959	33 970	46 858	82 841	3 164
325188	All other basic inorganic chemical mfg	—	9	3	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	9	4	680	21 797	281	452	7 152	190 521	102 538	292 155	3 982
325199	All other basic organic chemical mfg	—	8	3	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	14	8	1 215	42 641	731	1 360	22 582	206 644	282 016	488 909	22 361
32521	Resin & synthetic rubber mfg	—	11	7	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	10	7	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	9	3	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	9	3	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	1	8	3	322	11 934	168	330	3 014	33 365	40 651	73 430	4 257
32532	Pesticide & other agricultural chemical mfg	—	4	3	302	11 379	153	295	2 649	30 700	32 578	62 765	D
325320	Pesticide & other agricultural chemical mfg	—	4	3	302	11 379	153	295	2 649	30 700	32 578	62 765	D
3254	Pharmaceutical & medicine mfg	1	18	9	674	25 535	301	556	7 815	86 199	36 950	122 316	16 536
32541	Pharmaceutical & medicine mfg	1	18	9	674	25 535	301	556	7 815	86 199	36 950	122 316	16 536
325412	Pharmaceutical preparation mfg	1	6	4	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	62	20	1 569	63 432	793	1 592	24 465	315 442	432 447	744 048	20 358
32551	Paint & coating mfg	1	37	9	823	30 439	391	726	10 772	165 874	236 341	400 007	9 736
325510	Paint & coating mfg	1	37	9	823	30 439	391	726	10 772	165 874	236 341	400 007	9 736
32552	Adhesive mfg	—	25	11	746	32 993	402	866	13 693	149 568	196 106	344 041	10 622
325520	Adhesive mfg	—	25	11	746	32 993	402	866	13 693	149 568	196 106	344 041	10 622
3256	Soap, cleaning compound, & toilet preparation mfg	—	59	27	2 732	101 709	1 390	2 975	42 009	726 895	486 121	1 216 549	25 805
32561	Soap & cleaning compound mfg	—	47	21	g	D	D	D	D	D	D	D	24 479
325611	Soap & other detergent mfg	—	27	12	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	—	19	9	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ATLANTA, GA MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	1	62	31	2 728	97 585	1 594	3 233	46 377	406 517	534 401	934 165	25 152
32591	Printing ink mfg	3	21	12	430	16 785	241	493	7 603	52 611	79 578	131 110	D
325910	Printing ink mfg	3	21	12	430	16 785	241	493	7 603	52 611	79 578	131 110	D
32599	All other chemical product & preparation mfg	—	41	19	2 298	80 800	1 353	2 740	38 774	353 906	454 823	803 055	D
325991	Custom compounding of purchased resin...	—	11	7	892	34 363	461	973	15 690	117 759	187 617	299 331	14 406
325998	All other miscellaneous chemical product & preparation mfg	—	23	8	1 158	38 449	764	1 511	20 361	212 684	246 013	459 083	7 484
326	Plastics & rubber products mfg	—	234	133	15 793	443 420	12 587	26 131	303 325	1 452 695	1 446 456	2 897 681	148 556
3261	Plastics product mfg	—	195	114	13 008	368 254	10 287	21 376	248 295	1 204 664	1 224 932	2 423 674	134 198
32611	Unsupported plastics film, sheet, & bag mfg	—	32	25	3 106	98 125	2 427	5 196	67 981	401 966	424 035	823 377	33 932
326111	Unsupported plastics bag mfg	—	10	10	1 367	43 465	1 146	2 389	31 694	167 916	153 667	323 626	D
326112	Unsupported plastics packaging film & sheet mfg	—	6	5	801	28 409	628	1 433	20 749	93 987	130 850	223 145	7 375
326113	Unsupported plastics film & sheet (except packaging) mfg	—	16	10	938	26 251	653	1 374	15 538	140 063	139 518	276 606	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	15	7	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	1	10	4	305	8 494	174	382	3 705	16 828	12 016	28 324	3 086
32614	Polystyrene foam product mfg	—	14	9	1 677	47 637	1 334	2 971	34 453	215 537	182 472	399 683	25 769
326140	Polystyrene foam product mfg	—	14	9	1 677	47 637	1 334	2 971	34 453	215 537	182 472	399 683	25 769
32615	Urethane & other foam product (except polystyrene) mfg	1	9	5	473	14 910	370	800	9 534	30 603	40 609	70 946	2 448
326150	Urethane & other foam product (except polystyrene) mfg	1	9	5	473	14 910	370	800	9 534	30 603	40 609	70 946	2 448
32616	Plastics bottle mfg	—	13	10	1 019	29 502	912	1 917	24 350	80 770	86 916	167 063	19 574
326160	Plastics bottle mfg	—	13	10	1 019	29 502	912	1 917	24 350	80 770	86 916	167 063	19 574
32619	Other plastics product mfg	1	106	57	6 219	162 154	4 929	9 862	104 220	447 362	445 895	890 223	47 774
326191	Plastics plumbing fixture mfg	7	11	5	384	9 127	308	593	5 771	22 160	17 202	39 401	932
326199	All other plastics product mfg	—	95	52	5 835	153 027	4 621	9 269	98 449	425 202	428 693	850 822	46 842
3262	Rubber product mfg	—	39	19	2 785	75 166	2 300	4 755	55 030	248 031	221 524	474 007	14 358
32621	Tire mfg	—	16	6	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	4	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	4	2	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	4	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	19	11	1 525	40 420	1 267	2 539	30 000	139 922	82 275	222 375	8 610
326291	Rubber product mfg for mechanical use	—	8	5	1 077	26 492	922	1 827	20 498	89 595	45 100	135 061	6 222
326299	All other rubber product mfg	—	11	6	448	13 928	345	712	9 502	50 327	37 175	87 314	2 388
327	Nonmetallic mineral product mfg	—	231	86	7 137	230 661	5 637	11 939	167 865	788 904	751 682	1 545 281	48 112
3271	Clay product & refractory mfg	—	20	9	1 145	31 005	957	1 824	24 042	92 761	54 201	147 659	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	13	5	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	4	3	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	7	4	e	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	2	2	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	28	9	1 101	38 068	870	1 729	28 158	117 322	161 962	281 968	9 696
32721	Glass & glass product mfg	—	28	9	1 101	38 068	870	1 729	28 158	117 322	161 962	281 968	9 696
327213	Glass container mfg	—	2	2	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	25	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ATLANTA, GA MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	—	140	51	3 285	107 926	2 589	5 829	77 397	373 660	369 483	745 305	D
32732	Ready-mix concrete mfg.	—	85	32	1 574	57 457	1 377	3 165	44 928	177 817	242 244	420 930	8 669
327320	Ready-mix concrete mfg	—	85	32	1 574	57 457	1 377	3 165	44 928	177 817	242 244	420 930	8 669
32739	Other concrete product mfg	—	35	17	1 359	37 143	960	2 044	23 350	126 548	82 122	208 415	5 759
327390	Other concrete product mfg	—	35	17	1 359	37 143	960	2 044	23 350	126 548	82 122	208 415	5 759
3279	Other nonmetallic mineral product mfg	1	38	15	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	36	14	1 366	46 039	1 048	2 169	33 754	173 096	104 502	278 105	10 982
327991	Cut stone & stone product mfg	2	17	4	271	6 847	212	457	4 711	16 649	7 430	23 583	1 449
327993	Mineral wool mfg	—	9	5	833	32 936	658	1 316	24 792	136 057	80 409	217 957	D
327999	All other miscellaneous nonmetallic mineral product mfg	1	10	5	262	6 256	178	396	4 251	20 390	16 663	36 565	D
331	Primary metal mfg	—	38	18	2 503	89 506	1 920	4 179	62 126	207 965	895 830	1 101 640	28 957
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	9	8	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	1	6	5	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	4	2	694	23 031	532	1 211	14 395	53 489	67 953	122 540	D
33131	Alumina & aluminum production & processing	—	4	2	694	23 031	532	1 211	14 395	53 489	67 953	122 540	D
331316	Aluminum extruded product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	9	5	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	518	158	13 247	407 333	9 689	19 439	251 882	958 258	993 487	1 947 359	60 952
3321	Forging & stamping	—	23	10	834	26 916	650	1 269	17 884	71 796	79 396	149 814	3 101
33211	Forging & stamping	—	23	10	834	26 916	650	1 269	17 884	71 796	79 396	149 814	3 101
332116	Metal stamping	—	18	8	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	3	21	10	697	21 510	448	809	10 409	48 984	28 085	77 434	3 039
33221	Cutlery & handtool mfg	3	21	10	697	21 510	448	809	10 409	48 984	28 085	77 434	3 039
332212	Hand & edge tool mfg	4	16	7	403	10 879	300	484	6 401	26 482	14 183	40 559	D
332213	Saw blade & handsaw mfg	2	4	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	162	62	4 919	149 021	3 405	6 940	85 061	341 311	437 799	774 601	20 386
33231	Plate work & fabricated structural product mfg	2	40	18	1 111	36 697	730	1 499	21 235	82 786	123 183	205 770	7 417
332312	Fabricated structural metal mfg	2	32	16	1 030	34 292	681	1 408	20 053	75 225	115 165	190 190	6 891
33232	Ornamental & architectural metal products mfg	—	122	44	3 808	112 324	2 675	5 441	63 826	258 525	314 616	568 831	12 969
332321	Metal window & door mfg	—	23	13	1 711	47 629	1 143	2 356	26 372	104 969	145 511	247 450	4 013
332322	Sheet metal work mfg	—	62	23	1 508	46 999	1 134	2 306	28 128	109 675	118 957	227 202	7 155
332323	Ornamental & architectural metal work mfg	1	37	8	589	17 696	398	779	9 326	43 881	50 148	94 179	1 801
3324	Boiler, tank, & shipping container mfg	—	20	11	1 187	41 256	882	1 866	30 365	91 609	158 467	254 135	9 224
33242	Metal tank (heavy gauge) mfg	—	10	6	789	26 058	559	1 279	17 944	44 932	67 422	112 764	D
332420	Metal tank (heavy gauge) mfg	—	10	6	789	26 058	559	1 279	17 944	44 932	67 422	112 764	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	5	368	14 301	302	548	11 848	44 980	89 448	138 077	D
3325	Hardware mfg	—	7	4	385	11 444	250	555	5 224	28 758	35 849	64 982	740
33251	Hardware mfg	—	7	4	385	11 444	250	555	5 224	28 758	35 849	64 982	740
332510	Hardware mfg	—	7	4	385	11 444	250	555	5 224	28 758	35 849	64 982	740

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ATLANTA, GA MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	—	16	7	680	16 545	571	1 095	12 142	58 057	51 832	109 040	2 023
33261	Spring & wire product mfg	—	16	7	680	16 545	571	1 095	12 142	58 057	51 832	109 040	2 023
332612	Spring (light gauge) mfg	—	4	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	180	26	1 917	64 305	1 390	2 628	39 383	128 831	53 066	178 792	10 817
33271	Machine shops	2	166	21	1 504	50 469	1 168	2 155	32 183	101 108	42 252	141 097	8 392
332710	Machine shops	2	166	21	1 504	50 469	1 168	2 155	32 183	101 108	42 252	141 097	8 392
33272	Turned product & screw, nut, & bolt mfg	—	14	5	413	13 836	222	473	7 200	27 723	10 814	37 695	2 425
332721	Precision turned product mfg	—	11	3	308	10 395	146	315	5 249	18 553	6 568	24 597	1 344
3328	Coating, engraving, heat treating, & allied activities .	2	33	11	925	27 560	722	1 499	17 244	58 819	43 302	102 778	4 007
33281	Coating, engraving, heat treating, & allied activities	2	33	11	925	27 560	722	1 499	17 244	58 819	43 302	102 778	4 007
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	14	5	342	12 772	237	500	6 304	30 603	26 909	58 333	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	17	5	f	D	D	D	D	D	D	D	2 195
3329	Other fabricated metal product mfg	1	56	17	1 703	48 776	1 371	2 778	34 170	130 093	105 691	235 783	7 615
33299	All other fabricated metal product mfg	1	49	14	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	2	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	10	1	463	10 081	401	772	8 427	29 571	34 273	63 862	2 117
332999	All other miscellaneous fabricated metal product mfg	1	26	11	709	20 746	563	1 141	14 289	43 882	47 929	92 063	2 839
333	Machinery mfg	1	261	92	10 322	349 694	6 606	13 544	178 447	1 039 128	885 726	1 849 516	56 947
3331	Agriculture, construction, & mining machinery mfg	—	21	13	1 601	47 764	1 050	2 090	22 265	151 271	163 217	277 534	11 686
33311	Agricultural implement mfg	—	10	7	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	2	63	22	1 587	60 035	961	1 995	30 082	101 687	101 426	204 733	7 021
33329	Other industrial machinery mfg	2	55	19	1 325	51 569	843	1 752	26 590	84 122	88 038	173 460	6 563
333293	Printing machinery & equipment mfg	—	11	3	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	11	6	271	10 066	153	290	4 265	19 001	20 851	39 902	805
333298	All other industrial machinery mfg	3	20	7	526	20 398	326	737	10 477	36 775	36 042	73 876	3 674
3333	Commercial & service industry machinery mfg	1	31	10	686	22 923	478	898	12 301	99 596	66 215	166 692	D
33331	Commercial & service industry machinery mfg	1	31	10	686	22 923	478	898	12 301	99 596	66 215	166 692	D
333319	Other commercial & service industry machinery mfg	1	18	5	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	21	15	2 638	92 618	1 830	4 213	50 430	234 732	213 443	440 743	12 862
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	21	15	2 638	92 618	1 830	4 213	50 430	234 732	213 443	440 743	12 862
333415	AC & warm air heating & commercial/industrial refig equip mfg	1	11	9	2 230	80 586	1 576	3 709	44 597	194 992	164 318	353 803	11 278
3335	Metalworking machinery mfg	2	48	10	f	D	D	D	D	D	D	D	3 097
33351	Metalworking machinery mfg	2	48	10	f	D	D	D	D	D	D	D	3 097
333514	Special die & tool, die set, jig, & fixture mfg	2	27	5	429	14 136	355	645	11 415	27 890	10 963	38 527	1 947

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	ATLANTA, GA MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	—	73	20	2 963	96 572	1 666	3 177	43 376	394 760	299 697	660 944	19 258
33392	Material handling equipment mfg	—	19	6	658	23 591	298	639	8 866	54 781	63 946	117 051	1 181
333922	Conveyor & conveying equipment mfg	—	10	4	374	13 703	171	357	5 473	34 705	21 859	55 933	605
33399	All other general-purpose machinery mfg	—	45	13	2 211	70 223	1 314	2 442	33 273	330 941	230 372	529 796	17 732
333991	Power-driven handtool mfg	—	1	1	g	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	19	7	f	D	D	D	D	D	D	D	3 148
334	Computer & electronic product mfg	1	225	87	17 436	656 827	10 713	21 465	290 343	2 011 754	2 070 620	4 072 913	108 251
3341	Computer & peripheral equipment mfg	—	34	11	2 559	121 413	1 257	2 457	40 548	371 179	360 984	746 493	16 240
33411	Computer & peripheral equipment mfg	—	34	11	2 559	121 413	1 257	2 457	40 548	371 179	360 984	746 493	16 240
334111	Electronic computer mfg	—	9	1	e	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	6	4	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	18	6	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	3	48	21	4 062	185 898	2 410	6 197	90 335	596 238	569 223	1 136 589	D
33421	Telephone apparatus mfg	2	10	4	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	2	10	4	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	3	27	15	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	3	27	15	h	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	9	3	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	9	3	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	9	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	50	21	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	50	21	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	2	17	10	g	D	D	D	D	D	D	D	4 957
334418	Printed circuit assembly (electronic assembly) mfg	—	8	7	2 033	65 327	1 278	2 053	19 858	172 840	278 491	462 144	7 101
3345	Navigational, measuring, medical, & control instruments mfg	2	63	24	3 080	116 825	1 688	3 331	45 888	338 533	256 296	601 405	18 042
33451	Navigational, measuring, medical, & control instruments mfg	2	63	24	3 080	116 825	1 688	3 331	45 888	338 533	256 296	601 405	18 042
334510	Electromedical & electrotherapeutic apparatus mfg	—	5	4	706	30 414	351	697	8 601	107 012	61 629	176 897	D
334511	Search, detection, navigation, & guidance instrument mfg	—	5	2	332	19 025	66	135	2 008	39 105	22 843	59 630	D
334513	Industrial process control instrument mfg	5	16	9	748	22 762	432	829	8 606	87 957	89 728	179 022	5 196
334515	Electricity measuring & testing instrument mfg	—	10	2	437	13 581	312	620	6 333	40 539	34 485	73 052	1 831
334516	Analytical laboratory instrument mfg	2	8	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	9	3	337	11 703	242	487	6 420	18 718	25 237	44 197	995

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ATLANTA, GA MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3346	Mfg & reproducing magnetic & optical media .	—	21	7	h	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	21	7	h	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	11	3	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	—	8	4	1 827	57 509	1 254	1 883	28 658	252 930	256 296	502 641	14 870
335	Electrical equipment, appliance, & component mfg	—	71	31	8 740	355 842	6 020	11 757	208 292	1 292 093	1 288 303	2 548 124	172 988
3351	Electric lighting equipment mfg	4	8	3	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	4	8	3	g	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg	5	4	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . .	—	40	14	g	D	D	D	D	D	D	D	23 194
33531	Electrical equipment mfg	—	40	14	g	D	D	D	D	D	D	D	23 194
335313	Switchgear & switchboard apparatus mfg	—	12	6	1 031	31 444	822	1 720	21 531	98 472	88 971	181 445	D
335314	Relay & industrial control mfg	—	18	7	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	19	14	4 827	221 515	3 715	7 102	145 910	828 472	857 470	1 653 384	145 678
33591	Battery mfg	—	2	2	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	2	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	7	7	h	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg	—	3	3	h	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	4	4	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	5	3	339	10 107	255	479	6 308	26 747	26 382	51 543	D
335932	Noncurrent-carrying wiring device mfg	—	4	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	111	44	23 497	1 114 985	15 242	31 261	650 212	4 205 652	8 122 814	12 122 063	141 227
3361	Motor vehicle mfg	—	8	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	7	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	4	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	3	1	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	21	9	1 039	27 026	827	1 759	18 667	72 673	109 772	185 108	D
33621	Motor vehicle body & trailer mfg	—	21	9	1 039	27 026	827	1 759	18 667	72 673	109 772	185 108	D
336211	Motor vehicle body mfg	—	12	5	708	20 358	583	1 346	14 214	61 267	86 135	148 927	D
3363	Motor vehicle parts mfg . . .	—	57	23	3 139	80 788	2 249	4 299	50 354	180 709	291 508	490 141	15 705
33632	Motor vehicle electrical & electronic equipment mfg	2	14	6	594	14 175	483	888	9 786	37 885	32 941	71 671	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	12	5	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	2	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	2	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	5	2	315	10 809	154	260	3 284	S	S	21 612	1 061
336350	Motor vehicle transmission & power train parts mfg	—	5	2	315	10 809	154	260	3 284	S	S	21 612	1 061
33636	Motor vehicle seating & interior trim mfg	—	2	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	2	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	5	4	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	5	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ATLANTA, GA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	-	16	6	604	15 182	460	905	9 472	51 598	28 684	80 376	3 674
336399	All other motor vehicle parts mfg	-	15	6	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	16	5	j	D	D	D	D	D	D	D	26 955
33641	Aerospace product & parts mfg	-	16	5	j	D	D	D	D	D	D	D	26 955
336411	Aircraft mfg	-	1	1	i	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	6	4	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	6	4	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	6	4	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	322	59	6 443	171 478	5 083	10 253	119 488	470 531	348 225	824 179	13 672
3371	Household & institutional furniture & kitchen cabinet mfg	2	209	23	2 328	51 294	1 913	3 466	37 752	115 607	103 971	223 308	3 560
33711	Wood kitchen cabinet & counter top mfg	3	146	10	1 067	23 888	882	1 580	17 549	38 170	27 830	66 139	1 824
337110	Wood kitchen cabinet & counter top mfg ...	3	146	10	1 067	23 888	882	1 580	17 549	38 170	27 830	66 139	1 824
33712	Household & institutional furniture mfg	1	63	13	1 261	27 406	1 031	1 886	20 203	77 437	76 141	157 169	1 736
337122	Nonupholstered wood household furniture mfg	1	34	7	530	10 377	417	845	7 282	43 395	54 291	99 953	659
337124	Metal household furniture mfg	-	6	1	e	D	D	D	D	D	D	D	468
337127	Institutional furniture mfg	2	13	4	379	12 456	321	677	9 143	21 787	10 230	32 124	537
3372	Office furniture (including fixtures) mfg	-	94	29	3 372	100 048	2 606	5 470	68 537	293 302	186 263	480 204	8 438
33721	Office furniture (including fixtures) mfg	-	94	29	3 372	100 048	2 606	5 470	68 537	293 302	186 263	480 204	8 438
337211	Wood office furniture mfg	-	13	4	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	3	25	8	e	D	D	D	D	D	D	D	597
337214	Office furniture (except wood) mfg	-	10	5	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	46	12	1 704	49 688	1 247	2 549	32 013	107 077	82 848	189 854	4 426
3379	Other furniture related product mfg	-	19	7	743	20 136	564	1 317	13 199	61 622	57 991	120 667	1 674
33791	Mattress mfg	-	11	5	f	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	11	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	427	63	8 087	265 482	5 355	10 271	111 996	648 464	469 978	1 174 396	44 001
3391	Medical equipment & supplies mfg	1	200	22	4 570	165 642	2 940	5 354	65 220	395 790	282 426	731 275	29 605
33911	Medical equipment & supplies mfg	1	200	22	4 570	165 642	2 940	5 354	65 220	395 790	282 426	731 275	29 605
339112	Surgical & medical instrument mfg	-	15	4	1 115	55 184	448	825	10 318	178 510	158 161	346 003	3 412
339113	Surgical appliance & supplies mfg	1	20	7	998	40 889	529	1 042	10 935	120 739	55 206	174 108	5 425
339115	Ophthalmic goods mfg	-	13	5	1 574	45 896	1 300	2 320	29 844	45 834	48 679	139 435	D
339116	Dental laboratories ...	6	139	6	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	227	41	3 517	99 840	2 415	4 917	46 776	252 674	187 552	443 121	14 396
33992	Sporting & athletic goods mfg	1	24	4	355	14 122	196	367	4 554	50 125	19 439	70 352	5 809
339920	Sporting & athletic goods mfg	1	24	4	355	14 122	196	367	4 554	50 125	19 439	70 352	5 809
33994	Office supplies (except paper) mfg	2	13	5	583	13 865	486	1 303	6 877	30 619	40 703	74 486	D
339942	Lead pencil & art good mfg	3	4	2	e	D	D	D	D	D	D	D	D

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31-33	ATLANTA, GA MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33995	Sign mfg	3	104	13	1 214	38 339	732	1 348	16 984	75 127	46 806	121 547	2 717
339950	Sign mfg	3	104	13	1 214	38 339	732	1 348	16 984	75 127	46 806	121 547	2 717
33999	All other miscellaneous mfg	2	59	14	1 113	27 110	842	1 623	15 565	66 297	50 914	116 918	3 530
339994	Broom, brush, & mop mfg	1	6	5	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	3	35	5	499	12 022	389	707	7 103	26 378	17 439	43 748	1 600
	AUGUSTA-AIKEN, GA-SC MSA												
31-33	Manufacturing	-	364	149	41 124	1 560 574	25 542	47 026	817 378	6 561 832	3 797 324	10 336 193	463 785
	Augusta-Aiken, GA-SC MSA (GA Part)	-	237	98	19 084	619 348	13 651	26 518	375 719	3 033 447	2 709 616	5 746 519	161 885
	Augusta-Aiken, GA-SC MSA (SC Part)	-	127	51	22 040	941 226	11 891	20 508	441 659	3 528 385	1 087 708	4 589 674	301 900
311	Food mfg	-	17	8	1 666	51 295	1 377	2 862	30 733	186 058	275 429	462 723	5 375
3116	Meat product mfg	-	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	6	3	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	8	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	8	2	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	20	18	5 232	125 075	4 777	7 885	108 452	231 029	556 256	801 161	9 543
3131	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	1	11	10	3 311	74 246	3 009	4 951	63 533	160 786	343 469	502 580	D
31321	Broadwoven fabric mills	1	8	7	2 917	66 193	2 735	4 466	59 407	139 888	294 153	432 959	3 035
313210	Broadwoven fabric mills	1	8	7	2 917	66 193	2 735	4 466	59 407	139 888	294 153	432 959	3 035
31323	Nonwoven fabric mills	-	3	3	394	8 053	274	485	4 126	20 898	49 316	69 621	D
313230	Nonwoven fabric mills	-	3	3	394	8 053	274	485	4 126	20 898	49 316	69 621	D
3133	Textile & fabric finishing & fabric coating mills	-	7	6	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	7	6	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	3	2	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	14	4	1 145	17 907	851	1 460	10 309	42 735	42 336	86 062	D
3141	Textile furnishings mills	-	9	3	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	9	3	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	7	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	8	6	1 339	18 462	1 143	2 016	13 413	40 139	27 106	63 757	D
3152	Cut & sew apparel mfg	3	7	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	3	3	3	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	20	7	766	21 986	590	1 257	15 096	49 267	78 203	124 951	8 182
3211	Sawmills & wood preservation	-	7	4	388	12 977	313	746	8 693	24 322	54 333	76 441	4 842
32111	Sawmills & wood preservation	-	7	4	388	12 977	313	746	8 693	24 322	54 333	76 441	4 842
321113	Sawmills	-	5	3	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	11	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUGUSTA-AIKEN, GA-SC MSA—Con. Manufacturing—Con.												
322	Paper mfg	-	10	9	3 016	159 310	2 418	5 994	122 785	1 100 419	551 800	1 643 833	234 363
3221	Pulp, paper, & paperboard mills	-	5	5	2 619	146 335	2 104	5 313	113 832	1 070 240	502 565	1 565 058	D
32212	Paper mills	-	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	397	12 975	314	681	8 953	30 179	49 235	78 775	D
32221	Paperboard container mfg	-	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
3231	Printing & related support activities.....	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
32311	Printing	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
323111	Commercial gravure printing.....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	41	26	14 137	751 382	4 845	7 011	279 843	3 419 466	958 402	4 369 849	85 098
3251	Basic chemical mfg	-	22	16	12 276	677 795	3 359	3 785	226 972	2 504 495	413 281	2 931 976	39 315
32518	Other basic inorganic chemical mfg	-	10	6	11 217	624 966	2 694	2 415	195 353	2 170 028	120 738	2 289 523	11 897
325188	All other basic inorganic chemical mfg	-	9	5	j	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	6	6	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	5	5	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	7	6	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	3	3	e	D	D	D	D	D	D	D	7 077
325211	Plastics material & resin mfg	-	3	3	e	D	D	D	D	D	D	D	7 077
32522	Artificial & synthetic fibers & filaments mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	4	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	5	2	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	8	1 003	27 204	833	1 470	19 497	89 523	52 844	139 621	D
3261	Plastics product mfg	-	11	7	f	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	2	2	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	7	4	293	6 041	250	378	4 088	11 993	10 128	20 720	D
326199	All other plastics product mfg	1	7	4	293	6 041	250	378	4 088	11 993	10 128	20 720	D
327	Nonmetallic mineral product mfg	6	30	7	2 743	90 744	2 056	4 337	62 548	310 131	165 561	475 616	30 725
3271	Clay product & refractory mfg	-	3	2	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	3	2	g	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	-	2	1	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	9	5	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	9	5	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	9	3	1	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	20	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	AUGUSTA-AIKEN, GA-SC MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	50	18	1 822	44 408	1 480	3 095	30 505	133 463	92 170	220 215	9 723
3323	Architectural & structural metals mfg	3	12	6	277	7 944	201	422	4 806	15 126	18 123	33 431	763
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	22	5	e	D	D	D	D	D	D	D	D
33271	Machine shops	4	19	5	258	7 213	194	322	4 755	14 746	5 671	20 392	794
332710	Machine shops	4	19	5	258	7 213	194	322	4 755	14 746	5 671	20 392	794
3329	Other fabricated metal product mfg	—	9	5	1 021	21 343	875	1 926	15 532	78 937	53 133	126 596	6 700
33291	Metal valve mfg	—	4	2	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	5	3	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	13	7	1 215	46 733	799	1 711	22 411	348 923	305 941	643 825	13 398
3335	Metalworking machinery mfg	—	5	1	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	5	1	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	—	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	4	3	404	13 848	289	575	7 626	48 089	22 962	70 258	D
33391	Pump & compressor mfg	—	1	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	2	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	3	2	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	2	1	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	18	8	h	D	D	D	D	D	D	D	12 423
3363	Motor vehicle parts mfg ...	—	5	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	5	3	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	5	3	h	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	—	4	2	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	19	6	302	6 676	251	473	4 143	35 601	16 213	51 725	1 496
339	Miscellaneous mfg	—	27	3	906	26 744	765	1 452	20 151	42 562	110 028	152 772	D
3391	Medical equipment & supplies mfg	—	13	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	13	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	3	1	f	D	D	D	D	D	D	D	D
	CHATTANOOGA, TN-GA MSA												
31-33	Manufacturing	1	707	277	44 038	1 265 866	33 390	65 958	801 035	3 395 618	4 098 991	7 470 751	332 375
	Chattanooga, TN—GA MSA (GA Part)	2	163	56	9 753	235 937	8 452	16 614	179 525	805 357	980 295	1 764 750	98 458
	Chattanooga, TN—GA MSA (TN Part)	—	544	221	34 285	1 029 929	24 938	49 344	621 510	2 590 261	3 118 696	5 706 001	233 917

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
311	Food mfg	-	33	19	9 794	265 002	6 228	11 208	124 671	617 181	985 395	1 600 457	68 755
3112	Grain & oilseed milling	-	5	5	578	17 915	370	643	8 069	28 596	324 328	360 719	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	6	3	1 542	25 881	1 397	2 271	20 744	50 739	112 625	158 163	2 045
31161	Animal slaughtering & processing	-	6	3	1 542	25 881	1 397	2 271	20 744	50 739	112 625	158 163	2 045
311615	Poultry processing	-	3	3	1 509	25 408	1 369	2 239	20 402	49 447	109 267	153 508	1 943
3118	Bakeries & tortilla mfg	-	16	6	6 346	175 221	3 744	6 906	79 319	464 748	435 342	899 868	D
31181	Bread & bakery product mfg	-	13	3	i	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	4	3	i	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	3	e	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	3	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	467	12 159	357	755	7 564	28 764	44 230	72 853	D
31191	Snack food mfg	-	1	1	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	4	35	23	6 554	155 658	5 940	12 633	124 905	378 529	506 176	879 008	61 333
3131	Fiber, yarn, & thread mills	-	12	10	2 691	60 719	2 528	5 410	55 007	94 225	250 257	347 410	D
31311	Fiber, yarn, & thread mills	-	12	10	2 691	60 719	2 528	5 410	55 007	94 225	250 257	347 410	D
313111	Yarn spinning mills	-	7	6	g	D	D	D	D	D	D	D	4 073
313112	Yarn texturing, throwing, & twisting mills	-	4	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	8	10	5	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	6	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	6	3	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	1	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	13	8	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	2	12	8	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	4	3	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	2	8	5	1 077	21 918	969	2 036	17 744	43 670	69 610	114 947	4 508
314	Textile product mills	-	25	9	1 213	27 936	907	1 994	18 824	97 942	146 038	244 251	D
3141	Textile furnishings mills	-	9	4	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	6	3	898	21 538	661	1 513	14 821	85 993	134 475	220 477	4 486
314110	Carpet & rug mills	-	6	3	898	21 538	661	1 513	14 821	85 993	134 475	220 477	4 486
3149	Other textile product mills	3	16	5	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	26	13	999	15 279	900	1 523	11 839	25 278	25 076	51 821	2 525
3151	Apparel knitting mills	6	12	6	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	5	9	5	486	8 243	450	796	6 622	12 661	13 313	27 250	D
315119	Other hosiery & sock mills	5	8	5	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	11	6	317	4 178	277	400	2 805	7 230	5 464	12 438	D
316	Leather & allied product mfg	2	11	6	f	D	D	D	D	D	D	D	562
3169	Other leather & allied product mfg	3	8	4	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	3	8	4	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	3	8	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	18	7	e	D	D	D	D	D	D	D	1 904
3219	Other wood product mfg	2	15	5	286	5 243	253	432	3 752	12 032	12 784	24 734	D
322	Paper mfg	-	21	14	1 645	55 634	1 230	2 680	37 853	157 988	176 987	331 436	24 485
3221	Pulp, paper, & paperboard mills	-	4	4	480	22 193	355	829	16 615	70 516	60 388	128 216	9 138
32213	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	17	10	1 165	33 441	875	1 851	21 238	87 472	116 599	203 220	15 347
32221	Paperboard container mfg	-	14	9	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	9	5	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	3	3	418	12 775	306	745	8 018	29 304	30 851	60 739	D

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31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	4	85	20	2 175	75 778	1 604	3 565	48 468	144 092	133 270	281 872	15 653
3231	Printing & related support activities.....	4	85	20	2 175	75 778	1 604	3 565	48 468	144 092	133 270	281 872	15 653
32311	Printing	5	75	19	2 122	74 027	1 559	3 474	47 149	139 696	131 330	275 550	D
323110	Commercial lithographic printing ..	6	33	10	1 440	57 067	1 072	2 532	36 595	115 933	96 672	211 307	12 791
323113	Commercial screen printing.....	—	20	8	550	13 970	390	778	8 789	16 993	29 623	52 444	1 980
325	Chemical mfg	—	40	20	3 099	133 014	2 084	4 650	88 153	415 929	474 683	901 183	D
3251	Basic chemical mfg	—	11	5	515	22 901	287	572	11 928	55 977	121 155	180 122	24 223
32519	Other basic organic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	6	1 801	80 554	1 386	3 305	61 460	209 622	249 764	468 552	D
32521	Resin & synthetic rubber mfg	—	4	4	e	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	4	2	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	4	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	39	18	1 231	31 686	1 036	2 124	22 137	112 958	128 104	239 384	20 981
3261	Plastics product mfg	—	31	16	1 141	29 600	966	1 978	20 648	103 927	115 552	218 219	19 688
32615	Urethane & other foam product (except polystyrene) mfg	—	4	4	294	8 221	235	503	5 160	21 540	32 404	54 062	4 354
326150	Urethane & other foam product (except polystyrene) mfg	—	4	4	294	8 221	235	503	5 160	21 540	32 404	54 062	4 354
32619	Other plastics product mfg	—	18	8	625	13 742	541	1 081	10 234	61 221	57 262	116 982	12 847
326199	All other plastics product mfg	—	13	8	f	D	D	D	D	D	D	D	12 796
327	Nonmetallic mineral product mfg	—	30	10	g	D	D	D	D	D	D	D	5 819
3271	Clay product & refractory mfg	—	3	3	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	16	5	310	10 134	250	533	7 279	45 183	29 038	74 725	1 349
331	Primary metal mfg	—	15	10	3 136	99 595	2 686	5 160	68 899	195 577	197 936	391 408	12 642
3315	Foundries	—	10	7	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	7	6	h	D	D	D	D	D	D	D	10 489
331511	Iron foundries	—	6	5	h	D	D	D	D	D	D	D	10 489
332	Fabricated metal product mfg	—	138	43	3 538	103 974	2 680	5 056	65 844	251 526	152 840	404 639	12 394
3321	Forging & stamping	—	5	4	331	8 374	195	426	4 300	12 746	17 268	29 755	D
33211	Forging & stamping	—	5	4	331	8 374	195	426	4 300	12 746	17 268	29 755	D
332114	Custom roll forming ...	—	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	28	9	488	15 104	362	716	8 915	38 601	17 457	56 218	D
33231	Plate work & fabricated structural product mfg ..	—	14	4	250	7 313	172	306	3 994	26 703	10 040	36 638	452
3324	Boiler, tank, & shipping container mfg	1	8	6	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	6	5	312	9 707	229	426	6 514	21 276	24 751	46 080	1 471
332420	Metal tank (heavy gauge) mfg	—	6	5	312	9 707	229	426	6 514	21 276	24 751	46 080	1 471
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	59	10	765	20 540	626	870	14 156	47 706	18 392	65 018	2 275
33271	Machine shops.....	2	55	9	704	18 460	579	751	12 695	43 892	15 621	58 437	1 778
332710	Machine shops.....	2	55	9	704	18 460	579	751	12 695	43 892	15 621	58 437	1 778

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	—	19	5	1 013	31 666	775	1 531	21 818	89 368	51 081	141 803	2 871
33291	Metal valve mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg...	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	18	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	53	24	2 766	103 381	1 951	4 095	60 352	323 465	415 829	736 061	14 893
3331	Agriculture, construction, & mining machinery mfg....	—	7	5	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	—	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
333120	Construction machinery mfg.....	—	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
3332	Industrial machinery mfg..	—	14	9	f	D	D	D	D	D	D	D	988
33329	Other industrial machinery mfg.....	1	11	6	e	D	D	D	D	D	D	D	D
333292	Textile machinery mfg.	—	8	6	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	6	4	269	9 210	167	359	2 998	21 442	23 167	44 569	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	—	6	4	269	9 210	167	359	2 998	21 442	23 167	44 569	D
3339	Other general-purpose machinery mfg.....	4	16	4	402	10 858	310	613	7 301	25 128	12 653	37 734	1 035
33399	All other general-purpose machinery mfg.....	5	12	3	e	D	D	D	D	D	D	D	928
333999	All other miscellaneous general-purpose machinery mfg.....	5	8	3	325	8 685	263	519	6 143	19 488	9 955	29 338	D
334	Computer & electronic product mfg.....	3	19	7	649	19 457	360	757	8 179	50 008	40 217	90 048	3 362
3344	Semiconductor & other electronic component mfg.....	6	4	3	325	10 387	238	547	5 689	27 477	15 981	44 190	D
33441	Semiconductor & other electronic component mfg.....	6	4	3	325	10 387	238	547	5 689	27 477	15 981	44 190	D
335	Electrical equipment, appliance, & component mfg.....	—	9	8	2 186	56 173	1 814	3 422	40 431	302 828	257 796	547 872	D
3352	Household appliance mfg..	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	—	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	1	4	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	16	8	1 146	27 464	935	1 749	20 505	45 698	256 620	296 029	4 450
3362	Motor vehicle body & trailer mfg.....	—	5	4	880	22 171	715	1 435	16 909	32 139	236 020	261 799	D
33621	Motor vehicle body & trailer mfg.....	—	5	4	880	22 171	715	1 435	16 909	32 139	236 020	261 799	D
336211	Motor vehicle body mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	42	7	843	19 733	656	1 243	13 804	38 559	35 110	73 056	2 368
3371	Household & institutional furniture & kitchen cabinet mfg.....	3	31	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	—	8	4	447	12 025	310	630	7 646	22 004	22 449	44 127	1 605
33721	Office furniture (including fixtures) mfg.....	—	8	4	447	12 025	310	630	7 646	22 004	22 449	44 127	1 605
337215	Showcase, partition, shelving, & locker mfg.....	1	5	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	45	9	973	26 878	673	1 053	11 861	70 776	46 410	115 196	3 378
3391	Medical equipment & supplies mfg.....	—	24	3	500	15 073	368	404	4 789	35 140	23 089	58 210	1 358
33911	Medical equipment & supplies mfg.....	—	24	3	500	15 073	368	404	4 789	35 140	23 089	58 210	1 358
339113	Surgical appliance & supplies mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	1	21	6	473	11 805	305	649	7 072	35 636	23 321	56 986	2 020
33995	Sign mfg.....	—	8	3	329	8 331	212	442	4 804	18 940	13 382	32 015	D
339950	Sign mfg.....	—	8	3	329	8 331	212	442	4 804	18 940	13 382	32 015	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLUMBUS, GA—AL MSA												
31-33	Manufacturing	1	230	99	19 930	597 036	15 017	32 427	394 338	2 171 632	2 183 278	4 357 805	221 782
	Columbus, GA—AL MSA (AL Part)	—	49	19	3 295	107 782	2 757	6 049	80 709	540 642	462 403	1 000 399	89 114
	Columbus, GA—AL MSA (GA Part)	1	181	80	16 635	489 254	12 260	26 378	313 629	1 630 990	1 720 875	3 357 406	132 668
311	Food mfg.	—	17	8	3 464	90 255	2 255	4 423	54 577	446 992	264 829	707 615	15 761
3115	Dairy product mfg.	—	1	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.	—	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.	—	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.	—	3	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.	—	3	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing.	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.	—	5	3	2 137	64 801	1 183	2 576	35 850	296 278	120 719	416 729	10 002
31181	Bread & bakery product mfg.	—	3	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.	—	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	—	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	—	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
3121	Beverage mfg.	—	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
31211	Soft drink & ice mfg.	—	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
312111	Soft drink mfg.	—	3	3	399	23 686	209	456	11 049	103 686	203 689	306 817	D
313	Textile mills	3	12	10	4 321	128 446	3 535	8 215	92 682	252 791	384 688	650 205	32 520
3131	Fiber, yarn, & thread mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
31311	Fiber, yarn, & thread mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
313111	Yarn spinning mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
3132	Fabric mills	4	7	6	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	4	5	5	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	4	5	5	h	D	D	D	D	D	D	D	D
314	Textile product mills.	—	7	6	1 327	25 086	1 148	2 635	20 579	183 005	194 777	374 961	D
3141	Textile furnishings mills.	—	5	4	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.	—	3	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.	—	13	5	564	14 368	494	1 079	10 696	36 311	65 437	101 189	D
3211	Sawmills & wood preservation	—	5	4	e	D	D	D	D	D	D	D	2 949
32111	Sawmills & wood preservation	—	5	4	e	D	D	D	D	D	D	D	2 949
321113	Sawmills	—	4	3	e	D	D	D	D	D	D	D	D
322	Paper mfg.	—	6	6	1 223	66 421	870	2 022	45 521	311 841	280 322	592 346	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.	3	5	5	e	D	D	D	D	D	D	D	3 802
32222	Paper bag & coated & treated paper mfg.	6	3	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.	5	27	3	398	11 705	293	545	7 292	25 124	16 058	41 248	2 398
3231	Printing & related support activities.	5	27	3	398	11 705	293	545	7 292	25 124	16 058	41 248	2 398
32311	Printing	5	25	3	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	6	11	2	298	9 709	219	432	5 990	20 758	12 920	33 743	1 903
327	Nonmetallic mineral product mfg.	—	16	6	424	10 842	327	628	6 605	47 477	29 158	76 789	D
331	Primary metal mfg.	—	7	6	1 061	32 868	866	2 078	24 641	103 549	61 030	162 783	8 551
3315	Foundries	—	5	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	5	4	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLUMBUS, GA—AL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	32	13	1 218	32 570	871	1 535	18 937	80 013	91 101	170 302	2 825
3322	Cutlery & handtool mfg	—	3	3	312	8 092	208	309	3 549	16 612	22 763	39 012	D
33221	Cutlery & handtool mfg ..	—	3	3	312	8 092	208	309	3 549	16 612	22 763	39 012	D
332212	Hand & edge tool mfg .	—	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	3	13	5	315	9 294	215	407	5 173	21 796	25 470	47 104	1 128
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
33271	Machine shops	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
332710	Machine shops	—	11	3	322	8 045	217	339	4 657	27 612	27 958	53 993	610
333	Machinery mfg	2	12	7	1 072	32 866	807	1 769	21 975	58 904	130 623	204 224	19 649
3332	Industrial machinery mfg ..	3	4	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	3	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refriger equip mfg	—	3	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	5	2 468	67 837	1 968	4 446	46 753	345 688	253 799	587 683	16 476
3352	Household appliance mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	3	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	2	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	5	1 110	38 052	727	1 433	20 157	85 857	96 210	180 429	D
3364	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
31-33	MACON, GA MSA												
	Manufacturing	—	292	93	18 617	688 435	14 456	29 531	471 439	4 543 823	2 470 838	7 022 117	329 162
311	Food mfg	—	27	10	2 941	83 832	2 384	4 983	54 221	406 342	420 344	834 721	21 076
3116	Meat product mfg	9	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	3	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	11	3	f	D	D	D	D	D	D	D	2 428
31182	Cookie, cracker, & pasta mfg	—	3	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	—	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	3	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	2	1	h	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	1	1	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	—	1	1	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	1	1	h	D	D	D	D	D	D	D	D
313	Textile mills	—	4	3	266	8 670	165	409	5 926	33 958	63 499	94 881	D
314	Textile product mills	—	10	5	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	6	3	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	6	3	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MACON, GA MSA— Con. Manufacturing— Con.												
321	Wood product mfg	-	16	4	f	D	D	D	D	D	D	D	D
3211	Sawmills & wood preservation	-	2	1	e	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	2	1	e	D	D	D	D	D	D	D	D
321113	Sawmills	-	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	9	8	1 459	56 565	1 230	2 396	44 792	156 081	259 575	420 857	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	8	7	f	D	D	D	D	D	D	D	51 150
32229	Other converted paper product mfg	2	3	3	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	9	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	32	4	e	D	D	D	D	D	D	D	1 113
3231	Printing & related support activities	3	32	4	e	D	D	D	D	D	D	D	1 113
32311	Printing	4	31	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	3	14	6	509	17 363	258	474	5 726	91 620	56 259	147 064	5 197
3259	Other chemical product mfg	1	4	4	357	13 365	174	334	3 634	72 323	34 815	106 086	3 614
326	Plastics & rubber products mfg	-	19	9	605	13 891	508	1 106	10 648	35 761	62 822	97 333	883
3261	Plastics product mfg	-	13	6	488	11 383	428	945	9 264	29 654	54 195	82 922	583
32619	Other plastics product mfg	1	8	4	362	8 435	323	717	6 868	21 579	24 288	45 582	367
326199	All other plastics product mfg	-	6	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	23	10	1 645	68 520	1 305	2 761	52 910	198 090	145 258	345 578	42 030
3272	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	14	4	364	13 070	295	587	8 526	50 110	35 058	85 070	8 150
3279	Other nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	40	12	f	D	D	D	D	D	D	D	2 478
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	23	4	317	11 055	234	431	6 431	19 213	8 299	27 756	1 217
33271	Machine shops	2	23	4	317	11 055	234	431	6 431	19 213	8 299	27 756	1 217
332710	Machine shops	2	23	4	317	11 055	234	431	6 431	19 213	8 299	27 756	1 217
333	Machinery mfg	-	12	3	515	12 967	404	871	8 353	43 829	41 359	84 228	1 203
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	7	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	2	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MACON, GA MSA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	25	3	f	D	D	D	D	D	D	D	440
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	2	e	D	D	D	D	D	D	D	202
33712	Household & institutional furniture mfg	-	3	1	e	D	D	D	D	D	D	D	D
337129	Wood television, radio, & sewing machine cabinet mfg	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	27	3	1 423	45 017	1 010	2 867	26 697	100 969	69 389	167 954	D
3399	Other miscellaneous mfg ..	-	11	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
339993	Fastener, button, needle, & pin mfg	-	1	1	g	D	D	D	D	D	D	D	D
SAVANNAH, GA MSA													
31-33	Manufacturing	-	227	65	14 606	608 602	10 380	18 128	397 248	1 769 025	3 521 812	5 325 814	201 723
311	Food mfg	-	24	9	1 696	51 467	1 012	2 181	28 121	215 645	689 326	908 678	5 456
3113	Sugar & confectionery product mfg	-	5	3	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	2	2	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining ...	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	9	2	f	D	D	D	D	D	D	D	929
31181	Bread & bakery product mfg	-	8	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	17	5	591	15 505	508	1 130	12 153	46 113	119 002	165 338	2 589
3211	Sawmills & wood preservation	1	8	4	e	D	D	D	D	D	D	D	2 261
32111	Sawmills & wood preservation	1	8	4	e	D	D	D	D	D	D	D	2 261
3212	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
321211	Hardwood veneer & plywood mfg	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	5	3 284	166 590	2 581	5 909	126 903	458 816	524 348	964 032	131 104
3221	Pulp, paper, & paperboard mills	-	3	3	3 112	161 310	2 451	5 650	123 530	448 395	501 346	930 682	130 669
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	6	3	295	12 588	227	593	9 163	87 189	184 164	272 502	5 507
3241	Petroleum & coal products mfg	-	6	3	295	12 588	227	593	9 163	87 189	184 164	272 502	5 507
325	Chemical mfg	-	17	9	1 619	64 475	996	2 214	34 401	233 153	398 103	645 244	24 790
3251	Basic chemical mfg	-	7	5	1 025	41 240	642	1 442	23 204	147 128	241 946	406 608	18 366
32513	Dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	3	1	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	9	2	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	9	2	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	18	7	527	17 244	405	923	11 816	75 841	53 015	128 378	6 071
3273	Cement & concrete product mfg	1	14	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	31	8	e	D	D	D	D	D	D	D	2 121
333	Machinery mfg	-	11	5	412	12 525	307	543	7 267	48 800	25 678	75 058	2 644
3332	Industrial machinery mfg ..	-	6	2	286	8 086	226	383	5 605	40 065	19 112	59 426	2 548
33329	Other industrial machinery mfg	-	6	2	286	8 086	226	383	5 605	40 065	19 112	59 426	2 548

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAVANNAH, GA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg.....	-	11	3	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	9	4	1	e	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	9	4	1	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	9	3	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	20	2	294	7 079	130	209	2 453	33 116	31 494	64 646	1 153

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	APPLING COUNTY, GA												
	Manufacturing.....	-	25	14	1 160	28 705	857	1 817	17 890	103 154	334 809	432 857	7 675
	ATKINSON COUNTY, GA												
31-33	Manufacturing.....	-	13	4	1 081	24 086	967	1 991	19 020	44 829	78 516	123 808	D
314	Textile product mills.....	-	4	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills...	-	4	3	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	-	4	3	f	D	D	D	D	D	D	D	D
314911	Textile bag mills.....	-	3	3	f	D	D	D	D	D	D	D	D
	BACON COUNTY, GA												
31-33	Manufacturing.....	-	14	7	1 373	27 842	1 109	2 126	21 893	64 468	145 127	210 857	1 984

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BALDWIN COUNTY, GA													
31-33	Manufacturing	-	20	8	3 454	91 219	3 098	6 137	78 162	172 919	421 206	624 869	6 823
313	Textile mills	-	5	4	1 568	33 375	1 466	2 970	29 430	32 029	107 164	160 788	1 143
3131	Fiber, yarn, & thread mills .	-	2	2	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	f	D	D	D	D	D	D	D	D
BANKS COUNTY, GA													
31-33	Manufacturing	-	14	4	f	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
BARROW COUNTY, GA													
31-33	Manufacturing	1	64	11	2 217	64 047	1 801	3 648	45 200	185 543	326 899	509 871	21 936
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
BARTOW COUNTY, GA													
31-33	Manufacturing	-	126	59	10 115	303 066	8 231	17 526	226 147	1 387 632	1 526 973	2 918 411	116 161
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	10	7	862	19 988	668	1 310	14 463	69 665	57 666	128 013	D
3131	Fiber, yarn, & thread mills .	-	5	5	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	14	9	2 689	73 159	2 412	5 850	60 514	230 572	393 627	622 833	11 260
3141	Textile furnishings mills	-	11	7	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	10	7	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	10	7	g	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	3	2	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	2	g	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	7	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	7	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	10	6	891	41 416	609	1 233	22 153	254 675	221 783	481 563	10 241
326	Plastics & rubber products mfg	-	11	9	1 306	36 041	1 127	2 235	27 954	154 114	136 043	291 660	20 601
3261	Plastics product mfg	-	9	9	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	3	3	721	22 777	628	1 254	18 524	112 611	83 760	198 348	D
326111	Unsupported plastics bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	6	799	22 799	619	1 224	17 380	50 035	62 600	112 105	3 623
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
BARTOW COUNTY, GA														
—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D	
3365	Railroad rolling stock mfg ..	—	1	1	f	D	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D	
BEN HILL COUNTY, GA														
31-33	Manufacturing	1	34	21		3 621	93 609	3 195	5 849	73 022	260 338	379 221	641 529	7 785
313	Textile mills	—	2	2	f	D	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	—	2	2	f	D	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	2	2	f	D	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	—	1	1	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg	4	5	5		1 036	23 917	897	1 671	18 078	48 565	114 056	165 325	2 441
3219	Other wood product mfg ...	7	3	3	f	D	D	D	D	D	D	D	D	D
32199	All other wood product mfg	7	2	2	f	D	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	7	2	2	f	D	D	D	D	D	D	D	D	D
BERRIEN COUNTY, GA														
31-33	Manufacturing	—	17	8		1 987	45 031	1 740	3 799	37 726	93 105	134 139	231 644	2 345
313	Textile mills	—	1	1	f	D	D	D	D	D	D	D	D	D
3132	Fabric mills	—	1	1	f	D	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	—	1	1	f	D	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	1	1	f	D	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	1	1	f	D	D	D	D	D	D	D	D	D
336612	Boat building	—	1	1	f	D	D	D	D	D	D	D	D	D
BIBB COUNTY, GA														
31-33	Manufacturing	—	179	61	j	D	D	D	D	D	D	D	D	238 106
311	Food mfg	1	22	8	g	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	3	1	f	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	3	1	f	D	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	f	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	10	3	f	D	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	3	2	f	D	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	—	3	2	f	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	2	1	h	D	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	—	1	1	h	D	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	8	7	g	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	7	6	f	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	3	3	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	12	6	f	D	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	—	2	2	f	D	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	31	10	f	D	D	D	D	D	D	D	D	2 176

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BIBB COUNTY, GA— Con. Manufacturing— Con.												
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	15	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	6	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
339993	Fastener, button, needle, & pin mfg	-	1	1	g	D	D	D	D	D	D	D	D
31-33	BLECKLEY COUNTY, GA Manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	g	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
31-33	BROOKS COUNTY, GA Manufacturing	-	12	9	1 077	17 407	942	1 631	11 295	47 751	59 271	106 257	1 648
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31-33	BULLOCH COUNTY, GA Manufacturing	-	41	15	3 210	84 290	2 683	5 237	59 088	276 751	208 348	493 353	20 559
332	Fabricated metal product mfg	-	10	3	1 060	31 406	921	1 957	25 075	111 371	54 263	167 206	3 955
3329	Other fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	BURKE COUNTY, GA Manufacturing	3	16	8	1 035	21 316	587	1 247	11 749	49 241	33 372	84 416	3 449
31-33	BUTTS COUNTY, GA Manufacturing	-	18	10	1 127	22 277	964	1 889	16 683	105 196	75 492	181 396	3 151
31-33	CALHOUN COUNTY, GA Manufacturing	8	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	8	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	9	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMDEN COUNTY, GA													
31-33	Manufacturing	-	21	7	1 364	52 737	1 039	2 343	36 289	237 461	292 244	528 823	D
322	Paper mfg	-	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
CARROLL COUNTY, GA													
31-33	Manufacturing	-	121	54	9 590	229 641	7 860	15 460	175 038	663 831	1 503 769	2 156 699	62 734
311	Food mfg	-	4	3	1 298	27 112	985	1 786	18 767	150 605	159 794	310 325	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	13	11	g	D	D	D	D	D	D	D	612
3151	Apparel knitting mills	-	6	5	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	5	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	6	5	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	3	3	g	D	D	D	D	D	D	D	303
315211	Men's & boys' cut & sew apparel contractors	-	3	3	g	D	D	D	D	D	D	D	303
326	Plastics & rubber products mfg	-	6	5	994	23 704	895	1 923	19 606	86 481	105 971	193 457	8 341
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	f	D	D	D	D	D	D	D	D
CATOOSA COUNTY, GA													
31-33	Manufacturing	-	64	22	2 291	56 203	1 813	3 683	40 527	182 336	277 869	458 520	24 891
314	Textile product mills	-	3	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	3	2	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	3	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	3	2	f	D	D	D	D	D	D	D	D
CHATHAM COUNTY, GA													
31-33	Manufacturing	-	207	58	j	D	D	D	D	D	D	D	D
311	Food mfg	-	24	9	1 696	51 467	1 012	2 181	28 121	215 645	689 326	908 678	5 456
3113	Sugar & confectionery product mfg	-	5	3	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	2	2	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	9	2	f	D	D	D	D	D	D	D	929
31181	Bread & bakery product mfg	-	8	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHATHAM COUNTY, GA—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	—	16	9	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	7	5	1 025	41 240	642	1 442	23 204	147 128	241 946	406 608	18 366
32513	Dye & pigment mfg	—	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	16	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	11	3	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	2	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	2	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	h	D	D	D	D	D	D	D	D
CHATTOOGA COUNTY, GA													
31-33	Manufacturing	—	23	15	3 996	90 967	3 568	8 163	75 856	464 675	414 170	873 611	34 431
313	Textile mills	—	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	—	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	—	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	1	1	f	D	D	D	D	D	D	D	D
CHEROKEE COUNTY, GA													
31-33	Manufacturing	1	152	35	3 886	100 486	2 971	5 882	60 332	247 360	414 860	656 717	18 229
311	Food mfg	—	5	2	905	19 873	808	1 890	14 818	37 565	156 401	190 091	2 940
3116	Meat product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	10	4	539	14 703	465	970	8 402	32 979	49 687	80 525	3 797
3261	Plastics product mfg	—	10	4	539	14 703	465	970	8 402	32 979	49 687	80 525	3 797
332	Fabricated metal product mfg	2	25	5	684	19 997	482	1 111	14 268	36 527	54 586	90 315	2 589
CLARKE COUNTY, GA													
31-33	Manufacturing	—	90	34	9 388	234 924	7 520	15 658	168 504	577 408	793 936	1 368 469	94 765
311	Food mfg	—	6	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	h	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	6	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	6	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	13	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARKE COUNTY, GA													
—Con.													
31-33	Manufacturing—												
	Con.												
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
CLAYTON COUNTY, GA													
31-33	Manufacturing	-	167	59	5 901	184 128	4 216	8 272	109 803	789 287	853 943	1 641 582	37 971
311	Food mfg.....	-	12	8	779	18 674	582	1 047	12 848	77 541	84 015	161 749	D
3118	Bakeries & tortilla mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	12	5	633	23 617	439	906	13 289	372 675	296 851	668 427	11 784
326	Plastics & rubber products mfg.....	-	16	8	701	20 665	574	937	10 617	92 319	71 047	160 865	5 552
3261	Plastics product mfg.....	-	11	7	660	19 001	537	862	9 138	89 820	68 384	155 697	D
327	Nonmetallic mineral product mfg.....	-	10	9	599	18 972	391	816	11 106	38 417	29 600	66 669	2 385
332	Fabricated metal product mfg.....	-	21	5	719	26 021	501	1 065	17 011	42 659	113 998	156 599	2 409
3323	Architectural & structural metals mfg.....	-	9	4	f	D	D	D	D	D	D	D	1 882
33232	Ornamental & architectural metal products mfg.....	-	7	4	557	18 446	382	831	10 709	18 061	73 564	90 265	D
336	Transportation equipment mfg.....	-	9	4	709	17 010	462	962	9 994	45 631	152 034	204 874	1 865
3363	Motor vehicle parts mfg ...	-	7	3	f	D	D	D	D	D	D	D	D
CLINCH COUNTY, GA													
31-33	Manufacturing	1	11	5	918	18 828	834	1 799	15 481	49 746	101 589	148 897	4 730
332	Fabricated metal product mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332431	Metal can mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
COBB COUNTY, GA													
31-33	Manufacturing	-	604	160	24 499	980 153	14 336	28 444	437 689	2 146 596	2 222 328	4 134 656	110 741
311	Food mfg.....	1	22	7	1 547	40 426	1 198	2 614	23 886	102 416	140 470	242 261	18 312
3119	Other food mfg.....	3	5	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	16	9	786	22 039	688	1 609	17 012	35 614	63 571	99 322	1 248
3219	Other wood product mfg... ..	-	13	6	577	16 393	509	1 179	12 812	24 424	51 348	75 900	D
32191	Millwork.....	-	11	6	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	20	14	1 739	59 935	1 358	3 093	44 635	184 784	200 553	376 948	16 409
3222	Converted paper product mfg.....	-	18	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	12	8	504	17 550	365	711	10 891	44 816	56 525	101 303	1 820
323	Printing & related support activities.....	1	141	26	1 914	66 462	1 390	2 625	40 424	151 366	66 992	217 781	7 789
3231	Printing & related support activities.....	1	141	26	1 914	66 462	1 390	2 625	40 424	151 366	66 992	217 781	7 789
32311	Printing.....	1	126	20	1 583	50 924	1 121	2 055	30 178	102 957	57 199	159 696	D
323110	Commercial lithographic printing ..	1	58	13	927	33 599	620	1 217	18 624	65 110	29 723	94 394	2 665

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COBB COUNTY, GA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	2	35	13	1 160	45 583	624	1 327	19 022	116 975	154 680	271 743	11 025
326	Plastics & rubber products mfg	1	22	5	616	15 857	523	1 021	11 831	43 311	38 504	81 336	D
3261	Plastics product mfg	1	19	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	24	13	727	19 496	583	1 164	14 294	69 662	68 961	139 142	2 418
332	Fabricated metal product mfg	1	67	22	1 169	36 705	803	1 587	19 560	87 367	81 558	169 496	5 050
333	Machinery mfg	2	39	12	1 191	44 740	651	1 286	19 726	102 756	100 200	182 368	3 324
334	Computer & electronic product mfg	1	29	7	814	34 534	351	671	10 695	119 277	71 973	199 108	7 708
3345	Navigational, measuring, medical, & control instruments mfg	—	9	4	f	D	D	D	D	D	D	D	5 877
33451	Navigational, measuring, medical, & control instruments mfg	—	9	4	f	D	D	D	D	D	D	D	5 877
334510	Electromedical & electrotherapeutic apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	11	4	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	78	9	1 148	37 132	782	1 475	14 597	93 020	42 419	134 637	5 252
3391	Medical equipment & supplies mfg	1	38	4	718	25 169	470	929	7 638	70 000	20 897	89 590	3 674
33911	Medical equipment & supplies mfg	1	38	4	718	25 169	470	929	7 638	70 000	20 897	89 590	3 674
	COFFEE COUNTY, GA												
31-33	Manufacturing	—	45	22	5 377	116 057	4 667	7 952	86 613	294 801	482 476	773 782	22 367
311	Food mfg	—	6	2	g	D	D	D	D	D	D	D	1 670
3116	Meat product mfg	—	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	9	5	g	D	D	D	D	D	D	D	2 296
3219	Other wood product mfg	—	8	5	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	6	5	g	D	D	D	D	D	D	D	2 234
321991	Manufactured home (mobile home) mfg	—	5	5	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	8	4	625	14 992	537	1 107	10 933	48 235	68 653	115 603	1 884
336	Transportation equipment mfg	—	6	4	924	21 353	764	1 459	13 494	64 705	38 280	100 854	D
3364	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
	COLQUITT COUNTY, GA												
31-33	Manufacturing	1	55	18	3 503	67 076	2 577	4 817	42 483	151 011	302 593	452 223	16 989
315	Apparel mfg	8	6	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	5	4	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	8	4	3	g	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	8	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	8	4	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	5	3	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBIA COUNTY, GA													
31-33	Manufacturing	-	77	24	5 323	154 317	3 690	6 879	84 256	683 266	684 018	1 356 074	40 121
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	14	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	14	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	14	2	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
COOK COUNTY, GA													
31-33	Manufacturing	-	35	15	1 582	34 115	1 313	2 453	23 615	100 264	130 439	227 358	12 237
321	Wood product mfg	-	9	5	911	19 240	787	1 518	13 683	67 617	83 732	148 428	8 901
3219	Other wood product mfg ...	-	7	3	f	D	D	D	D	D	D	D	D
COWETA COUNTY, GA													
31-33	Manufacturing	1	76	30	5 589	147 764	4 120	8 196	94 690	389 771	706 621	1 093 191	46 348
313	Textile mills	-	5	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	4	694	15 173	465	946	9 364	31 256	46 891	77 276	4 076
3261	Plastics product mfg	-	8	4	694	15 173	465	946	9 364	31 256	46 891	77 276	4 076
331	Primary metal mfg	-	5	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	6	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CRISP COUNTY, GA													
31-33	Manufacturing	-	27	14	2 067	53 141	1 714	3 433	35 132	185 601	155 668	340 458	10 153
321	Wood product mfg	-	3	3	523	13 481	457	889	9 059	38 500	52 378	91 608	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
DADE COUNTY, GA													
31-33	Manufacturing	1	22	9	907	19 862	819	1 450	16 146	47 169	51 881	98 544	4 571

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DECATUR COUNTY, GA													
31-33	Manufacturing	-	35	12	3 538	84 166	2 833	5 987	57 296	292 258	336 584	632 834	25 435
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
DEKALB COUNTY, GA													
31-33	Manufacturing	-	697	204	24 358	942 810	17 939	38 444	627 888	2 718 358	5 320 006	8 018 525	159 864
311	Food mfg	1	55	21	3 278	110 958	2 144	4 341	59 447	434 780	353 001	783 993	21 480
3118	Bakeries & tortilla mfg	3	35	9	1 666	53 856	938	1 840	29 048	125 954	104 339	231 065	9 763
31181	Bread & bakery product mfg	4	27	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	11	4	1 011	30 525	433	819	12 734	45 371	33 749	78 935	3 670
3119	Other food mfg	-	8	7	940	37 618	698	1 457	17 873	182 667	169 292	352 272	10 214
322	Paper mfg	-	21	16	1 677	59 177	1 346	2 936	41 736	148 152	239 644	386 405	7 438
3222	Converted paper product mfg	-	21	16	1 677	59 177	1 346	2 936	41 736	148 152	239 644	386 405	7 438
32221	Paperboard container mfg	-	11	11	1 264	46 332	1 028	2 272	33 329	108 871	188 955	296 047	5 405
322211	Corrugated & solid fiber box mfg	-	7	7	726	27 606	571	1 268	18 473	64 209	116 729	180 271	3 253
323	Printing & related support activities	1	172	27	3 290	109 551	2 242	4 448	65 422	224 205	179 189	401 465	15 931
3231	Printing & related support activities	1	172	27	3 290	109 551	2 242	4 448	65 422	224 205	179 189	401 465	15 931
32311	Printing	1	148	24	2 855	97 904	2 034	4 071	60 709	209 291	175 663	383 056	14 999
323110	Commercial lithographic printing ..	1	76	14	1 895	73 364	1 342	2 681	44 816	129 804	101 927	230 575	6 561
325	Chemical mfg	1	39	17	931	33 473	453	879	12 608	178 808	198 771	375 979	11 076
3255	Paint, coating, & adhesive mfg	-	17	9	510	18 916	243	511	7 383	96 918	133 175	226 685	D
326	Plastics & rubber products mfg	-	35	16	1 936	56 494	1 568	3 288	40 123	121 469	186 180	313 681	23 097
3261	Plastics product mfg	1	30	15	g	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	2	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	30	11	724	23 812	542	1 257	16 122	81 437	92 990	174 919	D
332	Fabricated metal product mfg	1	73	30	1 963	70 660	1 394	2 843	40 678	163 552	124 400	284 029	10 996
3323	Architectural & structural metals mfg	-	19	12	617	23 594	415	836	13 000	53 014	51 552	103 660	2 414
333	Machinery mfg	-	37	14	1 608	63 582	904	1 907	25 246	118 987	94 370	209 947	9 104
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	3	603	25 317	337	709	7 869	39 368	28 720	61 978	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	5	3	603	25 317	337	709	7 869	39 368	28 720	61 978	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	34	11	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DEKALB COUNTY, GA													
—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	10	5	1 404	41 738	1 138	2 322	28 581	147 766	168 840	305 281	15 410
3353	Electrical equipment mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	16	5	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	3	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	40	5	f	D	D	D	D	D	D	D	1 029
339	Miscellaneous mfg	1	71	12	1 189	36 834	779	1 848	15 151	65 717	52 594	118 277	D
3391	Medical equipment & supplies mfg	2	36	4	505	22 034	270	518	6 741	32 331	22 053	54 515	D
33911	Medical equipment & supplies mfg	2	36	4	505	22 034	270	518	6 741	32 331	22 053	54 515	D
3399	Other miscellaneous mfg ..	1	35	8	684	14 800	509	1 330	8 410	33 386	30 541	63 762	D
DODGE COUNTY, GA													
31-33	Manufacturing	-	16	4	867	17 538	773	1 336	13 835	49 539	102 876	154 987	1 383
DOOLY COUNTY, GA													
31-33	Manufacturing	-	12	8	1 521	30 402	1 320	2 799	24 363	104 070	83 924	186 779	5 421
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
DOUGHERTY COUNTY, GA													
31-33	Manufacturing	-	90	43	8 627	311 971	7 065	15 130	229 793	1 905 032	2 376 378	4 275 544	D
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
31191	Snack food mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
311911	Roasted nuts & peanut butter mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
312	Beverage & tobacco product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	2 498
322	Paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DOUGHERTY COUNTY, GA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
	DOUGLAS COUNTY, GA												
31-33	Manufacturing	1	95	21	g	54 528	1 747	3 412	36 013	165 508	205 311	371 234	11 674
332	Fabricated metal product mfg.....	-	21	6		17 478	496	974	10 683	43 402	62 330	105 666	D
3323	Architectural & structural metals mfg.....	-	9	5		15 903	445	898	9 656	40 950	59 725	100 619	D
33232	Ornamental & architectural metal products mfg.....	-	9	5		15 903	445	898	9 656	40 950	59 725	100 619	D
	EARLY COUNTY, GA												
31-33	Manufacturing	-	12	4	g	45 029	857	1 763	21 289	165 975	308 602	475 229	D
322	Paper mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
	EFFINGHAM COUNTY, GA												
31-33	Manufacturing	-	11	5	g	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	g	D	D	D	D	D	D	D	D
	ELBERT COUNTY, GA												
31-33	Manufacturing	1	112	32	g	64 602	2 383	4 669	47 726	206 588	236 833	441 719	20 860
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	4	87	24		31 251	1 037	2 052	23 200	56 139	46 713	103 068	3 224
3279	Other nonmetallic mineral product mfg.....	4	80	22		28 700	939	1 898	21 474	54 217	37 984	92 393	2 930
32799	All other nonmetallic mineral product mfg....	4	80	22		28 700	939	1 898	21 474	54 217	37 984	92 393	2 930
327991	Cut stone & stone product mfg.....	4	78	22	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
	EMANUEL COUNTY, GA												
31-33	Manufacturing	-	36	16	g	2 191	1 764	3 571	28 117	125 596	127 913	253 532	6 350
332	Fabricated metal product mfg.....	1	13	8		11 011	409	790	6 768	16 618	19 681	36 492	656
	EVANS COUNTY, GA												
31-33	Manufacturing	-	14	7	g	1 677	1 449	3 235	25 862	60 551	124 828	184 863	6 618
311	Food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
FANNIN COUNTY, GA													
31-33	Manufacturing	1	28	7	922	15 661	820	1 506	13 783	67 901	79 206	146 589	2 732
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
FAYETTE COUNTY, GA													
31-33	Manufacturing	-	85	24	5 595	170 180	3 959	7 693	95 396	617 321	742 513	1 345 095	40 815
334	Computer & electronic product mfg	-	5	5	3 409	104 932	2 286	4 278	51 725	357 202	435 542	775 934	24 678
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	2	2	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	2	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	2	2	g	D	D	D	D	D	D	D	D
FLOYD COUNTY, GA													
31-33	Manufacturing	-	120	56	9 583	280 002	8 115	16 836	205 245	765 520	1 131 595	1 892 430	93 160
311	Food mfg	-	7	6	1 141	26 485	922	2 092	18 486	81 032	158 779	240 148	2 571
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	8	6	2 745	70 385	2 607	5 580	62 270	101 793	199 849	304 774	9 674
3131	Fiber, yarn, & thread mills .	-	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	5	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	13	7	1 335	33 924	1 137	2 415	23 745	123 902	191 905	309 255	D
3141	Textile furnishings mills	-	12	7	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	10	6	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	10	6	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	4	728	27 910	580	927	15 121	97 108	77 971	176 355	D
332	Fabricated metal product mfg	-	16	6	739	24 856	617	1 241	17 282	68 658	149 316	217 091	37 942
FORSYTH COUNTY, GA													
31-33	Manufacturing	1	129	36	4 337	127 698	3 489	6 943	88 075	329 308	372 512	701 325	19 174
311	Food mfg	1	5	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	24	6	706	24 564	512	1 068	14 263	68 059	54 383	123 265	2 601
FRANKLIN COUNTY, GA													
31-33	Manufacturing	-	46	18	1 852	43 155	1 488	2 860	28 232	134 625	147 440	281 073	9 182
313	Textile mills	-	5	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
FULTON COUNTY, GA													
31-33	Manufacturing	1	897	314	37 948	1 283 646	26 734	53 770	777 631	6 945 051	7 333 392	14 240 886	301 815
311	Food mfg	2	64	38	6 938	182 018	5 479	10 343	127 969	1 709 853	1 230 004	2 942 707	73 485
3116	Meat product mfg	8	9	6	3 007	51 518	2 690	4 590	42 334	147 757	258 726	406 475	9 358
31161	Animal slaughtering & processing	8	9	6	3 007	51 518	2 690	4 590	42 334	147 757	258 726	406 475	9 358
311615	Poultry processing	8	3	3	2 764	44 787	2 490	4 080	37 245	128 331	189 808	317 699	D
3118	Bakeries & tortilla mfg	2	29	16	g	D	D	D	D	D	D	D	30 371
31181	Bread & bakery product mfg	1	22	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	13	8	f	D	D	D	D	D	D	D	3 254
31182	Cookie, cracker, & pasta mfg	2	5	4	1 025	37 661	757	1 450	24 973	110 652	100 009	214 847	26 906
311821	Cookie & cracker mfg	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	2	12	8	g	D	D	D	D	D	D	D	16 582
312	Beverage & tobacco product mfg	-	15	6	1 089	38 118	619	1 427	17 096	418 288	351 042	766 763	D
3121	Beverage mfg	-	15	6	1 089	38 118	619	1 427	17 096	418 288	351 042	766 763	D
31211	Soft drink & ice mfg	-	10	5	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	7	5	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	30	10	672	15 013	547	1 120	9 414	32 966	23 119	56 105	4 903
3149	Other textile product mills	2	16	8	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	30	9	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	18	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	29	22	2 311	69 894	1 626	3 585	44 456	260 497	336 151	585 166	17 110
3222	Converted paper product mfg	-	28	21	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	16	13	1 559	49 023	1 066	2 464	29 102	156 961	239 493	390 089	9 716
322211	Corrugated & solid fiber box mfg	-	10	9	803	27 999	568	1 306	16 862	82 248	111 922	194 519	8 295
322212	Folding paperboard box mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	208	53	5 250	202 048	3 552	7 356	114 933	457 497	344 620	804 096	40 352
3231	Printing & related support activities	4	208	53	5 250	202 048	3 552	7 356	114 933	457 497	344 620	804 096	40 352
32311	Printing	4	175	42	4 511	175 044	3 002	6 262	98 402	403 137	333 183	738 018	D
323110	Commercial lithographic printing	4	93	24	2 790	116 510	1 902	3 970	67 908	250 288	228 484	478 637	24 179
32312	Support activities for printing	1	33	11	739	27 004	550	1 094	16 531	54 360	11 437	66 078	D
325	Chemical mfg	1	67	30	3 014	102 577	1 281	2 289	32 156	421 393	332 709	751 417	14 499
3251	Basic chemical mfg	-	8	4	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	1 652
325199	All other basic organic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	1 652
3256	Soap, cleaning compound, & toilet preparation mfg	2	21	12	1 210	43 140	354	713	8 307	80 674	58 072	139 127	6 117
32561	Soap & cleaning compound mfg	1	17	10	1 147	41 928	309	641	7 607	75 848	54 611	130 826	5 803
325611	Soap & other detergent mfg	2	11	7	627	25 535	207	426	5 063	46 554	35 228	81 895	4 986
325612	Polish & other sanitation good mfg	1	6	3	520	16 393	102	215	2 544	29 294	19 383	48 931	817
326	Plastics & rubber products mfg	1	44	29	2 745	84 586	2 034	4 346	53 816	230 120	251 088	479 920	15 925
3261	Plastics product mfg	1	40	28	2 683	82 602	1 997	4 278	53 090	226 959	246 001	471 717	D
32611	Unsupported plastics film, sheet, & bag mfg	-	7	6	780	27 208	537	1 197	16 301	77 295	75 582	152 013	4 591
32616	Plastics bottle mfg	-	7	7	713	20 907	639	1 326	17 141	49 746	60 245	109 512	4 747
326160	Plastics bottle mfg	-	7	7	713	20 907	639	1 326	17 141	49 746	60 245	109 512	4 747
32619	Other plastics product mfg	2	15	12	924	25 906	631	1 284	13 710	78 336	86 487	165 155	5 606
326199	All other plastics product mfg	-	13	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	44	14	1 949	70 971	1 612	3 417	54 345	274 477	176 011	462 410	8 778
3273	Cement & concrete product mfg	-	23	9	620	21 638	515	1 191	15 763	93 848	66 445	163 260	4 155
3279	Other nonmetallic mineral product mfg	-	10	2	501	20 749	385	787	15 157	97 174	43 706	142 812	2 555
32799	All other nonmetallic mineral product mfg	-	10	2	501	20 749	385	787	15 157	97 174	43 706	142 812	2 555
332	Fabricated metal product mfg	1	76	21	1 858	55 920	1 408	2 762	35 768	120 276	133 075	254 858	11 275
3323	Architectural & structural metals mfg	2	30	10	752	22 353	559	1 193	15 092	42 458	53 891	96 249	5 111

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FULTON COUNTY, GA —Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	5	33	13	844	30 657	608	1 276	18 971	72 990	66 887	140 260	3 227
334	Computer & electronic product mfg	2	48	16	1 405	54 939	709	1 452	18 420	127 995	88 731	212 835	10 011
335	Electrical equipment, appliance, & component mfg	—	11	5	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	7	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	7	4	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	16	9	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	58	18	2 476	69 304	1 911	4 062	47 441	204 842	167 085	372 517	5 229
3372	Office furniture (including fixtures) mfg	—	26	10	1 902	56 439	1 479	3 202	39 616	157 746	108 788	266 402	4 252
33721	Office furniture (including fixtures) mfg	—	26	10	1 902	56 439	1 479	3 202	39 616	157 746	108 788	266 402	4 252
337215	Showcase, partition, shelving, & locker mfg	—	11	6	1 011	28 689	743	1 556	19 097	63 525	42 718	106 390	D
339	Miscellaneous mfg	3	86	13	1 270	38 594	861	1 737	17 972	94 541	59 472	154 745	D
3399	Other miscellaneous mfg ..	2	53	11	992	29 266	677	1 408	13 544	72 953	49 827	123 110	D
GILMER COUNTY, GA													
31-33	Manufacturing	—	34	10	3 404	52 343	3 127	4 205	39 571	99 331	202 509	302 999	7 651
311	Food mfg	—	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
GLYNN COUNTY, GA													
31-33	Manufacturing	—	71	22	3 784	124 896	2 651	5 384	76 021	382 679	613 291	993 612	34 386
311	Food mfg	—	9	3	1 166	25 354	874	1 483	11 950	28 324	169 245	197 679	D
3117	Seafood product preparation & packaging ..	—	4	3	g	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	—	4	3	g	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	—	4	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	7	5	505	10 426	205	383	4 692	42 108	42 692	86 736	1 866
GORDON COUNTY, GA													
31-33	Manufacturing	—	102	57	10 527	255 449	7 798	15 635	158 770	801 498	1 572 039	2 419 003	60 083
313	Textile mills	—	11	7	1 326	29 481	1 255	2 643	26 606	60 474	141 553	199 416	1 686
3131	Fiber, yarn, & thread mills ..	—	6	4	773	19 522	746	1 729	18 478	34 590	124 153	156 131	1 163
31311	Fiber, yarn, & thread mills	—	6	4	773	19 522	746	1 729	18 478	34 590	124 153	156 131	1 163
314	Textile product mills	—	34	25	6 389	155 289	4 361	8 941	83 771	502 133	631 121	1 190 286	41 113
3141	Textile furnishings mills	—	29	21	i	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	27	19	5 295	127 370	3 555	7 307	68 434	366 139	547 427	974 374	39 820
314110	Carpet & rug mills	—	27	19	5 295	127 370	3 555	7 307	68 434	366 139	547 427	974 374	39 820
31412	Curtain & linen mills	—	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	10	617	17 137	480	927	10 111	61 457	85 103	146 320	3 735

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GORDON COUNTY, GA													
—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	—	5	2	g	D	D	D	D	D	D	D	4 471
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
GRADY COUNTY, GA													
31-33	Manufacturing	3	19	6	1 402	29 578	1 231	2 206	23 271	78 703	68 371	153 732	7 753
332	Fabricated metal product mfg	—	4	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	1	1	f	D	D	D	D	D	D	D	D
GREENE COUNTY, GA													
31-33	Manufacturing	—	19	11	1 533	33 069	1 339	2 620	24 157	98 571	352 811	448 424	14 751
315	Apparel mfg	—	6	5	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	2	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	2	2	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	2	2	f	D	D	D	D	D	D	D	D
GWINNETT COUNTY, GA													
31-33	Manufacturing	1	737	237	29 121	1 071 268	19 123	38 875	535 538	3 402 722	2 857 800	6 241 653	329 090
311	Food mfg	—	18	6	520	13 606	389	883	8 293	47 697	84 494	133 740	8 597
314	Textile product mills	—	19	6	550	11 764	483	909	8 997	29 715	25 517	53 527	D
315	Apparel mfg	—	11	6	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	9	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	3	19	14	1 240	40 288	957	2 181	23 608	126 755	139 683	264 474	8 474
3222	Converted paper product mfg	3	19	14	1 240	40 288	957	2 181	23 608	126 755	139 683	264 474	8 474
32221	Paperboard container mfg	—	11	9	797	26 076	630	1 431	14 705	67 409	64 157	130 573	4 378
323	Printing & related support activities	1	144	27	1 993	62 407	1 270	2 499	34 068	173 123	75 578	248 716	14 116
3231	Printing & related support activities	1	144	27	1 993	62 407	1 270	2 499	34 068	173 123	75 578	248 716	14 116
32311	Printing	1	127	24	1 793	56 163	1 118	2 228	29 800	72 506	72 506	233 391	13 364
323110	Commercial lithographic printing ..	1	57	10	835	29 342	460	953	14 867	78 444	37 796	116 202	10 219
325	Chemical mfg	1	37	16	1 485	49 713	738	1 447	17 886	192 948	190 628	381 195	24 080
3259	Other chemical product mfg	—	11	8	817	26 437	366	724	9 021	102 391	107 549	204 724	6 934
32599	All other chemical product & preparation mfg	—	9	6	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin...	—	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	26	14	879	27 153	719	1 481	18 789	67 116	85 900	152 021	16 248
3261	Plastics product mfg	1	25	14	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	18	11	620	19 034	509	1 046	13 081	50 130	63 627	113 160	13 628
326199	All other plastics product mfg	2	16	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	30	12	784	25 776	611	1 193	18 345	96 692	168 201	264 271	12 242

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WINNETT COUNTY, GA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	81	26	1 681	53 498	1 160	2 372	28 845	151 315	129 301	280 412	8 124
3323	Architectural & structural metals mfg	-	28	13	964	29 441	623	1 342	14 832	104 902	96 140	199 921	3 797
33232	Ornamental & architectural metal products mfg	-	20	9	808	23 478	544	1 165	12 445	88 587	67 319	155 028	D
333	Machinery mfg	-	50	17	2 340	73 570	1 433	2 845	36 924	308 016	251 267	547 790	20 290
3339	Other general-purpose machinery mfg	-	14	6	1 497	44 930	868	1 652	20 637	244 430	192 706	425 077	D
33399	All other general-purpose machinery mfg	-	11	5	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	86	37	7 635	335 777	4 242	9 639	126 989	1 048 323	975 224	2 009 520	50 492
3341	Computer & peripheral equipment mfg	-	12	5	1 467	73 919	642	1 364	18 712	242 222	171 482	416 884	8 148
33411	Computer & peripheral equipment mfg	-	12	5	1 467	73 919	642	1 364	18 712	242 222	171 482	416 884	8 148
334119	Other computer peripheral equipment mfg	-	7	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	3	21	12	3 212	147 434	1 983	5 355	73 046	516 105	521 965	1 008 588	29 034
33421	Telephone apparatus mfg	1	7	3	532	30 807	48	81	1 110	40 907	32 611	74 503	7 082
334210	Telephone apparatus mfg	1	7	3	532	30 807	48	81	1 110	40 907	32 611	74 503	7 082
33422	Radio & TV broadcasting & wireless communications equipment mfg	3	14	9	2 680	116 627	1 935	5 274	71 936	475 198	489 354	934 085	21 952
334220	Radio & TV broadcasting & wireless communications equipment mfg	3	14	9	2 680	116 627	1 935	5 274	71 936	475 198	489 354	934 085	21 952
3344	Semiconductor & other electronic component mfg	-	21	7	1 380	49 352	738	1 167	9 686	154 204	164 611	333 666	4 875
33441	Semiconductor & other electronic component mfg	-	21	7	1 380	49 352	738	1 167	9 686	154 204	164 611	333 666	4 875
334418	Printed circuit assembly (electronic assembly) mfg	-	5	4	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	23	11	1 386	57 608	751	1 501	21 621	119 631	89 221	208 199	7 122
33451	Navigational, measuring, medical, & control instruments mfg	-	23	11	1 386	57 608	751	1 501	21 621	119 631	89 221	208 199	7 122
335	Electrical equipment, appliance, & component mfg	-	13	6	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	5	3	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	g	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	17	7	1 574	63 564	916	1 854	24 435	203 398	92 897	277 686	9 206
3363	Motor vehicle parts mfg	1	11	5	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	58	13	770	20 736	614	1 184	14 121	39 691	22 495	62 564	1 784
339	Miscellaneous mfg	1	88	18	2 940	92 124	2 134	3 889	47 279	173 904	150 823	370 795	23 385
3391	Medical equipment & supplies mfg	1	42	7	2 103	66 518	1 567	2 811	36 460	105 847	88 688	239 331	21 046
33911	Medical equipment & supplies mfg	1	42	7	2 103	66 518	1 567	2 811	36 460	105 847	88 688	239 331	21 046
339115	Ophthalmic goods mfg	-	3	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	46	11	837	25 606	567	1 078	10 819	68 057	62 135	131 464	2 339

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HABERSHAM COUNTY, GA													
31-33	Manufacturing	-	69	25	4 354	111 820	3 530	6 716	76 623	402 104	282 676	681 231	16 486
311	Food mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills.....	-	4	3	630	19 150	542	1 102	14 685	46 422	39 570	83 828	D
3132	Fabric mills.....	-	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	4	4	1 239	41 091	867	1 657	22 086	112 256	41 121	151 550	D
3391	Medical equipment & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
HALL COUNTY, GA													
31-33	Manufacturing	-	226	95	16 519	443 089	13 361	26 401	306 271	1 835 772	2 456 880	4 293 699	133 559
311	Food mfg.....	-	29	22	5 928	132 439	5 277	10 239	106 165	677 490	1 431 717	2 105 389	36 283
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	11	9	4 660	90 133	4 241	8 191	73 897	239 837	677 627	914 709	7 142
31161	Animal slaughtering & processing.....	-	11	9	4 660	90 133	4 241	8 191	73 897	239 837	677 627	914 709	7 142
311615	Poultry processing....	-	10	9	h	D	D	D	D	D	D	D	D
313	Textile mills.....	-	5	4	1 048	28 063	968	2 279	23 438	56 664	144 242	195 928	12 026
3131	Fiber, yarn, & thread mills .	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	6	4	3	511	8 767	440	971	6 639	12 419	11 118	23 124	500
3152	Cut & sew apparel mfg	6	4	3	511	8 767	440	971	6 639	12 419	11 118	23 124	500
321	Wood product mfg.....	-	10	2	f	D	D	D	D	D	D	D	1 339
3219	Other wood product mfg ...	-	6	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	5	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	4	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	19	7	801	25 395	551	746	13 876	68 589	58 814	128 118	2 098
3231	Printing & related support activities.....	-	19	7	801	25 395	551	746	13 876	68 589	58 814	128 118	2 098
32311	Printing	-	18	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	16	7	1 060	36 089	702	1 379	18 264	241 632	129 093	371 158	9 183
331	Primary metal mfg.....	-	4	4	649	19 645	499	1 111	12 927	46 276	65 079	111 452	2 362
3313	Alumina & aluminum production & processing..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	4	683	23 425	564	1 144	17 518	65 923	59 761	134 965	D
333	Machinery mfg.....	-	24	11	1 049	38 417	747	1 466	24 325	74 993	98 952	175 390	10 633
336	Transportation equipment mfg	2	12	7	1 331	38 654	1 022	2 081	23 844	113 447	125 949	241 594	23 491
3363	Motor vehicle parts mfg ...	3	7	5	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARALSON COUNTY, GA													
31-33	Manufacturing	2	35	18	2 552	59 412	2 083	3 826	42 617	147 107	194 430	340 027	6 532
315	Apparel mfg	4	5	5	674	10 202	543	794	6 623	23 415	32 159	55 065	D
3152	Cut & sew apparel mfg	4	5	5	674	10 202	543	794	6 623	23 415	32 159	55 065	D
31522	Men's & boys' cut & sew apparel mfg.....	4	4	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	5	4	578	16 253	486	1 080	11 392	33 559	68 129	101 347	875
332	Fabricated metal product mfg	—	8	2	f	D	D	D	D	D	D	D	D
HARRIS COUNTY, GA													
31-33	Manufacturing	1	19	5	g	D	D	D	D	D	D	D	D
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
HART COUNTY, GA													
31-33	Manufacturing	—	36	15	2 540	61 092	2 144	4 266	47 392	271 755	190 224	465 552	24 178
313	Textile mills	—	4	4	568	13 281	517	1 124	11 674	66 038	76 989	154 103	D
336	Transportation equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
HEARD COUNTY, GA													
31-33	Manufacturing	1	9	3	550	12 776	459	824	9 026	32 507	45 634	77 621	D
HENRY COUNTY, GA													
31-33	Manufacturing	—	68	25	3 392	106 088	2 471	4 955	64 425	401 284	477 335	854 821	28 253
333	Machinery mfg	—	5	2	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	—	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
HOUSTON COUNTY, GA													
31-33	Manufacturing	—	66	17	h	D	D	D	D	D	D	D	D
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	8	3	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	2	f	D	D	D	D	D	D	D	D
IRWIN COUNTY, GA													
31-33	Manufacturing	2	7	4	746	13 749	664	1 488	10 523	23 387	18 778	38 540	1 234

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON COUNTY, GA													
31-33	Manufacturing	3	65	28	5 896	135 830	4 768	9 482	96 869	415 202	816 594	1 204 485	48 649
311	Food mfg	-	5	4	2 169	39 140	1 991	3 985	32 932	133 606	154 688	280 830	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	4 130
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	4 130
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	4 130
313	Textile mills	2	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	3	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	3	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	3	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	8	2	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
JASPER COUNTY, GA													
31-33	Manufacturing	-	19	10	737	21 442	640	1 355	17 706	50 411	124 252	176 661	6 390
321	Wood product mfg	-	7	5	f	D	D	D	D	D	D	D	D
JEFF DAVIS COUNTY, GA													
31-33	Manufacturing	2	23	8	2 493	48 950	1 989	4 185	40 856	154 568	149 465	304 402	10 878
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, GA													
31-33	Manufacturing	-	28	11	1 999	51 944	1 647	3 449	37 751	62 768	222 195	294 210	8 001
JENKINS COUNTY, GA													
31-33	Manufacturing	-	4	3	1 294	24 966	1 202	1 993	19 101	86 508	66 354	154 319	5 041
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
JOHNSON COUNTY, GA													
31-33	Manufacturing	4	8	7	762	8 845	642	1 111	6 913	20 194	14 534	34 857	593
315	Apparel mfg	7	3	3	524	5 178	447	740	4 471	11 444	4 019	15 428	D
3152	Cut & sew apparel mfg	7	3	3	524	5 178	447	740	4 471	11 444	4 019	15 428	D
LAMAR COUNTY, GA													
31-33	Manufacturing	-	13	6	1 605	35 082	1 351	2 841	25 381	72 154	118 288	190 912	9 980
314	Textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills .	-	2	2	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	2	f	D	D	D	D	D	D	D	D

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LAURENS COUNTY, GA													
31-33	Manufacturing	-	43	25	5 703	134 178	4 509	9 357	91 313	383 470	503 479	888 577	37 928
313	Textile mills	-	2	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	2	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	3	871	12 688	649	1 211	8 822	17 622	7 110	25 675	D
3152	Cut & sew apparel mfg	-	5	3	871	12 688	649	1 211	8 822	17 622	7 110	25 675	D
31522	Men's & boys' cut & sew apparel mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	3	525	11 915	389	819	7 055	28 441	41 234	67 785	D
337	Furniture & related product mfg	-	11	6	993	19 304	887	1 831	14 756	31 017	61 634	92 454	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	6	993	19 304	887	1 831	14 756	31 017	61 634	92 454	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
LIBERTY COUNTY, GA													
31-33	Manufacturing	-	14	9	1 020	33 933	782	1 834	24 143	110 722	212 455	318 966	D
LINCOLN COUNTY, GA													
31-33	Manufacturing	5	7	3	688	10 917	629	1 463	9 355	17 571	38 311	55 849	D
LOWNDES COUNTY, GA													
31-33	Manufacturing	-	98	37	5 492	146 679	4 234	8 751	97 974	460 915	1 017 359	1 468 866	36 422
311	Food mfg	-	8	5	733	16 497	517	1 067	10 300	71 195	399 230	460 100	3 413
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	5	f	D	D	D	D	D	D	D	4 050
322	Paper mfg	-	5	3	656	27 173	511	1 259	19 692	95 784	123 453	219 140	D
326	Plastics & rubber products mfg	-	5	4	595	11 814	445	857	8 243	27 792	27 695	55 270	3 112
3261	Plastics product mfg	-	5	4	595	11 814	445	857	8 243	27 792	27 695	55 270	3 112
336	Transportation equipment mfg	-	4	4	709	13 936	612	1 083	10 968	42 742	38 444	80 060	D
LUMPKIN COUNTY, GA													
31-33	Manufacturing	-	17	6	879	21 018	760	1 416	16 875	41 721	43 823	85 948	6 865
MCDUFFIE COUNTY, GA													
31-33	Manufacturing	-	26	13	1 677	41 664	1 414	2 798	32 734	83 596	214 782	297 837	4 247
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MACON COUNTY, GA													
31-33	Manufacturing	2	14	5	1 624	46 725	1 348	3 047	33 813	103 549	269 432	368 964	16 449
311	Food mfg.....	4	3	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
MADISON COUNTY, GA													
31-33	Manufacturing	-	31	6	826	18 927	704	1 468	14 884	32 099	38 339	69 022	2 501
MARION COUNTY, GA													
31-33	Manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
MERIWETHER COUNTY, GA													
31-33	Manufacturing	1	22	13	2 105	46 089	1 649	3 511	33 817	127 290	142 104	273 748	8 300
321	Wood product mfg.....	-	5	3	527	16 445	479	1 058	13 855	51 666	87 326	138 377	3 699
339	Miscellaneous mfg.....	2	2	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	D
MITCHELL COUNTY, GA													
31-33	Manufacturing	7	17	8	1 016	15 411	913	1 756	12 288	30 321	41 635	72 227	1 747
315	Apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D
MONROE COUNTY, GA													
31-33	Manufacturing	3	21	6	515	10 693	434	765	7 885	27 870	20 353	57 138	1 597
MORGAN COUNTY, GA													
31-33	Manufacturing	1	20	8	1 512	39 755	1 266	2 585	29 597	112 722	153 422	262 099	11 085
MURRAY COUNTY, GA													
31-33	Manufacturing	-	100	32	5 321	121 789	4 602	9 969	95 306	336 725	860 924	1 201 927	16 319
313	Textile mills.....	-	7	5	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	6	5	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	6	5	g	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	5	4	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	58	23	3 597	83 400	3 023	6 513	62 035	251 568	626 909	875 894	D
3141	Textile furnishings mills....	-	54	19	3 465	80 606	2 924	6 349	60 488	245 397	614 539	858 373	12 397
31411	Carpet & rug mills	-	54	19	3 465	80 606	2 924	6 349	60 488	245 397	614 539	858 373	12 397
314110	Carpet & rug mills	-	54	19	3 465	80 606	2 924	6 349	60 488	245 397	614 539	858 373	12 397

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUSCOGEE COUNTY, GA													
31-33	Manufacturing	1	158	75	j	D	D	D	D	D	D	D	D
311	Food mfg	-	15	7	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	5	3	2 137	64 801	1 183	2 576	35 850	296 278	120 719	416 729	10 002
31181	Bread & bakery product mfg	-	3	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	1	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	4	9	7	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
31311	Fiber, yarn, & thread mills	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
313111	Yarn spinning mills	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
3132	Fabric mills	6	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	6	3	3	g	D	D	D	D	D	D	D	16 387
313210	Broadwoven fabric mills	6	3	3	g	D	D	D	D	D	D	D	16 387
331	Primary metal mfg	-	6	5	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	4	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	11	g	D	D	D	D	D	D	D	D
333	Machinery mfg	2	9	7	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	5	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
NEWTON COUNTY, GA													
31-33	Manufacturing	1	62	23	3 976	146 365	2 527	5 646	70 634	756 972	582 835	1 348 760	42 133
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	6	6	2	657	27 162	370	821	14 657	104 288	142 326	246 897	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	9	2	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	9	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
OCONEE COUNTY, GA													
31-33	Manufacturing	-	30	12	746	20 761	579	1 108	13 626	78 351	132 669	208 795	3 662

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PAULDING COUNTY, GA													
31-33	Manufacturing	-	38	11	1 161	26 034	914	1 804	20 727	75 193	62 477	137 260	3 145
PEACH COUNTY, GA													
31-33	Manufacturing	-	32	13	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	2	2	g	D	D	D	D	D	D	D	D
PICKENS COUNTY, GA													
31-33	Manufacturing	-	35	12	1 155	26 736	913	1 745	18 700	74 152	62 922	135 777	7 454
PIERCE COUNTY, GA													
31-33	Manufacturing	1	17	7	521	9 077	468	884	7 126	22 082	56 166	77 208	D
POLK COUNTY, GA													
31-33	Manufacturing	-	35	15	2 273	62 105	1 844	4 079	45 962	218 223	206 687	423 057	10 235
311	Food mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
PULASKI COUNTY, GA													
31-33	Manufacturing	-	11	2	f	D	D	D	D	D	D	D	D
PUTNAM COUNTY, GA													
31-33	Manufacturing	-	24	14	2 030	56 805	1 733	3 406	45 041	144 801	280 582	424 750	4 152
321	Wood product mfg	-	6	5	1 509	46 016	1 287	2 535	36 605	108 463	217 537	324 819	2 219
3219	Other wood product mfg... ..	-	4	3	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
RABUN COUNTY, GA													
31-33	Manufacturing	-	27	8	1 870	44 117	1 711	3 423	37 666	135 266	178 410	316 037	14 859
313	Textile mills	-	2	2	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	2	2	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RICHMOND COUNTY, GA													
31-33	Manufacturing	-	134	61	12 084	423 367	8 547	16 841	258 729	2 266 585	1 810 816	4 092 608	117 517
311	Food mfg	-	7	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	4	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	5	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	4	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	4	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	7	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	22	14	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	13	9	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	5	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	3	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	2	2	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	2	2	g	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
ROCKDALE COUNTY, GA													
31-33	Manufacturing	-	116	44	6 730	199 954	4 659	9 807	121 323	743 385	883 045	1 625 109	39 657
322	Paper mfg	-	8	6	f	D	D	D	D	D	D	D	1 638
326	Plastics & rubber products mfg	-	11	10	1 191	34 985	872	1 823	22 766	86 078	76 213	163 874	8 950
3261	Plastics product mfg	-	9	8	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	4	994	30 839	738	1 609	20 464	75 337	64 574	140 430	4 890
326199	All other plastics product mfg	-	5	4	994	30 839	738	1 609	20 464	75 337	64 574	140 430	4 890

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKDALE COUNTY, GA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	9	3	1 152	38 639	821	1 787	23 173	120 124	83 581	203 190	6 963
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	8	2	2	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	9	1	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
	SCHLEY COUNTY, GA												
31-33	Manufacturing	-	9	7	589	14 623	498	997	10 588	49 382	66 469	115 445	2 425
	SCREVEN COUNTY, GA												
31-33	Manufacturing	-	13	4	1 289	33 889	1 125	2 171	26 846	76 284	51 855	127 753	2 780
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	1	f	D	D	D	D	D	D	D	662
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
	SPALDING COUNTY, GA												
31-33	Manufacturing	-	70	31	6 328	150 656	5 250	10 937	113 082	512 349	636 347	1 118 762	37 066
313	Textile mills	-	6	6	g	D	D	D	D	D	D	D	D
3132	Fabric mills	1	4	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	4	3	f	D	D	D	D	D	D	D	431
3141	Textile furnishings mills....	-	4	3	f	D	D	D	D	D	D	D	431
31412	Curtain & linen mills.....	-	4	3	f	D	D	D	D	D	D	D	431
314129	Other household textile product mills	-	3	3	f	D	D	D	D	D	D	D	431
326	Plastics & rubber products mfg	-	9	7	1 340	36 178	1 115	2 370	27 878	218 616	145 863	359 651	16 739
3262	Rubber product mfg	-	6	5	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	3 486
326291	Rubber product mfg for mechanical use	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SPALDING COUNTY, GA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D	
3362	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D	
33621	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D	
336211	Motor vehicle body mfg	-	3	3	f	D	D	D	D	D	D	D	D	
	STEPHENS COUNTY, GA													
31-33	Manufacturing	1	64	28		3 970	88 424	3 190	6 287	63 066	262 717	377 269	634 826	13 297
313	Textile mills	-	4	4	g	D	D	D	D	D	D	D	D	1 773
3133	Textile & fabric finishing & fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	4		672	16 720	561	1 171	12 548	36 865	22 253	58 596	2 480
	SUMTER COUNTY, GA													
31-33	Manufacturing	-	38	16		3 163	71 341	2 582	5 086	52 418	185 042	288 395	475 405	8 792
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	1	f	D	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	10	4		501	8 278	423	706	5 931	14 342	35 467	49 677	1 902
3371	Household & institutional furniture & kitchen cabinet mfg	3	10	4		501	8 278	423	706	5 931	14 342	35 467	49 677	1 902
	TATTNALL COUNTY, GA													
31-33	Manufacturing	-	12	3		762	8 438	622	1 121	7 527	39 043	23 643	62 917	332
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D	D
	TELFAIR COUNTY, GA													
31-33	Manufacturing	-	14	6		1 946	37 041	1 770	3 580	31 632	158 830	419 476	566 347	9 536
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
	TERRELL COUNTY, GA													
31-33	Manufacturing	-	13	6		786	15 057	693	1 395	12 010	37 395	98 238	141 636	1 739

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
THOMAS COUNTY, GA													
31-33	Manufacturing	-	72	30	4 926	108 635	3 748	7 542	68 881	421 270	517 006	933 735	22 777
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	5	874	16 765	749	1 561	13 516	51 602	81 088	131 179	2 517
332	Fabricated metal product mfg	-	16	4	520	13 685	412	758	9 404	32 536	41 090	73 604	1 042
TIFT COUNTY, GA													
31-33	Manufacturing	-	51	24	4 449	103 675	3 878	8 163	81 464	203 990	409 364	613 276	13 688
313	Textile mills	-	6	6	g	D	D	D	D	D	D	D	2 187
3131	Fiber, yarn, & thread mills .	-	4	4	1 213	28 002	1 149	2 514	25 522	42 153	92 902	135 429	D
31311	Fiber, yarn, & thread mills	-	4	4	1 213	28 002	1 149	2 514	25 522	42 153	92 902	135 429	D
313111	Yarn spinning mills ...	-	4	4	1 213	28 002	1 149	2 514	25 522	42 153	92 902	135 429	D
333	Machinery mfg	-	7	4	533	15 252	440	898	10 696	41 794	48 499	90 048	3 161
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
TOOMBS COUNTY, GA													
31-33	Manufacturing	2	38	17	2 516	41 621	2 093	3 281	30 369	79 874	89 074	169 335	5 589
315	Apparel mfg	3	5	5	1 253	17 885	1 022	1 187	13 520	16 888	3 724	20 721	D
3152	Cut & sew apparel mfg	3	5	5	1 253	17 885	1 022	1 187	13 520	16 888	3 724	20 721	D
31521	Cut & sew apparel contractors	-	4	4	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	4	4	f	D	D	D	D	D	D	D	D
TROUP COUNTY, GA													
31-33	Manufacturing	-	101	57	9 369	284 210	7 131	15 651	177 184	712 122	1 093 235	1 807 657	76 425
313	Textile mills	1	14	12	2 111	58 420	1 772	4 036	44 200	125 548	239 042	364 125	19 522
3132	Fabric mills	1	8	7	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	3	5	4	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	3	5	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	8	7	2 531	84 919	1 860	4 126	48 331	188 456	392 173	587 086	14 428
3141	Textile furnishings mills....	-	4	3	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	3	3	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	3	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	4	4	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	3	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	3	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	8	1 104	30 371	919	1 682	19 393	122 745	139 428	259 204	12 512
3261	Plastics product mfg	-	6	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	8	926	31 609	460	925	15 946	62 008	73 045	136 704	1 381
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TURNER COUNTY, GA													
31-33	Manufacturing	-	10	6	686	11 799	611	1 798	8 936	31 159	35 202	66 053	1 798
UPSON COUNTY, GA													
31-33	Manufacturing	-	26	14	4 241	82 931	3 476	6 888	63 239	251 200	317 373	555 087	14 511
313	Textile mills	-	5	4	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	3	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	2	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	2	2	f	D	D	D	D	D	D	D	D
WALKER COUNTY, GA													
31-33	Manufacturing	2	77	25	6 555	159 872	5 820	11 481	122 852	575 852	650 545	1 207 686	68 996
313	Textile mills	5	17	13	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills	9	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	3	3	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	8	5	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	8	5	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
WALTON COUNTY, GA													
31-33	Manufacturing	1	55	23	2 611	70 409	2 122	4 226	50 588	190 046	252 173	441 482	15 880
WARE COUNTY, GA													
31-33	Manufacturing	-	42	14	2 121	55 841	1 779	3 580	37 008	126 481	162 448	287 445	3 198
321	Wood product mfg	-	6	4	1 152	32 178	987	1 965	20 805	74 076	114 116	188 484	1 155
3219	Other wood product mfg	-	5	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	3	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg	-	2	2	f	D	D	D	D	D	D	D	D
WARREN COUNTY, GA													
31-33	Manufacturing	1	6	5	798	19 961	706	1 510	13 808	62 257	68 619	130 978	2 504
WASHINGTON COUNTY, GA													
31-33	Manufacturing	-	18	6	917	22 316	802	1 506	15 691	93 446	40 398	131 696	3 315

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAYNE COUNTY, GA													
31-33	Manufacturing	-	23	8	1 816	55 968	1 441	2 740	41 649	238 903	217 611	460 613	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
WHITE COUNTY, GA													
31-33	Manufacturing	-	28	5	952	27 039	808	1 616	15 713	88 247	83 209	172 804	5 952
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
WHITFIELD COUNTY, GA													
31-33	Manufacturing	-	379	164	27 373	687 477	21 626	47 117	505 759	2 444 713	3 823 416	6 166 529	86 913
311	Food mfg	1	8	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	36	16	2 092	51 039	1 925	4 121	43 205	87 909	166 778	257 003	4 614
3131	Fiber, yarn, & thread mills .	-	16	7	1 534	38 662	1 450	3 109	33 200	62 467	139 385	204 492	2 417
31311	Fiber, yarn, & thread mills	-	16	7	1 534	38 662	1 450	3 109	33 200	62 467	139 385	204 492	2 417
313111	Yarn spinning mills ...	-	12	4	949	24 544	916	1 906	21 430	35 305	65 075	102 980	1 671
313112	Yarn texturing, throwing, & twisting mills	-	4	3	585	14 118	534	1 203	11 770	27 162	74 310	101 512	746
314	Textile product mills	-	157	75	19 493	494 506	15 186	34 503	368 062	1 946 627	3 010 786	4 855 234	57 773
3141	Textile furnishings mills	-	133	59	18 009	470 761	13 865	32 033	351 298	1 903 843	2 923 978	4 716 846	D
31411	Carpet & rug mills	-	126	54	17 728	466 219	13 615	31 677	348 184	1 850 663	2 860 242	4 598 770	54 846
314110	Carpet & rug mills	-	126	54	17 728	466 219	13 615	31 677	348 184	1 850 663	2 860 242	4 598 770	54 846
3149	Other textile product mills ..	1	24	16	1 484	23 745	1 321	2 470	16 764	42 784	86 808	138 388	D
31499	All other textile product mills	1	23	16	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	1	23	16	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	38	18	1 331	25 282	1 047	1 818	16 711	51 628	23 677	75 167	1 685
3231	Printing & related support activities	2	38	18	1 331	25 282	1 047	1 818	16 711	51 628	23 677	75 167	1 685
32311	Printing	3	18	6	623	13 796	468	760	8 547	31 141	14 595	45 630	1 247
32312	Support activities for printing	1	20	12	708	11 486	579	1 058	8 164	20 487	9 082	29 537	438
323121	Tradebinding & related work	1	19	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	28	16	1 270	38 382	894	1 819	23 822	188 933	222 742	409 977	11 554
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	6	5	f	D	D	D	D	D	D	D	8 781
32522	Artificial & synthetic fibers & filaments mfg ..	-	5	4	736	21 755	561	1 263	16 307	91 098	103 364	194 949	D
325222	Noncellulosic organic fiber mfg	-	5	4	736	21 755	561	1 263	16 307	91 098	103 364	194 949	D
326	Plastics & rubber products mfg	-	14	9	666	18 692	544	1 101	13 376	46 218	135 846	181 730	3 147
333	Machinery mfg	-	32	12	636	18 476	482	885	12 337	25 615	32 519	58 370	1 055
3332	Industrial machinery mfg ..	-	25	11	582	16 967	449	831	11 500	23 253	30 832	54 250	980
33329	Other industrial machinery mfg	-	25	11	582	16 967	449	831	11 500	23 253	30 832	54 250	980
WILKES COUNTY, GA													
31-33	Manufacturing	-	23	12	1 584	36 788	1 359	2 963	28 715	131 005	184 148	315 367	10 087

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WILKINSON COUNTY, GA												
	Manufacturing	-	14	4	1 307	49 707	763	1 648	24 042	279 543	111 644	391 232	D
327	Nonmetallic mineral product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg..	-	2	2	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ACWORTH, GA												
	Manufacturing	1	17	8	622	18 282	460	990	12 470	31 496	42 791	74 220	1 447
	ADEL, GA												
31-33	Manufacturing	-	28	14	g	D	D	D	D	D	D	D	12 119
321	Wood product mfg	-	6	5	895	19 016	774	1 500	13 516	67 040	83 099	147 218	D
	ALBANY, GA												
31-33	Manufacturing	-	76	33	i	D	D	D	D	D	D	D	D
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
31191	Snack food mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
311911	Roasted nuts & peanut butter mfg	-	3	3	704	28 066	563	1 157	18 210	119 176	160 033	285 738	D
312	Beverage & tobacco product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	2 498
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY, GA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
31-33	ALMA, GA												
	Manufacturing	—	12	7	g	D	D	D	D	D	D	D	D
31-33	ALPHARETTA, GA												
	Manufacturing	1	44	19	2 279	88 899	1 196	2 224	36 481	330 203	260 178	589 224	21 874
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	AMERICUS, GA												
	Manufacturing	1	27	12	1 921	43 627	1 629	3 057	33 538	109 601	171 641	282 866	3 951
336	Transportation equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	ATHENS-CLARKE COUNTY, GA (CC) *												
	Manufacturing	—	90	34	9 388	234 924	7 520	15 658	168 504	577 408	793 936	1 368 469	94 765
311	Food mfg	—	6	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	h	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	6	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	6	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	13	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	6	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	1	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ATHENS-CLARKE COUNTY, GA *													
31-33	Manufacturing	-	90	34	9 388	234 924	7 520	15 658	168 504	577 408	793 936	1 368 469	94 765
311	Food mfg.....	-	6	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	2	h	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	6	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	13	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
ATLANTA, GA *													
31-33	Manufacturing	2	499	178	21 497	688 724	15 058	30 141	406 382	3 093 862	2 776 437	5 821 952	145 687
311	Food mfg.....	2	48	29	5 878	151 335	4 645	8 637	107 696	1 389 327	847 728	2 242 580	54 361
3116	Meat product mfg.....	9	5	4	2 665	45 485	2 384	3 975	37 616	107 743	244 052	351 940	8 437
31161	Animal slaughtering & processing.....	9	5	4	2 665	45 485	2 384	3 975	37 616	107 743	244 052	351 940	8 437
311615	Poultry processing....	9	2	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	3	25	14	1 932	64 009	1 407	2 798	43 293	172 219	162 832	340 627	32 334
31181	Bread & bakery product mfg.....	6	19	9	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	2	5	4	1 025	37 661	757	1 450	24 973	110 652	100 009	214 847	26 906
311821	Cookie & cracker mfg..	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	7	5	f	D	D	D	D	D	D	D	8 954
312	Beverage & tobacco product mfg.....	-	7	3	549	20 616	145	321	3 816	74 286	105 177	179 734	5 438
3121	Beverage mfg.....	-	7	3	549	20 616	145	321	3 816	74 286	105 177	179 734	5 438
315	Apparel mfg.....	4	19	7	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	4	14	6	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	11	9	1 390	41 944	993	2 283	26 906	165 405	229 925	386 526	8 676
3222	Converted paper product mfg.....	-	10	8	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	5	4	800	25 996	556	1 431	14 791	80 577	154 034	227 678	D
322212	Folding paperboard box mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	136	37	3 463	138 054	2 323	4 874	79 156	304 183	246 284	551 666	26 884
3231	Printing & related support activities.....	4	136	37	3 463	138 054	2 323	4 874	79 156	304 183	246 284	551 666	26 884
32311	Printing.....	4	116	29	2 971	118 628	1 970	4 185	67 820	265 256	237 696	503 870	23 568
323110	Commercial lithographic printing..	4	58	16	2 105	90 141	1 400	2 995	51 938	195 312	191 165	386 101	D

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ATLANTA, GA *—Con. Manufacturing—Con.												
325	Chemical mfg	1	36	18	1 915	63 359	921	1 555	20 987	314 863	204 645	517 567	8 027
3256	Soap, cleaning compound, & toilet preparation mfg . .	2	13	10	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	2	12	9	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	2	8	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	13	10	688	22 259	507	1 003	14 466	57 132	70 307	126 950	5 931
3261	Plastics product mfg	—	12	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	25	9	1 002	31 102	809	1 726	22 730	119 176	75 622	199 293	5 118
332	Fabricated metal product mfg	1	50	14	1 362	41 880	994	1 979	26 213	91 626	106 205	198 444	10 156
3323	Architectural & structural metals mfg	2	24	9	624	18 492	460	943	12 258	35 517	45 654	80 876	4 856
336	Transportation equipment mfg	—	10	6	568	19 757	346	642	8 053	54 432	38 001	103 211	D
337	Furniture & related product mfg	—	36	8	1 560	44 683	1 184	2 527	29 612	104 854	61 733	165 755	D
3372	Office furniture (including fixtures) mfg	—	15	6	1 382	40 585	1 035	2 229	26 757	95 543	55 275	149 919	3 735
33721	Office furniture (including fixtures) mfg	—	15	6	1 382	40 585	1 035	2 229	26 757	95 543	55 275	149 919	3 735
337215	Showcase, partition, shelving, & locker mfg	—	7	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	49	10	993	29 015	690	1 412	13 944	68 052	45 492	113 652	D
3399	Other miscellaneous mfg . .	2	31	9	805	22 300	569	1 187	10 860	55 326	38 138	93 394	D
31-33	AUGUSTA-RICHMOND COUNTY, GA (CC) *												
31-33	Manufacturing	—	134	61	12 084	423 367	8 547	16 841	258 729	2 266 585	1 810 816	4 092 608	117 517
311	Food mfg	—	7	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	4	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills . .	4	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	5	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills . . .	—	4	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	4	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	—	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	7	7	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	22	14	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	13	9	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	5	5	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	4	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 em- ploy- ees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	AUGUSTA-RICHMOND COUNTY, GA (CC) *— Con.												
31-33	Manufacturing— Con.												
327	Nonmetallic mineral product mfg	-	7	3	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	2	2	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	2	2	g	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
	AUGUSTA-RICHMOND COUNTY (BALANCE), GA *												
31-33	Manufacturing	-	132	60	j	D	D	D	D	D	D	D	D
311	Food mfg	-	7	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	4	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	4	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	4	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	5	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	4	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	4	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	7	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	22	14	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	13	9	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	5	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	3	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	2	2	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	2	2	g	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)		
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)						
31-33	AUGUSTA-RICHMOND COUNTY (BALANCE), GA *—Con.														
	Manufacturing—Con.														
336	Transportation equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D		
3369	Other transportation equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D		
33699	Other transportation equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D		
336999	All other transportation equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D		
339	Miscellaneous mfg	—	14	3	f	D	D	D	D	D	D	D	D		
3391	Medical equipment & supplies mfg	—	8	1	f	D	D	D	D	D	D	D	D		
33911	Medical equipment & supplies mfg	—	8	1	f	D	D	D	D	D	D	D	D		
339113	Surgical appliance & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D		
	AUSTELL, GA *														
31-33	Manufacturing	—	33	10	g	D	930	2 031	26 773	98 088	82 114	179 750	7 774		
322	Paper mfg	—	4	4	g	D	732	24 595	578	1 324	17 835	67 298	51 880	118 673	D
	BAINBRIDGE, GA														
31-33	Manufacturing	—	21	8	g	D	D	D	D	D	D	D	D	14 988	
313	Textile mills	—	1	1	g	D	D	D	D	D	D	D	D	D	
3132	Fabric mills	—	1	1	g	D	D	D	D	D	D	D	D	D	
31321	Broadwoven fabric mills	—	1	1	g	D	D	D	D	D	D	D	D	D	
313210	Broadwoven fabric mills	—	1	1	g	D	D	D	D	D	D	D	D	D	
	BARNESVILLE, GA														
31-33	Manufacturing	—	11	5	g	D	D	D	D	D	D	D	D	D	
314	Textile product mills	—	2	2	f	D	D	D	D	D	D	D	D	D	
	BAXLEY, GA														
31-33	Manufacturing	3	20	11	f	D	D	D	D	D	D	D	D	D	
	BREMEN, GA *														
31-33	Manufacturing	3	12	8	g	D	1 010	16 835	840	1 372	11 796	43 770	45 049	87 939	D
315	Apparel mfg	4	5	5	g	D	674	10 202	543	794	6 623	23 415	32 159	55 065	D
3152	Cut & sew apparel mfg	4	5	5	g	D	674	10 202	543	794	6 623	23 415	32 159	55 065	D
31522	Men's & boys' cut & sew apparel mfg	4	4	4	f	D	D	D	D	D	D	D	D	D	D
	BRUNSWICK, GA														
31-33	Manufacturing	—	55	21	g	D	3 642	121 413	2 543	5 147	73 495	370 515	594 147	962 012	D
311	Food mfg	—	7	3	g	D	D	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging ..	—	4	3	g	D	D	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging ..	—	4	3	g	D	D	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	—	4	3	g	D	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BUFORD, GA *													
31-33	Manufacturing	-	36	14	2 746	70 883	1 833	3 583	42 435	237 818	331 639	564 372	24 423
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
CAIRO, GA													
31-33	Manufacturing	3	10	4	1 299	27 220	1 158	2 086	22 077	71 711	58 163	136 646	7 197
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
CALHOUN, GA													
31-33	Manufacturing	-	70	40	8 807	209 595	6 979	13 998	140 463	658 034	1 396 224	2 099 488	46 411
313	Textile mills	-	11	7	1 326	29 481	1 255	2 643	26 606	60 474	141 553	199 416	1 686
3131	Fiber, yarn, & thread mills .	-	6	4	773	19 522	746	1 729	18 478	34 590	124 153	156 131	1 163
31311	Fiber, yarn, & thread mills	-	6	4	773	19 522	746	1 729	18 478	34 590	124 153	156 131	1 163
314	Textile product mills	-	26	19	5 303	130 187	4 004	8 237	77 566	428 036	554 184	1 039 249	34 129
3141	Textile furnishings mills	-	23	16	i	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	21	14	h	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	21	14	h	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CANTON, GA													
31-33	Manufacturing	2	39	12	1 312	33 504	935	1 714	21 306	104 713	132 325	239 406	6 185
332	Fabricated metal product mfg	3	11	3	515	14 592	379	915	11 397	26 502	38 682	66 486	2 226

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARROLLTON, GA													
31-33	Manufacturing	-	55	28	5 750	154 669	4 656	9 202	117 100	462 998	1 282 595	1 739 202	50 473
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	f	D	D	D	D	D	D	D	D
CARTERSVILLE, GA													
31-33	Manufacturing	-	79	42	7 012	200 595	5 765	12 504	157 151	1 157 973	1 111 134	2 276 138	99 324
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	6	6	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	12	7	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	9	5	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	8	5	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	8	5	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	3	2	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	2	g	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	7	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	7	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	7	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	7	1 162	31 728	1 024	1 992	25 513	138 866	114 850	255 742	D
32611	Unsupported plastics film, sheet, & bag mfg	-	3	3	721	22 777	628	1 254	18 524	112 611	83 760	198 348	D
326111	Unsupported plastics bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	3	611	15 339	455	884	11 952	42 233	54 301	95 513	3 254
CEDARTOWN, GA													
31-33	Manufacturing	-	22	12	1 497	42 697	1 199	2 746	32 226	172 505	155 747	327 879	7 328
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHAMBLEE, GA													
31-33	Manufacturing	-	59	19	1 602	55 559	1 205	2 546	32 682	190 956	132 884	322 481	14 426
311	Food mfg	-	7	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHATSWORTH, GA													
31-33	Manufacturing	—	39	15	2 905	59 590	2 562	5 339	49 832	128 715	474 928	613 143	7 588
313	Textile mills	—	4	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	—	4	4	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	4	4	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	—	3	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	23	10	1 990	40 742	1 719	3 601	33 244	94 559	360 415	464 053	6 111
3141	Textile furnishings mills	—	23	10	1 990	40 742	1 719	3 601	33 244	94 559	360 415	464 053	6 111
31411	Carpet & rug mills	—	23	10	1 990	40 742	1 719	3 601	33 244	94 559	360 415	464 053	6 111
314110	Carpet & rug mills	—	23	10	1 990	40 742	1 719	3 601	33 244	94 559	360 415	464 053	6 111
COCHRAN, GA													
31-33	Manufacturing	—	5	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	1	1	g	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	1	1	g	D	D	D	D	D	D	D	D
COLUMBUS, GA (CC) *													
31-33	Manufacturing	1	158	75	j	D	D	D	D	D	D	D	D
311	Food mfg	—	15	7	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	5	3	2 137	64 801	1 183	2 576	35 850	296 278	120 719	416 729	10 002
31181	Bread & bakery product mfg	—	3	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	4	9	7	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
31311	Fiber, yarn, & thread mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
313111	Yarn spinning mills	—	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
3132	Fabric mills	6	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	6	3	3	g	D	D	D	D	D	D	D	16 387
313210	Broadwoven fabric mills	6	3	3	g	D	D	D	D	D	D	D	16 387
331	Primary metal mfg	—	6	5	g	D	D	D	D	D	D	D	D
3315	Foundries	—	4	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	4	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	20	11	g	D	D	D	D	D	D	D	D
333	Machinery mfg	2	9	7	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	5	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	3	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLUMBUS CITY, GA *												
31-33	Manufacturing	1	158	75	j	D	D	D	D	D	D	D	D
311	Food mfg.....	-	15	7	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	5	3	2 137	64 801	1 183	2 576	35 850	296 278	120 719	416 729	10 002
31181	Bread & bakery product mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	1	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills.....	4	9	7	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
31311	Fiber, yarn, & thread mills	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
313111	Yarn spinning mills ...	-	4	3	1 520	36 743	1 271	2 797	28 392	56 789	130 556	190 375	D
3132	Fabric mills	6	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	6	3	3	g	D	D	D	D	D	D	D	16 387
313210	Broadwoven fabric mills	6	3	3	g	D	D	D	D	D	D	D	16 387
331	Primary metal mfg	-	6	5	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	4	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	20	11	g	D	D	D	D	D	D	D	D
333	Machinery mfg	2	9	7	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	3	3	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	5	5	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
	COMMERCE, GA												
31-33	Manufacturing	-	12	4	869	18 895	714	1 404	15 078	96 036	92 934	186 814	2 006
	CONYERS, GA												
31-33	Manufacturing	1	80	37	5 667	170 110	3 828	8 024	100 858	563 209	671 202	1 234 935	35 311
326	Plastics & rubber products mfg.....	-	9	9	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	7	1 023	30 431	741	1 507	19 485	76 286	65 333	143 354	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	3	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONYERS, GA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	8	2	2	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	9	1	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	9	1	1	f	D	D	D	D	D	D	D	D
CORDELE, GA													
31-33	Manufacturing	—	20	10	1 543	37 340	1 302	2 492	25 398	139 531	98 493	237 726	5 436
CORNELIA, GA													
31-33	Manufacturing	—	27	11	2 772	72 645	2 308	4 374	51 871	148 515	186 818	335 145	9 768
311	Food mfg	—	4	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	2	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	1	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	1	1	f	D	D	D	D	D	D	D	D
COVINGTON, GA													
31-33	Manufacturing	2	43	19	2 599	108 508	1 509	3 300	47 728	575 037	424 402	1 007 776	D
325	Chemical mfg	6	5	2	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	9	2	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	9	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	4	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
CUMMING, GA													
31-33	Manufacturing	—	39	11	1 882	44 637	1 663	3 413	35 186	87 655	188 869	274 528	9 036
311	Food mfg	—	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
DAHLONEGA, GA													
31-33	Manufacturing	—	8	5	748	17 984	670	1 251	14 970	33 764	38 514	72 680	D
DALLAS, GA													
31-33	Manufacturing	—	21	7	669	15 035	573	1 088	12 352	39 462	39 299	78 753	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALTON, GA												
31-33	Manufacturing	-	260	131	21 534	540 217	16 487	35 564	387 741	1 986 334	3 031 617	4 970 370	73 710
311	Food mfg	1	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	25	14	1 790	44 952	1 658	3 548	38 282	73 806	141 738	217 064	3 533
3131	Fiber, yarn, & thread mills ..	-	12	6	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills ..	-	12	6	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	8	3	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	4	3	585	14 118	534	1 203	11 770	27 162	74 310	101 512	746
314	Textile product mills	-	113	57	14 841	374 310	10 988	24 693	267 967	1 548 532	2 338 836	3 840 055	47 408
3141	Textile furnishings mills	-	98	48	j	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	95	46	14 146	361 545	10 380	23 708	259 695	1 475 990	2 241 888	3 669 281	45 526
314110	Carpet & rug mills	-	95	46	14 146	361 545	10 380	23 708	259 695	1 475 990	2 241 888	3 669 281	45 526
3149	Other textile product mills ..	2	15	9	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	2	15	9	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	2	15	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	28	13	1 016	18 822	813	1 427	12 839	38 827	18 024	56 794	1 433
3231	Printing & related support activities	2	28	13	1 016	18 822	813	1 427	12 839	38 827	18 024	56 794	1 433
32311	Printing	3	12	4	509	10 769	382	631	6 863	24 205	12 480	36 595	1 152
32312	Support activities for printing	-	16	9	507	8 053	431	796	5 976	14 622	5 544	20 199	281
323121	Tradebinding & related work	-	15	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	21	14	1 184	35 537	841	1 723	22 557	180 468	209 076	387 997	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	6	5	f	D	D	D	D	D	D	D	8 781
32522	Artificial & synthetic fibers & filaments mfg ..	-	5	4	736	21 755	561	1 263	16 307	91 098	103 364	194 949	D
325222	Noncellulosic organic fiber mfg	-	5	4	736	21 755	561	1 263	16 307	91 098	103 364	194 949	D
326	Plastics & rubber products mfg	-	13	9	f	D	D	D	D	D	D	D	D
	DORAVILLE, GA												
31-33	Manufacturing	-	52	10	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
	DOUGLAS, GA												
31-33	Manufacturing	-	38	20	h	D	D	D	D	D	D	D	D
311	Food mfg	-	5	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	1 043	21 611	868	1 301	15 895	44 292	81 733	125 696	D
3219	Other wood product mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	5	4	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	924	21 353	764	1 459	13 494	64 705	38 280	100 854	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DOUGLASVILLE, GA													
31-33	Manufacturing	3	33	9	762	21 011	576	1 152	13 377	57 660	101 290	159 378	7 676
DUBLIN, GA													
31-33	Manufacturing	-	32	18	5 162	125 639	4 082	8 644	84 912	367 801	459 083	828 301	D
313	Textile mills	-	2	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	2	2	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	4	855	17 264	759	1 603	12 897	26 873	54 430	81 103	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	4	855	17 264	759	1 603	12 897	26 873	54 430	81 103	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
DULUTH, GA													
31-33	Manufacturing	3	38	10	900	27 739	689	1 378	14 342	105 905	100 954	207 121	4 823
EASTMAN, GA													
31-33	Manufacturing	-	13	4	858	17 388	766	1 323	13 729	49 196	102 525	154 294	D
EAST POINT, GA													
31-33	Manufacturing	1	41	14	1 199	40 552	925	1 811	26 944	122 681	158 806	286 652	7 143
EATONTON, GA													
31-33	Manufacturing	-	19	13	1 923	54 593	1 650	3 222	43 254	140 262	269 443	409 215	3 519
321	Wood product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
ELBERTON, GA													
31-33	Manufacturing	1	69	20	1 457	34 687	1 178	2 361	26 030	136 822	81 016	219 949	3 054
327	Nonmetallic mineral product mfg	5	61	16	947	22 787	740	1 523	17 007	40 855	35 926	77 043	D
3279	Other nonmetallic mineral product mfg	5	59	15	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	5	59	15	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	5	58	15	886	21 438	691	1 434	16 045	40 070	28 967	69 157	D
FAIRBURN, GA													
31-33	Manufacturing	1	20	6	999	34 159	726	1 417	21 784	127 294	63 783	194 488	5 200

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
FITZGERALD, GA *													
31-33	Manufacturing	1	29	18	3 121	81 626	2 771	5 106	66 650	224 611	357 117	584 161	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	5	5	1 036	23 917	897	1 671	18 078	48 565	114 056	165 325	2 441
3219	Other wood product mfg ...	7	3	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	7	2	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	7	2	2	f	D	D	D	D	D	D	D	D
FOREST PARK, GA													
31-33	Manufacturing	1	24	5	751	19 541	606	1 147	14 589	60 626	81 173	142 104	D
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
FORT OGLETHORPE, GA *													
31-33	Manufacturing	-	16	7	922	20 819	654	1 274	13 264	49 801	65 983	115 793	2 093
FORT VALLEY, GA													
31-33	Manufacturing	-	13	6	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	2	2	g	D	D	D	D	D	D	D	D
GAINESVILLE, GA													
31-33	Manufacturing	1	95	41	7 365	178 159	5 908	11 736	120 512	598 564	949 226	1 543 307	41 475
311	Food mfg	-	15	11	2 430	46 516	2 185	4 023	38 910	145 596	557 299	702 008	4 848
3116	Meat product mfg	-	4	4	2 077	38 020	1 910	3 439	32 785	78 552	281 028	359 631	3 890
31161	Animal slaughtering & processing	-	4	4	2 077	38 020	1 910	3 439	32 785	78 552	281 028	359 631	3 890
311615	Poultry processing	-	4	4	2 077	38 020	1 910	3 439	32 785	78 552	281 028	359 631	3 890
321	Wood product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	3	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	3	570	21 161	353	778	8 813	69 194	21 078	90 938	D
333	Machinery mfg	1	9	5	538	21 874	354	699	13 724	36 438	54 776	92 912	8 977
336	Transportation equipment mfg	4	3	3	711	19 808	542	1 097	11 717	61 710	61 422	124 152	D
3363	Motor vehicle parts mfg ...	4	3	3	711	19 808	542	1 097	11 717	61 710	61 422	124 152	D
GARDEN CITY, GA													
31-33	Manufacturing	-	17	9	5 734	306 052	3 917	4 798	200 915	608 261	1 719 297	2 361 743	48 817
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	h	D	D	D	D	D	D	D	D

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GLENNVILLE, GA													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	196
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
GREENSBORO, GA													
31-33	Manufacturing	1	13	7	765	13 873	693	1 109	11 244	68 133	86 183	148 865	5 428
GRIFFIN, GA													
31-33	Manufacturing	-	48	21	4 780	112 967	3 998	8 206	83 045	381 753	498 241	851 515	20 918
313	Textile mills	1	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	2	2	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	3	3	f	D	D	D	D	D	D	D	431
3141	Textile furnishings mills	-	3	3	f	D	D	D	D	D	D	D	431
31412	Curtain & linen mills	-	3	3	f	D	D	D	D	D	D	D	431
314129	Other household textile product mills	-	3	3	f	D	D	D	D	D	D	D	431
326	Plastics & rubber products mfg	-	8	6	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	6	5	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	3 486
326291	Rubber product mfg for mechanical use	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
GROVETOWN, GA													
31-33	Manufacturing	-	8	4	g	D	D	D	D	D	D	D	12 237
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
HAPEVILLE, GA													
31-33	Manufacturing	-	6	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
HARTWELL, GA													
31-33	Manufacturing	-	19	11	2 099	47 048	1 780	3 597	38 069	154 640	158 935	318 045	D
313	Textile mills	-	4	4	568	13 281	517	1 124	11 674	66 038	76 989	154 103	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAWKINSVILLE, GA													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
HAZLEHURST, GA													
31-33	Manufacturing	2	15	5	2 039	41 738	1 682	3 512	36 472	133 491	118 354	251 960	8 381
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
HOMERVILLE, GA													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	1	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332431	Metal can mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
JACKSON, GA													
31-33	Manufacturing	-	13	8	f	D	D	D	D	D	D	D	D
JEFFERSON, GA													
31-33	Manufacturing	1	10	8	1 269	27 954	1 038	1 936	20 038	86 430	103 518	185 347	15 391
313	Textile mills	7	2	2	f	D	D	D	D	D	D	D	D
JESUP, GA													
31-33	Manufacturing	-	13	6	f	D	D	D	D	D	D	D	2 797
KENNESAW, GA													
31-33	Manufacturing	1	42	14	1 009	31 514	662	1 358	15 432	71 043	85 807	156 968	6 438
LA FAYETTE, GA													
31-33	Manufacturing	-	21	9	1 351	31 439	1 234	2 369	26 310	58 856	209 336	266 129	D
313	Textile mills	-	7	4	f	D	D	D	D	D	D	D	D
LAGRANGE, GA *													
31-33	Manufacturing	-	70	46	8 540	257 576	6 597	14 545	160 299	651 225	980 266	1 634 018	74 027
313	Textile mills	1	12	10	g	D	D	D	D	D	D	D	D
3132	Fabric mills	1	7	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	3	4	3	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	3	4	3	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	7	7	h	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	3	3	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	3	3	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	3	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	4	4	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	3	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	3	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	8	1 104	30 371	919	1 682	19 393	122 745	139 428	259 204	12 512
3261	Plastics product mfg	-	6	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LAWRENCEVILLE, GA													
31-33	Manufacturing	-	95	36	3 149	90 787	2 420	5 038	58 857	305 851	301 010	609 476	23 823
LILBURN, GA													
31-33	Manufacturing	6	40	7	645	20 182	428	754	9 923	46 898	20 759	68 771	2 282
MCDONOUGH, GA													
31-33	Manufacturing	-	22	8	1 900	60 239	1 320	2 610	34 448	258 590	323 321	560 050	7 706
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
MACON, GA *													
31-33	Manufacturing	-	154	53	10 650	419 545	8 038	16 389	295 604	3 709 119	1 666 277	5 388 598	205 880
311	Food mfg	1	20	8	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	9	3	f	D	D	D	D	D	D	D	2 426
31182	Cookie, cracker, & pasta mfg	-	3	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	3	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	2	1	h	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	5	702	29 676	544	1 192	21 307	87 373	133 308	226 043	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	8	5	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	28	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCRAE, GA													
31-33	Manufacturing	-	6	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MADISON, GA													
31-33	Manufacturing	2	11	6	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MANCHESTER, GA *													
31-33	Manufacturing	2	7	4	g	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	2	2	2	f	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	
339999	All other miscellaneous mfg ..	2	2	2	f	D	D	D	D	D	D	D	
MARIETTA, GA													
31-33	Manufacturing	-	158	42	4 886	169 083	3 440	7 268	92 667	462 440	461 753	924 070	39 045
311	Food mfg.....	-	9	4	g	D	D	D	D	D	D	D	
322	Paper mfg.....	-	8	4	626	21 112	513	1 185	17 249	59 010	93 320	146 310	6 924
3222	Converted paper product mfg ..	-	8	4	626	21 112	513	1 185	17 249	59 010	93 320	146 310	6 924
323	Printing & related support activities.....	1	47	9	636	24 251	441	805	13 189	45 106	16 546	61 215	2 853
3231	Printing & related support activities.....	1	47	9	636	24 251	441	805	13 189	45 106	16 546	61 215	2 853
32311	Printing ..	1	43	8	f	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	-	18	1	507	20 292	309	630	5 272	58 467	17 233	73 961	D
MILLEDGEVILLE, GA													
31-33	Manufacturing	-	17	6	g	D	D	D	D	D	D	D	
313	Textile mills.....	-	4	3	f	D	D	D	D	D	D	D	
336	Transportation equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg ..	-	1	1	f	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg ..	-	1	1	f	D	D	D	D	D	D	D	
336411	Aircraft mfg ..	-	1	1	f	D	D	D	D	D	D	D	
MILLEN, GA													
31-33	Manufacturing	-	4	3	1 294	24 966	1 202	1 993	19 101	86 508	66 354	154 319	5 041
315	Apparel mfg ..	-	1	1	f	D	D	D	D	D	D	D	
3151	Apparel knitting mills ..	-	1	1	f	D	D	D	D	D	D	D	
31519	Other apparel knitting mills ..	-	1	1	f	D	D	D	D	D	D	D	
315192	Underwear & nightwear knitting mills ..	-	1	1	f	D	D	D	D	D	D	D	
MONROE, GA													
31-33	Manufacturing	1	25	9	1 219	27 675	1 031	2 010	22 214	76 425	54 135	131 079	4 412
MONTEZUMA, GA													
31-33	Manufacturing	8	7	3	1 114	20 702	976	2 346	15 989	37 009	66 227	101 443	D
311	Food mfg.....	9	1	1	g	D	D	D	D	D	D	D	
3114	Fruit & vegetable preserving & specialty food mfg ..	9	1	1	g	D	D	D	D	D	D	D	
31141	Frozen food mfg.....	9	1	1	g	D	D	D	D	D	D	D	
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	g	D	D	D	D	D	D	D	
MOULTRIE, GA													
31-33	Manufacturing	-	41	12	1 660	37 638	1 290	2 480	26 502	99 754	198 348	299 079	13 426
321	Wood product mfg ..	-	6	2	f	D	D	D	D	D	D	D	
3219	Other wood product mfg ..	-	3	1	f	D	D	D	D	D	D	D	
32199	All other wood product mfg ..	-	1	1	f	D	D	D	D	D	D	D	
321991	Manufactured home (mobile home) mfg ..	-	1	1	f	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NASHVILLE, GA													
31-33	Manufacturing	-	14	7	g	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	f	D	D	D	D	D	D	D	D
NEWNAN, GA													
31-33	Manufacturing	1	42	21	4 143	107 475	3 111	6 128	71 913	285 774	572 590	859 609	40 764
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
NORCROSS, GA													
31-33	Manufacturing	-	89	35	3 241	124 654	1 845	3 458	39 367	421 280	299 437	729 739	28 114
334	Computer & electronic product mfg	-	19	9	1 751	80 871	780	1 467	15 976	280 816	235 157	523 158	9 003
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	1 405
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	1 405
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	f	D	D	D	D	D	D	D	D
OCILLA, GA													
31-33	Manufacturing	2	7	4	746	13 749	664	1 488	10 523	23 387	18 778	38 540	1 234
PEACHTREE CITY, GA													
31-33	Manufacturing	-	37	21	5 277	161 822	3 701	7 204	89 605	597 925	720 494	1 304 103	39 497
334	Computer & electronic product mfg	-	5	5	3 409	104 932	2 286	4 278	51 725	357 202	435 542	775 934	24 678
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	-	2	2	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	2	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
PERRY, GA *													
31-33	Manufacturing	-	14	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORT WENTWORTH, GA												
	Manufacturing	-	6	4	980	44 209	747	1 982	32 610	221 213	618 422	831 635	D
	QUITMAN, GA												
31-33	Manufacturing	-	10	8	g	D	D	D	D	D	D	D	D
	RINCON, GA												
31-33	Manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
	ROCKMART, GA												
31-33	Manufacturing	-	6	2	719	17 969	597	1 241	12 667	42 910	47 342	88 649	D
	ROME, GA												
31-33	Manufacturing	-	88	40	5 342	154 109	4 301	8 845	102 113	425 547	647 483	1 070 569	54 570
311	Food mfg	-	7	6	1 141	26 485	922	2 092	18 486	81 032	158 779	240 148	2 571
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	5	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	9	5	f	D	D	D	D	D	D	D	1 490
3141	Textile furnishings mills ...	-	8	5	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	6	4	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	6	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	4	f	D	D	D	D	D	D	D	D
	ROSSVILLE, GA												
31-33	Manufacturing	3	14	7	f	D	D	D	D	D	D	D	D
313	Textile mills	5	6	5	f	D	D	D	D	D	D	D	D
	ROSWELL, GA												
31-33	Manufacturing	1	58	5	759	24 694	550	1 176	16 613	85 639	77 806	164 271	2 797
	ROYSTON, GA *												
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
	ST. MARYS, GA												
31-33	Manufacturing	-	12	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
	SANDERSVILLE, GA												
31-33	Manufacturing	-	11	5	726	15 866	633	1 083	10 099	71 148	17 802	88 875	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
SAVANNAH, GA													
31-33	Manufacturing	-	131	26	4 579	139 340	2 993	5 868	73 719	450 528	814 344	1 279 731	30 758
311	Food mfg	1	14	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	5	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	5	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	12	5	1 292	51 688	763	1 765	27 196	194 329	289 308	497 128	18 486
3251	Basic chemical mfg	-	5	3	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
SMYRNA, GA													
31-33	Manufacturing	3	50	9	1 032	36 606	728	1 450	20 326	75 948	62 647	136 842	4 244
SOCIAL CIRCLE, GA *													
31-33	Manufacturing	1	9	8	g	D	D	D	D	D	D	D	D
STATESBORO, GA													
31-33	Manufacturing	1	26	10	1 695	39 521	1 488	2 805	30 445	169 079	117 277	286 213	13 618
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
SUWANEE, GA													
31-33	Manufacturing	1	25	9	654	17 539	520	1 082	11 739	36 351	34 648	70 500	2 678
SWAINSBORO, GA													
31-33	Manufacturing	-	23	10	1 414	25 245	1 171	2 246	18 521	71 069	85 472	156 393	1 429
SYLVANIA, GA													
31-33	Manufacturing	-	7	3	f	D	D	D	D	D	D	D	2 512
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
TALLAPOOSA, GA													
31-33	Manufacturing	1	13	8	1 385	38 152	1 125	2 228	28 314	94 364	142 095	235 829	5 529
332	Fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
THOMASTON, GA													
31-33	Manufacturing	-	17	11	3 639	69 002	2 948	5 766	52 719	207 402	286 392	481 020	13 234
313	Textile mills	-	4	4	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
THOMASVILLE, GA													
31-33	Manufacturing	-	53	25	4 164	91 801	3 131	6 195	57 335	374 101	461 180	831 596	21 446
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	11	4	511	13 444	404	746	9 243	32 002	40 605	72 583	1 009
THOMSON, GA													
31-33	Manufacturing	-	14	6	1 154	31 055	994	2 197	25 158	61 020	195 761	256 918	3 912
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
TIFTON, GA													
31-33	Manufacturing	-	35	15	3 249	79 874	2 884	6 108	63 990	162 820	339 507	502 605	10 021
313	Textile mills	-	4	4	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	3	3	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
TOCCOA, GA													
31-33	Manufacturing	1	32	14	2 073	47 212	1 726	3 450	35 957	126 355	228 670	353 148	6 382
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	4	635	15 626	529	1 141	11 806	34 796	21 648	55 922	2 336

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VALDOSTA, GA													
31-33	Manufacturing	-	70	31	4 816	118 939	3 699	7 508	77 337	366 069	916 227	1 272 432	D
311	Food mfg	-	6	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	595	11 814	445	857	8 243	27 792	27 695	55 270	3 112
3261	Plastics product mfg	-	5	4	595	11 814	445	857	8 243	27 792	27 695	55 270	3 112
336	Transportation equipment mfg	-	4	4	709	13 936	612	1 083	10 968	42 742	38 444	80 060	D
VIDALIA, GA *													
31-33	Manufacturing	2	27	13	1 988	33 727	1 652	2 407	24 980	73 815	79 236	153 310	5 514
315	Apparel mfg	3	3	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	3	3	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	2	2	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	2	2	f	D	D	D	D	D	D	D	D
VIENNA, GA													
31-33	Manufacturing	-	9	6	g	D	D	D	D	D	D	D	5 158
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
VILLA RICA, GA *													
31-33	Manufacturing	-	25	14	1 486	32 171	1 061	2 268	21 492	119 210	159 408	280 718	10 083
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
WARNER ROBINS, GA													
31-33	Manufacturing	-	34	5	f	D	D	D	D	D	D	D	10 948
WASHINGTON, GA													
31-33	Manufacturing	-	14	9	1 356	32 622	1 146	2 559	25 080	120 812	167 482	288 037	9 829
WAYCROSS, GA *													
31-33	Manufacturing	-	28	12	1 585	40 469	1 348	2 598	26 595	89 718	131 456	221 333	1 610
321	Wood product mfg	-	6	4	1 152	32 178	987	1 965	20 805	74 076	114 116	188 484	1 155
3219	Other wood product mfg ...	-	5	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	3	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
WAYNESBORO, GA													
31-33	Manufacturing	3	12	7	998	20 427	558	1 203	11 163	47 534	32 183	81 524	D
WINDER, GA													
31-33	Manufacturing	2	25	5	978	30 862	785	1 588	22 040	107 156	187 343	293 571	4 955
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	WOODSTOCK, GA Manufacturing	1	31	9	575	17 042	384	733	6 873	32 328	35 734	67 941	2 051

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
GEORGIA		GEORGIA—Con.	
Companies ¹	number.. 8 091	Quantity of electricity purchased for heat and power	1,000 kWh.. 26 016 973
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 4 871 421
All establishments	number.. 9 083	Total value of shipments	\$1,000.. 124 526 834
Establishments with 1 to 19 employees	number.. 5 782	Value of resales	\$1,000.. 3 839 479
Establishments with 20 to 99 employees	number.. 2 107	Value added	\$1,000.. 55 550 096
Establishments with 100 employees or more	number.. 1 194	Total inventories, beginning of year	\$1,000.. 13 158 626
All employees	number.. 533 830	Finished goods inventories, beginning of year	\$1,000.. 4 418 014
Total compensation ²	\$1,000.. 19 390 142	Work-in-process inventories, beginning of year	\$1,000.. 3 343 155
Annual payroll	\$1,000.. 15 534 058	Materials and supplies inventories, beginning of year	\$1,000.. 5 397 457
Total fringe benefits	\$1,000.. 3 856 084	Total inventories, end of year	\$1,000.. 13 645 725
Production workers, average for year	number.. 410 713	Finished goods inventories, end of year	\$1,000.. 4 714 718
Production workers on March 12	number.. 408 278	Work-in-process inventories, end of year	\$1,000.. 3 476 684
Production workers on May 12	number.. 409 353	Materials and supplies inventories, end of year	\$1,000.. 5 454 323
Production workers on August 12	number.. 412 147	Gross book value of total assets at beginning of year	\$1,000.. 45 705 892
Production workers on November 12	number.. 413 074	Total capital expenditures (new and used)	\$1,000.. 4 166 388
Production-worker hours	1,000.. 830 245	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 623 926
Production-worker wages	\$1,000.. 10 173 353	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 3 542 462
Total cost of materials	\$1,000.. 69 434 257	Total retirements ²	\$1,000.. 1 155 210
Cost of materials, parts, containers, etc., consumed	\$1,000.. 63 336 703	Gross book value of total assets at end of year	\$1,000.. 48 717 070
Cost of resales	\$1,000.. 2 936 451	Total depreciation during year ²	\$1,000.. 3 041 405
Cost of fuels	\$1,000.. 800 221	Total rental payments ²	\$1,000.. 682 434
Cost of purchased electricity	\$1,000.. 1 180 958	Buildings and other structures rental payments ²	\$1,000.. 318 921
Cost of contract work	\$1,000.. 1 179 924	Machinery and equipment rental payments ²	\$1,000.. 363 513

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

GEORGIA

Athens-Clarke County. See “Athens-Clarke County (consolidated city).”

Athens-Clarke County (consolidated city) is coextensive with Clarke County. It includes Winterville and Bogart (part in Clarke County), which are not populous enough for separate tabulation. Therefore, “Athens-Clarke County” refers to the whole consolidated city.

Atlanta is in DeKalb and Fulton Counties.

Auburn is in Barrow and Gwinnett Counties.

Augusta-Richmond County (balance). See “Augusta-Richmond County (consolidated city).”

Augusta-Richmond County (consolidated city) is coextensive with Richmond County. It includes Hephzibah, which is tabulated separately. “Augusta-Richmond County (balance),” which is a place equivalent, includes Blythe (part in Richmond County), which is not populous enough for separate tabulation. The governments of Augusta and Richmond County dissolved and consolidated in January 1996.

Austell is in Cobb and Douglas Counties.

Bremen is in Carroll and Haralson Counties.

Buford is in Gwinnett and Hall Counties.

College Park is in Clayton and Fulton Counties.

Columbus. See “Columbus (consolidated city).”

Columbus (consolidated city) is coextensive with Muscogee County. It includes Bibb City, which is not populous enough for separate tabulation. Therefore, “Columbus” refers to the whole consolidated city.

Fitzgerald is in Ben Hill and Irwin Counties.

Fort Oglethorpe is in Catoosa and Walker Counties.

Hephzibah. See “Augusta-Richmond County (consolidated city).”

LaGrange is a spelling correction from La Grange.

Lithia Springs was incorporated in February 1993.

Loganville is in Gwinnett and Walton Counties.

Macon is in Bibb and Jones Counties.

Manchester is in Meriwether and Talbot Counties.

Palmetto is in Coweta and Fulton Counties.

Perry is in Houston and Peach Counties.

Royston is in Franklin, Hart, and Madison Counties.

Social Circle is in Newton and Walton Counties.

Vidalia is in Montgomery and Toombs Counties.

Villa Rica is in Carroll and Douglas Counties.

Waycross is in Pierce and Ware Counties.

West Point is in Harris and Troup Counties.

Appendix E. Metropolitan Areas

GEORGIA

Albany, GA MSA

Dougherty County, GA
Lee County, GA

Athens, GA MSA

Clarke County, GA
Madison County, GA
Oconee County, GA

Atlanta, GA MSA

Barrow County, GA
Bartow County, GA
Carroll County, GA
Cherokee County, GA
Clayton County, GA
Cobb County, GA
Coweta County, GA
DeKalb County, GA
Douglas County, GA
Fayette County, GA
Forsyth County, GA
Fulton County, GA
Gwinnett County, GA
Henry County, GA
Newton County, GA
Paulding County, GA
Pickens County, GA
Rockdale County, GA
Spalding County, GA
Walton County, GA

Augusta—Aiken, GA—SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Chattanooga, TN—GA MSA

Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN

Columbus, GA—AL MSA

Russell County, AL
Chattahoochee County, GA
Harris County, GA
Muscogee County, GA

Macon, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA
Twiggs County, GA

Savannah, GA MSA

Bryan County, GA
Chatham County, GA
Effingham County, GA

Hawaii

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HAWAII *												
31-33	Manufacturing	3	921	159	15 109	405 045	9 899	18 362	231 595	1 262 448	1 941 147	3 192 532	100 707
311	Food mfg.	2	244	55	6 118	153 304	4 132	7 497	90 110	402 859	475 773	878 143	32 687
3113	Sugar & confectionery product mfg.	-	23	10	1 293	39 457	987	1 998	25 851	88 139	102 024	192 175	D
31131	Sugar mfg.	-	3	3	f	D	D	D	D	D	D	D	D
311311	Sugarcane mills	-	3	3	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	-	14	5	395	8 709	307	467	4 441	30 273	28 629	59 545	5 017
311330	Confectionery mfg from purchased chocolate	-	14	5	395	8 709	307	467	4 441	30 273	28 629	59 545	5 017
3114	Fruit & vegetable preserving & specialty food mfg.	1	20	3	822	19 237	754	1 228	16 120	40 797	62 826	103 634	2 981
31142	Fruit & vegetable canning, pickling, & drying	1	18	3	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	1	15	2	768	18 420	710	1 175	15 530	37 882	59 443	97 300	2 743
3115	Dairy product mfg.	1	15	8	600	18 940	218	450	6 837	54 515	80 881	135 248	1 746
31151	Dairy product (except frozen) mfg.	-	6	5	429	15 016	158	349	5 452	48 912	71 802	120 638	1 277
311511	Fluid milk mfg.	-	6	5	429	15 016	158	349	5 452	48 912	71 802	120 638	1 277
31152	Ice cream & frozen dessert mfg.	4	9	3	171	3 924	60	101	1 385	5 603	9 079	14 610	469
311520	Ice cream & frozen dessert mfg.	4	9	3	171	3 924	60	101	1 385	5 603	9 079	14 610	469
3116	Meat product mfg.	5	17	2	191	3 737	152	226	2 441	10 007	14 780	24 760	661
31161	Animal slaughtering & processing.	5	17	2	191	3 737	152	226	2 441	10 007	14 780	24 760	661
311612	Meat processed from carcasses	3	10	2	125	2 298	96	141	1 325	7 862	7 378	15 244	332
3117	Seafood product preparation & packaging..	-	3	2	c	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	3	2	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.	5	97	14	1 493	32 453	878	1 515	17 829	80 598	45 945	126 680	3 422
31181	Bread & bakery product mfg.	4	71	12	1 277	28 528	727	1 315	15 484	68 392	35 374	103 747	2 574
311811	Retail bakeries	4	49	5	441	5 789	235	322	2 908	12 431	7 911	20 428	1 190
311812	Commercial bakeries . . .	4	22	7	836	22 739	492	993	12 576	55 961	27 463	83 319	1 384
31182	Cookie, cracker, & pasta mfg.	8	24	2	c	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg. . .	8	12	2	161	2 890	101	135	1 500	6 960	6 318	13 431	519
3119	Other food mfg.	2	64	16	1 558	35 773	1 026	1 875	19 103	119 068	120 438	237 190	14 127
31191	Snack food mfg.	-	12	3	674	15 186	520	1 047	9 252	50 051	58 293	106 672	3 704
311911	Roasted nuts & peanut butter mfg.	-	5	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg. . .	-	7	1	c	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.	5	8	2	100	2 354	35	74	886	11 621	15 544	27 363	324
311920	Coffee & tea mfg.	5	8	2	100	2 354	35	74	886	11 621	15 544	27 363	324
31199	All other food mfg.	4	35	9	657	15 343	412	660	7 655	34 295	36 398	69 616	9 380
311991	Perishable prepared food mfg.	2	21	6	506	12 004	301	479	5 661	22 938	26 986	48 816	8 859
311999	All other miscellaneous food mfg.	6	14	3	151	3 339	111	181	1 994	11 357	9 412	20 800	521
312	Beverage & tobacco product mfg.	5	15	5	697	18 656	254	475	5 871	38 419	104 584	151 467	4 007
3121	Beverage mfg.	5	15	5	697	18 656	254	475	5 871	38 419	104 584	151 467	4 007
31211	Soft drink & ice mfg.	5	9	5	669	17 980	235	452	5 349	34 458	101 187	144 140	3 732
312111	Soft drink mfg.	5	6	5	653	17 576	223	430	5 087	33 931	100 887	143 318	D
314	Textile product mills.	7	28	1	c	D	D	D	D	D	D	D	291
3141	Textile furnishings mills. . .	8	14	1	c	D	D	D	D	D	D	D	164
31412	Curtain & linen mills.	8	14	1	c	D	D	D	D	D	D	D	164
314121	Curtain & drapery mills	8	11	1	c	D	D	D	D	D	D	D	D
315	Apparel mfg.	1	93	21	1 555	28 924	1 221	2 250	17 243	70 638	62 975	133 900	1 833
3152	Cut & sew apparel mfg.	1	85	20	1 494	27 896	1 196	2 212	16 958	67 612	58 513	126 327	1 734
31521	Cut & sew apparel contractors	3	32	7	499	7 542	470	914	6 290	11 706	2 280	13 888	526
315211	Men's & boys' cut & sew apparel contractors	1	7	5	304	4 482	288	574	3 818	6 934	1 118	8 055	317
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	25	2	195	3 060	182	340	2 472	4 772	1 162	5 833	209
31522	Men's & boys' cut & sew apparel mfg.	3	20	4	c	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.	2	11	3	170	3 307	135	271	1 896	6 719	5 599	12 668	116

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAWAII *—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31523	Women's & girls' cut & sew apparel mfg	—	31	8	735	16 036	524	941	8 095	47 011	48 713	95 640	1 035
315232	Women's & girls' cut & sew blouse & shirt mfg	1	6	2	c	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	—	17	5	302	6 520	210	305	2 349	13 474	10 144	23 505	150
315239	Women's & girls' cut & sew other outerwear mfg	—	6	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	24	3	c	D	D	D	D	D	D	D	D
322	Paper mfg	1	6	2	136	5 068	94	183	3 161	14 109	12 654	26 466	334
3222	Converted paper product mfg	1	6	2	136	5 068	94	183	3 161	14 109	12 654	26 466	334
32221	Paperboard container mfg	—	4	2	c	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	3	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	123	19	1 736	42 452	1 072	2 010	27 109	80 317	59 396	140 213	9 658
3231	Printing & related support activities	1	123	19	1 736	42 452	1 072	2 010	27 109	80 317	59 396	140 213	9 658
32311	Printing	1	114	19	1 681	40 599	1 028	1 927	25 581	76 422	58 769	135 687	8 859
323110	Commercial lithographic printing	—	47	12	1 025	24 838	556	1 127	15 701	49 266	26 673	75 948	6 478
323113	Commercial screen printing	—	24	3	201	3 764	145	249	2 100	10 503	16 428	27 228	424
323114	Quick printing	2	24	1	255	7 297	180	343	4 649	8 282	9 425	17 724	1 536
324	Petroleum & coal products mfg	3	4	3	f	D	D	D	D	D	D	D	38 747
3241	Petroleum & coal products mfg	3	4	3	f	D	D	D	D	D	D	D	38 747
32411	Petroleum refineries	3	2	2	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries	3	2	2	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	2	1	c	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	—	2	1	c	D	D	D	D	D	D	D	D
325	Chemical mfg	7	17	3	159	4 735	89	135	2 103	11 649	11 874	23 581	1 881
326	Plastics & rubber products mfg	3	19	4	260	6 524	193	304	4 327	14 090	11 779	26 101	D
3261	Plastics product mfg	3	14	3	197	5 359	151	218	3 666	11 518	9 208	20 714	D
327	Nonmetallic mineral product mfg	1	47	10	674	27 990	488	981	19 196	64 041	71 707	135 841	3 824
3273	Cement & concrete product mfg	1	33	10	613	26 662	437	901	18 238	60 573	69 264	129 904	3 528
32732	Ready-mix concrete mfg	—	10	5	313	15 650	238	488	11 810	35 278	38 566	73 610	1 790
327320	Ready-mix concrete mfg	—	10	5	313	15 650	238	488	11 810	35 278	38 566	73 610	1 790
32733	Concrete pipe, brick, & block mfg	1	7	2	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	4	15	2	143	5 100	101	212	3 219	12 687	6 870	19 837	694
327390	Other concrete product mfg	4	15	2	143	5 100	101	212	3 219	12 687	6 870	19 837	694
332	Fabricated metal product mfg	1	46	8	481	16 049	332	622	10 042	38 085	48 516	85 587	922
3323	Architectural & structural metals mfg	2	20	4	232	7 681	149	293	4 536	16 724	15 960	32 733	D
33232	Ornamental & architectural metal products mfg	2	15	3	172	6 633	107	227	3 879	14 688	13 806	28 538	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	15	2	112	3 673	86	143	2 306	7 419	3 677	10 953	D
334	Computer & electronic product mfg	1	9	1	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	24	6	400	13 418	328	585	10 306	26 088	21 138	47 327	816
3366	Ship & boat building	4	18	5	345	12 244	279	515	9 521	23 713	17 736	41 488	660
33661	Ship & boat building	4	18	5	345	12 244	279	515	9 521	23 713	17 736	41 488	660
336611	Ship building & repairing	4	10	4	e	D	D	D	D	D	D	D	615

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAWAII *—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	3	47	5	372	10 339	286	554	6 931	23 608	18 302	40 407	D
3371	Household & institutional furniture & kitchen cabinet mfg												
33711	Wood kitchen cabinet & counter top mfg	5	35	3	c	D	D	D	D	D	D	D	515
337110	Wood kitchen cabinet & counter top mfg	3	25	2	143	3 676	113	192	2 813	8 883	5 664	13 013	336
3379	Other furniture related product mfg	3	25	2	143	3 676	113	192	2 813	8 883	5 664	13 013	336
339	Miscellaneous mfg	1	6	2	106	3 538	77	173	1 972	8 959	8 500	17 484	262
3391	Medical equipment & supplies mfg	5	146	13	1 372	31 297	767	1 305	15 528	71 149	36 239	106 043	2 670
33911	Medical equipment & supplies mfg	8	43	1	217	5 640	162	274	3 860	14 638	5 113	19 946	487
339116	Dental laboratories	8	43	1	217	5 640	162	274	3 860	14 638	5 113	19 946	487
3399	Other miscellaneous mfg	8	34	1	191	4 791	143	242	3 430	12 460	3 952	16 574	337
33991	Jewelry & silverware mfg	4	103	12	1 155	25 657	605	1 031	11 668	56 511	31 126	86 097	2 183
339911	Jewelry (except costume) mfg	3	35	5	685	14 809	272	447	5 382	37 730	16 904	53 060	1 173
33992	Sporting & athletic goods mfg	3	32	5	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	6	15	1	100	2 384	76	138	1 696	4 060	4 688	8 761	511
33995	Sign mfg	6	15	1	100	2 384	76	138	1 696	4 060	4 688	8 761	511
339950	Sign mfg	6	27	3	176	4 453	118	229	2 322	8 192	5 942	14 117	222
33999	All other miscellaneous mfg	6	27	3	176	4 453	118	229	2 322	8 192	5 942	14 117	222
339999	All other miscellaneous mfg	5	23	3	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	3	16	2	125	2 214	86	109	1 062	2 827	1 786	4 659	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HONOLULU, HI MSA												
	Manufacturing	3	685	133	11 161	300 856	7 034	13 018	164 815	1 042 807	1 659 321	2 692 239	77 715
311	Food mfg	2	157	40	3 248	79 006	1 986	3 426	39 852	247 687	254 872	503 364	13 773
3113	Sugar & confectionery product mfg	–	14	6	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	–	10	5	372	8 445	289	451	4 257	29 406	27 899	57 765	D
311330	Confectionery mfg from purchased chocolate	–	10	5	372	8 445	289	451	4 257	29 406	27 899	57 765	D
3115	Dairy product mfg	1	10	4	399	13 437	174	355	5 438	41 433	65 036	106 390	D
31151	Dairy product (except frozen) mfg	1	3	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	1	3	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	68	12	1 251	28 611	712	1 254	15 474	71 209	39 587	110 909	2 889
31181	Bread & bakery product mfg	4	51	11	1 112	25 951	620	1 122	14 002	62 813	32 071	94 860	2 387
311811	Retail bakeries	3	34	5	355	4 756	173	245	2 343	10 031	6 346	16 458	1 068
311812	Commercial bakeries	4	17	6	757	21 195	447	877	11 659	52 782	25 725	78 402	1 319
3119	Other food mfg	3	40	12	808	20 028	497	878	9 979	82 459	62 522	145 411	D
31199	All other food mfg	4	23	8	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	2	11	5	355	7 740	193	297	3 350	15 738	21 355	37 015	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HONOLULU, HI MSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	5	9	5	665	17 885	236	446	5 417	35 626	102 010	146 049	3 750
3121	Beverage mfg	5	9	5	665	17 885	236	446	5 417	35 626	102 010	146 049	3 750
31211	Soft drink & ice mfg	5	6	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	5	5	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	89	20	1 524	28 488	1 193	2 200	16 866	69 628	62 028	131 933	D
3152	Cut & sew apparel mfg	1	81	19	1 463	27 460	1 168	2 162	16 581	66 602	57 566	124 360	D
31521	Cut & sew apparel contractors	3	31	7	e	D	D	D	D	D	D	D	526
315211	Men's & boys' cut & sew apparel contractors	1	7	5	304	4 482	288	574	3 818	6 934	1 118	8 055	317
31523	Women's & girls' cut & sew apparel mfg	—	28	7	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	—	15	4	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	6	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	97	16	1 523	37 953	926	1 778	24 669	70 637	52 473	123 489	8 950
3231	Printing & related support activities	1	97	16	1 523	37 953	926	1 778	24 669	70 637	52 473	123 489	8 950
32311	Printing	1	89	16	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	38	12	965	23 355	506	1 044	14 748	46 210	24 545	70 750	6 216
324	Petroleum & coal products mfg	3	2	2	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	3	2	2	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries	3	2	2	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	3	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	17	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	29	7	495	21 088	369	741	15 319	46 715	60 655	107 695	D
3273	Cement & concrete product mfg	1	22	7	454	20 132	334	688	14 633	43 994	58 649	102 947	D
332	Fabricated metal product mfg	1	35	7	402	13 126	275	506	7 976	30 826	40 391	70 119	D
336	Transportation equipment mfg	3	19	6	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	4	15	5	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	4	15	5	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing	4	10	4	e	D	D	D	D	D	D	D	615
337	Furniture & related product mfg	3	33	5	319	9 088	239	459	5 891	20 818	16 651	35 968	D
339	Miscellaneous mfg	4	114	11	1 190	27 036	636	1 094	13 230	62 943	31 214	92 806	2 423
3399	Other miscellaneous mfg ..	4	79	10	1 001	21 938	496	855	9 765	49 957	26 606	75 038	1 999
33991	Jewelry & silverware mfg	3	32	5	676	14 471	266	435	5 203	36 792	15 793	51 011	1 151
339911	Jewelry (except costume) mfg	2	29	5	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAWAII COUNTY, HI													
31-33	Manufacturing	2	106	13	1 588	37 458	1 076	1 954	21 133	81 221	113 642	192 461	14 236
311	Food mfg.....	1	44	6	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	16	4	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
HONOLULU COUNTY, HI *													
31-33	Manufacturing	3	685	133	11 161	300 856	7 034	13 018	164 815	1 042 807	1 659 321	2 692 239	77 715
311	Food mfg.....	2	157	40	3 248	79 006	1 986	3 426	39 852	247 687	254 872	503 364	13 773
3118	Bakeries & tortilla mfg.....	5	68	12	1 251	28 611	712	1 254	15 474	71 209	39 587	110 909	2 889
31181	Bread & bakery product mfg.....	4	51	11	1 112	25 951	620	1 122	14 002	62 813	32 071	94 860	2 387
311812	Commercial bakeries ..	4	17	6	757	21 195	447	877	11 659	52 782	25 725	78 402	1 319
3119	Other food mfg.....	3	40	12	808	20 028	497	878	9 979	82 459	62 522	145 411	D
31199	All other food mfg.....	4	23	8	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	5	9	5	665	17 885	236	446	5 417	35 626	102 010	146 049	3 750
3121	Beverage mfg.....	5	9	5	665	17 885	236	446	5 417	35 626	102 010	146 049	3 750
31211	Soft drink & ice mfg.....	5	6	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	5	5	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	1	89	20	1 524	28 488	1 193	2 200	16 866	69 628	62 028	131 933	D
3152	Cut & sew apparel mfg....	1	81	19	1 463	27 460	1 168	2 162	16 581	66 602	57 566	124 360	D
31523	Women's & girls' cut & sew apparel mfg.....	-	28	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	97	16	1 523	37 953	926	1 778	24 669	70 637	52 473	123 489	8 950
3231	Printing & related support activities.....	1	97	16	1 523	37 953	926	1 778	24 669	70 637	52 473	123 489	8 950
32311	Printing.....	1	89	16	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	38	12	965	23 355	506	1 044	14 748	46 210	24 545	70 750	6 216
339	Miscellaneous mfg.....	4	114	11	1 190	27 036	636	1 094	13 230	62 943	31 214	92 806	2 423
3399	Other miscellaneous mfg..	4	79	10	1 001	21 938	496	855	9 765	49 957	26 606	75 038	1 999
33991	Jewelry & silverware mfg.....	3	32	5	676	14 471	266	435	5 203	36 792	15 793	51 011	1 151
339911	Jewelry (except costume) mfg.....	2	29	5	f	D	D	D	D	D	D	D	D
MAUI COUNTY, HI *													
31-33	Manufacturing	1	100	9	1 919	51 302	1 509	2 830	36 296	123 343	135 369	259 608	4 020
311	Food mfg.....	-	34	6	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311311	Sugarcane mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	3	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	-	3	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AIEA, HI												
	Manufacturing	4	27	8	1 075	32 494	547	1 091	14 606	105 365	121 455	226 538	6 306
31-33	HILO, HI												
	Manufacturing	2	58	8	716	17 459	431	730	8 575	34 467	45 530	80 190	D
31-33	HONOLULU, HI *												
	Manufacturing	2	491	90	7 639	187 684	4 898	8 702	105 928	446 893	451 249	904 861	27 378
311	Food mfg.....	2	117	30	2 429	56 137	1 501	2 542	28 676	173 599	198 547	372 940	10 235
3118	Bakeries & tortilla mfg.....	3	49	8	864	17 388	507	889	9 883	40 861	27 644	68 598	D
31181	Bread & bakery product mfg.....	1	34	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	13	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	4	30	8	533	11 797	325	527	6 166	49 949	39 409	89 985	D
315	Apparel mfg.....	2	73	15	1 101	19 021	917	1 650	11 599	35 418	24 896	60 619	926
3152	Cut & sew apparel mfg....	2	67	15	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	82	15	1 399	35 360	820	1 581	22 751	65 832	50 448	116 515	8 832
3231	Printing & related support activities.....	1	82	15	1 399	35 360	820	1 581	22 751	65 832	50 448	116 515	8 832
32311	Printing.....	1	75	15	1 348	33 558	778	1 501	21 261	62 038	49 844	112 113	8 038
323110	Commercial lithographic printing ..	-	35	11	f	D	D	D	D	D	D	D	6 200
339	Miscellaneous mfg.....	4	89	8	976	22 041	480	799	9 856	53 309	24 504	76 398	1 827
3399	Other miscellaneous mfg ..	3	58	7	f	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg.....	2	29	5	652	13 869	248	392	4 826	35 565	15 084	49 074	D
339911	Jewelry (except costume) mfg.....	2	28	5	f	D	D	D	D	D	D	D	D
31-33	KAHULUI, HI												
	Manufacturing	1	27	2	798	19 931	733	1 240	16 597	41 776	60 245	102 128	2 893
311	Food mfg.....	1	8	1	692	17 005	649	1 094	14 699	34 490	56 813	91 323	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	2	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	-	2	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
HAWAII		HAWAII—Con.	
Companies ¹	number.. 895	Quantity of electricity purchased for heat and power	1,000 kWh.. 245 275
All establishments	number.. 921	Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Establishments with 1 to 19 employees	number.. 762	Total value of shipments	\$1,000.. 3 192 532
Establishments with 20 to 99 employees	number.. 130	Value of resales	\$1,000.. 181 478
Establishments with 100 employees or more	number.. 29	Value added	\$1,000.. 1 262 448
All employees	number.. 15 109	Total inventories, beginning of year	\$1,000.. 336 547
Total compensation ²	\$1,000.. 503 407	Finished goods inventories, beginning of year	\$1,000.. 175 028
Annual payroll	\$1,000.. 405 045	Work-in-process inventories, beginning of year	\$1,000.. 46 214
Total fringe benefits	\$1,000.. 98 362	Materials and supplies inventories, beginning of year	\$1,000.. 115 305
Production workers, average for year	number.. 9 899	Total inventories, end of year	\$1,000.. 351 344
Production workers on March 12	number.. 9 835	Finished goods inventories, end of year	\$1,000.. 188 052
Production workers on May 12	number.. 9 768	Work-in-process inventories, end of year	\$1,000.. 47 984
Production workers on August 12	number.. 10 194	Materials and supplies inventories, end of year	\$1,000.. 115 308
Production workers on November 12	number.. 9 799	Gross book value of total assets at beginning of year	\$1,000.. 1 221 564
Production-worker hours	1,000.. 18 362	Total capital expenditures (new and used)	\$1,000.. 100 707
Production-worker wages	\$1,000.. 231 595	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 38 742
Total cost of materials	\$1,000.. 1 941 147	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 61 965
Cost of materials, parts, containers, etc., consumed	\$1,000.. 1 673 002	Total retirements ²	\$1,000.. 24 447
Cost of resales	\$1,000.. 152 624	Gross book value of total assets at end of year	\$1,000.. 1 297 824
Cost of fuels	\$1,000.. 51 118	Total depreciation during year ²	\$1,000.. 68 301
Cost of purchased electricity	\$1,000.. 23 281	Total rental payments ²	\$1,000.. 38 447
Cost of contract work	\$1,000.. 41 122	Buildings and other structures rental payments ²	\$1,000.. 23 072
		Machinery and equipment rental payments ²	\$1,000.. 15 375

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

HAWAII

Hawaii has no incorporated places in the sense of functioning governmental units; however, in agreement with Hawaiian law, the Census Bureau reports data for “census designated places” (CDPs) which have been designated as place equivalents. Those CDPs, only for the State of Hawaii, with 2,500 or more population are recognized.

Honolulu CDP. Aliamanu and Fort Shafter were erroneously reported separately as CDPs for the 1992 Economic Census. Aliamanu and Fort Shafter were corrected and made part of the Honolulu CDP.

Honolulu County is coextensive with Honolulu city which is not recognized for the economic census; however, Honolulu CDP is recognized for the economic census.

Island of Lanai. See “Maui County.”

Island of Molokai. See “Maui County.”

Maui County consists of four islands. The State requested that two of the islands, Lanai and Molokai, be recognized as “places” for the economic census. Included on the island of Molokai is the nonfunctioning county of Kalawao.

Waihee-Waiehu is a spelling correction from Waihee-Waiehue.

Appendix E. Metropolitan Areas

HAWAII

Honolulu, HI MSA

Honolulu County, HI

Iowa

1997

Issued May 2000

EC97M31A-IA

1997 Economic Census

Manufacturing

Geographic Area Series



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1997 Economic Census
Manufacturing
Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
IOWA													
31-33	Manufacturing	-	3 749	1 413	235 880	7 573 258	175 933	354 220	4 936 083	28 673 277	33 981 805	62 413 687	1 978 727
311	Food mfg.....	-	441	204	44 956	1 265 324	35 558	74 829	905 688	7 008 084	14 373 902	21 376 088	578 089
3111	Animal food mfg.....	-	105	38	3 119	108 017	1 686	3 458	53 812	1 029 322	1 241 621	2 272 608	43 387
31111	Animal food mfg.....	-	105	38	3 119	108 017	1 686	3 458	53 812	1 029 322	1 241 621	2 272 608	43 387
311111	Dog & cat food mfg...	-	5	4	f	D	D	D	D	D	D	D	D
311119	Other animal food mfg.....	-	100	34	g	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	36	29	6 130	287 536	4 268	9 437	190 404	2 557 067	4 754 414	7 323 648	273 938
31121	Flour milling & malt mfg .	1	6	3	252	5 930	213	428	4 445	61 265	80 195	142 109	D
311211	Flour milling	1	6	3	252	5 930	213	428	4 445	61 265	80 195	142 109	D
31122	Starch & vegetable fats & oils mfg	-	27	23	3 945	179 542	2 516	5 583	103 594	1 335 103	4 281 697	5 627 892	231 522
311221	Wet corn milling	-	10	9	3 155	153 617	1 979	4 437	87 747	1 045 600	1 767 064	2 848 578	212 959
311222	Soybean processing ..	-	14	12	f	D	D	D	D	D	D	D	17 754
31123	Breakfast cereal mfg....	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
311230	Breakfast cereal mfg..	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
3113	Sugar & confectionery product mfg.....	-	17	2	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	7	1	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	-	7	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	17	12	2 349	58 714	2 072	3 688	48 463	349 387	255 489	603 849	22 350
31141	Frozen food mfg.....	-	9	7	1 433	33 103	1 246	2 160	25 935	236 166	128 542	364 489	17 736
311412	Frozen specialty food mfg.....	-	8	6	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	8	5	916	25 611	826	1 528	22 528	113 221	126 947	239 360	4 614
311421	Fruit & vegetable canning.....	-	7	4	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	39	25	3 618	115 620	2 788	6 449	87 671	497 074	1 254 937	1 744 144	D
31151	Dairy product (except frozen) mfg.....	1	33	21	h	D	D	D	D	D	D	D	21 758
311511	Fluid milk mfg.....	2	14	9	1 192	39 285	640	1 421	21 663	142 281	441 279	581 055	6 813
311513	Cheese mfg.....	-	10	7	701	19 258	592	1 223	16 008	67 399	367 423	432 952	4 631
311514	Dry, condensed, & evaporated dairy product mfg.....	-	9	5	f	D	D	D	D	D	D	D	10 314
31152	Ice cream & frozen dessert mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	119	61	23 148	535 423	20 044	43 346	427 225	1 831 034	6 216 167	8 088 470	160 451
31161	Animal slaughtering & processing.....	-	119	61	23 148	535 423	20 044	43 346	427 225	1 831 034	6 216 167	8 088 470	160 451
311611	Animal (except poultry) slaughtering	-	60	25	16 163	351 798	14 052	31 392	288 117	811 277	4 452 415	5 290 581	58 824
311612	Meat processed from carcasses	-	40	24	4 764	133 528	4 058	8 013	101 224	874 910	1 546 003	2 437 711	90 624
311613	Rendering & meat byproduct processing.....	-	9	5	345	11 783	189	381	4 452	43 603	48 515	91 044	2 625
311615	Poultry processing.....	2	10	7	1 876	38 314	1 745	3 560	33 432	101 244	169 234	269 134	8 378
3118	Bakeries & tortilla mfg.....	-	72	18	3 703	87 739	2 313	4 585	50 722	303 887	214 429	518 023	18 616
31181	Bread & bakery product mfg.....	-	61	14	2 914	69 252	1 614	2 888	36 387	215 042	147 090	362 971	12 194
311811	Retail bakeries.....	6	40	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	19	11	2 057	52 036	935	1 811	24 141	131 493	92 481	224 014	7 242
311813	Frozen cakes, pies, & other pastries mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	11	4	789	18 487	699	1 697	14 335	88 045	67 339	155 052	6 422
311821	Cookie & cracker mfg .	-	4	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	35	18	2 364	62 200	1 938	3 056	39 958	421 270	399 731	767 902	D
31191	Snack food mfg.....	-	6	2	c	D	D	D	D	D	D	D	454
311919	Other snack food mfg .	-	6	2	c	D	D	D	D	D	D	D	454
31194	Seasoning & dressing mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg...	-	2	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	2	21	13	1 253	28 672	1 076	1 914	18 742	235 215	229 145	464 830	9 008
311999	All other miscellaneous food mfg	2	18	12	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	3	18	10	1 032	29 280	523	1 054	14 892	204 714	256 568	461 037	9 796
3121	Beverage mfg.....	3	18	10	1 032	29 280	523	1 054	14 892	204 714	256 568	461 037	9 796
31211	Soft drink & ice mfg.....	3	11	9	991	28 422	492	1 005	14 319	202 095	254 229	456 008	9 512
312111	Soft drink mfg.....	3	9	9	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IOWA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills	—	59	9	1 235	29 791	910	1 583	14 776	73 381	104 714	173 659	2 952
3141	Textile furnishings mills	—	26	3	227	3 475	182	233	2 333	26 289	38 792	57 193	151
31412	Curtain & linen mills	—	25	2	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	5	1	c	D	D	D	D	D	D	D	24
3149	Other textile product mills . . .	—	33	6	1 008	26 316	728	1 350	12 443	47 092	65 922	116 466	2 801
31491	Textile bag & canvas mills	3	20	4	e	D	D	D	D	D	D	D	547
314911	Textile bag mills	2	5	2	c	D	D	D	D	D	D	D	90
314912	Canvas & related product mills	4	15	2	132	2 714	107	212	1 841	4 820	3 671	8 197	457
31499	All other textile product mills	—	13	2	f	D	D	D	D	D	D	D	2 254
314991	Rope, cordage, & twine mills	—	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills . .	1	12	1	c	D	D	D	D	D	D	D	D
315	Apparel mfg	—	61	25	3 538	66 735	2 693	4 977	49 085	114 204	125 041	242 186	4 544
3151	Apparel knitting mills	—	1	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	39	17	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	15	2	130	2 183	76	117	821	5 802	979	7 924	47
31522	Men's & boys' cut & sew apparel mfg	—	11	8	765	11 614	744	1 324	11 265	32 733	22 989	56 998	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	4	4	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	5	3	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	6	2	c	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	7	5	353	5 704	288	570	4 053	10 391	4 671	15 090	D
315299	All other cut & sew apparel mfg	—	6	5	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	21	7	1 770	35 183	1 191	2 241	25 551	39 079	74 089	113 103	2 434
31599	Apparel accessories & other apparel mfg	—	21	7	1 770	35 183	1 191	2 241	25 551	39 079	74 089	113 103	2 434
315991	Hat, cap, & millinery mfg	—	2	1	g	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	3	6	3	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	—	13	3	174	3 392	128	245	2 029	8 131	7 761	14 826	D
316	Leather & allied product mfg . .	2	20	9	f	D	D	D	D	D	D	D	5 749
3161	Leather & hide tanning & finishing	2	5	2	247	5 834	206	448	4 314	14 688	12 032	26 456	D
31611	Leather & hide tanning & finishing	2	5	2	247	5 834	206	448	4 314	14 688	12 032	26 456	D
316110	Leather & hide tanning & finishing	2	5	2	247	5 834	206	448	4 314	14 688	12 032	26 456	D
3169	Other leather & allied product mfg	2	14	7	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	2	14	7	e	D	D	D	D	D	D	D	D
316991	Luggage mfg	2	7	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	161	50	8 298	224 780	6 866	13 290	161 283	557 861	505 051	1 063 126	41 128
3211	Sawmills & wood preservation	1	39	6	440	9 308	335	628	6 485	22 736	28 356	49 879	2 306
32111	Sawmills & wood preservation	1	39	6	440	9 308	335	628	6 485	22 736	28 356	49 879	2 306
321113	Sawmills	1	38	6	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	12	8	437	11 869	334	690	7 512	34 668	40 860	75 066	1 363
32121	Veneer, plywood, & engineered wood product mfg	—	12	8	437	11 869	334	690	7 512	34 668	40 860	75 066	1 363
321214	Truss mfg	—	9	7	e	D	D	D	D	D	D	D	1 218

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IOWA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg ...	—	110	36	7 421	203 603	6 197	11 972	147 286	500 457	435 835	938 181	37 459
32191	Millwork	—	30	16	5 691	168 077	4 751	9 274	122 768	429 323	325 152	753 845	32 416
321911	Wood window & door mfg	—	17	12	5 437	162 638	4 517	8 863	117 922	416 915	303 075	719 229	29 394
321912	Cut stock, resawing lumber, & planing....	—	7	4	209	4 473	197	352	4 197	10 811	19 059	29 979	2 941
32192	Wood container & pallet mfg	1	43	11	848	16 525	745	1 374	12 550	27 176	51 690	80 889	2 655
321920	Wood container & pallet mfg	1	43	11	848	16 525	745	1 374	12 550	27 176	51 690	80 889	2 655
32199	All other wood product mfg	—	37	9	882	19 001	701	1 324	11 968	43 958	58 993	103 447	2 388
321992	Prefabricated wood building mfg	—	7	3	283	7 839	230	480	5 439	22 354	41 583	64 196	528
321999	All other miscellaneous wood product mfg ...	1	30	6	599	11 162	471	844	6 529	21 604	17 410	39 251	1 860
322	Paper mfg	—	44	36	5 480	183 930	4 394	9 213	130 708	705 961	834 045	1 531 237	36 539
3221	Pulp, paper, & paperboard mills	—	3	3	423	17 918	281	643	10 288	124 660	121 561	245 878	D
32213	Paperboard mills	—	3	3	423	17 918	281	643	10 288	124 660	121 561	245 878	D
322130	Paperboard mills	—	3	3	423	17 918	281	643	10 288	124 660	121 561	245 878	D
3222	Converted paper product mfg	—	41	33	5 057	166 012	4 113	8 570	120 420	581 301	712 484	1 285 359	D
32221	Paperboard container mfg	—	22	18	2 724	87 666	2 252	4 663	65 406	185 940	326 225	507 675	17 618
322211	Corrugated & solid fiber box mfg	—	13	11	1 450	48 156	1 127	2 354	32 335	109 505	209 645	317 512	8 119
322212	Folding paperboard box mfg	—	4	3	976	28 647	880	1 768	24 369	57 213	89 996	143 837	D
322213	Setup paperboard box mfg	—	3	2	c	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	11	9	1 865	63 493	1 489	3 147	44 916	367 830	345 916	709 776	11 837
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	5	3	f	D	D	D	D	D	D	D	D
322223	Plastics, foil, & coated paper bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	3	3	677	17 333	582	1 120	13 036	45 075	64 917	110 733	1 024
32223	Stationery product mfg ...	1	5	4	412	13 751	325	687	9 329	24 516	38 172	62 665	1 629
322232	Envelope mfg	1	4	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	451	114	11 620	327 779	8 641	16 150	211 005	759 836	580 275	1 336 157	62 080
3231	Printing & related support activities	2	451	114	11 620	327 779	8 641	16 150	211 005	759 836	580 275	1 336 157	62 080
32311	Printing	1	406	101	10 723	306 610	7 928	14 923	196 918	719 780	570 365	1 286 255	57 653
323110	Commercial lithographic printing ...	2	203	58	5 124	145 519	3 726	7 293	92 035	319 861	274 370	591 724	34 231
323111	Commercial gravure printing	—	6	1	g	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing .	5	8	4	c	D	D	D	D	D	D	D	D
323113	Commercial screen printing	—	42	8	985	22 598	736	1 239	13 289	53 429	63 588	113 711	3 381
323114	Quick printing	1	79	5	720	16 516	516	919	9 364	30 979	14 205	45 298	2 764
323116	Manifold business form printing	1	15	12	1 290	42 660	857	1 671	24 161	150 539	103 080	253 007	8 713
323117	Book printing	—	10	6	894	26 627	714	1 331	20 837	51 521	36 759	90 812	2 965
323119	Other commercial printing	2	38	6	434	12 446	335	633	6 280	31 212	17 683	47 863	1 775
32312	Support activities for printing	3	45	13	897	21 169	713	1 227	14 087	40 056	9 910	49 902	4 427
323121	Tradebinding & related work	—	10	5	216	4 789	186	348	3 484	9 466	1 890	11 327	1 968
323122	Prepress services	4	35	8	681	16 380	527	879	10 603	30 590	8 020	38 575	2 459
324	Petroleum & coal products mfg	2	16	4	166	5 331	117	251	3 226	37 265	70 873	110 337	1 090
3241	Petroleum & coal products mfg	2	16	4	166	5 331	117	251	3 226	37 265	70 873	110 337	1 090
32412	Asphalt paving, roofing, & saturated materials mfg	2	11	3	129	4 399	101	228	2 901	24 456	55 181	80 192	D

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31-33	IOWA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	—	125	54	6 925	266 462	4 339	8 803	152 712	3 594 410	1 758 134	5 297 152	329 634
3251	Basic chemical mfg	2	19	11	945	37 539	449	924	16 405	265 532	187 891	457 998	24 034
32518	Other basic inorganic chemical mfg	—	5	3	192	8 939	127	262	5 131	117 319	98 630	216 346	5 864
325188	All other basic inorganic chemical mfg	—	5	3	192	8 939	127	262	5 131	117 319	98 630	216 346	5 864
32519	Other basic organic chemical mfg	4	6	5	626	24 113	271	563	9 345	132 403	75 947	213 017	13 385
325199	All other basic organic chemical mfg	4	4	4	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	2	1	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	1	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	1	1	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	22	10	1 335	56 794	937	2 009	37 750	804 510	492 944	1 304 793	D
32531	Fertilizer mfg	—	14	6	e	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	—	5	4	337	14 687	225	531	9 339	105 445	104 113	210 496	71 580
32532	Pesticide & other agricultural chemical mfg	—	8	4	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	—	8	4	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	2	30	14	1 955	66 865	1 111	2 200	31 970	561 649	212 418	719 567	83 607
32541	Pharmaceutical & medicine mfg	2	30	14	1 955	66 865	1 111	2 200	31 970	561 649	212 418	719 567	83 607
325411	Medicinal & botanical mfg	6	6	2	251	11 852	159	355	7 095	102 008	75 051	175 195	10 857
325412	Pharmaceutical preparation mfg	6	11	5	364	10 749	188	345	3 664	74 306	40 570	115 191	D
325414	Biological product (except diagnostic) mfg	—	10	6	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	15	7	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	13	7	668	23 292	361	689	12 461	162 036	188 566	344 925	5 228
325510	Paint & coating mfg	—	13	7	668	23 292	361	689	12 461	162 036	188 566	344 925	5 228
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	19	5	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	2	16	4	c	D	D	D	D	D	D	D	236
325612	Polish & other sanitation good mfg ..	1	9	4	c	D	D	D	D	D	D	D	127
32562	Toilet preparation mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	18	6	f	D	D	D	D	D	D	D	D
32591	Printing ink mfg	—	4	1	c	D	D	D	D	D	D	D	440
325910	Printing ink mfg	—	4	1	c	D	D	D	D	D	D	D	440
32599	All other chemical product & preparation mfg	—	14	5	585	21 631	413	865	12 445	95 344	146 334	228 120	D
325991	Custom compounding of purchased resin ..	2	4	1	156	3 655	132	219	2 687	7 609	7 234	14 901	250
325998	All other miscellaneous chemical product & preparation mfg	—	10	4	429	17 976	281	646	9 758	87 735	139 100	213 219	D
326	Plastics & rubber products mfg	—	195	109	15 645	465 137	12 982	26 209	346 543	1 304 794	1 265 510	2 554 996	142 637
3261	Plastics product mfg	1	161	97	11 085	293 910	9 186	18 263	215 359	779 415	854 763	1 620 375	81 840
32611	Unsupported plastics film, sheet, & bag mfg ..	—	17	10	1 698	62 436	1 346	2 749	45 870	167 598	185 497	351 034	24 864
326111	Unsupported plastics bag mfg	—	4	3	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	—	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	12	6	1 026	35 782	798	1 552	25 284	111 717	93 930	205 099	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	18	9	518	13 744	396	777	9 519	48 179	84 270	132 752	4 659
326122	Plastics pipe & pipe fitting mfg	—	12	7	446	12 191	335	669	8 377	44 187	81 342	126 018	2 918

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31-33	IOWA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32613	Laminated plastics plate, sheet, & shape mfg	2	9	2	185	3 566	131	203	2 806	17 299	18 959	36 331	535
326130	Laminated plastics plate, sheet, & shape mfg	2	9	2	185	3 566	131	203	2 806	17 299	18 959	36 331	535
32614	Polystyrene foam product mfg	5	4	2	126	3 122	97	177	1 727	6 979	8 775	15 828	D
326140	Polystyrene foam product mfg	5	4	2	126	3 122	97	177	1 727	6 979	8 775	15 828	D
32615	Urethane & other foam product (except polystyrene) mfg	1	6	5	968	29 256	806	1 744	22 186	67 253	76 661	143 299	D
326150	Urethane & other foam product (except polystyrene) mfg	1	6	5	968	29 256	806	1 744	22 186	67 253	76 661	143 299	D
32616	Plastics bottle mfg	—	6	5	401	11 363	333	651	9 185	32 716	60 037	90 411	5 408
326160	Plastics bottle mfg	—	6	5	401	11 363	333	651	9 185	32 716	60 037	90 411	5 408
32619	Other plastics product mfg	1	101	64	7 189	170 423	6 077	11 962	124 066	439 391	420 564	850 720	39 509
326191	Plastics plumbing fixture mfg	—	3	2	c	D	D	D	D	D	D	D	170
326199	All other plastics product mfg	1	98	62	i	D	D	D	D	D	D	D	39 339
3262	Rubber product mfg	—	34	12	4 560	171 227	3 796	7 946	131 184	525 379	410 747	934 621	60 797
32621	Tire mfg	—	20	5	2 903	121 922	2 429	5 102	93 946	404 304	317 417	720 704	34 744
326211	Tire mfg (except retreading)	—	5	4	2 789	119 371	2 345	4 888	91 905	398 700	310 044	707 703	34 336
326212	Tire retreading	3	15	1	114	2 551	84	214	2 041	5 604	7 373	13 001	408
32622	Rubber & plastics hoses & belting mfg	—	3	3	426	12 786	365	742	9 981	43 123	43 378	85 216	D
326220	Rubber & plastics hoses & belting mfg	—	3	3	426	12 786	365	742	9 981	43 123	43 378	85 216	D
32629	Other rubber product mfg	1	11	4	1 231	36 519	1 002	2 102	27 257	77 952	49 952	128 701	D
326291	Rubber product mfg for mechanical use	—	7	3	1 183	35 147	966	2 028	26 335	73 939	46 219	120 912	D
327	Nonmetallic mineral product mfg	—	311	79	7 085	209 974	5 962	12 273	159 680	920 093	647 515	1 563 651	58 842
3271	Clay product & refractory mfg	—	13	4	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	6	4	e	D	D	D	D	D	D	D	2 513
327121	Brick & structural clay tile mfg	—	3	3	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	3	1	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	14	5	835	23 965	724	1 464	19 232	86 648	89 737	172 318	3 406
32721	Glass & glass product mfg	—	14	5	835	23 965	724	1 464	19 232	86 648	89 737	172 318	3 406
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	10	4	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	259	58	4 074	116 098	3 392	6 838	86 433	360 013	300 135	658 950	38 076
32731	Cement mfg	—	8	3	489	19 494	391	829	14 275	128 890	80 416	208 744	9 229
327310	Cement mfg	—	8	3	489	19 494	391	829	14 275	128 890	80 416	208 744	9 229
32732	Ready-mix concrete mfg	1	168	34	2 097	57 088	1 801	3 545	44 027	128 250	158 043	286 513	21 392
327320	Ready-mix concrete mfg	1	168	34	2 097	57 088	1 801	3 545	44 027	128 250	158 043	286 513	21 392
32733	Concrete pipe, brick, & block mfg	—	19	9	322	8 811	235	450	5 235	24 378	18 487	42 473	2 706
327331	Concrete block & brick mfg	—	12	3	164	4 725	110	218	2 485	10 346	11 327	21 725	D
327332	Concrete pipe mfg	—	7	6	158	4 086	125	232	2 750	14 032	7 160	20 748	D
32739	Other concrete product mfg	3	64	12	1 166	30 705	965	2 014	22 896	78 495	43 189	121 220	4 749
327390	Other concrete product mfg	3	64	12	1 166	30 705	965	2 014	22 896	78 495	43 189	121 220	4 749
3274	Lime & gypsum product mfg	—	7	7	f	D	D	D	D	D	D	D	D
32741	Lime mfg	—	2	2	c	D	D	D	D	D	D	D	D
327410	Lime mfg	—	2	2	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	5	5	775	30 429	646	1 501	23 379	194 686	114 480	309 733	8 505
327420	Gypsum product mfg	—	5	5	775	30 429	646	1 501	23 379	194 686	114 480	309 733	8 505

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	IOWA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	-	18	5	805	22 663	689	1 409	17 037	231 354	107 391	339 349	D
32791	Abrasive product mfg....	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg..	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg....	2	17	4	c	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	66	43	9 441	390 398	7 639	15 785	296 448	1 247 099	1 450 994	2 708 847	90 706
3311	Iron & steel mills & ferroalloy mfg.....	-	3	3	702	31 742	512	1 135	20 732	85 908	87 457	173 572	D
33111	Iron & steel mills & ferroalloy mfg.....	-	3	3	702	31 742	512	1 135	20 732	85 908	87 457	173 572	D
331111	Iron & steel mills.....	-	2	2	f	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	-	4	3	236	6 794	197	466	5 632	14 934	6 681	21 215	D
33122	Rolling & drawing of purchased steel.....	-	4	3	236	6 794	197	466	5 632	14 934	6 681	21 215	D
331222	Steel wire drawing.....	-	4	3	236	6 794	197	466	5 632	14 934	6 681	21 215	D
3313	Alumina & aluminum production & processing..	-	5	5	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	5	5	h	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	3	3	h	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	3	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding..	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	51	30	4 959	171 887	4 026	8 171	133 955	417 854	272 811	693 418	28 557
33151	Ferrous metal foundries..	-	20	18	3 474	131 425	2 831	5 682	105 565	340 505	225 598	567 815	20 974
331511	Iron foundries.....	-	15	13	2 270	95 140	1 888	3 855	74 366	237 637	168 208	406 117	15 410
331512	Steel investment foundries.....	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	-	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	-	31	12	1 485	40 462	1 195	2 489	28 390	77 349	47 213	125 603	7 583
331521	Aluminum die-casting foundries.....	-	8	4	352	10 178	300	586	7 539	16 994	12 733	30 127	3 589
331522	Nonferrous (except aluminum) die-casting foundries.....	-	4	2	e	D	D	D	D	D	D	D	1 315
331524	Aluminum foundries (except die-casting)...	-	15	5	654	19 832	482	1 096	13 224	37 831	17 285	56 188	2 639
332	Fabricated metal product mfg.....	-	594	217	24 349	715 029	18 359	35 893	453 341	1 765 366	1 511 831	3 287 492	124 178
3321	Forging & stamping.....	-	23	13	1 646	57 191	1 285	2 490	36 771	108 033	105 874	214 366	3 918
33211	Forging & stamping.....	-	23	13	1 646	57 191	1 285	2 490	36 771	108 033	105 874	214 366	3 918
332111	Iron & steel forging....	-	5	2	c	D	D	D	D	D	D	D	D
332114	Custom roll forming....	-	5	4	483	15 694	414	862	11 402	32 114	52 678	84 910	1 753
332116	Metal stamping.....	-	12	7	917	32 232	659	1 202	18 407	52 229	41 592	93 746	1 922
3322	Cutlery & handtool mfg....	-	17	5	649	19 201	467	964	10 848	49 399	26 418	74 507	2 022
33221	Cutlery & handtool mfg..	-	17	5	649	19 201	467	964	10 848	49 399	26 418	74 507	2 022
332211	Cutlery & flatware (except precious) mfg.....	-	3	2	c	D	D	D	D	D	D	D	166
332212	Hand & edge tool mfg..	-	11	3	495	14 818	362	765	8 423	37 766	23 214	59 718	1 812
3323	Architectural & structural metals mfg.....	-	136	60	6 448	167 674	4 785	9 207	109 559	415 669	496 965	917 321	26 622
33231	Plate work & fabricated structural product mfg..	-	65	30	2 810	74 666	2 026	3 807	46 299	185 887	248 525	432 304	7 935
332311	Prefabricated metal building & component mfg.....	-	11	7	985	27 398	654	1 284	15 224	84 561	107 127	191 179	1 723
332312	Fabricated structural metal mfg.....	1	35	16	1 078	30 516	759	1 563	18 596	70 751	114 349	184 819	4 122
332313	Plate work mfg.....	-	19	7	747	16 752	613	960	12 479	30 575	27 049	56 306	2 090
33232	Ornamental & architectural metal products mfg.....	-	71	30	3 638	93 008	2 759	5 400	63 260	229 782	248 440	485 017	18 687
332321	Metal window & door mfg.....	-	13	7	1 913	49 150	1 399	2 849	33 218	126 715	137 001	269 180	11 056
332322	Sheet metal work mfg..	-	27	9	814	25 169	629	1 232	15 636	58 274	57 719	115 860	4 613
332323	Ornamental & architectural metal work mfg.....	1	31	14	911	18 689	731	1 319	14 406	44 793	53 720	99 977	3 018

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IOWA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	26	18	1 318	39 300	946	1 903	27 041	178 720	201 142	378 741	21 904
33241	Power boiler & heat exchanger mfg	—	7	5	278	8 656	213	445	5 936	19 062	15 599	34 402	856
332410	Power boiler & heat exchanger mfg	—	7	5	278	8 656	213	445	5 936	19 062	15 599	34 402	856
33242	Metal tank (heavy gauge) mfg	—	8	6	478	13 443	301	613	9 396	84 640	52 620	136 870	1 323
332420	Metal tank (heavy gauge) mfg	—	8	6	478	13 443	301	613	9 396	84 640	52 620	136 870	1 323
33243	Metal can, box, & other metal container (light gauge) mfg	—	11	7	562	17 201	432	845	11 709	75 018	132 923	207 469	19 725
332431	Metal can mfg	—	2	2	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	9	5	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	9	4	913	24 038	735	1 308	13 656	50 516	48 773	99 361	5 994
33251	Hardware mfg	—	9	4	913	24 038	735	1 308	13 656	50 516	48 773	99 361	5 994
332510	Hardware mfg	—	9	4	913	24 038	735	1 308	13 656	50 516	48 773	99 361	5 994
3326	Spring & wire product mfg	1	19	9	565	12 776	479	895	8 924	26 793	31 075	57 801	1 569
33261	Spring & wire product mfg	1	19	9	565	12 776	479	895	8 924	26 793	31 075	57 801	1 569
332618	Other fabricated wire product mfg	1	17	8	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	253	59	5 193	145 515	4 285	8 714	106 288	351 667	219 588	570 665	35 260
33271	Machine shops	1	216	40	3 222	86 507	2 687	5 090	64 391	206 328	115 269	320 647	19 759
332710	Machine shops	1	216	40	3 222	86 507	2 687	5 090	64 391	206 328	115 269	320 647	19 759
33272	Turned product & screw, nut, & bolt mfg	—	37	19	1 971	59 008	1 598	3 624	41 897	145 339	104 319	250 018	15 501
332721	Precision turned product mfg	—	31	16	g	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	6	3	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	—	34	13	889	20 650	744	1 436	14 153	51 821	16 898	68 761	2 549
33281	Coating, engraving, heat treating, & allied activities	—	34	13	889	20 650	744	1 436	14 153	51 821	16 898	68 761	2 549
332811	Metal heat treating	—	5	4	134	4 913	102	195	2 244	14 444	3 579	17 997	1 086
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	10	6	555	11 197	482	943	8 759	29 276	10 648	39 942	1 106
332813	Electroplating, plating, polishing, anodizing, & coloring	1	19	3	200	4 540	160	298	3 150	8 101	2 671	10 822	357
3329	Other fabricated metal product mfg	—	77	36	6 728	228 684	4 633	8 976	126 101	532 748	365 098	905 969	24 340
33291	Metal valve mfg	—	16	14	3 421	131 861	2 039	4 242	64 608	305 986	223 284	536 934	15 414
332911	Industrial valve mfg	—	10	10	2 842	116 899	1 579	3 254	53 279	281 307	175 137	460 312	12 204
332912	Fluid power valve & hose fitting mfg	—	4	2	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	2	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	61	22	3 307	96 823	2 594	4 734	61 493	226 762	141 814	369 035	8 926
332991	Ball & roller bearing mfg	—	3	2	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	—	1	1	f	D	D	D	D	D	D	D	D
332997	Industrial pattern mfg	—	12	5	202	9 152	162	350	7 582	16 052	4 606	20 501	2 159
332999	All other miscellaneous fabricated metal product mfg	—	38	12	1 502	35 276	1 276	2 384	26 233	70 026	73 219	142 497	3 818
333	Machinery mfg	—	443	207	37 126	1 550 661	25 705	52 551	990 931	5 382 767	6 211 996	11 555 828	225 835
3331	Agriculture, construction, & mining machinery mfg	—	141	74	19 891	930 264	13 937	28 632	636 933	3 695 532	4 668 320	8 331 694	122 528
33311	Agricultural implement mfg	—	110	54	10 375	492 986	7 268	14 681	342 263	2 240 166	2 332 028	4 552 867	68 011
333111	Farm machinery & equipment mfg	—	108	52	j	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	2	2	c	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	27	18	9 290	430 288	6 510	13 616	290 216	1 441 368	2 328 483	3 756 777	54 410
333120	Construction machinery mfg	—	27	18	9 290	430 288	6 510	13 616	290 216	1 441 368	2 328 483	3 756 777	54 410
33313	Mining & oil & gas field machinery mfg	—	4	2	226	6 990	159	335	4 454	13 998	7 809	22 050	107
333131	Mining machinery & equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IOWA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	-	50	22	2 431	96 520	1 576	3 048	52 641	223 145	166 615	393 550	14 144
33322	Plastics & rubber industry machinery mfg	7	2	2	c	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	7	2	2	c	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	48	20	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	9	3	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	18	10	807	33 082	487	956	15 078	91 077	54 408	144 457	4 533
333298	All other industrial machinery mfg	-	15	7	657	22 435	377	766	9 302	42 311	37 057	78 538	D
3333	Commercial & service industry machinery mfg ..	-	27	13	1 846	59 288	1 037	2 030	27 221	98 048	149 879	249 199	4 255
33331	Commercial & service industry machinery mfg	-	27	13	1 846	59 288	1 037	2 030	27 221	98 048	149 879	249 199	4 255
333311	Automatic vending machine mfg	-	3	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	21	11	g	D	D	D	D	D	D	D	3 894
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	23	14	2 832	84 969	2 143	4 499	55 671	329 568	364 974	694 195	12 256
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	23	14	2 832	84 969	2 143	4 499	55 671	329 568	364 974	694 195	12 256
333414	Heating equipment (except warm air furnaces) mfg	-	6	2	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	10	10	2 067	62 813	1 663	3 403	44 452	258 343	320 526	578 564	5 808
3335	Metalworking machinery mfg	1	92	31	2 034	76 433	1 524	3 142	49 128	143 301	69 197	208 987	13 266
33351	Metalworking machinery mfg	1	92	31	2 034	76 433	1 524	3 142	49 128	143 301	69 197	208 987	13 266
333511	Industrial mold mfg ...	2	24	8	567	21 137	455	911	15 255	36 350	13 612	49 754	4 979
333514	Special die & tool, die set, jig, & fixture mfg ..	1	48	13	740	29 360	573	1 326	20 299	51 216	21 253	71 159	4 642
333515	Cutting tool & machine tool accessory mfg ..	1	12	5	405	13 780	290	501	7 329	30 302	17 102	46 635	2 769
333518	Other metalworking machinery mfg	-	4	2	c	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	10	7	1 374	79 392	757	1 569	40 900	226 765	297 993	521 977	12 602
33361	Engine, turbine, & power transmission equipment mfg	-	10	7	1 374	79 392	757	1 569	40 900	226 765	297 993	521 977	12 602
333611	Turbine & turbine generator set unit mfg	-	1	1	c	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	4	5	4	e	D	D	D	D	D	D	D	3 207
333618	Other engine equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	100	46	6 718	223 795	4 731	9 631	128 437	666 408	495 018	1 156 226	46 784
33391	Pump & compressor mfg	-	8	3	832	32 059	489	1 038	17 921	108 427	54 491	163 538	2 164
333911	Pump & pumping equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	39	22	2 365	73 076	1 752	3 528	43 690	154 840	159 957	313 574	14 814
333921	Elevator & moving stairway mfg	-	6	3	239	6 881	190	367	5 642	16 301	8 599	24 847	965
333922	Conveyor & conveying equipment mfg	-	19	11	1 149	36 149	897	1 867	22 443	75 264	73 743	148 707	4 676
333923	Overhead traveling crane, hoist, & monorail system mfg ..	4	7	4	395	10 505	288	580	6 248	23 208	19 431	41 158	2 077
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	7	4	582	19 541	377	714	9 357	40 067	58 184	98 862	7 096

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	IOWA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	-	53	21	3 521	118 660	2 490	5 065	66 826	403 141	280 570	679 114	29 806
333991	Power-driven handtool mfg	-	3	2	e	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	7	2	536	22 490	291	548	10 312	42 195	27 047	65 771	1 761
333995	Fluid power cylinder & actuator mfg	-	8	7	1 191	34 143	974	2 009	24 207	83 591	83 966	167 413	7 275
333996	Fluid power pump & motor mfg	-	5	3	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	26	7	392	10 446	271	550	6 514	23 621	17 043	39 808	1 287
334	Computer & electronic product mfg	-	74	29	14 075	524 166	5 743	10 227	123 291	1 244 720	776 782	1 958 070	66 369
3341	Computer & peripheral equipment mfg	-	6	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	6	2	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	4	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	7	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	1 358	36 829	1 029	2 142	24 040	226 484	155 691	361 936	8 250
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	1 358	36 829	1 029	2 142	24 040	226 484	155 691	361 936	8 250
3344	Semiconductor & other electronic component mfg	1	30	13	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	30	13	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	5	3	243	5 350	206	358	3 126	13 817	6 398	20 214	2 038
334416	Electronic coil, transformer, & other inductor mfg	-	4	3	573	9 422	456	925	5 746	26 953	9 063	34 282	D
334419	Other electronic component mfg	-	11	4	517	11 510	315	694	4 550	35 465	27 675	62 147	2 037
3345	Navigational, measuring, medical, & control instruments mfg	-	29	9	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	29	9	i	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	1	4	1	c	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	4	2	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	41	29	12 260	406 499	9 696	20 167	286 802	1 335 947	1 162 335	2 440 115	37 957
3351	Electric lighting equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	c	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	6	6	7 576	255 191	6 317	12 426	190 572	695 849	751 186	1 395 601	D
33521	Small electrical appliance mfg	-	2	2	c	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	c	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	c	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	4	4	i	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	h	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D

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	IOWA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	23	15	3 239	109 751	2 313	4 433	67 188	422 897	222 096	644 973	10 143
33531	Electrical equipment mfg	-	23	15	3 239	109 751	2 313	4 433	67 188	422 897	222 096	644 973	10 143
335311	Power, distribution, & specialty transformer mfg	-	2	2	c	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	7	5	385	10 178	289	613	5 926	20 761	16 894	37 377	D
335313	Switchgear & switchboard apparatus mfg	-	4	3	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	10	5	1 113	29 093	737	1 590	13 158	98 663	40 926	138 687	3 266
3359	Other electrical equipment & component mfg	-	11	7	g	D	D	D	D	D	D	D	5 211
33591	Battery mfg	-	3	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	3	396	8 612	249	1 650	5 449	22 319	22 969	45 642	D
335932	Noncurrent-carrying wiring device mfg	-	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	168	93	18 508	517 795	14 828	29 077	366 402	1 323 199	1 529 495	2 848 475	72 812
3362	Motor vehicle body & trailer mfg	-	62	37	7 657	190 988	5 860	11 012	125 538	381 550	731 259	1 107 697	17 093
33621	Motor vehicle body & trailer mfg	-	62	37	7 657	190 988	5 860	11 012	125 538	381 550	731 259	1 107 697	17 093
336211	Motor vehicle body mfg	-	20	13	1 383	37 860	1 090	2 062	29 028	74 711	171 473	240 971	4 236
336212	Truck trailer mfg	-	16	10	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	2	2	h	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	24	12	1 844	38 335	1 463	2 692	28 466	99 886	119 681	219 101	4 509
3363	Motor vehicle parts mfg ...	-	71	46	9 215	283 766	7 698	15 601	214 026	839 397	640 847	1 475 199	49 379
33631	Motor vehicle gasoline engine & engine parts mfg	1	15	7	1 779	55 433	1 464	2 977	41 137	133 276	99 701	231 323	9 759
336311	Carburetor, piston, piston ring, & valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	2	13	6	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	15	9	1 489	43 361	1 271	2 707	33 502	70 324	77 344	145 642	4 012
336322	Other motor vehicle electrical & electronic equipment mfg	1	15	9	1 489	43 361	1 271	2 707	33 502	70 324	77 344	145 642	4 012
33635	Motor vehicle transmission & power train parts mfg	-	6	6	1 330	51 912	1 174	2 065	44 414	236 572	133 458	369 905	10 369
336350	Motor vehicle transmission & power train parts mfg	-	6	6	1 330	51 912	1 174	2 065	44 414	236 572	133 458	369 905	10 369
33636	Motor vehicle seating & interior trim mfg	-	2	1	c	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	2	1	c	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	9	7	g	D	D	D	D	D	D	D	7 838
336370	Motor vehicle metal stamping	-	9	7	g	D	D	D	D	D	D	D	7 838
33639	Other motor vehicle parts mfg	-	21	16	2 937	84 502	2 563	5 122	67 340	273 669	198 648	472 252	16 747
336399	All other motor vehicle parts mfg	-	21	16	2 937	84 502	2 563	5 122	67 340	273 669	198 648	472 252	16 747
3364	Aerospace product & parts mfg	-	8	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	8	2	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	17	6	1 031	22 542	854	1 606	16 028	53 963	134 249	195 185	2 976
33699	Other transportation equipment mfg	-	17	6	1 031	22 542	854	1 606	16 028	53 963	134 249	195 185	2 976
336999	All other transportation equipment mfg	-	11	6	1 019	22 257	844	1 588	15 815	53 360	133 729	194 062	2 914

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IOWA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	181	43	7 980	220 931	6 676	13 603	174 183	617 348	506 900	1 122 061	44 377
3371	Household & institutional furniture & kitchen cabinet mfg	-	134	26	5 027	120 398	4 130	7 718	89 639	223 040	221 042	444 269	7 937
33711	Wood kitchen cabinet & counter top mfg	-	74	7	2 473	57 864	2 119	4 044	47 625	119 713	104 293	224 499	5 591
337110	Wood kitchen cabinet & counter top mfg ...	-	74	7	2 473	57 864	2 119	4 044	47 625	119 713	104 293	224 499	5 591
33712	Household & institutional furniture mfg	1	60	19	2 554	62 534	2 011	3 674	42 014	103 327	116 749	219 770	2 346
337121	Upholstered household furniture mfg	1	12	6	1 651	47 327	1 261	2 444	30 650	72 360	85 177	157 597	1 123
337122	Nonupholstered wood household furniture mfg	4	30	4	261	3 554	217	346	2 726	5 486	5 668	11 102	225
337124	Metal household furniture mfg	1	3	1	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	2	11	5	259	5 273	203	387	3 476	10 893	10 217	20 896	538
337129	Wood television, radio, & sewing machine cabinet mfg	-	2	2	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	39	14	2 658	91 851	2 357	5 500	79 880	367 368	260 423	625 220	34 585
33721	Office furniture (including fixtures) mfg	-	39	14	2 658	91 851	2 357	5 500	79 880	367 368	260 423	625 220	34 585
337211	Wood office furniture mfg	-	5	3	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	6	4	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	7	15	6	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	8	3	295	8 682	189	385	4 664	26 940	25 435	52 572	1 855
33791	Mattress mfg	-	6	3	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	6	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	268	48	5 429	158 279	3 698	7 087	84 508	431 107	276 218	705 731	43 146
3391	Medical equipment & supplies mfg	1	110	10	1 181	32 241	760	1 352	16 623	86 232	47 346	132 767	5 199
33911	Medical equipment & supplies mfg	1	110	10	1 181	32 241	760	1 352	16 623	86 232	47 346	132 767	5 199
339111	Laboratory apparatus & furniture mfg	-	2	1	e	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	1	11	2	120	3 902	57	104	1 009	11 136	6 334	17 475	767
339113	Surgical appliance & supplies mfg	2	11	3	114	2 798	74	108	1 226	5 546	3 077	8 857	539
339116	Dental laboratories ...	5	76	3	455	9 778	325	532	6 625	21 284	7 883	29 478	673
3399	Other miscellaneous mfg ...	1	158	38	4 248	126 038	2 938	5 735	67 885	344 875	228 872	572 964	37 947
33992	Sporting & athletic goods mfg	-	23	6	561	13 773	352	699	6 094	37 930	24 063	63 306	1 343
339920	Sporting & athletic goods mfg	-	23	6	561	13 773	352	699	6 094	37 930	24 063	63 306	1 343
33993	Doll, toy, & game mfg ...	1	14	4	845	29 990	529	1 003	12 169	130 883	64 673	191 280	4 326
339932	Game, toy, & children's vehicle mfg	1	10	4	831	29 740	517	980	11 969	130 296	64 345	190 357	4 320
33994	Office supplies (except paper) mfg	5	13	4	829	23 076	618	1 146	12 911	57 811	26 855	84 284	D
339941	Pen & mechanical pencil mfg	5	2	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	3	49	12	696	19 388	362	733	7 852	33 576	29 530	64 926	1 515
339950	Sign mfg	3	49	12	696	19 388	362	733	7 852	33 576	29 530	64 926	1 515
33999	All other miscellaneous mfg	-	45	11	1 229	37 728	1 004	2 025	27 364	79 969	81 108	161 881	D
339991	Gasket, packing, & sealing device mfg ...	1	4	3	302	6 670	242	476	4 897	10 159	18 619	28 766	D
339993	Fastener, button, needle, & pin mfg ...	-	4	3	160	3 491	127	280	2 218	8 582	3 702	12 476	D
339994	Broom, brush, & mop mfg	-	5	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	23	3	215	7 140	175	273	4 378	9 804	18 294	28 069	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CEDAR RAPIDS, IA MSA												
31-33	Manufacturing	1	239	95	22 877	935 016	11 730	22 747	388 409	3 617 005	2 811 906	6 376 141	212 737
311	Food mfg.....	2	22	15	3 334	161 516	2 329	5 182	113 209	1 689 448	1 356 654	3 046 185	101 442
3111	Animal food mfg.....	-	4	3	276	8 381	100	174	2 441	19 203	40 302	59 269	1 209
31111	Animal food mfg.....	-	4	3	276	8 381	100	174	2 441	19 203	40 302	59 269	1 209
311119	Other animal food mfg.....	-	4	3	276	8 381	100	174	2 441	19 203	40 302	59 269	1 209
3112	Grain & oilseed milling	2	8	8	2 817	146 143	2 104	4 722	107 211	1 632 971	1 273 660	2 906 917	91 894
31122	Starch & vegetable fats & oils mfg.....	-	5	5	884	44 079	565	1 296	24 846	472 272	881 138	1 353 270	D
311221	Wet corn milling.....	-	3	3	f	D	D	D	D	D	D	D	52 545
31123	Breakfast cereal mfg....	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
311230	Breakfast cereal mfg..	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
322	Paper mfg.....	-	4	4	596	27 840	410	987	17 582	117 557	158 438	273 554	6 793
3222	Converted paper product mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	42	13	1 392	36 802	1 030	1 934	22 590	82 610	77 801	157 140	6 803
3231	Printing & related support activities.....	1	42	13	1 392	36 802	1 030	1 934	22 590	82 610	77 801	157 140	6 803
32311	Printing.....	1	38	12	1 284	34 362	941	1 768	21 073	78 078	76 516	151 312	D
323110	Commercial lithographic printing ..	4	15	6	468	14 410	346	725	8 847	29 197	18 739	47 941	2 233
323113	Commercial screen printing.....	-	10	4	681	16 840	507	920	10 322	42 054	54 440	93 189	2 722
326	Plastics & rubber products mfg.....	1	8	6	511	18 921	391	775	13 150	55 704	64 389	119 266	9 685
3261	Plastics product mfg.....	-	5	4	418	15 982	317	606	11 041	48 898	58 445	106 464	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	36	16	953	30 877	746	1 551	20 685	79 868	47 187	126 741	4 115
3323	Architectural & structural metals mfg.....	-	7	6	337	9 878	266	519	6 159	31 654	24 876	56 186	1 601
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	3	20	6	276	8 742	215	484	6 328	19 217	7 968	26 908	1 831
333	Machinery mfg.....	-	36	17	2 996	130 183	1 925	3 770	73 078	266 457	224 080	480 956	16 000
3331	Agriculture, construction, & mining machinery mfg....	-	6	4	1 106	46 253	687	1 392	25 744	90 465	98 640	179 601	4 090
33312	Construction machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	9	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	-	9	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	10	5	385	17 829	258	540	9 710	34 134	18 029	50 573	2 001
33351	Metalworking machinery mfg.....	-	10	5	385	17 829	258	540	9 710	34 134	18 029	50 573	2 001
3339	Other general-purpose machinery mfg.....	-	7	4	591	25 893	333	618	11 661	48 108	32 855	76 810	1 523
33399	All other general-purpose machinery mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CEDAR RAPIDS, IA MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	10	5	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	27	5	369	9 646	222	413	4 126	19 877	24 008	46 323	731
3399	Other miscellaneous mfg ..	1	13	4	285	7 873	165	327	3 102	16 200	22 495	41 074	605
	DAVENPORT—MOLINE—ROCK ISLAND, IA—IL MSA												
31-33	Manufacturing	-	460	162	26 539	1 096 313	19 964	41 726	773 407	4 313 201	5 151 952	9 411 592	259 420
	Davenport—Moline—Rock Island, IA—IL MSA (IL Part) .	-	250	84	14 694	618 016	11 216	23 646	449 628	2 123 417	2 723 894	4 796 824	124 760
	Davenport—Moline—Rock Island, IA—IL MSA (IA Part) .	-	210	78	11 845	478 297	8 748	18 080	323 779	2 189 784	2 428 058	4 614 768	134 660
311	Food mfg.....	-	37	14	3 788	131 041	2 967	6 445	105 142	797 309	1 617 384	2 418 539	41 147
3111	Animal food mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
31111	Animal food mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	10	5	2 612	92 843	2 258	5 093	82 717	504 752	1 341 658	1 851 255	D
31161	Animal slaughtering & processing.....	-	10	5	2 612	92 843	2 258	5 093	82 717	504 752	1 341 658	1 851 255	D
311611	Animal (except poultry) slaughtering	-	7	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	12	4	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	12	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	2	1	e	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	18	5	386	8 179	323	658	6 319	19 161	18 548	38 248	983
322	Paper mfg.....	1	6	4	442	13 424	360	782	8 213	36 411	39 491	75 654	D
3222	Converted paper product mfg.....	1	6	4	442	13 424	360	782	8 213	36 411	39 491	75 654	D
32221	Paperboard container mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	4	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVENPORT—MOLINE—ROCK ISLAND, IA—IL MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	-	50	5	g	D	D	D	D	D	D	D	4 241
3231	Printing & related support activities.....	-	50	5	g	D	D	D	D	D	D	D	4 241
32311	Printing.....	-	46	5	1 010	29 425	733	1 429	18 990	55 618	31 731	87 289	4 099
323114	Quick printing.....	1	14	1	e	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	13	6	860	36 635	570	1 162	22 238	183 786	220 803	392 274	D
3259	Other chemical product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	14	6	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	1	10	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	21	6	587	19 567	447	929	13 789	81 054	59 571	140 888	7 019
3273	Cement & concrete product mfg.....	-	19	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	17	9	3 883	184 233	3 099	6 450	135 659	696 358	944 593	1 654 781	D
3313	Alumina & aluminum production & processing..	-	3	3	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	3	3	h	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	3	3	h	D	D	D	D	D	D	D	D
3315	Foundries.....	-	13	6	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	-	3	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	2	1	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	-	1	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	-	10	4	284	10 059	228	467	6 462	14 955	13 896	29 126	D
332	Fabricated metal product mfg.....	-	113	46	3 366	102 775	2 502	4 659	63 485	233 866	142 986	372 013	16 654
3323	Architectural & structural metals mfg.....	-	15	5	670	18 314	523	820	12 128	38 052	35 199	73 492	2 504
33231	Plate work & fabricated structural product mfg..	1	6	1	266	6 028	230	175	4 624	10 848	8 742	19 671	D
33232	Ornamental & architectural metal products mfg.....	-	9	4	404	12 286	293	645	7 504	27 204	26 457	53 821	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	44	18	1 161	32 796	933	1 728	22 350	67 542	41 317	106 212	7 024
33271	Machine shops.....	-	40	16	1 047	29 371	830	1 586	19 847	60 872	39 322	97 534	6 210
332710	Machine shops.....	-	40	16	1 047	29 371	830	1 586	19 847	60 872	39 322	97 534	6 210
3328	Coating, engraving, heat treating, & allied activities..	-	17	7	421	11 362	312	561	7 135	24 800	8 498	33 597	1 291
33281	Coating, engraving, heat treating, & allied activities.....	-	17	7	421	11 362	312	561	7 135	24 800	8 498	33 597	1 291
3329	Other fabricated metal product mfg.....	-	19	7	607	24 484	366	726	12 255	59 501	27 261	84 827	2 353
33291	Metal valve mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg....	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	17	6	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	71	38	9 268	503 114	6 573	14 787	355 388	2 007 661	1 859 149	3 811 821	91 666
3331	Agriculture, construction, & mining machinery mfg....	-	20	12	6 990	417 618	4 982	11 286	302 911	1 801 349	1 703 549	3 449 857	80 184
33311	Agricultural implement mfg.....	-	13	7	5 319	330 910	3 916	8 869	250 669	1 408 409	1 154 311	2 516 802	63 676
333111	Farm machinery & equipment mfg.....	-	13	7	5 319	330 910	3 916	8 869	250 669	1 408 409	1 154 311	2 516 802	63 676
33312	Construction machinery mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg..	-	4	3	280	12 956	162	334	5 807	38 763	13 747	51 827	1 899
33329	Other industrial machinery mfg.....	-	4	3	280	12 956	162	334	5 807	38 763	13 747	51 827	1 899

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVENPORT—MOLINE—ROCK ISLAND, IA—IL MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	4	21	10	744	28 188	546	1 137	17 612	57 181	30 712	84 658	4 612
33351	Metalworking machinery mfg	4	21	10	744	28 188	546	1 137	17 612	57 181	30 712	84 658	4 612
333514	Special die & tool, die set, jig, & fixture mfg	4	11	6	286	12 694	234	647	9 556	21 971	8 725	28 452	D
333515	Cutting tool & machine tool accessory mfg	—	4	3	e	D	D	D	D	D	D	D	1 778
3339	Other general-purpose machinery mfg	—	16	8	f	D	D	D	D	D	D	D	3 911
33391	Pump & compressor mfg	—	2	2	e	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	—	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	5	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	3	f	D	D	D	D	D	D	D	972
3362	Motor vehicle body & trailer mfg	—	3	2	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	3	2	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	18	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	34	5	e	D	D	D	D	D	D	D	D
	DES MOINES, IA MSA												
31-33	Manufacturing	—	476	155	22 735	759 771	16 400	32 806	480 479	2 249 994	3 360 471	5 543 306	152 498
311	Food mfg	—	51	22	4 837	130 635	3 393	6 744	80 743	473 578	1 705 312	2 120 822	34 497
3112	Grain & oilseed milling	—	5	5	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	4	3	345	9 919	281	543	6 705	26 060	23 363	49 426	4 301
3115	Dairy product mfg	5	6	5	896	28 775	425	923	13 924	67 461	173 627	240 896	6 162
31151	Dairy product (except frozen) mfg	6	4	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	8	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	9	4	1 830	39 743	1 545	3 537	31 247	65 482	389 689	474 865	8 738
31161	Animal slaughtering & processing	—	9	4	1 830	39 743	1 545	3 537	31 247	65 482	389 689	474 865	8 738
311611	Animal (except poultry) slaughtering	—	5	3	1 712	36 769	1 497	3 461	30 442	52 140	373 115	444 979	8 522
3118	Bakeries & tortilla mfg	—	10	1	e	D	D	D	D	D	D	D	307
31181	Bread & bakery product mfg	—	7	1	e	D	D	D	D	D	D	D	296
311812	Commercial bakeries	—	2	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	5	2	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	—	2	1	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	3	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	3	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	2	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	12	5	418	10 472	320	679	6 919	23 600	29 829	53 395	579
3219	Other wood product mfg	2	9	3	334	8 502	257	554	5 599	20 156	25 253	45 338	483
32191	Millwork	2	4	2	e	D	D	D	D	D	D	D	412
321911	Wood window & door mfg	2	3	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	5	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	5	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	2	2	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DES MOINES, IA MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	111	28	2 834	95 013	2 224	4 428	66 223	201 931	149 314	351 705	18 159
3231	Printing & related support activities.....	1	111	28	2 834	95 013	2 224	4 428	66 223	201 931	149 314	351 705	18 159
32311	Printing.....	1	94	21	2 600	87 903	2 033	4 077	61 059	187 903	146 429	334 846	16 648
323110	Commercial lithographic printing ..	—	47	12	1 083	40 870	806	1 886	25 623	89 928	69 594	159 038	12 289
323111	Commercial gravure printing.....	—	3	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	24	9	851	31 469	513	888	12 478	107 891	95 523	199 111	11 072
3254	Pharmaceutical & medicine mfg.....	3	8	5	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	3	8	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	15	10	3 325	138 185	2 797	5 712	102 812	385 345	350 284	732 989	42 056
3261	Plastics product mfg.....	—	11	8	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	—	3	2	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	6	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	—	6	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	—	4	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	—	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	—	31	12	886	22 304	802	1 597	18 221	68 712	49 076	116 799	6 119
3271	Clay product & refractory mfg.....	—	4	3	320	7 428	282	636	5 976	25 625	12 420	37 469	D
32712	Clay building material & refractories mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	—	21	9	515	12 905	482	899	11 328	39 711	34 758	74 181	D
32732	Ready-mix concrete mfg.	—	13	6	388	8 760	373	665	8 134	16 715	25 671	42 494	3 228
327320	Ready-mix concrete mfg.....	—	13	6	388	8 760	373	665	8 134	16 715	25 671	42 494	3 228
332	Fabricated metal product mfg.....	—	53	13	1 549	39 554	1 102	2 160	24 152	137 934	101 999	244 886	8 373
3323	Architectural & structural metals mfg.....	—	16	6	739	17 406	505	1 032	9 256	47 997	54 925	107 184	5 553
33232	Ornamental & architectural metal products mfg.....	—	13	4	626	14 614	412	836	7 131	42 553	50 055	97 625	D
332321	Metal window & door mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	38	20	3 686	163 693	2 273	4 549	97 815	451 346	533 680	981 224	10 411
3331	Agriculture, construction, & mining machinery mfg....	—	13	9	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	—	11	7	1 641	92 603	1 118	2 220	64 735	358 617	320 352	676 400	7 259
333111	Farm machinery & equipment mfg.....	—	11	7	1 641	92 603	1 118	2 220	64 735	358 617	320 352	676 400	7 259
3332	Industrial machinery mfg ..	—	6	4	384	16 234	217	389	6 297	31 674	24 062	54 389	716
33329	Other industrial machinery mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	6	4	1 132	38 266	592	1 221	16 761	41 023	94 989	136 114	1 632
33331	Commercial & service industry machinery mfg.....	—	6	4	1 132	38 266	592	1 221	16 761	41 023	94 989	136 114	1 632
333311	Automatic vending machine mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	12	3	274	4 885	232	411	2 897	16 334	2 604	17 955	D
335	Electrical equipment, appliance, & component mfg.....	—	4	4	473	18 952	120	293	3 835	56 503	24 840	78 606	D
3353	Electrical equipment mfg ..	—	4	4	473	18 952	120	293	3 835	56 503	24 840	78 606	D
33531	Electrical equipment mfg.....	—	4	4	473	18 952	120	293	3 835	56 503	24 840	78 606	D
335314	Relay & industrial control mfg.....	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DES MOINES, IA MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	1	19	5	1 292	39 625	1 001	2 047	25 137	94 577	67 862	162 658	9 752
3363	Motor vehicle parts mfg . . .	1	9	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	3	3	817	21 452	704	1 479	16 677	48 410	42 140	91 838	5 842
336399	All other motor vehicle parts mfg	—	3	3	817	21 452	704	1 479	16 677	48 410	42 140	91 838	5 842
3364	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	25	3	431	11 748	339	698	7 850	33 831	31 209	64 450	D
3372	Office furniture (including fixtures) mfg	—	10	3	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	10	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	47	8	701	19 128	438	848	9 699	36 598	22 814	61 311	2 671
3399	Other miscellaneous mfg . .	6	27	7	541	14 877	314	617	6 740	27 261	18 445	47 521	2 493
33995	Sign mfg	6	13	4	300	8 285	127	260	2 863	10 513	7 923	20 349	555
339950	Sign mfg	6	13	4	300	8 285	127	260	2 863	10 513	7 923	20 349	555
	DUBUQUE, IA MSA												
31-33	Manufacturing	—	133	65	10 687	386 886	7 698	16 029	248 081	1 391 519	1 695 974	3 074 896	54 458
311	Food mfg	—	6	5	1 845	37 328	1 410	3 379	26 143	111 053	312 100	421 619	3 783
3116	Meat product mfg	—	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	2	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	1	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	1	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	9	5	909	23 101	721	1 512	14 978	61 973	65 593	127 161	3 458
3219	Other wood product mfg . . .	—	6	3	f	D	D	D	D	D	D	D	D
32191	Millwork	—	3	1	e	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	—	3	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	1	1	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	19	5	484	14 108	406	820	11 416	25 934	17 345	45 653	2 212
3231	Printing & related support activities	—	19	5	484	14 108	406	820	11 416	25 934	17 345	45 653	2 212
32311	Printing	—	15	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	25	14	1 614	50 548	1 243	2 381	33 554	146 500	105 558	249 859	11 956
3323	Architectural & structural metals mfg	—	6	3	559	14 173	405	748	8 584	40 310	34 047	74 363	1 498
33231	Plate work & fabricated structural product mfg . .	1	5	2	e	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	8	4	321	9 965	297	617	8 392	47 251	11 093	59 246	5 306
33271	Machine shops	—	5	3	259	8 440	244	529	7 379	42 356	9 274	52 536	D
332710	Machine shops	—	5	3	259	8 440	244	529	7 379	42 356	9 274	52 536	D
3329	Other fabricated metal product mfg	—	4	2	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	2	2	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	18	13	h	D	D	D	D	D	D	D	17 704
3331	Agriculture, construction, & mining machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DUBUQUE, IA MSA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	3	7	2	739	25 619	481	986	12 833	45 799	40 426	86 535	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	16	6	1 154	41 356	676	1 317	16 995	167 200	88 093	249 773	6 850
3391	Medical equipment & supplies mfg	—	5	3	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	5	3	e	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	—	1	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	11	3	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	—	4	2	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	4	2	f	D	D	D	D	D	D	D	D
IOWA CITY, IA MSA													
31-33	Manufacturing	—	89	14	3 639	121 075	2 940	6 165	89 497	1 857 629	643 328	2 510 397	55 145
311	Food mfg	—	10	5	365	12 380	268	561	7 524	179 496	137 957	318 365	5 830
323	Printing & related support activities.....	2	13	3	f	D	D	D	D	D	D	D	2 751
3231	Printing & related support activities.....	2	13	3	f	D	D	D	D	D	D	D	2 751
32311	Printing	2	12	3	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing.....	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	3	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	9	3	1 240	36 951	1 063	2 387	28 793	82 923	82 635	164 962	7 657
3261	Plastics product mfg	—	9	3	1 240	36 951	1 063	2 387	28 793	82 923	82 635	164 962	7 657
32615	Urethane & other foam product (except polystyrene) mfg	—	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	4	2	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	4	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	24	1	520	19 411	437	952	15 357	46 943	37 370	84 892	D
3399	Other miscellaneous mfg ..	—	9	1	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	5	1	e	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	1	1	e	D	D	D	D	D	D	D	D
OMAHA, NE—IA MSA													
31-33	Manufacturing	—	709	229	34 735	1 099 771	26 317	53 488	740 681	4 042 391	4 809 376	8 809 328	301 844
	Omaha, NE—IA MSA (IA Part)	1	59	26	4 109	113 186	3 285	6 422	84 571	429 356	453 987	888 662	29 180
	Omaha, NE—IA MSA (NE Part)	—	650	203	30 626	986 585	23 032	47 066	656 110	3 613 035	4 355 389	7 920 666	272 664

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE-IA MSA—Con.												
	Manufacturing—Con.												
311	Food mfg	-	78	44	9 854	281 926	7 822	16 707	216 084	1 534 813	2 632 841	4 167 059	102 104
3112	Grain & oilseed milling	-	6	5	1 039	61 519	842	1 912	52 606	343 408	447 025	798 115	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	5	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	4	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	3	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	30	20	h	D	D	D	D	D	D	D	18 609
31161	Animal slaughtering & processing	-	30	20	h	D	D	D	D	D	D	D	18 609
311611	Animal (except poultry) slaughtering	-	15	10	h	D	D	D	D	D	D	D	10 866
311612	Meat processed from carcasses	-	6	6	907	21 641	772	1 645	16 941	55 781	186 866	241 886	D
3118	Bakeries & tortilla mfg	-	23	9	1 868	45 310	1 025	2 004	26 153	214 055	93 308	303 483	13 041
31181	Bread & bakery product mfg	1	18	4	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	8	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	3	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	-	2	2	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	2	2	e	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	2	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	4	5	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	5	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	4	4	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	10	3	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	1	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	4	4	3	e	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	27	3	305	7 365	236	485	4 927	16 850	16 555	33 726	1 516
3219	Other wood product mfg	1	26	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
3222	Converted paper product mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
32221	Paperboard container mfg	-	6	6	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	4	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	154	37	3 817	114 820	2 827	5 470	71 072	286 375	201 644	487 953	25 726
3231	Printing & related support activities	2	154	37	3 817	114 820	2 827	5 470	71 072	286 375	201 644	487 953	25 726
32311	Printing	2	139	32	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	4	69	22	2 047	59 150	1 573	3 144	38 928	129 732	111 033	240 520	D
323112	Commercial flexographic printing	1	5	5	863	28 666	606	1 263	16 708	76 311	58 179	134 224	5 272
323116	Manifold business form printing	-	3	3	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	-	15	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	27	13	972	38 570	600	1 163	20 267	283 763	226 017	504 294	33 553
3254	Pharmaceutical & medicine mfg	1	9	7	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	9	7	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE-IA MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	30	15	1 477	34 313	1 201	2 416	24 649	92 350	100 484	192 082	8 931
3261	Plastics product mfg	2	26	13	g	D	D	D	D	D	D	D	8 099
32619	Other plastics product mfg	—	15	7	953	22 993	781	1 666	16 479	53 515	46 745	99 287	6 282
326199	All other plastics product mfg	—	13	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	41	11	884	28 798	685	1 448	20 171	129 631	92 705	221 153	6 135
3273	Cement & concrete product mfg	1	27	10	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	5	10	5	410	11 910	317	779	9 257	29 346	19 088	48 060	1 705
327390	Other concrete product mfg	5	10	5	410	11 910	317	779	9 257	29 346	19 088	48 060	1 705
331	Primary metal mfg	—	6	5	f	D	D	D	D	D	D	D	D
3315	Foundries	—	6	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	3	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	84	23	2 191	62 286	1 609	3 075	41 229	135 855	163 185	297 828	8 162
3323	Architectural & structural metals mfg	—	20	6	559	15 773	348	709	8 614	40 884	77 664	118 376	1 171
33231	Plate work & fabricated structural product mfg ..	—	11	3	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	9	3	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	1	1	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	38	10	653	16 486	522	875	12 216	30 071	16 199	45 881	2 859
33271	Machine shops	1	32	8	484	13 195	387	713	9 994	24 326	12 435	36 371	2 307
332710	Machine shops	1	32	8	484	13 195	387	713	9 994	24 326	12 435	36 371	2 307
3329	Other fabricated metal product mfg	—	8	4	474	12 220	319	549	6 871	32 734	35 759	67 486	D
33299	All other fabricated metal product mfg	—	5	2	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	4	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	44	20	4 345	175 849	3 060	6 365	99 639	350 267	361 177	708 364	39 076
3331	Agriculture, construction, & mining machinery mfg	—	9	5	1 955	87 511	1 313	2 787	39 239	149 578	213 307	366 824	18 429
33311	Agricultural implement mfg	—	7	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	7	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	3	2	e	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	3	3	2	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	3	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	14	6	1 581	60 969	1 188	2 440	45 664	141 797	81 803	216 446	D
33399	All other general-purpose machinery mfg	—	8	4	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	19	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	8	5	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE-IA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	18	6	1 046	26 623	845	1 462	17 775	61 886	74 725	138 826	3 438
3362	Motor vehicle body & trailer mfg	—	7	3	795	19 535	656	1 127	13 407	40 886	54 191	97 609	D
33621	Motor vehicle body & trailer mfg	—	7	3	795	19 535	656	1 127	13 407	40 886	54 191	97 609	D
336211	Motor vehicle body mfg	—	4	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	56	15	2 333	60 161	1 831	3 483	40 131	186 408	130 225	313 554	6 074
3371	Household & institutional furniture & kitchen cabinet mfg	3	36	8	f	D	D	D	D	D	D	D	746
33712	Household & institutional furniture mfg	4	14	5	e	D	D	D	D	D	D	D	396
337121	Upholstered household furniture mfg	5	6	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	16	5	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	16	5	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	—	5	4	1 369	36 720	1 069	2 042	25 049	149 929	85 743	232 657	D
339	Miscellaneous mfg	—	67	10	1 134	32 956	801	1 601	20 257	202 451	62 924	269 118	10 960
3391	Medical equipment & supplies mfg	—	33	5	f	D	D	D	D	D	D	D	6 904
33911	Medical equipment & supplies mfg	—	33	5	f	D	D	D	D	D	D	D	6 904
339113	Surgical appliance & supplies mfg	—	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	34	5	e	D	D	D	D	D	D	D	4 056
	SIOUX CITY, IA-NE MSA												
31-33	Manufacturing	—	136	73	11 977	300 929	9 256	18 388	207 528	827 861	3 683 577	4 502 457	113 114
	Sioux City, IA-NE MSA (IA Part)	—	113	59	i	D	D	D	D	D	D	D	99 373
	Sioux City, IA-NE MSA (NE Part)	—	23	14	i	D	D	D	D	D	D	D	13 741
311	Food mfg	—	30	25	7 353	166 779	6 075	12 173	129 020	472 498	3 098 384	3 562 236	17 310
3116	Meat product mfg	—	12	10	6 062	133 967	5 279	10 898	111 333	309 547	2 350 603	2 652 042	10 697
31161	Animal slaughtering & processing	—	12	10	6 062	133 967	5 279	10 898	111 333	309 547	2 350 603	2 652 042	10 697
311611	Animal (except poultry) slaughtering	—	7	7	i	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	3	3	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	3	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	3	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	5	4	482	9 657	373	409	4 560	32 227	44 165	76 407	D
31199	All other food mfg	—	5	4	482	9 657	373	409	4 560	32 227	44 165	76 407	D
311999	All other miscellaneous food mfg	—	3	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
3222	Converted paper product mfg	—	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
32221	Paperboard container mfg	—	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
322211	Corrugated & solid fiber box mfg	—	2	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	7	4	408	19 319	268	647	10 616	93 199	112 581	203 128	76 296
327	Nonmetallic mineral product mfg	2	7	4	281	7 699	231	418	5 486	13 046	17 635	30 530	2 383

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SIoux CITY, IA-NE MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	2	17	8	564	14 979	387	743	8 991	32 965	36 720	68 888	2 270
3323	Architectural & structural metals mfg	2	10	6	422	12 113	288	572	7 184	27 295	34 264	61 444	2 012
33231	Plate work & fabricated structural product mfg ..	2	5	4	299	8 898	201	416	5 426	21 079	28 295	49 273	1 782
332312	Fabricated structural metal mfg	2	5	4	299	8 898	201	416	5 426	21 079	28 295	49 273	1 782
333	Machinery mfg	—	16	8	934	30 404	547	1 166	15 457	51 377	80 741	131 375	5 401
3339	Other general-purpose machinery mfg	—	4	4	518	18 525	301	672	9 059	28 585	58 178	85 609	3 274
33399	All other general-purpose machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	3	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	3	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	2	f	D	D	D	D	D	D	D	D
31-33	WATERLOO-CEDAR FALLS, IA MSA		165	70	13 542	555 720	9 967	20 832	382 116	2 258 387	2 878 327	5 133 098	65 832
311	Food mfg	—	17	8	2 674	50 923	2 280	5 146	42 100	179 119	704 911	885 472	5 231
3116	Meat product mfg	—	5	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	5	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	2	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	27	7	496	12 237	250	456	6 305	25 346	14 399	39 554	1 304
3231	Printing & related support activities	3	27	7	496	12 237	250	456	6 305	25 346	14 399	39 554	1 304
32311	Printing	2	21	7	452	10 859	223	400	5 391	22 594	13 724	36 136	1 152
323110	Commercial lithographic printing ..	4	11	5	281	6 375	136	246	3 846	10 494	5 923	16 409	684
331	Primary metal mfg	—	5	5	900	50 232	750	1 517	41 108	130 315	86 588	218 298	D
3315	Foundries	—	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	37	15	1 237	42 608	928	1 873	25 174	71 392	56 839	129 185	4 334
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	15	3	443	14 638	382	819	11 598	30 974	31 004	62 121	D
33271	Machine shops	—	11	2	349	11 212	303	629	9 120	24 471	27 927	52 580	1 429
332710	Machine shops	—	11	2	349	11 212	303	629	9 120	24 471	27 927	52 580	1 429
333	Machinery mfg	—	22	14	i	D	D	D	D	D	D	D	33 077
3331	Agriculture, construction, & mining machinery mfg	—	5	4	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	4	3	h	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	4	3	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	7	3	f	D	D	D	D	D	D	D	481
33391	Pump & compressor mfg	—	2	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	6	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	2	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	—	4	2	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ..	—	4	2	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
ADAIR COUNTY, IA													
31-33	Manufacturing	-	8	3	527	15 143	469	932	11 993	33 260	69 595	101 884	2 525
ALLAMAKEE COUNTY, IA													
31-33	Manufacturing	3	26	8	1 505	27 413	1 313	2 515	22 289	82 492	127 074	209 690	2 464
311	Food mfg	4	6	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	5	2	2	f	D	D	D	D	D	D	D	D
APPANOOSE COUNTY, IA													
31-33	Manufacturing	-	15	4	1 070	30 062	890	1 759	21 197	84 122	74 415	156 515	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
BLACK HAWK COUNTY, IA													
31-33	Manufacturing	-	165	70	13 542	555 720	9 967	20 832	382 116	2 258 387	2 878 327	5 133 098	65 832
311	Food mfg	-	17	8	2 674	50 923	2 280	5 146	42 100	179 119	704 911	885 472	5 231
3116	Meat product mfg	-	5	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	900	50 232	750	1 517	41 108	130 315	86 588	218 298	D
3315	Foundries	-	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	37	15	1 237	42 608	928	1 873	25 174	71 392	56 839	129 185	4 334
333	Machinery mfg	-	22	14	i	D	D	D	D	D	D	D	33 077
3331	Agriculture, construction, & mining machinery mfg	-	5	4	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	4	3	h	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	4	3	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	3	f	D	D	D	D	D	D	D	481
337	Furniture & related product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	2	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	4	2	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
BOONE COUNTY, IA													
31-33	Manufacturing	-	26	12	914	22 484	733	1 432	16 018	67 804	64 723	131 929	3 023

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BREMER COUNTY, IA													
31-33	Manufacturing	-	39	17	1 993	58 634	1 485	3 140	40 411	126 820	313 829	446 331	13 917
332	Fabricated metal product mfg	-	10	5	563	18 203	357	760	10 472	40 580	20 184	59 533	D
BUCHANAN COUNTY, IA													
31-33	Manufacturing	-	35	13	1 230	31 670	1 068	2 167	24 257	78 059	200 035	277 741	9 014
BUENA VISTA COUNTY, IA													
31-33	Manufacturing	-	28	8	2 546	55 242	2 185	4 804	46 007	112 319	576 673	688 580	13 742
311	Food mfg	-	8	4	2 191	46 295	1 913	4 267	40 161	91 367	560 584	651 863	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
BUTLER COUNTY, IA													
31-33	Manufacturing	2	23	7	601	16 317	504	1 015	12 121	36 403	36 122	70 660	5 439
CARROLL COUNTY, IA													
31-33	Manufacturing	-	39	13	1 588	41 655	1 375	2 521	33 534	205 849	204 401	423 826	16 083
321	Wood product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
CASS COUNTY, IA													
31-33	Manufacturing	-	25	10	1 112	29 764	844	1 693	20 226	71 162	81 101	150 736	5 826
CEDAR COUNTY, IA													
31-33	Manufacturing	1	25	8	810	19 393	588	1 090	11 400	53 446	70 803	122 257	2 688
CERRO GORDO COUNTY, IA													
31-33	Manufacturing	-	61	25	3 703	98 946	2 789	5 508	67 493	275 642	448 237	719 830	23 385
311	Food mfg	-	9	6	583	15 835	476	1 071	11 363	37 110	241 788	279 286	1 754
332	Fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	2	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHEROKEE COUNTY, IA													
31-33	Manufacturing	-	15	6	904	24 571	758	1 525	19 190	42 505	146 331	188 489	4 309
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
CHICKASAW COUNTY, IA													
31-33	Manufacturing	-	25	8	1 674	42 221	1 367	2 361	28 641	157 963	257 892	414 421	13 783
311	Food mfg	-	6	3	1 042	26 088	900	1 654	20 802	123 932	231 137	354 172	11 208
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARKE COUNTY, IA													
31-33	Manufacturing	-	19	9	1 152	21 413	1 009	2 057	16 877	89 633	114 818	209 403	D
CLAY COUNTY, IA													
31-33	Manufacturing	-	28	11	1 180	34 869	989	1 939	26 549	97 862	101 119	202 253	7 952
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
CLAYTON COUNTY, IA													
31-33	Manufacturing	2	31	12	1 538	28 571	1 289	2 435	19 587	73 751	113 036	184 566	3 595
336	Transportation equipment mfg	7	4	2	f	D	D	D	D	D	D	D	D
CLINTON COUNTY, IA													
31-33	Manufacturing	-	59	28	5 148	175 594	4 072	8 454	123 756	1 097 517	1 017 878	2 106 920	98 264
311	Food mfg	-	7	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	3	3	g	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	6	5	1 275	34 835	1 089	2 160	26 274	118 189	79 396	197 799	8 896
3261	Plastics product mfg	3	6	5	1 275	34 835	1 089	2 160	26 274	118 189	79 396	197 799	8 896
32619	Other plastics product mfg	6	5	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	6	5	4	f	D	D	D	D	D	D	D	D
CRAWFORD COUNTY, IA													
31-33	Manufacturing	-	22	10	1 879	49 547	1 648	4 237	38 064	131 470	769 564	908 932	4 817
311	Food mfg	-	7	6	1 700	46 612	1 508	4 021	36 005	126 038	760 469	893 761	4 278
3116	Meat product mfg	-	5	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	5	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	3	g	D	D	D	D	D	D	D	D
DALLAS COUNTY, IA													
31-33	Manufacturing	-	41	19	2 489	59 659	2 095	4 546	46 045	132 782	319 746	451 176	9 968
311	Food mfg	-	5	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
DELAWARE COUNTY, IA													
31-33	Manufacturing	-	34	9	1 144	33 692	906	1 809	24 282	171 026	165 182	327 485	6 745

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DES MOINES COUNTY, IA													
31-33	Manufacturing	-	66	32	6 772	228 850	5 119	10 187	155 404	553 583	767 984	1 320 764	34 210
311	Food mfg	-	5	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	1 071	31 291	708	980	12 083	75 267	14 589	90 085	978
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	1 293	63 863	872	2 017	45 393	118 390	399 313	519 180	13 595
3331	Agriculture, construction, & mining machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	4	568	13 194	293	665	4 992	34 326	30 622	65 342	2 247
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
DICKINSON COUNTY, IA													
31-33	Manufacturing	-	31	8	2 386	60 349	1 892	3 490	39 789	116 999	225 132	353 353	5 547
314	Textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
314991	Rope, cordage, & twine mills	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	2	f	D	D	D	D	D	D	D	574
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
DUBUQUE COUNTY, IA													
31-33	Manufacturing	-	133	65	10 687	386 886	7 698	16 029	248 081	1 391 519	1 695 974	3 074 896	54 458
311	Food mfg	-	6	5	1 845	37 328	1 410	3 379	26 143	111 053	312 100	421 619	3 783
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	5	909	23 101	721	1 512	14 978	61 973	65 593	127 161	3 458
3219	Other wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	14	1 614	50 548	1 243	2 381	33 554	146 500	105 558	249 859	11 956
3323	Architectural & structural metals mfg	-	6	3	559	14 173	405	748	8 584	40 310	34 047	74 363	1 498

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	DUBUQUE COUNTY, IA—Con.													
	Manufacturing—Con.													
333	Machinery mfg	—	18	13	h	D	D	D	D	D	D	D	17 704	
3331	Agriculture, construction, & mining machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D	
33312	Construction machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D	
333120	Construction machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	3	7	2		739	25 619	481	986	12 833	45 799	40 426	86 535	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	1	f	D	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	16	6		1 154	41 356	676	1 317	16 995	167 200	88 093	249 773	6 850
3399	Other miscellaneous mfg	—	11	3	f	D	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
31-33	EMMET COUNTY, IA													
	Manufacturing	2	15	7		752	18 163	567	1 062	12 433	39 571	77 499	115 813	3 536
31-33	FAYETTE COUNTY, IA													
	Manufacturing	—	24	14		1 539	38 924	1 271	2 567	29 521	94 046	167 554	262 373	6 981
332	Fabricated metal product mfg	—	3	3	f	D	D	D	D	D	D	D	D	3 482
3325	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
31-33	FLOYD COUNTY, IA													
	Manufacturing	3	17	5		591	16 602	470	938	11 138	30 517	65 170	94 541	9 454
31-33	FRANKLIN COUNTY, IA													
	Manufacturing	—	22	6		790	21 617	663	1 416	16 418	40 326	43 137	83 927	5 431
333	Machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D	D
31-33	GREENE COUNTY, IA													
	Manufacturing	—	17	5		525	14 351	393	767	8 837	36 257	48 043	83 438	1 712
31-33	HAMILTON COUNTY, IA													
	Manufacturing	—	30	14		2 861	75 847	2 377	4 874	55 609	161 349	310 952	471 984	11 894
311	Food mfg	—	6	4	f	D	D	D	D	D	D	D	D	3 424
3116	Meat product mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	3	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
31-33	HANCOCK COUNTY, IA													
	Manufacturing	—	27	9		1 126	29 711	797	1 599	17 928	54 957	169 041	221 234	4 459
333	Machinery mfg	—	6	3		527	15 194	344	750	8 807	19 621	34 741	55 059	D
3331	Agriculture, construction, & mining machinery mfg	—	3	3		517	14 946	336	740	8 644	19 148	34 481	54 324	D
31-33	HARDIN COUNTY, IA													
	Manufacturing	1	39	16		1 580	34 835	1 309	2 447	26 245	91 015	276 090	375 792	12 752
311	Food mfg	2	3	3	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENRY COUNTY, IA													
31-33	Manufacturing	-	34	12	2 839	85 173	2 130	4 539	57 818	357 018	385 983	717 417	14 669
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
HOWARD COUNTY, IA													
31-33	Manufacturing	-	20	5	1 405	29 209	1 169	1 972	25 732	91 498	89 294	177 652	3 846
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	1	1	f	D	D	D	D	D	D	D	D
HUMBOLDT COUNTY, IA													
31-33	Manufacturing	2	28	14	1 257	31 819	902	1 687	19 871	80 623	80 510	159 684	4 756
333	Machinery mfg	2	7	5	668	17 165	507	935	11 375	37 613	33 721	70 518	2 382
IDA COUNTY, IA													
31-33	Manufacturing	-	9	4	1 112	32 508	887	1 679	18 101	75 676	89 720	165 049	5 028
IOWA COUNTY, IA													
31-33	Manufacturing	-	31	10	4 698	144 677	3 813	7 294	101 219	283 668	400 303	678 781	28 824
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	h	D	D	D	D	D	D	D	D
JACKSON COUNTY, IA													
31-33	Manufacturing	2	34	17	1 208	25 729	1 019	1 762	18 152	80 623	121 715	194 501	3 723
JASPER COUNTY, IA													
31-33	Manufacturing	-	46	13	3 702	132 375	3 067	6 040	99 917	494 904	303 497	739 951	6 101
335	Electrical equipment, appliance, & component mfg	-	1	1	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, IA													
31-33	Manufacturing	-	37	13	1 751	56 353	1 508	2 677	43 817	149 978	105 833	256 573	8 151
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSON COUNTY, IA													
31-33	Manufacturing	-	89	14	3 639	121 075	2 940	6 165	89 497	1 857 629	643 328	2 510 397	55 145
323	Printing & related support activities	2	13	3	f	D	D	D	D	D	D	D	2 751
3231	Printing & related support activities	2	13	3	f	D	D	D	D	D	D	D	2 751
32311	Printing	2	12	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	3	1 240	36 951	1 063	2 387	28 793	82 923	82 635	164 962	7 657
3261	Plastics product mfg	-	9	3	1 240	36 951	1 063	2 387	28 793	82 923	82 635	164 962	7 657
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	24	1	520	19 411	437	952	15 357	46 943	37 370	84 892	D
JONES COUNTY, IA													
31-33	Manufacturing	-	23	8	889	23 534	716	1 347	16 925	78 967	91 482	170 091	6 819
KOSSUTH COUNTY, IA													
31-33	Manufacturing	-	30	10	1 126	33 732	918	1 780	25 147	92 905	115 930	207 323	3 910
LEE COUNTY, IA													
31-33	Manufacturing	-	70	36	6 397	209 034	4 910	9 759	144 834	762 040	893 190	1 671 509	75 167
311	Food mfg	-	5	3	1 118	49 194	762	1 637	28 707	202 489	295 822	513 397	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	2	2	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	527	21 870	393	755	14 512	218 199	245 794	464 047	11 689
326	Plastics & rubber products mfg	-	4	3	1 246	36 071	1 030	2 142	27 185	76 321	54 523	131 891	D
3262	Rubber product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	3	3	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	12	674	19 066	536	1 017	13 977	52 650	66 408	119 292	10 142
339	Miscellaneous mfg	5	4	2	748	20 708	568	1 057	12 095	51 532	25 729	76 888	D
3399	Other miscellaneous mfg ..	5	4	2	748	20 708	568	1 057	12 095	51 532	25 729	76 888	D
33994	Office supplies (except paper) mfg	5	2	2	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	5	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINN COUNTY, IA													
31-33	Manufacturing	1	239	95	22 877	935 016	11 730	22 747	388 409	3 617 005	2 811 906	6 376 141	212 737
311	Food mfg	2	22	15	3 334	161 516	2 329	5 182	113 209	1 689 448	1 356 654	3 046 185	101 442
3112	Grain & oilseed milling	2	8	8	2 817	146 143	2 104	4 722	107 211	1 632 971	1 273 660	2 906 917	91 894
31122	Starch & vegetable fats & oils mfg	-	5	5	884	44 079	565	1 296	24 846	472 272	881 138	1 353 270	D
311221	Wet corn milling	-	3	3	f		D	D	D	D	D	D	52 545
31123	Breakfast cereal mfg	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
311230	Breakfast cereal mfg ..	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
322	Paper mfg	-	4	4	596	27 840	410	987	17 582	117 557	158 438	273 554	6 793
323	Printing & related support activities	1	42	13	1 392	36 802	1 030	1 934	22 590	82 610	77 801	157 140	6 803
3231	Printing & related support activities	1	42	13	1 392	36 802	1 030	1 934	22 590	82 610	77 801	157 140	6 803
32311	Printing	1	38	12	1 284	34 362	941	1 768	21 073	78 078	76 516	151 312	D
323113	Commercial screen printing	-	10	4	681	16 840	507	920	10 322	42 054	54 440	93 189	2 722
326	Plastics & rubber products mfg	1	8	6	511	18 921	391	775	13 150	55 704	64 389	119 266	9 685
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	36	16	953	30 877	746	1 551	20 685	79 868	47 187	126 741	4 115
333	Machinery mfg	-	36	17	2 996	130 183	1 925	3 770	73 078	266 457	224 080	480 956	16 000
3331	Agriculture, construction, & mining machinery mfg	-	6	4	1 106	46 253	687	1 392	25 744	90 465	98 640	179 601	4 090
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	9	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	9	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	4	591	25 893	333	618	11 661	48 108	32 855	76 810	1 523
334	Computer & electronic product mfg	-	10	5	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
LOUISA COUNTY, IA													
31-33	Manufacturing	-	11	4	g	D	D	D	D	D	D	D	982
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAHASKA COUNTY, IA													
31-33	Manufacturing	-	26	11	1 020	26 326	805	1 664	18 120	112 026	118 717	230 622	5 917
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
MARION COUNTY, IA													
31-33	Manufacturing	-	44	14	6 687	229 795	5 426	11 016	167 378	690 665	700 922	1 388 500	35 273
321	Wood product mfg	-	4	2	h	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	4	2	h	D	D	D	D	D	D	D	D
32191	Millwork	-	2	1	h	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	1	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	3	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
MARSHALL COUNTY, IA													
31-33	Manufacturing	-	44	17	5 363	173 984	3 719	7 576	102 383	516 727	895 842	1 413 226	17 402
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	4	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	3	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
MITCHELL COUNTY, IA													
31-33	Manufacturing	-	16	9	1 021	27 384	842	1 674	17 049	104 386	81 291	186 321	5 914
MONROE COUNTY, IA													
31-33	Manufacturing	-	18	9	863	32 848	542	1 238	20 038	163 709	421 159	593 201	65 670
MONTGOMERY COUNTY, IA													
31-33	Manufacturing	1	11	5	1 365	32 400	1 222	2 355	26 602	92 710	91 172	185 024	3 056
332	Fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	1 486
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUSCATINE COUNTY, IA													
31-33	Manufacturing	-	70	33	6 523	252 676	4 937	10 623	176 162	1 506 691	1 122 505	2 631 091	161 950
311	Food mfg.....	-	9	5	1 749	67 737	1 150	2 168	38 981	249 171	358 860	613 899	D
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	3	1	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	5	606	17 947	480	1 107	12 655	109 227	100 465	205 121	9 078
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	5	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	9	6	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	5	5	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	5	5	g	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	2	f	D	D	D	D	D	D	D	D
PAGE COUNTY, IA													
31-33	Manufacturing	-	27	9	2 271	77 953	1 937	3 975	61 979	296 467	181 632	477 260	12 137
332	Fabricated metal product mfg	-	7	3	881	31 776	747	1 607	23 831	90 684	68 765	158 504	2 992
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PLYMOUTH COUNTY, IA													
31-33	Manufacturing	-	26	8	g	D	D	D	D	D	D	D	3 837
311	Food mfg.....	-	7	4	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	2	2	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POCAHONTAS COUNTY, IA													
31-33	Manufacturing	1	19	6	821	20 318	630	1 193	12 901	53 813	37 274	91 844	3 405
333	Machinery mfg	-	8	4	625	16 694	483	978	10 437	47 036	32 792	80 592	2 594
3339	Other general-purpose machinery mfg	-	6	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	4	4	574	15 514	450	926	9 802	44 065	30 059	75 003	2 417
POLK COUNTY, IA													
31-33	Manufacturing	-	410	131	19 790	688 568	13 985	27 680	427 609	2 106 881	3 014 889	5 054 878	139 986
311	Food mfg	1	44	20	h	D	D	D	D	D	D	D	D
3115	Dairy product mfg	5	5	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	6	4	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	8	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	6	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	3	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	5	2	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	2	1	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	107	27	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	107	27	h	D	D	D	D	D	D	D	D
32311	Printing	1	91	20	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	46	11	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	3	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	19	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	9	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	10	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	24	8	522	13 136	478	845	10 598	41 426	33 365	74 374	3 716
332	Fabricated metal product mfg	-	38	9	1 267	31 902	884	1 741	19 776	121 747	85 875	212 607	D
3323	Architectural & structural metals mfg	-	12	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	15	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	9	5	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	7	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	7	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	4	3	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	8	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	40	7	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	6	22	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POTTAWATTAMIE COUNTY, IA													
31-33	Manufacturing	1	59	26	4 109	113 186	3 285	6 422	84 571	429 356	453 987	888 662	29 180
311	Food mfg.....	-	8	5	1 644	46 626	1 395	2 627	38 579	261 274	228 226	494 060	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	5	3	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	3	1	f	D	D	D	D	D	D	D	24
323	Printing & related support activities.....	8	9	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	8	9	3	f	D	D	D	D	D	D	D	D
32311	Printing.....	8	9	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	8	5	3	f	D	D	D	D	D	D	D	D
POWESHIEK COUNTY, IA													
31-33	Manufacturing	-	32	15	1 533	42 712	1 249	2 394	30 089	108 922	113 655	226 584	6 669
336	Transportation equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
SCOTT COUNTY, IA													
31-33	Manufacturing	-	210	78	11 845	478 297	8 748	18 080	323 779	2 189 784	2 428 058	4 614 768	134 660
311	Food mfg.....	-	12	5	g	D	D	D	D	D	D	D	38 236
323	Printing & related support activities.....	-	29	4	f	D	D	D	D	D	D	D	3 947
3231	Printing & related support activities.....	-	29	4	f	D	D	D	D	D	D	D	3 947
32311	Printing.....	-	27	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	11	7	h	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	3	3	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	3	3	h	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	3	3	h	D	D	D	D	D	D	D	D
3315	Foundries.....	-	8	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	42	20	1 631	53 072	1 208	2 179	33 225	101 182	63 247	162 138	6 564
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	17	8	f	D	D	D	D	D	D	D	D
33271	Machine shops.....	-	15	7	519	14 479	436	787	10 103	28 401	21 173	48 325	2 381
332710	Machine shops.....	-	15	7	519	14 479	436	787	10 103	28 401	21 173	48 325	2 381
333	Machinery mfg.....	-	31	19	2 826	128 904	1 960	4 484	81 360	489 191	547 233	1 026 197	22 410
3331	Agriculture, construction, & mining machinery mfg....	-	5	5	g	D	D	D	D	D	D	D	15 237
33312	Construction machinery mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	3	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SIoux COUNTY, IA													
31-33	Manufacturing	-	67	28	4 610	104 645	3 387	6 925	74 782	305 677	522 337	821 974	11 550
311	Food mfg	-	15	6	1 022	21 951	898	1 764	18 313	129 844	342 169	473 715	2 052
3116	Meat product mfg	-	11	5	f	D	D	D	D	D	D	D	1 688
31161	Animal slaughtering & processing	-	11	5	f	D	D	D	D	D	D	D	1 688
311612	Meat processed from carcasses	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	14	5	514	14 198	429	1 024	11 732	31 871	21 944	53 237	2 408
STORY COUNTY, IA													
31-33	Manufacturing	1	75	28	3 577	108 387	2 449	4 582	58 154	652 050	341 687	988 576	32 449
323	Printing & related support activities	-	11	7	517	11 093	352	628	6 125	25 363	18 403	43 523	2 559
3231	Printing & related support activities	-	11	7	517	11 093	352	628	6 125	25 363	18 403	43 523	2 559
327	Nonmetallic mineral product mfg	-	5	3	f	D	D	D	D	D	D	D	4 094
3279	Other nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	895	34 390	493	934	11 581	190 663	81 968	271 849	15 025
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
TAMA COUNTY, IA													
31-33	Manufacturing	-	14	6	911	22 477	757	1 731	16 094	59 776	177 970	236 128	4 158
UNION COUNTY, IA													
31-33	Manufacturing	-	19	8	1 031	24 611	774	1 510	16 579	53 145	57 491	113 235	18 975
VAN BUREN COUNTY, IA													
31-33	Manufacturing	-	14	5	653	14 754	559	1 063	10 991	30 246	24 562	54 370	1 704
WAPELLO COUNTY, IA													
31-33	Manufacturing	-	22	9	2 701	92 455	2 139	3 914	64 714	290 718	448 990	741 836	36 951
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, IA													
31-33	Manufacturing	2	32	13	1 441	41 197	1 160	2 364	26 551	96 748	97 676	196 214	5 932
WAYNE COUNTY, IA													
31-33	Manufacturing	-	13	7	f	D	D	D	D	D	D	D	1 565

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEBSTER COUNTY, IA													
31-33	Manufacturing	-	60	20	2 554	81 684	1 625	3 597	48 240	748 276	412 783	1 110 929	135 706
325	Chemical mfg	1	6	5	1 181	37 609	556	1 252	16 657	446 848	138 036	533 604	D
3254	Pharmaceutical & medicine mfg	1	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	3	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	11	5	f	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	-	4	4	f	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	4	4	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	-	4	4	f	D	D	D	D	D	D	D	D
WINNEBAGO COUNTY, IA													
31-33	Manufacturing	-	13	5	4 006	105 521	3 292	6 635	70 222	262 779	376 285	640 479	9 762
336	Transportation equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	h	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WINNESHIEK COUNTY, IA													
31-33	Manufacturing	-	29	9	1 453	37 963	1 233	2 589	27 895	99 657	113 709	214 958	6 393
332	Fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	4	1	f	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	-	1	1	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	1	1	f	D	D	D	D	D	D	D	D
WOODBURY COUNTY, IA													
31-33	Manufacturing	-	113	59	i	D	D	D	D	D	D	D	99 373
311	Food mfg	-	25	20	h	D	D	D	D	D	D	D	5 465
3116	Meat product mfg	1	10	8	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	10	8	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	5	5	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	4	4	518	18 525	301	672	9 059	28 585	58 178	85 609	3 274
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
WORTH COUNTY, IA													
31-33	Manufacturing	-	12	3	596	12 529	458	958	8 293	26 188	23 060	49 205	1 414

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WRIGHT COUNTY, IA													
31-33	Manufacturing	-	25	10	1 318	39 169	1 021	2 126	27 132	131 013	415 318	546 537	9 356
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALGONA, IA													
31-33	Manufacturing	-	15	4	609	17 790	471	792	11 855	46 089	52 701	96 967	1 357
AMES, IA													
31-33	Manufacturing	1	44	16	2 344	75 292	1 563	3 059	39 556	568 081	260 679	824 145	24 924
327	Nonmetallic mineral product mfg	-	4	3	f	D	D	D	D	D	D	D	4 094
3279	Other nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
ANKENY, IA													
31-33	Manufacturing	-	14	5	2 225	111 200	1 617	2 520	75 507	487 377	450 073	879 561	16 746
311	Food mfg	1	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	1	1	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
ATLANTIC, IA													
31-33	Manufacturing	-	14	8	1 024	28 433	784	1 609	19 374	68 017	78 430	145 033	5 721

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BELMOND, IA													
31-33	Manufacturing	-	7	3	796	24 736	659	1 463	19 649	66 652	31 426	97 233	2 134
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
BETTENDORF, IA													
31-33	Manufacturing	2	28	13	1 127	34 312	845	1 972	23 019	72 831	59 644	130 852	4 671
BOONE, IA													
31-33	Manufacturing	-	16	8	712	17 289	574	1 127	12 509	60 045	49 741	109 165	2 153
BURLINGTON, IA													
31-33	Manufacturing	-	37	21	4 089	142 035	3 109	6 835	101 920	295 043	597 106	891 168	25 074
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CAMANCHE, IA													
31-33	Manufacturing	-	8	6	765	30 248	589	1 204	20 224	105 347	97 981	202 496	7 954
CARROLL, IA													
31-33	Manufacturing	-	24	7	g	D	D	D	D	D	D	D	10 271
321	Wood product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
CEDAR FALLS, IA													
31-33	Manufacturing	-	50	22	1 911	61 498	1 398	2 707	38 977	162 403	100 860	261 698	5 823
332	Fabricated metal product mfg	-	13	8	f	D	D	D	D	D	D	D	2 128
333	Machinery mfg	-	11	5	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CEDAR RAPIDS, IA													
31-33	Manufacturing	1	164	73	21 491	890 338	10 796	20 943	363 756	3 517 315	2 728 594	6 194 184	205 363
311	Food mfg	2	19	14	h	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	2	8	8	2 817	146 143	2 104	4 722	107 211	1 632 971	1 273 660	2 906 917	91 894
31122	Starch & vegetable fats & oils mfg	-	5	5	884	44 079	565	1 296	24 846	472 272	881 138	1 353 270	D
311221	Wet corn milling	-	3	3	f	D	D	D	D	D	D	D	52 545
31123	Breakfast cereal mfg	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
311230	Breakfast cereal mfg ..	4	3	3	1 933	102 064	1 539	3 426	82 365	1 160 699	392 522	1 553 647	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	32	10	1 129	29 508	824	1 521	17 749	62 245	63 151	122 453	5 387
3231	Printing & related support activities.....	2	32	10	1 129	29 508	824	1 521	17 749	62 245	63 151	122 453	5 387
32311	Printing	2	28	9	1 021	27 068	735	1 355	16 232	57 713	61 866	116 625	D
323113	Commercial screen printing.....	-	7	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	12	754	25 582	594	1 273	17 429	66 947	37 961	104 684	2 944
333	Machinery mfg	-	23	12	2 627	114 885	1 716	3 393	66 679	231 235	200 469	422 731	13 837
3331	Agriculture, construction, & mining machinery mfg....	-	4	4	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	6	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	6	1	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	8	4	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
CENTERVILLE, IA													
31-33	Manufacturing	-	11	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
CHARLES CITY, IA													
31-33	Manufacturing	3	12	5	571	16 296	453	913	10 928	29 806	64 469	93 147	9 428

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CHEROKEE, IA													
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	
CLARINDA, IA													
31-33	Manufacturing	-	6	4	983	34 191	822	1 777	25 420	93 459	69 067	161 609	3 105
332	Fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	
332991	Ball & roller bearing mfg	-	2	2	f	D	D	D	D	D	D	D	
CLINTON, IA													
31-33	Manufacturing	-	28	14	3 649	126 860	2 886	6 180	89 772	909 683	876 227	1 780 102	86 197
311	Food mfg	-	5	4	f	D	D	D	D	D	D	D	
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	3	3	g	D	D	D	D	D	D	D	
32221	Paperboard container mfg	-	3	3	g	D	D	D	D	D	D	D	
322212	Folding paperboard box mfg	-	2	2	f	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	6	3	2	f	D	D	D	D	D	D	D	
3261	Plastics product mfg	6	3	2	f	D	D	D	D	D	D	D	
32619	Other plastics product mfg	6	3	2	f	D	D	D	D	D	D	D	
326199	All other plastics product mfg	6	3	2	f	D	D	D	D	D	D	D	
CLIVE, IA *													
31-33	Manufacturing	-	18	7	972	25 639	667	1 319	16 656	88 067	109 421	197 084	3 285
COUNCIL BLUFFS, IA													
31-33	Manufacturing	1	41	22	h	D	D	D	D	D	D	D	
311	Food mfg	-	3	3	g	D	D	D	D	D	D	D	
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	
323	Printing & related support activities	8	8	3	f	D	D	D	D	D	D	D	
3231	Printing & related support activities	8	8	3	f	D	D	D	D	D	D	D	
32311	Printing	8	8	3	f	D	D	D	D	D	D	D	
323110	Commercial lithographic printing ..	8	5	3	f	D	D	D	D	D	D	D	
CRESCO, IA													
31-33	Manufacturing	-	12	4	1 331	28 034	1 103	1 861	24 775	90 197	77 792	164 864	3 601
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	
336214	Travel trailer & camper mfg	-	1	1	f	D	D	D	D	D	D	D	
CRESTON, IA													
31-33	Manufacturing	-	10	4	587	13 220	455	823	8 739	34 786	36 330	71 348	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DAVENPORT, IA													
31-33	Manufacturing	-	121	45	6 380	248 043	4 460	9 022	156 102	1 363 190	1 631 396	2 984 945	72 449
311	Food mfg	-	6	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	7	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	7	730	25 436	492	721	13 837	49 407	20 146	69 089	1 968
333	Machinery mfg	-	18	14	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	3	3	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
DECORAH, IA													
31-33	Manufacturing	-	14	6	1 212	31 203	1 047	2 251	23 382	86 186	103 969	191 646	D
332	Fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	1	1	f	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	-	1	1	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	1	1	f	D	D	D	D	D	D	D	D
DENISON, IA													
31-33	Manufacturing	-	15	7	g	D	D	D	D	D	D	D	D
311	Food mfg	-	4	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	g	D	D	D	D	D	D	D	D
DES MOINES, IA													
31-33	Manufacturing	-	234	73	11 168	375 775	8 073	16 640	235 942	1 027 848	1 818 475	2 841 655	82 837
311	Food mfg	1	24	12	2 021	61 410	1 077	2 381	30 332	199 095	1 112 314	1 306 188	11 941
3115	Dairy product mfg	5	5	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	6	4	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	8	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	5	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	68	19	2 140	69 574	1 709	3 409	49 122	137 194	95 345	232 871	14 962
3231	Printing & related support activities	-	68	19	2 140	69 574	1 709	3 409	49 122	137 194	95 345	232 871	14 962
32311	Printing	-	55	13	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	30	9	696	24 812	521	1 324	14 825	49 663	33 588	82 703	10 050
323111	Commercial gravure printing	-	3	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	16	6	719	26 987	428	734	9 357	94 736	87 166	178 639	D
326	Plastics & rubber products mfg	-	4	4	2 619	111 844	2 205	4 508	85 191	332 378	272 894	603 374	D
3262	Rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	3	662	16 429	438	899	8 121	43 230	52 807	100 963	D
333	Machinery mfg	-	13	4	532	20 221	331	715	9 957	44 814	36 481	79 878	D
339	Miscellaneous mfg	6	31	6	531	14 704	298	590	6 691	28 024	17 378	47 369	2 533
DE WITT, IA													
31-33	Manufacturing	1	10	7	668	17 385	541	999	13 011	79 861	41 038	119 061	3 301

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DUBUQUE, IA													
31-33	Manufacturing	-	86	45									25 993
311	Food mfg.....	-	5	5									D
3116	Meat product mfg.....	-	1	1									D
31161	Animal slaughtering & processing.....	-	1	1									D
311611	Animal (except poultry) slaughtering	-	1	1									D
321	Wood product mfg.....	-	3	2									D
332	Fabricated metal product mfg.....	-	19	11	1 317	41 429	980	1 827	26 027	103 169	94 784	194 746	D
3323	Architectural & structural metals mfg	-	6	3	559	14 173	405	748	8 584	40 310	34 047	74 363	1 498
337	Furniture & related product mfg.....	-	4	1									D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	4	1									D
33712	Household & institutional furniture mfg.....	-	1	1									D
337121	Upholstered household furniture mfg.....	-	1	1									D
339	Miscellaneous mfg.....	-	11	4									D
DYERSVILLE, IA *													
31-33	Manufacturing	1	18	9	1 249	41 591	859	1 713	19 277	156 532	94 208	246 957	6 837
339	Miscellaneous mfg.....	-	4	2									D
3399	Other miscellaneous mfg ..	-	4	2									D
33993	Doll, toy, & game mfg ...	-	3	2									D
339932	Game, toy, & children's vehicle mfg.....	-	3	2									D
ELDORA, IA													
31-33	Manufacturing	-	11	7	524	12 561	418	871	9 134	20 500	20 474	46 017	D
ELDRIDGE, IA													
31-33	Manufacturing	1	17	7	858	27 038	686	1 364	19 444	58 218	45 310	101 282	3 146
FAIRFIELD, IA													
31-33	Manufacturing	-	34	13	g	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
FOREST CITY, IA *													
31-33	Manufacturing	-	2	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
336213	Motor home mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
FORT DODGE, IA													
31-33	Manufacturing	-	44	15	1 976	61 309	1 194	2 650	34 019	634 072	325 624	911 283	85 181
325	Chemical mfg.....	1	4	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	1	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	1	3	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORT MADISON, IA													
31-33	Manufacturing	-	21	13	2 861	88 214	2 204	4 260	59 125	447 093	502 102	954 481	18 413
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	4	2	748	20 708	568	1 057	12 095	51 532	25 729	76 888	D
3399	Other miscellaneous mfg ..	5	4	2	748	20 708	568	1 057	12 095	51 532	25 729	76 888	D
33994	Office supplies (except paper) mfg	5	2	2	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	5	2	2	f	D	D	D	D	D	D	D	D
GARNER, IA													
31-33	Manufacturing	1	8	4	642	18 416	421	881	10 283	26 707	46 359	73 182	3 329
GRIMES, IA *													
31-33	Manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
GRINNELL, IA													
31-33	Manufacturing	-	17	9	1 051	29 802	919	1 849	23 490	78 070	74 539	151 950	5 506
HUMBOLDT, IA													
31-33	Manufacturing	2	18	12	1 134	29 113	811	1 507	17 948	73 163	75 833	147 669	4 335
333	Machinery mfg	2	6	5	f	D	D	D	D	D	D	D	D
INDEPENDENCE, IA													
31-33	Manufacturing	-	17	6	764	19 127	659	1 341	13 966	44 457	162 265	206 441	4 851
IOWA CITY, IA													
31-33	Manufacturing	-	48	10	2 945	102 742	2 341	4 929	76 187	1 769 541	560 741	2 339 244	51 662
323	Printing & related support activities	2	10	3	f	D	D	D	D	D	D	D	2 736
3231	Printing & related support activities	2	10	3	f	D	D	D	D	D	D	D	2 736
32311	Printing	2	10	3	f	D	D	D	D	D	D	D	2 736
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KEOKUK, IA													
31-33	Manufacturing	-	32	17	3 163	111 478	2 427	5 016	79 168	279 249	335 041	625 103	47 420
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	2	2	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	2	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
KNOXVILLE, IA													
31-33	Manufacturing	-	7	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
LE MARS, IA													
31-33	Manufacturing	-	14	6	g	D	D	D	D	D	D	D	3 418
311	Food mfg	-	6	4	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	2	2	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	2	2	f	D	D	D	D	D	D	D	D
MANCHESTER, IA													
31-33	Manufacturing	-	13	3	704	21 693	580	1 175	16 979	144 537	130 326	266 280	4 597
MAQUOKETA, IA													
31-33	Manufacturing	2	19	13	850	19 760	700	1 217	13 297	63 392	103 357	158 616	2 876
MARION, IA													
31-33	Manufacturing	-	39	8	607	20 984	365	699	10 235	44 341	31 210	74 753	2 694
MARSHALLTOWN, IA													
31-33	Manufacturing	-	38	15	i	D	D	D	D	D	D	D	D
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	2	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MASON CITY, IA													
31-33	Manufacturing	-	37	20	3 308	88 750	2 475	4 911	60 240	252 177	429 906	677 929	21 509
332	Fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONTICELLO, IA													
31-33	Manufacturing	-	9	5	566	15 991	445	881	12 062	57 503	62 513	119 838	5 240
MOUNT PLEASANT, IA													
31-33	Manufacturing	-	16	10	2 680	82 171	2 005	4 298	55 738	346 802	372 149	694 199	14 188
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MUSCATINE, IA													
31-33	Manufacturing	-	42	22	4 072	145 476	2 978	6 254	93 841	564 392	619 482	1 185 525	92 835
311	Food mfg	-	4	4	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	5	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	3	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	3	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
NEW HAMPTON, IA													
31-33	Manufacturing	-	8	5	1 061	27 460	828	1 352	15 240	106 757	84 605	191 565	10 544
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
NEWTON, IA														
31-33	Manufacturing	-	23	8	h	D	D	D	D	D	D	D	2 097	
335	Electrical equipment, appliance, & component mfg	-	1	1	h	D	D	D	D	D	D	D	D	
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D	
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D	
335224	Household laundry equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D	
OELWEIN, IA														
31-33	Manufacturing	-	10	6		512	14 151	391	836	10 551	39 978	32 512	71 402	1 523
ORANGE CITY, IA														
31-33	Manufacturing	-	11	7		1 993	43 184	1 276	2 440	29 922	66 826	157 821	226 327	2 966
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D	
3159	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D	
31599	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D	
315991	Hat, cap, & millinery mfg	-	1	1	g	D	D	D	D	D	D	D	D	
OSAGE, IA														
31-33	Manufacturing	-	4	4	f	D	D	D	D	D	D	D	D	
OSCEOLA, IA														
31-33	Manufacturing	-	14	8	g	D	D	D	D	D	D	D	D	
OSKALOOSA, IA														
31-33	Manufacturing	-	17	7		790	21 907	592	1 301	14 221	90 734	77 793	166 896	D
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D	
OTTUMWA, IA														
31-33	Manufacturing	-	19	8	h	D	D	D	D	D	D	D	D	
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D	
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D	
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D	
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	
PELLA, IA														
31-33	Manufacturing	-	29	10		3 651	120 224	3 056	5 858	83 946	284 774	156 230	440 062	D
321	Wood product mfg	-	4	2	h	D	D	D	D	D	D	D	D	
3219	Other wood product mfg ...	-	4	2	h	D	D	D	D	D	D	D	D	
32191	Millwork	-	2	1	h	D	D	D	D	D	D	D	D	
321911	Wood window & door mfg	-	2	1	h	D	D	D	D	D	D	D	D	
RED OAK, IA														
31-33	Manufacturing	1	9	5	g	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	1 486	
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
332999	All other miscellaneous fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
SHENANDOAH, IA *														
31-33	Manufacturing	-	13	3	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SIoux CENTER, IA													
31-33	Manufacturing	3	12	5	699	15 252	558	1 095	9 852	56 327	60 341	116 663	2 089
SIoux CITY, IA													
31-33	Manufacturing	1	94	52	6 018	160 227	4 290	8 109	96 813	476 963	1 378 553	1 853 719	D
311	Food mfg.....	-	23	18	2 634	63 272	1 949	3 525	40 222	248 943	1 014 341	1 258 066	D
3116	Meat product mfg.....	1	9	7	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	1	9	7	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	5	5	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
SPENCER, IA													
31-33	Manufacturing	1	21	8	616	14 857	504	939	11 170	40 096	36 545	78 516	D
SPIRIT LAKE, IA													
31-33	Manufacturing	-	15	6	1 295	34 074	972	1 683	18 499	70 866	169 462	251 793	4 282
314	Textile product mills.....	-	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	1	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
314991	Rope, cordage, & twine mills	-	1	1	f	D	D	D	D	D	D	D	D
STORM LAKE, IA													
31-33	Manufacturing	-	14	5	2 304	48 849	2 014	4 454	42 181	100 329	554 795	654 813	10 667
311	Food mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
URBANDALE, IA *													
31-33	Manufacturing	-	23	8	861	31 913	414	857	13 110	126 660	164 819	288 161	3 321
WASHINGTON, IA													
31-33	Manufacturing	2	14	7	1 013	30 946	867	1 842	21 079	80 096	58 987	136 725	4 159

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WATERLOO, IA													
31-33	Manufacturing	-	93	45	11 413	487 436	8 402	17 778	338 475	2 082 662	2 767 612	4 848 123	58 578
311	Food mfg	-	13	8	h	D	D	D	D	D	D	D	4 769
3116	Meat product mfg	-	4	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	9	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	2	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	h	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	2	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	3	2	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
WAVERLY, IA													
31-33	Manufacturing	-	15	10	1 519	47 913	1 128	2 496	32 920	102 840	293 607	402 245	12 594
WEBSTER CITY, IA													
31-33	Manufacturing	-	21	11	g	D	D	D	D	D	D	D	8 500
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
WEST BURLINGTON, IA													
31-33	Manufacturing	-	9	4	1 195	39 905	1 002	1 697	31 358	102 595	114 488	216 799	2 403
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
WEST DES MOINES, IA *													
31-33	Manufacturing	1	43	16	1 390	43 595	991	1 990	24 495	113 983	83 274	194 641	9 841
WILTON, IA *													
31-33	Manufacturing	-	7	5	1 159	47 801	1 005	2 338	40 027	163 155	147 805	311 952	8 350
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
IOWA		IOWA—Con.	
Companies ¹	3 309	Quantity of electricity purchased for heat and power	1,000 kWh.. 13 636 586
All establishments	3 749	Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Establishments with 1 to 19 employees	2 336	Total value of shipments	\$1,000.. 62 413 687
Establishments with 20 to 99 employees	927	Value of resales	\$1,000.. 2 891 477
Establishments with 100 employees or more	486	Value added	\$1,000.. 28 673 277
All employees	235 880	Total inventories, beginning of year	\$1,000.. 5 358 806
Total compensation ²	\$1,000.. 9 694 581	Finished goods inventories, beginning of year	\$1,000.. 2 123 273
Annual payroll	\$1,000.. 7 573 258	Work-in-process inventories, beginning of year	\$1,000.. 1 291 310
Total fringe benefits	\$1,000.. 2 121 323	Materials and supplies inventories, beginning of year	\$1,000.. 1 944 223
Production workers, average for year	175 933	Total inventories, end of year	\$1,000.. 5 773 389
Production workers on March 12	173 050	Finished goods inventories, end of year	\$1,000.. 2 216 365
Production workers on May 12	175 643	Work-in-process inventories, end of year	\$1,000.. 1 434 894
Production workers on August 12	177 097	Materials and supplies inventories, end of year	\$1,000.. 2 122 130
Production workers on November 12	177 942	Gross book value of total assets at beginning of year	\$1,000.. 20 440 989
Production-worker hours	1,000.. 354 220	Total capital expenditures (new and used)	\$1,000.. 1 978 727
Production-worker wages	\$1,000.. 4 936 083	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 304 358
Total cost of materials	\$1,000.. 33 981 805	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 674 369
Cost of materials, parts, containers, etc., consumed	\$1,000.. 30 120 827	Total retirements ²	\$1,000.. 607 077
Cost of resales	\$1,000.. 2 318 930	Gross book value of total assets at end of year	\$1,000.. 21 812 639
Cost of fuels	\$1,000.. 451 909	Total depreciation during year ²	\$1,000.. 1 346 922
Cost of purchased electricity	\$1,000.. 548 574	Total rental payments ²	\$1,000.. 247 616
Cost of contract work	\$1,000.. 541 565	Buildings and other structures rental payments ²	\$1,000.. 98 495
		Machinery and equipment rental payments ²	\$1,000.. 149 121

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

IOWA

Carlisle is in Polk and Warren Counties.

Clive is in Dallas and Polk Counties.

Dyersville is in Delaware and Dubuque Counties.

Forest City is in Hancock and Winnebago Counties.

Grimes is in Dallas and Polk Counties.

Sheldon is in O'Brien and Sioux Counties.

Shenandoah is in Fremont and Page Counties.

Urbandale is in Dallas and Polk Counties.

West Des Moines is in Dallas and Polk Counties.

Wilton is in Cedar and Muscatine Counties.

Appendix E. Metropolitan Areas

IOWA

Cedar Rapids, IA MSA

Linn County, IA

Davenport—Moline—Rock Island, IA—IL MSA

Henry County, IL

Rock Island County, IL

Scott County, IA

Des Moines, IA MSA

Dallas County, IA

Polk County, IA

Warren County, IA

Dubuque, IA MSA

Dubuque County, IA

Iowa City, IA MSA

Johnson County, IA

Omaha, NE—IA MSA

Pottawattamie County, IA

Cass County, NE

Douglas County, NE

Sarpy County, NE

Washington County, NE

Sioux City, IA—NE MSA

Woodbury County, IA

Dakota County, NE

Waterloo—Cedar Falls, IA MSA

Black Hawk County, IA

Idaho

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Geographic Area Series



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1997 Economic Census
Manufacturing
Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
IDAHO													
31-33	Manufacturing	-	1 647	419	66 184	2 099 750	50 362	89 417	1 277 198	6 393 062	10 659 688	16 952 872	834 503
311	Food mfg.....	1	154	73	16 238	372 867	13 674	25 520	273 828	1 431 958	2 560 208	3 977 685	155 921
3111	Animal food mfg.....	-	11	2	238	7 013	159	325	3 623	19 585	57 809	76 884	1 445
31111	Animal food mfg.....	-	11	2	238	7 013	159	325	3 623	19 585	57 809	76 884	1 445
311119	Other animal food mfg.....	-	11	2	238	7 013	159	325	3 623	19 585	57 809	76 884	1 445
3112	Grain & oilseed milling	2	7	2	121	4 437	94	191	3 045	23 824	54 045	79 013	D
31121	Flour milling & malt mfg .	3	5	2	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	11	4	g	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	32	27	9 570	219 929	8 248	15 657	161 949	862 381	690 269	1 540 704	85 208
31141	Frozen food mfg.....	2	15	14	5 740	133 190	4 989	9 429	102 665	575 473	464 183	1 039 528	42 200
311411	Frozen fruit, juice, & vegetable mfg.....	2	12	11	4 947	115 325	4 414	8 520	93 422	529 186	376 226	905 165	D
311412	Frozen specialty food mfg.....	2	3	3	793	17 865	575	909	9 243	46 287	87 957	134 363	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	17	13	3 830	86 739	3 259	6 228	59 284	286 908	226 086	501 176	43 008
311421	Fruit & vegetable canning.....	-	3	1	e	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	2	1	e	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	12	11	3 094	72 244	2 656	5 108	48 847	240 576	184 863	423 806	41 412
3115	Dairy product mfg.....	-	21	17	1 718	34 857	1 349	2 210	25 400	144 936	742 853	891 435	41 739
31151	Dairy product (except frozen) mfg.....	-	20	17	g	D	D	D	D	D	D	D	41 739
311511	Fluid milk mfg.....	-	6	4	e	D	D	D	D	D	D	D	D
311513	Cheese mfg.....	-	13	12	1 285	22 551	1 097	1 718	17 813	112 163	648 971	765 377	34 323
3116	Meat product mfg.....	1	24	9	2 064	38 993	1 826	3 315	29 317	98 568	710 012	799 523	15 194
31161	Animal slaughtering & processing.....	1	24	9	2 064	38 993	1 826	3 315	29 317	98 568	710 012	799 523	15 194
311611	Animal (except poultry) slaughtering.....	2	15	4	1 121	19 811	973	1 791	16 406	35 021	546 949	575 786	9 454
311612	Meat processed from carcasses.....	-	7	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	2	36	5	f	D	D	D	D	D	D	D	1 914
31181	Bread & bakery product mfg.....	2	32	4	463	8 917	210	314	4 211	24 503	10 944	35 445	1 662
311811	Retail bakeries.....	6	22	1	133	1 774	69	93	861	3 941	2 151	6 092	D
311812	Commercial bakeries .	1	10	3	330	7 143	141	221	3 350	20 562	8 793	29 353	D
3119	Other food mfg.....	1	9	5	f	D	D	D	D	D	D	D	2 079
31194	Seasoning & dressing mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	5	2	135	1 985	122	99	1 576	4 420	3 769	8 218	490
311999	All other miscellaneous food mfg.....	1	4	2	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	1	24	2	224	5 345	149	209	2 482	28 927	50 467	79 284	1 608
3121	Beverage mfg.....	1	24	2	224	5 345	149	209	2 482	28 927	50 467	79 284	1 608
31211	Soft drink & ice mfg.....	-	8	2	137	3 872	92	125	1 557	21 093	43 535	64 685	D
312111	Soft drink mfg.....	-	3	2	119	3 342	80	96	1 280	20 386	42 774	63 220	D
314	Textile product mills.....	2	38	5	285	4 437	221	374	2 830	10 875	11 023	21 852	D
3149	Other textile product mills..	2	29	4	c	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	4	19	3	185	2 762	142	234	1 690	4 806	4 528	9 296	D
314911	Textile bag mills.....	2	6	3	136	2 014	103	172	1 214	3 591	3 176	6 730	D
315	Apparel mfg.....	1	18	6	286	4 176	251	423	3 138	7 175	4 826	12 400	1 187
3152	Cut & sew apparel mfg....	1	12	5	c	D	D	D	D	D	D	D	1 152
31521	Cut & sew apparel contractors.....	-	6	3	132	1 780	124	244	1 574	2 841	451	3 236	D
316	Leather & allied product mfg .	-	11	1	210	4 466	183	392	3 468	17 357	7 876	22 960	285
3169	Other leather & allied product mfg.....	-	9	1	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg.....	-	9	1	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg.....	-	6	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IDAHO—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	—	206	82	9 288	262 352	8 019	16 154	208 576	615 601	1 418 162	2 010 498	33 811
3211	Sawmills & wood preservation	—	78	35	3 867	131 105	3 446	7 297	109 297	316 538	745 063	1 043 447	26 707
32111	Sawmills & wood preservation	—	78	35	3 867	131 105	3 446	7 297	109 297	316 538	745 063	1 043 447	26 707
321113	Sawmills	—	67	34	3 760	128 124	3 361	7 145	107 349	302 367	725 033	1 013 424	26 192
321114	Wood preservation	2	11	1	107	2 981	85	152	1 948	14 171	20 030	30 023	515
3212	Veneer, plywood, & engineered wood product mfg	—	24	17	1 364	38 203	1 110	2 384	28 834	77 949	144 525	221 023	2 861
32121	Veneer, plywood, & engineered wood product mfg	—	24	17	1 364	38 203	1 110	2 384	28 834	77 949	144 525	221 023	2 861
321212	Softwood veneer & plywood mfg	—	5	5	676	21 036	618	1 389	18 332	38 305	83 645	120 671	1 881
321213	Engineered wood member (except truss) mfg	—	2	2	c	D	D	D	D	D	D	D	D
321214	Truss mfg	2	14	7	408	8 712	279	536	4 974	17 330	22 507	39 926	742
321219	Reconstituted wood product mfg	—	3	3	c	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	104	30	4 057	93 044	3 463	6 473	70 445	221 114	528 574	746 028	4 243
32191	Millwork	—	47	17	2 210	50 211	1 915	3 649	41 056	122 682	390 479	510 104	1 736
321911	Wood window & door mfg	—	17	6	745	18 032	565	1 061	13 146	39 740	48 479	89 573	390
321912	Cut stock, resawing lumber, & planing	—	20	8	660	16 151	599	1 100	13 633	50 024	230 073	279 087	1 049
321918	Other millwork (including flooring)	—	10	3	805	16 028	751	1 488	14 277	32 918	111 927	141 444	297
32192	Wood container & pallet mfg	7	11	2	128	1 942	109	218	1 450	3 951	5 398	9 336	294
321920	Wood container & pallet mfg	7	11	2	128	1 942	109	218	1 450	3 951	5 398	9 336	294
32199	All other wood product mfg	2	46	11	1 719	40 891	1 439	2 606	27 939	94 481	132 697	226 588	2 213
321991	Manufactured home (mobile home) mfg	2	6	5	1 267	30 875	1 086	1 920	21 328	72 509	107 201	179 273	1 521
321992	Prefabricated wood building mfg	1	16	3	272	6 162	200	385	3 606	9 751	15 913	25 600	259
321999	All other miscellaneous wood product mfg	1	24	3	180	3 854	153	301	3 005	12 221	9 583	21 715	433
322	Paper mfg	—	9	6	1 979	87 220	1 588	3 264	65 374	285 776	325 336	613 265	23 379
3221	Pulp, paper, & paperboard mills	—	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	7	4	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	6	4	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	176	20	2 431	50 328	1 684	3 141	31 953	123 196	68 740	191 583	10 033
3231	Printing & related support activities	3	176	20	2 431	50 328	1 684	3 141	31 953	123 196	68 740	191 583	10 033
32311	Printing	3	163	18	2 314	47 686	1 596	2 986	30 027	117 589	67 423	184 742	9 146
323110	Commercial lithographic printing	2	87	11	867	19 476	585	929	12 238	39 437	23 359	62 608	5 205
323113	Commercial screen printing	1	16	1	106	1 656	80	117	1 035	3 888	3 014	6 906	D
323114	Quick printing	1	38	3	944	15 989	610	1 300	9 277	41 423	23 372	64 757	2 724
323116	Manifold business form printing	8	2	2	c	D	D	D	D	D	D	D	D
32312	Support activities for printing	4	13	2	117	2 642	88	155	1 926	5 607	1 317	6 841	887
324	Petroleum & coal products mfg	—	5	2	c	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	5	2	c	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	4	2	c	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	—	4	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IDAHO—Con.												
	Manufacturing—Con.												
325	Chemical mfg	—	45	13	2 979	102 238	1 950	4 327	66 883	422 564	484 909	904 130	49 344
3251	Basic chemical mfg	—	8	2	697	36 735	492	1 098	24 766	202 091	211 717	416 804	23 442
32518	Other basic inorganic chemical mfg	—	3	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	3	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	12	3	1 003	40 294	598	1 577	27 361	147 843	217 502	361 129	D
32531	Fertilizer mfg	—	10	3	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	—	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	6	3	288	6 131	255	548	4 652	28 350	19 673	48 020	857
32541	Pharmaceutical & medicine mfg	—	6	3	288	6 131	255	548	4 652	28 350	19 673	48 020	857
325412	Pharmaceutical preparation mfg	—	4	3	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	9	10	1	f	D	D	D	D	D	D	D	1 504
32562	Toilet preparation mfg	9	2	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	9	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	8	6	3	146	2 609	69	93	1 305	9 851	8 257	18 153	123
32599	All other chemical product & preparation mfg	8	6	3	146	2 609	69	93	1 305	9 851	8 257	18 153	123
325998	All other miscellaneous chemical product & preparation mfg	8	5	3	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	61	17	1 543	30 753	1 284	2 103	19 817	77 378	59 140	143 508	4 354
3261	Plastics product mfg	—	49	15	1 447	28 512	1 216	1 984	18 404	71 126	53 397	131 295	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	6	2	100	1 953	83	117	1 153	4 859	3 557	8 768	152
32619	Other plastics product mfg	—	35	12	1 299	25 243	1 094	1 808	16 647	62 622	45 560	114 602	3 430
326199	All other plastics product mfg	—	33	12	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	89	26	1 363	37 688	1 064	1 905	26 616	83 507	88 745	171 700	8 886
3273	Cement & concrete product mfg	1	59	23	1 184	33 604	924	1 667	23 993	73 398	81 415	154 373	8 426
32732	Ready-mix concrete mfg	1	38	18	891	24 067	725	1 306	18 001	47 402	60 728	108 023	6 334
327320	Ready-mix concrete mfg	1	38	18	891	24 067	725	1 306	18 001	47 402	60 728	108 023	6 334
32733	Concrete pipe, brick, & block mfg	—	6	2	c	D	D	D	D	D	D	D	391
32739	Other concrete product mfg	1	14	2	114	2 934	92	167	2 074	5 363	7 289	12 176	D
327390	Other concrete product mfg	1	14	2	114	2 934	92	167	2 074	5 363	7 289	12 176	D
331	Primary metal mfg	1	12	3	149	4 081	123	190	2 632	8 528	12 269	20 823	D
332	Fabricated metal product mfg	1	232	47	3 918	115 972	3 012	5 524	74 885	242 634	145 587	387 175	18 853
3321	Forging & stamping	2	5	1	146	3 994	81	170	2 046	8 247	9 103	16 719	841
33211	Forging & stamping	2	5	1	146	3 994	81	170	2 046	8 247	9 103	16 719	841
332116	Metal stamping	—	3	1	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	62	21	1 305	43 694	941	1 848	24 856	96 184	63 896	161 128	7 722
33231	Plate work & fabricated structural product mfg	2	24	6	375	14 071	277	544	7 999	27 762	26 502	55 556	1 158
332312	Fabricated structural metal mfg	3	14	4	218	7 729	165	301	4 428	16 950	15 983	34 471	915
332313	Plate work mfg	—	5	1	c	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	38	15	930	29 623	664	1 304	16 857	68 422	37 394	105 572	6 564
332322	Sheet metal work mfg	—	25	13	829	27 056	588	1 142	15 290	63 661	33 083	96 398	6 325
3324	Boiler, tank, & shipping container mfg	1	13	5	299	9 374	243	447	6 375	16 809	13 502	29 733	491
33242	Metal tank (heavy gauge) mfg	1	6	4	211	6 797	169	310	4 355	7 949	7 966	15 926	286
332420	Metal tank (heavy gauge) mfg	1	6	4	211	6 797	169	310	4 355	7 949	7 966	15 926	286

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IDAHO—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	102	15	1 036	25 240	837	1 370	18 267	47 328	19 336	66 778	5 523
33271	Machine shops	3	92	9	699	16 481	567	858	11 843	30 514	12 249	42 873	3 402
332710	Machine shops	3	92	9	699	16 481	567	858	11 843	30 514	12 249	42 873	3 402
33272	Turned product & screw, nut, & bolt mfg	—	10	6	337	8 759	270	512	6 424	16 814	7 087	23 905	2 121
332721	Precision turned product mfg	—	10	6	337	8 759	270	512	6 424	16 814	7 087	23 905	2 121
3328	Coating, engraving, heat treating, & allied activities .	3	11	2	147	4 169	113	208	2 833	8 257	2 311	10 560	861
33281	Coating, engraving, heat treating, & allied activities	3	11	2	147	4 169	113	208	2 833	8 257	2 311	10 560	861
3329	Other fabricated metal product mfg	—	22	1	835	25 418	678	1 273	17 819	56 525	30 625	86 239	2 930
33299	All other fabricated metal product mfg	—	19	1	f	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	—	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	129	30	2 776	89 316	1 914	3 864	51 764	229 103	156 937	377 581	21 665
3331	Agriculture, construction, & mining machinery mfg	6	44	14	1 135	28 479	824	1 597	19 690	65 610	69 031	130 251	7 886
33311	Agricultural implement mfg	7	32	8	769	18 149	551	1 064	13 173	35 223	42 161	78 144	6 723
333111	Farm machinery & equipment mfg	7	32	8	769	18 149	551	1 064	13 173	35 223	42 161	78 144	6 723
33312	Construction machinery mfg	4	10	6	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	4	10	6	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	28	5	968	40 232	639	1 435	21 127	117 587	54 557	168 020	9 141
33329	Other industrial machinery mfg	—	22	4	926	38 785	608	1 371	20 261	114 479	52 415	162 375	D
333294	Food product machinery mfg	1	6	1	123	4 553	97	200	3 167	10 246	7 922	18 516	317
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	6	10	4	129	4 232	83	185	1 852	9 145	7 012	16 453	562
33331	Commercial & service industry machinery mfg	6	10	4	129	4 232	83	185	1 852	9 145	7 012	16 453	562
3335	Metalworking machinery mfg	1	16	3	193	6 741	140	242	3 885	11 794	5 991	17 976	3 191
33351	Metalworking machinery mfg	1	16	3	193	6 741	140	242	3 885	11 794	5 991	17 976	3 191
333515	Cutting tool & machine tool accessory mfg ..	—	5	2	128	4 866	89	174	2 609	8 165	4 851	13 225	2 903
3339	Other general-purpose machinery mfg	2	24	3	e	D	D	D	D	D	D	D	702
33392	Material handling equipment mfg	1	6	2	127	3 352	106	193	2 537	8 519	7 435	15 687	D
333922	Conveyor & conveying equipment mfg	—	5	2	c	D	D	D	D	D	D	D	265
33399	All other general-purpose machinery mfg	5	15	1	124	3 221	84	143	1 679	6 764	5 597	12 239	392
334	Computer & electronic product mfg	—	57	29	16 797	793 150	10 839	14 050	359 458	2 484 159	4 984 453	7 423 870	492 750
3341	Computer & peripheral equipment mfg	—	12	6	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	12	6	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	2	2	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	8	3	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	6	3	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IDAHO—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	19	12	9 875	438 586	8 224	10 529	293 246	1 797 267	867 210	2 555 813	D
33441	Semiconductor & other electronic component mfg	—	19	12	9 875	438 586	8 224	10 529	293 246	1 797 267	867 210	2 555 813	D
334413	Semiconductor & related device mfg ...	—	6	3	8 439	395 858	7 044	7 926	256 862	1 717 144	590 710	2 198 945	D
334418	Printed circuit assembly (electronic assembly) mfg	—	5	5	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	4	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	5	17	8	f	D	D	D	D	D	D	D	2 706
33451	Navigational, measuring, medical, & control instruments mfg	5	17	8	f	D	D	D	D	D	D	D	2 706
334511	Search, detection, navigation, & guidance instrument mfg	1	5	2	168	3 765	83	175	1 867	10 256	11 763	21 457	244
334515	Electricity measuring & testing instrument mfg	9	1	1	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	27	9	578	16 638	335	686	6 706	35 173	24 684	60 879	D
3353	Electrical equipment mfg ..	4	15	5	270	8 131	163	300	3 675	15 117	10 330	25 460	D
33531	Electrical equipment mfg	4	15	5	270	8 131	163	300	3 675	15 117	10 330	25 460	D
335314	Relay & industrial control mfg	—	7	3	155	4 511	73	124	1 183	7 851	4 068	11 767	D
3359	Other electrical equipment & component mfg	—	6	4	281	7 721	151	345	2 543	18 050	12 025	31 018	D
33593	Wiring device mfg	—	2	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	50	19	1 926	47 428	1 512	2 764	29 261	113 398	136 016	239 139	2 125
3362	Motor vehicle body & trailer mfg	—	26	13	1 157	25 624	939	1 643	15 782	49 018	74 858	124 880	1 410
33621	Motor vehicle body & trailer mfg	—	26	13	1 157	25 624	939	1 643	15 782	49 018	74 858	124 880	1 410
336211	Motor vehicle body mfg	1	5	2	c	D	D	D	D	D	D	D	361
336212	Truck trailer mfg	—	4	1	c	D	D	D	D	D	D	D	93
336214	Travel trailer & camper mfg	1	17	10	820	16 682	706	1 319	12 135	25 635	52 050	79 459	956
3363	Motor vehicle parts mfg ...	9	6	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	142	16	1 782	36 662	1 520	2 731	27 328	74 483	61 794	136 446	2 942
3371	Household & institutional furniture & kitchen cabinet mfg	3	119	12	1 036	19 372	908	1 486	14 533	36 267	30 565	67 053	1 349
33711	Wood kitchen cabinet & counter top mfg	3	67	3	359	7 159	299	456	5 301	13 449	9 915	23 372	488
337110	Wood kitchen cabinet & counter top mfg ...	3	67	3	359	7 159	299	456	5 301	13 449	9 915	23 372	488
33712	Household & institutional furniture mfg	3	52	9	677	12 213	609	1 030	9 232	22 818	20 650	43 681	861
337121	Upholstered household furniture mfg	2	4	2	282	5 250	259	477	3 911	9 759	10 416	20 227	284
337122	Nonupholstered wood household furniture mfg	5	37	4	266	4 548	244	389	3 762	8 822	7 255	16 185	413
337127	Institutional furniture mfg	—	6	3	111	2 172	90	144	1 384	3 702	2 303	6 023	83
3372	Office furniture (including fixtures) mfg	—	17	3	682	15 853	570	1 175	12 119	37 175	26 174	63 253	1 409
33721	Office furniture (including fixtures) mfg	—	17	3	682	15 853	570	1 175	12 119	37 175	26 174	63 253	1 409
337214	Office furniture (except wood) mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	IDAHO—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	2	157	13	1 271	29 190	908	1 523	16 185	93 359	33 456	122 745	3 319
3391	Medical equipment & supplies mfg.....	2	66	2	528	12 007	417	727	7 230	57 593	12 252	65 481	1 425
33911	Medical equipment & supplies mfg.....	2	66	2	528	12 007	417	727	7 230	57 593	12 252	65 481	1 425
339112	Surgical & medical instrument mfg.....	—	6	1	c	D	D	D	D	D	D	D	612
339113	Surgical appliance & supplies mfg.....	4	9	1	104	2 666	77	128	1 402	6 217	2 836	9 120	369
339116	Dental laboratories ..	5	42	—	157	3 509	123	190	2 329	8 087	3 439	11 417	315
3399	Other miscellaneous mfg ..	2	91	11	743	17 183	491	796	8 955	35 766	21 204	57 264	1 894
33992	Sporting & athletic goods mfg.....	6	23	1	127	2 241	96	128	1 330	5 956	4 178	10 177	265
339920	Sporting & athletic goods mfg.....	6	23	1	127	2 241	96	128	1 330	5 956	4 178	10 177	265
33995	Sign mfg.....	1	37	5	342	9 615	200	369	4 621	15 557	8 061	23 602	914
339950	Sign mfg.....	1	37	5	342	9 615	200	369	4 621	15 557	8 061	23 602	914
33999	All other miscellaneous mfg.....	—	18	3	165	3 131	114	179	1 444	8 243	4 621	13 230	556
339999	All other miscellaneous mfg.....	—	14	3	157	2 973	107	165	1 336	7 892	4 436	12 691	527

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; h–1,000 to 2,499 employees; i–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOISE CITY, ID MSA												
	Manufacturing	—	571	155	30 667	1 130 712	21 729	34 701	597 203	3 387 328	6 572 835	9 900 047	382 544
311	Food mfg.....	1	51	23	4 633	103 178	3 754	6 996	77 879	359 336	932 595	1 291 263	26 122
3113	Sugar & confectionery product mfg.....	—	7	2	f	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	7	5	1 712	38 234	1 506	2 595	29 460	164 276	78 681	242 844	7 886
31141	Frozen food mfg.....	1	6	5	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	7	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	—	4	4	619	13 523	413	873	9 502	28 925	186 664	219 339	D
31151	Dairy product (except frozen) mfg.....	—	4	4	619	13 523	413	873	9 502	28 925	186 664	219 339	D
311511	Fluid milk mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
311513	Cheese mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	13	6	1 170	21 412	1 017	1 894	17 463	38 363	552 900	584 243	D
31161	Animal slaughtering & processing.....	2	13	6	1 170	21 412	1 017	1 894	17 463	38 363	552 900	584 243	D
311611	Animal (except poultry) slaughtering.....	2	8	4	g	D	D	D	D	D	D	D	9 358
3118	Bakeries & tortilla mfg.....	1	15	5	438	8 964	204	339	4 283	24 492	11 640	36 137	1 804
31181	Bread & bakery product mfg.....	1	13	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	5	3	312	6 897	127	202	3 183	19 890	8 371	28 259	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOISE CITY, ID MSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	1	50	20	2 715	62 913	2 320	4 480	47 842	151 131	300 672	448 434	3 715
3212	Veneer, plywood, & engineered wood product mfg	3	7	4	315	6 262	258	529	4 680	13 196	15 017	28 309	584
32121	Veneer, plywood, & engineered wood product mfg	3	7	4	315	6 262	258	529	4 680	13 196	15 017	28 309	584
3219	Other wood product mfg	1	39	14	2 247	53 443	1 922	3 667	40 148	129 028	265 194	392 616	2 252
32191	Millwork	—	17	8	997	24 033	864	1 743	19 501	61 878	163 873	224 521	489
321911	Wood window & door mfg	—	6	3	465	12 448	385	770	9 862	30 850	36 314	67 919	139
321918	Other millwork (including flooring)	—	6	2	e	D	D	D	D	D	D	D	D
32199	All other wood product mfg	2	17	5	1 206	28 834	1 022	1 873	20 213	65 807	99 454	164 877	1 680
321991	Manufactured home (mobile home) mfg	2	4	4	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	74	13	905	22 376	600	1 026	12 682	40 363	25 937	66 084	5 147
3231	Printing & related support activities	1	74	13	905	22 376	600	1 026	12 682	40 363	25 937	66 084	5 147
32311	Printing	1	64	11	806	20 268	527	903	11 119	36 010	24 894	60 764	4 406
323110	Commercial lithographic printing	2	33	7	398	10 776	242	447	6 302	20 581	13 005	33 433	3 546
326	Plastics & rubber products mfg	1	24	8	617	12 082	502	759	7 398	14 531	26 964	47 076	D
3261	Plastics product mfg	1	21	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	16	7	553	10 449	457	681	6 476	10 746	23 168	39 221	D
326199	All other plastics product mfg	—	14	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	30	9	f	D	D	D	D	D	D	D	2 880
3273	Cement & concrete product mfg	—	16	8	f	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	—	7	6	400	9 841	344	557	7 587	18 283	26 263	44 569	2 062
327320	Ready-mix concrete mfg	—	7	6	400	9 841	344	557	7 587	18 283	26 263	44 569	2 062
332	Fabricated metal product mfg	1	80	24	g	D	D	D	D	D	D	D	9 998
3323	Architectural & structural metals mfg	1	27	14	883	30 069	616	1 302	16 535	68 233	44 367	112 253	6 408
33232	Ornamental & architectural metal products mfg	—	17	10	647	20 252	446	937	11 214	51 055	27 069	78 063	5 384
332322	Sheet metal work mfg	—	12	8	584	18 507	400	833	10 123	47 745	23 752	71 338	5 248
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	33	6	388	10 068	304	557	7 187	15 545	7 047	22 830	2 336
333	Machinery mfg	1	38	8	1 338	50 453	913	1 936	27 204	137 358	78 258	210 761	12 990
3331	Agriculture, construction, & mining machinery mfg	5	10	2	270	7 453	193	358	4 584	17 719	20 499	38 356	876
3332	Industrial machinery mfg	—	9	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	7	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	27	16	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	8	5	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	8	5	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	6	3	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOISE CITY, ID MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	11	7	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	11	7	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	3	2	i	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	4	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	6	3	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	6	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	25	13		1 536	38 331	1 175	2 201	23 040	96 021	117 370	203 528
3362	Motor vehicle body & trailer mfg	-	18	10	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	18	10	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	12	8		638	12 942	537	1 032	9 462	19 869	45 806	67 454
3365	Railroad rolling stock mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	53	7		669	13 752	579	1 034	10 139	26 073	23 334	49 460
3371	Household & institutional furniture & kitchen cabinet mfg	2	44	6		590	11 698	520	920	8 823	22 459	20 603	43 092
33712	Household & institutional furniture mfg	3	15	4		402	7 215	366	658	5 518	14 056	14 505	28 618
337121	Upholstered household furniture mfg	1	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	69	7		518	13 697	345	578	7 315	26 973	14 105	41 032
3399	Other miscellaneous mfg ..	2	46	7		408	10 939	262	447	5 396	21 004	11 083	32 155
	POCATELLO, ID MSA												
31-33	Manufacturing	-	62	20		3 482	119 168	2 420	4 391	60 704	406 019	374 440	775 117
311	Food mfg	1	4	3		595	14 001	374	635	7 124	34 619	94 305	129 597
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	2	2	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	7	2		254	5 466	212	415	3 697	42 830	6 608	45 000

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbol, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADA COUNTY, ID													
31-33	Manufacturing	—	395	97	20 850	862 557	13 866	20 044	415 958	2 242 448	4 138 559	6 318 385	117 809
311	Food mfg.....	—	33	13	1 411	32 856	988	1 807	20 758	88 314	426 812	509 129	D
321	Wood product mfg.....	2	31	14	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	2	22	9	g	D	D	D	D	D	D	D	D
32191	Millwork.....	—	11	6	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	5	11	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	63	9	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	2	63	9	f	D	D	D	D	D	D	D	D
32311	Printing.....	2	53	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	56	15	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	1	15	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	23	7	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	6	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	—	6	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	22	13	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	—	7	4	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	7	4	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	6	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	8	5	i	D	D	D	D	D	D	D	921
33441	Semiconductor & other electronic component mfg.....	—	8	5	i	D	D	D	D	D	D	D	921
334413	Semiconductor & related device mfg...	—	2	1	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	14	7	f	D	D	D	D	D	D	D	D
BANNOCK COUNTY, ID													
31-33	Manufacturing	—	62	20	3 482	119 168	2 420	4 391	60 704	406 019	374 440	775 117	226 690
311	Food mfg.....	1	4	3	595	14 001	374	635	7 124	34 619	94 305	129 597	D
3114	Fruit & vegetable preserving & specialty food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg.....	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
BANNOCK COUNTY, ID —Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg....	-	1	1	f	D	D	D	D	D	D	D	D	
BENEWAH COUNTY, ID														
31-33	Manufacturing	-	8	3		586	20 173	532	1 249	17 400	43 697	101 094	141 837	3 817
321	Wood product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D	
3211	Sawmills & wood preservation.....	-	5	3	f	D	D	D	D	D	D	D	D	
32111	Sawmills & wood preservation.....	-	5	3	f	D	D	D	D	D	D	D	D	
321113	Sawmills.....	-	4	3	f	D	D	D	D	D	D	D	D	
BINGHAM COUNTY, ID														
31-33	Manufacturing	-	44	9		2 413	64 239	1 995	4 227	42 043	187 725	182 060	366 098	40 431
311	Food mfg.....	-	9	7		2 073	55 526	1 739	3 704	35 772	171 532	150 182	317 671	37 347
3114	Fruit & vegetable preserving & specialty food mfg.....	-	6	6	g	D	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	5	5	g	D	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	5	5	g	D	D	D	D	D	D	D	D	D
BONNER COUNTY, ID														
31-33	Manufacturing	1	86	20		1 898	56 796	1 563	2 814	41 782	126 770	258 543	382 075	11 027
321	Wood product mfg.....	1	22	10		1 059	36 721	952	1 869	30 276	80 655	209 262	285 999	7 744
3211	Sawmills & wood preservation.....	1	14	8		960	34 688	863	1 691	28 642	73 898	202 997	272 851	7 627
32111	Sawmills & wood preservation.....	1	14	8		960	34 688	863	1 691	28 642	73 898	202 997	272 851	7 627
321113	Sawmills.....	1	11	7		920	33 125	830	1 621	27 587	66 065	193 260	258 213	D
BONNEVILLE COUNTY, ID														
31-33	Manufacturing	2	115	26		2 550	55 762	1 917	3 560	36 533	136 016	134 120	267 920	7 239
325	Chemical mfg.....	5	5	2	f	D	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg. . .	9	2	1	f	D	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg. . .	9	2	1	f	D	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg. . .	9	2	1	f	D	D	D	D	D	D	D	D	D
CANYON COUNTY, ID														
31-33	Manufacturing	-	176	58		9 817	268 155	7 863	14 657	181 245	1 144 880	2 434 276	3 581 662	264 735
311	Food mfg.....	2	18	10		3 222	70 322	2 766	5 189	57 121	271 022	505 783	782 134	D
3113	Sugar & confectionery product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	5	4	g	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	1	5	4	g	D	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	4	3	g	D	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	5	4	2	f	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	5	4	2	f	D	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	5	4	2	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	19	6	g	D	D	D	D	D	D	D	D	D
3219	Other wood product mfg. . .	-	17	5	g	D	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg. . .	-	2	2	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	24	9	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CANYON COUNTY, ID—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	5	3	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	11	6	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	1	9	5	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	1	9	5	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg.....	1	9	5	f	D	D	D	D	D	D	D	D
CARIBOU COUNTY, ID													
31-33	Manufacturing	-	7	4	f	D	D	D	D	D	D	D	D
CASSIA COUNTY, ID													
31-33	Manufacturing	8	24	5	g	D	D	D	D	D	D	D	D
311	Food mfg.....	9	3	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, ID													
31-33	Manufacturing	3	17	3	664	11 870	567	875	8 034	57 108	36 284	94 426	4 911
311	Food mfg.....	3	4	2	562	9 991	482	687	6 708	52 637	30 663	84 282	4 541
3114	Fruit & vegetable preserving & specialty food mfg.....	3	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	3	2	2	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	3	2	2	f	D	D	D	D	D	D	D	D
JEROME COUNTY, ID													
31-33	Manufacturing	2	19	7	803	15 860	672	1 189	12 858	75 810	99 714	176 299	D
KOOTENAI COUNTY, ID													
31-33	Manufacturing	1	195	50	4 472	116 903	3 459	6 720	83 629	275 471	315 700	592 061	17 756
321	Wood product mfg.....	-	21	12	980	31 973	830	1 787	26 099	87 699	177 996	265 703	6 413
3211	Sawmills & wood preservation.....	-	9	5	532	18 810	479	1 077	16 289	56 408	100 483	157 333	5 070
32111	Sawmills & wood preservation.....	-	9	5	532	18 810	479	1 077	16 289	56 408	100 483	157 333	5 070
321113	Sawmills.....	-	7	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	12	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	15	2	643	14 391	554	1 136	11 429	35 069	25 078	59 895	D
3372	Office furniture (including fixtures) mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON COUNTY, ID													
31-33	Manufacturing	1	21	8	1 326	25 517	963	2 061	17 114	85 437	55 099	141 422	4 991
323	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	f	D	D	D	D	D	D	D	D
323114	Quick printing	-	1	1	f	D	D	D	D	D	D	D	D
MINIDOKA COUNTY, ID													
31-33	Manufacturing	-	18	8	1 638	44 264	1 432	3 005	35 177	170 356	256 056	425 660	D
311	Food mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
NEZ PERCE COUNTY, ID													
31-33	Manufacturing	-	55	12	3 263	127 974	2 656	5 356	95 623	395 300	372 835	769 096	D
322	Paper mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	8	4	868	27 184	709	1 360	19 035	60 078	28 934	88 170	D
3329	Other fabricated metal product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
OWYHEE COUNTY, ID													
31-33	Manufacturing	-	5	2	613	12 221	563	1 090	9 476	56 943	169 527	225 164	D
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
PAYETTE COUNTY, ID													
31-33	Manufacturing	-	24	9	g	D	D	D	D	D	D	D	4 612
POWER COUNTY, ID													
31-33	Manufacturing	1	8	6	889	21 335	744	1 405	16 917	62 899	92 664	155 332	7 227
TWIN FALLS COUNTY, ID													
31-33	Manufacturing	-	95	23	3 588	82 895	3 031	5 092	57 796	286 411	444 227	723 276	16 614
311	Food mfg.....	-	16	10	2 473	55 292	2 241	3 705	41 486	234 639	372 800	599 910	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AMERICAN FALLS, ID													
31-33	Manufacturing	1	4	4	f	D	D	D	D	D	D	D	
BOISE CITY, ID													
31-33	Manufacturing	-	210	55	16 823	753 384	10 931	14 260	348 731	1 990 826	3 836 250	5 780 601	102 739
311	Food mfg	-	24	9	931	21 274	682	1 336	15 039	57 438	398 640	450 948	D
321	Wood product mfg	3	9	5	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	6	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	5	4	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	49	7	f	D	D	D	D	D	D	D	3 980
3231	Printing & related support activities.....	2	49	7	f	D	D	D	D	D	D	D	3 980
333	Machinery mfg	-	11	4	808	34 918	520	1 219	17 585	102 538	45 228	142 869	D
3332	Industrial machinery mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	13	8	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	6	4	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	6	4	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	5	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
BUHL, ID													
31-33	Manufacturing	-	7	2	f	D	D	D	D	D	D	D	D
311	Food mfg	-	4	2	f	D	D	D	D	D	D	D	D
CALDWELL, ID													
31-33	Manufacturing	-	64	24	1 956	41 079	1 578	2 808	27 198	75 740	163 120	239 094	D
336	Transportation equipment mfg	-	7	4	506	10 194	432	825	7 678	14 994	35 256	51 922	D
COEUR D'ALENE, ID													
31-33	Manufacturing	1	61	12	1 169	32 497	865	1 694	21 056	81 665	111 062	193 625	5 474
FRUITLAND, ID													
31-33	Manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
GARDEN CITY, ID													
31-33	Manufacturing	1	52	10	586	17 466	418	847	10 256	29 109	20 901	50 143	1 101
HEYBURN, ID													
31-33	Manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
IDAHO FALLS, ID													
31-33	Manufacturing	2	79	18	2 107	44 865	1 581	2 957	29 614	110 555	109 078	217 806	5 847
325	Chemical mfg	5	4	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	2	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	9	2	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	9	2	1	f	D	D	D	D	D	D	D	D
LEWISTON, ID													
31-33	Manufacturing	2	44	7	f	D	D	D	D	D	D	D	1 604
MERIDIAN, ID													
31-33	Manufacturing	1	43	11	1 058	26 444	779	1 543	16 683	56 374	99 615	153 978	5 057
321	Wood product mfg	1	9	5	552	12 496	452	930	9 039	23 546	74 713	96 815	D
NAMPA, ID													
31-33	Manufacturing	-	71	26	5 798	179 909	4 515	8 592	117 901	936 799	2 068 550	3 008 669	253 803
311	Food mfg	-	9	5	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	6	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	3	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
POCATELLO, ID *													
31-33	Manufacturing	1	52	17	2 315	70 380	1 717	2 719	27 931	208 058	181 995	385 697	D
311	Food mfg	1	4	3	595	14 001	374	635	7 124	34 619	94 305	129 597	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
POST FALLS, ID													
31-33	Manufacturing	-	36	14	1 461	33 562	1 190	2 290	25 041	80 826	75 945	155 860	4 262
337	Furniture & related product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
REXBURG, ID													
31-33	Manufacturing	-	9	3	748	12 788	479	1 158	7 596	38 724	18 368	57 093	D
323	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	f	D	D	D	D	D	D	D	D
323114	Quick printing	-	1	1	f	D	D	D	D	D	D	D	D
SANDPOINT, ID													
31-33	Manufacturing	1	34	5	630	15 303	449	656	8 929	41 314	75 301	114 484	2 022
TWIN FALLS, ID													
31-33	Manufacturing	-	64	17	2 400	51 811	1 989	3 114	35 866	177 258	332 951	512 091	12 956
311	Food mfg.....	-	8	5	1 397	26 266	1 274	1 835	20 620	129 647	265 742	397 149	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
IDAHO		IDAHO—Con.	
Companies ¹	number.. 1 561	Quantity of electricity purchased for heat and power	1,000 kWh.. 6 941 307
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
All establishments	number.. 1 647	Total value of shipments	\$1,000.. 16 952 872
Establishments with 1 to 19 employees	number.. 1 228	Value of resales	\$1,000.. 2 189 891
Establishments with 20 to 99 employees	number.. 292	Value added	\$1,000.. 6 393 062
Establishments with 100 employees or more	number.. 127	Total inventories, beginning of year	\$1,000.. 1 888 176
All employees	number.. 66 184	Finished goods inventories, beginning of year	\$1,000.. 619 734
Total compensation ²	\$1,000.. 2 582 166	Work-in-process inventories, beginning of year	\$1,000.. 507 098
Annual payroll	\$1,000.. 2 099 750	Materials and supplies inventories, beginning of year	\$1,000.. 761 344
Total fringe benefits	\$1,000.. 482 416	Total inventories, end of year	\$1,000.. 2 029 442
Production workers, average for year	number.. 50 362	Finished goods inventories, end of year	\$1,000.. 670 209
Production workers on March 12	number.. 50 533	Work-in-process inventories, end of year	\$1,000.. 558 256
Production workers on May 12	number.. 49 603	Materials and supplies inventories, end of year	\$1,000.. 800 977
Production workers on August 12	number.. 50 510	Gross book value of total assets at beginning of year	\$1,000.. 5 396 199
Production workers on November 12	number.. 50 802	Total capital expenditures (new and used)	\$1,000.. 834 503
Production-worker hours	1,000.. 89 417	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 169 232
Production-worker wages	\$1,000.. 1 277 198	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 665 271
Total cost of materials	\$1,000.. 10 659 688	Total retirements ²	\$1,000.. 186 256
Cost of materials, parts, containers, etc., consumed	\$1,000.. 8 199 536	Gross book value of total assets at end of year	\$1,000.. 6 044 446
Cost of resales	\$1,000.. 1 968 695	Total depreciation during year ²	\$1,000.. 376 809
Cost of fuels	\$1,000.. 96 742	Total rental payments ²	\$1,000.. 75 946
Cost of purchased electricity	\$1,000.. 185 445	Buildings and other structures rental payments ²	\$1,000.. 31 604
Cost of contract work	\$1,000.. 209 270	Machinery and equipment rental payments ²	\$1,000.. 44 342

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

IDAHO

Burley is in Cassia and Minidoka Counties.

Pocatello is in Bannock and Power Counties.

Appendix E. Metropolitan Areas

IDAHO

Boise City, ID MSA

Ada County, ID

Canyon County, ID

Pocatello, ID MSA

Bannock County, ID

Illinois

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
ILLINOIS													
31-33	Manufacturing	-	17 953	6 572	887 350	31 837 943	629 423	1 285 397	18 713 827	95 287 251	105 028 914	200 019 991	7 376 987
311	Food mfg.....	1	1 300	494	84 578	2 597 578	63 260	133 297	1 723 055	12 352 764	16 960 075	29 266 966	788 573
3111	Animal food mfg.....	-	76	26	2 021	68 310	1 208	2 765	40 314	408 218	595 921	1 002 390	20 267
31111	Animal food mfg.....	-	76	26	2 021	68 310	1 208	2 765	40 314	408 218	595 921	1 002 390	20 267
311111	Dog & cat food mfg....	-	9	3	616	27 090	462	1 168	21 589	213 011	141 469	356 298	5 994
311119	Other animal food mfg.....	1	67	23	1 405	41 220	746	1 597	18 725	195 207	454 452	646 092	14 273
3112	Grain & oilseed milling	1	58	45	7 658	309 390	5 545	12 826	211 613	2 572 845	5 558 572	8 088 333	280 399
31121	Flour milling & malt mfg ..	2	17	14	1 344	49 419	948	2 266	33 681	182 546	528 479	704 271	13 104
311211	Flour milling	2	15	12	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	1	36	26	4 783	184 141	3 359	7 574	117 633	1 636 729	4 791 171	6 389 229	245 105
311221	Wet corn milling	4	4	4	1 330	62 056	972	41 441	808 133	1 186 458	1 965 079	1 965 079	144 952
311222	Soybean processing ..	-	18	12	2 090	72 588	1 412	3 178	44 350	517 737	2 767 024	3 281 184	53 967
311225	Fats & oils refining & blending.....	-	13	10	g	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	-	5	5	1 531	75 830	1 238	2 986	60 299	753 570	238 922	994 833	22 190
311230	Breakfast cereal mfg..	-	5	5	1 531	75 830	1 238	2 986	60 299	753 570	238 922	994 833	22 190
3113	Sugar & confectionery product mfg.....	-	92	38	11 791	384 359	9 811	20 987	290 726	1 949 722	1 265 696	3 204 404	105 947
31132	Chocolate & confectionery mfg from cacao beans	-	7	2	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	7	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	42	14	i	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	42	14	i	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	42	22	6 000	194 599	5 100	10 024	147 599	1 008 292	598 076	1 594 999	57 711
311340	Nonchocolate confectionery mfg ...	-	42	22	6 000	194 599	5 100	10 024	147 599	1 008 292	598 076	1 594 999	57 711
3114	Fruit & vegetable preserving & specialty food mfg	1	82	37	8 106	208 550	6 746	15 072	149 788	783 031	843 444	1 630 943	65 573
31141	Frozen food mfg.....	1	37	13	4 686	114 143	4 090	8 803	82 223	393 173	471 403	868 616	43 188
311411	Frozen fruit, juice, & vegetable mfg.....	-	7	4	2 106	55 621	1 947	3 779	44 500	226 531	299 552	531 612	32 069
311412	Frozen specialty food mfg	2	30	9	2 580	58 522	2 143	5 024	37 723	166 642	171 851	337 004	11 119
31142	Fruit & vegetable canning, pickling, & drying	1	45	24	3 420	94 407	2 656	6 269	67 565	389 858	372 041	762 327	22 385
311421	Fruit & vegetable canning	1	31	17	2 086	59 669	1 751	4 329	41 417	229 220	226 931	457 256	12 739
311422	Specialty canning.....	5	8	3	378	9 653	326	737	7 025	38 467	28 207	66 602	D
311423	Dried & dehydrated food mfg	-	6	4	956	25 085	579	1 203	19 123	122 171	116 903	238 469	D
3115	Dairy product mfg	2	75	43	4 140	147 137	2 963	6 047	83 956	592 579	1 290 604	1 887 820	32 135
31151	Dairy product (except frozen) mfg	2	60	38	3 036	106 784	2 106	4 408	62 027	382 513	1 135 555	1 520 558	24 132
311511	Fluid milk mfg	3	25	18	1 610	66 231	1 040	2 200	35 650	241 123	679 120	920 579	13 477
311513	Cheese mfg	-	19	11	777	20 006	608	1 283	13 773	70 384	229 968	302 566	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	15	9	f	D	D	D	D	D	D	D	6 065
31152	Ice cream & frozen dessert mfg	3	15	5	1 104	40 353	857	1 639	21 929	210 066	155 049	367 262	8 003
311520	Ice cream & frozen dessert mfg	3	15	5	1 104	40 353	857	1 639	21 929	210 066	155 049	367 262	8 003
3116	Meat product mfg.....	1	198	98	16 707	467 421	13 712	29 371	336 130	1 343 826	3 655 501	5 010 274	61 862
31161	Animal slaughtering & processing.....	1	198	98	16 707	467 421	13 712	29 371	336 130	1 343 826	3 655 501	5 010 274	61 862
311611	Animal (except poultry) slaughtering	-	85	35	8 663	225 505	7 522	16 906	183 331	491 683	2 295 070	2 794 641	15 741
311612	Meat processed from carcasses	1	94	51	6 515	197 266	5 110	10 430	128 818	719 682	1 185 821	1 910 905	36 775
311613	Rendering & meat byproduct processing.....	2	10	6	281	9 453	139	351	4 088	42 320	50 888	93 564	3 303
311615	Poultry processing....	9	9	6	1 248	35 197	941	1 684	19 893	90 141	123 722	211 164	6 043
3117	Seafood product preparation & packaging..	3	5	3	249	6 155	191	333	3 029	15 295	37 474	52 744	1 127
31171	Seafood product preparation & packaging	3	5	3	249	6 155	191	333	3 029	15 295	37 474	52 744	1 127
311711	Seafood canning	-	2	2	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	1	543	119	22 011	630 608	14 550	28 098	387 446	2 671 068	1 598 304	4 256 943	120 922
31181	Bread & bakery product mfg	2	476	86	14 621	378 279	8 300	14 506	198 066	1 224 965	602 069	1 828 233	51 433
311811	Retail bakeries	4	351	32	3 087	42 010	1 813	2 501	22 174	88 846	47 314	134 690	10 095
311812	Commercial bakeries	2	117	51	11 187	327 098	6 201	11 458	169 905	1 116 196	537 751	1 656 664	40 090
311813	Frozen cakes, pies, & other pastries mfg	1	8	3	347	9 171	286	547	5 987	19 923	17 004	36 879	1 248
31182	Cookie, cracker, & pasta mfg	—	58	28	6 840	240 066	5 800	12 859	180 608	1 408 618	970 789	2 365 922	68 328
311821	Cookie & cracker mfg	—	28	19	5 032	181 852	4 293	9 326	139 651	1 089 499	659 817	1 735 186	59 265
311822	Flour mixes & dough mfg from purchased flour	1	15	7	1 539	50 895	1 306	3 108	36 268	289 555	282 244	572 084	8 648
311823	Dry pasta mfg	1	15	2	269	7 319	201	425	4 689	29 564	28 728	58 652	415
31183	Tortilla mfg	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161
311830	Tortilla mfg	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161
3119	Other food mfg	1	171	85	11 895	375 648	8 534	17 798	220 053	2 016 180	2 114 559	4 133 115	100 341
31191	Snack food mfg	2	26	14	1 510	34 867	1 186	2 330	22 618	142 901	171 745	314 977	11 369
311911	Roasted nuts & peanut butter mfg	3	7	5	418	8 872	285	529	5 270	27 472	66 081	93 984	2 326
311919	Other snack food mfg	1	19	9	1 092	25 995	901	1 801	17 348	115 429	105 664	220 993	9 043
31192	Coffee & tea mfg	—	9	6	576	17 707	419	751	10 144	99 102	227 950	325 499	4 056
311920	Coffee & tea mfg	—	9	6	576	17 707	419	751	10 144	99 102	227 950	325 499	4 056
31193	Flavoring syrup & concentrate mfg	—	13	5	916	28 260	271	493	6 126	63 383	54 019	119 601	6 493
311930	Flavoring syrup & concentrate mfg	—	13	5	916	28 260	271	493	6 126	63 383	54 019	119 601	6 493
31194	Seasoning & dressing mfg	2	44	23	3 937	156 818	2 719	5 969	92 253	1 032 590	1 112 065	2 146 483	42 703
311941	Mayonnaise, dressing, & other prepared sauce mfg	2	18	7	2 527	90 778	2 059	4 528	70 845	855 343	862 887	1 718 896	31 039
311942	Spice & extract mfg	—	26	16	1 410	66 040	660	1 441	21 408	177 247	249 178	427 587	11 664
31199	All other food mfg	1	79	37	4 956	137 996	3 939	8 255	88 912	678 204	548 780	1 226 555	35 720
311991	Perishable prepared food mfg	1	25	11	1 347	37 727	1 051	2 413	20 181	104 327	90 673	194 646	5 472
311999	All other miscellaneous food mfg	1	54	26	3 609	100 269	2 888	5 842	68 731	573 877	458 107	1 031 909	30 248
312	Beverage & tobacco product mfg	1	62	22	3 751	125 213	2 166	4 545	66 148	966 469	769 764	1 733 169	34 103
3121	Beverage mfg	2	60	21	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	37	18	3 174	106 373	1 812	3 946	53 793	411 235	694 126	1 102 053	24 828
312111	Soft drink mfg	2	19	14	2 650	93 147	1 650	3 613	50 316	379 270	685 831	1 061 629	23 722
312112	Bottled water mfg	—	5	4	e	D	D	D	D	D	D	D	D
31212	Breweries	6	12	1	c	D	D	D	D	D	D	D	999
312120	Breweries	6	12	1	c	D	D	D	D	D	D	D	999
3122	Tobacco mfg	—	2	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	2	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	2	1	e	D	D	D	D	D	D	D	D
313	Textile mills	3	80	11	1 287	39 946	1 025	2 082	26 237	81 852	113 998	194 271	6 265
3132	Fabric mills	3	35	5	421	9 734	344	697	6 294	21 378	22 131	43 201	1 415
31322	Narrow fabric mills & schiffli machine embroidery	1	10	2	210	4 170	176	351	2 699	8 649	6 459	14 831	317
313221	Narrow fabric mills	—	5	1	123	2 516	104	213	1 463	5 491	5 558	11 063	D
3133	Textile & fabric finishing & fabric coating mills	3	45	6	866	30 212	681	1 385	19 943	60 474	91 867	151 070	4 850
31331	Textile & fabric finishing mills	4	39	4	577	17 750	478	982	12 374	46 511	66 484	111 730	D
313311	Broadwoven fabric finishing mills	4	37	4	f	D	D	D	D	D	D	D	D
31332	Fabric coating mills	—	6	2	289	12 462	203	403	7 569	13 963	25 383	39 340	D
313320	Fabric coating mills	—	6	2	289	12 462	203	403	7 569	13 963	25 383	39 340	D
314	Textile product mills	2	265	60	5 278	115 290	4 053	7 678	71 670	248 196	248 083	500 749	12 350
3141	Textile furnishings mills	1	137	20	2 075	41 839	1 538	2 993	25 974	113 510	106 023	221 940	2 411
31411	Carpet & rug mills	—	2	1	c	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	2	1	c	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	1	135	19	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	109	6	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	26	13	1 254	26 205	883	1 769	15 904	79 601	71 909	154 113	1 191

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills—Con.												
3149	Other textile product mills . . .	3	128	40	3 203	73 451	2 515	4 685	45 696	134 686	142 060	278 809	9 939
31491	Textile bag & canvas mills	4	74	19	1 592	38 108	1 230	2 220	22 653	75 607	77 025	152 081	3 262
314911	Textile bag mills	—	15	6	594	13 422	491	899	7 767	22 660	30 147	52 869	599
314912	Canvas & related product mills	6	59	13	998	24 686	739	1 321	14 886	52 947	46 878	99 212	2 663
31499	All other textile product mills	3	54	21	1 611	35 343	1 285	2 465	23 043	59 079	65 035	126 728	6 677
314999	All other miscellaneous textile product mills . .	3	53	20	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	272	89	10 733	222 901	8 359	15 908	132 623	456 808	373 341	829 995	25 081
3151	Apparel knitting mills	—	16	8	692	14 054	594	1 092	9 795	25 413	22 371	46 750	623
31519	Other apparel knitting mills	—	13	8	660	13 713	565	1 058	9 518	24 839	21 682	45 487	580
315191	Outerwear knitting mills	—	12	7	f	D	D	D	D	D	D	D	580
3152	Cut & sew apparel mfg	3	168	55	7 351	144 721	5 920	11 673	98 029	304 110	154 743	452 525	18 718
31521	Cut & sew apparel contractors	8	78	18	2 338	37 349	2 070	4 032	29 659	59 372	13 530	72 348	3 592
315211	Men's & boys' cut & sew apparel contractors	8	8	3	303	9 798	250	822	5 846	14 386	1 316	15 682	409
315212	Women's, girls', & infants' cut & sew apparel contractors . .	8	70	15	2 035	27 551	1 820	3 210	23 813	44 986	12 214	56 666	3 183
31522	Men's & boys' cut & sew apparel mfg	1	29	14	3 025	68 745	2 196	4 748	41 980	138 599	78 100	209 013	12 398
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	1	11	6	2 151	52 560	1 507	3 422	32 384	108 226	45 118	145 773	D
315225	Men's & boys' cut & sew work clothing mfg	—	8	6	747	13 833	577	1 154	7 615	26 075	28 884	54 805	D
31523	Women's & girls' cut & sew apparel mfg	3	41	17	1 023	21 388	786	1 310	12 020	51 036	38 744	91 632	867
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	5	3	186	3 383	126	214	1 878	6 698	6 421	12 975	185
315233	Women's & girls' cut & sew dress mfg	5	13	8	471	10 930	342	529	5 885	32 437	25 032	59 557	454
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	10	2	134	3 365	110	203	1 566	4 663	3 357	7 971	109
315239	Women's & girls' cut & sew other outerwear mfg	2	7	3	158	2 024	139	199	1 703	3 479	3 556	7 064	65
31529	Other cut & sew apparel mfg	3	20	6	965	17 239	868	1 583	14 370	55 103	24 369	79 532	1 861
315299	All other cut & sew apparel mfg	2	13	6	929	16 643	845	1 544	14 014	53 296	21 059	74 459	1 784
3159	Apparel accessories & other apparel mfg	1	88	26	2 690	64 126	1 845	3 143	24 799	127 285	196 227	330 720	5 740
31599	Apparel accessories & other apparel mfg	1	88	26	2 690	64 126	1 845	3 143	24 799	127 285	196 227	330 720	5 740
315991	Hat, cap, & millinery mfg	1	9	4	c	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	—	8	7	867	19 630	593	1 124	8 785	60 564	93 689	155 504	D
315999	Other apparel accessories & other apparel mfg	2	68	13	1 502	38 908	976	1 550	12 376	58 091	94 916	158 657	2 972
316	Leather & allied product mfg	—	52	17	2 760	59 226	2 403	5 030	40 255	133 973	131 992	262 255	6 067
3161	Leather & hide tanning & finishing	—	5	2	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	5	2	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	5	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	7	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	7	3	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	2	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	40	12	1 714	30 483	1 429	3 031	20 068	77 270	75 039	148 809	2 276
31699	Other leather & allied product mfg	1	40	12	1 714	30 483	1 429	3 031	20 068	77 270	75 039	148 809	2 276
316991	Luggage mfg	3	18	7	592	13 479	480	950	7 824	37 784	29 368	65 927	1 560
316993	Personal leather good (except women's handbag & purse) mfg	—	5	2	c	D	D	D	D	D	D	D	46
316999	All other leather good mfg	—	16	3	1 003	14 977	851	1 917	10 926	35 626	39 166	72 206	670

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	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	2	460	124	9 614	232 290	7 507	14 159	158 670	494 510	641 634	1 138 406	29 517
3211	Sawmills & wood preservation	1	66	9	617	14 581	527	943	11 200	36 642	68 772	102 625	2 314
32111	Sawmills & wood preservation	1	66	9	617	14 581	527	943	11 200	36 642	68 772	102 625	2 314
321113	Sawmills	3	57	4	415	8 870	362	591	6 873	17 307	23 217	40 528	1 601
321114	Wood preservation	—	9	5	202	5 711	165	352	4 327	19 335	45 555	62 097	713
3212	Veneer, plywood, & engineered wood product mfg	1	39	23	2 105	55 524	1 679	3 229	37 071	124 215	157 952	282 394	9 322
32121	Veneer, plywood, & engineered wood product mfg	1	39	23	2 105	55 524	1 679	3 229	37 071	124 215	157 952	282 394	9 322
321211	Hardwood veneer & plywood mfg	—	4	1	175	3 714	154	321	2 705	8 670	6 978	16 109	D
321214	Truss mfg	2	22	15	1 148	31 928	892	1 680	20 884	65 591	78 608	144 037	D
321219	Reconstituted wood product mfg	—	13	7	782	19 882	633	1 228	13 482	49 954	72 366	122 248	5 129
3219	Other wood product mfg	2	355	92	6 892	162 185	5 301	9 987	110 399	333 653	414 910	753 387	17 881
32191	Millwork	2	120	27	3 093	81 793	2 295	4 406	56 583	152 578	203 183	361 368	6 149
321911	Wood window & door mfg	2	55	15	2 200	56 044	1 570	2 976	38 226	111 418	149 481	266 804	4 340
321912	Cut stock, resawing lumber, & planing	6	17	2	203	3 972	172	308	3 159	7 172	8 981	16 241	547
321918	Other millwork (including flooring)	2	48	10	690	21 777	553	1 122	15 198	33 988	44 721	78 323	1 262
32192	Wood container & pallet mfg	2	115	34	1 776	34 759	1 489	2 704	24 336	73 617	96 357	169 619	5 829
321920	Wood container & pallet mfg	2	115	34	1 776	34 759	1 489	2 704	24 336	73 617	96 357	169 619	5 829
32199	All other wood product mfg	1	120	31	2 023	45 633	1 517	2 877	29 480	107 458	115 370	222 400	5 903
321992	Prefabricated wood building mfg	—	24	11	641	15 977	403	846	9 177	51 879	66 062	117 265	3 095
321999	All other miscellaneous wood product mfg	2	93	19	g	D	D	D	D	D	D	D	D
322	Paper mfg	—	372	263	28 968	1 015 158	21 417	46 143	647 550	2 828 666	3 054 927	5 872 807	172 283
3221	Pulp, paper, & paperboard mills	—	10	9	1 059	49 110	823	1 829	35 521	121 693	169 405	291 096	15 032
32212	Paper mills	—	4	3	322	18 427	240	598	13 330	47 957	57 652	106 718	D
322121	Paper (except newsprint) mills	—	3	2	c	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	6	6	737	30 683	583	1 231	22 191	73 736	111 753	184 378	D
322130	Paperboard mills	—	6	6	737	30 683	583	1 231	22 191	73 736	111 753	184 378	D
3222	Converted paper product mfg	—	362	254	27 909	966 048	20 594	44 314	612 029	2 706 973	2 885 522	5 581 711	157 251
32221	Paperboard container mfg	—	197	154	16 601	598 351	12 675	27 804	387 401	1 490 948	1 892 165	3 384 158	88 041
322211	Corrugated & solid fiber box mfg	—	115	94	9 176	333 185	6 625	14 546	196 555	854 675	1 196 396	2 046 345	58 006
322212	Folding paperboard box mfg	—	53	39	4 916	196 749	3 924	8 858	137 318	449 489	498 615	955 906	21 638
322213	Setup paperboard box mfg	—	9	5	315	7 718	202	406	4 205	13 263	7 386	20 693	486
322214	Fiber can, tube, drum, & similar products mfg	1	16	12	681	19 613	539	1 178	13 983	45 857	68 817	115 075	3 239
322215	Nonfolding sanitary food container mfg	—	4	4	1 513	41 086	1 385	2 816	35 340	127 664	120 951	246 139	4 672
32222	Paper bag & coated & treated paper mfg	—	75	52	5 686	203 716	3 702	7 967	113 647	758 178	611 209	1 373 457	36 397
322221	Coated & laminated packaging paper & plastics film mfg	—	5	4	e	D	D	D	D	D	D	D	2 515
322222	Coated & laminated paper mfg	1	43	28	3 173	115 573	1 855	3 818	61 347	478 407	360 875	843 985	25 480
322223	Plastics, foil, & coated paper bag mfg	—	4	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	11	9	872	25 365	724	1 695	20 282	82 030	86 804	168 883	2 032
322225	Laminated aluminum foil mfg for flexible packaging uses	—	7	6	276	10 530	211	445	6 278	30 188	38 260	68 099	1 999
322226	Surface-coated paperboard mfg	—	5	3	416	21 871	252	676	8 222	105 168	58 670	164 097	D
32223	Stationery product mfg	1	50	25	3 496	98 463	2 558	5 317	67 325	312 312	248 361	545 209	15 117
322231	Die-cut paper & paperboard office supplies mfg	2	20	7	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	1	25	17	2 263	65 688	1 599	3 345	46 013	141 888	152 020	293 906	10 602
322233	Stationery, tablet, & related product mfg	—	5	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ILLINOIS—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32229	Other converted paper product mfg.....	-	40	23	2 126	65 518	1 659	3 226	43 656	145 535	133 787	278 887	17 696
322291	Sanitary paper product mfg.....	-	5	1	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	35	22	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	2 403	549	59 748	2 100 627	43 798	87 905	1 307 835	4 624 098	3 266 878	7 859 665	370 783
3231	Printing & related support activities.....	2	2 403	549	59 748	2 100 627	43 798	87 905	1 307 835	4 624 098	3 266 878	7 859 665	370 783
32311	Printing.....	2	2 090	458	51 280	1 810 751	37 421	75 314	1 122 933	4 013 778	3 072 107	7 054 606	335 310
323110	Commercial lithographic printing ..	2	1 010	267	30 372	1 151 310	22 274	46 158	725 634	2 439 330	1 762 345	4 179 451	235 847
323111	Commercial gravure printing.....	2	32	8	3 129	102 130	2 728	5 748	80 247	232 793	197 816	429 792	8 032
323112	Commercial flexographic printing ..	2	66	25	2 642	90 247	1 839	3 952	52 960	225 541	207 703	431 674	15 045
323113	Commercial screen printing.....	2	160	38	2 587	66 677	1 833	3 273	34 692	127 231	81 659	208 165	13 234
323114	Quick printing.....	2	430	22	2 697	70 989	1 868	3 157	42 610	153 752	90 079	242 519	11 067
323115	Digital printing.....	1	24	3	192	5 201	132	268	3 368	13 395	6 578	20 132	771
323116	Manifold business form printing.....	-	67	33	3 322	114 521	2 318	4 377	70 199	286 241	360 266	644 806	11 695
323117	Book printing.....	-	52	20	2 334	71 809	1 674	3 009	43 475	152 343	100 929	252 211	18 958
323118	Blankbook, looseleaf binder, & device mfg ..	1	29	16	1 653	59 951	1 084	2 195	21 556	215 351	152 100	367 345	8 839
323119	Other commercial printing.....	5	220	26	2 352	77 916	1 671	3 177	48 192	167 801	112 632	278 511	11 822
32312	Support activities for printing.....	2	313	91	8 468	289 876	6 377	12 591	184 902	610 320	194 771	805 059	35 473
323121	Tradebinding & related work.....	1	77	35	4 003	91 821	3 114	6 206	58 471	202 104	80 194	282 646	7 651
323122	Prepress services	3	236	56	4 465	198 055	3 263	6 385	126 431	408 216	114 577	522 413	27 822
324	Petroleum & coal products mfg.....	-	93	34	5 414	274 343	3 370	8 546	159 664	1 961 488	7 500 105	9 445 672	222 770
3241	Petroleum & coal products mfg.....	-	93	34	5 414	274 343	3 370	8 546	159 664	1 961 488	7 500 105	9 445 672	222 770
32411	Petroleum refineries	-	12	8	3 253	186 887	2 048	5 771	114 096	1 447 553	6 854 148	8 300 181	200 011
324110	Petroleum refineries ..	-	12	8	3 253	186 887	2 048	5 771	114 096	1 447 553	6 854 148	8 300 181	200 011
32412	Asphalt paving, roofing, & saturated materials mfg.....	1	51	13	1 105	43 051	759	1 607	27 865	180 229	319 808	497 755	10 562
324121	Asphalt paving mixture & block mfg.....	2	33	4	288	13 216	210	430	8 408	45 653	132 551	180 022	5 255
324122	Asphalt shingle & coating materials mfg.....	1	18	9	817	29 835	549	1 177	19 457	134 576	187 257	317 733	5 307
32419	Other petroleum & coal products mfg.....	1	30	13	1 056	44 405	563	1 168	17 703	333 706	326 149	647 736	12 197
324191	Petroleum lubricating oil & grease mfg.....	1	26	12	f	D	D	D	D	D	D	D	D
324199	All other petroleum & coal products mfg ...	-	4	1	c	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	745	372	54 437	2 586 242	28 878	59 871	1 114 815	11 986 361	10 238 420	22 005 768	1 099 956
3251	Basic chemical mfg.....	-	122	71	7 286	345 259	4 553	9 601	195 384	1 655 508	2 143 707	3 793 394	160 479
32511	Petrochemical mfg.....	-	3	2	172	8 574	98	229	4 392	51 102	57 471	109 279	2 544
325110	Petrochemical mfg.....	-	3	2	172	8 574	98	229	4 392	51 102	57 471	109 279	2 544
32512	Industrial gas mfg.....	1	25	5	262	9 389	140	273	5 215	95 865	43 764	138 614	19 024
325120	Industrial gas mfg.....	1	25	5	262	9 389	140	273	5 215	95 865	43 764	138 614	19 024
32513	Dye & pigment mfg.....	1	11	9	675	27 129	504	1 206	21 034	89 069	107 136	193 996	8 118
325131	Inorganic dye & pigment mfg.....	2	7	5	391	15 433	275	692	12 355	48 527	58 457	107 301	5 658
325132	Synthetic organic dye & pigment mfg.....	-	4	4	284	11 696	229	514	8 679	40 542	48 679	86 695	2 460
32518	Other basic inorganic chemical mfg.....	-	33	23	2 405	113 767	1 567	3 304	63 559	437 031	373 788	807 397	40 371
325188	All other basic inorganic chemical mfg.....	-	33	23	2 405	113 767	1 567	3 304	63 559	437 031	373 788	807 397	40 371
32519	Other basic organic chemical mfg.....	-	50	32	3 772	186 400	2 244	4 589	101 184	982 441	1 561 548	2 544 108	90 422
325192	Cyclic crude & intermediate mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
325193	Ethyl alcohol mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	43	27	2 594	121 906	1 353	2 692	55 013	841 041	920 198	1 764 136	72 570
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	46	32	3 966	197 508	2 598	5 718	122 270	993 091	1 615 755	2 604 260	168 512
32521	Resin & synthetic rubber mfg.....	-	44	32	h	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	-	41	31	h	D	D	D	D	D	D	D	168 265

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ILLINOIS—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3253	Pesticide, fertilizer, & other agricultural chemical mfg	1	31	11	723	25 284	438	910	12 426	325 705	291 774	500 436	21 942
32531	Fertilizer mfg	1	23	6	431	12 607	235	516	5 744	75 753	97 814	172 242	9 173
325311	Nitrogenous fertilizer mfg	—	7	2	177	7 420	79	181	2 836	53 688	48 579	100 034	D
325314	Fertilizer (mixing only) mfg	3	16	4	254	5 187	156	335	2 908	22 065	49 235	72 208	D
32532	Pesticide & other agricultural chemical mfg	1	8	5	292	12 677	203	394	6 682	249 952	193 960	328 194	12 769
325320	Pesticide & other agricultural chemical mfg	1	8	5	292	12 677	203	394	6 682	249 952	193 960	328 194	12 769
3254	Pharmaceutical & medicine mfg	—	54	29	19 391	1 116 216	7 212	14 711	333 328	3 516 672	1 579 481	5 036 757	437 838
32541	Pharmaceutical & medicine mfg	—	54	29	19 391	1 116 216	7 212	14 711	333 328	3 516 672	1 579 481	5 036 757	437 838
325411	Medicinal & botanical mfg	—	11	5	f	D	D	D	D	D	D	D	43 425
325412	Pharmaceutical preparation mfg	1	32	17	2 174	81 526	1 078	2 227	32 939	678 329	302 437	984 571	D
325413	In-vitro diagnostic substance mfg	—	5	4	j	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	6	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	163	84	7 090	285 041	4 123	8 443	131 484	1 368 684	1 475 923	2 835 345	61 392
32551	Paint & coating mfg	—	118	63	5 691	225 564	3 285	6 652	103 054	1 066 967	1 165 386	2 224 644	38 942
325510	Paint & coating mfg	—	118	63	5 691	225 564	3 285	6 652	103 054	1 066 967	1 165 386	2 224 644	38 942
32552	Adhesive mfg	1	45	21	1 399	59 477	838	1 791	28 430	301 717	310 537	610 701	22 450
325520	Adhesive mfg	1	45	21	1 399	59 477	838	1 791	28 430	301 717	310 537	610 701	22 450
3256	Soap, cleaning compound, & toilet preparation mfg	1	150	63	8 970	348 541	5 540	11 633	177 173	2 703 920	1 600 108	4 293 449	143 999
32561	Soap & cleaning compound mfg	1	111	38	4 696	196 667	2 921	6 490	106 510	1 402 248	1 097 813	2 510 460	84 641
325611	Soap & other detergent mfg	—	47	12	1 559	67 049	1 106	2 436	41 306	489 719	267 068	761 178	27 024
325612	Polish & other sanitation good mfg	1	47	15	1 595	50 225	897	1 981	20 982	574 650	300 150	881 236	9 668
325613	Surface active agent mfg	2	17	11	1 542	79 393	918	2 073	44 222	337 879	530 595	868 046	47 949
32562	Toilet preparation mfg	—	39	25	4 274	151 874	2 619	5 143	70 663	1 301 672	502 295	1 782 989	59 358
325620	Toilet preparation mfg	—	39	25	4 274	151 874	2 619	5 143	70 663	1 301 672	502 295	1 782 989	59 358
3259	Other chemical product mfg	2	179	82	7 011	268 393	4 414	8 855	142 750	1 422 781	1 531 672	2 942 127	105 794
32591	Printing ink mfg	1	46	23	g	D	D	D	D	D	D	D	16 409
325910	Printing ink mfg	1	46	23	g	D	D	D	D	D	D	D	16 409
32592	Explosives mfg	—	3	2	e	D	D	D	D	D	D	D	376
325920	Explosives mfg	—	3	2	e	D	D	D	D	D	D	D	376
32599	All other chemical product & preparation mfg	2	130	57	5 186	198 191	3 303	6 579	103 826	1 192 845	1 205 283	2 396 711	89 009
325991	Custom compounding of purchased resin	3	39	17	1 352	41 979	958	1 855	22 736	112 217	135 595	246 951	10 321
325992	Photographic film, paper, plate, & chemical mfg	—	24	8	834	26 821	526	1 091	14 197	70 257	129 604	199 417	10 300
325998	All other miscellaneous chemical product & preparation mfg	2	67	32	3 000	129 391	1 819	3 633	66 893	1 010 371	940 084	1 950 343	68 388
326	Plastics & rubber products mfg	1	959	542	68 009	2 117 213	53 662	111 497	1 418 841	5 742 450	5 576 083	11 326 026	543 015
3261	Plastics product mfg	1	836	488	56 668	1 669 280	44 720	92 125	1 084 113	4 682 894	4 407 302	9 080 521	453 979
32611	Unsupported plastics film, sheet, & bag mfg	1	93	59	8 095	273 181	5 898	13 370	169 927	907 294	1 006 196	1 922 575	106 357
326111	Unsupported plastics bag mfg	—	29	22	3 844	116 773	3 140	7 295	83 098	459 407	425 438	886 358	63 771
326112	Unsupported plastics packaging film & sheet mfg	—	14	10	1 115	48 504	786	1 877	28 620	104 303	171 042	272 723	10 844
326113	Unsupported plastics film & sheet (except packaging) mfg	2	50	27	3 136	107 904	1 972	4 198	58 209	343 584	409 716	763 494	31 742
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	57	32	2 956	89 487	2 175	4 384	57 720	193 999	194 309	388 048	14 050
326121	Unsupported plastics profile shape mfg	1	41	20	2 432	75 635	1 788	3 623	47 727	154 327	116 138	270 839	11 026
326122	Plastics pipe & pipe fitting mfg	1	16	12	524	13 852	387	761	9 993	39 672	78 171	117 209	3 024
32613	Laminated plastics plate, sheet, & shape mfg	—	35	8	997	28 997	682	1 363	15 547	99 654	114 683	214 402	5 080
326130	Laminated plastics plate, sheet, & shape mfg	—	35	8	997	28 997	682	1 363	15 547	99 654	114 683	214 402	5 080

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ILLINOIS—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32614	Polystyrene foam product mfg.....	-	18	14	1 248	39 162	942	1 963	25 316	170 674	147 287	317 360	14 226
326140	Polystyrene foam product mfg.....	-	18	14	1 248	39 162	942	1 963	25 316	170 674	147 287	317 360	14 226
32615	Urethane & other foam product (except polystyrene) mfg.....	-	24	15	1 536	39 349	1 254	2 585	28 963	123 515	179 064	303 612	9 802
326150	Urethane & other foam product (except polystyrene) mfg.....	-	24	15	1 536	39 349	1 254	2 585	28 963	123 515	179 064	303 612	9 802
32616	Plastics bottle mfg.....	2	36	30	3 757	107 515	3 233	7 049	83 281	344 262	359 813	702 414	43 230
326160	Plastics bottle mfg.....	2	36	30	3 757	107 515	3 233	7 049	83 281	344 262	359 813	702 414	43 230
32619	Other plastics product mfg.....	1	573	330	38 079	1 091 589	30 536	61 411	703 359	2 843 496	2 405 950	5 232 110	261 234
326191	Plastics plumbing fixture mfg.....	-	18	7	e	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	554	322	37 281	1 058 818	29 852	59 930	676 108	2 741 367	2 344 257	5 065 985	D
3262	Rubber product mfg.....	1	123	54	11 341	447 933	8 942	19 372	334 728	1 059 556	1 168 781	2 245 505	89 036
32621	Tire mfg.....	-	36	10	6 590	287 328	5 407	11 589	232 778	638 889	792 037	1 444 089	62 543
326211	Tire mfg (except retreading).....	-	9	4	6 103	275 826	5 061	10 836	225 855	617 446	755 717	1 385 889	61 699
326212	Tire retreading.....	3	27	6	487	11 502	346	753	6 923	21 443	36 320	58 200	844
32622	Rubber & plastics hoses & belting mfg.....	-	13	8	1 222	53 771	846	2 005	32 843	153 220	109 073	271 782	8 342
326220	Rubber & plastics hoses & belting mfg..	-	13	8	1 222	53 771	846	2 005	32 843	153 220	109 073	271 782	8 342
32629	Other rubber product mfg.....	1	74	36	3 529	106 834	2 689	5 778	69 107	267 447	267 671	529 634	18 151
326291	Rubber product mfg for mechanical use.....	2	30	15	1 757	48 662	1 354	3 048	33 048	120 469	79 221	198 428	11 265
326299	All other rubber product mfg.....	1	44	21	1 772	58 172	1 335	2 730	36 059	146 978	188 450	331 206	6 886
327	Nonmetallic mineral product mfg.....	1	642	242	19 088	641 490	14 844	29 846	447 652	1 801 674	1 385 373	3 197 783	157 158
3271	Clay product & refractory mfg.....	1	61	31	4 088	106 924	3 334	6 020	76 891	311 711	217 863	536 666	12 688
32711	Pottery, ceramics, & plumbing fixture mfg...	4	37	16	2 978	66 764	2 544	4 410	51 256	124 663	77 227	209 984	9 172
327111	Vitreous china plumbing fixture & bathroom accessories mfg.....	5	2	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg..	5	24	9	1 778	31 813	1 488	2 529	22 186	57 417	41 129	100 944	5 249
327113	Porcelain electrical supply mfg.....	-	11	5	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg.....	-	24	15	1 110	40 160	790	1 610	25 635	187 048	140 636	326 682	3 516
327121	Brick & structural clay tile mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
327124	Clay refractory mfg...	-	12	9	674	23 480	516	1 087	17 653	122 115	112 716	235 246	2 364
327125	Nonclay refractory mfg.....	-	7	4	300	11 998	174	313	4 992	54 057	21 097	73 658	608
3272	Glass & glass product mfg.	-	74	20	3 409	122 212	2 858	5 895	93 451	384 652	218 449	603 640	41 117
32721	Glass & glass product mfg.....	-	74	20	3 409	122 212	2 858	5 895	93 451	384 652	218 449	603 640	41 117
327211	Flat glass mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg.....	7	17	1	c	D	D	D	D	D	D	D	578
327213	Glass container mfg..	-	5	5	1 462	55 233	1 304	2 603	47 219	164 659	83 094	251 267	D
327215	Glass product mfg made of purchased glass.....	2	50	12	1 141	30 969	897	1 821	18 938	77 992	58 166	135 468	4 684
3273	Cement & concrete product mfg.....	2	371	125	7 624	276 721	5 803	11 873	194 297	733 739	663 952	1 394 173	75 358
32731	Cement mfg.....	-	15	4	559	23 253	420	867	15 497	131 928	70 431	202 279	9 153
327310	Cement mfg.....	-	15	4	559	23 253	420	867	15 497	131 928	70 431	202 279	9 153
32732	Ready-mix concrete mfg.	2	224	77	4 328	159 566	3 501	6 916	123 447	382 509	429 430	811 955	43 503
327320	Ready-mix concrete mfg.....	2	224	77	4 328	159 566	3 501	6 916	123 447	382 509	429 430	811 955	43 503
32733	Concrete pipe, brick, & block mfg.....	-	51	23	1 314	49 031	899	1 900	26 887	119 997	98 470	216 251	13 278
327331	Concrete block & brick mfg.....	-	28	9	528	19 268	349	665	9 239	56 519	43 095	99 255	9 908
327332	Concrete pipe mfg....	-	23	14	786	29 763	550	1 235	17 648	63 478	55 375	116 996	3 370

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	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg—Con.												
32739	Other concrete product mfg	1	81	21	1 423	44 871	983	2 190	28 466	99 305	65 621	163 688	9 424
327390	Other concrete product mfg	1	81	21	1 423	44 871	983	2 190	28 466	99 305	65 621	163 688	9 424
3274	Lime & gypsum product mfg	—	17	7	386	13 792	313	741	10 759	54 190	59 516	113 407	1 855
32741	Lime mfg	—	3	3	c	D	D	D	D	D	D	D	D
327410	Lime mfg	—	3	3	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	1	14	4	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	1	14	4	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	119	59	3 581	121 841	2 536	5 317	72 254	317 382	225 593	549 897	26 140
32791	Abrasive product mfg	—	35	25	1 608	53 853	1 121	2 388	27 857	131 252	78 691	217 743	4 876
327910	Abrasive product mfg	—	35	25	1 608	53 853	1 121	2 388	27 857	131 252	78 691	217 743	4 876
32799	All other nonmetallic mineral product mfg	2	84	34	1 973	67 988	1 415	2 929	44 397	186 130	146 902	332 154	21 264
327991	Cut stone & stone product mfg	1	34	8	384	12 182	270	580	8 169	23 445	13 184	36 474	D
327992	Ground or treated mineral & earth mfg	1	20	10	553	23 198	353	810	13 279	67 990	57 828	124 769	11 814
327993	Mineral wool mfg	—	6	4	262	7 972	209	351	4 538	20 987	18 524	39 906	D
327999	All other miscellaneous nonmetallic mineral product mfg	4	24	12	774	24 636	583	1 188	18 411	73 708	57 366	131 005	7 821
331	Primary metal mfg	—	325	210	39 306	1 533 212	31 297	67 511	1 098 523	4 164 993	6 738 616	10 875 537	308 657
3311	Iron & steel mills & ferroalloy mfg	—	19	18	10 903	483 485	9 001	19 444	379 548	1 193 019	2 397 775	3 583 475	139 735
33111	Iron & steel mills & ferroalloy mfg	—	19	18	10 903	483 485	9 001	19 444	379 548	1 193 019	2 397 775	3 583 475	139 735
331111	Iron & steel mills	—	19	18	10 903	483 485	9 001	19 444	379 548	1 193 019	2 397 775	3 583 475	139 735
3312	Steel product mfg from purchased steel	—	59	43	5 759	244 697	4 175	8 959	153 443	890 637	1 536 490	2 429 447	47 365
33121	Iron & steel pipes & tubes mfg from purchased steel	—	22	20	2 579	128 558	1 852	4 144	69 914	421 826	710 296	1 154 701	25 843
331210	Iron & steel pipes & tubes mfg from purchased steel	—	22	20	2 579	128 558	1 852	4 144	69 914	421 826	710 296	1 154 701	25 843
33122	Rolling & drawing of purchased steel	—	37	23	3 180	116 139	2 323	4 815	83 529	468 811	826 194	1 274 746	21 522
331221	Cold-rolled steel shape mfg	—	15	8	1 503	68 511	1 127	2 466	50 049	332 067	659 405	983 257	10 315
331222	Steel wire drawing	—	22	15	1 677	47 628	1 196	2 349	33 480	136 744	166 789	291 489	11 207
3313	Alumina & aluminum production & processing	—	22	18	3 174	124 894	2 499	5 519	87 629	394 830	675 387	1 049 828	19 863
33131	Alumina & aluminum production & processing	—	22	18	3 174	124 894	2 499	5 519	87 629	394 830	675 387	1 049 828	19 863
331314	Secondary smelting & alloying of aluminum	—	9	6	338	13 470	239	577	8 435	54 636	137 215	189 923	1 895
331315	Aluminum sheet, plate, & foil mfg	—	3	3	1 057	54 770	822	1 911	40 644	161 959	325 850	477 384	10 791
331316	Aluminum extruded product mfg	—	5	5	1 306	42 138	1 071	2 390	30 983	92 978	115 712	207 483	4 384
331319	Other aluminum rolling & drawing	—	5	4	473	14 516	367	641	7 567	85 257	96 610	175 038	2 793
3314	Nonferrous metal (except aluminum) production & processing	—	44	33	6 328	247 303	4 848	10 812	165 523	702 569	1 443 328	2 148 281	41 593
33141	Nonferrous metal (except aluminum) smelting & refining	—	6	5	681	22 074	486	957	13 265	72 637	141 740	212 048	5 007
331419	Other nonferrous metal primary smelting & refining	—	6	5	681	22 074	486	957	13 265	72 637	141 740	212 048	5 007
33142	Copper rolling, drawing, extruding, & alloying	—	18	15	4 445	186 593	3 424	7 910	128 662	525 676	1 077 269	1 605 983	29 455
331421	Copper rolling, drawing, & extruding	—	10	8	3 384	146 122	2 685	6 281	105 457	406 135	653 686	1 059 211	18 154
331422	Copper wire (except mechanical) drawing	—	3	2	e	D	D	D	D	D	D	D	5 408
331423	Secondary smelting, refining, & alloying of copper	—	5	5	f	D	D	D	D	D	D	D	5 893
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	20	13	1 202	38 636	938	1 945	23 596	104 256	224 319	330 250	7 131
331491	Other nonferrous metal rolling, drawing, & extruding	—	15	11	1 056	33 708	841	1 773	21 570	97 195	189 223	286 005	6 266
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	5	2	146	4 928	97	172	2 026	7 061	35 096	44 245	865

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	181	98	13 142	432 833	10 774	22 777	312 380	983 938	685 636	1 664 506	60 101
33151	Ferrous metal foundries ..	-	58	33	6 094	211 467	4 964	10 096	155 059	518 545	318 734	832 591	26 783
331511	Iron foundries	-	38	25	3 944	146 035	3 109	6 134	101 764	357 699	227 877	582 547	20 730
331512	Steel investment foundries	-	2	2	c	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	18	6	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	123	65	7 048	221 366	5 810	12 681	157 321	465 393	366 902	831 915	33 318
331521	Aluminum die-casting foundries	1	29	19	2 767	85 434	2 317	5 180	62 379	169 598	160 313	330 795	12 720
331522	Nonferrous (except aluminum) die-casting foundries	-	22	17	2 259	70 420	1 823	3 828	48 687	161 407	121 215	282 349	12 373
331524	Aluminum foundries (except die-casting) ..	1	35	11	939	29 265	764	1 769	20 196	64 162	36 994	101 025	4 010
331525	Copper foundries (except die-casting) ..	3	26	12	785	25 938	690	1 444	20 226	46 799	32 647	79 291	3 421
331528	Other nonferrous foundries (except die-casting)	5	11	6	298	10 309	216	460	5 833	23 427	15 733	38 455	794
332	Fabricated metal product mfg	-	3 782	1 376	133 216	4 547 701	101 554	210 889	2 959 768	10 550 843	8 144 235	18 666 908	732 081
3321	Forging & stamping	-	357	195	20 294	733 699	15 915	34 338	494 764	1 666 887	1 573 392	3 222 666	138 725
33211	Forging & stamping	-	357	195	20 294	733 699	15 915	34 338	494 764	1 666 887	1 573 392	3 222 666	138 725
332111	Iron & steel forging	2	41	24	2 449	90 997	1 861	3 890	62 275	166 847	166 847	347 253	17 162
332112	Nonferrous forging	-	8	5	959	41 935	696	1 654	31 724	118 409	99 802	216 041	12 994
332114	Custom roll forming	-	25	13	1 290	41 512	946	2 031	27 092	107 285	106 756	212 935	4 204
332115	Crown & closure mfg	-	8	3	655	22 275	562	1 186	17 905	58 740	59 276	118 208	8 776
332116	Metal stamping	-	264	143	13 798	495 033	10 928	23 552	326 105	1 118 602	1 096 267	2 203 740	81 200
332117	Powder metallurgy part mfg	-	11	7	1 143	41 947	922	2 025	29 663	80 669	44 444	124 489	14 389
3322	Cutlery & handtool mfg	1	129	53	6 655	215 014	5 038	10 280	135 441	523 360	308 863	840 629	31 397
33221	Cutlery & handtool mfg ..	1	129	53	6 655	215 014	5 038	10 280	135 441	523 360	308 863	840 629	31 397
332211	Cutlery & flatware (except precious) mfg	1	8	4	283	7 152	234	403	4 982	23 146	10 153	33 782	1 525
332212	Hand & edge tool mfg ..	1	106	42	5 002	168 977	3 722	7 688	104 639	372 199	204 828	590 630	23 549
332213	Saw blade & handsaw mfg	2	10	2	337	9 517	266	602	6 400	20 103	13 692	33 745	3 134
332214	Kitchen utensil, pot, & pan mfg	-	5	5	1 033	29 368	816	1 587	19 420	107 912	80 190	182 472	3 189
3323	Architectural & structural metals mfg	-	534	219	19 645	633 193	14 230	29 961	382 338	1 651 860	1 382 950	3 034 005	69 630
33231	Plate work & fabricated structural product metal ..	-	196	78	7 793	252 353	5 708	11 784	156 897	690 784	685 057	1 377 569	22 199
332311	Prefabricated metal building & component mfg	-	20	10	1 674	51 113	1 414	2 735	40 945	174 019	278 710	455 607	3 177
332312	Fabricated structural metal mfg	-	121	44	4 258	139 881	2 900	6 041	76 276	404 007	320 048	723 155	13 158
332313	Plate work mfg	-	55	24	1 861	61 359	1 394	3 008	39 676	112 758	86 299	198 807	5 864
33232	Ornamental & architectural metal products mfg	-	338	141	11 852	380 840	8 522	18 177	225 441	961 076	697 893	1 656 436	47 431
332321	Metal window & door mfg	-	63	20	2 805	85 123	1 881	4 246	45 188	200 049	184 568	384 961	6 589
332322	Sheet metal work mfg ..	-	196	93	6 556	217 629	4 897	10 081	132 360	568 567	361 199	927 974	34 353
332323	Ornamental & architectural metal work mfg	1	79	28	2 491	78 088	1 744	3 850	47 893	192 460	152 126	343 501	6 489
3324	Boiler, tank, & shipping container mfg	-	100	45	4 913	186 490	3 832	8 242	129 790	418 495	668 367	1 092 583	20 804
33241	Power boiler & heat exchanger mfg	-	24	8	637	19 410	452	837	11 295	46 048	25 704	73 205	1 588
332410	Power boiler & heat exchanger mfg	-	24	8	637	19 410	452	837	11 295	46 048	25 704	73 205	1 588
33242	Metal tank (heavy gauge) mfg	-	23	10	730	28 162	514	1 092	16 211	54 938	46 464	102 305	1 608
332420	Metal tank (heavy gauge) mfg	-	23	10	730	28 162	514	1 092	16 211	54 938	46 464	102 305	1 608
33243	Metal can, box, & other metal container (light gauge) mfg	1	53	27	3 546	138 918	2 866	6 313	102 284	317 509	596 199	917 073	17 608
332431	Metal can mfg	-	25	15	2 216	89 201	1 855	3 954	72 982	216 255	463 980	682 561	9 888
332439	Other metal container mfg	1	28	12	1 330	49 717	1 011	2 359	29 302	101 254	132 219	234 512	7 720
3325	Hardware mfg	1	70	39	7 149	230 561	5 346	10 348	135 738	577 851	383 984	975 901	36 640
33251	Hardware mfg	1	70	39	7 149	230 561	5 346	10 348	135 738	577 851	383 984	975 901	36 640
332510	Hardware mfg	1	70	39	7 149	230 561	5 346	10 348	135 738	577 851	383 984	975 901	36 640

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	-	182	84	7 083	218 491	5 580	10 978	135 825	463 815	360 309	813 210	27 318
33261	Spring & wire product mfg	-	182	84	7 083	218 491	5 580	10 978	135 825	463 815	360 309	813 210	27 318
332611	Spring (heavy gauge) mfg	-	18	9	975	32 489	798	1 618	24 895	65 835	63 838	128 957	3 347
332612	Spring (light gauge) mfg	1	51	26	2 096	69 971	1 726	3 635	47 388	144 905	106 126	248 769	8 969
332618	Other fabricated wire product mfg	-	113	49	4 012	116 031	3 056	5 725	63 542	253 075	190 345	435 484	15 002
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	1 620	436	35 022	1 235 142	27 231	56 773	829 978	2 603 183	1 417 570	4 000 441	218 600
33271	Machine shops	1	1 252	254	18 204	641 686	14 198	28 933	430 908	1 219 309	568 507	1 773 876	101 939
332710	Machine shops	1	1 252	254	18 204	641 686	14 198	28 933	430 908	1 219 309	568 507	1 773 876	101 939
33272	Turned product & screw, nut, & bolt mfg	1	368	182	16 818	593 456	13 033	27 840	399 070	1 383 874	849 063	2 226 565	116 661
332721	Precision turned product mfg	2	233	105	7 842	258 927	6 378	13 518	180 042	587 815	240 325	823 398	55 429
332722	Bolt, nut, screw, rivet, & washer mfg	-	135	77	8 976	334 529	6 655	14 322	219 028	796 059	608 738	1 403 167	61 232
3328	Coating, engraving, heat treating, & allied activities .	1	432	169	12 640	405 831	9 796	20 203	260 002	856 576	512 344	1 366 774	87 156
33281	Coating, engraving, heat treating, & allied activities	1	432	169	12 640	405 831	9 796	20 203	260 002	856 576	512 344	1 366 774	87 156
332811	Metal heat treating	1	46	24	1 600	58 736	1 232	2 837	40 070	134 397	49 425	185 286	39 089
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	118	59	4 726	147 116	3 712	7 350	100 617	349 012	303 866	646 878	24 586
332813	Electroplating, plating, polishing, anodizing, & coloring	1	268	86	6 314	199 979	4 852	10 016	119 315	373 167	159 053	534 610	23 481
3329	Other fabricated metal product mfg	-	358	136	19 815	689 280	14 586	29 766	455 892	1 788 816	1 536 456	3 320 699	101 811
33291	Metal valve mfg	-	79	50	7 007	253 079	4 694	9 971	150 475	702 959	577 236	1 280 290	34 153
332911	Industrial valve mfg	-	31	19	2 733	93 559	1 675	3 720	57 597	248 571	146 203	401 967	12 791
332912	Fluid power valve & hose fitting mfg	-	24	12	1 186	38 833	839	1 844	23 451	129 335	113 045	239 194	5 465
332913	Plumbing fixture fitting & trim mfg	-	8	6	1 608	61 032	1 051	2 063	36 447	164 059	176 875	336 010	9 977
332919	Other metal valve & pipe fitting mfg	1	16	13	1 480	59 655	1 129	2 344	32 980	160 994	141 113	303 119	5 920
33299	All other fabricated metal product mfg	-	279	86	12 808	436 201	9 892	19 795	305 417	1 085 857	959 220	2 040 409	67 658
332991	Ball & roller bearing mfg	-	13	10	2 309	84 367	1 903	3 902	67 458	224 990	176 241	403 254	21 224
332992	Small arms ammunition mfg	-	6	3	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	1	37	12	1 020	31 945	800	1 492	19 230	61 034	56 153	117 505	4 111
332997	Industrial pattern mfg	-	54	10	717	25 676	566	1 156	18 790	41 157	12 643	53 221	3 339
332998	Enameled iron & metal sanitary ware mfg	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	160	45	5 675	177 720	4 488	8 798	125 280	500 487	511 778	1 015 973	22 409
333	Machinery mfg	-	2 202	826	115 408	4 793 663	77 019	158 555	2 799 281	13 216 153	12 878 578	26 221 019	711 429
3331	Agriculture, construction, & mining machinery mfg	-	146	71	24 818	1 223 444	17 115	36 321	776 363	4 665 022	5 335 946	10 045 709	228 851
33311	Agricultural implement mfg	-	71	34	11 384	531 343	8 204	18 478	367 115	1 989 414	1 841 092	3 732 117	121 397
333111	Farm machinery & equipment mfg	-	66	31	j	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	51	29	12 740	667 626	8 409	16 931	393 475	2 583 288	3 446 941	6 180 920	104 495
333120	Construction machinery mfg	-	51	29	12 740	667 626	8 409	16 931	393 475	2 583 288	3 446 941	6 180 920	104 495
33313	Mining & oil & gas field machinery mfg	-	24	8	694	24 475	502	912	15 773	92 320	47 913	132 672	2 959
333131	Mining machinery & equipment mfg	-	18	8	662	23 558	482	880	15 299	90 708	46 943	130 236	2 657

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	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	1	273	108	10 524	410 820	6 025	11 876	201 333	963 430	895 352	1 862 947	48 025
33321	Sawmill & woodworking machinery mfg	2	15	4	267	7 674	153	331	4 050	19 191	10 363	29 210	566
333210	Sawmill & woodworking machinery mfg	2	15	4	267	7 674	153	331	4 050	19 191	10 363	29 210	566
33322	Plastics & rubber industry machinery mfg	—	28	10	1 094	40 277	655	1 316	17 735	83 095	101 558	184 776	6 267
333220	Plastics & rubber industry machinery mfg	—	28	10	1 094	40 277	655	1 316	17 735	83 095	101 558	184 776	6 267
33329	Other industrial machinery mfg	1	230	94	9 163	362 869	5 217	10 229	179 548	861 144	783 431	1 648 961	41 192
333291	Paper industry machinery mfg	1	16	4	269	10 780	109	203	3 683	18 106	19 735	36 875	1 621
333292	Textile machinery mfg	1	10	4	536	15 703	392	745	10 515	34 457	27 142	60 137	1 141
333293	Printing machinery & equipment mfg	—	70	29	2 795	105 996	1 218	2 540	45 697	225 361	189 445	409 008	6 298
333294	Food product machinery mfg	—	42	21	1 941	82 570	1 251	2 476	46 307	183 625	186 687	375 382	8 593
333298	All other industrial machinery mfg	1	89	34	3 534	142 974	2 186	4 146	70 215	391 291	353 109	751 965	23 090
3333	Commercial & service industry machinery mfg ..	—	171	78	9 147	332 619	4 931	10 023	135 845	797 993	751 724	1 503 851	35 217
33331	Commercial & service industry machinery mfg	—	171	78	9 147	332 619	4 931	10 023	135 845	797 993	751 724	1 503 851	35 217
333311	Automatic vending machine mfg	5	11	4	211	6 019	145	312	3 137	15 275	9 896	25 415	615
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	9	6	398	13 175	317	498	7 955	31 364	27 705	59 837	138
333313	Office machinery mfg ..	—	17	10	2 271	89 267	713	1 446	19 390	144 728	179 614	320 661	11 354
333314	Optical instrument & lens mfg	5	15	3	164	6 761	114	220	4 385	11 844	5 633	17 697	939
333315	Photographic & photocopying equipment mfg	1	30	9	503	17 780	272	510	7 109	58 932	34 715	90 198	1 696
333319	Other commercial & service industry machinery mfg	—	89	46	5 600	199 617	3 370	7 037	93 869	535 850	494 161	990 043	20 475
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	103	56	8 094	249 763	5 887	10 824	143 532	632 187	699 078	1 332 007	32 460
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	103	56	8 094	249 763	5 887	10 824	143 532	632 187	699 078	1 332 007	32 460
333411	Air purification equipment mfg	3	27	12	1 231	34 061	796	1 244	15 826	76 286	83 982	164 002	4 608
333412	Industrial & commercial fan & blower mfg	3	16	10	1 390	45 533	938	1 755	24 366	95 234	75 977	170 859	5 442
333414	Heating equipment (except warm air furnaces) mfg	—	17	8	1 173	43 918	756	1 535	21 046	113 523	72 864	185 571	4 568
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	43	26	4 300	126 251	3 397	6 290	82 294	347 144	466 255	811 575	17 842
3335	Metalworking machinery mfg	2	969	253	23 034	964 363	16 241	35 490	613 888	1 903 515	1 040 339	2 977 001	126 584
33351	Metalworking machinery mfg	2	969	253	23 034	964 363	16 241	35 490	613 888	1 903 515	1 040 339	2 977 001	126 584
333511	Industrial mold mfg ...	1	277	64	4 102	195 395	3 231	7 291	140 536	337 744	127 982	465 610	30 982
333512	Machine tool (metal cutting types) mfg ...	6	36	17	2 840	116 758	1 631	3 911	64 229	194 555	204 075	396 492	11 800
333513	Machine tool (metal forming types) mfg ...	1	26	20	2 421	105 695	1 463	3 061	59 716	263 815	145 654	416 687	12 634
333514	Special die & tool, die set, jig, & fixture mfg ..	2	388	87	6 168	260 978	4 838	9 967	177 651	470 229	207 778	674 427	34 009
333515	Cutting tool & machine tool accessory mfg ..	—	189	40	5 281	190 207	3 755	8 303	121 187	425 922	208 228	625 919	26 890
333516	Rolling mill machinery & equipment mfg	1	9	3	191	6 434	127	280	4 074	11 070	8 295	19 251	2 211
333518	Other metalworking machinery mfg	2	44	22	2 031	88 896	1 196	2 677	46 495	200 180	138 327	378 615	8 058
3336	Engine, turbine, & power transmission equipment mfg	—	71	47	11 539	524 195	8 137	15 842	330 133	1 797 996	1 746 670	3 610 590	108 475

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ILLINOIS—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg—Con.												
33361	Engine, turbine, & power transmission equipment mfg	-	71	47	11 539	524 195	8 137	15 842	330 133	1 797 996	1 746 670	3 610 590	108 475
333612	Speed changer, industrial high-speed drive, & gear mfg	-	34	21	2 379	96 543	1 665	3 412	58 537	218 485	113 722	334 960	12 080
333613	Mechanical power transmission equipment mfg	-	20	13	2 761	99 088	1 881	3 650	58 693	218 787	175 761	401 759	13 561
333618	Other engine equipment mfg	-	17	13	6 399	328 564	4 591	8 780	212 903	1 360 724	1 457 187	2 873 871	82 834
3339	Other general-purpose machinery mfg	-	469	213	28 252	1 088 459	18 683	38 179	598 187	2 456 010	2 409 469	4 888 914	131 817
33391	Pump & compressor mfg	-	53	29	5 311	198 216	3 242	6 997	103 523	467 650	350 881	839 994	22 716
333911	Pump & pumping equipment mfg	-	28	19	2 781	110 579	1 519	3 158	51 678	203 659	218 971	446 891	12 967
333912	Air & gas compressor mfg	1	23	9	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	107	48	5 100	196 782	3 472	7 535	113 203	393 187	661 609	1 061 112	24 799
333921	Elevator & moving stairway mfg	4	20	11	814	31 830	586	1 321	18 747	65 751	85 676	153 471	3 997
333922	Conveyor & conveying equipment mfg	1	54	20	1 978	81 756	1 194	2 511	40 739	154 329	134 047	289 193	6 742
333923	Overhead traveling crane, hoist, & monorail system mfg	-	11	7	535	18 672	294	614	8 604	35 376	34 172	69 689	1 587
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	22	10	1 773	64 524	1 398	3 089	45 113	137 731	407 714	548 759	12 473
33399	All other general-purpose machinery mfg	-	309	136	17 841	693 461	11 969	23 647	381 461	1 595 173	1 396 979	2 987 808	84 302
333991	Power-driven handtool mfg	1	22	6	561	19 132	415	858	12 214	66 098	79 851	144 869	1 607
333992	Welding & soldering equipment mfg	-	13	10	620	23 679	420	942	13 005	56 708	52 178	106 643	2 706
333993	Packaging machinery mfg	1	61	31	3 949	160 080	2 124	4 028	65 936	330 485	254 850	586 325	19 381
333994	Industrial process furnace & oven mfg	1	27	10	1 219	38 401	897	1 713	20 383	95 500	56 119	150 114	3 046
333995	Fluid power cylinder & actuator mfg	-	36	19	5 112	239 576	3 752	7 586	156 724	554 412	432 806	989 666	25 196
333996	Fluid power pump & motor mfg	-	11	6	1 702	56 717	1 351	2 595	37 296	140 656	167 536	310 224	8 285
333997	Scale & balance (except laboratory) mfg	-	7	5	572	16 086	371	751	7 509	27 384	88 971	115 460	1 127
333999	All other miscellaneous general-purpose machinery mfg	1	132	49	4 106	139 790	2 639	5 174	68 394	323 930	264 668	584 507	22 954
334	Computer & electronic product mfg	-	770	350	76 625	3 085 770	42 657	83 156	1 118 591	8 288 831	8 112 519	16 281 686	968 528
3341	Computer & peripheral equipment mfg	-	54	12	2 630	101 267	776	1 675	20 104	302 416	218 391	522 768	34 508
33411	Computer & peripheral equipment mfg	-	54	12	2 630	101 267	776	1 675	20 104	302 416	218 391	522 768	34 508
334119	Other computer peripheral equipment mfg	-	34	10	2 457	96 194	700	1 497	17 736	292 405	204 625	498 889	33 498
3342	Communications equipment mfg	-	100	42	30 794	1 599 701	14 567	28 690	496 284	4 580 001	5 623 749	10 080 394	702 861
33421	Telephone apparatus mfg	-	31	13	5 457	283 872	2 414	4 983	65 344	1 089 512	502 728	1 578 124	D
334210	Telephone apparatus mfg	-	31	13	5 457	283 872	2 414	4 983	65 344	1 089 512	502 728	1 578 124	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	45	19	22 932	1 237 023	10 642	20 727	395 906	3 326 706	4 978 531	8 196 655	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	45	19	22 932	1 237 023	10 642	20 727	395 906	3 326 706	4 978 531	8 196 655	D
33429	Other communications equipment mfg	-	24	10	2 405	78 806	1 511	2 980	35 034	163 783	142 490	305 615	D
334290	Other communications equipment mfg	-	24	10	2 405	78 806	1 511	2 980	35 034	163 783	142 490	305 615	D
3343	Audio & video equipment mfg	-	30	11	1 376	46 886	767	1 430	16 645	149 020	115 883	263 139	6 874
33431	Audio & video equipment mfg	-	30	11	1 376	46 886	767	1 430	16 645	149 020	115 883	263 139	6 874
334310	Audio & video equipment mfg	-	30	11	1 376	46 886	767	1 430	16 645	149 020	115 883	263 139	6 874

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	330	169	21 726	568 403	16 182	30 615	320 352	1 168 124	969 843	2 133 302	88 405
33441	Semiconductor & other electronic component mfg	1	330	169	21 726	568 403	16 182	30 615	320 352	1 168 124	969 843	2 133 302	88 405
334411	Electron tube mfg	—	9	4	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	2	87	53	5 034	134 502	3 826	7 931	85 817	282 016	210 352	490 526	29 636
334413	Semiconductor & related device mfg	6	25	6	407	12 729	248	369	4 849	38 797	18 531	57 360	9 599
334415	Electronic resistor mfg	1	6	4	363	8 369	267	523	4 642	18 467	7 513	26 122	1 252
334416	Electronic coil, transformer, & other inductor mfg	—	59	35	2 907	60 700	2 318	4 510	35 278	129 204	101 328	229 390	8 090
334417	Electronic connector mfg	5	15	9	1 549	46 021	1 123	2 209	27 771	94 572	54 938	150 355	5 870
334418	Printed circuit assembly (electronic assembly) mfg	1	23	17	1 691	42 053	1 209	2 376	21 741	85 802	86 227	174 311	4 790
334419	Other electronic component mfg	—	100	40	5 017	147 322	3 455	6 028	69 431	420 560	237 660	653 204	19 357
3345	Navigational, measuring, medical, & control instruments mfg	—	218	103	17 112	685 758	8 042	16 054	208 257	1 696 290	983 637	2 682 019	89 686
33451	Navigational, measuring, medical, & control instruments mfg	—	218	103	17 112	685 758	8 042	16 054	208 257	1 696 290	983 637	2 682 019	89 686
334510	Electromedical & electrotherapeutic apparatus mfg	—	20	10	1 811	62 313	922	1 935	21 830	137 613	60 434	204 197	6 568
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	3 526	185 712	1 054	2 107	34 580	398 932	140 943	531 553	37 204
334512	Automatic environmental control mfg	—	13	7	2 010	56 248	1 275	1 918	28 959	213 641	137 585	343 799	9 647
334513	Industrial process control instrument mfg	1	41	23	2 489	99 662	1 204	2 408	31 504	249 472	151 672	400 025	7 538
334514	Totalizing fluid meter & counting device mfg	—	13	7	923	29 182	556	996	11 860	78 972	34 870	113 324	3 387
334515	Electricity measuring & testing instrument mfg	1	29	17	1 703	62 574	842	1 797	19 419	168 413	94 883	262 102	10 470
334516	Analytical laboratory instrument mfg	3	19	6	e	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	—	22	11	1 971	79 609	1 076	2 373	30 060	180 306	170 691	357 567	6 361
334518	Watch, clock, & part mfg	—	13	2	g	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	34	12	1 155	47 502	482	893	12 592	132 126	90 937	223 776	3 959
3346	Mfg & reproducing magnetic & optical media	—	38	13	2 987	83 755	2 323	4 692	56 949	392 980	201 016	600 064	46 194
33461	Mfg & reproducing magnetic & optical media	—	38	13	2 987	83 755	2 323	4 692	56 949	392 980	201 016	600 064	46 194
334612	Prerecorded CD (except software), tape, & record reproducing	—	30	11	2 510	70 814	1 904	3 793	47 885	360 265	185 646	551 777	43 479
334613	Magnetic & optical recording media mfg	2	5	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	486	259	49 247	1 615 344	34 232	68 154	869 291	4 015 118	3 638 061	7 668 050	298 095
3351	Electric lighting equipment mfg	1	88	43	6 070	193 590	4 289	8 485	95 503	500 133	395 150	893 603	74 283
33511	Electric lamp bulb & part mfg	—	6	4	862	26 630	777	1 586	23 205	56 751	26 010	81 372	D
335110	Electric lamp bulb & part mfg	—	6	4	862	26 630	777	1 586	23 205	56 751	26 010	81 372	D
33512	Lighting fixture mfg	1	82	39	5 208	166 960	3 512	6 899	72 298	443 382	369 140	812 231	D
335121	Residential electric lighting fixture mfg	1	32	16	2 807	101 607	1 800	3 677	38 270	297 854	215 696	512 872	32 296
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	23	12	1 573	42 425	1 087	2 044	19 839	89 542	93 104	183 341	D
335129	Other lighting equipment mfg	1	27	11	828	22 928	625	1 178	14 189	55 986	60 340	116 018	2 022

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3352	Household appliance mfg...	-	28	20	8 016	248 539	6 242	12 664	166 503	567 773	775 777	1 373 162	28 595
33521	Small electrical appliance mfg	-	13	5	1 449	45 854	943	2 083	27 816	108 071	153 681	258 889	11 956
335211	Electric housewares & household fan mfg...	-	12	4	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	15	15	6 567	202 685	5 299	10 581	138 687	459 702	622 096	1 114 273	16 639
335221	Household cooking appliance mfg	-	11	11	h	D	D	D	D	D	D	D	13 399
335222	Household refrigerator & home freezer mfg..	-	2	2	h	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	215	106	16 693	544 392	11 324	22 393	277 322	1 395 678	1 180 719	2 544 723	87 162
33531	Electrical equipment mfg	-	215	106	16 693	544 392	11 324	22 393	277 322	1 395 678	1 180 719	2 544 723	87 162
335311	Power, distribution, & specialty transformer mfg	-	24	15	2 464	69 671	1 697	3 463	32 247	248 751	171 540	413 254	12 176
335312	Motor & generator mfg	1	41	24	2 739	78 874	2 005	4 184	47 070	241 610	166 943	408 780	7 785
335313	Switchgear & switchboard apparatus mfg	-	49	27	6 297	231 629	4 429	9 617	133 700	536 705	421 068	960 878	40 510
335314	Relay & industrial control mfg	-	101	40	5 193	164 218	3 193	5 129	64 305	368 612	421 168	761 811	26 691
3359	Other electrical equipment & component mfg	-	155	90	18 468	628 823	12 377	24 612	329 963	1 551 534	1 286 415	2 856 562	108 055
33591	Battery mfg	-	13	5	956	31 978	820	1 779	22 015	97 717	179 028	275 744	1 698
335911	Storage battery mfg...	-	13	5	956	31 978	820	1 779	22 015	97 717	179 028	275 744	1 698
33592	Communication & energy wire & cable mfg	-	15	13	2 930	114 606	1 650	3 745	49 731	419 835	279 558	711 908	35 594
335929	Other communication & energy wire mfg ...	-	14	12	h	D	D	D	D	D	D	D	35 594
33593	Wiring device mfg	-	59	42	11 155	376 816	7 731	14 621	212 104	801 201	570 150	1 377 603	61 882
335931	Current-carrying wiring device mfg	-	38	29	8 888	293 885	6 120	11 261	161 954	592 954	382 419	978 431	39 948
335932	Noncurrent-carrying wiring device mfg	-	21	13	2 267	82 931	1 611	3 360	50 150	208 247	187 731	399 172	21 934
33599	All other electrical equipment & component mfg	1	68	30	3 427	105 423	2 176	4 467	46 113	232 781	257 679	491 307	8 881
335999	All other miscellaneous electrical equipment & component mfg	1	63	30	3 376	104 092	2 139	4 409	45 225	229 316	254 743	484 819	8 587
336	Transportation equipment mfg	-	450	238	60 238	2 295 287	46 271	89 745	1 568 080	7 059 801	11 731 012	18 807 542	651 025
3361	Motor vehicle mfg	-	19	5	10 210	566 352	9 256	16 596	492 452	2 948 599	6 492 365	9 458 115	207 672
33611	Automobile & light duty motor vehicle mfg	-	19	5	10 210	566 352	9 256	16 596	492 452	2 948 599	6 492 365	9 458 115	207 672
336111	Automobile mfg	-	12	5	10 179	565 508	9 228	16 563	491 741	2 945 421	6 485 642	9 448 185	207 464
3362	Motor vehicle body & trailer mfg	-	46	26	4 248	117 184	3 365	6 666	82 366	228 170	483 457	735 324	31 721
33621	Motor vehicle body & trailer mfg	-	46	26	4 248	117 184	3 365	6 666	82 366	228 170	483 457	735 324	31 721
336211	Motor vehicle body mfg	1	23	10	1 363	48 915	951	1 980	30 306	93 062	109 255	204 672	D
336212	Truck trailer mfg	-	11	9	2 491	59 162	2 107	3 997	45 936	116 927	352 046	490 228	4 459
336213	Motor home mfg	-	1	1	c	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	2	11	6	e	D	D	D	D	D	D	D	471
3363	Motor vehicle parts mfg ...	-	278	153	30 464	971 514	23 893	45 833	656 538	2 496 993	2 834 091	5 366 217	322 120
33631	Motor vehicle gasoline engine & engine parts mfg	1	35	14	2 789	76 948	2 028	3 410	47 574	258 470	199 880	455 398	20 491
336312	Gasoline engine & engine parts mfg	1	31	13	2 733	75 650	1 981	3 339	46 586	255 337	197 844	450 244	20 320
33632	Motor vehicle electrical & electronic equipment mfg	-	69	32	7 726	191 465	5 896	11 064	117 876	569 006	608 076	1 180 005	58 374
336321	Vehicular lighting equipment mfg	-	10	6	2 065	55 857	1 711	3 517	40 526	158 218	158 533	317 114	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	59	26	5 661	135 608	4 185	7 547	77 350	410 788	449 543	862 891	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33633	Motor vehicle steering & suspension component (except spring) mfg	1	8	3	359	9 763	297	704	6 801	24 006	23 817	47 416	2 954
336330	Motor vehicle steering & suspension component (except spring) mfg	1	8	3	359	9 763	297	704	6 801	24 006	23 817	47 416	2 954
33634	Motor vehicle brake system mfg	—	14	8	1 893	62 793	1 547	3 370	43 173	139 422	203 935	353 345	7 748
336340	Motor vehicle brake system mfg	—	14	8	1 893	62 793	1 547	3 370	43 173	139 422	203 935	353 345	7 748
33635	Motor vehicle transmission & power train parts mfg	—	22	8	2 296	80 862	1 820	3 286	56 106	214 799	165 182	387 216	16 059
336350	Motor vehicle transmission & power train parts mfg	—	22	8	2 296	80 862	1 820	3 286	56 106	214 799	165 182	387 216	16 059
33636	Motor vehicle seating & interior trim mfg	—	10	6	875	24 775	681	1 523	15 888	79 643	176 319	256 677	3 847
336360	Motor vehicle seating & interior trim mfg	—	10	6	875	24 775	681	1 523	15 888	79 643	176 319	256 677	3 847
33637	Motor vehicle metal stamping	—	48	38	5 177	245 834	4 263	8 686	182 973	565 888	624 025	1 195 667	136 895
336370	Motor vehicle metal stamping	—	48	38	5 177	245 834	4 263	8 686	182 973	565 888	624 025	1 195 667	136 895
33639	Other motor vehicle parts mfg	1	72	44	9 349	279 074	7 361	13 790	186 147	645 759	832 857	1 490 493	75 752
336391	Motor vehicle air-conditioning mfg	—	4	4	1 119	41 217	896	1 640	27 540	83 337	175 674	270 916	D
336399	All other motor vehicle parts mfg	1	68	40	8 230	237 857	6 465	12 150	158 607	562 422	657 183	1 219 577	D
3364	Aerospace product & parts mfg	—	30	16	5 685	286 527	2 716	6 088	119 412	690 448	400 101	1 040 464	52 373
33641	Aerospace product & parts mfg	—	30	16	5 685	286 527	2 716	6 088	119 412	690 448	400 101	1 040 464	52 373
336411	Aircraft mfg	9	2	1	c	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	9	4	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	18	10	3 964	215 700	1 385	3 115	64 960	564 561	313 682	831 788	40 544
3365	Railroad rolling stock mfg	—	38	23	5 998	276 439	3 995	8 930	161 509	526 902	1 282 031	1 809 064	27 472
33651	Railroad rolling stock mfg	—	38	23	5 998	276 439	3 995	8 930	161 509	526 902	1 282 031	1 809 064	27 472
336510	Railroad rolling stock mfg	—	38	23	5 998	276 439	3 995	8 930	161 509	526 902	1 282 031	1 809 064	27 472
3366	Ship & boat building	—	16	5	1 488	35 218	1 246	2 176	25 119	77 260	122 366	199 985	3 552
33661	Ship & boat building	—	16	5	1 488	35 218	1 246	2 176	25 119	77 260	122 366	199 985	3 552
336611	Ship building & repairing	—	3	1	c	D	D	D	D	D	D	D	D
336612	Boat building	—	13	4	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	23	10	2 145	42 053	1 800	3 456	30 684	91 429	116 601	198 373	6 115
33699	Other transportation equipment mfg	—	23	10	2 145	42 053	1 800	3 456	30 684	91 429	116 601	198 373	6 115
336991	Motorcycle, bicycle, & parts mfg	—	10	7	2 009	38 933	1 697	3 250	28 718	85 142	107 922	183 753	5 469
336999	All other transportation equipment mfg	5	12	3	c	D	D	D	D	D	D	D	646
337	Furniture & related product mfg	1	844	178	19 933	558 584	15 172	29 683	350 643	1 351 423	1 144 400	2 512 115	54 982
3371	Household & institutional furniture & kitchen cabinet mfg	2	582	84	8 263	203 779	6 605	12 321	137 566	435 114	378 536	814 401	16 252
33711	Wood kitchen cabinet & counter top mfg	2	323	30	3 656	95 118	2 953	5 624	66 139	201 430	142 691	345 193	7 165
337110	Wood kitchen cabinet & counter top mfg	2	323	30	3 656	95 118	2 953	5 624	66 139	201 430	142 691	345 193	7 165
33712	Household & institutional furniture mfg	3	259	54	4 607	108 661	3 652	6 697	71 427	233 684	235 845	469 208	9 087
337121	Upholstered household furniture mfg	4	52	7	669	12 000	581	983	9 906	20 854	16 599	37 718	489
337122	Nonupholstered wood household furniture mfg	3	127	23	1 853	40 963	1 487	2 673	29 016	82 026	108 681	190 139	3 075
337124	Metal household furniture mfg	4	12	2	246	6 227	171	374	3 620	15 351	20 487	35 827	1 031
337127	Institutional furniture mfg	2	59	20	1 739	47 348	1 336	2 544	27 740	112 009	86 696	198 714	4 259

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ILLINOIS—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	203	81	9 446	302 487	7 232	14 675	182 215	717 344	617 764	1 346 406	33 743
33721	Office furniture (including fixtures) mfg	1	203	81	9 446	302 487	7 232	14 675	182 215	717 344	617 764	1 346 406	33 743
337211	Wood office furniture mfg	3	25	10	649	22 684	495	1 117	14 648	51 477	37 858	95 552	1 482
337212	Custom architectural woodwork & millwork mfg	1	44	9	615	23 087	421	853	14 041	41 355	27 170	68 226	2 938
337214	Office furniture (except wood) mfg	2	13	7	1 214	44 964	868	1 873	21 054	106 222	66 177	173 102	5 653
337215	Showcase, partition, shelving, & locker mfg	—	121	55	6 968	211 752	5 448	10 832	132 472	518 290	486 559	1 009 526	23 670
3379	Other furniture related product mfg	—	59	13	2 224	52 318	1 335	2 687	30 862	198 965	148 100	351 308	4 987
33791	Mattress mfg	—	28	8	835	24 002	629	1 266	15 324	65 596	70 962	136 354	2 125
337910	Mattress mfg	—	28	8	835	24 002	629	1 266	15 324	65 596	70 962	136 354	2 125
33792	Blind & shade mfg	1	31	5	1 389	28 316	706	1 421	15 538	133 369	77 138	214 954	2 862
337920	Blind & shade mfg	1	31	5	1 389	28 316	706	1 421	15 538	133 369	77 138	214 954	2 862
339	Miscellaneous mfg	1	1 389	316	39 712	1 280 865	26 479	51 197	634 635	2 960 780	2 380 820	5 353 602	184 269
3391	Medical equipment & supplies mfg	2	564	83	11 137	409 948	6 958	13 249	204 269	835 407	640 189	1 471 434	53 915
33911	Medical equipment & supplies mfg	2	564	83	11 137	409 948	6 958	13 249	204 269	835 407	640 189	1 471 434	53 915
339111	Laboratory apparatus & furniture mfg	—	20	7	845	32 183	432	897	11 446	48 551	54 559	104 924	3 143
339112	Surgical & medical instrument mfg	5	60	23	3 598	180 131	2 291	4 672	101 897	273 382	148 964	421 430	18 990
339113	Surgical appliance & supplies mfg	—	64	21	2 423	68 514	1 641	2 993	32 322	138 107	226 192	366 943	5 417
339114	Dental equipment & supplies mfg	1	47	11	1 394	53 040	797	1 553	22 023	144 372	90 927	234 464	7 339
339115	Ophthalmic goods mfg	—	32	5	978	29 791	421	820	6 598	123 790	85 248	200 862	15 997
339116	Dental laboratories	6	341	16	1 899	46 289	1 376	2 314	29 983	107 205	34 299	142 811	3 029
3399	Other miscellaneous mfg	1	825	233	28 575	870 917	19 521	37 948	430 366	2 125 373	1 740 631	3 882 168	130 354
33991	Jewelry & silverware mfg	2	87	13	1 221	31 720	877	1 525	17 799	92 597	71 149	163 227	2 846
339911	Jewelry (except costume) mfg	2	49	7	655	19 460	459	854	10 490	70 004	57 158	127 076	1 980
339912	Silverware & plated ware mfg	1	9	3	295	6 419	216	347	3 902	12 147	7 546	19 320	D
339914	Costume jewelry & novelty mfg	2	28	3	e	D	D	D	D	D	D	D	464
33992	Sporting & athletic goods mfg	3	90	24	3 450	99 766	2 292	3 752	37 998	289 372	230 712	557 556	13 892
339920	Sporting & athletic goods mfg	3	90	24	3 450	99 766	2 292	3 752	37 998	289 372	230 712	557 556	13 892
33993	Doll, toy, & game mfg	—	66	16	2 096	59 843	1 446	2 832	28 186	166 700	197 651	368 334	19 172
339931	Doll & stuffed toy mfg	—	10	2	245	4 427	200	475	2 855	32 653	13 424	45 634	126
339932	Game, toy, & children's vehicle mfg	—	56	14	1 851	55 416	1 246	2 357	25 331	134 047	184 227	322 700	19 046
33994	Office supplies (except paper) mfg	—	75	16	1 753	58 789	1 159	2 417	29 447	214 216	188 517	394 664	8 702
339941	Pen & mechanical pencil mfg	—	5	3	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	1	12	5	370	12 408	257	478	5 653	34 351	24 464	58 808	D
339943	Marking device mfg	2	52	5	520	11 628	340	662	7 359	32 049	16 364	47 073	1 726
339944	Carbon paper & inked ribbon mfg	—	6	3	c	D	D	D	D	D	D	D	1 437
33995	Sign mfg	1	261	65	5 398	183 712	3 416	6 713	84 578	355 145	297 273	643 605	14 921
339950	Sign mfg	1	261	65	5 398	183 712	3 416	6 713	84 578	355 145	297 273	643 605	14 921
33999	All other miscellaneous mfg	1	246	99	14 657	437 087	10 331	20 709	232 358	1 007 343	755 329	1 754 782	70 821
339991	Gasket, packing, & sealing device mfg	—	48	28	5 925	196 571	3 942	7 579	101 640	435 500	290 008	722 773	35 713
339992	Musical instrument mfg	1	31	9	703	19 628	541	1 075	12 177	46 826	30 762	79 509	3 021
339993	Fastener, button, needle, & pin mfg	3	11	4	296	6 079	221	408	3 742	14 893	14 851	29 324	512
339994	Broom, brush, & mop mfg	—	21	14	1 388	45 699	964	2 398	23 986	113 621	76 870	190 110	7 564
339995	Burlap casket mfg	4	8	4	159	4 290	124	248	3 157	12 231	8 287	20 649	680
339999	All other miscellaneous mfg	1	127	40	6 186	164 820	4 539	9 001	87 656	384 272	334 551	712 417	23 331

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BLOOMINGTON-NORMAL, IL MSA												
31-33	Manufacturing	—	112	38	8 388	357 729	6 751	12 986	276 349	975 020	2 882 082	3 870 266	84 896
311	Food mfg.....	—	16	7	715	20 682	518	1 102	15 076	50 900	198 267	247 030	4 980
3113	Sugar & confectionery product mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	—	1	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	18	6	627	22 296	461	969	13 137	48 129	27 938	74 261	8 529
3231	Printing & related support activities.....	2	18	6	627	22 296	461	969	13 137	48 129	27 938	74 261	8 529
32311	Printing.....	2	16	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	9	5	474	16 961	355	725	10 299	31 642	19 208	49 704	D
326	Plastics & rubber products mfg.....	9	1	1	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	9	1	1	e	D	D	D	D	D	D	D	D
32621	Tire mfg.....	9	1	1	e	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	9	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	13	6	424	13 145	317	620	8 025	31 872	37 398	69 116	1 451
333	Machinery mfg.....	4	7	3	e	D	D	D	D	D	D	D	1 937
335	Electrical equipment, appliance, & component mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg...	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	7	2	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg.....	—	1	1	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHAMPAIGN-URBANA, IL MSA												
31-33	Manufacturing	-	152	55	10 857	292 444	8 396	15 858	204 808	1 165 868	1 488 725	2 689 516	74 130
311	Food mfg.....	-	7	2	g	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	1	1	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	1	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	1	1	g	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	1	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	4	3	g	D	D	D	D	D	D	D	1 467
3219	Other wood product mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
32191	Millwork	-	3	2	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	3	2	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	30	8	736	18 349	455	745	10 491	52 040	25 916	77 974	1 681
3231	Printing & related support activities.....	2	30	8	736	18 349	455	745	10 491	52 040	25 916	77 974	1 681
32311	Printing	1	25	6	578	14 269	332	583	7 933	45 004	24 592	69 617	1 334
323110	Commercial lithographic printing ..	1	8	5	485	12 472	267	475	6 783	41 171	22 219	63 396	1 101
325	Chemical mfg	-	3	3	e	D	D	D	D	D	D	D	2 808
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	7	2 188	52 134	1 885	3 543	39 712	168 562	235 711	402 648	16 528
3261	Plastics product mfg	-	10	7	2 188	52 134	1 885	3 543	39 712	168 562	235 711	402 648	16 528
32616	Plastics bottle mfg	-	2	2	e	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	8	5	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	8	4	275	10 618	229	470	8 398	47 944	39 834	88 123	1 351
332	Fabricated metal product mfg	-	15	8	454	13 834	326	580	8 833	25 467	21 434	46 127	2 708
333	Machinery mfg	1	15	5	547	15 680	362	678	9 481	49 700	52 700	98 373	3 440
334	Computer & electronic product mfg.....	1	12	4	602	16 549	501	1 057	9 978	33 571	27 875	61 915	2 607
3346	Mfg & reproducing magnetic & optical media .	-	1	1	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	e	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	9	19	3	956	20 709	810	1 206	12 019	96 048	53 090	188 919	3 768
3399	Other miscellaneous mfg ...	9	11	3	898	18 832	774	1 134	11 133	92 018	50 749	182 594	3 524
33992	Sporting & athletic goods mfg	9	4	2	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	4	2	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA												
	Manufacturing	1	14 080	5 205	660 689	24 785 382	457 284	943 383	14 112 493	72 622 192	73 308 763	145 631 728	6 094 310
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IL Part)	1	13 307	4 906	601 701	22 016 416	412 652	848 543	12 106 543	64 048 310	61 153 748	124 949 232	5 039 928
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IN Part)	-	569	217	49 462	2 372 725	37 307	79 659	1 724 496	7 692 325	11 002 978	18 651 480	907 596
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (WI Part)	-	204	82	9 526	396 241	7 325	15 181	281 454	881 557	1 152 037	2 031 016	146 786
311	Food mfg	2	968	356	60 673	1 891 456	43 954	91 804	1 197 751	8 586 698	8 444 266	17 013 983	494 798
312	Beverage & tobacco product mfg	1	42	19	h	D	D	D	D	D	D	D	D
313	Textile mills	3	64	12	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	223	50	h	D	D	D	D	D	D	D	D
315	Apparel mfg	2	219	63	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	1	40	15	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	253	67	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	307	218	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 982	463	k	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	74	29	h	D	D	D	D	D	D	D	D
325	Chemical mfg	1	626	311	46 729	2 279 814	23 792	49 365	924 324	10 176 023	7 759 952	17 861 640	933 446
326	Plastics & rubber products mfg	1	794	455	k	D	D	D	D	D	D	D	378 704
327	Nonmetallic mineral product mfg	2	395	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	262	166	l	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	2 942	1 094	97 993	3 437 556	74 316	154 633	2 216 814	7 877 522	6 120 662	13 976 945	551 562
333	Machinery mfg	-	1 726	609	67 472	2 722 311	43 811	90 715	1 508 124	6 405 822	5 481 511	11 960 300	353 618
334	Computer & electronic product mfg	-	678	316	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	395	204	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	309	162	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	632	136	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	1 149	284	k	D	D	D	D	D	D	D	D
	Chicago, IL PMSA												
31-33	Manufacturing	1	13 191	4 855	594 764	21 752 664	407 773	837 543	11 946 955	63 133 442	59 795 488	122 695 995	4 907 410
311	Food mfg	2	905	327	57 111	1 780 900	41 318	86 229	1 129 513	8 230 301	7 734 461	15 946 105	453 970
3111	Animal food mfg	1	19	8	f	D	D	D	D	D	D	D	6 519
31111	Animal food mfg	1	19	8	f	D	D	D	D	D	D	D	6 519
31119	Other animal food mfg	1	15	8	557	19 002	306	755	9 061	107 646	193 985	298 526	D
3112	Grain & oilseed milling	3	20	14	2 618	116 201	1 920	4 535	82 773	1 036 033	1 028 538	2 042 527	81 214
31121	Flour milling & malt mfg	-	6	5	f	D	D	D	D	D	D	D	D
311211	Flour milling	-	4	3	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	7	11	6	1 155	49 373	834	1 958	32 333	387 225	759 202	1 117 575	D
311221	Wet corn milling	9	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	3	3	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	3	3	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3113	Sugar & confectionery product mfg.....	-	69	30	9 596	318 702	7 880	17 236	236 253	1 624 436	1 044 036	2 677 867	84 977
31133	Confectionery mfg from purchased chocolate...	-	33	12	4 513	152 263	3 588	8 599	111 619	862 301	479 698	1 341 941	37 011
311330	Confectionery mfg from purchased chocolate.....	-	33	12	4 513	152 263	3 588	8 599	111 619	862 301	479 698	1 341 941	37 011
31134	Nonchocolate confectionery mfg.....	-	30	17	h	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	-	30	17	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	60	29	7 016	176 843	5 766	12 951	124 680	613 903	686 155	1 304 224	56 009
31141	Frozen food mfg.....	1	29	11	h	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	2	24	8	h	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	31	18	h	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	1	21	13	1 747	49 872	1 440	3 604	33 540	171 010	185 393	357 141	10 184
311423	Dried & dehydrated food mfg.....	-	6	4	956	25 085	579	1 203	19 123	122 171	116 903	238 469	D
3115	Dairy product mfg.....	4	34	12	1 737	64 694	1 274	2 564	37 477	247 286	441 721	692 213	D
31151	Dairy product (except frozen) mfg.....	6	23	9	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	7	12	6	653	24 224	453	925	15 696	63 122	297 618	360 696	6 755
31152	Ice cream & frozen dessert mfg.....	-	11	3	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	-	11	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	125	75	9 427	276 713	7 365	14 708	176 228	880 609	1 695 016	2 578 476	48 865
31161	Animal slaughtering & processing.....	2	125	75	9 427	276 713	7 365	14 708	176 228	880 609	1 695 016	2 578 476	48 865
311611	Animal (except poultry) slaughtering.....	3	36	20	1 909	47 793	1 544	3 047	30 980	83 300	413 650	497 003	D
311612	Meat processed from carcasses.....	1	79	47	i	D	D	D	D	D	D	D	D
311615	Poultry processing.....	9	7	6	g	D	D	D	D	D	D	D	35 631
3118	Bakeries & tortilla mfg.....	1	447	97	18 807	556 510	12 078	23 342	336 122	2 317 937	1 379 470	3 684 391	109 007
31181	Bread & bakery product mfg.....	3	393	71	12 715	330 948	7 042	12 426	170 385	955 018	520 197	1 475 844	42 459
311811	Retail bakeries.....	4	289	27	2 650	37 242	1 566	2 198	19 636	79 594	41 821	119 929	9 681
311812	Commercial bakeries.....	2	96	41	9 718	284 535	5 190	9 681	144 762	855 501	461 372	1 319 036	31 530
311813	Frozen cakes, pies, & other pastries mfg...	1	8	3	347	9 171	286	547	5 987	19 923	17 004	36 879	1 248
31182	Cookie, cracker, & pasta mfg.....	-	45	21	5 542	213 299	4 586	10 183	156 965	1 325 434	833 827	2 145 759	65 387
311821	Cookie & cracker mfg...	-	21	14	h	D	D	D	D	D	D	D	56 761
311822	Flour mixes & dough mfg from purchased flour.....	2	10	5	f	D	D	D	D	D	D	D	D
311823	Dry pasta mfg.....	1	14	2	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg.....	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161
311830	Tortilla mfg.....	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161
3119	Other food mfg.....	2	127	59	7 097	245 882	4 533	9 799	123 755	1 385 651	1 226 003	2 611 548	54 224
31191	Snack food mfg.....	-	12	5	550	13 765	430	889	9 090	79 095	75 102	153 880	5 742
311919	Other snack food mfg...	-	8	3	455	12 344	357	750	8 246	73 816	62 575	134 422	5 450
31192	Coffee & tea mfg.....	-	9	6	576	17 707	419	751	10 144	99 102	227 950	325 499	4 056
311920	Coffee & tea mfg.....	-	9	6	576	17 707	419	751	10 144	99 102	227 950	325 499	4 056
31193	Flavoring syrup & concentrate mfg.....	-	12	4	f	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg.....	-	12	4	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	4	37	20	g	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	6	12	5	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg...	-	25	15	g	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	57	24	3 067	99 057	2 310	5 256	59 774	492 108	380 180	872 619	19 189
311991	Perishable prepared food mfg.....	1	20	9	g	D	D	D	D	D	D	D	5 313
311999	All other miscellaneous food mfg.....	-	37	15	g	D	D	D	D	D	D	D	13 876

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	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	1	37	16	2 771	97 854	1 700	3 610	50 851	847 889	619 450	1 464 965	20 471
3121	Beverage mfg	2	35	15	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	19	12	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	2	14	10	1 823	69 867	1 258	2 806	36 519	273 600	543 727	814 448	D
312112	Bottled water mfg	—	2	2	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	2	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	2	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	2	1	e	D	D	D	D	D	D	D	D
313	Textile mills	3	63	11	1 235	39 168	978	2 010	25 653	80 217	112 635	191 285	D
3132	Fabric mills	3	28	5	398	9 452	322	663	6 071	20 781	21 341	41 817	D
3133	Textile & fabric finishing & fabric coating mills	3	35	6	837	29 716	656	1 347	19 582	59 436	91 294	149 468	D
31331	Textile & fabric finishing mills	4	29	4	548	17 254	453	944	12 013	45 473	65 911	110 128	D
313311	Broadwoven fabric finishing mills	4	27	4	f	D	D	D	D	D	D	D	2 464
31332	Fabric coating mills	—	6	2	289	12 462	203	403	7 569	13 963	25 383	39 340	D
313320	Fabric coating mills	—	6	2	289	12 462	203	403	7 569	13 963	25 383	39 340	D
314	Textile product mills	3	213	49	h	D	D	D	D	D	D	D	11 154
3141	Textile furnishings mills	1	116	17	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	1	114	16	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	93	5	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	21	11	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	4	97	32	h	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	4	53	14	1 349	32 833	1 043	1 868	19 391	66 955	68 987	135 275	D
314911	Textile bag mills	—	12	5	f	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	7	41	9	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	3	44	18	g	D	D	D	D	D	D	D	6 242
314999	All other miscellaneous textile product mills	3	43	17	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	212	62	7 644	176 576	5 769	11 211	96 415	334 571	304 069	638 848	11 620
3151	Apparel knitting mills	—	13	7	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	12	7	f	D	D	D	D	D	D	D	580
315191	Outerwear knitting mills	—	11	6	f	D	D	D	D	D	D	D	580
3152	Cut & sew apparel mfg	3	130	37	4 869	106 677	3 864	7 933	68 427	196 997	104 679	295 554	D
31521	Cut & sew apparel contractors	8	56	11	1 718	30 615	1 569	3 057	24 144	49 323	11 473	60 736	D
315211	Men's & boys' cut & sew apparel contractors	8	7	3	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	8	49	8	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	22	9	2 050	52 262	1 399	3 262	30 276	95 039	53 027	140 433	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	8	3	g	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	4	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	36	14	f	D	D	D	D	D	D	D	712
315233	Women's & girls' cut & sew dress mfg	4	11	7	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	3	16	3	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	1	9	3	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	69	18	g	D	D	D	D	D	D	D	5 672
31599	Apparel accessories & other apparel mfg	1	69	18	g	D	D	D	D	D	D	D	5 672
315992	Glove & mitten mfg	—	3	2	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	2	57	12	1 462	38 326	948	1 503	12 036	57 112	93 792	156 543	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.													
	Chicago, IL PMSA—Con.													
31-33	Manufacturing—Con.													
316	Leather & allied product mfg .	1	39	15	g	D	D	D	D	D	D	D	D	
3161	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D	
31611	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D	
316110	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D	
3169	Other leather & allied product mfg	1	31	12	g	D	D	D	D	D	D	D	D	
31699	Other leather & allied product mfg	1	31	12	g	D	D	D	D	D	D	D	D	
316991	Luggage mfg	3	16	7	f	D	D	D	D	D	D	D	D	
316999	All other leather good mfg	—	9	3	f	D	D	D	D	D	D	D	D	
321	Wood product mfg	3	222	57		3 680	105 019	2 870	5 611	67 825	197 678	253 027	450 356	9 382
3212	Veneer, plywood, & engineered wood product mfg	1	14	10		598	17 460	462	866	10 804	35 437	42 058	77 524	933
32121	Veneer, plywood, & engineered wood product mfg	1	14	10		598	17 460	462	866	10 804	35 437	42 058	77 524	933
321214	Truss mfg	1	5	5		383	11 740	297	525	7 476	22 253	30 990	53 107	D
3219	Other wood product mfg	3	199	45		2 973	84 546	2 322	4 571	54 847	158 498	205 410	363 579	8 087
32191	Millwork	4	76	19		1 380	47 533	1 050	2 150	31 064	82 106	111 076	193 100	3 838
321911	Wood window & door mfg	5	34	9		670	24 789	477	950	15 064	46 434	66 558	113 390	2 434
321918	Other millwork (including flooring)	2	36	9		621	20 658	497	1 046	14 365	31 509	40 254	71 260	1 175
32192	Wood container & pallet mfg	2	62	16		827	19 232	678	1 266	11 916	43 323	62 167	105 286	2 764
321920	Wood container & pallet mfg	2	62	16		827	19 232	678	1 266	11 916	43 323	62 167	105 286	2 764
32199	All other wood product mfg	3	61	10		766	17 781	594	1 155	11 867	33 069	32 167	65 193	1 485
321999	All other miscellaneous wood product mfg	4	59	9	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	292	206		22 493	820 785	16 124	34 840	507 536	2 191 549	2 296 092	4 489 609	138 369
3221	Pulp, paper, & paperboard mills	—	4	4	f	D	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	e	D	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	288	202	j	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	154	121		13 024	491 051	9 717	21 183	308 711	1 180 181	1 459 850	2 640 558	69 833
322211	Corrugated & solid fiber box mfg	—	85	70		7 229	273 788	5 108	11 234	157 843	705 451	946 069	1 647 090	48 684
322212	Folding paperboard box mfg	—	46	34		4 379	178 928	3 464	7 803	123 128	391 249	412 967	809 334	17 257
322213	Setup paperboard box mfg	—	8	5	e	D	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	—	13	10	f	D	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	62	43		4 821	174 507	2 985	6 435	91 080	671 415	490 990	1 163 348	30 989
322222	Coated & laminated paper mfg	1	38	25		2 879	105 118	1 611	3 340	53 003	448 125	299 807	750 252	21 878
322223	Plastics, foil, & coated paper bag mfg	—	3	2	f	D	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	6	5		468	13 297	386	953	10 546	44 966	50 402	94 969	1 027
322226	Surface-coated paperboard mfg	—	5	3		416	21 871	252	676	8 222	105 168	58 670	164 097	D
32223	Stationery product mfg	1	41	21	g	D	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	1	17	5	e	D	D	D	D	D	D	D	D	D
322232	Envelope mfg	1	23	16	g	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	31	17		1 679	55 959	1 301	2 689	37 703	123 767	111 479	234 909	14 984
322291	Sanitary paper product mfg	—	5	1	e	D	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	26	16	g	D	D	D	D	D	D	D	D	D

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	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	1 901	449	42 441	1 588 878	30 537	61 438	952 180	3 417 832	2 329 752	5 730 750	289 666
3231	Printing & related support activities.....	2	1 901	449	42 441	1 588 878	30 537	61 438	952 180	3 417 832	2 329 752	5 730 750	289 666
32311	Printing.....	2	1 635	368	35 444	1 335 446	25 174	50 813	787 657	2 914 988	2 185 998	5 083 731	257 920
323110	Commercial lithographic printing ..	2	782	210	20 719	849 132	14 900	31 332	513 194	1 745 076	1 220 524	2 954 218	182 613
323111	Commercial gravure printing.....	7	27	6	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	3	56	21	1 774	67 341	1 221	2 398	37 877	152 419	123 619	275 886	11 758
323113	Commercial screen printing.....	3	120	29	g	D	D	D	D	D	D	D	11 783
323114	Quick printing ..	2	335	20	2 146	58 744	1 476	2 548	35 558	122 031	73 031	194 400	7 694
323116	Manifold business form printing.....	—	52	27	2 716	92 846	1 923	3 573	57 777	226 836	320 533	545 598	D
323117	Book printing.....	—	37	15	1 615	55 367	1 132	2 259	32 077	114 456	74 623	188 035	10 365
323118	Blankbook, looseleaf binder, & device mfg ..	—	27	16	g	D	D	D	D	D	D	D	D
323119	Other commercial printing.....	5	179	22	2 048	71 038	1 454	2 833	44 438	152 675	103 746	254 464	10 806
32312	Support activities for printing.....	3	266	81	6 997	253 432	5 363	10 625	164 523	502 844	143 754	647 019	31 746
323121	Tradebinding & related work.....	3	68	31	3 076	71 343	2 519	4 944	49 000	127 653	35 020	163 230	5 620
323122	Prepress services	3	198	50	3 921	182 089	2 844	5 681	115 523	375 191	108 734	483 789	26 126
324	Petroleum & coal products mfg.....	—	62	24	2 778	136 301	1 594	3 528	70 763	832 939	3 093 083	3 922 056	71 528
3241	Petroleum & coal products mfg.....	—	62	24	2 778	136 301	1 594	3 528	70 763	832 939	3 093 083	3 922 056	71 528
32411	Petroleum refineries ..	—	7	5	1 162	67 591	682	1 553	36 960	443 082	2 596 654	3 045 966	54 147
324110	Petroleum refineries ..	—	7	5	1 162	67 591	682	1 553	36 960	443 082	2 596 654	3 045 966	54 147
32412	Asphalt paving, roofing, & saturated materials mfg.....	1	31	9	908	34 810	616	1 331	23 018	161 979	267 819	427 422	6 876
324122	Asphalt shingle & coating materials mfg.....	1	17	8	f	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg.....	2	24	10	708	33 900	296	644	10 785	227 878	228 610	448 668	10 505
324191	Petroleum lubricating oil & grease mfg.....	2	22	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	574	279	42 391	2 070 663	21 137	43 616	820 126	9 156 926	6 606 378	15 721 857	797 310
3251	Basic chemical mfg.....	—	72	40	3 618	170 222	2 122	4 336	85 702	864 823	868 393	1 737 660	D
32513	Dye & pigment mfg.....	1	6	5	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	—	4	4	284	11 696	229	514	8 679	40 542	48 679	86 695	2 460
32518	Other basic inorganic chemical mfg.....	—	20	13	1 269	59 350	881	1 813	35 022	203 711	201 775	404 968	22 075
325188	All other basic inorganic chemical mfg.....	—	20	13	1 269	59 350	881	1 813	35 022	203 711	201 775	404 968	22 075
32519	Other basic organic chemical mfg.....	—	34	18	1 760	86 111	815	1 582	34 353	539 094	546 012	1 092 233	41 064
325199	All other basic organic chemical mfg.....	—	32	18	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	35	23	2 646	134 822	1 633	3 693	78 942	667 796	1 070 192	1 734 367	106 423
32521	Resin & synthetic rubber mfg.....	—	33	23	h	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	—	31	22	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	34	17	17 003	1 008 278	5 876	11 928	288 679	3 017 351	1 020 007	4 020 908	D
32541	Pharmaceutical & medicine mfg.....	—	34	17	17 003	1 008 278	5 876	11 928	288 679	3 017 351	1 020 007	4 020 908	D
325412	Pharmaceutical preparation mfg.....	1	22	12	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg.....	—	4	3	j	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	1	136	68	5 427	226 384	3 069	6 209	100 491	963 254	1 133 887	2 091 393	49 937
32551	Paint & coating mfg.....	—	98	51	4 261	175 943	2 415	4 799	77 813	741 815	901 861	1 638 588	29 083
325510	Paint & coating mfg.....	—	98	51	4 261	175 943	2 415	4 799	77 813	741 815	901 861	1 638 588	29 083
32552	Adhesive mfg.....	1	38	17	1 166	50 441	654	1 410	22 678	221 439	232 026	452 805	20 854
325520	Adhesive mfg.....	1	38	17	1 166	50 441	654	1 410	22 678	221 439	232 026	452 805	20 854

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	135	60	8 181	321 146	5 056	10 574	160 382	2 505 545	1 476 439	3 966 722	D
32561	Soap & cleaning compound mfg	1	100	37	h	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	44	12	1 526	65 819	1 094	2 410	41 071	486 647	263 699	754 746	D
325612	Polish & other sanitation good mfg ..	1	40	15	1 556	49 402	867	1 943	20 540	571 860	297 589	875 822	9 570
325613	Surface active agent mfg	2	16	10	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	35	23	h	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	35	23	h	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	3	148	66	5 293	202 015	3 244	6 604	102 442	1 087 146	967 246	2 048 380	D
32591	Printing ink mfg	1	42	21	1 349	54 608	762	1 595	28 347	162 698	198 521	353 506	D
325910	Printing ink mfg	1	42	21	1 349	54 608	762	1 595	28 347	162 698	198 521	353 506	D
32599	All other chemical product & preparation mfg	3	106	45	3 944	147 407	2 482	5 009	74 095	924 448	768 725	1 694 874	50 169
325991	Custom compounding of purchased resin...	3	32	15	1 244	39 743	877	1 748	21 258	105 566	126 454	231 098	9 695
325992	Photographic film, paper, plate, & chemical mfg	—	18	6	636	20 732	388	806	10 499	55 287	97 751	154 114	8 020
325998	All other miscellaneous chemical product & preparation mfg	3	56	24	2 064	86 932	1 217	2 455	42 338	763 595	544 520	1 309 662	32 454
326	Plastics & rubber products mfg	1	754	433	46 728	1 395 471	36 351	75 201	871 116	3 606 045	3 297 996	6 884 379	348 895
3261	Plastics product mfg	1	676	398	43 662	1 302 239	34 054	70 264	812 033	3 391 200	3 072 834	6 446 024	335 620
32611	Unsupported plastics film, sheet, & bag mfg ..	1	75	48	6 052	208 534	4 341	9 727	126 140	588 006	634 183	1 220 295	70 735
326111	Unsupported plastics bag mfg	—	22	16	g	D	D	D	D	D	D	D	31 838
326112	Unsupported plastics packaging film & sheet mfg	—	12	10	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	2	41	22	2 608	93 911	1 589	3 326	48 218	283 050	252 246	538 610	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	41	24	1 794	51 073	1 335	2 765	32 431	108 326	90 280	198 588	6 148
326121	Unsupported plastics profile shape mfg	1	32	17	1 505	43 111	1 136	2 364	26 843	88 364	64 503	152 546	4 676
326122	Plastics pipe & pipe fitting mfg	4	9	7	289	7 962	199	401	5 588	19 962	25 777	46 042	1 472
32613	Laminated plastics plate, sheet, & shape mfg	—	30	7	885	26 955	637	1 268	14 586	95 275	111 417	206 946	4 427
326130	Laminated plastics plate, sheet, & shape mfg	—	30	7	885	26 955	637	1 268	14 586	95 275	111 417	206 946	4 427
32614	Polystyrene foam product mfg	1	13	10	1 013	32 449	752	1 591	20 278	127 821	99 125	226 653	9 249
326140	Polystyrene foam product mfg	1	13	10	1 013	32 449	752	1 591	20 278	127 821	99 125	226 653	9 249
32615	Urethane & other foam product (except polystyrene) mfg	—	16	11	1 085	28 114	878	1 814	20 383	79 518	97 780	177 861	7 311
326150	Urethane & other foam product (except polystyrene) mfg	—	16	11	1 085	28 114	878	1 814	20 383	79 518	97 780	177 861	7 311
32616	Plastics bottle mfg	3	22	17	1 989	62 609	1 639	3 652	46 253	179 444	202 670	382 000	22 788
326160	Plastics bottle mfg	3	22	17	1 989	62 609	1 639	3 652	46 253	179 444	202 670	382 000	22 788
32619	Other plastics product mfg	1	479	281	30 844	892 505	24 472	49 447	551 962	2 212 810	1 837 379	4 033 681	214 962
326199	All other plastics product mfg	1	472	276	30 607	885 895	24 279	49 052	547 634	2 200 084	1 831 553	4 015 204	D
3262	Rubber product mfg	1	78	35	3 066	93 232	2 297	4 937	59 083	214 845	225 162	438 355	13 275
32621	Tire mfg	3	18	6	417	9 951	298	642	6 025	17 983	32 131	50 471	753
326212	Tire retreading	3	15	6	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	52	24	2 409	74 422	1 815	3 869	46 922	170 371	165 227	333 944	10 189
326291	Rubber product mfg for mechanical use	—	22	10	1 251	36 084	933	2 102	23 702	97 271	52 503	148 833	5 386
326299	All other rubber product mfg	1	30	14	1 158	38 338	882	1 767	23 220	73 100	112 724	185 111	4 803

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	2	334	151	10 617	360 690	8 124	16 371	241 735	910 874	769 541	1 678 528	96 779
3271	Clay product & refractory mfg	2	38	19	2 242	53 676	1 685	2 969	30 830	134 626	108 877	244 787	D
32711	Pottery, ceramics, & plumbing fixture mfg	4	21	10	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	5	14	7	1 499	26 603	1 236	2 024	17 809	45 675	37 142	85 215	5 006
32712	Clay building material & refractories mfg	—	17	9	f	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	6	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	1	58	13	1 876	60 004	1 575	3 187	44 062	166 453	87 004	250 963	D
32721	Glass & glass product mfg	1	58	13	1 876	60 004	1 575	3 187	44 062	166 453	87 004	250 963	D
327213	Glass container mfg	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	2	43	11	1 092	30 267	867	1 762	18 547	76 298	57 446	133 040	4 610
3273	Cement & concrete product mfg	2	136	67	3 514	144 802	2 635	5 535	100 731	351 723	349 007	699 003	36 532
32732	Ready-mix concrete mfg	3	80	42	2 185	94 855	1 718	3 465	72 351	225 256	256 219	481 310	24 287
327320	Ready-mix concrete mfg	3	80	42	2 185	94 855	1 718	3 465	72 351	225 256	256 219	481 310	24 287
32733	Concrete pipe, brick, & block mfg	—	26	15	749	29 712	462	975	14 460	80 036	60 027	138 591	8 988
327331	Concrete block & brick mfg	—	14	7	323	12 639	192	366	5 100	44 106	29 947	73 846	7 216
327332	Concrete pipe mfg	—	12	8	426	17 073	270	609	9 360	35 930	30 080	64 745	1 772
32739	Other concrete product mfg	2	27	10	553	18 785	435	1 046	12 923	41 422	28 796	70 085	D
327390	Other concrete product mfg	2	27	10	553	18 785	435	1 046	12 923	41 422	28 796	70 085	D
3274	Lime & gypsum product mfg	—	14	5	326	12 577	263	629	9 871	51 864	57 934	109 492	D
3279	Other nonmetallic mineral product mfg	2	88	47	2 659	89 631	1 966	4 051	56 241	206 208	166 719	374 283	19 991
32791	Abrasive product mfg	—	28	20	1 117	34 167	837	1 701	19 701	69 652	60 254	131 363	2 499
327910	Abrasive product mfg	—	28	20	1 117	34 167	837	1 701	19 701	69 652	60 254	131 363	2 499
32799	All other nonmetallic mineral product mfg	2	60	27	1 542	55 464	1 129	2 350	36 540	136 556	106 465	242 920	17 492
327991	Cut stone & stone product mfg	—	28	8	e	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg	2	13	6	344	16 364	223	513	9 194	40 095	37 934	77 656	9 256
327999	All other miscellaneous nonmetallic mineral product mfg	5	15	9	577	19 576	444	938	14 963	53 844	39 762	93 648	6 633
331	Primary metal mfg	—	231	141	19 325	748 163	14 955	33 103	492 639	1 949 695	3 115 743	5 017 462	148 307
3311	Iron & steel mills & ferroalloy mfg	—	13	12	3 637	162 001	2 809	6 376	114 189	362 422	761 843	1 100 712	47 189
33111	Iron & steel mills & ferroalloy mfg	—	13	12	3 637	162 001	2 809	6 376	114 189	362 422	761 843	1 100 712	47 189
331111	Iron & steel mills	—	13	12	3 637	162 001	2 809	6 376	114 189	362 422	761 843	1 100 712	47 189
3312	Steel product mfg from purchased steel	—	42	30	3 853	175 245	2 739	5 970	98 777	550 782	897 540	1 443 209	33 747
33121	Iron & steel pipes & tubes mfg from purchased steel	—	17	16	2 183	117 267	1 511	3 411	60 996	381 736	625 795	1 029 246	21 124
331210	Iron & steel pipes & tubes mfg from purchased steel	—	17	16	2 183	117 267	1 511	3 411	60 996	381 736	625 795	1 029 246	21 124
33122	Rolling & drawing of purchased steel	—	25	14	1 670	57 978	1 228	2 559	37 781	169 046	271 745	413 963	12 623
331221	Cold-rolled steel shape mfg	—	11	7	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	14	7	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	17	13	2 201	93 495	1 673	3 681	62 900	301 488	536 467	817 908	16 382
33131	Alumina & aluminum production & processing	—	17	13	2 201	93 495	1 673	3 681	62 900	301 488	536 467	817 908	16 382
331314	Secondary smelting & alloying of aluminum	—	8	5	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	3	3	1 057	54 770	822	1 911	40 644	161 959	325 850	477 384	10 791
331316	Aluminum extruded product mfg	—	2	2	e	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	—	4	3	e	D	D	D	D	D	D	D	D

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	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	-	32	23	2 374	85 323	1 778	3 874	52 217	225 750	515 241	745 012	19 189
33142	Copper rolling, drawing, extruding, & alloying ...	-	14	12	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	7	6	f	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing .	-	3	2	e	D	D	D	D	D	D	D	5 408
331423	Secondary smelting, refining, & alloying of copper	-	4	4	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	14	8	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	10	7	f	D	D	D	D	D	D	D	D
3315	Foundries	1	127	63	7 260	232 099	5 956	13 202	164 556	509 253	404 652	910 621	31 800
33151	Ferrous metal foundries .	-	34	14	2 106	68 908	1 769	3 917	50 791	172 905	124 809	295 724	7 479
331511	Iron foundries .	-	16	8	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	16	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	93	49	5 154	163 191	4 187	9 285	113 765	336 348	279 843	614 897	24 321
331521	Aluminum die-casting foundries	1	27	17	h	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	16	14	1 266	43 081	949	2 039	27 702	92 344	77 763	168 861	7 433
331524	Aluminum foundries (except die-casting) ..	1	22	7	654	19 474	538	1 266	13 442	42 887	25 183	68 158	3 108
331525	Copper foundries (except die-casting) ..	2	17	5	e	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	5	11	6	298	10 309	216	460	5 833	23 427	15 733	38 455	794
332	Fabricated metal product mfg	1	2 731	1 015	91 645	3 212 285	69 391	145 060	2 061 211	7 273 838	5 575 002	12 835 792	516 189
3321	Forging & stamping	-	307	165	17 557	644 233	13 773	29 814	432 931	1 466 917	1 413 790	2 863 089	122 394
33211	Forging & stamping	-	307	165	17 557	644 233	13 773	29 814	432 931	1 466 917	1 413 790	2 863 089	122 394
332111	Iron & steel forging ...	-	24	13	1 471	57 858	1 080	2 252	38 173	111 987	106 050	215 789	10 946
332112	Nonferrous forging	-	6	4	f	D	D	D	D	D	D	D	D
332114	Custom roll forming ...	-	22	11	1 164	36 929	838	1 815	23 403	84 027	96 170	178 894	3 733
332115	Crown & closure mfg ..	-	7	3	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	239	128	12 332	448 804	9 805	21 149	296 000	1 019 611	1 018 526	2 026 847	72 257
332117	Powder metallurgy part mfg	-	9	6	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg ...	1	99	41	4 567	153 264	3 274	6 888	91 885	349 372	222 891	586 605	25 249
33221	Cutlery & handtool mfg ..	1	99	41	4 567	153 264	3 274	6 888	91 885	349 372	222 891	586 605	25 249
332211	Cutlery & flatware (except precious) mfg	-	7	3	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	1	81	33	3 483	122 191	2 446	5 203	71 751	266 823	165 106	448 396	18 843
332213	Saw blade & handsaw mfg	2	8	2	e	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	3	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	386	155	11 284	368 462	7 949	16 786	217 451	917 973	627 174	1 543 262	36 688
33231	Plate work & fabricated structural product mfg ..	1	123	47	2 810	90 800	1 879	3 912	51 698	213 704	183 244	398 570	7 790
332312	Fabricated structural metal mfg	1	82	29	1 791	57 781	1 144	2 359	30 798	153 502	135 892	290 694	5 106
332313	Plate work mfg	1	32	14	906	29 675	666	1 426	19 318	52 959	37 121	90 370	2 364
33232	Ornamental & architectural metal products mfg	1	263	108	8 474	277 662	6 070	12 874	165 753	704 269	443 930	1 144 692	28 898
332321	Metal window & door mfg	1	53	15	1 569	43 022	1 056	2 209	22 256	96 100	87 354	182 669	2 848
332322	Sheet metal work mfg .	-	150	70	4 649	162 477	3 455	7 166	99 789	429 837	219 428	647 839	19 953
332323	Ornamental & architectural metal work mfg	1	60	23	2 256	72 163	1 559	3 499	43 708	178 332	137 148	314 184	6 097

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	CHICAGO—GARY—KENOSHA, IL—IN—WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	1	63	27	3 424	137 456	2 658	5 801	94 106	303 300	461 428	766 497	15 980
33241	Power boiler & heat exchanger mfg	—	13	6	453	14 265	314	576	7 904	34 334	18 970	54 758	1 234
332410	Power boiler & heat exchanger mfg	—	13	6	453	14 265	314	576	7 904	34 334	18 970	54 758	1 234
33242	Metal tank (heavy gauge) mfg	—	10	2	378	16 109	251	506	8 953	34 429	24 385	59 300	982
332420	Metal tank (heavy gauge) mfg	—	10	2	378	16 109	251	506	8 953	34 429	24 385	59 300	982
33243	Metal can, box, & other metal container (light gauge) mfg	1	40	19	2 593	107 082	2 093	4 719	77 249	234 537	418 073	652 439	13 764
332431	Metal can mfg	1	17	8	1 332	59 347	1 137	2 473	49 082	136 857	288 685	424 305	D
332439	Other metal container mfg	1	23	11	1 261	47 735	956	2 246	28 167	97 680	129 388	228 134	D
3325	Hardware mfg	1	46	26	2 910	95 850	2 119	4 396	55 217	207 849	136 391	343 499	10 518
33251	Hardware mfg	1	46	26	2 910	95 850	2 119	4 396	55 217	207 849	136 391	343 499	10 518
332510	Hardware mfg	1	46	26	2 910	95 850	2 119	4 396	55 217	207 849	136 391	343 499	10 518
3326	Spring & wire product mfg	1	151	68	5 779	182 130	4 604	8 955	114 917	380 520	309 251	681 297	21 528
33261	Spring & wire product mfg	1	151	68	5 779	182 130	4 604	8 955	114 917	380 520	309 251	681 297	21 528
332611	Spring (heavy gauge) mfg	—	17	9	f	D	D	D	D	D	D	D	3 347
332612	Spring (light gauge) mfg	1	45	24	g	D	D	D	D	D	D	D	8 354
332618	Other fabricated wire product mfg	—	89	35	2 933	86 900	2 251	4 095	47 517	184 589	148 376	327 434	9 827
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	1 092	302	23 165	837 363	17 679	37 029	550 171	1 711 844	903 678	2 605 404	140 454
33271	Machine shops	1	811	171	11 746	438 541	9 071	18 714	292 787	808 276	370 736	1 170 958	62 550
332710	Machine shops	1	811	171	11 746	438 541	9 071	18 714	292 787	808 276	370 736	1 170 958	62 550
33272	Turned product & screw, nut, & bolt mfg	1	281	131	11 419	398 822	8 608	18 315	257 384	903 568	532 942	1 434 446	77 904
332721	Precision turned product mfg	2	184	77	6 519	218 909	5 312	11 370	151 589	476 806	201 116	672 506	46 148
332722	Bolt, nut, screw, rivet, & washer mfg	—	97	54	4 900	179 913	3 296	6 945	105 795	426 762	331 826	761 940	31 756
3328	Coating, engraving, heat treating, & allied activities	1	329	136	10 181	331 242	7 875	16 244	209 257	669 701	413 582	1 083 515	71 748
33281	Coating, engraving, heat treating, & allied activities	1	329	136	10 181	331 242	7 875	16 244	209 257	669 701	413 582	1 083 515	71 748
332811	Metal heat treating	2	28	16	1 151	43 543	896	2 081	29 476	93 150	40 961	135 757	36 708
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	93	46	3 681	117 074	2 901	5 827	79 620	259 016	232 848	488 396	19 702
332813	Electroplating, plating, polishing, anodizing, & coloring	1	208	74	5 349	170 625	4 078	8 336	100 161	317 535	139 773	459 362	15 338
3329	Other fabricated metal product mfg	—	258	95	12 778	462 285	9 460	19 147	295 276	1 266 362	1 086 817	2 362 624	71 630
33291	Metal valve mfg	1	67	42	4 974	198 867	3 515	7 375	113 462	535 210	438 866	977 048	27 688
332911	Industrial valve mfg	1	25	15	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	19	9	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	7	5	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	1	16	13	1 480	59 655	1 129	2 344	32 980	160 994	141 113	303 119	5 920
33299	All other fabricated metal product mfg	—	191	53	7 804	263 418	5 945	11 772	181 814	731 152	647 951	1 385 576	43 942
332991	Ball & roller bearing mfg	—	8	5	1 389	52 388	1 148	2 349	42 275	158 186	115 318	275 842	16 682
332996	Fabricated pipe & pipe fitting mfg	2	25	6	445	17 361	329	630	8 150	23 369	27 104	51 810	3 348
332998	Enameled iron & metal sanitary ware mfg	—	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	131	37	4 967	157 845	3 903	7 610	111 445	459 699	475 356	938 753	19 136

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	1 639	574	64 758	2 621 294	41 970	86 944	1 453 542	6 168 359	5 296 894	11 540 246	338 907
3331	Agriculture, construction, & mining machinery mfg	-	37	19	5 133	251 886	3 497	7 797	151 041	1 166 763	1 051 375	2 241 527	49 114
33311	Agricultural implement mfg	-	13	7	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	11	6	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	21	10	3 759	208 269	2 469	5 588	121 681	959 386	805 408	1 818 796	41 157
333120	Construction machinery mfg	-	21	10	3 759	208 269	2 469	5 588	121 681	959 386	805 408	1 818 796	41 157
3332	Industrial machinery mfg	1	226	92	8 233	317 557	4 457	8 725	141 004	607 985	618 463	1 233 340	37 093
33322	Plastics & rubber industry machinery mfg	-	26	9	g	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	26	9	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	191	82	7 097	276 293	3 763	7 337	122 086	524 717	520 799	1 052 367	31 070
333292	Textile machinery mfg	1	8	3	e	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	57	25	2 258	84 223	894	1 827	34 628	166 889	153 561	319 477	5 051
333294	Food product machinery mfg	-	33	17	1 191	52 128	676	1 446	25 173	106 698	94 729	202 434	D
333298	All other industrial machinery mfg	2	78	33	h	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	-	131	56	6 302	234 709	3 087	6 245	84 584	520 135	519 681	1 026 909	25 596
33331	Commercial & service industry machinery mfg	-	131	56	6 302	234 709	3 087	6 245	84 584	520 135	519 681	1 026 909	25 596
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	8	6	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg	-	15	8	g	D	D	D	D	D	D	D	138
333315	Photographic & photocopying equipment mfg	1	26	8	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	59	28	2 952	107 718	1 662	3 514	45 934	274 576	269 788	537 485	11 820
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	68	34	4 416	141 107	3 012	5 397	71 987	327 177	275 299	599 937	20 639
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	68	34	4 416	141 107	3 012	5 397	71 987	327 177	275 299	599 937	20 639
333411	Air purification equipment mfg	3	21	9	1 012	28 319	621	924	11 647	64 353	72 102	135 924	D
333412	Industrial & commercial fan & blower mfg	2	14	9	g	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	8	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	1	25	13	1 707	55 445	1 253	2 334	30 478	131 380	112 530	242 318	10 125
3335	Metalworking machinery mfg	1	779	188	15 598	672 003	11 408	24 996	440 548	1 301 929	649 363	1 995 630	88 230
33351	Metalworking machinery mfg	1	779	188	15 598	672 003	11 408	24 996	440 548	1 301 929	649 363	1 995 630	88 230
333511	Industrial mold mfg	1	245	59	3 588	175 376	2 817	6 467	126 382	303 058	115 813	418 393	28 503
333512	Machine tool (metal cutting types) mfg	3	23	9	f	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg	-	16	10	1 477	68 873	937	1 965	41 235	185 354	84 259	276 432	7 716
333514	Special die & tool, die set, jig, & fixture mfg	2	308	63	4 595	198 432	3 575	7 414	134 652	343 795	143 913	490 694	24 015
333515	Cutting tool & machine tool accessory mfg	1	147	30	3 442	122 521	2 542	5 733	80 806	244 236	131 424	371 154	16 285
333518	Other metalworking machinery mfg	2	33	14	1 643	72 651	984	2 210	38 901	163 220	116 203	319 017	6 919

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	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	-	51	29	4 579	187 392	3 167	6 279	116 979	428 024	506 645	946 765	25 999
33361	Engine, turbine, & power transmission equipment mfg	-	51	29	4 579	187 392	3 167	6 279	116 979	428 024	506 645	946 765	25 999
333612	Speed changer, industrial high-speed drive, & gear mfg	-	28	15	g	D	D	D	D	D	D	D	9 692
333613	Mechanical power transmission equipment mfg	-	14	7	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	9	7	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	347	156	20 497	816 640	13 342	27 505	447 399	1 816 346	1 676 068	3 496 138	92 236
33391	Pump & compressor mfg	-	42	21	4 054	148 492	2 631	5 616	82 496	361 060	272 281	635 035	17 158
333911	Pump & pumping equipment mfg	-	23	14	g	D	D	D	D	D	D	D	9 656
333912	Air & gas compressor mfg	-	18	7	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	78	35	3 457	141 653	2 108	4 538	71 734	270 385	365 749	643 231	15 815
333921	Elevator & moving stairway mfg	6	13	6	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	44	17	1 770	77 366	1 057	2 267	38 202	146 295	119 373	266 414	6 077
333923	Overhead traveling crane, hoist, & monorail system mfg .	-	8	6	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	13	6	f	D	D	D	D	D	D	D	7 308
33399	All other general-purpose machinery mfg	-	227	100	12 986	526 495	8 603	17 351	293 169	1 184 901	1 038 038	2 217 872	59 263
333991	Power-driven handtool mfg	1	14	5	482	16 627	356	736	10 729	59 291	76 416	134 852	1 345
333992	Welding & soldering equipment mfg	1	9	7	438	16 739	292	677	9 151	43 384	36 231	77 839	D
333993	Packaging machinery mfg	1	52	27	3 407	140 103	1 848	3 556	60 298	287 922	220 750	509 540	17 896
333994	Industrial process furnace & oven mfg ..	2	23	9	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	23	15	4 566	218 980	3 376	6 766	145 315	510 180	403 919	915 673	22 142
333997	Scale & balance (except laboratory) mfg	-	6	4	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	97	33	2 523	89 047	1 651	3 448	44 986	200 178	173 329	369 839	12 830
334	Computer & electronic product mfg	-	646	304	68 085	2 852 756	36 910	72 994	1 009 445	7 352 520	7 363 432	14 600 949	909 532
3341	Computer & peripheral equipment mfg	-	44	11	2 523	97 600	742	1 627	19 332	294 781	212 444	508 915	34 151
33411	Computer & peripheral equipment mfg	-	44	11	2 523	97 600	742	1 627	19 332	294 781	212 444	508 915	34 151
334119	Other computer peripheral equipment mfg	-	28	9	2 371	93 085	674	1 462	17 127	285 811	200 100	487 580	33 242
3342	Communications equipment mfg	-	79	33	k	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	25	10	i	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	25	10	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	34	14	j	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	34	14	j	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	20	9	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	20	9	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3343	Audio & video equipment mfg	-	24	8	1 185	43 226	618	1 237	14 926	127 714	94 068	222 196	5 965
33431	Audio & video equipment mfg	-	24	8	1 185	43 226	618	1 237	14 926	127 714	94 068	222 196	5 965
334310	Audio & video equipment mfg	-	24	8	1 185	43 226	618	1 237	14 926	127 714	94 068	222 196	5 965
3344	Semiconductor & other electronic component mfg	1	279	149	19 256	521 853	14 365	27 841	298 040	1 079 690	876 513	1 950 464	78 882
33441	Semiconductor & other electronic component mfg	1	279	149	19 256	521 853	14 365	27 841	298 040	1 079 690	876 513	1 950 464	78 882
334411	Electron tube mfg	-	6	3	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	80	50	4 750	128 375	3 596	7 578	81 982	268 926	200 400	467 196	28 363
334413	Semiconductor & related device mfg ...	6	20	6	385	12 229	234	357	4 647	37 229	17 813	55 066	9 113
334415	Electronic resistor mfg	1	5	3	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	-	44	26	2 002	47 191	1 531	3 119	26 234	89 750	72 834	161 746	4 488
334417	Electronic connector mfg	5	15	9	1 549	46 021	1 123	2 209	27 771	94 572	54 938	150 355	5 870
334418	Printed circuit assembly (electronic assembly) mfg	2	19	13	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	84	38	4 855	144 351	3 327	5 860	67 734	414 922	231 619	641 331	18 967
3345	Navigational, measuring, medical, & control instruments mfg	-	188	93	14 911	620 940	6 727	13 776	179 467	1 465 765	863 075	2 337 357	81 769
33451	Navigational, measuring, medical, & control instruments mfg	-	188	93	14 911	620 940	6 727	13 776	179 467	1 465 765	863 075	2 337 357	81 769
334510	Electromedical & electrotherapeutic apparatus mfg	-	18	10	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	10	6	3 403	182 679	961	1 880	32 844	392 014	133 575	517 796	37 136
334512	Automatic environmental control mfg	-	11	5	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	1	35	21	2 130	86 865	983	2 033	27 051	224 957	133 800	356 669	D
334514	Totalizing fluid meter & counting device mfg .	-	12	6	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	1	25	16	g	D	D	D	D	D	D	D	10 443
334516	Analytical laboratory instrument mfg	2	17	5	e	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	22	11	1 971	79 609	1 076	2 373	30 060	180 306	170 691	357 567	6 361
334518	Watch, clock, & part mfg	-	9	2	g	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	29	11	g	D	D	D	D	D	D	D	3 877
3346	Mfg & reproducing magnetic & optical media .	1	32	10	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	32	10	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	26	9	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	382	199	31 890	1 072 961	21 134	43 342	534 630	2 830 210	2 316 156	5 129 656	225 314
3351	Electric lighting equipment mfg	1	79	38	5 300	168 400	3 589	7 028	72 948	446 638	362 021	807 173	D
33511	Electric lamp bulb & part mfg	2	5	3	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	2	5	3	e	D	D	D	D	D	D	D	D

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	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3351	Electric lighting equipment mfg—Con.												
33512	Lighting fixture mfg	1	74	35	i	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg . . .	1	29	15	h	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg . . .	—	21	11	g	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	1	24	9	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg. . .	—	18	12	2 695	77 875	2 149	4 761	54 308	267 198	286 270	551 216	D
33521	Small electrical appliance mfg	—	10	4	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg . . .	—	10	4	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	8	8	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	7	7	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . .	—	162	80	11 615	406 471	7 600	15 761	202 244	1 005 183	810 649	1 785 476	69 283
33531	Electrical equipment mfg	—	162	80	11 615	406 471	7 600	15 761	202 244	1 005 183	810 649	1 785 476	69 283
335311	Power, distribution, & specialty transformer mfg	—	15	11	1 941	61 759	1 247	2 602	26 267	222 455	160 728	375 909	11 955
335312	Motor & generator mfg	1	31	18	1 827	49 979	1 350	2 753	30 979	171 343	117 610	289 620	4 345
335313	Switchgear & switchboard apparatus mfg	—	35	19	4 282	176 146	2 856	6 643	96 136	350 537	259 551	611 622	31 270
335314	Relay & industrial control mfg	1	81	32	3 565	118 587	2 147	3 763	48 862	260 848	272 760	508 325	21 713
3359	Other electrical equipment & component mfg	—	123	69	12 280	420 215	7 796	15 792	205 130	1 111 191	857 216	1 985 791	84 756
33591	Battery mfg	—	8	4	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	8	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	12	10	2 552	101 054	1 359	3 125	40 191	383 505	158 868	555 361	33 678
335929	Other communication & energy wire mfg . . .	—	11	9	h	D	D	D	D	D	D	D	33 678
33593	Wiring device mfg	—	49	32	6 527	212 946	4 415	8 350	116 800	478 717	392 208	876 510	42 672
335931	Current-carrying wiring device mfg	—	32	23	h	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	17	9	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	54	23	h	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	49	23	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	283	150	26 029	1 020 224	19 983	39 798	693 217	4 067 823	5 590 023	9 657 725	306 530
3361	Motor vehicle mfg	—	8	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	8	3	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	4	3	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	15	12	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	15	12	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	1	8	5	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	5	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	198	107	15 289	535 885	12 087	23 147	367 684	1 338 483	1 468 172	2 820 405	212 192
33631	Motor vehicle gasoline engine & engine parts mfg	2	24	11	g	D	D	D	D	D	D	D	8 417
336312	Gasoline engine & engine parts mfg	3	22	10	1 238	31 104	916	1 474	19 408	60 050	91 854	147 257	D
33632	Motor vehicle electrical & electronic equipment mfg	1	49	21	g	D	D	D	D	D	D	D	8 846
336322	Other motor vehicle electrical & electronic equipment mfg	1	42	18	g	D	D	D	D	D	D	D	D

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	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33633	Motor vehicle steering & suspension component (except spring) mfg	1	6	3	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	1	6	3	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	9	5	f	D	D	D	D	D	D	D	4 244
336340	Motor vehicle brake system mfg	—	9	5	f	D	D	D	D	D	D	D	4 244
33635	Motor vehicle transmission & power train parts mfg	—	15	6	1 952	71 970	1 547	2 784	49 679	192 568	126 894	325 119	D
336350	Motor vehicle transmission & power train parts mfg	—	15	6	1 952	71 970	1 547	2 784	49 679	192 568	126 894	325 119	D
33636	Motor vehicle seating & interior trim mfg	—	8	5	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	8	5	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	43	34	4 875	233 885	4 037	8 273	176 238	539 448	603 432	1 150 087	135 294
336370	Motor vehicle metal stamping	—	43	34	4 875	233 885	4 037	8 273	176 238	539 448	603 432	1 150 087	135 294
33639	Other motor vehicle parts mfg	1	44	22	2 856	93 480	2 132	3 842	55 676	245 173	279 273	524 283	34 803
336399	All other motor vehicle parts mfg	1	44	22	2 856	93 480	2 132	3 842	55 676	245 173	279 273	524 283	34 803
3364	Aerospace product & parts mfg	1	14	7	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	1	14	7	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	11	5	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	29	17	5 204	252 155	3 341	7 572	144 129	475 278	1 156 035	1 632 068	24 070
33651	Railroad rolling stock mfg	—	29	17	5 204	252 155	3 341	7 572	144 129	475 278	1 156 035	1 632 068	24 070
336510	Railroad rolling stock mfg	—	29	17	5 204	252 155	3 341	7 572	144 129	475 278	1 156 035	1 632 068	24 070
3369	Other transportation equipment mfg	2	12	4	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	2	12	4	e	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	2	7	4	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	591	127	13 966	412 591	10 680	21 145	252 625	940 735	783 493	1 737 927	43 122
3371	Household & institutional furniture & kitchen cabinet mfg	3	383	49	4 952	127 026	3 905	7 388	83 064	254 978	239 696	495 453	10 041
33711	Wood kitchen cabinet & counter top mfg	3	208	16	1 945	50 930	1 569	3 030	34 944	88 188	70 528	158 193	4 073
337110	Wood kitchen cabinet & counter top mfg	3	208	16	1 945	50 930	1 569	3 030	34 944	88 188	70 528	158 193	4 073
33712	Household & institutional furniture mfg	2	175	33	3 007	76 096	2 336	4 358	48 120	166 790	169 168	337 260	5 968
337121	Upholstered household furniture mfg	4	45	6	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	3	71	11	1 055	26 373	846	1 617	18 874	52 925	76 749	130 786	1 754
337127	Institutional furniture mfg	2	42	13	1 206	35 430	896	1 783	19 327	85 096	65 590	150 646	3 118

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Chicago, IL PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	162	68	7 743	254 441	5 881	11 973	149 827	606 779	455 987	1 076 323	30 685
33721	Office furniture (including fixtures) mfg	1	162	68	7 743	254 441	5 881	11 973	149 827	606 779	455 987	1 076 323	30 685
337211	Wood office furniture mfg	4	22	9	f	D	D	D	D	D	D	D	971
337212	Custom architectural woodwork & millwork mfg	1	33	9	f	D	D	D	D	D	D	D	2 734
337214	Office furniture (except wood) mfg	2	13	7	1 214	44 964	868	1 873	21 054	106 222	66 177	173 102	5 653
337215	Showcase, partition, shelving, & locker mfg	—	94	43	5 414	167 576	4 195	8 322	102 206	420 656	331 661	759 273	21 327
3379	Other furniture related product mfg	1	46	10	1 271	31 124	894	1 784	19 734	78 978	87 810	166 151	2 396
33791	Mattress mfg	—	19	6	f	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	19	6	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	4	27	4	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	4	27	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	1 080	266	32 804	1 102 493	21 168	41 429	526 753	2 433 457	2 021 523	4 430 452	161 364
3391	Medical equipment & supplies mfg	2	429	71	9 699	373 464	5 913	11 421	184 108	748 192	601 931	1 347 419	51 290
33911	Medical equipment & supplies mfg	2	429	71	9 699	373 464	5 913	11 421	184 108	748 192	601 931	1 347 419	51 290
339111	Laboratory apparatus & furniture mfg	—	15	6	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	5	54	23	3 568	178 984	2 272	4 638	101 359	271 396	147 934	418 349	18 807
339113	Surgical appliance & supplies mfg	—	54	17	1 865	55 649	1 226	2 272	25 533	106 113	206 184	316 676	4 922
339114	Dental equipment & supplies mfg	—	42	11	1 368	52 296	779	1 500	21 616	142 066	90 387	231 609	7 284
339115	Ophthalmic goods mfg	—	24	5	948	29 133	400	790	6 231	122 133	84 321	198 273	15 747
339116	Dental laboratories	6	240	9	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	1	651	195	23 105	729 029	15 255	30 008	342 645	1 685 265	1 419 592	3 083 033	110 074
33991	Jewelry & silverware mfg	3	78	12	f	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	3	46	6	e	D	D	D	D	D	D	D	D
339912	Silverware & plated ware mfg	1	8	3	e	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	1	58	19	2 215	74 442	1 257	2 279	22 841	166 270	166 868	331 796	9 849
339920	Sporting & athletic goods mfg	1	58	19	2 215	74 442	1 257	2 279	22 841	166 270	166 868	331 796	9 849
33993	Doll, toy, & game mfg	—	52	13	g	D	D	D	D	D	D	D	17 401
339932	Game, toy, & children's vehicle mfg	—	47	11	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	59	15	1 631	56 336	1 076	2 260	28 010	207 766	184 235	383 802	D
339941	Pen & mechanical pencil mfg	—	4	2	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	1	9	5	e	D	D	D	D	D	D	D	D
339943	Marking device mfg	2	41	5	e	D	D	D	D	D	D	D	D
33995	Sign mfg	1	206	54	4 395	157 024	2 729	5 410	70 549	295 672	251 127	537 468	13 206
339950	Sign mfg	1	206	54	4 395	157 024	2 729	5 410	70 549	295 672	251 127	537 468	13 206
33999	All other miscellaneous mfg	1	198	82	12 111	366 619	8 246	16 419	182 910	814 947	600 242	1 409 993	59 832
339991	Gasket, packing, & sealing device mfg	—	44	24	5 171	174 495	3 300	6 295	84 038	402 904	231 345	631 097	D
339992	Musical instrument mfg	1	23	8	595	17 148	466	929	10 677	41 848	28 615	72 374	2 918
339993	Fastener, button, needle, & pin mfg	3	9	4	e	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	16	9	982	36 916	608	1 600	17 760	82 145	57 404	139 352	D
339999	All other miscellaneous mfg	2	102	35	5 027	130 900	3 627	7 133	65 937	270 853	265 173	532 640	18 341

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Kankakee, IL PMSA												
31-33	Manufacturing	-	116	51	6 937	263 752	4 879	11 000	159 588	914 868	1 358 260	2 253 237	132 518
311	Food mfg.....	-	14	7	1 106	42 417	853	2 145	29 303	109 137	246 096	356 084	18 000
3111	Animal food mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
31111	Animal food mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg...	-	2	1	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	2	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	4	6	5	358	8 778	291	651	6 670	28 259	38 237	66 160	2 874
3222	Converted paper product mfg.....	4	6	5	358	8 778	291	651	6 670	28 259	38 237	66 160	2 874
323	Printing & related support activities.....	-	6	2	e	D	D	D	D	D	D	D	810
3231	Printing & related support activities.....	-	6	2	e	D	D	D	D	D	D	D	810
32311	Printing	-	5	2	e	D	D	D	D	D	D	D	810
323112	Commercial flexographic printing ..	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	13	11	2 078	98 772	1 149	2 430	40 614	361 813	586 119	919 720	51 800
3254	Pharmaceutical & medicine mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	1	5	5	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg.....	1	3	3	407	15 309	231	541	7 022	65 779	88 386	159 527	3 303
325510	Paint & coating mfg....	1	3	3	407	15 309	231	541	7 022	65 779	88 386	159 527	3 303
326	Plastics & rubber products mfg.....	-	12	7	914	37 064	780	1 791	31 694	148 280	140 625	291 081	10 972
3261	Plastics product mfg.....	-	11	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	6	4	699	29 615	613	1 395	26 474	115 655	94 369	212 087	9 406
326192	Resilient floor covering mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	-	1	1	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel.....	-	1	1	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing....	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	25	5	465	14 110	381	793	10 433	42 874	67 516	109 671	2 232
333	Machinery mfg.....	-	8	4	367	15 463	188	402	5 742	40 158	34 457	78 869	2 728
335	Electrical equipment, appliance, & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33591	Battery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg....	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVENPORT-MOLINE-ROCK ISLAND, IA-IL MSA												
	Manufacturing	-	460	162	26 539	1 096 313	19 964	41 726	773 407	4 313 201	5 151 952	9 411 592	259 420
	Davenport-Moline-Rock Island, IA-IL MSA (IL Part) .	-	250	84	14 694	618 016	11 216	23 646	449 628	2 123 417	2 723 894	4 796 824	124 760
	Davenport-Moline-Rock Island, IA-IL MSA (IA Part) .	-	210	78	11 845	478 297	8 748	18 080	323 779	2 189 784	2 428 058	4 614 768	134 660
311	Food mfg	-	37	14	3 788	131 041	2 967	6 445	105 142	797 309	1 617 384	2 418 539	41 147
3111	Animal food mfg	-	4	2	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	4	2	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	-	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	10	5	2 612	92 843	2 258	5 093	82 717	504 752	1 341 658	1 851 255	D
31161	Animal slaughtering & processing	-	10	5	2 612	92 843	2 258	5 093	82 717	504 752	1 341 658	1 851 255	D
311611	Animal (except poultry) slaughtering	-	7	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	12	4	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	12	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	2	1	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	18	5	386	8 179	323	658	6 319	19 161	18 548	38 248	983
322	Paper mfg	1	6	4	442	13 424	360	782	8 213	36 411	39 491	75 654	D
3222	Converted paper product mfg	1	6	4	442	13 424	360	782	8 213	36 411	39 491	75 654	D
32221	Paperboard container mfg	-	5	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	50	5	g	D	D	D	D	D	D	D	4 241
3231	Printing & related support activities	-	50	5	g	D	D	D	D	D	D	D	4 241
32311	Printing	-	46	5	1 010	29 425	733	1 429	18 990	55 618	31 731	87 289	4 099
323114	Quick printing	1	14	1	e	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	6	860	36 635	570	1 162	22 238	183 786	220 803	392 274	D
3259	Other chemical product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	4	2	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	6	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	10	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	21	6	587	19 567	447	929	13 789	81 054	59 571	140 888	7 019
3273	Cement & concrete product mfg	-	19	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	17	9	3 883	184 233	3 099	6 450	135 659	696 358	944 593	1 654 781	D
3313	Alumina & aluminum production & processing	-	3	3	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	h	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	3	3	h	D	D	D	D	D	D	D	D
3315	Foundries	-	13	6	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	1	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	10	4	284	10 059	228	467	6 462	14 955	13 896	29 126	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVENPORT—MOLINE—ROCK ISLAND, IA—IL MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg.....	-	113	46	3 366	102 775	2 502	4 659	63 485	233 866	142 986	372 013	16 654
3323	Architectural & structural metals mfg.....	-	15	5	670	18 314	523	820	12 128	38 052	35 199	73 492	2 504
33231	Plate work & fabricated structural product mfg..	1	6	1	266	6 028	230	175	4 624	10 848	8 742	19 671	D
33232	Ornamental & architectural metal products mfg.....	-	9	4	404	12 286	293	645	7 504	27 204	26 457	53 821	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	44	18	1 161	32 796	933	1 728	22 350	67 542	41 317	106 212	7 024
33271	Machine shops.....	-	40	16	1 047	29 371	830	1 586	19 847	60 872	39 322	97 534	6 210
332710	Machine shops.....	-	40	16	1 047	29 371	830	1 586	19 847	60 872	39 322	97 534	6 210
3328	Coating, engraving, heat treating, & allied activities.	-	17	7	421	11 362	312	561	7 135	24 800	8 498	33 597	1 291
33281	Coating, engraving, heat treating, & allied activities.....	-	17	7	421	11 362	312	561	7 135	24 800	8 498	33 597	1 291
3329	Other fabricated metal product mfg.....	-	19	7	607	24 484	366	726	12 255	59 501	27 261	84 827	2 353
33291	Metal valve mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg...	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	17	6	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	71	38	9 268	503 114	6 573	14 787	355 388	2 007 661	1 859 149	3 811 821	91 666
3331	Agriculture, construction, & mining machinery mfg....	-	20	12	6 990	417 618	4 982	11 286	302 911	1 801 349	1 703 549	3 449 857	80 184
33311	Agricultural implement mfg.....	-	13	7	5 319	330 910	3 916	8 869	250 669	1 408 409	1 154 311	2 516 802	63 676
333111	Farm machinery & equipment mfg.....	-	13	7	5 319	330 910	3 916	8 869	250 669	1 408 409	1 154 311	2 516 802	63 676
33312	Construction machinery mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg..	-	4	3	280	12 956	162	334	5 807	38 763	13 747	51 827	1 899
33329	Other industrial machinery mfg.....	-	4	3	280	12 956	162	334	5 807	38 763	13 747	51 827	1 899
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	5	4	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	-	5	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	4	21	10	744	28 188	546	1 137	17 612	57 181	30 712	84 658	4 612
33351	Metalworking machinery mfg.....	4	21	10	744	28 188	546	1 137	17 612	57 181	30 712	84 658	4 612
333514	Special die & tool, die set, jig, & fixture mfg..	4	11	6	286	12 694	234	647	9 556	21 971	8 725	28 452	D
333515	Cutting tool & machine tool accessory mfg..	-	4	3	e	D	D	D	D	D	D	D	1 778
3339	Other general-purpose machinery mfg.....	-	16	8	f	D	D	D	D	D	D	D	3 911
33391	Pump & compressor mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	5	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	14	3	f	D	D	D	D	D	D	D	972
3362	Motor vehicle body & trailer mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	18	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	34	5	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DECATUR, IL MSA													
31-33	Manufacturing	-	134	45	11 616	479 406	8 240	16 177	319 733	2 182 892	3 833 751	6 114 166	193 557
311	Food mfg.....	-	15	10	1 741	70 315	1 189	2 805	45 239	982 377	1 768 306	2 740 081	119 629
3112	Grain & oilseed milling	-	7	6	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
311221	Wet corn milling.....	-	2	2	f	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	10	5	658	26 365	455	1 015	14 998	345 284	290 645	625 450	17 111
3251	Basic chemical mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	3	3	e	D	D	D	D	D	D	D	12 627
32541	Pharmaceutical & medicine mfg.....	-	3	3	e	D	D	D	D	D	D	D	12 627
325412	Pharmaceutical preparation mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading) ..	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	6	3	f	D	D	D	D	D	D	D	2 077
3272	Glass & glass product mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
327211	Flat glass mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	38	10	1 371	40 148	799	1 758	29 319	61 742	66 506	127 566	3 972
3329	Other fabricated metal product mfg.....	-	6	4	919	25 891	478	1 117	20 177	33 557	33 653	67 690	2 385
33291	Metal valve mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	12	4	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	2	2	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
PEORIA-PEKIN, IL MSA													
31-33	Manufacturing	-	350	143	23 638	996 395	16 691	33 727	628 310	3 605 699	4 045 897	7 550 512	231 574
311	Food mfg.....	1	28	15	936	31 116	554	1 061	14 097	136 384	95 167	232 525	3 296
3118	Bakeries & tortilla mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	2	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	6	3	328	11 477	268	600	8 719	33 561	32 229	65 735	1 951
323	Printing & related support activities.....	1	56	18	1 688	52 116	963	1 910	25 752	116 576	60 739	178 474	8 552
3231	Printing & related support activities.....	1	56	18	1 688	52 116	963	1 910	25 752	116 576	60 739	178 474	8 552
32311	Printing.....	1	51	18	1 670	51 257	948	1 884	25 346	115 199	60 561	176 918	8 475
323110	Commercial lithographic printing ..	-	24	13	1 269	39 595	661	1 296	18 789	87 148	37 176	125 150	4 756

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PEORIA-PEKIN, IL MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	-	19	10	1 328	58 779	880	1 834	36 804	385 045	784 762	1 065 212	60 628
3251	Basic chemical mfg	-	9	7	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	5	732	32 349	465	930	19 403	94 352	585 855	684 220	35 725
325193	Ethyl alcohol mfg	1	3	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	1	1	e	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	7	1 030	40 601	732	1 447	24 118	119 257	104 508	221 254	7 249
3261	Plastics product mfg	1	6	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	5	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	5	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	e	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	e	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	19	4	271	6 746	190	297	4 811	14 775	17 434	32 106	1 788
331	Primary metal mfg	-	9	7	2 714	124 662	2 164	4 461	95 808	275 023	285 548	550 085	34 448
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	6	5	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	5	4	340	12 440	277	623	9 641	25 156	16 671	41 633	D
332	Fabricated metal product mfg	-	88	41	4 364	132 190	3 369	6 792	85 600	361 841	282 900	639 545	26 774
3323	Architectural & structural metals mfg	-	21	16	2 352	72 395	1 865	3 864	46 970	193 626	168 412	363 720	13 895
33231	Plate work & fabricated structural product mfg ..	-	14	10	1 288	44 119	1 009	2 063	28 470	124 598	107 003	232 589	5 200
332311	Prefabricated metal building & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	6	4	527	22 412	344	702	10 805	52 273	45 064	98 696	2 880
332313	Plate work mfg	-	7	5	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	7	6	1 064	28 276	856	1 801	18 500	69 028	61 409	131 131	8 695
332322	Sheet metal work mfg ..	-	6	6	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	37	13	722	25 708	586	1 211	17 292	59 406	31 626	89 404	7 394
33271	Machine shops	1	32	9	597	21 331	488	1 030	14 526	50 711	27 727	76 700	6 378
332710	Machine shops	1	32	9	597	21 331	488	1 030	14 526	50 711	27 727	76 700	6 378
3328	Coating, engraving, heat treating, & allied activities.	9	11	5	443	10 313	368	684	7 197	23 118	7 192	29 650	1 469
33281	Coating, engraving, heat treating, & allied activities	9	11	5	443	10 313	368	684	7 197	23 118	7 192	29 650	1 469
332812	Metal coating engraving (exc jewelry/silverware)/ allied services	9	7	4	314	6 568	267	476	4 787	15 533	4 569	19 399	D
3329	Other fabricated metal product mfg	-	12	5	738	20 223	470	882	11 890	81 398	66 927	142 209	3 952
33291	Metal valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	11	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PEORIA-PEKIN, IL MSA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	23	13	8 627	469 750	5 928	12 233	294 382	2 017 848	2 195 625	4 235 248	79 766
3331	Agriculture, construction, & mining machinery mfg	-	7	4	h	D	D	D	D	D	D	D	45 720
33311	Agricultural implement mfg	-	2	1	e	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	5	3	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	5	3	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	5	7	4	e	D	D	D	D	D	D	D	2 444
335	Electrical equipment, appliance, & component mfg	3	10	5	393	15 644	263	483	8 373	36 128	31 853	66 997	1 460
3353	Electrical equipment mfg	1	7	3	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	7	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	6	4	334	9 436	214	323	4 147	10 804	33 674	46 312	2 297
337	Furniture & related product mfg	1	27	6	651	19 089	510	1 077	11 942	41 446	74 334	112 606	1 624
3371	Household & institutional furniture & kitchen cabinet mfg	5	21	5	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	4	1	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	4	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	26	6	652	15 827	416	734	7 749	32 624	17 240	49 949	571
3391	Medical equipment & supplies mfg	1	13	3	337	7 883	259	428	4 731	17 126	3 929	21 125	215
33911	Medical equipment & supplies mfg	1	13	3	337	7 883	259	428	4 731	17 126	3 929	21 125	215
3399	Other miscellaneous mfg	-	13	3	315	7 944	157	306	3 018	15 498	13 311	28 824	356
ROCKFORD, IL MSA													
31-33	Manufacturing	-	912	345	51 445	1 933 636	36 944	74 866	1 203 213	4 716 032	5 297 898	9 928 907	385 583
311	Food mfg	1	30	15	3 580	103 778	3 033	6 041	80 584	489 035	734 613	1 203 599	32 589
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	4	6	5	573	20 203	416	921	13 266	98 781	219 676	317 215	D
31151	Dairy product (except frozen) mfg	2	5	4	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	4	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	3	288	5 910	242	506	4 860	17 363	14 672	32 003	1 793
3119	Other food mfg	-	7	3	327	8 313	294	520	6 341	33 874	28 091	62 010	3 729
31191	Snack food mfg	1	4	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	1	4	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	19	6	431	9 341	356	641	6 351	21 156	22 627	43 563	2 079
3219	Other wood product mfg	2	13	4	261	5 530	217	434	3 991	13 207	8 796	21 780	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKFORD, IL MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	—	8	7	917	28 297	776	1 627	21 974	126 779	90 585	215 501	5 157
3222	Converted paper product mfg	—	7	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	5	5	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	3	3	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	1	1	e	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	62	13	1 729	50 264	1 389	2 667	36 593	92 811	73 914	164 803	6 079
3231	Printing & related support activities	—	62	13	1 729	50 264	1 389	2 667	36 593	92 811	73 914	164 803	6 079
32311	Printing	—	56	12	1 667	48 614	1 334	2 576	35 342	89 881	73 269	161 226	5 881
323110	Commercial lithographic printing	1	29	6	383	10 770	283	513	7 012	18 728	13 323	32 109	1 066
323111	Commercial gravure printing	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	20	10	1 166	39 097	731	1 500	21 154	231 848	170 504	398 312	9 711
3254	Pharmaceutical & medicine mfg	—	5	2	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	2	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	7	4	640	21 000	410	864	11 738	148 318	98 935	244 498	5 296
32551	Paint & coating mfg	—	6	3	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	6	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	30	13	823	24 709	629	1 391	17 238	77 381	79 203	156 904	10 667
3261	Plastics product mfg	1	24	12	751	22 553	573	1 270	15 777	71 541	73 475	145 285	10 271
32619	Other plastics product mfg	2	17	9	552	15 680	416	907	10 379	33 743	28 694	62 494	3 158
326199	All other plastics product mfg	2	17	9	552	15 680	416	907	10 379	33 743	28 694	62 494	3 158
327	Nonmetallic mineral product mfg	1	31	11	850	32 303	592	1 358	19 936	66 347	53 466	125 637	6 224
3273	Cement & concrete product mfg	2	24	9	609	22 730	466	1 092	15 602	51 421	36 932	87 488	5 340
32739	Other concrete product mfg	—	8	4	262	10 166	188	432	5 846	24 491	11 884	35 958	2 693
327390	Other concrete product mfg	—	8	4	262	10 166	188	432	5 846	24 491	11 884	35 958	2 693
331	Primary metal mfg	—	20	15	1 659	51 488	1 363	2 809	36 663	118 515	188 562	308 447	8 754
3314	Nonferrous metal (except aluminum) production & processing	—	3	3	252	8 197	201	409	6 191	24 234	93 269	117 783	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	3	3	252	8 197	201	409	6 191	24 234	93 269	117 783	D
3315	Foundries	—	13	8	1 104	34 164	971	1 982	25 127	70 948	35 275	106 406	4 437
33151	Ferrous metal foundries	—	3	3	461	14 183	402	764	9 723	32 521	13 006	45 246	D
331511	Iron foundries	—	3	3	461	14 183	402	764	9 723	32 521	13 006	45 246	D
33152	Nonferrous metal foundries	1	10	5	643	19 981	569	1 218	15 404	38 427	22 269	61 160	D
331522	Nonferrous (except aluminum) die-casting foundries	—	4	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	337	117	12 481	421 981	9 979	20 803	291 351	985 160	630 539	1 621 575	67 809
3321	Forging & stamping	—	10	5	384	14 700	306	728	10 140	39 583	24 983	64 869	1 558
33211	Forging & stamping	—	10	5	384	14 700	306	728	10 140	39 583	24 983	64 869	1 558
3322	Cutlery & handtool mfg	—	14	5	785	23 791	659	1 355	15 378	60 998	26 540	85 356	1 572
33221	Cutlery & handtool mfg	—	14	5	785	23 791	659	1 355	15 378	60 998	26 540	85 356	1 572
332212	Hand & edge tool mfg	—	13	4	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	30	11	546	22 080	369	790	11 360	42 398	36 201	78 633	4 660
33232	Ornamental & architectural metal products mfg	—	18	6	316	10 841	214	450	6 046	23 674	12 959	36 613	3 595
332322	Sheet metal work mfg	—	12	5	278	9 721	184	383	5 387	20 046	10 874	30 856	3 503
3324	Boiler, tank, & shipping container mfg	—	3	2	328	10 341	266	545	8 051	28 388	38 969	66 933	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	2	328	10 341	266	545	8 051	28 388	38 969	66 933	D
332431	Metal can mfg	—	3	2	328	10 341	266	545	8 051	28 388	38 969	66 933	D
3325	Hardware mfg	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D
33251	Hardware mfg	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D
332510	Hardware mfg	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D

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	ROCKFORD, IL MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	—	12	7	805	23 006	599	1 236	12 301	52 286	32 073	82 550	4 262
33261	Spring & wire product mfg	—	12	7	805	23 006	599	1 236	12 301	52 286	32 073	82 550	4 262
332618	Other fabricated wire product mfg	—	8	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	196	58	6 192	228 500	5 066	11 100	165 984	532 431	305 119	833 118	38 101
33271	Machine shops	—	141	26	1 900	69 105	1 492	3 143	47 591	123 538	49 696	173 334	10 633
332710	Machine shops	—	141	26	1 900	69 105	1 492	3 143	47 591	123 538	49 696	173 334	10 633
33272	Turned product & screw, nut, & bolt mfg	—	55	32	4 292	159 395	3 574	7 957	118 393	408 893	255 423	659 784	27 468
332721	Precision turned product mfg	—	25	15	779	23 724	629	1 363	17 571	82 032	26 892	109 292	6 250
332722	Bolt, nut, screw, rivet, & washer mfg	—	30	17	3 513	135 671	2 945	6 594	100 822	326 861	228 531	550 492	21 218
3328	Coating, engraving, heat treating, & allied activities .	1	42	15	832	25 731	663	1 471	17 023	53 698	18 472	72 334	7 071
33281	Coating, engraving, heat treating, & allied activities	1	42	15	832	25 731	663	1 471	17 023	53 698	18 472	72 334	7 071
332813	Electroplating, plating, polishing, anodizing, & coloring	—	26	8	471	15 698	366	855	9 340	29 164	9 783	39 169	5 640
3329	Other fabricated metal product mfg	—	23	10	718	23 322	587	1 180	16 641	51 880	58 848	111 253	3 186
33299	All other fabricated metal product mfg	—	19	7	543	16 953	476	955	13 722	33 506	37 066	71 040	3 005
333	Machinery mfg	1	203	91	13 606	528 336	8 951	18 725	303 522	1 173 119	919 798	2 064 682	65 335
3331	Agriculture, construction, & mining machinery mfg	—	10	5	1 150	41 998	720	1 457	22 286	82 395	78 419	167 368	3 130
33311	Agricultural implement mfg	—	5	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	4	3	530	17 267	353	487	9 541	55 843	28 266	84 221	1 739
333120	Construction machinery mfg	—	4	3	530	17 267	353	487	9 541	55 843	28 266	84 221	1 739
3332	Industrial machinery mfg . .	—	20	9	1 391	56 414	917	1 858	33 314	140 604	143 862	281 914	8 079
33329	Other industrial machinery mfg	—	17	7	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	6	3	439	18 714	254	572	9 008	51 669	32 531	79 774	D
333294	Food product machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg . .	—	14	6	983	38 791	664	1 393	22 280	108 565	107 132	185 304	3 675
33331	Commercial & service industry machinery mfg	—	14	6	983	38 791	664	1 393	22 280	108 565	107 132	185 304	3 675
333319	Other commercial & service industry machinery mfg	—	11	5	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	3	3	e	D	D	D	D	D	D	D	1 338
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	3	3	e	D	D	D	D	D	D	D	1 338
333414	Heating equipment (except warm air furnaces) mfg	1	2	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	108	40	5 532	221 652	3 484	7 850	129 253	460 983	311 630	762 359	27 921
33351	Metalworking machinery mfg	3	108	40	5 532	221 652	3 484	7 850	129 253	460 983	311 630	762 359	27 921
333512	Machine tool (metal cutting types) mfg	8	12	7	2 087	86 348	1 171	2 916	48 784	136 401	149 946	284 242	9 039
333513	Machine tool (metal forming types) mfg	3	5	5	456	17 086	253	528	8 482	41 835	28 822	66 605	2 541
333514	Special die & tool, die set, jig, & fixture mfg	1	40	12	827	34 323	657	1 387	22 836	72 710	35 733	107 230	4 184
333515	Cutting tool & machine tool accessory mfg	—	29	7	1 655	62 227	1 079	2 279	36 915	171 081	73 000	240 252	9 877
333518	Other metalworking machinery mfg	—	7	6	274	11 010	144	314	4 912	21 366	17 033	38 919	561

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROCKFORD, IL MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	-	10	10	g	D	D	D	D	D	D	D	10 221
33361	Engine, turbine, & power transmission equipment mfg	-	10	10	g	D	D	D	D	D	D	D	10 221
333612	Speed changer, industrial high-speed drive, & gear mfg	-	5	5	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	4	4	1 284	49 836	908	1 826	32 090	97 285	76 936	181 490	D
3339	Other general-purpose machinery mfg	-	38	18	2 479	87 941	1 736	3 381	48 682	202 026	148 776	352 865	10 971
33399	All other general-purpose machinery mfg	-	32	16	2 352	82 668	1 663	3 225	46 051	193 010	142 572	337 578	10 288
333995	Fluid power cylinder & actuator mfg	-	9	4	521	19 915	356	783	10 921	42 903	27 713	71 507	D
333996	Fluid power pump & motor mfg	-	4	3	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	9	5	f	D	D	D	D	D	D	D	3 014
334	Computer & electronic product mfg	-	18	6	2 042	51 862	1 160	1 655	17 143	165 602	97 438	257 639	6 957
3344	Semiconductor & other electronic component mfg	-	9	3	g	D	D	D	D	D	D	D	4 190
33441	Semiconductor & other electronic component mfg	-	9	3	g	D	D	D	D	D	D	D	4 190
334411	Electron tube mfg	-	3	1	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	-	2	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	16	7	1 202	45 650	728	1 645	23 624	109 338	94 232	205 229	4 655
3352	Household appliance mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	12	5	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	12	5	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	30	17	9 425	504 255	6 196	11 830	305 083	957 421	2 045 947	2 968 501	154 874
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	22	12	1 768	66 679	1 329	2 800	38 860	138 528	166 455	305 963	D
33632	Motor vehicle electrical & electronic equipment mfg	2	7	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	2	7	2	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	3	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	3	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	8	5	f	D	D	D	D	D	D	D	1 987
336391	Motor vehicle air-conditioning mfg	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKFORD, IL MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	—	6	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	5	3	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	34	5	449	11 921	308	603	6 676	18 703	21 582	40 428	872
3371	Household & institutional furniture & kitchen cabinet mfg	—	25	4	360	9 916	239	488	5 515	16 174	18 209	34 476	675
339	Miscellaneous mfg	—	40	9	896	24 329	607	1 283	11 660	73 091	60 338	129 897	3 116
3399	Other miscellaneous mfg	—	30	7	661	18 555	448	918	8 542	54 817	45 958	99 113	2 667
33999	All other miscellaneous mfg	—	7	3	289	7 590	195	453	4 388	23 015	16 216	39 041	765
	ST. LOUIS, MO—IL MSA												
31-33	Manufacturing	—	3 320	1 132	170 766	6 590 408	115 500	235 281	3 823 497	21 018 794	28 104 319	51 488 137	1 429 995
	St. Louis, MO—IL MSA (IL Part)	—	495	146	27 487	1 023 352	20 910	43 836	700 665	3 525 644	6 147 590	9 646 771	265 987
	St. Louis, MO—IL MSA (MO Part)	—	2 825	986	143 279	5 567 056	94 590	191 445	3 122 832	17 493 150	21 956 729	41 841 366	1 164 008
311	Food mfg	1	210	73	9 139	256 713	5 999	12 083	146 624	1 149 597	1 458 904	2 613 825	45 645
3111	Animal food mfg	—	8	2	580	16 620	351	738	9 091	236 013	220 020	461 636	D
31111	Animal food mfg	—	8	2	580	16 620	351	738	9 091	236 013	220 020	461 636	D
311119	Other animal food mfg	—	8	2	580	16 620	351	738	9 091	236 013	220 020	461 636	D
3112	Grain & oilseed milling	1	9	7	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	19	6	1 050	28 504	838	1 553	18 468	156 796	92 622	248 492	4 776
31134	Nonchocolate confectionery mfg	—	12	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	—	12	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	3	16	4	e	D	D	D	D	D	D	D	1 188
31141	Frozen food mfg	3	10	4	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	3	10	4	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	16	8	917	31 857	658	1 419	19 344	92 524	289 960	386 258	7 062
31151	Dairy product (except frozen) mfg	—	11	7	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	7	4	551	19 696	357	833	9 927	62 735	198 532	261 355	D
3116	Meat product mfg	1	35	8	f	D	D	D	D	D	D	D	3 659
31161	Animal slaughtering & processing	1	35	8	f	D	D	D	D	D	D	D	3 659
311612	Meat processed from carcasses	—	14	5	541	14 501	445	858	8 967	47 240	94 709	141 539	2 362
3118	Bakeries & tortilla mfg	1	83	24	3 915	99 088	2 185	4 512	52 537	286 672	248 052	535 698	10 744
31181	Bread & bakery product mfg	1	76	19	2 436	60 053	1 364	2 481	31 902	184 893	76 718	261 757	6 039
311811	Retail bakeries	5	50	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	24	9	1 700	49 427	952	1 811	25 782	167 190	58 229	225 489	D
31182	Cookie, cracker, & pasta mfg	1	7	5	1 479	39 035	821	2 031	20 635	101 779	171 334	273 941	4 705
311821	Cookie & cracker mfg	—	2	2	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	8	3	2	f	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	—	2	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	24	14	1 190	37 493	771	1 580	18 527	219 516	171 005	386 867	8 504
31194	Seasoning & dressing mfg	—	6	3	e	D	D	D	D	D	D	D	D
31199	All other food mfg	—	7	5	378	10 446	287	543	5 737	85 053	47 447	132 112	D
311999	All other miscellaneous food mfg	—	5	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	22	10	3 531	185 365	2 574	5 294	126 325	1 217 069	808 218	2 022 998	171 981
3121	Beverage mfg	—	22	10	3 531	185 365	2 574	5 294	126 325	1 217 069	808 218	2 022 998	171 981
31211	Soft drink & ice mfg	1	13	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	7	6	g	D	D	D	D	D	D	D	D
31212	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	g	D	D	D	D	D	D	D	D

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31-33	ST. LOUIS, MO-IL MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	5	17	7	505	12 947	393	776	8 328	33 333	35 359	68 320	D
3133	Textile & fabric finishing & fabric coating mills	6	13	4	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	9	2	e	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	9	8	2	e	D	D	D	D	D	D	D	1 357
314	Textile product mills	2	76	16	1 466	29 819	1 076	1 980	16 684	55 038	58 636	115 799	D
3141	Textile furnishings mills	3	37	5	641	12 256	400	760	5 608	21 359	30 811	54 111	D
31412	Curtain & linen mills	3	36	5	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	3	9	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	39	11	825	17 563	676	1 220	11 076	33 679	27 825	61 688	D
31491	Textile bag & canvas mills	—	19	5	451	9 710	367	609	5 969	17 073	13 598	30 709	D
314912	Canvas & related product mills	—	16	4	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	20	6	374	7 853	309	611	5 107	16 606	14 227	30 979	D
314999	All other miscellaneous textile product mills	1	20	6	374	7 853	309	611	5 107	16 606	14 227	30 979	D
315	Apparel mfg	3	63	16	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	29	5	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	16	1	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	9	15	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	6	2	326	5 749	294	454	4 808	10 930	10 599	22 294	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	2	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	33	11	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	33	11	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	3	10	7	449	7 069	398	708	4 968	12 158	7 633	20 028	374
316	Leather & allied product mfg ..	1	21	10	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	4	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	2	e	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	3	14	6	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	3	14	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	83	16	1 110	27 340	870	1 620	18 454	64 024	85 476	149 006	D
3212	Veneer, plywood, & engineered wood product mfg	1	14	6	448	12 864	338	677	7 830	35 177	39 689	74 790	D
32121	Veneer, plywood, & engineered wood product mfg	1	14	6	448	12 864	338	677	7 830	35 177	39 689	74 790	D
321214	Truss mfg	1	10	5	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	58	7	481	9 917	381	661	7 543	18 914	24 974	43 803	D
322	Paper mfg	—	76	53	4 966	164 444	3 906	8 584	110 941	453 574	639 380	1 093 683	24 513
3221	Pulp, paper, & paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	75	52	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	41	31	2 271	77 990	1 717	3 620	47 965	163 556	289 855	456 170	15 475
322211	Corrugated & solid fiber box mfg	1	26	24	1 639	55 297	1 200	2 435	31 254	114 291	224 704	338 574	D
322212	Folding paperboard box mfg	—	11	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	14	8	g	D	D	D	D	D	D	D	D
322221	Coated & laminated packaging paper & plastics film mfg	—	3	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	14	9	1 280	41 773	1 064	2 609	31 981	164 457	165 253	328 608	4 227
322231	Die-cut paper & paperboard office supplies mfg	—	5	3	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	7	6	f	D	D	D	D	D	D	D	D

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31-33	ST. LOUIS, MO-IL MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	559	123	10 959	371 566	7 718	14 697	221 656	755 774	521 214	1 273 989	57 366
3231	Printing & related support activities.....	1	559	123	10 959	371 566	7 718	14 697	221 656	755 774	521 214	1 273 989	57 366
32311	Printing.....	1	486	97	9 291	310 094	6 446	12 209	182 519	634 461	493 724	1 125 040	50 580
323110	Commercial lithographic printing ..	2	229	55	4 885	184 269	3 306	6 255	105 984	333 804	250 036	582 217	24 456
323111	Commercial gravure printing.....	1	12	3	743	26 950	585	1 236	18 603	69 771	65 990	135 247	7 849
323112	Commercial flexographic printing ..	—	20	7	479	15 073	312	606	7 507	32 777	41 724	74 700	2 559
323113	Commercial screen printing.....	—	46	8	619	14 979	472	933	9 767	40 697	30 173	67 882	2 061
323114	Quick printing.....	2	100	6	616	14 168	457	715	8 853	34 749	18 801	53 480	5 328
323116	Manifold business form printing.....	1	14	7	616	21 722	341	764	11 563	45 909	33 560	80 729	4 154
323118	Blankbook, looseleaf binder, & device mfg .	—	7	3	824	18 713	637	1 069	12 358	50 046	31 146	81 612	D
323119	Other commercial printing.....	8	51	5	302	7 046	218	361	4 205	14 092	10 862	25 159	1 080
32312	Support activities for printing.....	2	73	26	1 668	61 472	1 272	2 488	39 137	121 313	27 490	148 949	6 786
323121	Tradebinding & related work.....	1	16	5	255	7 563	211	373	4 383	13 270	2 289	15 516	769
323122	Prepress services.....	2	57	21	1 413	53 909	1 061	2 115	34 754	108 043	25 201	133 433	6 017
324	Petroleum & coal products mfg.....	—	31	8	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	31	8	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries.....	—	4	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	3	g	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg.....	1	10	4	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg.....	1	10	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	212	95	12 530	511 735	7 278	14 956	263 162	3 154 044	2 051 132	5 207 282	183 116
3251	Basic chemical mfg.....	—	36	15	1 925	97 032	1 356	2 944	67 584	383 839	334 704	709 649	42 637
32513	Dye & pigment mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	10	6	456	22 448	314	656	15 452	87 464	85 095	171 732	D
325188	All other basic inorganic chemical mfg.....	—	9	5	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	3	12	6	674	25 099	331	708	8 556	168 608	178 291	350 326	12 087
32532	Pesticide & other agricultural chemical mfg.....	3	8	4	513	17 291	233	482	4 871	146 331	143 471	293 490	8 061
325320	Pesticide & other agricultural chemical mfg.....	3	8	4	513	17 291	233	482	4 871	146 331	143 471	293 490	8 061
3254	Pharmaceutical & medicine mfg.....	—	35	17	4 581	182 056	2 218	4 550	78 235	932 949	369 436	1 316 859	69 354
32541	Pharmaceutical & medicine mfg.....	—	35	17	4 581	182 056	2 218	4 550	78 235	932 949	369 436	1 316 859	69 354
325411	Medicinal & botanical mfg.....	—	4	3	h	D	D	D	D	D	D	D	51 711
325412	Pharmaceutical preparation mfg.....	—	18	11	1 433	57 331	818	1 534	26 529	416 166	120 757	533 742	14 030
325414	Biological product (except diagnostic) mfg.....	8	9	3	e	D	D	D	D	D	D	D	3 502
3255	Paint, coating, & adhesive mfg.....	2	44	17	g	D	D	D	D	D	D	D	8 161
32551	Paint & coating mfg.....	2	38	15	1 111	45 931	535	953	14 264	238 137	212 222	448 804	7 678
325510	Paint & coating mfg....	2	38	15	1 111	45 931	535	953	14 264	238 137	212 222	448 804	7 678
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	46	20	2 678	96 817	1 918	3 946	63 223	1 199 459	525 217	1 719 157	D
32561	Soap & cleaning compound mfg.....	—	37	15	2 224	82 188	1 652	3 374	55 876	1 161 820	456 152	1 613 397	32 616
325611	Soap & other detergent mfg.....	—	21	8	1 119	45 912	823	1 621	30 351	856 616	334 918	1 187 388	15 623
325612	Polish & other sanitation good mfg...	1	16	7	1 105	36 276	829	1 753	25 525	305 204	121 234	426 009	16 993
32562	Toilet preparation mfg....	2	9	5	454	14 629	266	572	7 347	37 639	69 065	105 760	D
325620	Toilet preparation mfg.	2	9	5	454	14 629	266	572	7 347	37 639	69 065	105 760	D

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31-33	ST. LOUIS, MO-IL MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	-	35	17	1 296	54 190	757	1 480	25 254	195 762	369 433	564 919	12 562
32599	All other chemical product & preparation mfg	-	25	13	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	3	3	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	16	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	178	92	9 501	268 376	7 507	13 971	162 381	734 942	649 007	1 375 010	73 042
3261	Plastics product mfg	2	141	77	7 540	218 025	6 058	11 188	131 670	617 949	538 788	1 147 562	65 976
32611	Unsupported plastics film, sheet, & bag mfg	3	16	8	1 040	38 003	832	1 895	23 773	90 587	92 636	184 899	9 307
326111	Unsupported plastics bag mfg	5	4	3	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	10	4	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	4	9	6	320	12 462	243	506	7 482	29 671	24 851	54 516	2 922
326121	Unsupported plastics profile shape mfg	4	8	5	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	9	8	645	18 375	579	1 100	14 958	54 957	44 541	99 698	9 304
326160	Plastics bottle mfg	-	9	8	645	18 375	579	1 100	14 958	54 957	44 541	99 698	9 304
32619	Other plastics product mfg	-	89	46	4 989	129 964	4 001	6 897	72 764	374 501	279 255	643 022	39 195
326199	All other plastics product mfg	-	78	44	4 877	126 863	3 914	6 698	70 572	368 791	275 332	633 371	39 021
3262	Rubber product mfg	-	37	15	1 961	50 351	1 449	2 783	30 711	116 993	110 219	227 448	7 066
32621	Tire mfg	-	11	6	608	15 046	445	845	9 233	28 576	35 971	64 860	1 147
326211	Tire mfg (except retreading)	-	1	1	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	22	9	1 323	34 260	981	1 901	21 030	86 039	70 857	156 817	5 748
326291	Rubber product mfg for mechanical use	-	6	2	419	10 899	347	635	8 270	29 987	20 916	50 788	D
326299	All other rubber product mfg	-	16	7	904	23 361	634	1 266	12 760	56 052	49 941	106 029	D
327	Nonmetallic mineral product mfg	1	143	54	3 428	114 683	2 541	5 063	76 710	334 303	314 695	649 867	55 899
3272	Glass & glass product mfg	-	16	4	519	18 228	408	814	13 675	73 895	37 790	110 623	D
32721	Glass & glass product mfg	-	16	4	519	18 228	408	814	13 675	73 895	37 790	110 623	D
327213	Glass container mfg	-	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	14	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	94	38	2 145	71 968	1 611	3 224	49 291	197 595	216 565	415 554	22 927
32732	Ready-mix concrete mfg	1	57	29	1 406	45 494	1 105	2 171	32 554	100 744	132 961	234 390	14 545
327320	Ready-mix concrete mfg	1	57	29	1 406	45 494	1 105	2 171	32 554	100 744	132 961	234 390	14 545
32739	Other concrete product mfg	2	26	4	329	8 928	229	446	6 425	19 381	16 171	35 581	3 768
327390	Other concrete product mfg	2	26	4	329	8 928	229	446	6 425	19 381	16 171	35 581	3 768
3279	Other nonmetallic mineral product mfg	2	20	6	489	15 660	350	707	9 643	47 582	46 684	94 656	D
32799	All other nonmetallic mineral product mfg	3	19	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	54	36	12 466	497 822	10 078	21 212	370 373	1 402 763	2 103 348	3 492 037	74 361
3311	Iron & steel mills & ferroalloy mfg	-	2	2	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	5	4	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	e	D	D	D	D	D	D	D	D

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	ST. LOUIS, MO—IL MSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	-	11	7	4 124	173 508	3 174	7 162	119 742	494 202	962 640	1 454 640	29 909
33141	Nonferrous metal (except aluminum) smelting & refining.....	-	4	3	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining.....	-	4	3	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	3	3	3 014	132 116	2 370	5 549	93 388	388 235	716 109	1 104 168	15 818
331421	Copper rolling, drawing, & extruding .	-	2	2	h	D	D	D	D	D	D	D	D
3315	Foundries	-	34	21	3 340	102 992	2 831	5 648	78 970	245 781	139 662	378 493	16 231
33151	Ferrous metal foundries .	-	15	9	1 568	49 452	1 338	2 732	39 559	106 224	60 782	165 193	6 828
331511	Iron foundries	2	8	5	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	-	6	3	1 137	36 932	971	1 930	29 935	84 575	47 985	130 855	4 428
33152	Nonferrous metal foundries	-	19	12	1 772	53 540	1 493	2 916	39 411	139 557	78 880	213 300	9 403
331521	Aluminum die-casting foundries	1	5	5	617	17 209	512	984	12 642	30 984	28 482	59 165	D
331524	Aluminum foundries (except die-casting) ..	-	7	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	555	176	17 489	585 146	13 168	26 531	375 387	1 364 809	1 085 963	2 458 277	77 909
3321	Forging & stamping	-	36	13	1 021	36 323	759	1 610	23 612	73 551	55 604	129 532	6 296
33211	Forging & stamping	-	36	13	1 021	36 323	759	1 610	23 612	73 551	55 604	129 532	6 296
332116	Metal stamping.....	-	28	12	921	32 748	675	1 434	21 107	67 234	50 763	118 458	5 830
3322	Cutlery & handtool mfg ...	-	21	10	1 091	35 620	791	1 631	22 095	64 128	34 877	105 390	4 918
33221	Cutlery & handtool mfg ..	-	21	10	1 091	35 620	791	1 631	22 095	64 128	34 877	105 390	4 918
332212	Hand & edge tool mfg .	1	18	7	f	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	3	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	103	38	4 149	132 635	2 959	5 985	75 708	402 710	301 602	704 628	9 412
33231	Plate work & fabricated structural product mfg ..	-	44	23	2 897	92 483	2 116	4 318	53 368	317 895	231 981	550 914	6 995
332311	Prefabricated metal building & component mfg	-	6	5	394	11 510	266	526	6 050	78 987	30 702	113 916	467
332312	Fabricated structural metal mfg	-	29	12	2 211	70 703	1 624	3 294	40 850	221 173	189 494	407 609	5 028
332313	Plate work mfg	1	9	6	292	10 270	226	498	6 468	17 735	11 785	29 389	1 500
33232	Ornamental & architectural metal products mfg.....	1	59	15	1 252	40 152	843	1 667	22 340	84 815	69 621	153 714	2 417
332321	Metal window & door mfg	-	12	4	348	10 444	231	458	5 859	24 081	21 497	45 496	470
332322	Sheet metal work mfg .	1	31	10	739	24 624	507	1 017	13 755	48 996	37 641	86 363	1 684
3324	Boiler, tank, & shipping container mfg	-	21	9	1 393	58 369	990	2 059	37 981	107 745	180 851	296 527	8 346
33241	Power boiler & heat exchanger mfg	-	6	2	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	6	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	11	5	549	23 235	420	886	17 107	43 787	131 358	179 636	D
332431	Metal can mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	1	21	7	383	9 834	298	554	6 588	20 824	23 791	44 469	843
33261	Spring & wire product mfg	1	21	7	383	9 834	298	554	6 588	20 824	23 791	44 469	843
332618	Other fabricated wire product mfg.....	1	16	6	314	7 854	248	466	5 328	16 186	20 460	36 613	561
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	212	50	3 233	108 040	2 588	5 107	76 400	214 537	126 687	339 452	15 198
33271	Machine shops	1	162	28	1 753	61 311	1 366	2 625	43 256	114 760	52 372	167 187	7 823
332710	Machine shops	1	162	28	1 753	61 311	1 366	2 625	43 256	114 760	52 372	167 187	7 823
33272	Turned product & screw, nut, & bolt mfg	-	50	22	1 480	46 729	1 222	2 482	33 144	99 777	74 315	172 265	7 375
332721	Precision turned product mfg.....	1	38	13	1 128	33 910	945	1 919	24 849	75 150	59 351	133 248	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	12	9	352	12 819	277	563	8 295	24 627	14 964	39 017	D

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	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities . . .	1	74	23	1 486	50 361	1 115	2 257	31 583	123 631	57 877	179 898	7 441
33281	Coating, engraving, heat treating, & allied activities . . .	1	74	23	1 486	50 361	1 115	2 257	31 583	123 631	57 877	179 898	7 441
332812	Metal coating/engraving (exc jewelry/silverware)/allied services . . .	1	22	7	578	24 184	415	806	14 216	64 583	42 229	105 060	4 437
332813	Electroplating, plating, polishing, anodizing, & coloring . . .	2	45	11	672	17 509	511	996	10 647	32 493	11 566	44 292	1 897
3329	Other fabricated metal product mfg . . .	—	58	22	4 553	149 093	3 523	7 082	98 273	348 489	297 991	642 489	25 022
33291	Metal valve mfg . . .	—	15	10	2 093	61 200	1 625	2 936	36 612	163 878	133 121	300 117	11 335
332911	Industrial valve mfg . . .	—	8	5	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg . . .	—	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg . . .	—	43	12	2 460	87 893	1 898	4 146	61 661	184 611	164 870	342 372	13 687
332992	Small arms ammunition mfg . . .	—	1	1	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg . . .	—	12	2	e	D	D	D	D	D	D	D	1 359
332999	All other miscellaneous fabricated metal product mfg . . .	—	16	6	430	12 267	326	731	8 245	27 160	45 886	72 743	D
333	Machinery mfg . . .	—	272	110	16 166	571 290	11 000	22 220	327 257	1 585 910	1 188 013	2 767 815	77 021
3331	Agriculture, construction, & mining machinery mfg . . .	2	17	8	f	D	D	D	D	D	D	D	1 744
33313	Mining & oil & gas field machinery mfg . . .	2	7	6	413	16 118	251	544	8 098	37 994	33 869	70 561	D
333131	Mining machinery & equipment mfg . . .	3	6	5	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg . . .	—	35	15	g	D	D	D	D	D	D	D	6 790
33329	Other industrial machinery mfg . . .	—	31	14	1 761	71 545	1 201	2 444	43 688	292 112	192 417	482 648	D
333293	Printing machinery & equipment mfg . . .	—	7	5	637	25 046	362	799	12 416	58 531	38 233	94 319	1 682
333298	All other industrial machinery mfg . . .	—	17	7	952	39 093	719	1 395	26 819	218 820	145 734	365 116	D
3333	Commercial & service industry machinery mfg . . .	—	29	11	1 898	61 826	1 062	2 080	25 745	250 342	185 528	435 691	9 029
33331	Commercial & service industry machinery mfg . . .	—	29	11	1 898	61 826	1 062	2 080	25 745	250 342	185 528	435 691	9 029
333311	Automatic vending machine mfg . . .	—	3	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg . . .	1	19	8	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg . . .	—	17	11	4 639	135 868	3 490	6 821	93 351	379 610	374 285	760 516	19 511
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . . .	—	17	11	4 639	135 868	3 490	6 821	93 351	379 610	374 285	760 516	19 511
333414	Heating equipment (except warm air furnaces) mfg . . .	—	5	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refig equip mfg . . .	—	9	8	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg . . .	—	102	30	2 807	116 160	2 028	4 289	78 292	247 955	146 285	381 287	20 907
33351	Metalworking machinery mfg . . .	—	102	30	2 807	116 160	2 028	4 289	78 292	247 955	146 285	381 287	20 907
333511	Industrial mold mfg . . .	—	25	9	695	31 967	530	1 148	24 053	65 386	19 261	84 546	3 233
333514	Special die & tool, die set, jig, & fixture mfg . . .	—	48	11	874	31 363	692	1 368	21 845	60 739	48 251	109 839	D
333515	Cutting tool & machine tool accessory mfg . . .	—	20	4	920	38 200	598	1 301	23 088	74 104	27 306	98 288	D
3336	Engine, turbine, & power transmission equipment mfg . . .	1	13	6	612	18 793	473	1 067	12 972	54 194	45 696	100 501	3 215
33361	Engine, turbine, & power transmission equipment mfg . . .	1	13	6	612	18 793	473	1 067	12 972	54 194	45 696	100 501	3 215
333612	Speed changer, industrial high-speed drive, & gear mfg . . .	1	6	4	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ST. LOUIS, MO-IL MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	59	29	3 766	142 983	2 292	4 577	60 635	307 418	196 471	507 488	15 825
33391	Pump & compressor mfg	-	7	4	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	13	6	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	39	19	3 076	120 720	1 843	3 783	49 121	250 452	150 785	404 321	13 691
333993	Packaging machinery mfg	-	8	5	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	1	7	5	920	26 803	657	1 350	13 236	55 964	19 093	75 328	1 681
333999	All other miscellaneous general-purpose machinery mfg	-	17	7	952	42 203	617	1 247	19 554	66 761	36 253	105 300	6 782
334	Computer & electronic product mfg	-	102	39	6 641	245 384	3 987	7 519	104 645	1 352 382	348 051	1 711 632	79 514
3341	Computer & peripheral equipment mfg	2	16	5	255	8 386	91	199	3 214	22 223	39 502	61 967	1 262
33411	Computer & peripheral equipment mfg	2	16	5	255	8 386	91	199	3 214	22 223	39 502	61 967	1 262
3343	Audio & video equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	29	15	2 870	91 266	2 313	4 356	61 988	1 008 481	149 883	1 152 787	D
33441	Semiconductor & other electronic component mfg	-	29	15	2 870	91 266	2 313	4 356	61 988	1 008 481	149 883	1 152 787	D
334412	Bare printed circuit board mfg	1	5	3	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	7	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	1	6	6	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	8	4	e	D	D	D	D	D	D	D	1 565
3345	Navigational, measuring, medical, & control instruments mfg	-	33	13	2 923	130 253	1 230	2 351	33 799	295 693	126 525	438 849	10 686
33451	Navigational, measuring, medical, & control instruments mfg	-	33	13	2 923	130 253	1 230	2 351	33 799	295 693	126 525	438 849	10 686
334510	Electromedical & electrotherapeutic apparatus mfg	-	5	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	66	37	5 101	168 404	3 754	7 104	97 533	408 635	296 764	706 920	43 359
3351	Electric lighting equipment mfg	-	10	7	647	26 287	553	1 348	22 505	127 246	45 413	172 805	D
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	9	6	e	D	D	D	D	D	D	D	453
3352	Household appliance mfg ..	-	5	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	3	2	e	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	3	2	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	32	20	2 903	91 700	2 020	3 416	44 298	159 476	159 077	320 222	14 883
33531	Electrical equipment mfg	1	32	20	2 903	91 700	2 020	3 416	44 298	159 476	159 077	320 222	14 883
335311	Power, distribution, & specialty transformer mfg	-	5	4	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	4	6	4	g	D	D	D	D	D	D	D	6 510
335313	Switchgear & switchboard apparatus mfg	-	8	4	413	15 024	322	631	10 035	31 344	36 869	68 351	D
335314	Relay & industrial control mfg	1	13	8	960	30 402	520	677	7 087	51 781	29 401	83 305	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	ST. LOUIS, MO-IL MSA—Con.													
	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg—Con.													
3359	Other electrical equipment & component mfg	—	19	8	g	D	D	D	D	D	D	D	24 778	
33593	Wiring device mfg	—	9	6	f	D	D	D	D	D	D	D	D	
335931	Current-carrying wiring device mfg	—	5	3	e	D	D	D	D	D	D	D	D	
335932	Noncurrent-carrying wiring device mfg	—	4	3	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	105	50		2 114 650	23 361	50 328	1 141 660	5 256 567	13 063 607	20 693 642	296 945	
3361	Motor vehicle mfg	—	9	4		13 337	831 171	12 458	26 655	750 427	4 485 529	9 484 211	13 939 590	D
33611	Automobile & light duty motor vehicle mfg	—	9	4		13 337	831 171	12 458	26 655	750 427	4 485 529	9 484 211	13 939 590	D
336112	Light truck & utility vehicle mfg	—	6	4	j	D	D	D	D	D	D	D	D	
3362	Motor vehicle body & trailer mfg	1	18	5		394	11 861	305	651	7 917	16 963	31 343	47 941	D
33621	Motor vehicle body & trailer mfg	1	18	5		394	11 861	305	651	7 917	16 963	31 343	47 941	D
3363	Motor vehicle parts mfg	—	49	24	h	D	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	1	11	1		316	11 473	280	572	9 676	18 831	36 918	598	
336311	Carburetor, piston, piston ring, & valve mfg	—	2	1	e	D	D	D	D	D	D	D	D	
33632	Motor vehicle electrical & electronic equipment mfg	—	7	3	e	D	D	D	D	D	D	D	2 488	
336321	Vehicular lighting equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D	
33634	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D	
336340	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D	
33636	Motor vehicle seating & interior trim mfg	—	4	4	g	D	D	D	D	D	D	D	D	
336360	Motor vehicle seating & interior trim mfg	—	4	4	g	D	D	D	D	D	D	D	D	
33637	Motor vehicle metal stamping	—	5	5	f	D	D	D	D	D	D	D	2 598	
336370	Motor vehicle metal stamping	—	5	5	f	D	D	D	D	D	D	D	2 598	
33639	Other motor vehicle parts mfg	1	12	7		1 413	38 597	1 185	2 683	30 328	88 517	115 878	205 577	D
336399	Other motor vehicle parts mfg	1	12	7		1 413	38 597	1 185	2 683	30 328	88 517	115 878	205 577	D
3364	Aerospace product & parts mfg	—	17	12	j	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	17	12	j	D	D	D	D	D	D	D	D	
336411	Aircraft mfg	—	3	2	j	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	—	13	9	g	D	D	D	D	D	D	D	D	
3366	Ship & boat building	—	6	1		272	8 332	230	497	6 312	14 832	9 799	24 709	D
33661	Ship & boat building	—	6	1		272	8 332	230	497	6 312	14 832	9 799	24 709	D
336611	Ship building & repairing	—	4	1	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	2	145	40		3 867	108 992	3 011	6 114	69 006	237 251	203 514	453 149	8 519
3371	Household & institutional furniture & kitchen cabinet mfg	3	93	19		2 103	58 328	1 623	3 353	38 151	145 744	107 824	254 573	5 498
33711	Wood kitchen cabinet & counter top mfg	1	64	5		522	14 912	406	767	10 924	28 427	19 993	48 428	1 860
337110	Wood kitchen cabinet & counter top mfg	1	64	5		522	14 912	406	767	10 924	28 427	19 993	48 428	1 860
33712	Household & institutional furniture mfg	3	29	14		1 581	43 416	1 217	2 586	27 227	117 317	87 831	206 145	3 638
337122	Nonupholstered wood household furniture mfg	9	9	1	e	D	D	D	D	D	D	D	D	
337127	Institutional furniture mfg	—	15	12	g	D	D	D	D	D	D	D	D	
3372	Office furniture (including fixtures) mfg	—	43	19		1 579	44 727	1 268	2 523	28 166	73 617	80 495	165 329	2 622
33721	Office furniture (including fixtures) mfg	—	43	19		1 579	44 727	1 268	2 523	28 166	73 617	80 495	165 329	2 622
337215	Showcase, partition, shelving, & locker mfg	—	25	10		1 089	28 654	888	1 846	17 274	56 656	59 791	117 705	2 088

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	330	71	6 681	196 396	3 971	7 619	88 526	490 449	304 260	791 516	23 523
3391	Medical equipment & supplies mfg	1	172	28	3 404	114 133	1 986	4 113	49 659	321 528	163 679	485 015	14 454
33911	Medical equipment & supplies mfg	1	172	28	3 404	114 133	1 986	4 113	49 659	321 528	163 679	485 015	14 454
339112	Surgical & medical instrument mfg	—	24	12	2 017	76 120	994	2 313	27 342	214 734	118 925	333 488	10 039
339113	Surgical appliance & supplies mfg	1	14	4	517	16 206	378	824	9 760	45 103	23 048	68 874	2 302
339116	Dental laboratories . . .	6	114	7	588	13 293	442	617	8 610	28 470	11 041	40 238	879
3399	Other miscellaneous mfg . .	1	158	43	3 277	82 263	1 985	3 506	38 867	168 921	140 581	306 501	9 069
33992	Sporting & athletic goods mfg	—	16	7	457	10 844	333	511	6 183	45 023	23 749	66 786	1 682
339920	Sporting & athletic goods mfg	—	16	7	457	10 844	333	511	6 183	45 023	23 749	66 786	1 682
33994	Office supplies (except paper) mfg	—	14	3	467	12 415	96	198	2 193	16 937	43 839	61 135	D
339943	Marking device mfg	—	11	2	424	11 749	78	161	1 877	15 520	42 648	58 531	784
33995	Sign mfg	2	72	15	1 449	38 816	896	1 629	19 230	63 374	39 893	102 800	3 411
339950	Sign mfg	2	72	15	1 449	38 816	896	1 629	19 230	63 374	39 893	102 800	3 411
33999	All other miscellaneous mfg	2	37	15	f	D	D	D	D	D	D	D	2 498
339999	All other miscellaneous mfg	2	22	8	431	7 867	332	547	4 855	18 365	10 977	28 533	2 012
	SPRINGFIELD, IL MSA												
31-33	Manufacturing	—	142	41	3 986	116 913	2 738	5 424	66 884	317 055	431 219	743 347	22 201
323	Printing & related support activities	2	25	5	315	9 476	230	365	6 147	16 302	14 776	31 107	1 613
3231	Printing & related support activities	2	25	5	315	9 476	230	365	6 147	16 302	14 776	31 107	1 613
32311	Printing	2	23	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	6	3	378	14 265	272	591	9 083	51 621	135 558	185 315	3 444
333	Machinery mfg	—	13	4	1 557	44 692	1 065	2 238	22 625	124 132	106 451	227 539	8 641
3331	Agriculture, construction, & mining machinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	3	1	e	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg . .	—	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	9	5	592	15 270	362	620	6 253	40 140	21 133	61 443	2 288
3345	Navigational, measuring, medical, & control instruments mfg	—	4	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAMS COUNTY, IL													
31-33	Manufacturing	-	85	30	5 707	190 371	3 647	7 640	93 568	634 180	1 224 340	1 868 341	65 299
332	Fabricated metal product mfg	-	20	7	513	17 577	393	748	10 462	46 783	15 329	61 868	D
333	Machinery mfg	-	12	8	2 083	67 803	1 427	3 276	38 628	169 980	136 765	323 589	D
3331	Agriculture, construction, & mining machinery mfg,	-	2	2	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	4	4	897	36 025	434	1 040	14 708	78 275	56 701	154 244	D
33391	Pump & compressor mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
BOND COUNTY, IL													
31-33	Manufacturing	-	16	5	695	19 159	517	1 033	13 131	79 013	91 615	166 041	2 643
BOONE COUNTY, IL													
31-33	Manufacturing	-	63	23	5 846	283 866	5 175	9 386	240 327	500 420	1 795 560	2 300 022	116 390
311	Food mfg	3	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
BUREAU COUNTY, IL													
31-33	Manufacturing	1	41	22	2 499	71 995	1 818	3 266	43 131	239 913	169 035	413 680	15 159
332	Fabricated metal product mfg	-	6	5	560	17 479	425	798	11 364	70 610	38 106	109 367	3 026
CARROLL COUNTY, IL													
31-33	Manufacturing	-	33	12	1 015	27 021	802	1 480	18 274	134 573	100 095	235 172	6 284
333	Machinery mfg	-	10	6	610	15 912	465	893	9 992	65 450	58 316	124 227	2 104
CASS COUNTY, IL													
31-33	Manufacturing	-	13	6	g	D	D	D	D	D	D	D	5 375
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHAMPAIGN COUNTY, IL													
31-33	Manufacturing	-	152	55	10 857	292 444	8 396	15 858	204 808	1 165 868	1 488 725	2 689 516	74 130
311	Food mfg	-	7	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	1	1	g	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	4	3	g	D	D	D	D	D	D	D	1 467
3219	Other wood product mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
32191	Millwork	-	3	2	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	3	2	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	30	8	736	18 349	455	745	10 491	52 040	25 916	77 974	1 681
3231	Printing & related support activities.....	2	30	8	736	18 349	455	745	10 491	52 040	25 916	77 974	1 681
32311	Printing	1	25	6	578	14 269	332	583	7 933	45 004	24 592	69 617	1 334
326	Plastics & rubber products mfg	-	10	7	2 188	52 134	1 885	3 543	39 712	168 562	235 711	402 648	16 528
3261	Plastics product mfg	-	10	7	2 188	52 134	1 885	3 543	39 712	168 562	235 711	402 648	16 528
32619	Other plastics product mfg	-	8	5	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	5	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	15	5	547	15 680	362	678	9 481	49 700	52 700	98 373	3 440
334	Computer & electronic product mfg.....	1	12	4	602	16 549	501	1 057	9 978	33 571	27 875	61 915	2 607
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	19	3	956	20 709	810	1 206	12 019	96 048	53 090	188 919	3 768
3399	Other miscellaneous mfg ...	9	11	3	898	18 832	774	1 134	11 133	92 018	50 749	182 594	3 524
33992	Sporting & athletic goods mfg	9	4	2	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	4	2	f	D	D	D	D	D	D	D	D
CHRISTIAN COUNTY, IL													
31-33	Manufacturing	-	30	8	1 388	53 161	847	1 662	24 019	142 876	354 901	479 303	25 998
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	2	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
CLARK COUNTY, IL													
31-33	Manufacturing	-	24	10	1 682	44 637	1 314	2 752	26 863	188 885	247 221	435 535	12 872
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLAY COUNTY, IL													
31-33	Manufacturing	-	23	10	2 453	62 790	1 932	4 006	42 531	220 423	265 020	480 089	19 783
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CLINTON COUNTY, IL													
31-33	Manufacturing	1	39	12	963	22 447	709	1 342	14 958	108 108	63 368	175 929	1 939
COLES COUNTY, IL													
31-33	Manufacturing	-	57	21	5 754	182 876	4 844	9 810	142 355	766 531	681 507	1 455 613	34 968
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	11	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	11	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	10	2	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
COOK COUNTY, IL													
31-33	Manufacturing	1	7 966	2 947	362 364	13 031 961	250 025	516 596	7 309 292	38 114 862	36 606 788	74 563 276	2 681 048
311	Food mfg	2	695	247	45 294	1 411 047	32 087	67 099	884 506	6 358 186	5 824 977	12 155 314	360 714
3112	Grain & oilseed milling	7	15	9	1 453	56 038	1 008	2 244	36 842	397 860	738 953	1 117 629	D
31121	Flour milling & malt mfg .	-	5	4	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	8	9	4	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	9	2	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	54	25	i	D	D	D	D	D	D	D	77 390
31133	Confectionery mfg from purchased chocolate ...	-	28	11	4 312	148 972	3 458	8 319	109 439	856 821	475 261	1 332 133	D
311330	Confectionery mfg from purchased chocolate	-	28	11	4 312	148 972	3 458	8 319	109 439	856 821	475 261	1 332 133	D
31134	Nonchocolate confectionery mfg	-	21	13	h	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	21	13	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	46	21	4 516	114 868	3 464	7 801	77 657	385 415	458 687	842 177	21 084
31141	Frozen food mfg	2	24	9	h	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	2	21	8	2 495	56 794	2 075	4 896	36 586	158 549	166 743	323 802	10 888
31142	Fruit & vegetable canning, pickling, & drying	1	22	12	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	1	15	9	923	31 776	694	1 441	19 408	90 388	137 560	228 215	D
311423	Dried & dehydrated food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	22	6	634	27 807	418	941	17 082	89 189	159 362	248 069	D
3116	Meat product mfg	2	99	59	7 748	221 443	6 006	12 009	138 258	638 791	1 273 172	1 913 407	34 829
31161	Animal slaughtering & processing	2	99	59	7 748	221 443	6 006	12 009	138 258	638 791	1 273 172	1 913 407	34 829
311611	Animal (except poultry) slaughtering	3	26	14	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	65	39	4 931	145 785	3 804	7 754	92 167	452 893	817 094	1 273 906	24 290
311615	Poultry processing	9	7	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	349	76	16 413	491 641	10 286	20 011	289 703	2 024 051	1 199 187	3 211 076	102 155
31181	Bread & bakery product mfg	3	307	57	11 063	290 351	5 869	10 345	141 838	867 855	455 738	1 325 013	37 715
311811	Retail bakeries	3	218	20	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	3	84	35	8 834	256 471	4 503	8 388	124 024	797 010	412 531	1 210 817	28 444
31182	Cookie, cracker, & pasta mfg	-	33	14	4 800	189 027	3 967	8 933	139 093	1 118 711	718 003	1 823 275	63 279
311821	Cookie & cracker mfg .	-	15	11	4 220	163 274	3 568	7 990	124 155	1 046 514	604 570	1 636 945	D
31183	Tortilla mfg	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161
311830	Tortilla mfg	2	9	5	550	12 263	450	733	8 772	37 485	25 446	62 788	1 161

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL—												
	Con.												
31-33	Manufacturing—												
	Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	96	44	5 734	204 073	3 615	8 097	103 961	1 284 089	915 673	2 198 942	44 024
31191	Snack food mfg	—	11	4	f	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg	1	6	1	527	17 245	30	63	980	36 812	16 488	55 171	D
311930	Flavoring syrup & concentrate mfg	1	6	1	527	17 245	30	63	980	36 812	16 488	55 171	D
31194	Seasoning & dressing mfg	4	24	14	1 673	73 765	971	2 110	34 417	620 930	376 872	996 818	17 894
311941	Mayonnaise, dressing, & other prepared sauce mfg	6	11	5	f	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	13	9	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	48	21	2 806	92 791	2 081	4 750	55 091	475 449	367 466	843 149	D
311991	Perishable prepared food mfg	1	19	9	g	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	29	12	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	26	14	h	D	D	D	D	D	D	D	18 504
3121	Beverage mfg	2	24	13	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	17	11	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	2	14	10	1 823	69 867	1 258	2 806	36 519	273 600	543 727	814 448	D
313	Textile mills	5	41	7	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	5	21	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	4	134	32	2 836	60 820	2 158	3 993	38 489	157 858	131 814	291 179	D
3141	Textile furnishings mills	2	74	10	1 088	20 688	800	1 532	14 034	73 183	58 420	133 871	1 049
31412	Curtain & linen mills	2	73	10	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	18	9	773	14 878	550	1 084	10 365	61 237	48 164	111 818	D
3149	Other textile product mills	5	60	22	1 748	40 132	1 358	2 461	24 455	84 675	73 394	157 308	D
31491	Textile bag & canvas mills	5	30	11	f	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	7	23	8	f	D	D	D	D	D	D	D	1 966
31499	All other textile product mills	6	30	11	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	6	29	10	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	173	59	7 358	172 153	5 533	10 804	93 496	325 587	299 900	625 679	11 279
3151	Apparel knitting mills	—	12	7	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	11	7	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	10	6	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	106	36	h	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	8	44	11	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	8	39	8	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	18	9	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	7	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	4	30	13	694	16 317	531	865	8 598	38 685	30 122	70 576	656
3159	Apparel accessories & other apparel mfg	1	55	16	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	55	16	g	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	—	3	2	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	2	46	10	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	1	35	14	g	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	27	11	g	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	27	11	g	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	8	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COOK COUNTY, IL— Con. Manufacturing— Con.												
321	Wood product mfg	4	119	31	2 009	56 842	1 573	3 153	35 576	103 890	120 102	224 114	D
3219	Other wood product mfg . . .	4	107	24	1 662	48 366	1 302	2 606	30 102	86 658	103 578	190 337	D
32191	Millwork	7	35	10	653	25 107	475	1 008	14 945	40 012	45 583	85 854	D
32199	All other wood product mfg	4	32	6	553	12 557	438	862	8 333	22 853	20 639	43 339	D
321999	All other miscellaneous wood product mfg . . .	4	31	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	188	133	14 692	530 467	10 319	22 065	317 274	1 420 370	1 403 130	2 831 980	87 465
3222	Converted paper product mfg	1	185	130	j	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	103	82	8 517	313 450	6 406	13 778	196 793	697 495	876 057	1 578 514	46 300
322211	Corrugated & solid fiber box mfg	1	52	44	4 449	167 670	3 169	6 740	95 522	367 171	527 636	896 329	31 598
322212	Folding paperboard box mfg	—	31	24	h	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg . . .	—	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	38	25	3 556	131 640	2 101	4 456	64 851	545 539	327 781	877 102	24 308
322222	Coated & laminated paper mfg	1	27	16	2 286	82 631	1 261	2 622	41 396	381 083	209 291	594 348	18 302
322223	Plastics, foil, & coated paper bag mfg	—	2	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg . . .	3	24	12	1 541	39 801	1 008	2 058	26 301	77 449	84 238	161 580	D
322232	Envelope mfg	3	13	8	1 307	33 119	829	1 687	21 700	64 426	79 549	143 856	D
32229	Other converted paper product mfg	1	20	11	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg . . .	1	17	11	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 197	274	26 309	1 029 000	18 797	37 955	612 966	2 143 743	1 376 886	3 505 672	179 014
3231	Printing & related support activities	2	1 197	274	26 309	1 029 000	18 797	37 955	612 966	2 143 743	1 376 886	3 505 672	179 014
32311	Printing	2	1 012	212	20 995	832 965	14 727	29 920	484 245	1 750 297	1 267 728	3 003 253	157 779
323110	Commercial lithographic printing . .	2	497	131	13 226	562 477	9 446	19 790	340 652	1 111 178	793 802	1 893 907	111 408
323112	Commercial flexographic printing .	5	27	9	1 060	44 251	729	1 465	24 908	96 067	66 802	163 016	5 714
323113	Commercial screen printing	1	69	14	1 042	27 919	716	1 248	13 935	50 464	37 186	87 673	8 736
323114	Quick printing	2	207	13	1 336	37 429	956	1 622	22 492	78 965	48 603	126 873	4 945
323116	Manifold business form printing	1	26	11	705	25 449	477	962	14 524	52 227	71 342	122 742	2 690
323117	Book printing	1	26	10	893	32 975	582	1 165	18 758	61 766	38 387	99 563	7 372
323118	Blankbook, looseleaf binder, & device mfg .	—	17	9	1 156	46 649	684	1 345	12 903	177 307	124 150	301 253	7 832
323119	Other commercial printing	5	113	11	1 296	46 937	919	1 901	29 984	100 994	64 115	163 604	6 941
32312	Support activities for printing	3	185	62	5 314	196 035	4 070	8 035	128 721	393 446	109 158	502 419	21 235
323121	Tradebinding & related work	3	55	26	2 632	59 777	2 153	4 094	41 433	107 422	22 212	129 440	4 976
323122	Prepress services	3	130	36	2 682	136 258	1 917	3 941	87 288	286 024	86 946	372 979	16 259
324	Petroleum & coal products mfg	—	42	17	1 732	81 428	979	2 179	40 930	488 545	1 427 483	1 916 771	D
3241	Petroleum & coal products mfg	—	42	17	1 732	81 428	979	2 179	40 930	488 545	1 427 483	1 916 771	D
32411	Petroleum refineries	—	6	4	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	6	4	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	1	19	6	f	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	1	11	5	f	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	1	17	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	344	169	16 726	672 142	9 798	20 680	321 818	4 396 965	3 363 499	7 750 538	208 248
3251	Basic chemical mfg	—	40	25	2 160	98 174	1 238	2 675	50 626	489 560	572 008	1 058 454	D
32518	Other basic inorganic chemical mfg	—	13	9	927	43 126	651	1 438	27 960	157 644	153 184	310 707	D
325188	All other basic inorganic chemical mfg	—	13	9	927	43 126	651	1 438	27 960	157 644	153 184	310 707	D
32519	Other basic organic chemical mfg	—	18	11	934	42 076	399	826	15 258	252 079	342 191	591 274	D
325199	All other basic organic chemical mfg	—	18	11	934	42 076	399	826	15 258	252 079	342 191	591 274	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	1	20	11	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	20	11	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	1	16	9	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	87	42	3 554	151 244	2 052	4 438	69 201	673 914	806 405	1 479 628	32 093
32551	Paint & coating mfg	—	63	33	2 826	117 889	1 647	3 535	54 449	504 727	647 531	1 152 274	17 430
325510	Paint & coating mfg	—	63	33	2 826	117 889	1 647	3 535	54 449	504 727	647 531	1 152 274	17 430
32552	Adhesive mfg	2	24	9	728	33 355	405	903	14 752	169 187	158 874	327 354	14 663
325520	Adhesive mfg	2	24	9	728	33 355	405	903	14 752	169 187	158 874	327 354	14 663
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	87	37	5 498	202 885	3 363	7 019	94 473	1 777 165	858 235	2 619 205	73 956
32561	Soap & cleaning compound mfg	1	60	20	1 871	67 704	1 080	2 496	30 207	637 226	432 706	1 074 359	D
325611	Soap & other detergent mfg	3	30	7	588	19 361	383	836	10 085	77 380	67 782	148 244	3 032
325612	Polish & other sanitation good mfg ..	—	23	8	992	34 748	533	1 300	13 146	502 831	250 219	758 331	7 903
32562	Toilet preparation mfg	—	27	17	3 627	135 181	2 283	4 523	64 266	1 139 939	425 529	1 544 846	D
325620	Toilet preparation mfg ..	—	27	17	3 627	135 181	2 283	4 523	64 266	1 139 939	425 529	1 544 846	D
3259	Other chemical product mfg	2	86	45	3 706	143 408	2 258	4 714	74 570	836 318	740 041	1 574 255	D
32591	Printing ink mfg	—	25	15	918	38 904	506	1 089	19 817	102 517	134 905	231 468	D
325910	Printing ink mfg	—	25	15	918	38 904	506	1 089	19 817	102 517	134 905	231 468	D
32599	All other chemical product & preparation mfg	2	61	30	2 788	104 504	1 752	3 625	54 753	733 801	605 136	1 342 787	36 510
325991	Custom compounding of purchased resin ...	4	14	8	690	19 333	493	1 012	11 659	55 779	70 710	126 355	D
325992	Photographic film, paper, plate, & chemical mfg	—	13	6	591	19 268	363	769	9 718	51 260	94 613	147 018	D
325998	All other miscellaneous chemical product & preparation mfg	2	34	16	1 507	65 903	896	1 844	33 376	626 762	439 813	1 069 414	24 754
326	Plastics & rubber products mfg	1	353	203	20 971	642 429	16 283	34 367	405 382	1 659 927	1 477 558	3 131 588	146 363
3261	Plastics product mfg	1	308	181	18 962	582 272	14 828	31 143	366 727	1 535 266	1 371 850	2 902 042	139 437
32611	Unsupported plastics film, sheet, & bag mfg ..	1	39	26	3 665	130 352	2 624	6 132	78 707	407 758	380 759	792 398	46 227
326111	Unsupported plastics bag mfg	—	12	8	1 325	35 752	1 225	2 928	32 160	119 131	114 327	232 929	23 712
326112	Unsupported plastics packaging film & sheet mfg	—	7	6	551	27 189	398	1 016	14 518	63 852	88 178	152 747	3 535
326113	Unsupported plastics film & sheet (except packaging) mfg	2	20	12	1 789	67 411	1 001	2 188	32 029	224 775	178 254	406 722	18 980
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	23	14	1 273	37 405	945	1 945	23 270	80 267	59 049	139 212	4 510
326121	Unsupported plastics profile shape mfg	1	19	12	1 199	35 125	890	1 842	21 799	73 475	48 662	121 991	4 035
32613	Laminated plastics plate, sheet, & shape mfg	—	17	5	524	15 074	352	659	9 518	46 758	42 046	87 690	3 835
326130	Laminated plastics plate, sheet, & shape mfg	—	17	5	524	15 074	352	659	9 518	46 758	42 046	87 690	3 835
32616	Plastics bottle mfg	2	10	7	872	26 867	749	1 558	21 191	57 866	65 960	123 697	D
326160	Plastics bottle mfg	2	10	7	872	26 867	749	1 558	21 191	57 866	65 960	123 697	D
32619	Other plastics product mfg	1	207	121	11 943	350 836	9 704	19 962	222 753	883 532	765 386	1 641 052	75 270
326199	All other plastics product mfg	1	204	118	11 857	348 664	9 640	19 836	221 149	879 320	763 837	1 635 281	D
3262	Rubber product mfg	1	45	22	2 009	60 157	1 455	3 224	38 655	124 661	105 708	229 546	6 926
32629	Other rubber product mfg	1	29	14	1 604	47 950	1 187	2 611	31 634	104 319	68 692	172 123	4 990
326291	Rubber product mfg for mechanical use	—	12	6	967	28 555	697	1 601	18 855	67 407	42 146	109 136	D
326299	All other rubber product mfg	3	17	8	637	19 395	490	1 010	12 779	36 912	26 546	62 987	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COOK COUNTY, IL— Con.												
	Manufacturing— Con.												
327	Nonmetallic mineral product mfg	2	173	83	5 587	198 111	4 256	8 814	134 080	469 424	391 512	858 487	64 448
3271	Clay product & refractory mfg	1	21	10	f	D	D	D	D	D	D	D	2 499
3272	Glass & glass product mfg	1	40	11	1 585	51 707	1 357	2 798	39 235	148 179	75 747	221 476	D
32721	Glass & glass product mfg	1	40	11	1 585	51 707	1 357	2 798	39 235	148 179	75 747	221 476	D
327213	Glass container mfg	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	2	30	9	832	22 637	676	1 408	14 246	59 943	46 938	106 231	D
3273	Cement & concrete product mfg	2	48	31	1 638	66 828	1 227	2 450	46 146	139 821	145 494	284 692	15 635
32732	Ready-mix concrete mfg	3	28	20	1 190	50 008	869	1 738	35 869	103 110	117 956	220 498	12 439
327320	Ready-mix concrete mfg	3	28	20	1 190	50 008	869	1 738	35 869	103 110	117 956	220 498	12 439
3279	Other nonmetallic mineral product mfg	3	53	27	1 513	50 874	1 073	2 279	30 588	102 956	84 134	188 844	15 300
32791	Abrasive product mfg	1	15	10	586	16 313	432	878	8 815	23 731	20 979	45 427	1 244
327910	Abrasive product mfg	1	15	10	586	16 313	432	878	8 815	23 731	20 979	45 427	1 244
32799	All other nonmetallic mineral product mfg	3	38	17	927	34 561	641	1 401	21 773	79 225	63 155	143 417	14 056
331	Primary metal mfg	—	152	97	14 027	568 188	10 811	23 808	371 782	1 442 980	2 307 013	3 716 329	118 494
3311	Iron & steel mills & ferroalloy mfg	—	11	10	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	11	10	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	11	10	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	30	23	3 134	151 994	2 211	4 887	84 128	474 901	803 292	1 284 824	27 461
33121	Iron & steel pipes & tubes mfg from purchased steel	—	16	15	g	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	16	15	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	14	8	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	8	5	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	12	8	1 372	63 489	1 058	2 267	44 370	174 803	316 879	474 082	D
33131	Alumina & aluminum production & processing	—	12	8	1 372	63 489	1 058	2 267	44 370	174 803	316 879	474 082	D
331315	Aluminum sheet, plate, & foil mfg	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	23	16	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	9	7	968	37 364	754	1 606	25 567	90 100	183 123	275 775	D
3315	Foundries	1	76	40	4 600	142 329	3 765	8 336	101 326	311 404	251 326	560 886	17 838
33151	Ferrous metal foundries	—	20	9	1 523	45 401	1 302	2 866	34 529	120 411	78 817	196 833	4 865
331511	Iron foundries	—	9	4	f	D	D	D	D	D	D	D	2 387
331513	Steel foundries (except investment)	—	10	4	928	25 968	830	1 905	21 860	74 786	50 073	123 424	D
33152	Nonferrous metal foundries	1	56	31	3 077	96 928	2 463	5 470	66 797	190 993	172 509	364 053	12 973
331521	Aluminum die-casting foundries	1	14	10	1 534	48 916	1 299	2 919	36 777	96 567	97 357	194 959	D
331522	Nonferrous (except aluminum) die-casting foundries	—	10	8	595	17 152	401	788	9 450	32 821	31 191	64 233	1 945
331524	Aluminum foundries (except die-casting)	1	15	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 675	665	61 167	2 145 660	46 363	97 616	1 376 097	4 809 935	3 794 369	8 595 162	314 505
3321	Forging & stamping	—	207	111	12 255	445 023	9 651	20 870	296 752	965 297	1 031 090	1 987 334	86 376
33211	Forging & stamping	—	207	111	12 255	445 023	9 651	20 870	296 752	965 297	1 031 090	1 987 334	86 376
332111	Iron & steel forging	—	15	9	1 159	46 724	884	1 865	31 868	87 481	85 316	170 745	9 537
332112	Nonferrous forging	—	3	3	f	D	D	D	D	D	D	D	D
332114	Custom roll forming	—	13	6	632	20 899	421	901	12 400	36 481	60 496	95 520	1 670
332115	Crown & closure mfg	—	4	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	168	90	9 165	329 543	7 293	15 793	215 035	714 716	765 367	1 475 619	54 681
3322	Cutlery & handtool mfg	1	66	29	3 280	113 752	2 254	4 930	65 128	238 777	123 287	377 535	19 261
33221	Cutlery & handtool mfg	1	66	29	3 280	113 752	2 254	4 930	65 128	238 777	123 287	377 535	19 261
332212	Hand & edge tool mfg	2	56	24	2 798	99 982	1 906	4 167	56 583	209 899	102 024	326 371	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	224	96	7 599	241 861	5 278	11 132	143 882	660 034	413 866	1 072 389	22 427
33231	Plate work & fabricated structural product mfg . .	1	66	31	1 800	60 168	1 140	2 440	33 752	153 122	117 729	272 557	5 132
332312	Fabricated structural metal mfg	1	46	20	1 110	36 201	648	1 352	18 412	110 537	85 324	197 240	2 826
332313	Plate work mfg	1	16	8	622	22 254	445	1 007	14 363	38 978	27 114	66 395	2 125
33232	Ornamental & architectural metal products mfg	1	158	65	5 799	181 693	4 138	8 692	110 130	506 912	296 137	799 832	17 295
332321	Metal window & door mfg	2	38	10	1 057	29 513	704	1 468	14 732	66 203	55 557	121 143	1 923
332322	Sheet metal work mfg .	—	78	39	2 985	98 829	2 229	4 533	63 648	302 669	136 893	438 370	12 479
332323	Ornamental & architectural metal work mfg	—	42	16	1 757	53 351	1 205	2 691	31 750	138 040	103 687	240 319	2 893
3324	Boiler, tank, & shipping container mfg	1	42	19	2 695	114 859	2 149	4 890	81 659	244 582	392 284	637 776	8 749
33243	Metal can, box, & other metal container (light gauge) mfg	1	29	15	2 252	97 202	1 827	4 260	71 103	210 461	375 615	585 684	D
332431	Metal can mfg	1	13	6	1 155	53 572	1 002	2 200	45 407	123 675	258 245	380 646	D
332439	Other metal container mfg	1	16	9	1 097	43 630	825	2 060	25 696	86 786	117 370	205 038	4 551
3325	Hardware mfg	1	27	13	1 449	46 094	1 075	2 139	28 148	98 695	65 641	163 983	5 566
33251	Hardware mfg	1	27	13	1 449	46 094	1 075	2 139	28 148	98 695	65 641	163 983	5 566
332510	Hardware mfg	1	27	13	1 449	46 094	1 075	2 139	28 148	98 695	65 641	163 983	5 566
3326	Spring & wire product mfg .	1	102	48	4 545	144 918	3 615	7 092	90 355	292 551	235 501	519 176	16 412
33261	Spring & wire product mfg	1	102	48	4 545	144 918	3 615	7 092	90 355	292 551	235 501	519 176	16 412
332611	Spring (heavy gauge) mfg	1	13	6	810	25 781	669	1 341	19 429	47 535	51 850	98 823	2 761
332612	Spring (light gauge) mfg	2	28	16	1 400	47 447	1 176	2 530	33 197	100 916	65 402	163 296	5 261
332618	Other fabricated wire product mfg	—	61	26	2 335	71 690	1 770	3 221	37 729	144 100	118 249	257 057	8 390
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	628	194	13 796	496 673	10 651	22 263	329 053	999 376	489 976	1 482 128	85 562
33271	Machine shops	1	460	121	7 624	285 487	5 961	12 556	191 921	523 135	229 948	749 509	41 012
332710	Machine shops	1	460	121	7 624	285 487	5 961	12 556	191 921	523 135	229 948	749 509	41 012
33272	Turned product & screw, nut, & bolt mfg	1	168	73	6 172	211 186	4 690	9 707	137 132	476 241	260 028	732 619	44 550
332721	Precision turned product mfg	1	109	42	3 401	114 801	2 862	5 903	80 673	251 017	95 277	341 498	26 119
332722	Bolt, nut, screw, rivet, & washer mfg	—	59	31	2 771	96 385	1 828	3 804	56 459	225 224	164 751	391 121	18 431
3328	Coating, engraving, heat treating, & allied activities .	1	238	103	7 730	262 525	5 955	12 586	163 171	530 129	330 518	861 103	32 929
33281	Coating, engraving, heat treating, & allied activities	1	238	103	7 730	262 525	5 955	12 586	163 171	530 129	330 518	861 103	32 929
332811	Metal heat treating	3	17	9	727	28 548	561	1 340	17 852	60 800	14 997	77 678	5 666
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	61	34	2 457	86 412	1 901	4 064	58 380	201 516	201 047	399 437	14 354
332813	Electroplating, plating, polishing, anodizing, & coloring	1	160	60	4 546	147 565	3 493	7 182	86 939	267 813	114 474	383 988	12 909
3329	Other fabricated metal product mfg	—	141	52	7 818	279 955	5 735	11 714	177 949	780 494	712 206	1 493 738	37 223
33291	Metal valve mfg	1	34	22	3 071	120 377	2 209	4 539	71 590	334 008	252 978	585 922	15 224
332911	Industrial valve mfg . . .	1	16	9	900	32 525	603	1 285	18 564	106 310	49 471	155 945	3 802
332913	Plumbing fixture fitting & trim mfg	—	3	3	1 033	44 288	755	1 477	29 045	89 395	76 790	167 485	6 114
332919	Other metal valve & pipe fitting mfg	3	6	5	781	30 045	614	1 245	16 189	89 824	88 376	177 326	2 906
33299	All other fabricated metal product mfg	—	107	30	4 747	159 578	3 526	7 175	106 359	446 486	459 228	907 816	21 999
332998	Enameled iron & metal sanitary ware mfg . . .	—	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	67	20	3 327	105 741	2 633	5 310	76 530	327 927	381 035	711 788	13 360

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL— Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg	1	840	291	28 920	1 144 611	17 761	37 220	603 166	2 397 283	2 069 185	4 471 525	150 522
3332	Industrial machinery mfg ..	1	112	46	4 163	157 383	2 064	4 133	68 968	303 805	272 572	574 000	22 526
33329	Other industrial machinery mfg	1	102	44	3 932	145 570	1 907	3 791	62 370	287 914	250 218	537 261	D
333293	Printing machinery & equipment mfg	1	31	12	1 556	54 229	576	1 163	21 689	104 317	90 398	192 688	1 964
333294	Food product machinery mfg	—	16	12	f	D	D	D	D	D	D	D	2 538
333298	All other industrial machinery mfg	3	47	17	1 439	54 510	834	1 649	23 166	118 148	104 695	222 977	13 423
3333	Commercial & service industry machinery mfg ..	—	88	37	5 064	189 108	2 369	4 741	65 206	400 277	415 391	804 263	22 309
33331	Commercial & service industry machinery mfg	—	88	37	5 064	189 108	2 369	4 741	65 206	400 277	415 391	804 263	22 309
333313	Office machinery mfg ..	—	11	7	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	38	16	2 125	76 952	1 193	2 505	34 219	187 116	190 512	373 314	9 410
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	33	14	1 525	53 457	1 053	2 128	27 563	128 664	81 979	206 366	6 357
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	33	14	1 525	53 457	1 053	2 128	27 563	128 664	81 979	206 366	6 357
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	2	15	8	f	D	D	D	D	D	D	D	2 519
3335	Metalworking machinery mfg	1	399	99	7 934	346 001	5 823	12 654	228 519	656 876	333 389	997 579	43 363
33351	Metalworking machinery mfg	1	399	99	7 934	346 001	5 823	12 654	228 519	656 876	333 389	997 579	43 363
333511	Industrial mold mfg ...	1	99	25	1 661	79 936	1 330	3 082	57 935	145 361	50 237	192 560	8 430
333512	Machine tool (metal cutting types) mfg ...	4	14	8	519	21 604	331	739	11 032	41 451	39 023	79 635	D
333513	Machine tool (metal forming types) mfg ...	—	9	6	1 066	48 746	712	1 451	31 934	123 277	51 548	182 067	6 381
333514	Special die & tool, die set, jig, & fixture mfg ..	2	178	40	2 724	121 195	2 151	4 593	83 278	206 722	87 531	298 196	12 838
333515	Cutting tool & machine tool accessory mfg ..	1	79	14	1 417	53 808	1 002	2 127	33 412	109 789	65 886	173 670	9 126
3336	Engine, turbine, & power transmission equipment mfg	—	28	14	2 183	96 449	1 582	3 194	65 799	253 690	319 964	583 897	18 002
33361	Engine, turbine, & power transmission equipment mfg	—	28	14	2 183	96 449	1 582	3 194	65 799	253 690	319 964	583 897	18 002
333612	Speed changer, industrial high-speed drive, & gear mfg	—	19	11	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	3	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	166	76	7 601	287 637	4 557	9 700	138 189	631 052	620 821	1 257 458	35 658
33391	Pump & compressor mfg	—	24	12	1 940	79 397	1 117	2 376	38 955	179 221	168 508	353 089	11 247
333911	Pump & pumping equipment mfg	—	16	9	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	8	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	3	42	22	1 859	67 783	1 089	2 391	31 077	136 406	127 018	263 099	5 831
333922	Conveyor & conveying equipment mfg	3	20	9	878	32 368	500	1 158	14 398	62 609	72 303	134 652	3 268
33399	All other general-purpose machinery mfg	2	100	42	3 802	140 457	2 351	4 933	68 157	315 425	325 295	641 270	18 580
333993	Packaging machinery mfg	3	26	15	1 332	57 523	751	1 591	26 670	136 477	107 455	248 341	8 710
333999	All other miscellaneous general-purpose machinery mfg	1	45	17	1 414	47 765	917	1 943	24 669	107 737	95 006	201 692	6 672
334	Computer & electronic product mfg	—	326	145	36 168	1 611 615	18 112	34 953	543 848	3 107 075	3 419 369	6 495 217	382 039
3341	Computer & peripheral equipment mfg	—	23	5	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	23	5	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	14	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	COOK COUNTY, IL—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3342	Communications equipment mfg	-	45	13	j	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	20	6	j	D	D	D	D	D	D	D	D	
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	20	6	j	D	D	D	D	D	D	D	D	
3343	Audio & video equipment mfg	-	13	6		1 089	40 375	555	1 121	13 576	120 825	86 603	207 688	D
33431	Audio & video equipment mfg	-	13	6		1 089	40 375	555	1 121	13 576	120 825	86 603	207 688	D
334310	Audio & video equipment mfg	-	13	6		1 089	40 375	555	1 121	13 576	120 825	86 603	207 688	D
3344	Semiconductor & other electronic component mfg	-	124	66		11 359	307 494	8 840	17 166	186 207	502 459	504 833	1 010 014	41 533
33441	Semiconductor & other electronic component mfg	-	124	66		11 359	307 494	8 840	17 166	186 207	502 459	504 833	1 010 014	41 533
334411	Electron tube mfg	-	4	3	h	D	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	37	23		2 968	82 930	2 300	4 710	54 319	156 993	136 632	291 782	18 062
334416	Electronic coil, transformer, & other inductor mfg	1	24	12		923	19 712	756	1 585	12 458	33 504	19 629	53 359	D
334417	Electronic connector mfg	1	4	4	f	D	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	30	12		1 827	59 463	1 212	2 235	26 473	123 434	63 866	191 333	6 402
3345	Navigational, measuring, medical, & control instruments mfg	-	97	47		7 950	367 416	3 347	6 856	95 577	848 723	437 557	1 287 371	52 214
33451	Navigational, measuring, medical, & control instruments mfg	-	97	47		7 950	367 416	3 347	6 856	95 577	848 723	437 557	1 287 371	52 214
334510	Electromedical & electrotherapeutic apparatus mfg	-	11	6	g	D	D	D	D	D	D	D	D	5 330
334511	Search, detection, navigation, & guidance instrument mfg	-	5	4	h	D	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	2	16	10		789	32 417	338	696	9 884	97 394	64 956	162 372	2 460
334517	Irradiation apparatus mfg	-	13	9	g	D	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	2	14	7		505	19 186	245	459	6 638	52 933	32 392	85 640	D
3346	Mfg & reproducing magnetic & optical media	1	24	8	g	D	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	24	8	g	D	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	18	7	g	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	217	112		20 602	713 114	13 733	29 102	363 007	1 947 095	1 482 406	3 414 152	179 486
3351	Electric lighting equipment mfg	-	60	31		4 527	147 399	3 055	5 915	62 375	371 147	300 157	664 894	D
33512	Lighting fixture mfg	-	56	29	h	D	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	-	24	11		2 341	89 194	1 472	3 011	31 953	248 167	167 354	409 761	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	-	17	10	g	D	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	1	15	8	f	D	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	11	7		2 309	68 521	1 853	4 141	47 990	236 444	260 256	493 032	D
33521	Small electrical appliance mfg	-	6	2		549	13 867	397	916	10 255	31 794	50 896	85 069	D
335211	Electric housewares & household fan mfg	-	6	2		549	13 867	397	916	10 255	31 794	50 896	85 069	D
33522	Major appliance mfg	-	5	5		1 760	54 654	1 456	3 225	37 735	204 650	209 360	407 963	D
335221	Household cooking appliance mfg	-	4	4	g	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	85	41	7 652	274 405	5 114	11 048	146 680	705 542	533 277	1 216 388	53 980
33531	Electrical equipment mfg	-	85	41	7 652	274 405	5 114	11 048	146 680	705 542	533 277	1 216 388	53 980
335311	Power, distribution, & specialty transformer mfg	-	10	8	1 325	37 423	919	1 967	18 944	135 961	71 108	208 099	D
335312	Motor & generator mfg	1	18	9	1 082	30 970	794	1 665	17 788	130 554	70 700	201 922	D
335313	Switchgear & switchboard apparatus mfg	-	19	13	3 974	165 180	2 661	6 276	91 548	314 716	237 916	554 134	29 577
335314	Relay & industrial control mfg	-	38	11	1 271	40 832	740	1 140	18 400	124 311	153 553	252 233	D
3359	Other electrical equipment & component mfg	-	61	33	6 114	222 789	3 711	7 998	105 962	633 962	388 716	1 039 838	56 839
33592	Communication & energy wire & cable mfg	-	7	5	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	7	5	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	27	17	3 124	109 956	2 086	4 243	60 638	233 454	249 865	485 575	23 495
335931	Current-carrying wiring device mfg	-	17	11	1 537	46 969	1 016	1 947	24 424	80 227	98 267	179 330	3 267
335932	Noncurrent-carrying wiring device mfg	-	10	6	1 587	62 987	1 070	2 296	36 214	153 227	151 598	306 245	20 228
33599	All other electrical equipment & component mfg	3	24	11	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	3	22	11	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	166	91	19 479	808 096	15 132	30 199	561 085	3 503 201	4 972 830	8 468 888	257 484
3361	Motor vehicle mfg	-	5	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	5	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	1	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	9	7	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	9	7	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	5	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	121	67	j	D	D	D	D	D	D	D	168 730
33631	Motor vehicle gasoline engine & engine parts mfg	2	17	8	794	19 249	675	799	13 313	42 707	41 033	81 233	4 332
336312	Gasoline engine & engine parts mfg	2	15	7	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	28	14	1 524	35 619	1 171	2 289	21 926	97 522	100 680	200 817	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	23	12	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	11	4	1 390	51 098	1 092	1 923	34 869	133 929	105 998	245 337	D
336350	Motor vehicle transmission & power train parts mfg	-	11	4	1 390	51 098	1 092	1 923	34 869	133 929	105 998	245 337	D
33637	Motor vehicle metal stamping	-	26	21	4 139	203 856	3 473	7 078	157 170	475 197	547 243	1 029 014	132 732
336370	Motor vehicle metal stamping	-	26	21	4 139	203 856	3 473	7 078	157 170	475 197	547 243	1 029 014	132 732
33639	Other motor vehicle parts mfg	1	25	13	1 548	48 398	1 174	1 913	25 866	114 144	120 482	234 210	D
336399	All other motor vehicle parts mfg	1	25	13	1 548	48 398	1 174	1 913	25 866	114 144	120 482	234 210	D
3365	Railroad rolling stock mfg ..	-	13	10	4 439	224 648	2 828	6 633	130 822	406 854	1 078 514	1 483 287	21 641
33651	Railroad rolling stock mfg	-	13	10	4 439	224 648	2 828	6 633	130 822	406 854	1 078 514	1 483 287	21 641
336510	Railroad rolling stock mfg	-	13	10	4 439	224 648	2 828	6 633	130 822	406 854	1 078 514	1 483 287	21 641

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COOK COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	365	82	9 685	266 486	7 555	14 826	166 474	592 685	516 463	1 120 295	24 108
3371	Household & institutional furniture & kitchen cabinet mfg	3	228	31	3 207	76 805	2 597	4 778	53 717	156 579	160 560	318 407	5 920
33711	Wood kitchen cabinet & counter top mfg	3	112	7	1 016	24 650	833	1 591	17 727	41 921	39 108	80 886	2 122
337110	Wood kitchen cabinet & counter top mfg ...	3	112	7	1 016	24 650	833	1 591	17 727	41 921	39 108	80 886	2 122
33712	Household & institutional furniture mfg	3	116	24	2 191	52 155	1 764	3 187	35 990	114 658	121 452	237 521	3 798
337122	Nonupholstered wood household furniture mfg	3	49	7	817	20 972	638	1 166	14 590	45 107	68 491	114 760	1 547
337127	Institutional furniture mfg	2	27	10	823	19 976	643	1 223	13 100	48 462	37 401	86 087	D
3372	Office furniture (including fixtures) mfg	—	102	43	5 558	169 089	4 336	8 819	100 765	395 718	299 721	705 932	16 381
33721	Office furniture (including fixtures) mfg	—	102	43	5 558	169 089	4 336	8 819	100 765	395 718	299 721	705 932	16 381
337214	Office furniture (except wood) mfg	—	9	4	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	—	60	27	3 779	101 677	3 014	5 950	62 832	257 346	217 577	479 068	9 114
3379	Other furniture related product mfg	2	35	8	920	20 592	622	1 229	11 992	40 388	56 182	95 956	1 807
33792	Blind & shade mfg	4	21	3	513	10 336	332	666	6 857	18 911	28 195	46 487	904
337920	Blind & shade mfg	4	21	3	513	10 336	332	666	6 857	18 911	28 195	46 487	904
339	Miscellaneous mfg	1	705	181	23 367	757 935	14 823	29 353	344 750	1 812 027	1 468 537	3 260 581	117 404
3391	Medical equipment & supplies mfg	1	279	48	5 262	176 490	3 119	6 030	73 183	427 231	299 079	721 101	30 730
33911	Medical equipment & supplies mfg	1	279	48	5 262	176 490	3 119	6 030	73 183	427 231	299 079	721 101	30 730
339111	Laboratory apparatus & furniture mfg	—	11	5	565	19 755	312	630	7 801	20 211	35 235	54 835	D
339112	Surgical & medical instrument mfg	2	32	15	1 209	41 955	820	1 754	19 732	79 060	50 913	130 314	D
339113	Surgical appliance & supplies mfg	3	34	10	712	22 071	462	876	9 927	38 858	32 477	75 268	D
339114	Dental equipment & supplies mfg	—	29	10	1 178	45 253	649	1 224	17 950	123 295	80 023	201 872	6 766
339115	Ophthalmic goods mfg	—	21	4	869	27 847	322	630	5 283	120 508	83 447	195 834	D
339116	Dental laboratories ...	7	152	4	729	19 609	554	916	12 490	45 299	16 984	62 978	1 458
3399	Other miscellaneous mfg ..	—	426	133	18 105	581 445	11 704	23 323	271 567	1 384 796	1 169 458	2 539 480	86 674
33991	Jewelry & silverware mfg	2	62	10	844	19 879	625	1 061	11 614	50 599	47 862	95 404	1 025
33992	Sporting & athletic goods mfg	—	33	13	1 985	69 498	1 071	2 005	20 119	152 621	155 740	308 942	9 166
339920	Sporting & athletic goods mfg	—	33	13	1 985	69 498	1 071	2 005	20 119	152 621	155 740	308 942	9 166
33993	Doll, toy, & game mfg ...	—	35	10	1 407	39 614	1 010	1 949	20 673	103 593	130 537	239 928	9 939
339932	Game, toy, & children's vehicle mfg	—	30	8	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	41	11	1 440	51 267	938	2 009	24 533	187 065	171 831	350 901	7 076
339941	Pen & mechanical pencil mfg	—	4	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	1	125	32	3 006	104 295	1 836	3 664	48 278	193 381	167 634	357 162	7 296
339950	Sign mfg	1	125	32	3 006	104 295	1 836	3 664	48 278	193 381	167 634	357 162	7 296
33999	All other miscellaneous mfg	—	130	57	9 423	296 892	6 224	12 635	146 350	697 537	495 854	1 187 143	52 172
339991	Gasket, packing, & sealing device mfg ...	—	32	18	4 750	160 974	2 975	5 566	76 230	375 946	213 959	587 402	32 227
339994	Broom, brush, & mop mfg	—	12	8	f	D	D	D	D	D	D	D	4 168
339999	All other miscellaneous mfg	1	59	20	3 028	81 477	2 144	4 512	41 747	200 142	196 111	392 001	14 618

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAWFORD COUNTY, IL													
31-33	Manufacturing	-	20	10	2 547	90 392	2 132	4 308	68 389	343 346	1 823 601	2 175 427	D
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
DEKALB COUNTY, IL													
31-33	Manufacturing	-	137	56	6 957	207 682	4 859	8 751	110 230	875 751	666 282	1 511 725	37 497
326	Plastics & rubber products mfg.....	1	7	6	592	20 302	384	796	9 231	31 312	30 435	61 047	4 659
3261	Plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	27	6	941	31 705	665	1 111	17 090	79 816	74 314	155 870	D
333	Machinery mfg	-	19	7	f	D	D	D	D	D	D	D	4 731
334	Computer & electronic product mfg.....	-	8	6	1 866	57 722	1 152	2 041	20 732	374 871	88 992	459 149	13 854
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	5	4	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	4	2	2	f	D	D	D	D	D	D	D	D
DE WITT COUNTY, IL													
31-33	Manufacturing	-	15	8	1 300	39 590	1 037	1 979	26 196	139 182	130 720	267 065	5 130
332	Fabricated metal product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
DOUGLAS COUNTY, IL													
31-33	Manufacturing	-	65	19	2 711	79 160	2 111	4 290	49 492	240 917	222 362	481 689	17 084
337	Furniture & related product mfg.....	-	25	4	865	22 571	747	1 423	17 413	71 892	45 561	118 612	1 675
3371	Household & institutional furniture & kitchen cabinet mfg	-	24	4	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	12	3	792	20 925	689	1 308	16 327	68 265	42 800	112 231	1 380
337110	Wood kitchen cabinet & counter top mfg ...	-	12	3	792	20 925	689	1 308	16 327	68 265	42 800	112 231	1 380

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DUPAGE COUNTY, IL													
31-33	Manufacturing	1	2 033	739	71 351	2 503 047	50 090	103 083	1 411 806	6 631 889	5 309 368	11 938 497	432 005
311	Food mfg	-	69	27	5 095	169 371	4 069	8 283	113 874	972 196	686 065	1 671 586	51 625
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	5	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	36	8	f	D	D	D	D	D	D	D	3 804
31181	Bread & bakery product mfg	1	35	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	6	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	43	27	3 081	117 679	2 206	5 072	75 437	380 812	459 927	831 857	18 381
3222	Converted paper product mfg	-	43	27	3 081	117 679	2 206	5 072	75 437	380 812	459 927	831 857	18 381
32221	Paperboard container mfg	-	24	17	2 212	87 308	1 581	3 765	55 985	288 644	369 062	650 928	13 648
322211	Corrugated & solid fiber box mfg	-	15	13	1 737	68 583	1 181	2 922	40 800	247 057	292 003	533 895	D
323	Printing & related support activities	2	372	104	9 809	342 735	7 037	14 227	206 660	796 433	647 347	1 442 577	61 433
3231	Printing & related support activities	2	372	104	9 809	342 735	7 037	14 227	206 660	796 433	647 347	1 442 577	61 433
32311	Printing	2	323	94	9 171	320 214	6 597	13 452	194 919	755 145	635 521	1 389 442	56 890
323110	Commercial lithographic printing	1	152	49	4 941	185 880	3 516	7 696	111 926	449 180	314 042	763 906	42 358
323113	Commercial screen printing	2	26	8	543	16 362	396	786	8 682	30 008	16 588	46 551	2 072
323116	Manifold business form printing	1	16	9	1 507	49 016	1 121	1 883	33 350	104 698	191 654	294 825	2 565
32312	Support activities for printing	1	49	10	638	22 521	440	775	11 741	41 288	11 826	53 135	4 543
325	Chemical mfg	3	78	29	1 933	68 960	1 078	2 088	30 037	264 134	240 431	502 997	D
3255	Paint, coating, & adhesive mfg	1	16	8	511	18 521	244	434	6 580	65 708	74 198	137 800	5 253
3259	Other chemical product mfg	5	30	9	639	23 994	358	686	11 111	82 728	86 209	167 954	D
326	Plastics & rubber products mfg	3	133	78	7 156	208 385	5 586	11 602	126 410	552 909	521 543	1 073 060	51 663
3261	Plastics product mfg	3	119	72	6 710	196 339	5 223	10 818	117 778	520 966	495 947	1 016 031	49 384
32611	Unsupported plastics film, sheet, & bag mfg	1	10	8	551	17 740	411	821	9 323	41 004	41 683	83 283	D
32616	Plastics bottle mfg	5	8	7	843	26 113	651	1 558	17 188	83 141	106 963	188 681	11 080
326160	Plastics bottle mfg	5	8	7	843	26 113	651	1 558	17 188	83 141	106 963	188 681	11 080
32619	Other plastics product mfg	3	87	50	4 374	127 408	3 340	6 709	74 188	315 349	236 775	551 279	D
326199	All other plastics product mfg	3	85	49	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	35	16	967	36 267	659	1 353	21 457	114 546	85 414	198 946	4 398
331	Primary metal mfg	-	21	13	1 447	50 301	1 147	2 531	34 773	124 085	157 743	281 329	7 570
3315	Foundries	1	14	7	794	28 263	682	1 487	20 255	56 760	43 000	99 026	3 833
33152	Nonferrous metal foundries	1	10	6	f	D	D	D	D	D	D	D	3 553
332	Fabricated metal product mfg	1	452	161	11 823	413 136	8 989	18 639	264 659	957 477	626 223	1 576 338	68 481
3321	Forging & stamping	-	40	22	1 466	55 181	1 185	2 471	35 274	141 020	100 394	240 937	9 425
33211	Forging & stamping	-	40	22	1 466	55 181	1 185	2 471	35 274	141 020	100 394	240 937	9 425
332116	Metal stamping	-	29	16	1 101	43 342	925	1 977	28 265	105 588	75 410	180 396	7 166
3323	Architectural & structural metals mfg	1	66	27	1 523	52 541	1 097	2 298	30 123	100 780	77 518	178 340	5 550
33232	Ornamental & architectural metal products mfg	1	54	23	1 329	47 239	934	1 957	26 330	91 083	69 611	160 602	5 290
332322	Sheet metal work mfg	1	46	19	1 151	41 498	829	1 748	23 572	78 130	57 017	135 328	4 836
3326	Spring & wire product mfg	-	24	13	714	22 616	597	1 146	15 879	48 761	34 043	82 662	1 904
33261	Spring & wire product mfg	-	24	13	714	22 616	597	1 146	15 879	48 761	34 043	82 662	1 904

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DUPAGE COUNTY, IL—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	189	44	3 670	141 113	2 761	6 064	91 558	317 795	162 851	474 621	21 064
33271	Machine shops	2	140	15	1 268	49 091	963	1 911	33 237	85 204	34 417	115 912	4 565
332710	Machine shops	2	140	15	1 268	49 091	963	1 911	33 237	85 204	34 417	115 912	4 565
33272	Turned product & screw, nut, & bolt mfg	2	49	29	2 402	92 022	1 798	4 153	58 321	232 591	128 434	358 709	16 499
332721	Precision turned product mfg	4	31	16	1 285	47 174	1 048	2 424	31 269	101 018	46 345	146 538	7 869
332722	Bolt, nut, screw, rivet, & washer mfg	—	18	13	1 117	44 848	750	1 729	27 052	131 573	82 089	212 171	8 630
3328	Coating, engraving, heat treating, & allied activities.	—	45	22	1 615	41 757	1 253	2 272	27 330	84 203	37 757	121 840	12 374
33281	Coating, engraving, heat treating, & allied activities	—	45	22	1 615	41 757	1 253	2 272	27 330	84 203	37 757	121 840	12 374
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	18	10	1 038	25 351	854	1 501	17 806	45 946	27 918	73 557	4 811
3329	Other fabricated metal product mfg	—	58	18	1 913	67 265	1 422	2 882	44 272	189 671	147 099	336 404	11 888
33291	Metal valve mfg	—	18	10	1 032	37 003	732	1 591	22 403	94 802	113 784	208 337	6 084
33299	All other fabricated metal product mfg	—	40	8	881	30 262	690	1 291	21 869	94 869	33 315	128 067	5 804
333	Machinery mfg	—	329	117	13 220	522 169	8 625	17 817	283 544	1 142 132	734 269	1 876 230	53 116
3332	Industrial machinery mfg ..	—	48	26	2 093	81 939	1 258	2 496	37 061	158 521	143 612	300 841	5 454
33322	Plastics & rubber industry machinery mfg	—	9	5	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	9	5	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	37	21	1 406	58 657	858	1 636	27 770	114 567	98 371	212 276	4 461
333293	Printing machinery & equipment mfg	—	18	11	f	D	D	D	D	D	D	D	1 724
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	15	8	1 538	53 869	967	1 800	26 436	137 176	129 026	268 156	7 485
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	15	8	1 538	53 869	967	1 800	26 436	137 176	129 026	268 156	7 485
333412	Industrial & commercial fan & blower mfg	—	4	3	707	23 553	420	668	11 339	55 924	47 299	103 189	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	4	3	594	20 593	430	871	11 363	55 825	59 792	117 724	D
3335	Metalworking machinery mfg	1	180	43	3 250	145 782	2 309	4 911	93 282	282 158	131 732	422 674	17 460
33351	Metalworking machinery mfg	1	180	43	3 250	145 782	2 309	4 911	93 282	282 158	131 732	422 674	17 460
333511	Industrial mold mfg ...	1	69	18	985	47 197	740	1 691	33 486	75 708	35 537	114 481	9 115
333514	Special die & tool, die set, jig, & fixture mfg .	2	63	13	1 045	44 283	813	1 526	29 819	83 133	33 542	115 901	4 605
3336	Engine, turbine, & power transmission equipment mfg	2	7	6	799	31 761	485	986	16 194	67 563	33 364	102 096	2 595
33361	Engine, turbine, & power transmission equipment mfg	2	7	6	799	31 761	485	986	16 194	67 563	33 364	102 096	2 595
3339	Other general-purpose machinery mfg	—	66	29	5 099	191 049	3 317	6 975	101 417	438 712	238 042	667 556	18 762
33391	Pump & compressor mfg	—	8	4	1 536	50 091	1 224	2 809	35 572	147 278	47 785	190 504	4 351
333912	Air & gas compressor mfg	—	6	3	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	12	4	543	29 159	359	733	18 792	55 773	36 041	93 089	2 669
33399	All other general-purpose machinery mfg	—	46	21	3 020	111 799	1 734	3 433	47 053	235 661	154 216	383 963	11 742
333993	Packaging machinery mfg	—	12	6	1 361	51 668	690	1 158	19 120	102 708	73 401	172 954	5 646
333995	Fluid power cylinder & actuator mfg	—	5	4	502	20 750	251	571	8 450	38 556	23 297	62 310	D
333999	All other miscellaneous general-purpose machinery mfg	—	22	7	709	27 773	464	1 023	13 309	67 239	45 756	110 718	4 414

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DUPAGE COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	142	68	7 254	268 987	3 996	8 258	91 526	611 256	429 675	1 052 139	41 257
3342	Communications equipment mfg.....	1	13	8	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	2	6	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	2	6	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	3	77	36	3 336	88 091	2 448	4 787	49 357	203 891	142 399	348 357	13 913
33441	Semiconductor & other electronic component mfg.....	3	77	36	3 336	88 091	2 448	4 787	49 357	203 891	142 399	348 357	13 913
334412	Bare printed circuit board mfg.....	3	26	15	1 034	25 705	766	1 586	15 800	62 926	34 407	98 572	6 585
334417	Electronic connector mfg.....	7	9	4	661	23 853	467	938	11 901	46 777	33 322	81 009	3 381
334419	Other electronic component mfg.....	1	21	8	711	14 897	559	932	8 759	41 154	32 836	74 460	D
3345	Navigational, measuring, medical, & control instruments mfg.....	1	35	20	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	1	35	20	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	57	24	2 869	88 494	2 019	4 032	44 916	197 586	222 292	418 762	9 164
3353	Electrical equipment mfg ..	1	27	12	1 141	35 525	683	1 290	15 188	76 222	68 347	145 532	3 990
33531	Electrical equipment mfg.....	1	27	12	1 141	35 525	683	1 290	15 188	76 222	68 347	145 532	3 990
335314	Relay & industrial control mfg.....	1	19	9	948	29 222	582	1 064	13 015	50 678	57 167	108 851	3 410
3359	Other electrical equipment & component mfg.....	—	24	11	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg.....	—	8	5	754	23 222	624	1 117	16 180	55 597	33 298	88 995	2 658
335931	Current-carrying wiring device mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	—	13	4	524	17 250	332	777	5 701	33 407	73 940	106 797	D
335999	All other miscellaneous electrical equipment & component mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	48	28	2 946	95 814	2 038	4 055	56 716	240 411	269 884	510 380	27 671
3363	Motor vehicle parts mfg ...	2	33	18	2 106	67 997	1 403	2 879	39 596	178 676	201 494	382 213	D
33639	Other motor vehicle parts mfg.....	1	10	6	823	28 478	558	1 171	17 227	91 789	115 061	206 041	19 244
336399	All other motor vehicle parts mfg.....	1	10	6	823	28 478	558	1 171	17 227	91 789	115 061	206 041	19 244
337	Furniture & related product mfg.....	1	69	13	1 038	35 183	763	1 529	18 557	85 293	65 625	152 381	8 008
3372	Office furniture (including fixtures) mfg.....	—	19	10	568	18 371	445	865	10 758	41 971	33 844	77 261	6 454
33721	Office furniture (including fixtures) mfg.....	—	19	10	568	18 371	445	865	10 758	41 971	33 844	77 261	6 454
339	Miscellaneous mfg.....	1	124	25	2 072	71 187	1 382	2 764	33 498	158 128	110 397	262 885	8 572
3391	Medical equipment & supplies mfg.....	3	53	7	647	19 594	433	804	10 417	50 805	23 156	75 027	1 572
33911	Medical equipment & supplies mfg.....	3	53	7	647	19 594	433	804	10 417	50 805	23 156	75 027	1 572
3399	Other miscellaneous mfg ..	—	71	18	1 425	51 593	949	1 960	23 081	107 323	87 241	187 858	7 000
33995	Sign mfg.....	1	26	5	548	26 154	306	659	8 614	51 859	44 675	89 977	4 161
339950	Sign mfg.....	1	26	5	548	26 154	306	659	8 614	51 859	44 675	89 977	4 161
33999	All other miscellaneous mfg.....	—	28	10	745	21 189	547	1 121	11 803	41 065	31 142	72 423	1 832
	EDGAR COUNTY, IL												
31-33	Manufacturing	2	27	11	1 539	36 915	1 229	2 600	24 850	100 573	162 880	248 682	9 594
326	Plastics & rubber products mfg.....	1	7	6	892	19 680	750	1 594	13 221	52 453	65 553	118 571	5 157
3261	Plastics product mfg.....	—	6	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EDWARDS COUNTY, IL													
31-33	Manufacturing	-	8	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
EFFINGHAM COUNTY, IL													
31-33	Manufacturing	1	59	27	5 660	148 718	4 827	9 785	111 345	379 286	605 043	978 666	34 470
321	Wood product mfg	-	8	3	574	12 296	464	826	8 177	28 664	42 197	70 276	D
323	Printing & related support activities.....	2	9	5	2 591	76 829	2 269	5 047	59 797	161 732	153 363	311 140	20 673
3231	Printing & related support activities.....	2	9	5	2 591	76 829	2 269	5 047	59 797	161 732	153 363	311 140	20 673
32311	Printing	2	8	4	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	8	4	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	3	g	D	D	D	D	D	D	D	3 708
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
FAYETTE COUNTY, IL													
31-33	Manufacturing	-	22	8	1 529	37 836	1 384	2 790	32 298	148 166	128 397	277 893	9 944
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D
FORD COUNTY, IL													
31-33	Manufacturing	1	22	9	951	23 697	756	1 433	16 849	89 684	231 970	322 448	4 994
FRANKLIN COUNTY, IL													
31-33	Manufacturing	-	43	12	1 632	36 553	1 329	2 184	24 910	85 651	148 293	233 731	4 854
336	Transportation equipment mfg	-	8	6	1 259	27 738	1 042	1 731	19 302	64 809	115 744	180 996	3 090
3366	Ship & boat building	-	4	3	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	4	3	g	D	D	D	D	D	D	D	D
336612	Boat building.....	-	4	3	g	D	D	D	D	D	D	D	D
GRUNDY COUNTY, IL													
31-33	Manufacturing	-	33	14	2 015	87 799	1 469	3 251	59 812	384 548	488 489	875 423	21 914
325	Chemical mfg	-	5	5	914	55 607	598	1 512	37 646	304 695	405 893	711 695	19 702
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	3	3	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	3	3	f	D	D	D	D	D	D	D	D
HANCOCK COUNTY, IL													
31-33	Manufacturing	-	28	6	1 862	42 515	1 287	2 174	23 174	120 380	73 949	193 236	8 505
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENRY COUNTY, IL													
31-33	Manufacturing	—	53	17	4 019	124 262	3 222	6 721	95 254	210 045	1 082 785	1 288 006	6 438
311	Food mfg	—	9	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	4	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	4	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
IROQUOIS COUNTY, IL													
31-33	Manufacturing	—	30	14	1 723	43 030	1 333	2 720	27 125	108 084	192 505	296 900	7 991
JACKSON COUNTY, IL													
31-33	Manufacturing	2	35	8	1 062	29 004	846	1 657	20 805	61 606	89 876	151 818	3 774
JASPER COUNTY, IL													
31-33	Manufacturing	6	15	6	874	15 220	731	1 118	10 653	28 859	36 810	66 438	1 693
JEFFERSON COUNTY, IL													
31-33	Manufacturing	—	44	11	2 922	104 517	2 334	4 493	77 208	371 143	366 299	743 133	23 284
326	Plastics & rubber products mfg	—	2	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
JO DAVIESS COUNTY, IL													
31-33	Manufacturing	—	33	13	1 590	46 184	1 304	2 756	32 480	158 653	156 866	312 602	18 799
332	Fabricated metal product mfg	—	4	2	f	D	D	D	D	D	D	D	D
KANE COUNTY, IL													
31-33	Manufacturing	1	877	373	40 200	1 443 793	28 591	58 159	837 613	4 360 132	3 818 818	8 226 135	300 555
311	Food mfg	1	37	15	1 935	61 716	1 367	2 709	37 763	454 119	450 468	903 998	13 924
3116	Meat product mfg	3	6	5	f	D	D	D	D	D	D	D	5 189
31161	Animal slaughtering & processing	3	6	5	f	D	D	D	D	D	D	D	5 189
311612	Meat processed from carcasses	3	4	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	23	8	583	19 575	432	816	11 860	41 353	60 222	101 628	1 263
322	Paper mfg	2	25	19	1 319	49 441	992	2 085	30 073	103 264	126 814	230 549	D
3222	Converted paper product mfg	2	25	19	1 319	49 441	992	2 085	30 073	103 264	126 814	230 549	D
32221	Paperboard container mfg	2	14	13	927	34 875	705	1 464	20 810	77 537	88 621	166 701	D
322211	Corrugated & solid fiber box mfg	1	10	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	89	22	1 991	67 005	1 544	3 068	42 085	155 271	91 820	246 517	15 924
3231	Printing & related support activities	—	89	22	1 991	67 005	1 544	3 068	42 085	155 271	91 820	246 517	15 924
32311	Printing	—	77	18	1 482	50 771	1 108	2 133	30 557	124 866	85 774	210 378	D
323110	Commercial lithographic printing ..	—	33	10	929	33 763	750	1 495	22 145	64 042	40 739	104 090	5 582
32312	Support activities for printing	—	12	4	509	16 234	436	935	11 528	30 405	6 046	36 139	D
325	Chemical mfg	—	47	23	2 194	94 447	1 326	2 741	44 964	448 806	384 047	833 196	23 748
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	10	5	784	33 753	522	1 153	20 992	254 167	103 463	359 708	8 883
32561	Soap & cleaning compound mfg	—	8	4	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	15	7	537	18 214	392	794	9 946	51 892	73 932	123 373	3 450

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANE COUNTY, IL— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	—	88	58	6 392	180 145	5 279	10 718	119 833	406 673	412 164	816 582	45 915
3261	Plastics product mfg	1	84	56	i	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	8	5	700	21 267	493	1 078	14 625	47 027	101 701	145 171	9 529
32619	Other plastics product mfg	1	60	44	4 788	129 434	4 029	8 041	84 085	290 817	194 984	485 170	31 036
326199	All other plastics product mfg	1	60	44	4 788	129 434	4 029	8 041	84 085	290 817	194 984	485 170	31 036
327	Nonmetallic mineral product mfg	2	34	18	1 075	35 433	814	1 758	24 783	94 888	87 338	182 135	6 367
3273	Cement & concrete product mfg	2	21	11	546	21 867	425	986	16 110	62 799	58 864	121 829	5 575
331	Primary metal mfg	—	15	8	821	28 025	652	1 572	18 800	69 131	71 866	138 544	D
3315	Foundries	—	11	5	588	19 881	465	1 117	13 935	51 141	34 528	84 464	D
33152	Nonferrous metal foundries	—	9	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	178	70	6 637	233 917	5 027	10 530	152 784	507 956	386 169	903 590	71 863
3321	Forging & stamping	—	23	13	1 606	58 867	1 229	2 706	38 918	113 627	65 206	177 767	9 188
33211	Forging & stamping	—	23	13	1 606	58 867	1 229	2 706	38 918	113 627	65 206	177 767	9 188
332116	Metal stamping	—	18	10	558	19 926	398	860	11 222	41 908	27 952	69 610	1 898
332117	Powder metallurgy part mfg	—	2	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	19	9	528	16 560	404	815	10 257	29 873	38 198	68 389	2 088
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	83	26	2 324	79 365	1 733	3 702	53 285	168 329	103 785	275 295	16 575
33271	Machine shops	1	57	12	895	32 116	698	1 367	22 212	68 158	46 284	114 567	6 984
332710	Machine shops	1	57	12	895	32 116	698	1 367	22 212	68 158	46 284	114 567	6 984
33272	Turned product & screw, nut, & bolt mfg	1	26	14	1 429	47 249	1 035	2 335	31 073	100 171	57 501	160 728	9 591
332721	Precision turned product mfg	—	18	10	1 138	34 776	854	1 945	23 986	79 676	36 102	116 269	8 372
3329	Other fabricated metal product mfg	—	23	11	1 338	55 125	1 021	2 032	35 707	137 114	114 507	258 749	16 403
33299	All other fabricated metal product mfg	—	14	5	917	32 850	744	1 452	25 804	81 917	82 369	168 037	11 846
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	108	40	6 355	302 238	4 010	8 258	172 908	1 143 899	962 006	2 156 371	52 598
3331	Agriculture, construction, & mining machinery mfg	—	7	4	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	5	3	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	5	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	3	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	5	3	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	55	15	960	42 050	721	1 502	30 088	77 561	32 992	111 340	8 850
33351	Metalworking machinery mfg	—	55	15	960	42 050	721	1 502	30 088	77 561	32 992	111 340	8 850
333511	Industrial mold mfg	—	28	8	501	26 598	391	900	19 772	46 457	17 999	64 709	5 280
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	568	21 298	309	683	9 081	41 562	59 289	100 947	D
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	568	21 298	309	683	9 081	41 562	59 289	100 947	D
3339	Other general-purpose machinery mfg	—	22	8	763	26 366	418	651	11 823	47 701	70 042	117 517	2 422

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	KANE COUNTY, IL— Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg	-	47	25	3 690	112 998	2 474	4 486	54 332	335 957	229 385	554 886	23 666
3342	Communications equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	23	15	g	D	D	D	D	D	D	D	10 946
33441	Semiconductor & other electronic component mfg	-	23	15	g	D	D	D	D	D	D	D	10 946
334419	Other electronic component mfg	-	15	7	975	31 200	702	1 240	16 267	154 860	81 769	224 777	6 980
3345	Navigational, measuring, medical, & control instruments mfg	4	12	5	f	D	D	D	D	D	D	D	2 974
33451	Navigational, measuring, medical, & control instruments mfg	4	12	5	f	D	D	D	D	D	D	D	2 974
335	Electrical equipment, appliance, & component mfg	1	29	18	2 682	94 976	1 630	3 400	41 556	207 737	199 508	410 422	9 080
3353	Electrical equipment mfg ..	-	19	11	1 142	40 433	708	1 342	14 899	69 684	49 420	117 506	4 059
33531	Electrical equipment mfg	-	19	11	1 142	40 433	708	1 342	14 899	69 684	49 420	117 506	4 059
335314	Relay & industrial control mfg	-	13	7	906	34 008	548	1 039	11 683	57 140	35 462	91 039	D
3359	Other electrical equipment & component mfg	-	5	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	21	10	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	53	13	1 702	68 754	1 206	2 479	42 104	182 176	137 100	320 910	6 883
3372	Office furniture (including fixtures) mfg	2	17	10	1 210	55 157	794	1 670	31 593	140 467	101 359	243 831	6 217
33721	Office furniture (including fixtures) mfg	2	17	10	1 210	55 157	794	1 670	31 593	140 467	101 359	243 831	6 217
337215	Showcase, partition, shelving, & locker mfg	1	8	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	56	17	1 121	42 794	650	1 281	15 026	81 934	59 841	139 421	11 026
3399	Other miscellaneous mfg ..	1	32	11	881	34 248	488	970	11 125	61 361	48 650	107 807	10 189
	KANKAKEE COUNTY, IL												
31-33	Manufacturing	-	116	51	6 937	263 752	4 879	11 000	159 588	914 868	1 358 260	2 253 237	132 518
311	Food mfg	-	14	7	1 106	42 417	853	2 145	29 303	109 137	246 096	356 084	18 000
325	Chemical mfg	-	13	11	2 078	98 772	1 149	2 430	40 614	361 813	586 119	919 720	51 800
3254	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	5	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	7	914	37 064	780	1 791	31 694	148 280	140 625	291 081	10 972
3261	Plastics product mfg	-	11	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	6	4	699	29 615	613	1 395	26 474	115 655	94 369	212 087	9 406
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENDALL COUNTY, IL													
31-33	Manufacturing	-	66	16	2 303	69 489	1 800	3 484	39 169	229 023	136 959	369 604	11 303
311	Food mfg	-	6	3	602	22 146	433	842	11 173	79 072	54 315	135 323	D
326	Plastics & rubber products mfg	-	8	3	881	22 683	749	1 489	14 871	94 923	39 529	136 099	7 478
3261	Plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	7 308
326199	All other plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	7 308
KNOX COUNTY, IL													
31-33	Manufacturing	-	56	25	5 528	165 036	4 477	8 147	119 848	370 709	668 369	1 058 842	23 054
326	Plastics & rubber products mfg	-	6	4	693	20 430	531	1 126	15 959	76 066	104 520	197 005	4 976
332	Fabricated metal product mfg	-	9	3	g	D	D	D	D	D	D	D	3 114
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
LAKE COUNTY, IL													
31-33	Manufacturing	-	969	310	62 535	2 660 241	37 779	75 141	1 163 125	7 361 372	6 407 199	13 686 182	956 500
311	Food mfg	1	48	13	1 459	39 485	1 055	2 162	25 028	142 490	187 689	327 606	D
314	Textile product mills	-	27	6	715	17 979	581	1 313	12 206	26 643	47 688	76 315	D
322	Paper mfg	-	17	13	1 664	64 623	1 250	2 609	41 534	136 997	143 403	281 379	D
3222	Converted paper product mfg	-	17	13	1 664	64 623	1 250	2 609	41 534	136 997	143 403	281 379	D
32221	Paperboard container mfg	-	8	6	946	40 252	706	1 492	24 946	76 480	68 844	146 875	D
322212	Folding paperboard box mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	117	22	1 747	67 344	1 271	2 489	37 832	129 149	99 357	228 659	9 999
3231	Printing & related support activities	2	117	22	1 747	67 344	1 271	2 489	37 832	129 149	99 357	228 659	9 999
32311	Printing	2	107	20	1 594	61 768	1 175	2 270	34 505	118 478	89 150	207 229	D
323110	Commercial lithographic printing ..	2	50	12	918	42 065	683	1 342	22 213	74 656	46 142	120 470	6 729
325	Chemical mfg	-	46	23	17 109	1 021 766	5 999	12 089	294 643	2 799 091	1 104 774	3 880 022	394 536
3251	Basic chemical mfg	1	13	7	507	24 829	236	392	8 811	124 845	117 552	239 087	D
3254	Pharmaceutical & medicine mfg	-	3	2	j	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	j	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	67	31	4 736	132 016	3 743	7 579	85 611	324 789	317 026	629 692	34 742
3261	Plastics product mfg	-	62	29	4 578	127 456	3 630	7 356	83 457	295 285	305 773	589 136	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	8	6	887	29 918	640	1 423	19 038	68 085	84 405	149 860	D
326111	Unsupported plastics bag mfg	-	3	3	567	17 542	427	957	11 301	42 864	45 047	85 975	D
32619	Other plastics product mfg	-	46	20	3 488	91 341	2 841	5 633	60 335	211 816	205 078	407 602	24 945
326199	All other plastics product mfg	-	46	20	3 488	91 341	2 841	5 633	60 335	211 816	205 078	407 602	24 945
327	Nonmetallic mineral product mfg	3	28	12	1 768	43 618	1 457	2 497	28 766	112 762	97 848	212 416	10 809
3271	Clay product & refractory mfg	6	4	3	1 157	20 030	974	1 509	12 632	27 968	33 647	64 215	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	7	3	3	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	9	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAKE COUNTY, IL— Con. Manufacturing— Con.												
331	Primary metal mfg	—	19	8	1 191	36 804	924	2 071	23 815	118 908	284 231	404 452	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	160	47	4 779	164 027	3 566	7 283	101 486	403 031	329 392	726 558	22 751
3321	Forging & stamping	—	12	6	1 166	38 326	904	1 838	28 345	116 254	115 861	226 787	6 141
33211	Forging & stamping	—	12	6	1 166	38 326	904	1 838	28 345	116 254	115 861	226 787	6 141
332116	Metal stamping	—	8	5	1 032	34 456	803	1 632	25 837	106 850	105 762	207 234	5 590
3322	Cutlery & handtool mfg	—	7	3	553	15 268	453	863	10 495	44 974	31 427	73 830	D
33221	Cutlery & handtool mfg	—	7	3	553	15 268	453	863	10 495	44 974	31 427	73 830	D
3323	Architectural & structural metals mfg	1	30	10	578	21 903	370	858	12 031	47 558	35 354	82 191	2 892
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	65	15	1 158	41 935	889	1 806	27 003	83 478	59 414	143 961	5 692
33271	Machine shops	1	54	9	600	21 448	450	900	14 074	43 452	20 058	63 490	2 987
332710	Machine shops	1	54	9	600	21 448	450	900	14 074	43 452	20 058	63 490	2 987
33272	Turned product & screw, nut, & bolt mfg	3	11	6	558	20 487	439	906	12 929	40 026	39 356	80 471	2 705
3329	Other fabricated metal product mfg	—	17	6	606	23 771	424	849	12 728	60 664	54 096	116 254	2 989
333	Machinery mfg	1	147	51	5 141	197 899	3 500	6 744	108 656	432 283	420 196	884 266	27 869
3332	Industrial machinery mfg	1	30	10	679	27 352	333	585	9 608	61 970	85 927	152 737	D
33329	Other industrial machinery mfg	1	26	9	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	64	13	1 444	63 947	985	2 172	37 268	166 323	83 018	278 744	9 219
33351	Metalworking machinery mfg	1	64	13	1 444	63 947	985	2 172	37 268	166 323	83 018	278 744	9 219
333518	Other metalworking machinery mfg	1	7	6	726	35 157	456	1 079	19 083	99 157	59 240	190 079	2 394
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	f	D	D	D	D	D	D	D	2 818
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	f	D	D	D	D	D	D	D	2 818
333618	Other engine equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	29	15	1 163	45 625	755	1 404	23 800	70 952	84 895	156 022	5 499
33399	All other general-purpose machinery mfg	1	23	12	1 067	41 465	675	1 238	21 354	63 788	75 068	138 940	D
333993	Packaging machinery mfg	—	7	4	636	28 267	360	729	13 439	44 197	35 585	79 203	3 325
334	Computer & electronic product mfg	—	60	26	12 345	521 517	7 814	15 745	211 343	2 058 341	2 690 849	4 674 491	D
3341	Computer & peripheral equipment mfg	—	8	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	8	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	7	4	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	3	19	8	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	3	19	8	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	25	12	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	25	12	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LAKE COUNTY, IL—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	—	29	17	3 599	113 539	2 285	4 241	52 464	284 460	259 124	540 012	20 287
3353	Electrical equipment mfg ..	1	11	6	997	36 600	579	1 132	13 380	106 981	118 524	218 511	D
33531	Electrical equipment mfg	1	11	6	997	36 600	579	1 132	13 380	106 981	118 524	218 511	D
335311	Power, distribution, & specialty transformer mfg	—	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	14	7	2 248	67 594	1 476	2 626	34 766	149 806	106 474	258 411	D
33593	Wiring device mfg	—	7	4	1 922	57 064	1 215	2 045	28 046	115 346	65 893	183 441	13 367
335931	Current-carrying wiring device mfg	—	5	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	6	540	17 396	408	890	9 882	35 333	35 247	70 135	D
337	Furniture & related product mfg	2	46	8	507	14 201	336	638	7 632	29 791	28 176	58 168	D
339	Miscellaneous mfg	4	96	22	4 801	195 168	3 219	5 990	112 586	291 989	314 306	609 096	20 040
3391	Medical equipment & supplies mfg	4	40	8	3 284	162 290	1 996	3 885	93 271	235 220	262 532	499 189	17 282
33911	Medical equipment & supplies mfg	4	40	8	3 284	162 290	1 996	3 885	93 271	235 220	262 532	499 189	17 282
339112	Surgical & medical instrument mfg	7	8	4	2 130	129 477	1 294	2 581	77 880	175 875	87 801	262 513	D
339113	Surgical appliance & supplies mfg	—	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	56	14	1 517	32 878	1 223	2 105	19 315	56 769	51 774	109 907	2 758
33999	All other miscellaneous mfg	9	15	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	9	11	2	f	D	D	D	D	D	D	D	D
	LA SALLE COUNTY, IL												
31-33	Manufacturing	—	152	65	6 752	232 101	5 272	10 840	163 602	789 893	947 757	1 732 568	86 132
311	Food mfg	—	11	5	528	13 442	457	887	10 129	49 810	99 702	146 214	3 507
323	Printing & related support activities	—	12	3	563	15 422	471	842	12 496	37 381	23 901	61 135	D
3231	Printing & related support activities	—	12	3	563	15 422	471	842	12 496	37 381	23 901	61 135	D
325	Chemical mfg	—	10	6	806	40 667	606	1 272	28 814	236 813	406 153	640 333	49 905
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	8	6	615	16 560	499	1 021	11 925	40 691	31 877	72 432	3 081
327	Nonmetallic mineral product mfg	—	17	11	1 086	47 170	880	1 849	34 396	203 653	104 100	306 239	7 267
3272	Glass & glass product mfg ..	—	4	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	35	10	802	26 399	618	1 259	18 187	60 962	62 549	122 756	7 420
333	Machinery mfg	—	18	6	724	26 310	485	1 160	15 843	46 686	45 157	94 311	5 110
336	Transportation equipment mfg	3	6	5	736	19 646	615	1 335	15 082	50 181	85 759	138 924	1 960
3363	Motor vehicle parts mfg ...	3	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEE COUNTY, IL													
31-33	Manufacturing	—	35	21	3 798	115 286	2 798	5 901	71 809	404 941	325 393	739 386	18 170
311	Food mfg	3	8	6	865	22 767	668	1 571	13 968	73 309	88 748	162 523	5 202
3119	Other food mfg	3	4	4	738	18 885	558	1 269	10 958	64 109	70 718	135 443	4 838
332	Fabricated metal product mfg	—	6	5	1 361	44 155	877	2 234	25 939	132 007	80 238	214 344	4 722
3323	Architectural & structural metals mfg	—	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	1	1	f	D	D	D	D	D	D	D	D
LIVINGSTON COUNTY, IL													
31-33	Manufacturing	—	51	22	4 573	170 480	3 580	7 124	121 088	537 061	516 618	1 055 810	49 220
323	Printing & related support activities	—	6	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	6	4	g	D	D	D	D	D	D	D	D
32311	Printing	—	5	3	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	5	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	5	4	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
LOGAN COUNTY, IL													
31-33	Manufacturing	—	24	6	1 401	44 889	1 164	2 360	33 756	170 602	145 238	318 179	12 515
335	Electrical equipment, appliance, & component mfg	—	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
MCDONOUGH COUNTY, IL													
31-33	Manufacturing	2	30	14	1 956	61 229	1 615	3 281	48 018	140 193	116 084	255 851	13 700
332	Fabricated metal product mfg	—	6	3	970	31 299	820	1 638	25 015	63 018	44 160	106 970	4 615
3329	Other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	1	1	f	D	D	D	D	D	D	D	D
MCHENRY COUNTY, IL													
31-33	Manufacturing	1	583	212	22 949	760 437	16 601	35 263	458 709	1 966 527	1 955 362	3 930 437	158 077
311	Food mfg	6	13	6	g	D	D	D	D	D	D	D	11 116
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	59	17	1 860	63 058	1 356	2 734	39 778	151 625	83 702	234 988	20 764
3231	Printing & related support activities	—	59	17	1 860	63 058	1 356	2 734	39 778	151 625	83 702	234 988	20 764
32311	Printing	—	52	14	1 485	50 256	1 043	2 090	30 772	124 963	77 267	201 546	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MCHEMRY COUNTY, IL—Con.												
	Manufacturing—Con.												
325	Chemical mfg	3	19	11	1 057	34 531	693	1 167	18 733	198 826	213 785	408 683	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	4	3	3	533	18 894	350	694	10 707	113 234	117 713	230 437	D
32521	Resin & synthetic rubber mfg	4	3	3	533	18 894	350	694	10 707	113 234	117 713	230 437	D
325211	Plastics material & resin mfg	4	3	3	533	18 894	350	694	10 707	113 234	117 713	230 437	D
326	Plastics & rubber products mfg	1	58	31	3 473	107 888	2 499	4 725	60 950	267 521	246 068	513 897	29 080
3261	Plastics product mfg	1	54	30	3 439	107 069	2 471	4 663	60 237	264 887	244 009	509 429	29 032
32619	Other plastics product mfg	1	42	25	3 159	96 937	2 274	4 304	54 721	239 162	214 195	453 983	25 556
326199	All other plastics product mfg	1	42	25	3 159	96 937	2 274	4 304	54 721	239 162	214 195	453 983	25 556
331	Primary metal mfg	—	12	7	983	36 101	760	1 672	23 971	107 728	103 415	199 817	6 684
3312	Steel product mfg from purchased steel	—	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	2	2	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	124	37	3 335	125 556	2 596	5 548	89 443	312 520	204 217	515 729	22 586
3321	Forging & stamping	—	16	9	836	39 417	665	1 683	30 067	110 110	83 974	192 600	10 003
33211	Forging & stamping	—	16	9	836	39 417	665	1 683	30 067	110 110	83 974	192 600	10 003
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	63	14	1 050	34 926	784	1 598	23 836	66 470	33 881	100 155	D
33271	Machine shops	—	47	9	760	25 426	557	1 149	17 013	47 537	23 468	70 996	3 260
332710	Machine shops	—	47	9	760	25 426	557	1 149	17 013	47 537	23 468	70 996	3 260
3329	Other fabricated metal product mfg	—	7	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	5	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	4	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	123	35	4 419	158 269	3 172	7 096	95 309	261 700	399 079	675 376	22 838
3332	Industrial machinery mfg	—	16	3	723	26 437	472	830	13 434	23 006	58 966	87 459	4 505
33329	Other industrial machinery mfg	—	9	3	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	60	13	1 671	59 196	1 320	3 170	42 795	92 666	54 828	145 827	D
33351	Metalworking machinery mfg	—	60	13	1 671	59 196	1 320	3 170	42 795	92 666	54 828	145 827	D
333515	Cutting tool & machine tool accessory mfg	—	11	3	1 104	33 714	882	2 235	25 040	54 547	40 244	93 729	2 872
3339	Other general-purpose machinery mfg	—	23	7	946	35 262	623	1 373	19 035	70 894	198 527	275 815	6 713
33392	Material handling equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	41	21	3 230	103 808	1 859	4 391	42 242	290 498	188 105	484 552	D
3344	Semiconductor & other electronic component mfg	—	22	15	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	22	15	g	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	9	7	594	15 836	437	876	7 468	32 147	27 492	59 677	D
334419	Other electronic component mfg	—	7	5	520	19 653	357	785	10 013	49 589	24 036	74 012	D
3345	Navigational, measuring, medical, & control instruments mfg	—	12	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	12	4	g	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	22	13	937	28 691	636	1 203	14 595	72 943	70 612	144 698	2 910

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MCHEMRY COUNTY, IL													
—Con.													
31-33	Manufacturing—												
	Con.												
336	Transportation equipment mfg	—	7	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	7	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	34	11	631	15 491	520	979	10 267	36 328	30 749	67 275	1 484
3399	Other miscellaneous mfg ..	3	23	10	542	13 248	459	861	9 073	31 962	28 555	60 611	1 241
MCLEAN COUNTY, IL													
31-33	Manufacturing	—	112	38	8 388	357 729	6 751	12 986	276 349	975 020	2 882 082	3 870 266	84 896
311	Food mfg	—	16	7	715	20 682	518	1 102	15 076	50 900	198 267	247 030	4 980
323	Printing & related support activities	2	18	6	627	22 296	461	969	13 137	48 129	27 938	74 261	8 529
3231	Printing & related support activities	2	18	6	627	22 296	461	969	13 137	48 129	27 938	74 261	8 529
32311	Printing	2	16	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	2	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
MACON COUNTY, IL													
31-33	Manufacturing	—	134	45	11 616	479 406	8 240	16 177	319 733	2 182 892	3 833 751	6 114 166	193 557
311	Food mfg	—	15	10	1 741	70 315	1 189	2 805	45 239	982 377	1 768 306	2 740 081	119 629
3112	Grain & oilseed milling	—	7	6	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	6	5	g	D	D	D	D	D	D	D	D
311221	Wet corn milling	—	2	2	f	D	D	D	D	D	D	D	D
311222	Soybean processing ..	—	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	10	5	658	26 365	455	1 015	14 998	345 284	290 645	625 450	17 111
326	Plastics & rubber products mfg	—	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	6	3	f	D	D	D	D	D	D	D	2 077
331	Primary metal mfg	—	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	—	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	38	10	1 371	40 148	799	1 758	29 319	61 742	66 506	127 566	3 972
3329	Other fabricated metal product mfg	—	6	4	919	25 891	478	1 117	20 177	33 557	33 653	67 690	2 385
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	12	4	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	—	2	2	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	—	2	2	f	D	D	D	D	D	D	D	D

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	MACOUPIN COUNTY, IL												
31-33	Manufacturing	-	35	8	697	18 895	515	1 039	12 282	65 403	91 967	156 521	2 985
	MADISON COUNTY, IL												
31-33	Manufacturing	-	224	71	19 074	743 827	14 679	31 709	520 998	2 799 810	4 904 915	7 676 517	218 080
324	Petroleum & coal products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	4	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	3	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	19	8	547	15 728	427	950	11 503	33 719	46 101	80 248	D
331	Primary metal mfg	-	8	8	7 474	325 230	6 148	13 061	249 339	1 030 623	1 307 810	2 338 189	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	3	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	2	2	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	2	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	15	3 688	133 450	2 810	5 968	89 323	360 664	223 092	572 750	16 017
3323	Architectural & structural metals mfg	-	4	2	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	3	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	6	5	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	6	5	g	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	6	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	5	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	3	3	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	8	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION COUNTY, IL													
31-33	Manufacturing	-	65	29	5 220	152 559	4 267	8 269	113 486	440 037	327 573	768 283	30 239
323	Printing & related support activities.....	-	6	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	6	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	1 383	41 284	1 242	2 272	34 730	119 873	77 710	198 166	6 869
3261	Plastics product mfg	-	5	4	1 383	41 284	1 242	2 272	34 730	119 873	77 710	198 166	6 869
32619	Other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARSHALL COUNTY, IL													
31-33	Manufacturing	2	18	11	921	28 250	763	1 518	19 881	95 467	85 322	179 631	6 881
MASSAC COUNTY, IL													
31-33	Manufacturing	-	12	4	732	31 154	553	1 072	21 212	132 979	60 658	191 529	7 401
MONTGOMERY COUNTY, IL													
31-33	Manufacturing	-	37	15	1 752	48 262	1 422	2 886	35 133	117 735	173 741	300 666	11 573
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
MORGAN COUNTY, IL													
31-33	Manufacturing	-	36	14	3 566	110 598	2 670	5 565	72 981	664 576	546 394	1 213 395	57 254
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	6	3	792	19 413	475	957	7 997	76 419	45 033	121 242	2 138
3231	Printing & related support activities.....	-	6	3	792	19 413	475	957	7 997	76 419	45 033	121 242	2 138
32312	Support activities for printing	-	2	2	f	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	-	1	1	f	D	D	D	D	D	D	D	D
MOULTRIE COUNTY, IL													
31-33	Manufacturing	2	20	5	796	19 824	676	1 496	14 796	81 413	133 377	210 778	6 410
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OGLE COUNTY, IL													
31-33	Manufacturing	-	70	27	5 859	166 188	4 762	9 614	118 376	424 249	591 284	1 020 481	21 932
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	2	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	7	1 292	45 737	857	1 661	25 597	94 636	83 056	183 758	3 643
3331	Agriculture, construction, & mining machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
PEORIA COUNTY, IL													
31-33	Manufacturing	-	177	77	14 351	610 568	9 859	19 693	383 802	2 038 732	2 339 716	4 392 743	149 733
311	Food mfg	-	14	10	710	26 312	371	752	10 791	110 305	66 807	177 095	D
323	Printing & related support activities	1	37	14	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	37	14	g	D	D	D	D	D	D	D	D
32311	Printing	1	33	14	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	16	10	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	9	4	f	D	D	D	D	D	D	D	51 193
326	Plastics & rubber products mfg	-	6	5	884	37 343	610	1 295	21 758	112 518	97 566	208 513	D
331	Primary metal mfg	-	6	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	41	18	2 008	64 015	1 383	2 778	35 808	182 655	140 543	315 647	9 857
3323	Architectural & structural metals mfg	-	12	8	973	34 952	680	1 420	18 947	78 901	69 013	147 761	D
33231	Plate work & fabricated structural product mfg	-	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	6	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PERRY COUNTY, IL													
31-33	Manufacturing	-	22	8	1 481	35 308	1 189	2 411	24 657	119 891	140 024	262 252	5 854
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
PUTNAM COUNTY, IL													
31-33	Manufacturing	-	9	3	f	D	D	D	D	D	D	D	6 342
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
RANDOLPH COUNTY, IL													
31-33	Manufacturing	-	32	15	2 353	51 835	2 146	4 432	42 310	165 233	233 240	398 606	15 606
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
RICHLAND COUNTY, IL													
31-33	Manufacturing	-	34	10	1 814	37 036	1 499	2 767	24 971	101 014	125 734	218 260	4 690
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
ROCK ISLAND COUNTY, IL													
31-33	Manufacturing	-	197	67	10 675	493 754	7 994	16 925	354 374	1 913 372	1 641 109	3 508 818	118 322
325	Chemical mfg	-	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	56	21	1 330	37 845	992	1 905	24 247	101 340	57 024	157 293	8 642
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	24	10	579	16 560	447	852	11 023	35 025	18 750	52 431	D
333	Machinery mfg	-	33	16	i	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	11	5	i	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	10	5	i	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	10	5	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. CLAIR COUNTY, IL													
31-33	Manufacturing	-	198	61	7 123	249 320	5 300	10 419	159 730	602 895	1 163 528	1 763 491	44 486
311	Food mfg	-	16	7	520	13 923	381	664	8 679	50 600	115 941	166 800	D
325	Chemical mfg	-	10	7	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	1 508	53 975	1 164	2 444	37 677	61 082	422 552	482 844	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	2	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	8	f	D	D	D	D	D	D	D	4 157
335	Electrical equipment, appliance, & component mfg	-	9	5	f	D	D	D	D	D	D	D	D
SANGAMON COUNTY, IL													
31-33	Manufacturing	-	134	41	h	D	D	D	D	D	D	D	22 118
333	Machinery mfg	-	12	4	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	5	592	15 270	362	620	6 253	40 140	21 133	61 443	2 288
SHELBY COUNTY, IL													
31-33	Manufacturing	-	14	4	1 191	32 372	1 029	2 435	26 539	103 572	103 718	205 740	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	1	1	f	D	D	D	D	D	D	D	D
STEPHENSON COUNTY, IL													
31-33	Manufacturing	-	62	23	8 386	300 293	5 988	12 009	194 906	646 786	550 320	1 239 228	47 744
311	Food mfg	2	12	6	952	19 411	754	1 343	13 808	52 758	134 235	188 680	5 167
3119	Other food mfg	4	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	h	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	h	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TAZEWELL COUNTY, IL													
31-33	Manufacturing	-	118	47	7 015	311 079	4 985	10 298	195 533	1 160 688	1 348 862	2 512 880	58 419
332	Fabricated metal product mfg	1	33	16	g	D	D	D	D	D	D	D	13 487
3323	Architectural & structural metals mfg	-	6	5	f	D	D	D	D	D	D	D	8 532
33232	Ornamental & architectural metal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	3	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
UNION COUNTY, IL													
31-33	Manufacturing	-	11	6	616	16 965	481	1 030	11 142	59 099	73 788	132 212	5 456
VERMILION COUNTY, IL													
31-33	Manufacturing	-	104	44	7 055	228 890	5 467	11 276	161 421	657 444	1 021 779	1 696 066	67 832
311	Food mfg	-	9	8	1 287	51 898	932	2 212	35 481	272 291	488 626	779 802	42 677
3112	Grain & oilseed milling	-	4	4	1 083	45 461	770	1 839	30 810	263 234	454 713	735 813	39 409
31122	Starch & vegetable fats & oils mfg	-	3	3	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	27	9	996	32 510	802	1 673	24 643	67 271	96 071	165 661	4 702
333	Machinery mfg	-	13	7	1 501	54 427	1 214	2 534	40 662	124 127	239 218	364 163	2 083
3339	Other general-purpose machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	4	808	25 036	679	1 445	19 422	50 745	52 437	97 218	D
WABASH COUNTY, IL													
31-33	Manufacturing	1	15	4	611	20 454	466	836	13 401	40 621	15 580	55 801	2 296
WARREN COUNTY, IL													
31-33	Manufacturing	-	19	5	g	D	D	D	D	D	D	D	1 908
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WASHINGTON COUNTY, IL													
31-33	Manufacturing	-	16	5	1 397	44 453	1 036	2 363	25 793	104 242	119 536	222 362	15 944
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, IL													
31-33	Manufacturing	-	20	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WHITESIDE COUNTY, IL													
31-33	Manufacturing	-	102	40	7 374	245 024	6 187	12 208	179 637	547 516	820 930	1 381 776	38 388
331	Primary metal mfg	-	4	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	37	16	2 326	80 856	1 647	3 272	41 695	206 301	148 121	354 476	13 226
3325	Hardware mfg	-	4	3	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	4	3	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	4	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	6	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	4	1 227	30 456	1 126	1 758	24 739	60 963	57 327	120 030	D
3353	Electrical equipment mfg ..	-	6	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILL COUNTY, IL													
31-33	Manufacturing	-	527	188	24 090	988 215	16 559	33 815	557 199	3 209 338	4 406 223	7 594 716	308 511
311	Food mfg	1	27	11	1 088	38 752	840	1 806	25 040	83 862	234 200	314 453	7 090
3116	Meat product mfg	1	6	5	579	24 810	450	967	16 150	54 504	127 662	181 616	6 536
31161	Animal slaughtering & processing	1	6	5	579	24 810	450	967	16 150	54 504	127 662	181 616	6 536
322	Paper mfg	-	9	6	1 189	41 254	957	2 199	31 814	105 849	110 522	216 106	D
3222	Converted paper product mfg	-	8	5	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	3	3	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	7	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	7	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	30	18	2 316	118 260	1 558	3 160	70 028	724 867	870 857	1 591 415	113 704
3251	Basic chemical mfg	-	10	6	842	43 932	579	1 178	24 388	236 338	166 909	414 088	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	8	6	1 032	47 758	712	1 457	29 652	341 741	364 698	704 899	36 036
32561	Soap & cleaning compound mfg	-	7	5	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	37	21	2 391	77 584	1 713	3 698	46 483	254 890	240 882	496 672	28 729
3261	Plastics product mfg	1	36	21	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	28	15	1 816	58 987	1 299	2 809	34 929	154 463	164 017	318 926	D
326199	All other plastics product mfg	2	26	14	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	37	13	684	28 113	542	1 099	20 232	75 539	72 306	147 542	6 272
332	Fabricated metal product mfg	1	100	27	2 587	85 442	1 886	3 709	52 647	174 409	137 263	310 830	11 144
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	50	8	932	36 020	684	1 355	22 338	62 687	49 199	111 284	6 043
33271	Machine shops	1	42	5	541	23 473	393	751	13 310	38 296	15 500	52 924	3 402
332710	Machine shops	1	42	5	541	23 473	393	751	13 310	38 296	15 500	52 924	3 402
3329	Other fabricated metal product mfg	-	10	6	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	10	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	66	28	5 649	259 563	4 160	8 252	167 084	590 466	514 986	1 107 239	26 792
3339	Other general-purpose machinery mfg	-	31	15	4 536	217 002	3 380	6 746	144 562	497 545	417 064	916 763	21 905
33399	All other general-purpose machinery mfg	-	20	11	4 150	200 514	3 156	6 343	138 564	475 001	400 501	877 466	D
333995	Fluid power cylinder & actuator mfg	-	4	4	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	16	9	3 227	169 484	1 300	2 811	42 149	562 079	309 385	859 995	D
3342	Communications equipment mfg	-	4	4	2 966	165 217	1 178	2 585	40 252	551 994	305 436	846 028	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	18	10	723	20 319	447	678	8 594	58 046	32 689	90 623	D
3359	Other electrical equipment & component mfg	2	9	7	604	16 920	360	501	6 763	50 562	24 960	75 559	1 911
336	Transportation equipment mfg	-	14	7	922	34 885	722	1 464	23 224	98 346	64 835	164 082	7 842
3363	Motor vehicle parts mfg ...	-	7	5	724	27 901	557	1 175	18 300	86 150	51 308	138 672	7 487
337	Furniture & related product mfg	2	28	8	703	19 640	564	1 136	13 058	31 786	20 536	51 902	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	23	8	669	18 506	536	1 077	12 377	29 627	18 807	48 023	D
33711	Wood kitchen cabinet & counter top mfg	1	14	5	503	14 763	394	788	9 548	24 313	13 504	37 407	D
337110	Wood kitchen cabinet & counter top mfg ...	1	14	5	503	14 763	394	788	9 548	24 313	13 504	37 407	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILL COUNTY, IL—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	3	49	7	540	14 370	428	824	8 392	38 440	22 463	60 716	2 530
WILLIAMSON COUNTY, IL													
31-33	Manufacturing	2	51	12	2 551	69 179	1 720	3 107	43 762	161 683	265 481	425 061	7 571
332	Fabricated metal product mfg.....	—	11	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	—	1	1	f	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
WINNEBAGO COUNTY, IL													
31-33	Manufacturing	1	779	295	39 740	1 483 582	27 007	55 866	844 510	3 791 363	2 911 054	6 608 404	247 261
311	Food mfg.....	1	22	10	1 786	56 184	1 484	2 971	43 015	325 232	269 922	574 623	19 391
3113	Sugar & confectionery product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg....	—	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	53	10	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	—	53	10	f	D	D	D	D	D	D	D	D
32311	Printing	—	48	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	18	9	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	—	6	3	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg.....	—	6	3	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg...	—	6	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	20	9	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	1	18	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	19	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	17	13	g	D	D	D	D	D	D	D	D
3315	Foundries	—	11	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	302	108	j	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg....	—	13	5	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	—	13	5	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg. .	—	12	4	f	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D
33251	Hardware mfg.....	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D
332510	Hardware mfg.....	2	7	4	1 891	50 510	1 464	2 398	34 473	123 498	89 334	226 529	D
3326	Spring & wire product mfg. .	—	9	6	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg.....	—	9	6	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	—	178	56	i	D	D	D	D	D	D	D	D
33271	Machine shops.....	—	128	25	g	D	D	D	D	D	D	D	D
332710	Machine shops.....	—	128	25	g	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg.....	—	50	31	h	D	D	D	D	D	D	D	D
332721	Precision turned product mfg.....	—	25	15	779	23 724	629	1 363	17 571	82 032	26 892	109 292	6 250
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	25	16	h	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	1	36	12	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities.....	1	36	12	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	—	21	10	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	17	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WINNEBAGO COUNTY, IL—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	178	80	12 047	474 173	7 856	16 590	270 711	1 062 983	828 134	1 856 790	61 522
3332	Industrial machinery mfg ..	-	19	9	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	17	7	g	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	10	5	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	10	5	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	95	36	5 331	215 280	3 313	7 529	124 136	447 961	307 676	745 416	27 404
33351	Metalworking machinery mfg	3	95	36	5 331	215 280	3 313	7 529	124 136	447 961	307 676	745 416	27 404
333512	Machine tool (metal cutting types) mfg ...	8	12	7	2 087	86 348	1 171	2 916	48 784	136 401	149 946	284 242	9 039
333514	Special die & tool, die set, jig, & fixture mfg .	-	35	9	f	D	D	D	D	D	D	D	4 047
333515	Cutting tool & machine tool accessory mfg ..	-	26	7	1 630	61 700	1 058	2 242	36 547	168 952	72 589	237 701	D
3336	Engine, turbine, & power transmission equipment mfg	-	10	10	g	D	D	D	D	D	D	D	10 221
33361	Engine, turbine, & power transmission equipment mfg	-	10	10	g	D	D	D	D	D	D	D	10 221
333613	Mechanical power transmission equipment mfg	-	4	4	1 284	49 836	908	1 826	32 090	97 285	76 936	181 490	D
3339	Other general-purpose machinery mfg	-	35	16	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	31	15	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	9	4	521	19 915	356	783	10 921	42 903	27 713	71 507	D
333996	Fluid power pump & motor mfg	-	4	3	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	8	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	14	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	6	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	6	1	f	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	15	7	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	11	5	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	11	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	25	13	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	18	9	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	5	3	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	37	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WOODFORD COUNTY, IL												
31-33	Manufacturing	-	55	19	2 272	74 748	1 847	3 736	48 975	406 279	357 319	644 889	23 422
332	Fabricated metal product mfg	-	14	7	f	D	D	D	D	D	D	D	3 430
333	Machinery mfg	1	7	4	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ADDISON, IL												
31-33	Manufacturing	2	388	154	10 598	346 942	7 638	15 628	200 380	820 700	634 097	1 461 133	52 084
323	Printing & related support activities	2	40	14	1 104	38 616	736	1 473	20 950	78 444	70 012	148 466	3 980
3231	Printing & related support activities	2	40	14	1 104	38 616	736	1 473	20 950	78 444	70 012	148 466	3 980
32311	Printing	2	34	13	1 037	36 989	702	1 416	19 886	74 966	69 299	144 284	3 888
325	Chemical mfg	6	18	7	522	15 855	339	701	8 295	57 357	54 208	112 657	5 673
326	Plastics & rubber products mfg	2	39	24	1 782	48 111	1 423	2 941	29 087	138 390	138 745	278 508	7 743
3261	Plastics product mfg	2	36	23	1 723	46 238	1 371	2 838	27 505	132 520	136 005	270 116	7 540
32619	Other plastics product mfg	5	25	16	998	23 644	808	1 643	15 812	65 529	42 886	108 540	4 826
326199	All other plastics product mfg	5	25	16	998	23 644	808	1 643	15 812	65 529	42 886	108 540	4 826
332	Fabricated metal product mfg	1	124	41	2 517	78 436	1 964	3 943	50 874	171 067	91 339	260 669	11 348
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	43	11	620	20 518	495	1 017	14 871	41 500	18 597	59 112	3 263
3328	Coating, engraving, heat treating, & allied activities	-	22	11	587	15 190	434	789	8 639	35 187	8 373	43 757	2 249
33281	Coating, engraving, heat treating, & allied activities	-	22	11	587	15 190	434	789	8 639	35 187	8 373	43 757	2 249
333	Machinery mfg	-	67	21	1 777	75 804	1 131	2 534	42 186	149 058	122 621	276 027	9 276
3335	Metalworking machinery mfg	-	41	12	872	38 602	583	1 292	23 862	66 223	34 681	106 292	4 109
33351	Metalworking machinery mfg	-	41	12	872	38 602	583	1 292	23 862	66 223	34 681	106 292	4 109
334	Computer & electronic product mfg	1	24	17	1 032	27 426	749	1 423	14 878	66 964	43 348	111 279	2 140
3344	Semiconductor & other electronic component mfg	1	18	12	758	18 337	613	1 148	10 759	44 764	28 296	72 198	1 569
33441	Semiconductor & other electronic component mfg	1	18	12	758	18 337	613	1 148	10 759	44 764	28 296	72 198	1 569
	ALGONQUIN, IL *												
31-33	Manufacturing	-	29	12	1 104	37 281	862	1 655	25 484	66 827	47 618	114 161	5 198
332	Fabricated metal product mfg	-	6	4	601	22 997	484	1 060	16 981	44 451	36 432	80 671	2 804

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALSIP, IL													
31-33	Manufacturing	2	105	47	4 517	174 676	3 042	6 467	95 008	480 659	517 225	1 000 993	34 649
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	30	11	864	38 798	659	1 563	25 240	78 486	114 466	193 398	6 274
333	Machinery mfg	2	16	8	694	26 735	428	874	13 880	49 188	23 786	73 868	1 982
ALTON, IL													
31-33	Manufacturing	-	31	9	1 716	66 087	1 340	2 650	48 813	76 615	282 768	358 388	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
ANTIOCH, IL													
31-33	Manufacturing	1	37	14	967	25 335	707	1 368	14 901	57 618	52 045	111 731	3 205
ARCOLA, IL													
31-33	Manufacturing	-	7	5	1 376	33 226	1 196	2 457	24 221	117 267	74 939	212 981	4 236
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	1	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
ARLINGTON HEIGHTS, IL *													
31-33	Manufacturing	-	120	37	10 976	645 576	5 238	9 873	256 618	902 885	2 174 861	3 052 864	213 870
333	Machinery mfg	-	18	6	552	27 691	370	927	15 664	44 688	29 390	76 150	3 139
334	Computer & electronic product mfg	-	9	4	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
AURORA, IL *													
31-33	Manufacturing	1	148	67	8 759	387 378	5 784	12 489	213 767	1 415 118	1 276 782	2 743 074	70 686
332	Fabricated metal product mfg	1	30	12	923	38 744	724	1 578	23 720	82 287	75 608	161 643	4 945
333	Machinery mfg	-	18	9	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	1	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	6	3	g	D	D	D	D	D	D	D	8 072
3342	Communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	12	6	668	27 042	431	952	15 743	66 635	49 145	116 527	3 670
3372	Office furniture (including fixtures) mfg	4	7	6	653	26 600	420	931	15 549	66 129	48 449	115 310	3 609
33721	Office furniture (including fixtures) mfg	4	7	6	653	26 600	420	931	15 549	66 129	48 449	115 310	3 609

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BARRINGTON, IL *													
31-33	Manufacturing	-	46	12	1 007	38 026	712	1 357	19 168	84 653	145 829	229 046	8 945
BARTLETT, IL *													
31-33	Manufacturing	1	22	7	1 426	58 441	999	2 031	33 454	147 760	148 566	304 718	12 164
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
BARTONVILLE, IL													
31-33	Manufacturing	-	18	8	1 861	70 312	1 459	2 837	52 392	134 327	209 091	337 787	D
331	Primary metal mfg	-	2	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
BATAVIA, IL *													
31-33	Manufacturing	1	104	37	4 283	139 564	3 047	5 959	76 142	389 952	333 617	718 723	31 826
326	Plastics & rubber products mfg	-	12	10	1 321	36 248	1 096	2 220	24 990	113 623	80 496	191 406	16 421
3261	Plastics product mfg	-	12	10	1 321	36 248	1 096	2 220	24 990	113 623	80 496	191 406	16 421
32619	Other plastics product mfg	-	7	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	7	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	685	27 694	434	854	9 644	41 927	31 527	72 569	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
BEARDSTOWN, IL													
31-33	Manufacturing	-	10	5	g	D	D	D	D	D	D	D	5 269
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	g	D	D	D	D	D	D	D	D
BEDFORD PARK, IL *													
31-33	Manufacturing	-	109	73	8 545	305 705	5 897	11 566	175 407	1 309 013	1 122 832	2 418 583	61 527
322	Paper mfg	-	7	7	823	33 494	507	1 103	15 143	61 531	77 868	141 390	7 160
3222	Converted paper product mfg	-	7	7	823	33 494	507	1 103	15 143	61 531	77 868	141 390	7 160
32221	Paperboard container mfg	-	6	6	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	6	6	1 128	28 088	819	1 547	20 302	74 953	69 360	144 059	4 410
3231	Printing & related support activities	2	6	6	1 128	28 088	819	1 547	20 302	74 953	69 360	144 059	4 410
32311	Printing	2	5	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	9	1 220	51 892	686	1 532	24 345	614 108	447 161	1 063 158	14 912
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	6	3	604	19 616	328	834	7 003	93 456	58 089	155 486	6 161
326	Plastics & rubber products mfg	1	6	5	1 050	40 387	590	1 388	21 242	133 023	48 142	179 627	13 381
3261	Plastics product mfg	1	5	5	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	2	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	14	1 297	48 862	1 006	1 768	31 344	160 017	121 159	279 685	5 925
3321	Forging & stamping	-	4	4	554	18 588	429	619	12 236	47 465	41 636	87 197	887
33211	Forging & stamping	-	4	4	554	18 588	429	619	12 236	47 465	41 636	87 197	887

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BEDFORD PARK, IL *—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	8	8	1 216	37 078	1 009	1 812	25 769	82 778	73 621	152 259	6 616
3363	Motor vehicle parts mfg ...	—	6	6	f	D	D	D	D	D	D	D	D
	BELLEVILLE, IL												
31-33	Manufacturing	—	60	15	2 239	65 652	1 626	3 072	34 621	159 016	150 033	307 721	11 035
333	Machinery mfg	—	9	4	665	26 350	353	643	8 294	67 562	47 513	114 053	3 749
	BELLWOOD, IL												
31-33	Manufacturing	—	55	31	4 090	147 641	2 913	5 684	86 239	374 398	348 420	721 252	24 081
323	Printing & related support activities.....	—	10	4	507	19 213	408	791	13 530	29 355	19 245	49 069	3 000
3231	Printing & related support activities.....	—	10	4	507	19 213	408	791	13 530	29 355	19 245	49 069	3 000
336	Transportation equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	1	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	—	1	1	f	D	D	D	D	D	D	D	D
	BELVIDERE, IL												
31-33	Manufacturing	—	29	12	i	D	D	D	D	D	D	D	D
311	Food mfg	3	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	6	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
	BENSENVILLE, IL *												
31-33	Manufacturing	2	265	100	7 802	263 690	5 762	11 665	165 848	555 054	413 191	966 991	31 055
323	Printing & related support activities.....	1	33	15	1 462	48 557	1 081	1 841	31 866	78 509	71 654	150 765	4 542
3231	Printing & related support activities.....	1	33	15	1 462	48 557	1 081	1 841	31 866	78 509	71 654	150 765	4 542
32311	Printing	2	25	12	1 293	43 639	952	1 581	28 868	69 377	70 068	140 051	D
323116	Manifold business form printing.....	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	22	12	1 137	33 336	893	1 852	21 380	74 024	58 220	131 895	6 128
3261	Plastics product mfg	5	20	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	19	12	g	D	D	D	D	D	D	D	6 088
326199	All other plastics product mfg	5	18	11	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	8	6	602	21 626	492	1 107	14 840	51 744	36 486	87 314	3 210
332	Fabricated metal product mfg	2	89	27	1 525	51 536	1 198	2 348	35 020	110 992	77 914	188 156	7 984
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	48	11	671	22 744	519	1 017	15 957	43 273	25 801	68 617	4 071
333	Machinery mfg	1	42	11	1 071	44 193	669	1 483	24 961	80 041	41 793	121 748	2 782

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BENTON, IL													
31-33	Manufacturing	-	16	5	1 014	20 347	835	1 247	14 041	53 189	94 169	146 339	2 751
336	Transportation equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building	-	2	2	f	D	D	D	D	D	D	D	D
BERKELEY, IL													
31-33	Manufacturing	-	12	6	577	24 514	401	818	12 413	64 811	66 982	131 702	4 234
BERWYN, IL													
31-33	Manufacturing	1	22	4	585	23 585	333	683	10 993	47 120	32 205	79 495	853
BLOOMINGDALE, IL													
31-33	Manufacturing	-	25	9	506	15 416	303	557	7 289	37 434	66 701	103 428	1 149
BLOOMINGTON, IL													
31-33	Manufacturing	-	59	22	h	D	D	D	D	D	D	D	25 851
311	Food mfg	-	13	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	15	6	589	21 692	426	925	12 695	46 986	27 475	72 666	8 481
3231	Printing & related support activities	2	15	6	589	21 692	426	925	12 695	46 986	27 475	72 666	8 481
32311	Printing	2	13	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLUE ISLAND, IL													
31-33	Manufacturing	-	39	16	2 570	85 333	1 926	3 959	54 406	247 910	654 060	896 063	36 607
332	Fabricated metal product mfg	-	10	2	638	22 980	520	1 062	16 765	46 969	26 830	73 816	D
3321	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
BOLINGBROOK, IL *													
31-33	Manufacturing	-	21	8	2 453	153 757	845	1 889	34 846	530 148	285 763	807 877	D
334	Computer & electronic product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
BRADLEY, IL													
31-33	Manufacturing	-	20	9	1 741	75 620	1 087	2 280	34 202	196 667	386 716	563 513	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRIDGEVIEW, IL													
31-33	Manufacturing	-	84	30	3 022	103 113	2 207	4 351	64 302	425 224	420 405	839 975	18 782
332	Fabricated metal product mfg	-	23	9	595	21 078	430	771	13 154	55 086	90 683	145 045	4 145
333	Machinery mfg	-	13	4	592	18 858	444	909	11 903	32 734	85 262	113 534	1 449
BROADVIEW, IL													
31-33	Manufacturing	1	80	43	4 367	139 863	3 298	6 452	84 673	307 970	259 520	561 263	16 856
323	Printing & related support activities	1	23	9	1 138	34 145	883	1 590	24 421	63 638	52 324	114 068	3 954
3231	Printing & related support activities	1	23	9	1 138	34 145	883	1 590	24 421	63 638	52 324	114 068	3 954
32311	Printing	-	16	6	508	22 448	369	805	16 056	43 890	45 630	87 847	2 935
32312	Support activities for printing	6	7	3	630	11 697	514	785	8 365	19 748	6 694	26 221	1 019
323121	Tradebinding & related work	6	4	3	606	10 583	499	747	7 573	17 814	6 068	23 700	D
332	Fabricated metal product mfg	-	21	11	1 136	42 288	909	1 809	26 923	96 530	51 640	146 976	7 456
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
BUFFALO GROVE, IL *													
31-33	Manufacturing	-	54	21	3 889	138 279	2 710	5 512	76 748	337 885	297 184	652 089	21 473
326	Plastics & rubber products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	15	9	946	43 370	631	1 366	24 386	123 100	86 999	242 871	3 985
3335	Metalworking machinery mfg	1	9	6	769	36 922	508	1 171	20 778	100 578	57 541	188 828	3 273
33351	Metalworking machinery mfg	1	9	6	769	36 922	508	1 171	20 778	100 578	57 541	188 828	3 273
333518	Other metalworking machinery mfg	1	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
BURR RIDGE, IL *													
31-33	Manufacturing	2	51	28	2 260	84 544	1 601	3 250	51 282	242 781	133 937	375 960	17 201
323	Printing & related support activities	3	11	7	586	21 707	431	910	13 126	59 770	28 650	88 371	8 480
3231	Printing & related support activities	3	11	7	586	21 707	431	910	13 126	59 770	28 650	88 371	8 480
32311	Printing	3	11	7	586	21 707	431	910	13 126	59 770	28 650	88 371	8 480
BUSHNELL, IL													
31-33	Manufacturing	1	10	7	569	14 836	460	905	11 085	32 419	37 918	71 078	3 071
CALUMET CITY, IL													
31-33	Manufacturing	3	19	8	757	23 422	481	985	13 848	77 996	77 389	155 295	12 585

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAROL STREAM, IL													
31-33	Manufacturing	-	91	49	5 123	190 783	3 534	7 704	103 657	503 514	481 817	973 326	62 206
323	Printing & related support activities.....	1	18	10	1 504	50 847	1 059	2 445	31 291	140 686	93 962	232 428	21 655
3231	Printing & related support activities.....	1	18	10	1 504	50 847	1 059	2 445	31 291	140 686	93 962	232 428	21 655
32311	Printing	1	17	9	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	11	6	1 158	37 514	814	1 900	22 543	104 885	75 973	178 549	16 259
332	Fabricated metal product mfg	-	17	8	1 079	36 632	811	1 755	24 652	82 768	63 417	146 242	10 274
3329	Other fabricated metal product mfg.....	-	4	3	611	20 463	455	988	13 893	51 787	49 532	101 507	3 654
33291	Metal valve mfg	-	3	3	f	D	D	D	D	D	D	D	D
CARPENTERSVILLE, IL													
31-33	Manufacturing	1	40	16	2 066	73 679	1 413	3 016	38 419	137 041	156 185	294 386	12 317
CARTHAGE, IL													
31-33	Manufacturing	-	5	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
CARY, IL													
31-33	Manufacturing	-	58	21	1 957	61 216	1 373	2 824	34 477	184 051	184 751	365 111	15 867
326	Plastics & rubber products mfg	-	6	3	587	23 742	372	758	11 630	51 592	71 413	122 459	D
3261	Plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
CASEY, IL *													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
CENTRALIA, IL *													
31-33	Manufacturing	1	22	11	1 382	36 356	1 033	1 921	24 252	103 956	104 821	209 433	7 573
CHAMPAIGN, IL													
31-33	Manufacturing	1	67	21	2 846	74 754	2 081	3 778	47 573	219 205	176 848	393 171	19 539
323	Printing & related support activities.....	1	19	8	689	17 427	420	678	9 895	50 454	24 644	75 097	1 544
3231	Printing & related support activities.....	1	19	8	689	17 427	420	678	9 895	50 454	24 644	75 097	1 544
32311	Printing	1	15	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
CHARLESTON, IL													
31-33	Manufacturing	-	17	6	1 283	41 658	1 103	2 297	34 581	154 337	234 770	404 664	3 216
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	CHICAGO, IL *												
31-33	Manufacturing	1	3 195	1 126	130 372	4 178 425	95 706	194 893	2 572 050	13 497 813	13 185 467	26 745 880	719 939
311	Food mfg.....	1	409	148	26 769	835 509	19 244	40 519	539 169	3 809 763	3 380 509	7 187 873	181 856
3112	Grain & oilseed milling	-	11	6	f	D	D	D	D	D	D	D	3 695
3113	Sugar & confectionery product mfg.....	-	29	16	5 323	186 602	4 609	9 626	146 710	1 042 828	639 705	1 685 842	48 128
31133	Confectionery mfg from purchased chocolate...	-	17	8	2 752	93 838	2 193	5 177	67 586	557 251	331 254	884 672	25 362
311330	Confectionery mfg from purchased chocolate.....	-	17	8	2 752	93 838	2 193	5 177	67 586	557 251	331 254	884 672	25 362
31134	Nonchocolate confectionery mfg.....	-	10	7	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	10	7	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	2	25	10	2 467	58 033	2 082	4 828	38 541	156 654	210 140	365 473	10 791
31141	Frozen food mfg.....	2	14	6	2 132	46 700	1 817	4 269	31 843	121 787	170 417	290 720	8 239
311412	Frozen specialty food mfg.....	3	12	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	78	47	6 030	172 450	4 661	9 643	108 019	516 568	1 011 800	1 528 625	25 645
31161	Animal slaughtering & processing.....	2	78	47	6 030	172 450	4 661	9 643	108 019	516 568	1 011 800	1 528 625	25 645
311611	Animal (except poultry) slaughtering	2	18	10	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	53	32	3 651	107 744	2 828	5 997	67 706	358 400	647 466	1 009 509	16 725
311615	Poultry processing.....	9	6	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	186	35	8 551	272 798	5 082	10 298	162 545	1 278 910	655 234	1 923 175	65 341
31181	Bread & bakery product mfg.....	4	167	26	5 397	144 656	2 407	4 401	61 260	322 039	164 838	487 807	D
311811	Retail bakeries.....	3	120	8	g	D	D	D	D	D	D	D	1 482
311812	Commercial bakeries ..	4	44	16	4 142	125 080	1 586	3 312	51 061	278 927	136 345	416 130	16 746
31182	Cookie, cracker, & pasta mfg.....	-	15	5	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	6	5	h	D	D	D	D	D	D	D	D
3119	Other food mfg.....	4	62	27	3 232	107 312	2 060	4 514	61 902	676 274	528 656	1 202 823	25 542
31191	Snack food mfg.....	-	9	4	f	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg.....	1	4	1	f	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg.....	1	4	1	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	8	11	5	663	27 934	436	881	15 837	331 399	173 807	504 408	D
31199	All other food mfg.....	1	33	13	1 350	42 951	1 086	2 433	32 331	164 170	188 116	352 877	11 666
311999	All other miscellaneous food mfg.....	1	19	7	937	34 237	747	1 709	26 048	140 709	174 323	315 596	9 800
312	Beverage & tobacco product mfg.....	-	11	6	1 205	37 025	498	1 112	15 950	176 839	226 344	403 228	3 739
3121	Beverage mfg.....	-	10	6	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	7	4	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
313	Textile mills.....	3	28	5	f	D	D	D	D	D	D	D	3 688
314	Textile product mills.....	5	76	22	2 040	43 623	1 493	2 741	27 286	122 065	91 962	215 594	3 606
3141	Textile furnishings mills...	2	39	7	778	14 802	531	1 005	9 535	60 663	40 156	102 904	761
31412	Curtain & linen mills....	2	38	7	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	2	12	7	f	D	D	D	D	D	D	D	607
3149	Other textile product mills..	7	37	15	1 262	28 821	962	1 736	17 751	61 402	51 806	112 690	2 845
31491	Textile bag & canvas mills.....	8	19	8	684	16 700	496	892	10 008	35 522	34 128	68 934	1 951
314912	Canvas & related product mills.....	8	16	7	619	15 624	446	826	9 355	35 070	33 798	68 152	D
31499	All other textile product mills.....	7	18	7	578	12 121	466	844	7 743	25 880	17 678	43 756	894
314999	All other miscellaneous textile product mills ..	7	18	7	578	12 121	466	844	7 743	25 880	17 678	43 756	894

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO, IL *—Con. Manufacturing—Con.												
315	Apparel mfg	2	127	46	5 632	125 011	4 469	8 141	68 508	238 704	256 437	499 762	10 085
3151	Apparel knitting mills	—	9	6	519	11 516	474	886	8 267	20 742	17 043	36 919	D
31519	Other apparel knitting mills	—	9	6	519	11 516	474	886	8 267	20 742	17 043	36 919	D
3152	Cut & sew apparel mfg	4	84	28	3 262	60 896	2 873	5 364	43 969	113 311	65 845	177 598	D
31521	Cut & sew apparel contractors	8	36	7	g	D	D	D	D	D	D	D	D
315212	Women's, girls' & infants' cut & sew apparel contractors ..	8	33	6	1 284	19 479	1 208	2 080	17 294	31 707	9 377	41 077	D
31522	Men's & boys' cut & sew apparel mfg	3	12	7	1 048	21 845	876	1 898	14 750	39 754	29 458	68 281	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	7	6	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	22	11	f	D	D	D	D	D	D	D	569
3159	Apparel accessories & other apparel mfg	1	34	12	1 851	52 599	1 122	1 891	16 272	104 651	173 549	285 245	5 358
31599	Apparel accessories & other apparel mfg	1	34	12	1 851	52 599	1 122	1 891	16 272	104 651	173 549	285 245	5 358
315992	Glove & mitten mfg ...	—	3	2	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	2	26	7	g	D	D	D	D	D	D	D	2 615
316	Leather & allied product mfg .	1	27	12	g	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	19	9	g	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	19	9	g	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	6	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	5	63	20	1 183	28 519	981	1 942	20 063	55 572	59 275	115 301	2 542
3219	Other wood product mfg ...	5	58	17	1 001	24 336	832	1 631	17 178	47 130	51 178	98 677	D
322	Paper mfg	1	89	62	6 626	212 971	4 706	9 751	131 883	477 118	544 078	1 026 812	35 050
3222	Converted paper product mfg	2	88	61	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	55	41	3 846	134 232	2 939	6 064	84 839	308 600	360 825	672 188	19 251
322211	Corrugated & solid fiber box mfg	2	23	17	1 647	64 176	1 156	2 351	34 950	133 927	178 013	312 702	10 177
322212	Folding paperboard box mfg	—	19	15	1 288	47 860	1 050	2 445	33 804	126 867	137 216	266 906	5 961
322215	Nonfolding sanitary food container mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	2	12	8	1 355	41 161	831	1 775	21 523	97 828	100 043	199 044	7 593
322222	Coated & laminated paper mfg	6	6	4	503	13 563	256	577	6 781	41 754	37 182	79 817	4 000
322223	Plastics, foil, & coated paper bag mfg	—	2	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	4	15	8	1 187	29 338	763	1 568	19 887	53 757	63 177	118 913	D
322232	Envelope mfg	4	9	6	1 060	26 067	663	1 363	17 522	48 052	60 988	111 011	D
323	Printing & related support activities	3	484	105	7 987	292 528	5 620	11 195	174 349	584 359	308 413	891 331	37 782
3231	Printing & related support activities	3	484	105	7 987	292 528	5 620	11 195	174 349	584 359	308 413	891 331	37 782
32311	Printing	3	395	75	5 776	208 091	4 050	8 078	120 928	408 613	252 192	659 398	28 642
323110	Commercial lithographic printing ..	3	183	46	3 265	131 834	2 309	4 712	77 826	258 418	153 797	411 246	18 091
323119	Other commercial printing	5	54	6	577	20 216	396	888	11 470	34 750	20 172	54 991	2 810
32312	Support activities for printing	4	89	30	2 211	84 437	1 570	3 117	53 421	175 746	56 221	231 933	9 140
323121	Tradebinding & related work	4	31	12	1 024	26 024	766	1 548	16 021	45 095	8 011	53 365	2 722
323122	Prepress services	4	58	18	1 187	58 413	804	1 569	37 400	130 651	48 210	178 568	6 418
325	Chemical mfg	1	123	51	4 904	187 117	3 069	6 146	97 071	955 604	834 532	1 784 698	55 178
3251	Basic chemical mfg	—	16	10	731	35 978	420	896	18 307	163 091	264 731	423 897	13 988
3255	Paint, coating, & adhesive mfg	1	33	13	938	34 080	528	1 060	14 909	182 353	202 724	385 057	5 843
32551	Paint & coating mfg	1	26	12	838	29 845	466	915	12 720	150 573	185 186	335 482	5 104
325510	Paint & coating mfg ...	1	26	12	838	29 845	466	915	12 720	150 573	185 186	335 482	5 104
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	39	17	2 313	81 077	1 541	2 941	42 965	498 259	272 365	764 943	24 623
32561	Soap & cleaning compound mfg	3	25	7	514	16 868	333	680	8 103	59 975	50 302	110 986	2 703
32562	Toilet preparation mfg ...	1	14	10	1 799	64 209	1 208	2 261	34 862	438 284	222 063	653 957	21 920
325620	Toilet preparation mfg .	1	14	10	1 799	64 209	1 208	2 261	34 862	438 284	222 063	653 957	21 920

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			Total	With 20 em- ploy- ees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO, IL *—Con. Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	1	23	9	802	32 366	501	1 075	18 816	95 533	79 366	177 995	9 822
32599	All other chemical product & preparation mfg	2	16	7	598	23 669	362	736	13 185	70 934	59 777	132 161	9 429
326	Plastics & rubber products mfg	2	113	59	6 082	174 579	4 953	10 053	114 788	402 571	398 633	798 045	24 217
3261	Plastics product mfg	2	95	49	5 368	153 109	4 350	8 863	99 139	364 371	376 463	736 862	22 934
32611	Unsupported plastics film, sheet, & bag mfg ..	1	8	7	557	15 694	400	826	9 838	41 986	69 252	110 790	2 627
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	10	5	577	16 988	393	841	8 896	33 641	24 691	58 414	2 306
326121	Unsupported plastics profile shape mfg	2	9	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	65	32	3 723	108 447	3 141	6 413	71 539	263 729	238 017	498 405	14 504
326199	All other plastics product mfg	1	64	31	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	18	10	714	21 470	603	1 190	15 649	38 200	22 170	61 183	1 283
32629	Other rubber product mfg	1	12	6	f	D	D	D	D	D	D	D	977
327	Nonmetallic mineral product mfg	2	68	31	1 810	58 429	1 453	3 111	41 939	157 346	142 219	299 980	12 324
3272	Glass & glass product mfg ..	-	20	6	548	15 603	456	1 016	9 913	44 750	30 100	74 264	2 891
32721	Glass & glass product mfg	-	20	6	548	15 603	456	1 016	9 913	44 750	30 100	74 264	2 891
327215	Glass product mfg made of purchased glass	-	17	6	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	4	23	13	637	18 542	494	1 017	12 777	42 335	30 241	73 802	D
331	Primary metal mfg	1	70	41	4 486	167 946	3 389	7 166	113 795	411 473	791 463	1 193 830	38 060
3311	Iron & steel mills & ferroalloy mfg	1	6	5	1 392	60 514	1 101	2 378	43 516	143 820	305 723	450 351	10 183
33111	Iron & steel mills & ferroalloy mfg	1	6	5	1 392	60 514	1 101	2 378	43 516	143 820	305 723	450 351	10 183
331111	Iron & steel mills	1	6	5	1 392	60 514	1 101	2 378	43 516	143 820	305 723	450 351	10 183
3312	Steel product mfg from purchased steel	-	9	7	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	5	5	765	30 402	479	1 011	18 771	109 339	244 992	341 777	13 012
331210	Iron & steel pipes & tubes mfg from purchased steel	-	5	5	765	30 402	479	1 011	18 771	109 339	244 992	341 777	13 012
3314	Nonferrous metal (except aluminum) production & processing	-	12	8	617	23 520	471	1 010	15 171	56 240	122 463	180 375	6 749
3315	Foundries	2	39	19	1 259	38 030	968	2 038	25 028	75 208	57 017	132 943	D
33152	Nonferrous metal foundries	2	30	13	1 046	32 269	812	1 738	20 996	60 984	49 223	110 895	3 399
331521	Aluminum die-casting foundries	-	7	4	503	16 173	388	831	10 039	30 819	23 826	56 274	2 117
332	Fabricated metal product mfg	1	571	219	20 502	685 694	15 811	32 784	444 161	1 428 688	1 168 122	2 611 494	89 705
3321	Forging & stamping	-	74	37	4 730	162 402	3 807	8 231	117 424	380 668	413 499	803 290	30 741
33211	Forging & stamping	-	74	37	4 730	162 402	3 807	8 231	117 424	380 668	413 499	803 290	30 741
332115	Crown & closure mfg ..	-	3	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	61	31	3 476	117 529	2 867	6 164	84 707	274 788	293 748	578 733	19 724
3322	Cutlery & handtool mfg	3	20	7	1 450	49 940	1 047	2 304	28 216	97 547	61 466	173 770	9 518
33221	Cutlery & handtool mfg ..	3	20	7	1 450	49 940	1 047	2 304	28 216	97 547	61 466	173 770	9 518
332212	Hand & edge tool mfg ..	3	16	5	1 370	48 019	984	2 189	27 156	93 370	59 509	167 640	D
3323	Architectural & structural metals mfg	1	85	32	3 062	95 584	2 169	4 334	57 405	217 207	133 551	349 442	9 867
33231	Plate work & fabricated structural product mfg ..	1	23	11	528	19 989	386	875	12 315	49 218	31 742	81 161	1 979
33232	Ornamental & architectural metal products mfg	1	62	21	2 534	75 595	1 783	3 459	45 090	167 989	101 809	268 281	7 888
332321	Metal window & door mfg	2	19	4	688	19 203	463	978	9 447	39 842	27 246	66 333	1 362
332322	Sheet metal work mfg ..	1	27	10	1 109	33 800	837	1 500	22 855	81 675	41 084	122 064	5 483
332323	Ornamental & architectural metal work mfg	-	16	7	737	22 592	483	981	12 788	46 472	33 479	79 884	1 043

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO, IL *—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	22	11	1 161	48 102	938	2 236	33 843	100 080	188 509	285 978	5 852
33243	Metal can, box, & other metal container (light gauge) mfg	—	15	10	1 015	40 505	825	1 988	29 115	87 070	181 718	266 047	D
332439	Other metal container mfg	—	12	7	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	1	52	25	2 298	75 722	1 878	3 866	49 811	158 998	124 368	275 958	10 900
33261	Spring & wire product mfg	1	52	25	2 298	75 722	1 878	3 866	49 811	158 998	124 368	275 958	10 900
332612	Spring (light gauge) mfg	1	15	10	945	34 899	802	1 801	24 164	73 029	44 881	114 858	3 745
332618	Other fabricated wire product mfg	—	29	12	937	25 666	728	1 302	14 061	57 529	45 945	99 175	5 443
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	145	40	2 747	92 635	2 095	4 176	62 470	156 133	82 679	239 179	9 935
33271	Machine shops	2	96	22	1 546	54 995	1 223	2 460	38 527	92 795	48 082	140 715	5 391
332710	Machine shops	2	96	22	1 546	54 995	1 223	2 460	38 527	92 795	48 082	140 715	5 391
33272	Turned product & screw, nut, & bolt mfg	2	49	18	1 201	37 640	872	1 716	23 943	63 338	34 597	98 464	4 544
332721	Precision turned product mfg	4	36	11	741	22 008	585	1 149	15 000	39 175	14 254	53 327	3 111
3328	Coating, engraving, heat treating, & allied activities .	1	121	50	3 470	107 721	2 675	5 341	64 081	181 647	84 348	267 730	8 623
33281	Coating, engraving, heat treating, & allied activities	1	121	50	3 470	107 721	2 675	5 341	64 081	181 647	84 348	267 730	8 623
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	26	14	777	20 763	587	1 206	13 247	42 869	28 289	70 545	994
332813	Electroplating, plating, polishing, anodizing, & coloring	1	86	32	2 456	78 283	1 908	3 782	45 683	126 442	50 765	177 605	5 444
3329	Other fabricated metal product mfg	2	45	14	1 208	43 187	931	1 775	24 047	117 575	66 471	183 835	2 536
33299	All other fabricated metal product mfg	1	36	9	752	23 671	572	1 119	15 702	63 049	47 948	111 097	1 673
333	Machinery mfg	1	212	68	6 219	239 105	4 350	8 589	143 161	483 283	291 950	791 104	32 265
3332	Industrial machinery mfg ..	1	33	12	744	27 453	473	833	13 941	46 579	41 193	87 420	2 134
33329	Other industrial machinery mfg	1	31	12	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	2	36	11	678	22 445	496	799	12 750	49 784	34 453	84 028	1 749
33331	Commercial & service industry machinery mfg	2	36	11	678	22 445	496	799	12 750	49 784	34 453	84 028	1 749
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	7	612	22 829	446	915	13 252	60 159	31 581	90 590	3 230
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	7	612	22 829	446	915	13 252	60 159	31 581	90 590	3 230
3335	Metalworking machinery mfg	—	74	15	1 902	78 360	1 357	2 792	52 147	167 303	74 139	253 650	10 044
33351	Metalworking machinery mfg	—	74	15	1 902	78 360	1 357	2 792	52 147	167 303	74 139	253 650	10 044
333513	Machine tool (metal forming types) mfg	—	3	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	1	14	7	1 009	40 586	750	1 550	28 063	77 806	37 638	120 676	5 405
33361	Engine, turbine, & power transmission equipment mfg	1	14	7	1 009	40 586	750	1 550	28 063	77 806	37 638	120 676	5 405
333612	Speed changer, industrial high-speed drive, & gear mfg	—	11	7	999	40 109	742	1 531	27 743	76 689	36 465	118 360	5 320
3339	Other general-purpose machinery mfg	2	39	15	1 092	40 919	693	1 408	18 800	75 583	61 336	137 342	8 193
33399	All other general-purpose machinery mfg	2	23	9	814	31 237	484	961	13 579	58 681	46 374	105 745	7 642

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31-33	CHICAGO, IL *—Con. Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	94	38	5 200	160 027	3 155	6 290	64 750	397 425	246 613	645 997	19 562
3341	Computer & peripheral equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	1	36	17	1 985	46 629	1 641	3 210	31 682	89 843	62 148	151 912	4 288
33441	Semiconductor & other electronic component mfg.....	1	36	17	1 985	46 629	1 641	3 210	31 682	89 843	62 148	151 912	4 288
334416	Electronic coil, transformer, & other inductor mfg.....	1	12	5	569	12 889	471	1 065	8 511	19 463	12 898	32 434	652
334417	Electronic connector mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	22	9	1 433	48 021	856	1 741	17 702	107 904	50 823	160 574	3 232
33451	Navigational, measuring, medical, & control instruments mfg.....	—	22	9	1 433	48 021	856	1 741	17 702	107 904	50 823	160 574	3 232
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	81	38	6 119	211 723	4 212	9 095	117 767	535 399	409 229	939 641	46 133
3351	Electric lighting equipment mfg.....	—	34	16	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg.....	—	32	16	1 838	52 001	1 365	2 866	29 604	137 278	74 647	203 995	D
335121	Residential electric lighting fixture mfg....	—	20	9	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	4	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg....	—	4	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	—	26	14	2 619	110 892	1 627	3 603	56 702	283 078	180 445	463 621	26 891
33531	Electrical equipment mfg.....	—	26	14	2 619	110 892	1 627	3 603	56 702	283 078	180 445	463 621	26 891
335311	Power, distribution, & specialty transformer mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	—	6	5	1 716	79 158	1 093	2 511	41 995	167 774	126 014	293 380	D
3359	Other electrical equipment & component mfg.....	—	17	6	g	D	D	D	D	D	D	D	16 091
33593	Wiring device mfg.....	—	10	5	1 021	32 960	757	1 625	20 092	79 887	98 133	178 534	D
335932	Noncurrent-carrying wiring device mfg....	—	5	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	67	32	7 477	271 664	6 350	12 253	206 529	2 254 021	3 135 584	5 442 288	77 924
3361	Motor vehicle mfg.....	—	4	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	4	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	1	51	22	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg.....	—	8	2	547	11 284	470	428	7 963	26 878	28 861	52 914	2 403
336312	Gasoline engine & engine parts mfg.....	—	7	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	—	11	6	593	18 436	437	536	7 345	34 500	25 910	61 427	5 163
336399	All other motor vehicle parts mfg.....	—	11	6	593	18 436	437	536	7 345	34 500	25 910	61 427	5 163
3365	Railroad rolling stock mfg..	—	5	4	929	36 312	732	1 767	23 143	S	S	198 894	438
33651	Railroad rolling stock mfg.....	—	5	4	929	36 312	732	1 767	23 143	S	S	198 894	438
336510	Railroad rolling stock mfg.....	—	5	4	929	36 312	732	1 767	23 143	S	S	198 894	438

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO, IL *—Con. Manufacturing—Con.												
337	Furniture & related product mfg	1	180	45	5 278	135 516	4 239	8 130	88 017	311 579	236 146	546 750	10 002
3371	Household & institutional furniture & kitchen cabinet mfg	3	113	18	1 627	37 015	1 379	2 474	26 828	66 122	59 033	125 561	2 610
33712	Household & institutional furniture mfg	3	70	15	1 176	27 255	995	1 767	20 021	47 640	40 095	88 077	1 906
3372	Office furniture (including fixtures) mfg	—	47	22	3 196	87 433	2 539	5 034	55 530	223 033	148 063	369 579	6 598
33721	Office furniture (including fixtures) mfg	—	47	22	3 196	87 433	2 539	5 034	55 530	223 033	148 063	369 579	6 598
337215	Showcase, partition, shelving, & locker mfg	—	31	16	2 555	65 957	2 088	4 005	42 938	174 861	120 907	293 857	5 342
339	Miscellaneous mfg	1	291	76	8 259	246 613	5 601	11 380	121 401	557 525	486 143	1 041 502	33 202
3391	Medical equipment & supplies mfg	2	94	12	1 209	34 231	810	1 548	17 746	87 567	44 200	131 344	4 334
33911	Medical equipment & supplies mfg	2	94	12	1 209	34 231	810	1 548	17 746	87 567	44 200	131 344	4 334
339114	Dental equipment & supplies mfg	—	10	4	500	18 623	290	595	8 380	53 769	27 498	80 442	2 715
3399	Other miscellaneous mfg ..	1	197	64	7 050	212 382	4 791	9 832	103 655	469 958	441 943	910 158	28 868
33991	Jewelry & silverware mfg	2	40	8	667	15 385	505	819	8 953	41 558	37 076	75 783	771
33993	Doll, toy, & game mfg ...	—	19	7	776	21 880	585	1 178	10 110	69 506	71 853	141 664	3 561
339932	Game, toy, & children's vehicle mfg	1	15	5	f	D	D	D	D	D	D	D	D
33995	Sign mfg	1	50	19	1 779	64 724	1 027	2 119	28 517	120 635	98 152	219 930	3 551
339950	Sign mfg	1	50	19	1 779	64 724	1 027	2 119	28 517	120 635	98 152	219 930	3 551
33999	All other miscellaneous mfg	1	64	25	3 247	95 695	2 249	4 945	49 068	200 785	185 177	384 048	18 319
339994	Broom, brush, & mop mfg	—	8	4	673	27 141	393	1 157	13 399	47 762	27 426	74 529	3 767
339999	All other miscellaneous mfg	1	33	12	1 961	51 920	1 404	2 879	25 368	121 082	128 268	248 972	12 466
	CHICAGO HEIGHTS, IL												
31-33	Manufacturing	—	71	31	4 061	149 042	3 003	6 782	97 420	419 292	565 665	982 474	25 657
325	Chemical mfg	—	7	5	505	22 612	390	934	14 943	84 924	111 913	202 652	8 986
331	Primary metal mfg	—	8	5	863	33 749	677	1 513	22 841	67 310	132 802	196 700	6 579
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D
	CHICAGO RIDGE, IL												
31-33	Manufacturing	—	18	5	863	26 851	618	1 288	15 548	52 050	40 923	91 928	5 299
	CICERO, IL												
31-33	Manufacturing	—	123	61	5 613	190 667	4 219	9 035	120 610	499 866	488 256	973 200	30 840
322	Paper mfg	—	6	6	628	20 041	486	1 042	12 443	45 335	45 852	93 129	2 344
3222	Converted paper product mfg	—	6	6	628	20 041	486	1 042	12 443	45 335	45 852	93 129	2 344
32221	Paperboard container mfg	—	5	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	3	3	893	30 963	751	1 713	22 776	109 068	161 148	260 626	6 692
332	Fabricated metal product mfg	—	30	16	1 120	39 884	861	1 983	24 980	69 129	45 716	115 377	4 471
333	Machinery mfg	1	12	9	797	28 342	452	919	13 859	51 728	38 296	89 397	1 837
	CLINTON, IL												
31-33	Manufacturing	—	8	6	f	D	D	D	D	D	D	D	D

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CREST HILL, IL													
31-33	Manufacturing	-	18	8	565	19 518	436	851	12 595	80 551	80 636	158 932	4 147
CRYSTAL LAKE, IL													
31-33	Manufacturing	1	99	43	5 437	186 790	3 965	8 755	115 924	449 038	305 484	756 313	42 106
323	Printing & related support activities.....	1	18	7	958	35 630	709	1 505	22 841	72 149	32 684	105 230	16 826
3231	Printing & related support activities.....	1	18	7	958	35 630	709	1 505	22 841	72 149	32 684	105 230	16 826
32311	Printing	1	15	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	18	7	948	36 599	788	1 512	27 082	91 505	55 610	148 150	6 490
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	24	12	1 762	60 476	1 405	3 567	41 609	92 033	90 683	185 687	5 812
3335	Metalworking machinery mfg	-	10	7	1 129	38 366	896	2 334	28 590	59 061	40 405	97 708	3 047
33351	Metalworking machinery mfg	-	10	7	1 129	38 366	896	2 334	28 590	59 061	40 405	97 708	3 047
333515	Cutting tool & machine tool accessory mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	5	539	14 971	230	475	4 804	66 793	46 709	112 836	D
DANVILLE, IL													
31-33	Manufacturing	-	60	29	4 864	160 458	3 819	7 991	115 838	507 484	842 772	1 363 367	52 383
311	Food mfg	-	5	4	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	12	6	679	22 259	550	1 192	16 455	54 031	61 080	113 087	3 807
333	Machinery mfg	-	7	5	g	D	D	D	D	D	D	D	1 566
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
DARIEN, IL													
31-33	Manufacturing	-	17	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D

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DECATUR, IL													
31-33	Manufacturing	-	98	38									181 592
311	Food mfg	-	13	9									D
3112	Grain & oilseed milling	-	6	5									D
31122	Starch & vegetable fats & oils mfg	-	5	4									D
311221	Wet corn milling	-	2	2									D
325	Chemical mfg	-	9	5									D
326	Plastics & rubber products mfg	-	3	2									D
3262	Rubber product mfg	-	2	1									D
32621	Tire mfg	-	1	1									D
326211	Tire mfg (except retreading)	-	1	1									D
331	Primary metal mfg	-	2	2									D
3315	Foundries	-	2	2									D
33151	Ferrous metal foundries ..	-	2	2									D
331511	Iron foundries	-	2	2									D
332	Fabricated metal product mfg	-	25	7	1 158	33 150	646	1 430	24 722	45 483	41 588	87 593	3 452
3329	Other fabricated metal product mfg	-	5	4									D
33291	Metal valve mfg	-	1	1									D
332911	Industrial valve mfg	-	1	1									D
333	Machinery mfg	-	6	4									D
3331	Agriculture, construction, & mining machinery mfg	-	2	2									D
33312	Construction machinery mfg	-	1	1									D
333120	Construction machinery mfg	-	1	1									D
336	Transportation equipment mfg	-	2	2									D
3363	Motor vehicle parts mfg ...	-	2	2									D
33639	Other motor vehicle parts mfg	-	2	2									D
336391	Motor vehicle air-conditioning mfg	-	2	2									D
DEKALB, IL													
31-33	Manufacturing	-	47	21	2 648	71 220	1 790	3 032	40 685	271 271	289 614	535 282	14 340
DES PLAINES, IL													
31-33	Manufacturing	-	164	78	12 021	411 031	8 025	17 779	221 617	988 977	868 933	1 849 552	89 882
311	Food mfg	-	8	3	1 069	29 438	837	2 009	18 288	75 824	125 692	202 201	3 154
3118	Bakeries & tortilla mfg	-	5	2									D
31182	Cookie, cracker, & pasta mfg	-	2	1									D
311821	Cookie & cracker mfg	-	1	1									D
315	Apparel mfg	-	2	1									D
3152	Cut & sew apparel mfg ...	-	1	1									D
31522	Men's & boys' cut & sew apparel mfg	-	1	1									D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1									D
323	Printing & related support activities	2	34	10	1 159	47 031	866	1 535	26 703	106 017	56 051	162 327	8 176
3231	Printing & related support activities	2	34	10	1 159	47 031	866	1 535	26 703	106 017	56 051	162 327	8 176
32311	Printing	3	30	8									D
323110	Commercial lithographic printing ..	4	18	5	603	23 992	454	807	12 993	53 736	32 578	86 448	4 885
326	Plastics & rubber products mfg	1	15	12	861	30 033	656	1 577	19 361	84 465	63 072	147 393	5 217
3261	Plastics product mfg	1	12	10	746	25 279	561	1 318	16 634	75 345	59 204	134 393	D
332	Fabricated metal product mfg	-	31	18	2 299	83 630	1 674	3 767	49 975	158 222	145 725	302 243	14 612
3321	Forging & stamping	-	10	6	543	19 177	324	641	9 240	45 901	56 996	102 201	2 785
33211	Forging & stamping	-	10	6	543	19 177	324	641	9 240	45 901	56 996	102 201	2 785
332116	Metal stamping	-	10	6	543	19 177	324	641	9 240	45 901	56 996	102 201	2 785
3323	Architectural & structural metals mfg	-	5	3	620	23 520	448	1 156	13 677	45 057	29 676	75 129	1 327
33232	Ornamental & architectural metal products mfg	-	4	2									D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DES PLAINES, IL—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	7	6	2 572	84 968	1 802	4 297	48 095	163 429	128 229	297 297	D
3351	Electric lighting equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	4	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	4	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	19	4	890	29 856	352	634	6 426	121 777	85 213	198 833	D
3391	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	8	1	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	1	1	f	D	D	D	D	D	D	D	D
	DIXON, IL												
31-33	Manufacturing	1	17	13	2 417	79 132	1 705	3 719	48 505	310 117	248 541	565 082	7 790
332	Fabricated metal product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
	DOLTON, IL												
31-33	Manufacturing	1	23	9	1 196	38 215	958	1 747	26 479	143 937	127 553	263 336	29 264
	DOWNERS GROVE, IL												
31-33	Manufacturing	1	104	34	5 174	203 033	3 330	6 797	107 623	426 765	268 324	692 665	25 372
323	Printing & related support activities	-	32	8	649	24 240	459	1 024	14 633	51 426	35 890	87 524	3 187
3231	Printing & related support activities	-	32	8	649	24 240	459	1 024	14 633	51 426	35 890	87 524	3 187
32311	Printing	-	26	8	610	22 706	430	964	13 553	48 500	35 300	84 006	3 163
332	Fabricated metal product mfg	-	11	5	646	24 946	523	1 096	18 304	82 524	24 070	106 355	5 253
3329	Other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	9	1 083	48 742	635	1 309	25 101	102 102	48 084	151 106	3 909
3336	Engine, turbine, & power transmission equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	12	5	1 142	51 780	476	1 021	12 895	101 327	64 091	163 574	3 980
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	729	40 487	206	440	6 707	79 389	44 174	121 417	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	729	40 487	206	440	6 707	79 389	44 174	121 417	D
336	Transportation equipment mfg	7	3	3	554	16 073	301	686	8 107	20 228	32 778	51 853	D
	DU QUOIN, IL												
31-33	Manufacturing	-	12	4	f	D	D	D	D	D	D	D	2 041

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DWIGHT, IL *												
31-33	Manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D
	EAST ALTON, IL												
31-33	Manufacturing	-	10	4	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	g	D	D	D	D	D	D	D	D
	EAST DUNDEE, IL *												
31-33	Manufacturing	1	24	6	599	18 015	395	889	10 935	34 478	94 633	128 871	D
	EAST MOLINE, IL												
31-33	Manufacturing	-	22	11	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	3	2	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	h	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
	EAST PEORIA, IL												
31-33	Manufacturing	-	33	11	h	D	D	D	D	D	D	D	35 361
333	Machinery mfg	-	4	3	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
	EAST ST. LOUIS, IL												
31-33	Manufacturing	-	22	5	564	20 899	413	901	15 607	63 825	72 685	134 865	3 067
	EFFINGHAM, IL												
31-33	Manufacturing	-	39	20	4 375	117 657	3 718	7 479	87 320	288 900	470 862	755 499	23 338
323	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	7	3	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	7	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ELGIN, IL *												
31-33	Manufacturing	—	175	92	9 955	345 750	7 337	15 111	215 876	909 017	878 854	1 779 016	92 653
326	Plastics & rubber products mfg	1	20	14	1 942	54 809	1 583	3 155	35 788	90 131	154 718	244 607	8 925
3261	Plastics product mfg	1	19	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	14	11	1 455	36 895	1 213	2 405	23 537	74 821	50 221	125 276	5 695
326199	All other plastics product mfg	1	14	11	1 455	36 895	1 213	2 405	23 537	74 821	50 221	125 276	5 695
332	Fabricated metal product mfg	—	31	15	2 379	91 088	1 997	4 303	71 126	200 591	229 762	435 599	40 961
3324	Boiler, tank, & shipping container mfg	—	2	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	2	2	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	15	6	839	27 328	688	1 567	19 525	59 022	34 544	95 070	6 516
33272	Turned product & screw, nut, & bolt mfg	—	7	5	787	25 086	658	1 503	18 467	55 580	33 304	90 391	6 423
332721	Precision turned product mfg	—	6	4	f	D	D	D	D	D	D	D	6 423
333	Machinery mfg	—	18	11	1 089	41 514	669	1 356	20 951	100 121	83 699	183 561	5 968
334	Computer & electronic product mfg	1	17	10	1 218	33 686	807	1 672	19 061	137 167	67 312	192 629	5 940
3344	Semiconductor & other electronic component mfg	—	8	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	6	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	4	7	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	4	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D
	ELK GROVE VILLAGE, IL *												
31-33	Manufacturing	1	550	251	23 239	864 400	16 670	35 504	508 847	2 109 266	1 826 674	3 916 491	173 589
311	Food mfg	1	11	10	998	33 735	668	1 500	18 348	94 039	171 137	264 588	6 999
322	Paper mfg	—	12	9	1 200	48 247	916	2 074	32 578	89 984	136 011	222 058	3 471
3222	Converted paper product mfg	—	12	9	1 200	48 247	916	2 074	32 578	89 984	136 011	222 058	3 471
32221	Paperboard container mfg	—	4	4	805	34 646	663	1 572	25 701	58 837	87 567	144 535	D
322212	Folding paperboard box mfg	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	85	40	4 128	182 445	3 034	6 780	112 963	369 404	304 911	673 983	40 065
3231	Printing & related support activities	3	85	40	4 128	182 445	3 034	6 780	112 963	369 404	304 911	673 983	40 065
32311	Printing	3	68	31	3 371	151 323	2 428	5 377	93 098	305 414	286 323	591 277	37 352
323110	Commercial lithographic printing	3	42	24	2 935	139 092	2 104	4 804	85 026	277 579	252 376	529 926	35 781
32312	Support activities for printing	4	17	9	757	31 122	606	1 403	19 865	63 990	18 588	82 706	2 713
325	Chemical mfg	3	29	15	1 369	40 405	803	1 622	20 295	129 015	125 683	254 814	7 386
3259	Other chemical product mfg	4	12	7	610	17 646	423	858	10 717	46 144	47 328	93 683	3 127
32599	All other chemical product & preparation mfg	5	10	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	36	25	2 430	76 566	1 868	3 907	46 813	212 121	212 405	423 793	17 982
3261	Plastics product mfg	—	34	23	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	22	15	1 369	35 725	1 082	2 073	23 473	113 731	108 532	220 986	9 361
326199	All other plastics product mfg	1	22	15	1 369	35 725	1 082	2 073	23 473	113 731	108 532	220 986	9 361

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ELK GROVE VILLAGE, IL *—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	162	76	6 188	237 348	4 717	10 345	150 313	573 709	404 639	966 211	37 658
3321	Forging & stamping	—	17	7	1 016	44 137	825	1 971	25 771	76 845	167 189	237 168	8 415
33211	Forging & stamping	—	17	7	1 016	44 137	825	1 971	25 771	76 845	167 189	237 168	8 415
332116	Metal stamping	—	15	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	11	8	596	22 681	428	909	13 013	127 708	34 277	162 050	2 190
33232	Ornamental & architectural metal products mfg	—	9	7	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	—	8	7	541	19 444	392	842	11 660	122 994	30 995	153 974	2 149
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	88	34	2 446	90 607	1 821	3 953	60 863	185 553	83 914	264 994	16 377
33271	Machine shops	1	67	22	1 210	45 435	929	2 046	31 165	78 966	31 284	109 409	5 817
332710	Machine shops	1	67	22	1 210	45 435	929	2 046	31 165	78 966	31 284	109 409	5 817
33272	Turned product & screw, nut, & bolt mfg	—	21	12	1 236	45 172	892	1 907	29 698	106 587	52 630	155 585	10 560
332721	Precision turned product mfg	—	14	9	742	26 846	625	1 319	20 149	60 541	21 139	78 072	6 735
3328	Coating, engraving, heat treating, & allied activities.	—	23	15	1 347	55 129	1 041	2 390	34 319	129 338	79 422	208 552	8 051
33281	Coating, engraving, heat treating, & allied activities	—	23	15	1 347	55 129	1 041	2 390	34 319	129 338	79 422	208 552	8 051
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	9	8	697	30 697	558	1 177	20 125	74 026	62 079	135 951	6 155
333	Machinery mfg	2	108	37	2 454	98 953	1 636	3 421	58 921	270 497	157 816	429 117	12 777
3332	Industrial machinery mfg ..	4	16	9	665	24 713	346	722	10 458	55 116	32 588	87 677	2 236
33329	Other industrial machinery mfg	4	16	9	665	24 713	346	722	10 458	55 116	32 588	87 677	2 236
3335	Metalworking machinery mfg	1	68	16	1 138	47 544	880	1 857	33 080	87 625	48 465	137 097	7 687
33351	Metalworking machinery mfg	1	68	16	1 138	47 544	880	1 857	33 080	87 625	48 465	137 097	7 687
334	Computer & electronic product mfg	1	26	15	1 731	44 835	1 370	2 694	28 505	101 632	81 602	182 411	13 340
3344	Semiconductor & other electronic component mfg	1	18	12	1 485	36 007	1 207	2 350	23 449	76 770	67 816	143 585	12 804
33441	Semiconductor & other electronic component mfg	1	18	12	1 485	36 007	1 207	2 350	23 449	76 770	67 816	143 585	12 804
334412	Bare printed circuit board mfg	1	12	8	1 300	31 429	1 080	2 182	21 636	62 905	60 038	122 066	11 166
335	Electrical equipment, appliance, & component mfg	—	12	5	1 130	54 785	541	1 020	11 912	148 872	131 730	283 887	D
3351	Electric lighting equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	1	1	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	27	9	886	25 311	552	1 001	13 377	74 852	64 119	134 480	1 811
3399	Other miscellaneous mfg ..	—	21	7	743	21 337	449	808	11 268	64 641	59 961	120 166	1 389
	ELMHURST, IL *												
31-33	Manufacturing	1	85	36	2 882	103 079	1 927	4 098	56 338	226 566	199 097	420 974	12 876
332	Fabricated metal product mfg	—	22	9	724	29 168	502	1 200	16 870	67 356	60 554	126 556	3 517
333	Machinery mfg	—	14	6	604	26 662	396	863	14 358	50 832	29 021	78 641	2 142
	EVANSTON, IL												
31-33	Manufacturing	2	67	24	2 310	74 448	1 233	2 507	30 960	167 457	156 809	321 692	10 651
334	Computer & electronic product mfg	—	6	2	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FAIRFIELD, IL													
31-33	Manufacturing	-	11	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
FLORA, IL													
31-33	Manufacturing	-	13	9	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	3	3	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
FORD HEIGHTS, IL													
31-33	Manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
FOREST PARK, IL													
31-33	Manufacturing	-	26	10	1 173	40 286	810	1 833	23 083	66 396	127 383	194 448	13 211
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D
FRANKFORT, IL													
31-33	Manufacturing	-	38	14	1 512	53 284	1 066	2 273	32 531	170 161	107 114	278 794	14 623
326	Plastics & rubber products mfg	-	4	4	645	22 140	414	932	11 607	71 593	59 986	131 981	6 312
3261	Plastics product mfg	-	4	4	645	22 140	414	932	11 607	71 593	59 986	131 981	6 312
FRANKLIN PARK, IL													
31-33	Manufacturing	-	315	126	15 415	500 860	10 619	22 331	295 710	1 963 752	1 225 009	3 190 093	75 372
311	Food mfg	-	10	6	2 775	75 935	1 887	4 228	51 896	458 010	278 273	735 689	15 370
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	2	3	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRANKLIN PARK, IL—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	17	8	802	23 678	651	1 390	14 790	55 808	53 446	108 505	5 847
3261	Plastics product mfg	1	16	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	11	6	661	20 257	541	1 176	12 247	47 292	41 375	88 089	5 685
326199	All other plastics product mfg	—	11	6	661	20 257	541	1 176	12 247	47 292	41 375	88 089	5 685
331	Primary metal mfg	—	5	4	511	14 786	396	892	10 895	35 377	48 694	84 009	1 381
332	Fabricated metal product mfg	1	126	50	4 908	165 814	3 574	7 550	106 333	376 357	324 614	694 284	18 459
3321	Forging & stamping	2	23	12	715	25 123	565	1 258	15 312	55 316	53 025	107 230	2 421
33211	Forging & stamping	2	23	12	715	25 123	565	1 258	15 312	55 316	53 025	107 230	2 421
332116	Metal stamping	3	17	9	553	17 492	426	935	10 091	38 707	39 504	77 209	2 169
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	63	19	1 218	40 371	973	2 005	27 373	78 156	46 544	121 549	6 702
33271	Machine shops	3	43	12	729	24 009	576	1 263	16 236	42 245	20 670	60 464	3 704
332710	Machine shops	3	43	12	729	24 009	576	1 263	16 236	42 245	20 670	60 464	3 704
3328	Coating, engraving, heat treating, & allied activities	2	15	7	517	15 978	400	946	11 103	39 684	64 576	101 827	2 206
33281	Coating, engraving, heat treating, & allied activities	2	15	7	517	15 978	400	946	11 103	39 684	64 576	101 827	2 206
3329	Other fabricated metal product mfg	—	6	3	1 758	60 146	1 137	2 283	37 211	126 084	119 212	246 547	4 385
33291	Metal valve mfg	—	2	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	4	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	3	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	52	9	1 217	42 609	806	1 617	23 199	87 364	85 612	176 532	6 542
3339	Other general-purpose machinery mfg	—	8	3	716	24 405	419	846	11 140	51 606	66 484	121 141	5 220
334	Computer & electronic product mfg	3	12	7	885	31 108	571	1 250	16 351	48 217	37 794	91 784	1 570
3344	Semiconductor & other electronic component mfg	—	7	4	582	19 988	394	809	11 579	22 347	16 798	43 242	383
33441	Semiconductor & other electronic component mfg	—	7	4	582	19 988	394	809	11 579	22 347	16 798	43 242	383
335	Electrical equipment, appliance, & component mfg	—	13	9	1 326	45 591	822	1 717	21 242	183 295	166 341	347 550	6 490
3359	Other electrical equipment & component mfg	2	5	5	727	27 987	435	952	12 501	71 931	49 628	122 670	3 964
33593	Wiring device mfg	—	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	17	8	893	33 126	387	678	8 922	56 360	51 391	106 962	3 036
3399	Other miscellaneous mfg ..	—	14	6	761	29 642	298	537	7 226	48 442	47 083	94 630	2 457
33992	Sporting & athletic goods mfg	—	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	—	1	1	f	D	D	D	D	D	D	D	D
FREEBURG, IL													
31-33	Manufacturing	2	5	5	f	D	D	D	D	D	D	D	1 162

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		E ¹	Total	With 20 em- ploy- ees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
FREESPORT, IL													
31-33	Manufacturing	-	40	16	7 645	280 712	5 377	10 885	180 518	595 642	419 557	1 058 194	43 474
311	Food mfg	4	4	3	611	9 907	475	753	6 479	29 297	30 799	60 645	2 153
3119	Other food mfg	4	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	h	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	h	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D
FULTON, IL													
31-33	Manufacturing	1	8	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
GALESBURG, IL													
31-33	Manufacturing	-	48	22	i	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	693	20 430	531	1 126	15 959	76 066	104 520	197 005	4 976
332	Fabricated metal product mfg	-	8	3	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
GENEVA, IL													
31-33	Manufacturing	-	44	14	1 958	73 961	1 395	3 179	43 302	176 456	157 126	337 066	12 814
332	Fabricated metal product mfg	-	9	5	936	37 093	714	1 679	24 422	67 897	41 612	109 436	7 443
3321	Forging & stamping	-	4	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	4	2	f	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	-	1	1	f	D	D	D	D	D	D	D	D
GENOA, IL													
31-33	Manufacturing	-	11	4	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GLENDALE HEIGHTS, IL													
31-33	Manufacturing	1	48	31	2 304	87 661	1 514	2 976	41 995	190 122	133 812	327 230	8 380
333	Machinery mfg	-	12	9	1 021	40 058	629	1 242	17 525	90 281	75 163	169 316	3 036
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	f	D	D	D	D	D	D	D	D
GLENVIEW, IL													
31-33	Manufacturing	3	68	15	1 481	54 243	964	2 038	31 885	102 240	119 946	222 858	8 859
333	Machinery mfg	4	14	6	564	21 839	340	700	10 246	37 367	61 107	100 568	2 687
GRANITE CITY, IL													
31-33	Manufacturing	-	28	16	5 632	234 465	4 714	9 568	184 844	813 853	1 041 198	1 857 121	38 363
331	Primary metal mfg	-	3	3	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
GREENVILLE, IL													
31-33	Manufacturing	-	12	5	f	D	D	D	D	D	D	D	2 582
GURNEE, IL													
31-33	Manufacturing	2	63	26	2 769	96 465	1 811	3 417	45 535	278 780	240 729	517 641	16 405
333	Machinery mfg	-	11	5	541	24 416	311	643	11 701	46 726	49 367	96 675	2 074
339	Miscellaneous mfg	-	5	4	665	14 615	547	871	7 754	16 939	15 008	30 044	D
HARVEY, IL													
31-33	Manufacturing	-	48	20	2 361	110 430	1 452	3 365	49 891	315 510	338 786	699 190	12 198
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
HARWOOD HEIGHTS, IL													
31-33	Manufacturing	-	27	19	2 304	78 611	1 639	3 236	42 512	224 582	116 873	341 099	14 896
332	Fabricated metal product mfg	-	10	5	810	27 881	668	1 447	17 627	85 039	24 231	109 518	8 393
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	6	3	538	18 544	475	1 031	12 668	68 295	15 289	84 128	D
HERRIN, IL													
31-33	Manufacturing	-	9	5	1 253	35 235	1 033	2 032	25 790	68 917	120 060	189 208	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HIGHLAND, IL													
31-33	Manufacturing	-	28	12	2 688	76 811	1 982	4 196	43 905	223 267	184 892	404 565	5 977
332	Fabricated metal product mfg	-	4	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
HIGHLAND PARK, IL													
31-33	Manufacturing	-	44	6	f	D	D	D	D	D	D	D	1 977
HILLSIDE, IL													
31-33	Manufacturing	3	33	15	1 072	42 946	788	1 601	26 511	107 127	61 679	166 187	5 301
HOFFMAN ESTATES, IL *													
31-33	Manufacturing	-	23	6	971	45 579	500	1 074	17 465	104 649	82 345	191 216	2 146
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
HOOPESTON, IL													
31-33	Manufacturing	-	10	6	906	24 186	760	1 537	18 011	43 104	89 573	138 565	3 848
HUNTLEY, IL *													
31-33	Manufacturing	4	26	15	1 703	62 856	1 183	2 367	37 071	154 062	222 723	370 895	13 348
333	Machinery mfg	-	6	3	624	23 566	376	703	11 858	18 096	43 873	67 934	5 187
3332	Industrial machinery mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
ITASCA, IL													
31-33	Manufacturing	1	63	36	5 279	198 414	3 454	7 728	108 362	586 824	523 371	1 117 660	43 782
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	8	7	5	555	25 158	461	1 249	19 342	52 923	50 357	106 042	6 881
3231	Printing & related support activities	8	7	5	555	25 158	461	1 249	19 342	52 923	50 357	106 042	6 881
32311	Printing	8	7	5	555	25 158	461	1 249	19 342	52 923	50 357	106 042	6 881
332	Fabricated metal product mfg	1	13	7	1 259	39 888	883	1 678	23 219	92 632	67 721	157 510	8 506
3328	Coating, engraving, heat treating, & allied activities ..	1	2	1	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	1	2	1	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	19	8	703	32 834	377	852	13 979	79 584	60 195	141 337	4 145

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSONVILLE, IL													
31-33	Manufacturing	-	27	12	h	D	D	D	D	D	D	D	D
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	6	3	792	19 413	475	957	7 997	76 419	45 033	121 242	2 138
3231	Printing & related support activities	-	6	3	792	19 413	475	957	7 997	76 419	45 033	121 242	2 138
32312	Support activities for printing	-	2	2	f	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
JOLIET, IL *													
31-33	Manufacturing	-	104	40	7 268	323 591	5 562	10 635	215 222	1 304 353	2 503 416	3 814 814	141 555
324	Petroleum & coal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	9	1 267	63 465	868	1 689	36 202	476 650	391 111	875 359	84 458
3251	Basic chemical mfg	-	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	4	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	2	h	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	5	2	h	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	h	D	D	D	D	D	D	D	D
KANKAKEE, IL													
31-33	Manufacturing	-	32	20	2 502	95 983	1 893	4 310	69 458	288 232	381 793	673 515	19 662
KEWANEE, IL													
31-33	Manufacturing	-	13	6	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
LA GRANGE, IL													
31-33	Manufacturing	1	23	8	957	29 815	592	1 148	13 456	101 985	27 046	129 811	4 923
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAKE BLUFF, IL													
31-33	Manufacturing	1	31	19	1 355	49 982	872	1 570	22 472	113 971	107 807	226 383	6 561
LAKE FOREST, IL													
31-33	Manufacturing	1	28	8	676	23 729	478	889	13 409	31 399	53 655	82 608	2 542

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LAKE ZURICH, IL													
31-33	Manufacturing	2	29	12	1 927	59 980	1 481	3 256	38 948	218 757	223 499	434 778	13 649
333	Machinery mfg	-	7	4	557	16 038	427	961	10 592	64 740	84 593	146 114	2 495
LANSING, IL													
31-33	Manufacturing	-	34	8	870	29 668	568	1 051	13 277	93 286	81 241	171 383	7 128
LA SALLE, IL													
31-33	Manufacturing	-	12	6	640	24 688	529	1 032	16 628	77 519	53 357	130 631	4 489
LEMONT, IL *													
31-33	Manufacturing	-	22	11	863	34 299	633	1 393	19 907	152 161	610 105	770 161	10 682
LIBERTYVILLE, IL													
31-33	Manufacturing	-	65	21	11 244	465 853	7 697	16 079	211 501	1 937 093	2 547 150	4 400 385	D
326	Plastics & rubber products mfg	-	5	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	6	f	D	D	D	D	D	D	D	4 233
3321	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	2	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
LINCOLN, IL													
31-33	Manufacturing	-	16	4	1 304	41 718	1 098	2 228	32 288	160 718	137 455	300 435	12 164
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
LINCOLNSHIRE, IL													
31-33	Manufacturing	-	17	11	942	35 157	528	1 101	14 616	141 447	195 633	336 975	3 462
LINCOLNWOOD, IL													
31-33	Manufacturing	-	40	20	1 582	61 717	1 120	2 390	26 587	141 921	86 253	216 202	6 243
332	Fabricated metal product mfg	-	10	7	580	21 923	371	864	11 507	54 273	38 045	92 532	3 463
LISLE, IL													
31-33	Manufacturing	1	38	11	956	28 877	677	1 394	15 666	89 313	96 529	185 719	4 692
LITCHFIELD, IL													
31-33	Manufacturing	-	15	7	1 150	32 203	961	2 053	25 252	70 173	123 986	201 650	5 185
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LOCKPORT, IL													
31-33	Manufacturing	-	20	7	561	17 908	366	752	9 650	41 958	41 523	83 637	D
LOMBARD, IL													
31-33	Manufacturing	3	102	19	1 718	62 164	1 333	2 463	40 896	146 397	97 915	246 302	8 103
LOVES PARK, IL													
31-33	Manufacturing	-	110	36	6 278	222 634	3 947	7 589	117 055	505 074	351 825	849 382	35 394
332	Fabricated metal product mfg	1	45	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	23	9	1 850	74 782	1 184	2 533	40 297	167 505	123 078	288 264	10 325
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCHENRY, IL													
31-33	Manufacturing	3	56	20	1 768	53 774	1 349	2 601	34 522	156 661	184 762	343 804	13 998
MACHESNEY PARK, IL													
31-33	Manufacturing	1	49	12	921	36 188	609	1 236	19 869	66 967	51 275	117 546	12 467
MACOMB, IL													
31-33	Manufacturing	-	14	4	979	32 318	821	1 662	25 880	59 507	40 416	100 086	5 354
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARENGO, IL													
31-33	Manufacturing	-	18	10	1 363	55 402	870	1 894	28 891	127 649	253 387	388 343	7 806
333	Machinery mfg	-	6	4	794	31 135	483	1 087	16 635	73 038	210 701	289 623	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARION, IL *													
31-33	Manufacturing	6	24	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARSHALL, IL													
31-33	Manufacturing	-	10	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MATTOON, IL													
31-33	Manufacturing	-	28	12	3 906	127 607	3 215	6 592	96 185	497 769	406 700	896 167	29 176
323	Printing & related support activities.....	-	4	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	4	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	4	2	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing.....	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
MAYWOOD, IL													
31-33	Manufacturing	4	28	9	603	19 146	452	966	12 076	41 856	31 999	73 993	1 943
MELROSE PARK, IL													
31-33	Manufacturing	-	131	69	12 474	423 722	8 868	18 318	240 473	1 093 761	1 049 675	2 143 068	78 063
311	Food mfg	2	9	5	1 138	36 796	811	1 895	24 700	118 291	102 384	224 434	4 342
3113	Sugar & confectionery product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	9	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	9	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	5	3	623	18 896	509	1 127	13 648	31 732	19 993	51 827	4 439
3231	Printing & related support activities.....	3	5	3	623	18 896	509	1 127	13 648	31 732	19 993	51 827	4 439
32311	Printing	3	5	3	623	18 896	509	1 127	13 648	31 732	19 993	51 827	4 439
325	Chemical mfg	-	8	6	1 257	60 357	447	927	14 358	392 570	148 245	522 934	34 193
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	48	22	1 832	63 121	1 304	2 802	38 293	137 447	93 673	234 099	8 198
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	20	9	596	19 398	441	928	12 089	36 330	22 617	59 364	2 892
333	Machinery mfg	-	14	6	1 093	53 068	824	1 708	38 053	151 851	276 967	434 088	10 919
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	1	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	1	h	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	10	7	894	32 650	621	1 425	16 763	45 800	67 817	113 394	2 122
3399	Other miscellaneous mfg ..	-	9	6	f	D	D	D	D	D	D	D	D

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31-33	MENDOTA, IL												
	Manufacturing	2	14	8	1 245	39 722	988	2 103	30 035	111 025	162 000	274 575	10 493
	MILAN, IL												
31-33	Manufacturing	1	24	9	769	24 108	615	1 286	14 093	57 983	52 295	108 961	D
	MOKENA, IL												
31-33	Manufacturing	3	48	11	1 054	45 785	748	1 788	27 659	118 155	98 050	215 848	8 997
	MOLINE, IL												
31-33	Manufacturing	-	61	16	2 150	89 735	1 463	3 077	56 801	237 831	278 888	500 430	18 691
333	Machinery mfg	-	15	7	1 260	60 717	857	1 905	40 360	163 819	212 202	359 901	D
3331	Agriculture, construction, & mining machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	4	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
	MONTGOMERY, IL *												
31-33	Manufacturing	-	20	12	1 511	56 757	1 090	2 424	30 666	154 958	139 191	295 363	12 906
	MORRIS, IL												
31-33	Manufacturing	-	16	7	804	31 112	609	1 376	20 962	135 676	167 512	304 826	12 299
	MORRISON, IL												
31-33	Manufacturing	-	6	3	802	23 519	736	1 378	20 721	48 613	44 161	93 138	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
	MORTON, IL												
31-33	Manufacturing	1	23	15	1 592	47 295	1 301	2 658	32 649	140 256	113 812	256 782	9 963
332	Fabricated metal product mfg	-	10	8	1 180	34 264	982	2 005	24 112	82 080	66 042	151 243	D
3323	Architectural & structural metals mfg	-	3	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	1	1	f	D	D	D	D	D	D	D	D
	MORTON GROVE, IL												
31-33	Manufacturing	1	54	20	5 301	184 767	3 474	7 073	102 371	717 167	411 468	1 135 713	34 846
323	Printing & related support activities	9	11	2	588	25 972	405	824	15 323	53 845	37 295	91 239	D
3231	Printing & related support activities	9	11	2	588	25 972	405	824	15 323	53 845	37 295	91 239	D
32311	Printing	9	10	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	9	4	2 317	75 011	1 250	2 330	32 248	157 166	133 430	294 382	20 384
3399	Other miscellaneous mfg ..	-	5	4	2 289	73 654	1 236	2 305	31 728	154 077	132 095	289 781	20 206
33999	All other miscellaneous mfg	-	1	1	g	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	g	D	D	D	D	D	D	D	D

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MOUNT CARMEL, IL													
31-33	Manufacturing	1	15	4	611	20 454	466	836	13 401	40 621	15 580	55 801	2 296
MOUNT MORRIS, IL													
31-33	Manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	2	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing.....	-	1	1	f	D	D	D	D	D	D	D	D
MOUNT PROSPECT, IL													
31-33	Manufacturing	-	46	17	3 457	134 787	1 200	2 223	36 990	270 726	298 701	553 445	46 133
333	Machinery mfg	-	7	3	1 651	63 076	321	631	11 010	84 714	134 440	225 436	8 809
3333	Commercial & service industry machinery mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
MOUNT VERNON, IL													
31-33	Manufacturing	-	29	11	2 841	103 254	2 277	4 414	76 515	368 582	363 908	738 176	23 108
326	Plastics & rubber products mfg	-	1	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
MUNDELEIN, IL													
31-33	Manufacturing	2	92	38	3 691	124 471	2 647	5 468	70 780	305 034	248 037	553 339	22 626
326	Plastics & rubber products mfg	-	9	6	550	18 757	383	873	12 207	51 331	44 466	93 296	D
3261	Plastics product mfg	-	9	6	550	18 757	383	873	12 207	51 331	44 466	93 296	D
NAPERVILLE, IL *													
31-33	Manufacturing	1	84	26	2 334	80 389	1 658	3 134	47 092	193 251	156 215	348 942	14 005
323	Printing & related support activities.....	-	20	4	611	22 675	443	751	11 907	52 807	22 294	75 035	2 072
3231	Printing & related support activities.....	-	20	4	611	22 675	443	751	11 907	52 807	22 294	75 035	2 072
32311	Printing	-	18	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	11	3	539	20 743	396	664	10 761	47 934	20 513	68 385	1 856
NEWTON, IL													
31-33	Manufacturing	7	8	5	f	D	D	D	D	D	D	D	1 559
NILES, IL													
31-33	Manufacturing	1	102	54	6 376	242 445	3 939	8 057	128 110	588 352	447 926	1 023 305	32 262
323	Printing & related support activities.....	-	27	7	914	44 605	635	1 337	26 441	79 732	46 003	121 429	3 939
3231	Printing & related support activities.....	-	27	7	914	44 605	635	1 337	26 441	79 732	46 003	121 429	3 939
32311	Printing	-	25	7	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	15	4	680	35 775	460	1 009	20 757	65 302	37 172	98 245	3 070
332	Fabricated metal product mfg	1	19	10	757	24 673	589	1 157	15 685	71 713	40 254	111 418	2 113
333	Machinery mfg	1	11	8	1 421	51 903	476	983	19 486	126 321	101 593	223 125	2 167
3332	Industrial machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
NORMAL, IL													
31-33	Manufacturing	-	19	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORRIDGE, IL													
31-33	Manufacturing	-	21	11	841	23 299	689	1 217	13 648	48 441	32 248	80 116	2 279
NORTH AURORA, IL													
31-33	Manufacturing	1	21	8	788	27 892	414	867	12 608	54 283	72 581	127 816	5 205
333	Machinery mfg	-	4	4	528	18 559	280	596	8 574	26 879	48 749	76 661	2 268
NORTHBROOK, IL													
31-33	Manufacturing	1	123	43	4 672	161 100	3 262	6 893	91 428	474 909	368 197	840 262	40 658
333	Machinery mfg	-	14	9	688	23 709	373	761	11 542	51 902	48 182	97 296	1 949
334	Computer & electronic product mfg	-	12	7	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	3	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	3	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	3	691	25 991	392	831	12 496	23 752	61 844	85 377	2 534
NORTH CHICAGO, IL													
31-33	Manufacturing	-	28	12	1 606	51 735	1 202	2 787	31 546	130 015	226 315	356 554	6 046
331	Primary metal mfg	-	3	3	578	16 248	464	1 043	10 754	26 724	117 547	144 554	D
NORTHFIELD, IL													
31-33	Manufacturing	7	16	4	719	25 676	586	1 560	18 419	99 748	124 161	223 338	4 533
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
NORTHLAKE, IL													
31-33	Manufacturing	2	28	16	3 533	118 582	2 939	6 513	83 763	340 136	426 798	764 178	40 791
311	Food mfg	9	3	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	9	3	2	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	9	3	2	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	9	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	6	605	23 337	456	1 081	15 759	50 607	88 942	138 598	5 770
3222	Converted paper product mfg	-	7	6	605	23 337	456	1 081	15 759	50 607	88 942	138 598	5 770
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
OAK BROOK, IL *													
31-33	Manufacturing	-	17	7	2 068	52 415	1 767	3 376	36 275	220 093	205 653	432 740	D
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	g	D	D	D	D	D	D	D	D
OAK FOREST, IL													
31-33	Manufacturing	-	22	5	519	16 112	397	662	9 419	46 884	40 192	85 717	5 006
OAK LAWN, IL													
31-33	Manufacturing	5	31	8	527	17 460	349	723	9 060	30 654	27 435	57 069	2 244

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OAK PARK, IL													
31-33	Manufacturing	7	43	6	679	22 286	512	1 058	14 407	49 041	34 182	82 819	9 134
OREGON, IL													
31-33	Manufacturing	-	9	5	745	29 497	453	1 212	15 893	50 859	68 738	124 701	2 415
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
ORLAND PARK, IL *													
31-33	Manufacturing	-	55	7	2 195	92 432	1 082	2 661	36 269	359 992	103 612	477 744	32 165
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
OTTAWA, IL													
31-33	Manufacturing	-	24	9	818	23 995	571	1 168	14 966	54 605	64 867	120 421	4 799
PALATINE, IL													
31-33	Manufacturing	2	76	21	2 830	91 880	2 136	4 754	54 896	258 005	191 516	453 592	16 659
332	Fabricated metal product mfg	3	20	4	553	18 685	441	956	13 437	45 871	32 180	77 579	6 632
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg.	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg.	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
PARIS, IL													
31-33	Manufacturing	1	22	10	1 301	30 918	1 029	2 113	20 722	90 888	147 592	223 783	7 982
326	Plastics & rubber products mfg	-	6	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
PAXTON, IL													
31-33	Manufacturing	1	9	4	f	D	D	D	D	D	D	D	969
PEKIN, IL *													
31-33	Manufacturing	1	28	10	f	D	D	D	D	D	D	D	8 688
PEORIA, IL													
31-33	Manufacturing	-	113	49	5 666	197 347	3 473	6 998	108 012	541 527	864 495	1 381 598	46 651
311	Food mfg	-	9	7	605	24 389	289	585	9 468	104 836	55 118	159 949	D
323	Printing & related support activities	1	31	13	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	31	13	g	D	D	D	D	D	D	D	D
32311	Printing	1	28	13	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	15	10	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	9	874	26 522	541	1 089	13 682	92 163	83 163	168 166	5 520
333	Machinery mfg	-	4	2	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PERU, IL													
31-33	Manufacturing	-	19	11	1 103	39 328	806	1 768	24 181	133 136	174 440	309 566	17 366
PINCKNEYVILLE, IL													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media ..	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	-	1	1	f	D	D	D	D	D	D	D	D
PLAINFIELD, IL													
31-33	Manufacturing	2	20	9	712	20 653	565	1 351	15 338	52 389	68 255	120 416	3 021
PLANO, IL													
31-33	Manufacturing	-	9	4	900	23 061	761	1 503	14 785	95 342	39 249	136 176	D
326	Plastics & rubber products mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
PONTIAC, IL													
31-33	Manufacturing	-	15	9	2 475	104 293	1 878	3 734	73 144	340 477	253 253	599 111	39 788
323	Printing & related support activities.....	1	4	3	878	30 345	671	1 285	23 841	70 684	33 368	103 646	D
3231	Printing & related support activities.....	1	4	3	878	30 345	671	1 285	23 841	70 684	33 368	103 646	D
32311	Printing	-	3	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PRINCETON, IL													
31-33	Manufacturing	-	13	6	1 273	37 168	1 010	1 786	25 410	159 051	86 555	248 821	7 208
QUINCY, IL													
31-33	Manufacturing	-	57	17	2 995	96 638	2 092	4 337	48 914	405 817	369 792	773 970	32 383
333	Machinery mfg.....	-	6	5	1 300	34 417	1 083	2 430	25 496	96 545	90 338	184 528	D
3331	Agriculture, construction, & mining machinery mfg....	-	2	2	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RANTOUL, IL													
31-33	Manufacturing	2	17	11	4 211	98 371	3 277	6 033	68 035	402 845	312 293	760 098	21 807
321	Wood product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
32191	Millwork	-	2	2	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D
RIVERDALE, IL													
31-33	Manufacturing	-	15	9	1 530	75 635	1 129	2 606	53 482	196 315	276 982	453 971	D
331	Primary metal mfg	-	3	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
RIVER GROVE, IL													
31-33	Manufacturing	-	22	7	591	18 853	442	901	10 627	51 872	26 371	78 429	2 354
ROBINSON, IL													
31-33	Manufacturing	-	12	5	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	1	1	f	D	D	D	D	D	D	D	D
ROCHELLE, IL													
31-33	Manufacturing	-	22	10	2 386	61 442	2 025	4 110	47 085	189 271	396 974	586 494	12 881
311	Food mfg	-	4	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
ROCK FALLS, IL													
31-33	Manufacturing	-	20	8	554	12 492	446	744	8 723	60 167	46 763	107 108	1 948

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCKFORD, IL													
31-33	Manufacturing	1	477	198	26 100	998 788	17 445	37 445	555 384	2 524 850	2 020 610	4 467 379	150 689
325	Chemical mfg	-	11	5	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	5	3	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	5	3	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	5	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	8	602	19 247	499	1 060	14 935	52 144	154 541	207 803	3 854
332	Fabricated metal product mfg	-	198	84	9 586	322 676	7 798	16 290	228 217	766 196	498 999	1 272 454	46 546
3325	Hardware mfg	2	6	4	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	2	6	4	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	2	6	4	g	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	-	6	4	526	13 227	421	881	7 976	27 597	15 272	42 265	1 439
33261	Spring & wire product mfg	-	6	4	526	13 227	421	881	7 976	27 597	15 272	42 265	1 439
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	116	43	4 690	177 867	3 892	8 707	130 977	425 285	249 884	670 412	31 357
33271	Machine shops	-	82	21	g	D	D	D	D	D	D	D	D
332710	Machine shops	-	82	21	g	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	-	34	22	h	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	19	14	h	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	25	10	537	16 495	425	936	10 364	31 805	10 773	42 735	1 816
33281	Coating, engraving, heat treating, & allied activities	-	25	10	537	16 495	425	936	10 364	31 805	10 773	42 735	1 816
3329	Other fabricated metal product mfg	-	17	9	621	20 202	504	1 045	14 134	44 335	51 871	96 434	2 146
333	Machinery mfg	2	109	50	7 220	285 421	4 440	9 945	156 598	643 449	475 747	1 081 827	34 161
3332	Industrial machinery mfg ..	1	9	5	551	21 186	298	710	10 072	51 353	33 328	81 566	D
3335	Metalworking machinery mfg	4	63	25	4 049	165 903	2 368	5 662	93 471	349 474	251 153	590 225	20 408
33351	Metalworking machinery mfg	4	63	25	4 049	165 903	2 368	5 662	93 471	349 474	251 153	590 225	20 408
333512	Machine tool (metal cutting types) mfg ...	9	11	6	g	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	-	23	7	518	23 761	387	909	14 444	53 947	30 049	82 864	2 747
333515	Cutting tool & machine tool accessory mfg ..	-	14	3	838	33 307	453	1 057	16 714	106 887	48 736	152 548	5 672
3339	Other general-purpose machinery mfg	-	23	10	1 677	55 649	1 162	2 244	30 999	123 996	107 635	234 590	5 856
33399	All other general-purpose machinery mfg	-	19	9	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	10	5	g	D	D	D	D	D	D	D	4 459
3353	Electrical equipment mfg ..	-	7	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	7	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	18	9	4 050	225 636	1 544	3 555	70 020	577 443	395 779	929 764	D
3363	Motor vehicle parts mfg ...	1	15	7	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	27	5	f	D	D	D	D	D	D	D	D
ROCK ISLAND, IL													
31-33	Manufacturing	1	58	20	1 927	47 720	1 567	3 035	33 715	137 352	102 475	238 529	8 873
ROCKTON, IL													
31-33	Manufacturing	-	9	2	f	D	D	D	D	D	D	D	6 626
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROLLING MEADOWS, IL													
31-33	Manufacturing	-	59	19	4 247	204 711	1 672	3 439	47 652	375 422	235 213	601 795	41 928
334	Computer & electronic product mfg	-	9	4	2 773	153 728	588	1 242	18 292	259 634	119 375	369 651	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	h	D	D	D	D	D	D	D	D
ROMEOVILLE, IL													
31-33	Manufacturing	1	39	18	1 772	64 472	1 218	2 526	35 997	136 496	178 270	314 020	9 541
333	Machinery mfg	-	7	4	528	23 087	287	596	9 525	37 690	38 772	76 920	1 945
ROSELLE, IL *													
31-33	Manufacturing	1	49	14	1 021	33 425	790	1 573	21 388	83 269	52 396	135 935	5 202
ROSEMONT, IL													
31-33	Manufacturing	-	38	9	1 017	36 793	724	1 405	16 540	76 565	42 719	120 152	3 371
ST. CHARLES, IL *													
31-33	Manufacturing	-	118	67	7 053	238 717	4 935	9 374	131 064	764 899	597 359	1 360 699	35 380
311	Food mfg	-	9	7	1 089	35 679	856	1 579	23 864	293 384	212 476	506 359	7 536
323	Printing & related support activities	-	17	5	595	22 555	460	936	14 538	63 741	51 082	114 776	2 082
3231	Printing & related support activities	-	17	5	595	22 555	460	936	14 538	63 741	51 082	114 776	2 082
32311	Printing	-	17	5	595	22 555	460	936	14 538	63 741	51 082	114 776	2 082
326	Plastics & rubber products mfg	2	16	12	854	25 010	672	1 325	14 623	50 024	44 464	94 775	3 711
3261	Plastics product mfg	2	16	12	854	25 010	672	1 325	14 623	50 024	44 464	94 775	3 711
32619	Other plastics product mfg	2	12	10	746	22 338	598	1 144	13 005	43 699	37 896	81 801	D
326199	All other plastics product mfg	2	12	10	746	22 338	598	1 144	13 005	43 699	37 896	81 801	D
332	Fabricated metal product mfg	1	22	13	595	18 581	437	883	11 672	40 449	27 107	68 211	2 416
333	Machinery mfg	1	18	11	655	27 355	446	897	17 179	49 848	39 491	88 470	4 476
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	876	31 658	367	792	10 035	61 952	50 439	111 032	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
SALEM, IL													
31-33	Manufacturing	-	18	11	1 642	46 725	1 305	2 742	31 532	182 890	122 361	306 323	12 860
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANDWICH, IL *													
31-33	Manufacturing	-	16	6	833	23 790	584	1 074	12 887	41 496	27 124	68 829	3 240
SCHAUMBURG, IL *													
31-33	Manufacturing	1	190	52	8 709	404 787	3 760	7 880	117 741	920 387	533 575	1 448 140	61 062
332	Fabricated metal product mfg	1	44	9	797	30 651	607	1 188	22 212	65 713	46 393	112 128	5 876
333	Machinery mfg	2	38	14	1 279	55 570	842	1 878	31 594	121 103	69 185	190 032	7 820
3335	Metalworking machinery mfg	1	28	10	792	37 548	544	1 276	23 135	75 808	34 042	110 829	6 147
33351	Metalworking machinery mfg	1	28	10	792	37 548	544	1 276	23 135	75 808	34 042	110 829	6 147
334	Computer & electronic product mfg	-	14	4	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
SCHILLER PARK, IL													
31-33	Manufacturing	-	94	53	5 767	210 579	3 918	8 385	124 102	512 125	324 104	833 360	28 789
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	36	23	2 226	78 178	1 692	3 817	52 870	169 453	130 227	296 960	16 390
3321	Forging & stamping	-	9	8	1 195	42 458	1 017	2 321	30 845	89 094	75 745	163 253	10 584
33211	Forging & stamping	-	9	8	1 195	42 458	1 017	2 321	30 845	89 094	75 745	163 253	10 584
332116	Metal stamping	-	7	7	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	23	12	886	37 564	562	1 342	21 967	57 026	58 445	115 012	3 351
3335	Metalworking machinery mfg	1	14	7	500	21 000	338	768	13 618	38 581	27 327	64 263	1 974
33351	Metalworking machinery mfg	1	14	7	500	21 000	338	768	13 618	38 581	27 327	64 263	1 974
337	Furniture & related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
SHELBYVILLE, IL													
31-33	Manufacturing	-	7	3	1 125	31 286	979	2 348	25 803	102 073	99 808	200 340	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SKOKIE, IL													
31-33	Manufacturing	1	212	70	9 083	310 097	6 352	12 399	165 565	1 176 843	638 479	1 815 451	54 608
311	Food mfg	5	17	7	559	12 672	397	941	7 066	51 952	59 624	111 240	2 791
323	Printing & related support activities	1	30	8	619	24 332	417	817	14 936	42 041	26 284	67 405	12 346
3231	Printing & related support activities	1	30	8	619	24 332	417	817	14 936	42 041	26 284	67 405	12 346
32311	Printing	1	25	6	534	20 505	377	739	13 587	35 764	24 834	59 693	12 115
332	Fabricated metal product mfg	1	46	16	1 474	50 313	1 091	2 185	29 961	119 659	71 725	192 097	5 329
3327	Machine shops, turned product, & screw, nut, & bolt mfg	5	23	5	507	18 185	412	731	11 530	30 835	22 026	52 924	1 642
333	Machinery mfg	4	29	8	657	24 268	440	930	14 045	53 717	35 727	89 058	4 175
334	Computer & electronic product mfg	-	15	6	1 254	46 194	759	1 490	23 275	154 992	45 323	202 752	4 334
3345	Navigational, measuring, medical, & control instruments mfg	-	7	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	7	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	35	8	2 511	89 701	1 773	3 083	42 992	256 874	130 519	385 318	D
3399	Other miscellaneous mfg ..	-	11	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	4	1	g	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg...	-	3	1	g	D	D	D	D	D	D	D	D
SOUTH BELOIT, IL													
31-33	Manufacturing	-	37	17	1 983	62 828	1 538	2 900	40 768	122 812	85 176	211 725	8 582
333	Machinery mfg	-	8	7	869	28 068	681	1 347	19 376	43 612	41 178	82 021	2 125
3335	Metalworking machinery mfg	-	4	4	535	17 247	406	765	11 728	33 428	14 466	47 071	D
33351	Metalworking machinery mfg	-	4	4	535	17 247	406	765	11 728	33 428	14 466	47 071	D
SOUTH ELGIN, IL													
31-33	Manufacturing	-	48	19	1 962	65 527	1 608	3 485	44 673	148 284	96 781	243 901	14 638
326	Plastics & rubber products mfg	-	7	6	977	28 782	879	1 847	21 893	63 585	43 896	107 369	7 934
3261	Plastics product mfg	-	7	6	977	28 782	879	1 847	21 893	63 585	43 896	107 369	7 934
32619	Other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
SOUTH HOLLAND, IL													
31-33	Manufacturing	2	58	23	2 168	69 666	1 579	3 241	43 584	169 068	198 349	366 899	18 958
332	Fabricated metal product mfg	-	12	5	561	15 447	460	807	10 399	38 477	31 164	69 965	3 659
SPARTA, IL													
31-33	Manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
SPRINGFIELD, IL													
31-33	Manufacturing	-	84	29	2 850	82 226	1 989	3 862	47 065	211 854	252 523	462 909	16 598
333	Machinery mfg	-	8	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	4	552	14 478	342	590	5 915	37 138	19 901	57 388	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPRING GROVE, IL													
31-33	Manufacturing	1	31	10	693	22 922	501	1 069	13 251	66 033	41 387	107 484	3 709
STEGER, IL *													
31-33	Manufacturing	-	19	7	511	17 382	365	794	10 147	40 493	36 620	77 228	5 559
STERLING, IL													
31-33	Manufacturing	-	20	7	3 049	126 676	2 583	5 694	94 899	226 595	552 395	795 238	20 962
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	4	g	D	D	D	D	D	D	D	D
3325	Hardware mfg	1	2	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	1	2	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	1	2	2	g	D	D	D	D	D	D	D	D
STREAMWOOD, IL													
31-33	Manufacturing	-	45	7	918	36 809	625	1 368	19 095	84 209	66 618	148 439	5 585
STREATOR, IL *													
31-33	Manufacturing	-	20	12	1 413	43 568	1 145	2 192	32 737	101 438	140 450	241 613	4 425
SULLIVAN, IL													
31-33	Manufacturing	2	10	4	f	D	D	D	D	D	D	D	5 971
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
SUMMIT, IL													
31-33	Manufacturing	5	15	5	1 158	51 558	802	1 942	34 569	401 758	547 324	920 175	59 411
SYCAMORE, IL													
31-33	Manufacturing	-	30	16	1 665	47 997	1 199	2 153	26 599	152 370	192 748	346 257	5 378
TINLEY PARK, IL *													
31-33	Manufacturing	-	33	11	1 140	40 188	820	1 582	26 701	104 667	91 476	197 128	4 167
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
UNIVERSITY PARK, IL *													
31-33	Manufacturing	-	13	10	1 357	44 052	912	1 907	23 006	115 661	112 625	224 953	11 739
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
URBANA, IL													
31-33	Manufacturing	-	33	12	g	D	D	D	D	D	D	D	D
VANDALIA, IL													
31-33	Manufacturing	-	12	7	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VERNON HILLS, IL													
31-33	Manufacturing	-	18	8	1 424	52 579	742	1 402	17 522	179 070	165 284	347 846	D
334	Computer & electronic product mfg	-	5	3	996	35 178	475	807	8 559	109 244	126 054	240 319	D
3341	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
VILLA PARK, IL													
31-33	Manufacturing	2	77	11	1 041	33 573	750	1 438	19 367	79 212	34 144	112 902	3 926
WATSEKA, IL													
31-33	Manufacturing	-	11	6	1 094	29 636	806	1 741	18 711	55 421	100 702	156 569	3 875
WAUCONDA, IL													
31-33	Manufacturing	3	76	17	2 458	61 161	1 946	3 274	37 969	124 812	121 023	249 019	16 000
327	Nonmetallic mineral product mfg	9	3	1	f	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	9	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	8	783	24 329	627	1 236	16 267	66 623	51 720	118 905	4 900
WAUKEGAN, IL													
31-33	Manufacturing	-	95	32	6 037	213 568	4 193	8 239	119 832	453 546	533 008	986 849	31 490
322	Paper mfg	-	3	3	567	24 651	406	804	14 814	51 618	44 053	94 338	D
3222	Converted paper product mfg	-	3	3	567	24 651	406	804	14 814	51 618	44 053	94 338	D
332	Fabricated metal product mfg	-	19	5	597	23 877	414	948	11 665	50 417	35 018	87 348	1 743
333	Machinery mfg	-	10	2	628	24 187	525	972	18 171	28 349	47 400	78 355	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	4	2 023	59 926	1 317	2 342	30 794	134 694	105 229	241 894	D
3359	Other electrical equipment & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	2	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	9	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	6	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST CHICAGO, IL													
31-33	Manufacturing	-	111	48	5 797	197 114	4 349	9 333	125 640	988 373	776 767	1 769 551	39 838
311	Food mfg	-	4	4	1 299	60 069	1 060	2 413	41 831	632 361	307 025	945 150	11 009
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	16	12	1 413	39 134	1 181	2 662	27 745	112 428	120 645	232 623	12 176
3261	Plastics product mfg	3	15	11	g	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	5	4	3	588	17 029	462	1 102	10 812	53 832	59 547	113 327	D
326160	Plastics bottle mfg	5	4	3	588	17 029	462	1 102	10 812	53 832	59 547	113 327	D
335	Electrical equipment, appliance, & component mfg	-	6	4	601	15 890	389	660	8 433	27 412	24 706	52 483	2 524
3353	Electrical equipment mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	3	2	f	D	D	D	D	D	D	D	D
WESTMONT, IL													
31-33	Manufacturing	2	40	10	1 063	34 325	793	1 537	20 002	92 707	52 352	142 444	5 284
WHEATON, IL													
31-33	Manufacturing	2	34	4	508	19 028	381	780	10 535	37 664	24 952	63 123	3 464
WHEELING, IL *													
31-33	Manufacturing	1	186	83	10 194	415 755	6 930	15 010	210 245	1 234 260	1 064 127	2 306 912	72 502
311	Food mfg	2	12	7	750	28 417	490	1 136	15 576	241 970	141 311	384 590	10 751
323	Printing & related support activities	-	21	7	1 219	70 237	643	1 430	22 550	228 948	203 003	431 660	10 058
3231	Printing & related support activities	-	21	7	1 219	70 237	643	1 430	22 550	228 948	203 003	431 660	10 058
32311	Printing	-	18	7	1 206	69 843	633	1 409	22 276	227 565	201 722	428 993	D
323110	Commercial lithographic printing ..	-	10	3	515	30 451	345	830	16 649	74 514	68 481	142 699	2 149
323118	Blankbook, looseleaf binder, & device mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	15	11	1 032	31 137	784	1 801	18 613	62 598	72 767	134 841	6 384
3261	Plastics product mfg	1	14	10	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	12	9	884	24 609	726	1 650	16 535	52 188	63 203	114 509	D
326199	All other plastics product mfg	1	11	8	f	D	D	D	D	D	D	D	5 663
332	Fabricated metal product mfg	-	51	24	3 085	114 224	2 358	4 976	71 505	273 406	233 949	509 542	19 880
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	29	11	801	37 631	632	1 461	23 650	75 510	29 097	104 247	5 332
3329	Other fabricated metal product mfg	-	6	4	1 169	34 385	923	1 805	23 867	114 582	156 272	275 001	7 987
33299	All other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	32	10	1 167	53 317	731	1 660	29 216	123 492	79 679	202 124	5 341
334	Computer & electronic product mfg	1	15	8	810	27 084	523	1 043	12 324	71 561	59 322	132 104	2 819
WILLOWBROOK, IL													
31-33	Manufacturing	1	27	7	1 035	28 649	708	1 028	13 801	68 273	80 854	148 877	5 617
333	Machinery mfg	-	5	3	552	19 269	340	519	9 034	37 337	44 856	81 807	D
WILMINGTON, IL													
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WOOD DALE, IL													
31-33	Manufacturing	1	118	39	3 974	144 329	2 516	4 948	70 452	294 659	206 310	500 292	15 655
333	Machinery mfg	-	34	11	2 157	76 053	1 274	2 444	33 373	149 244	107 370	254 623	8 156
3339	Other general-purpose machinery mfg	-	8	3	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	6	3	g	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
WOODRIDGE, IL *													
31-33	Manufacturing	-	16	6	741	30 484	465	1 155	16 654	92 332	99 867	192 623	2 237
WOODSTOCK, IL													
31-33	Manufacturing	1	71	25	2 966	85 783	2 375	5 519	56 721	245 001	179 951	425 294	17 467
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	8	695	20 798	575	1 244	13 193	44 184	35 915	79 811	2 654
3261	Plastics product mfg	-	10	8	695	20 798	575	1 244	13 193	44 184	35 915	79 811	2 654
32619	Other plastics product mfg	-	8	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	8	7	f	D	D	D	D	D	D	D	D
YORKVILLE, IL													
31-33	Manufacturing	-	20	6	791	22 962	551	982	11 798	76 307	50 664	129 081	D
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
ILLINOIS		ILLINOIS—Con.	
Companies ¹	number.. 16 640	Quantity of electricity purchased for heat and power	1,000 kWh.. 35 609 511
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 2 126 989
All establishments	number.. 17 953	Total value of shipments	\$1,000.. 200 019 991
Establishments with 1 to 19 employees	number.. 11 381	Value of resales	\$1,000.. 9 449 736
Establishments with 20 to 99 employees	number.. 4 617	Value added	\$1,000.. 95 287 251
Establishments with 100 employees or more	number.. 1 955	Total inventories, beginning of year	\$1,000.. 21 340 153
All employees	number.. 887 350	Finished goods inventories, beginning of year	\$1,000.. 8 036 561
Total compensation ²	\$1,000.. 39 995 415	Work-in-process inventories, beginning of year	\$1,000.. 5 411 038
Annual payroll	\$1,000.. 31 837 943	Materials and supplies inventories, beginning of year	\$1,000.. 7 892 554
Total fringe benefits	\$1,000.. 8 157 472	Total inventories, end of year	\$1,000.. 22 235 759
Production workers, average for year	number.. 629 423	Finished goods inventories, end of year	\$1,000.. 8 464 537
Production workers on March 12	number.. 625 739	Work-in-process inventories, end of year	\$1,000.. 5 280 230
Production workers on May 12	number.. 629 230	Materials and supplies inventories, end of year	\$1,000.. 8 490 992
Production workers on August 12	number.. 630 853	Gross book value of total assets at beginning of year	\$1,000.. 72 225 147
Production workers on November 12	number.. 631 870	Total capital expenditures (new and used)	\$1,000.. 7 376 987
Production-worker hours	1,000.. 1 285 397	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 1 122 955
Production-worker wages	\$1,000.. 18 713 827	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 6 254 032
Total cost of materials	\$1,000.. 105 028 914	Total retirements ²	\$1,000.. 2 444 372
Cost of materials, parts, containers, etc., consumed	\$1,000.. 92 715 875	Gross book value of total assets at end of year	\$1,000.. 77 157 762
Cost of resales	\$1,000.. 6 825 168	Total depreciation during year ²	\$1,000.. 5 272 960
Cost of fuels	\$1,000.. 1 160 705	Total rental payments ²	\$1,000.. 1 645 035
Cost of purchased electricity	\$1,000.. 1 924 768	Buildings and other structures rental payments ²	\$1,000.. 817 556
Cost of contract work	\$1,000.. 2 402 398	Machinery and equipment rental payments ²	\$1,000.. 827 479

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

ILLINOIS

Algonquin is in Kane and McHenry Counties.

Arlington Heights is in Cook and Lake Counties; it annexed into Lake County prior to 1990, but this change was not submitted to the Census Bureau until April 1995.

Aurora is in DuPage, Kane, Kendall, and Will Counties; it annexed into Kendall and Will Counties in December 1995.

Barrington is in Cook and Lake Counties.

Barrington Hills is in Cook, Kane, Lake, and McHenry Counties.

Bartlett is in Cook, DuPage, and Kane Counties.

Batavia is in DuPage and Kane Counties.

Bedford Park does not qualify as a “place” for the economic census based on its 1990 population but is included because of its dense concentration of economic activity.

Bensenville is in Cook and DuPage Counties.

Bolingbrook is in DuPage and Will Counties.

Buffalo Grove is in Cook and Lake Counties.

Burr Ridge is in Cook and DuPage Counties.

Casey is in Clark and Cumberland Counties.

Centralia is in Clinton, Marion, and Washington Counties.

Channahon is in Grundy and Will Counties.

Chicago is in Cook and DuPage Counties.

Coal City is in Grundy and Will Counties.

Coal Valley is in Henry and Rock Island Counties.

Collinsville is in Madison and St. Clair Counties.

Colona resulted from the merger of Green Rock (reported in the 1992 Economic Census) and Colona (not populous enough for separate tabulation in the 1992 Economic Census) in May 1995.

Columbia is in Monroe and St. Clair Counties; it annexed into St. Clair County in January 1993.

Deerfield is in Cook and Lake Counties.

Dwight is in Grundy and Livingston Counties.

East Dundee is in Cook and Kane Counties.

Elgin is in Cook and Kane Counties.

Elk Grove Village is in Cook and DuPage Counties.

Elmhurst is in Cook and DuPage Counties; it annexed into Cook County in July 1992.

Fox Lake is in Lake and McHenry Counties.

Fox River Grove is in Lake and McHenry Counties.

Hanover Park is in Cook and DuPage Counties.

Hinsdale is in Cook and DuPage Counties.

Hoffman Estates is in Cook and Kane Counties.

Huntley is in Kane and McHenry Counties.

Island Lake is in Lake and McHenry Counties.

Joliet is in Kendall and Will Counties; it annexed into Kendall County in June 1996.

Lemont is in Cook, DuPage, and Will Counties.

Madison is in Madison and St. Clair Counties.

Marion is in Johnson and Williamson Counties; it annexed into Johnson County in September 1993.

Matteson is in Cook and Will Counties; it annexed into Will County in February 1990, but this change was not submitted to the Census Bureau until May 1995.

Minooka is in Grundy and Will Counties.

Montgomery is in Kane and Kendall Counties.

Naperville is in DuPage and Will Counties.

New Baden is in Clinton and St. Clair Counties.

Oak Brook is in Cook and DuPage Counties.

Orland Park is in Cook and Will Counties; it annexed into Will County in January 1996.

Park Forest is in Cook and Will Counties.

Pekin is in Peoria and Tazewell Counties.

Peoria Heights is in Peoria, Tazewell, and Woodford Counties.

Roselle is in Cook and DuPage Counties.

St. Charles is in DuPage and Kane Counties.

Sandwich is in DeKalb and Kendall Counties.

Sauk Village is in Cook and Will Counties.

Schaumburg is in Cook and DuPage Counties.

Steger is in Cook and Will Counties.

Streator is in La Salle and Livingston Counties.

Tinley Park is in Cook and Will Counties.

University Park is in Cook and Will Counties.

Virden is in Macoupin and Sangamon Counties.

West Peoria was incorporated in November 1993.

Wheeling is in Cook and Lake Counties.

Woodridge is in Cook, DuPage, and Will Counties; it annexed into Cook County in June 1993.

Appendix E. Metropolitan Areas

ILLINOIS

Bloomington—Normal, IL MSA

McLean County, IL

Champaign—Urbana, IL MSA

Champaign County, IL

Chicago, IL PMSA

Cook County, IL

DeKalb County, IL

DuPage County, IL

Grundy County, IL

Kane County, IL

Kendall County, IL

Lake County, IL

McHenry County, IL

Will County, IL

Chicago—Gary—Kenosha, IL—IN—WI CMSA

Chicago, IL PMSA

Cook County, IL

DeKalb County, IL

DuPage County, IL

Grundy County, IL

Kane County, IL

Kendall County, IL

Lake County, IL

McHenry County, IL

Will County, IL

Gary, IN PMSA

Lake County, IN

Porter County, IN

Kankakee, IL PMSA

Kankakee County, IL

Kenosha, WI PMSA

Kenosha County, WI

Davenport—Moline—Rock Island, IA—IL MSA

Henry County, IL

Rock Island County, IL

Scott County, IA

Decatur, IL MSA

Macon County, IL

Kankakee, IL PMSA

Kankakee County, IL

Peoria—Pekin, IL MSA

Peoria County, IL

Tazewell County, IL

Woodford County, IL

Rockford, IL MSA

Boone County, IL

Ogle County, IL

Winnebago County, IL

St. Louis, MO—IL MSA

Clinton County, IL

Jersey County, IL

Madison County, IL

Monroe County, IL

St. Clair County, IL

Franklin County, MO

Jefferson County, MO

Lincoln County, MO

St. Charles County, MO

St. Louis County, MO

Warren County, MO

St. Louis, MO (IC)

Springfield, IL MSA

Menard County, IL

Sangamon County, IL

Indiana

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
INDIANA													
31-33	Manufacturing	-	9 303	3 946	625 692	22 121 447	478 248	981 408	14 956 506	67 210 944	75 652 832	142 270 702	5 548 626
311	Food mfg	-	446	188	33 062	968 187	22 865	46 976	552 012	4 609 040	6 030 733	10 620 502	315 140
3111	Animal food mfg	-	51	22	1 677	48 664	1 026	2 166	27 880	266 314	572 074	840 106	24 367
31111	Animal food mfg	-	51	22	1 677	48 664	1 026	2 166	27 880	266 314	572 074	840 106	24 367
311111	Dog & cat food mfg	-	7	4	638	19 464	447	943	13 264	166 331	219 268	380 365	10 298
311119	Other animal food mfg	1	44	18	1 039	29 200	579	1 223	14 616	99 983	352 806	459 741	14 069
3112	Grain & oilseed milling	-	26	18	2 868	122 023	2 176	4 971	82 815	778 771	1 726 688	2 493 907	96 742
31121	Flour milling & malt mfg	-	14	7	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	14	7	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	11	10	2 378	104 961	1 821	4 176	72 175	697 579	1 537 477	2 228 931	79 236
311221	Wet corn milling	-	4	4	g	D	D	D	D	D	D	D	57 789
311222	Soybean processing	-	6	5	462	17 978	335	858	12 434	78 443	983 465	1 057 262	D
311225	Fats & oils refining & blending	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	43	8	1 527	33 953	1 318	2 334	25 917	168 770	111 244	277 545	8 232
31133	Confectionery mfg from purchased chocolate	-	31	5	f	D	D	D	D	D	D	D	1 523
311330	Confectionery mfg from purchased chocolate	-	31	5	f	D	D	D	D	D	D	D	1 523
31134	Nonchocolate confectionery mfg	-	9	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	9	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	25	13	2 033	52 469	1 500	3 085	31 164	241 341	303 045	547 337	33 446
31141	Frozen food mfg	-	5	1	136	3 031	93	159	1 767	7 335	7 048	14 156	508
311412	Frozen specialty food mfg	-	5	1	136	3 031	93	159	1 767	7 335	7 048	14 156	508
31142	Fruit & vegetable canning, pickling, & drying	1	20	12	1 897	49 438	1 407	2 926	29 397	234 006	295 997	533 181	32 938
311421	Fruit & vegetable canning	1	15	9	1 300	31 329	938	1 807	19 315	169 334	227 334	400 089	D
311422	Specialty canning	2	4	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	33	21	4 750	180 022	2 118	4 687	64 695	1 286 352	908 499	2 197 874	44 839
31151	Dairy product (except frozen) mfg	-	21	17	4 125	161 300	1 583	3 520	50 163	1 160 217	736 358	1 901 584	31 514
311511	Fluid milk mfg	1	12	11	1 472	49 332	920	1 983	28 195	82 070	420 861	502 216	D
311513	Cheese mfg	-	5	4	e	D	D	D	D	D	D	D	1 594
311514	Dry, condensed, & evaporated dairy product mfg	-	3	1	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	12	4	625	18 722	535	1 167	14 532	126 135	172 141	296 290	13 325
311520	Ice cream & frozen dessert mfg	-	12	4	625	18 722	535	1 167	14 532	126 135	172 141	296 290	13 325
3116	Meat product mfg	-	63	32	7 742	166 800	6 541	13 992	125 323	417 453	1 389 761	1 795 820	18 093
31161	Animal slaughtering & processing	-	63	32	7 742	166 800	6 541	13 992	125 323	417 453	1 389 761	1 795 820	18 093
311611	Animal (except poultry) slaughtering	-	32	10	3 471	70 012	3 071	6 521	58 024	116 839	865 348	977 438	4 342
311612	Meat processed from carcasses	1	15	10	1 326	33 178	1 063	2 308	21 958	131 020	265 228	396 948	7 339
311613	Rendering & meat byproduct processing	-	9	6	311	9 998	145	325	4 372	30 415	47 379	77 131	2 979
311615	Poultry processing	1	7	6	2 634	53 612	2 262	4 838	40 969	139 179	211 806	344 303	3 433
3118	Bakeries & tortilla mfg	-	155	48	7 645	219 461	4 508	8 411	108 299	766 618	504 473	1 269 983	44 145
31181	Bread & bakery product mfg	1	136	40	6 117	172 793	3 189	5 784	72 128	496 080	293 846	791 228	23 596
311811	Retail bakeries	3	89	11	795	9 526	527	663	5 453	19 187	11 737	30 994	786
311812	Commercial bakeries	1	40	23	4 798	151 683	2 293	4 482	58 691	442 834	242 629	687 304	21 140
311813	Frozen cakes, pies, & other pastries mfg	-	7	6	524	11 584	369	639	7 984	34 059	39 480	72 930	1 670
31182	Cookie, cracker, & pasta mfg	-	16	6	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	6	3	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	4	3	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	3	2	e	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	3	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	INDIANA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	50	26	4 820	144 795	3 678	7 330	85 919	683 421	514 949	1 197 930	45 276
31191	Snack food mfg	—	16	9	2 529	72 027	2 074	3 929	45 284	434 760	193 383	627 532	29 127
311919	Other snack food mfg .	—	15	8	h	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	9	2	1	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	9	2	1	c	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg	—	3	1	e	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg	—	3	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	—	9	3	434	12 854	324	659	8 798	49 942	64 700	114 694	1 864
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	6	3	405	12 212	302	621	8 448	48 508	63 179	111 737	1 792
31199	All other food mfg	1	20	12	1 418	44 491	1 075	2 278	26 492	170 750	223 960	392 916	11 924
311991	Perishable prepared food mfg	—	7	4	414	11 140	327	586	7 835	21 562	33 682	55 325	737
311999	All other miscellaneous food mfg	1	13	8	1 004	33 351	748	1 692	18 657	149 188	190 278	337 591	11 187
312	Beverage & tobacco product mfg	3	44	21	3 159	112 607	1 785	3 459	56 601	773 339	850 587	1 599 649	42 498
3121	Beverage mfg	3	43	20	h	D	D	D	D	D	D	D	42 498
31211	Soft drink & ice mfg	3	27	16	2 244	76 635	1 078	2 282	31 963	697 247	789 126	1 483 137	30 921
312111	Soft drink mfg	3	13	12	2 026	69 982	973	2 064	29 085	680 285	778 702	1 455 834	29 356
312113	Ice mfg	1	12	2	c	D	D	D	D	D	D	D	D
31212	Breweries	9	5	1	c	D	D	D	D	D	D	D	D
312120	Breweries	9	5	1	c	D	D	D	D	D	D	D	D
31214	Distilleries	—	2	2	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	1	28	7	456	9 690	380	716	6 418	20 827	35 636	56 699	743
3132	Fabric mills	—	12	3	279	4 907	247	446	3 899	11 823	15 342	27 183	278
31323	Nonwoven fabric mills .	—	3	2	c	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	3	2	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	1	16	4	177	4 783	133	270	2 519	9 004	20 294	29 516	465
31332	Fabric coating mills	—	4	2	100	3 325	68	150	1 527	5 819	18 630	24 710	185
313320	Fabric coating mills .	—	4	2	100	3 325	68	150	1 527	5 819	18 630	24 710	185
314	Textile product mills	—	137	33	3 627	78 407	3 041	5 411	50 002	174 017	167 945	349 948	9 182
3141	Textile furnishings mills .	—	60	15	1 522	27 879	1 321	2 323	19 508	56 042	81 422	148 901	1 716
31411	Carpet & rug mills	1	7	1	320	6 979	268	537	4 577	11 185	19 075	29 939	543
314110	Carpet & rug mills	1	7	1	320	6 979	268	537	4 577	11 185	19 075	29 939	543
31412	Curtain & linen mills	—	53	14	1 202	20 900	1 053	1 786	14 931	44 857	62 347	118 962	1 173
314121	Curtain & drapery mills	—	43	6	588	10 805	498	945	7 688	16 421	15 925	32 422	573
314129	Other household textile product mills	—	10	8	614	10 095	555	841	7 243	28 436	46 422	86 540	600
3149	Other textile product mills .	—	77	18	2 105	50 528	1 720	3 088	30 494	117 975	86 523	201 047	7 466
31491	Textile bag & canvas mills	1	46	9	1 040	23 971	842	1 517	15 402	45 980	36 096	81 339	3 868
314912	Canvas & related product mills	1	42	8	971	22 864	775	1 362	14 375	44 678	35 580	79 518	3 822
31499	All other textile product mills	—	31	9	1 065	26 557	878	1 571	15 092	71 995	50 427	119 708	3 598
314992	Tire cord & tire fabric mills	—	1	1	c	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills .	—	30	8	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	81	26	2 525	51 194	1 887	3 754	29 432	117 849	123 064	244 017	5 113
3151	Apparel knitting mills	7	5	2	186	2 910	171	280	2 445	5 007	6 837	12 086	401
31519	Other apparel knitting mills	9	2	1	c	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	9	2	1	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	56	20	2 125	44 784	1 544	3 160	24 698	106 085	111 133	220 004	4 429
31521	Cut & sew apparel contractors	3	26	3	c	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	23	1	143	2 173	126	207	1 480	2 940	1 356	4 287	108

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31522	Men's & boys' cut & sew apparel mfg.....	-	22	14	1 774	39 247	1 246	2 620	20 752	96 142	105 415	204 466	4 128
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	-	3	2	e	D	D	D	D	D	D	D	104
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	4	4	890	23 072	471	1 124	8 819	53 478	68 523	121 728	D
315225	Men's & boys' cut & sew work clothing mfg.....	1	5	4	255	4 258	243	490	3 696	6 443	11 848	21 353	64
315228	Men's & boys' cut & sew other outerwear mfg.....	1	7	3	106	1 678	86	121	1 113	3 031	1 964	5 078	70
31523	Women's & girls' cut & sew apparel mfg.....	4	5	3	137	2 496	112	191	1 780	5 557	3 592	9 035	156
3159	Apparel accessories & other apparel mfg.....	4	20	4	214	3 500	172	314	2 289	6 757	5 094	11 927	283
31599	Apparel accessories & other apparel mfg.....	4	20	4	214	3 500	172	314	2 289	6 757	5 094	11 927	283
315999	Other apparel accessories & other apparel mfg.....	5	17	2	135	2 547	107	194	1 544	4 917	4 061	8 968	D
316	Leather & allied product mfg.	-	30	13	1 574	30 616	1 337	2 661	22 451	77 354	68 342	146 449	1 583
3161	Leather & hide tanning & finishing.....	-	4	2	c	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing.....	-	4	2	c	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing.....	-	4	2	c	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg.	-	3	3	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg.....	1	22	8	680	13 461	531	1 033	8 251	28 190	22 495	50 788	835
31699	Other leather & allied product mfg.....	1	22	8	680	13 461	531	1 033	8 251	28 190	22 495	50 788	835
316991	Luggage mfg.....	2	8	5	307	6 133	259	447	3 660	11 649	8 419	19 956	347
316993	Personal leather good (except women's handbag & purse) mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg.....	1	10	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	601	220	21 692	563 481	17 894	35 183	411 198	1 234 961	1 943 686	3 167 438	71 747
3211	Sawmills & wood preservation.....	1	125	30	1 987	43 740	1 651	3 161	32 926	111 782	202 482	312 022	11 576
32111	Sawmills & wood preservation.....	1	125	30	1 987	43 740	1 651	3 161	32 926	111 782	202 482	312 022	11 576
321113	Sawmills.....	2	120	25	1 829	39 491	1 518	2 889	29 836	95 066	119 395	211 461	10 191
321114	Wood preservation...	-	5	5	158	4 249	133	272	3 090	16 716	83 087	100 561	1 385
3212	Veneer, plywood, & engineered wood product mfg.....	-	69	39	3 703	90 445	3 118	6 166	63 688	180 527	263 177	440 256	13 829
32121	Veneer, plywood, & engineered wood product mfg.....	-	69	39	3 703	90 445	3 118	6 166	63 688	180 527	263 177	440 256	13 829
321211	Hardwood veneer & plywood mfg.....	-	28	24	2 485	60 969	2 143	4 289	42 927	115 966	163 992	277 385	8 867
321214	Truss mfg.....	1	26	10	781	17 896	602	1 126	11 754	36 619	55 911	92 000	D
321219	Reconstituted wood product mfg.....	2	14	5	e	D	D	D	D	D	D	D	3 230
3219	Other wood product mfg....	1	407	151	16 002	429 296	13 125	25 856	314 584	942 652	1 478 027	2 415 160	46 342
32191	Millwork.....	-	128	66	5 299	131 057	4 376	8 874	95 031	285 817	503 126	782 952	20 362
321911	Wood window & door mfg.....	-	31	20	1 772	42 062	1 389	2 618	28 593	97 790	147 669	243 359	4 406
321912	Cut stock, resawing lumber, & planing....	-	52	29	2 312	61 025	1 950	4 260	45 588	129 908	275 347	402 838	12 736
321918	Other millwork (including flooring)...	-	45	17	1 215	27 970	1 037	1 996	20 850	58 119	80 110	136 755	3 220
32192	Wood container & pallet mfg.....	3	136	31	1 968	35 034	1 587	2 897	25 736	76 231	86 220	162 054	5 087
321920	Wood container & pallet mfg.....	3	136	31	1 968	35 034	1 587	2 897	25 736	76 231	86 220	162 054	5 087

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	1	143	54	8 735	263 205	7 162	14 085	193 817	580 604	888 681	1 470 154	20 893
321991	Manufactured home (mobile home) mfg ..	1	38	33	6 679	214 198	5 522	11 064	162 059	483 384	770 132	1 254 600	16 931
321992	Prefabricated wood building mfg	—	23	8	1 004	30 546	788	1 570	18 505	56 392	78 606	135 353	1 775
321999	All other miscellaneous wood product mfg ...	2	82	13	1 052	18 461	852	1 451	13 253	40 828	39 943	80 201	2 187
322	Paper mfg	—	168	128	13 311	431 636	9 898	20 503	277 790	1 206 840	1 594 618	2 765 357	91 726
3221	Pulp, paper, & paperboard mills	—	11	11	1 163	45 980	893	2 017	32 553	113 110	181 403	293 857	19 945
32212	Paper mills	—	2	2	c	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	157	117	12 148	385 656	9 005	18 486	245 237	1 093 730	1 413 215	2 471 500	71 781
32221	Paperboard container mfg	—	100	76	7 532	251 033	5 649	11 574	160 034	581 076	841 248	1 417 389	46 744
322211	Corrugated & solid fiber box mfg	—	67	52	4 571	145 956	3 402	6 582	90 035	331 056	560 933	890 872	28 549
322212	Folding paperboard box mfg	1	18	15	2 219	84 132	1 589	3 599	52 416	178 117	191 967	368 988	14 179
322213	Setup paperboard box mfg	—	5	3	154	3 062	123	228	1 999	6 029	4 006	9 906	D
322214	Fiber can, tube, drum, & similar products mfg	—	7	3	313	11 065	278	633	9 296	30 915	47 360	78 192	D
322215	Nonfolding sanitary food container mfg ...	—	3	3	275	6 818	257	532	6 288	34 959	36 982	69 431	1 449
32222	Paper bag & coated & treated paper mfg	—	25	19	2 178	73 183	1 668	3 543	50 620	321 408	397 913	692 180	15 077
322221	Coated & laminated packaging paper & plastics film mfg	—	3	3	515	17 386	404	909	12 335	48 734	74 043	122 041	D
322222	Coated & laminated paper mfg	—	18	13	1 204	43 774	863	1 797	29 140	234 453	265 741	473 625	6 927
322223	Plastics, foil, & coated paper bag mfg	—	1	1	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	1	c	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	15	9	1 047	24 165	641	1 252	14 511	80 989	85 296	164 815	3 309
322231	Die-cut paper & paperboard office supplies mfg	—	8	3	192	4 016	149	296	2 853	28 502	45 851	74 488	D
322232	Envelope mfg	—	4	4	e	D	D	D	D	D	D	D	2 281
322233	Stationery, tablet, & related product mfg ..	—	3	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	17	13	1 391	37 275	1 047	2 117	20 072	110 257	88 758	197 116	6 651
322291	Sanitary paper product mfg	—	1	1	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	—	16	12	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	858	201	22 218	648 187	16 682	32 686	430 454	1 472 932	1 241 279	2 715 777	112 718
3231	Printing & related support activities	1	858	201	22 218	648 187	16 682	32 686	430 454	1 472 932	1 241 279	2 715 777	112 718
32311	Printing	1	767	169	19 635	581 840	14 667	28 990	387 182	1 347 061	1 191 347	2 536 167	102 690
323110	Commercial lithographic printing ..	1	396	103	8 171	251 261	5 820	11 787	155 700	493 283	480 061	970 386	47 383
323111	Commercial gravure printing	—	12	4	2 038	76 134	1 787	4 068	63 128	184 567	201 591	385 357	21 517
323112	Commercial flexographic printing .	1	25	10	1 256	36 155	924	1 817	23 464	86 491	65 903	151 959	5 438
323113	Commercial screen printing	—	65	9	1 443	33 324	1 051	1 833	17 843	99 859	121 886	220 634	4 399
323114	Quick printing	2	157	7	1 106	24 354	709	950	12 780	47 519	26 616	73 777	2 746
323115	Digital printing	4	7	4	c	D	D	D	D	D	D	D	D
323116	Manifold business form printing	4	22	17	1 485	47 042	1 122	2 275	32 700	176 674	113 594	292 974	8 341
323117	Book printing	—	10	4	h	D	D	D	D	D	D	D	8 069
323118	Blankbook, looseleaf binder, & device mfg .	—	3	3	413	12 401	300	675	7 616	23 195	27 359	49 326	D
323119	Other commercial printing	5	70	8	917	20 634	646	1 170	12 937	50 862	24 542	75 572	2 293
32312	Support activities for printing	1	91	32	2 583	66 347	2 015	3 696	43 272	125 871	49 932	179 610	10 028
323121	Tradebinding & related work	1	34	18	1 775	38 836	1 439	2 613	27 098	71 521	36 483	111 767	6 899
323122	Prepress services	3	57	14	808	27 511	576	1 083	16 174	54 350	13 449	67 843	3 129

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	-	61	16	3 238	155 597	2 589	5 424	117 546	926 638	3 668 450	4 606 223	90 968
3241	Petroleum & coal products mfg	-	61	16	3 238	155 597	2 589	5 424	117 546	926 638	3 668 450	4 606 223	90 968
32411	Petroleum refineries	-	3	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	2	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	-	43	8	g	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	1	34	3	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	-	9	5	871	30 456	738	1 589	24 143	151 052	150 673	301 343	7 429
32419	Other petroleum & coal products mfg	1	15	6	e	D	D	D	D	D	D	D	11 885
324191	Petroleum lubricating oil & grease mfg	1	14	6	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	310	146	21 869	1 073 936	13 277	26 510	555 296	8 831 369	4 965 203	13 319 124	571 377
3251	Basic chemical mfg	-	63	28	2 862	130 910	1 442	3 111	66 800	663 294	534 313	1 199 340	111 177
32512	Industrial gas mfg	-	21	6	466	20 451	141	350	6 221	205 331	90 938	296 776	60 098
325120	Industrial gas mfg	-	21	6	466	20 451	141	350	6 221	205 331	90 938	296 776	60 098
32513	Dye & pigment mfg	2	2	2	c	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	2	2	2	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	1	21	11	672	30 897	426	996	17 742	138 797	109 542	248 330	16 863
325188	All other basic inorganic chemical mfg	1	21	11	672	30 897	426	996	17 742	138 797	109 542	248 330	16 863
32519	Other basic organic chemical mfg	-	18	8	1 539	71 989	751	1 496	38 000	254 957	300 377	558 145	32 074
325193	Ethyl alcohol mfg	-	1	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	15	7	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	22	16	2 974	134 627	1 973	4 088	87 276	778 383	851 603	1 598 670	72 374
32521	Resin & synthetic rubber mfg	-	22	16	2 974	134 627	1 973	4 088	87 276	778 383	851 603	1 598 670	72 374
325211	Plastics material & resin mfg	-	15	13	2 711	126 395	1 795	3 716	81 412	749 929	779 543	1 498 419	68 928
325212	Synthetic rubber mfg ..	-	7	3	263	8 232	178	372	5 864	28 454	72 060	100 251	3 446
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	1	13	2	219	4 894	145	239	2 714	31 519	33 305	65 301	1 869
32531	Fertilizer mfg	1	12	2	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	1	10	2	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	29	16	7 514	499 232	4 617	9 579	243 413	6 271 251	2 005 197	7 834 396	312 100
32541	Pharmaceutical & medicine mfg	-	29	16	7 514	499 232	4 617	9 579	243 413	6 271 251	2 005 197	7 834 396	312 100
325411	Medicinal & botanical mfg	-	2	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	18	11	h	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	3	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	65	33	2 809	98 212	1 789	2 883	49 434	245 546	316 475	567 194	20 389
32551	Paint & coating mfg	1	42	24	2 021	73 352	1 260	1 800	35 765	179 235	234 686	419 762	10 274
325510	Paint & coating mfg	1	42	24	2 021	73 352	1 260	1 800	35 765	179 235	234 686	419 762	10 274
32552	Adhesive mfg	2	23	9	788	24 860	529	1 083	13 669	66 311	81 789	147 432	10 115
325520	Adhesive mfg	2	23	9	788	24 860	529	1 083	13 669	66 311	81 789	147 432	10 115
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	46	20	2 957	120 290	1 679	3 662	62 990	451 073	448 614	892 588	20 998
32561	Soap & cleaning compound mfg	3	42	18	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	3	21	9	1 713	85 625	1 052	2 363	50 362	353 547	325 285	671 349	16 099
325612	Polish & other sanitation good mfg ..	2	19	9	691	22 391	353	746	7 762	56 935	54 344	111 256	D
32562	Toilet preparation mfg	8	4	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	8	4	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	—	72	31	2 534	85 771	1 632	2 948	42 669	390 303	775 696	1 161 635	32 470
32591	Printing ink mfg	—	11	5	413	14 440	235	501	8 350	130 796	329 563	462 463	D
325910	Printing ink mfg	—	11	5	413	14 440	235	501	8 350	130 796	329 563	462 463	D
32599	All other chemical product & preparation mfg	—	59	26	g	D	D	D	D	D	D	D	21 538
325991	Custom compounding of purchased resin	—	29	16	1 393	51 599	918	1 707	25 559	178 697	345 358	522 055	13 369
325992	Photographic film, paper, plate, & chemical mfg	1	4	1	c	D	D	D	D	D	D	D	868
325998	All other miscellaneous chemical product & preparation mfg	3	26	9	483	16 133	316	614	6 907	73 302	91 950	160 530	7 301
326	Plastics & rubber products mfg	1	637	410	54 855	1 484 357	44 857	89 792	1 043 489	3 718 660	3 591 740	7 323 102	430 298
3261	Plastics product mfg	1	510	346	41 814	1 111 926	33 908	67 703	768 397	2 900 184	2 919 273	5 826 907	358 947
32611	Unsupported plastics film, sheet, & bag mfg	—	46	33	5 220	169 355	4 176	8 547	122 433	475 563	550 035	1 039 160	104 750
326111	Unsupported plastics bag mfg	—	10	7	2 085	65 575	1 738	3 394	51 943	160 114	213 766	375 912	39 674
326112	Unsupported plastics packaging film & sheet mfg	8	8	5	348	10 481	274	635	7 679	23 063	31 081	55 760	7 142
326113	Unsupported plastics film & sheet (except packaging) mfg	—	28	21	2 787	93 299	2 164	4 518	62 811	292 386	305 188	607 488	57 934
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	46	26	2 109	58 180	1 659	3 248	38 349	179 755	181 853	357 949	20 794
326121	Unsupported plastics profile shape mfg	1	31	14	1 182	34 476	907	1 770	21 458	79 847	53 439	132 635	4 627
326122	Plastics pipe & pipe fitting mfg	1	15	12	927	23 704	752	1 478	16 891	99 908	128 414	225 314	16 167
32613	Laminated plastics plate, sheet, & shape mfg	1	14	8	678	22 752	457	886	11 877	54 334	67 814	120 175	4 352
326130	Laminated plastics plate, sheet, & shape mfg	1	14	8	678	22 752	457	886	11 877	54 334	67 814	120 175	4 352
32614	Polystyrene foam product mfg	2	17	13	1 577	43 447	1 265	2 727	31 098	140 148	117 265	259 800	9 847
326140	Polystyrene foam product mfg	2	17	13	1 577	43 447	1 265	2 727	31 098	140 148	117 265	259 800	9 847
32615	Urethane & other foam product (except polystyrene) mfg	2	25	21	1 788	46 418	1 414	2 340	27 938	144 156	258 906	401 025	10 514
326150	Urethane & other foam product (except polystyrene) mfg	2	25	21	1 788	46 418	1 414	2 340	27 938	144 156	258 906	401 025	10 514
32616	Plastics bottle mfg	2	15	11	1 342	36 560	1 190	2 354	28 904	108 317	100 727	207 404	17 948
326160	Plastics bottle mfg	2	15	11	1 342	36 560	1 190	2 354	28 904	108 317	100 727	207 404	17 948
32619	Other plastics product mfg	1	347	234	29 100	735 214	23 747	47 601	507 798	1 797 911	1 642 673	3 441 394	190 742
326191	Plastics plumbing fixture mfg	—	16	9	995	23 459	835	1 536	16 659	45 704	33 853	80 293	2 882
326199	All other plastics product mfg	1	331	225	28 105	711 755	22 912	46 065	491 139	1 752 207	1 608 820	3 361 101	187 860
3262	Rubber product mfg	—	127	64	13 041	372 431	10 949	22 089	275 092	818 476	672 467	1 496 195	71 351
32621	Tire mfg	—	33	5	1 877	65 339	1 622	2 696	52 617	101 167	124 557	240 947	11 838
326211	Tire mfg (except retreading)	—	6	2	g	D	D	D	D	D	D	D	D
326212	Tire retreading	2	27	3	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	3	2	127	4 088	119	198	2 838	13 543	5 892	19 883	374
326220	Rubber & plastics hoses & belting mfg	—	3	2	127	4 088	119	198	2 838	13 543	5 892	19 883	374
32629	Other rubber product mfg	—	91	57	11 037	303 004	9 208	19 195	219 637	703 766	542 018	1 235 365	59 139
326291	Rubber product mfg for mechanical use	—	53	40	8 213	229 589	6 800	13 935	164 177	565 489	413 579	967 965	44 586
326299	All other rubber product mfg	1	38	17	2 824	73 415	2 408	5 260	55 460	138 277	128 439	267 400	14 553

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	467	176	18 514	622 439	14 673	30 605	450 824	1 742 355	1 480 137	3 249 942	160 509
3271	Clay product & refractory mfg	1	46	15	g	D	D	D	D	D	D	D	5 846
32711	Pottery, ceramics, & plumbing fixture mfg	-	15	4	e	D	D	D	D	D	D	D	3 421
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	3	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	1	31	11	881	25 467	688	1 387	18 309	77 950	41 137	119 007	2 425
327121	Brick & structural clay tile mfg	-	5	2	c	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	-	5	1	146	3 718	117	251	2 457	6 217	5 398	11 629	247
327124	Clay refractory mfg	3	10	3	254	7 347	193	364	5 347	22 167	16 582	39 539	890
327125	Nonclay refractory mfg	-	9	4	231	8 012	172	376	5 701	30 812	14 424	45 336	938
3272	Glass & glass product mfg	-	64	30	7 454	239 768	6 367	13 132	191 284	663 509	566 779	1 245 465	54 991
32721	Glass & glass product mfg	-	64	30	7 454	239 768	6 367	13 132	191 284	663 509	566 779	1 245 465	54 991
327212	Other pressed & blown glass & glassware mfg	-	2	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	-	5	5	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	56	23	4 979	152 368	4 134	8 957	115 195	403 075	432 514	836 445	28 749
3273	Cement & concrete product mfg	1	270	81	5 113	174 994	3 700	7 589	113 203	538 108	440 803	985 124	56 158
32731	Cement mfg	-	7	5	677	27 290	508	1 001	18 565	160 874	77 567	244 562	16 257
327310	Cement mfg	-	7	5	677	27 290	508	1 001	18 565	160 874	77 567	244 562	16 257
32732	Ready-mix concrete mfg	2	141	40	2 202	81 374	1 722	3 574	56 712	239 651	237 420	477 107	25 128
327320	Ready-mix concrete mfg	2	141	40	2 202	81 374	1 722	3 574	56 712	239 651	237 420	477 107	25 128
32733	Concrete pipe, brick, & block mfg	1	34	17	889	26 454	544	1 116	15 308	60 062	65 490	124 947	8 692
327331	Concrete block & brick mfg	2	22	10	482	15 577	267	580	8 049	32 821	42 035	74 170	3 195
327332	Concrete pipe mfg	1	12	7	407	10 877	277	536	7 259	27 241	23 455	50 777	5 497
32739	Other concrete product mfg	1	88	19	1 345	39 876	926	1 898	22 618	77 521	60 326	138 508	6 081
327390	Other concrete product mfg	1	88	19	1 345	39 876	926	1 898	22 618	77 521	60 326	138 508	6 081
3274	Lime & gypsum product mfg	-	12	8	f	D	D	D	D	D	D	D	8 688
32742	Gypsum product mfg	-	10	7	915	34 678	765	1 799	25 834	113 590	153 004	265 577	D
327420	Gypsum product mfg	-	10	7	915	34 678	765	1 799	25 834	113 590	153 004	265 577	D
3279	Other nonmetallic mineral product mfg	-	75	42	3 621	131 206	2 728	5 834	89 947	304 354	245 101	556 862	34 826
32791	Abrasive product mfg	1	10	7	280	9 097	223	421	6 176	21 695	9 500	30 937	1 187
327910	Abrasive product mfg	1	10	7	280	9 097	223	421	6 176	21 695	9 500	30 937	1 187
32799	All other nonmetallic mineral product mfg	-	65	35	3 341	122 109	2 505	5 413	83 771	282 659	235 601	525 925	33 639
327991	Cut stone & stone product mfg	-	31	14	848	26 924	670	1 373	19 468	47 122	32 155	79 664	2 651
327992	Ground or treated mineral & earth mfg	-	15	9	603	23 775	423	1 010	15 880	58 922	42 201	100 891	5 448
327993	Mineral wool mfg	-	14	10	1 811	68 995	1 359	2 932	47 122	167 931	150 821	326 378	25 165
331	Primary metal mfg	-	250	189	63 260	2 970 119	50 063	109 302	2 249 845	8 430 483	10 946 090	19 288 370	1 014 682
3311	Iron & steel mills & ferroalloy mfg	-	18	15	30 605	1 689 945	23 336	51 383	1 291 283	5 204 237	6 148 733	11 298 600	696 486
33111	Iron & steel mills & ferroalloy mfg	-	18	15	30 605	1 689 945	23 336	51 383	1 291 283	5 204 237	6 148 733	11 298 600	696 486
331111	Iron & steel mills	-	18	15	30 605	1 689 945	23 336	51 383	1 291 283	5 204 237	6 148 733	11 298 600	696 486
3312	Steel product mfg from purchased steel	-	34	29	3 587	121 230	2 856	6 128	91 728	332 957	592 426	923 534	25 132
33121	Iron & steel pipes & tubes mfg from purchased steel	-	17	14	1 731	51 239	1 375	2 873	37 884	145 155	267 113	413 226	14 375
331210	Iron & steel pipes & tubes mfg from purchased steel	-	17	14	1 731	51 239	1 375	2 873	37 884	145 155	267 113	413 226	14 375
33122	Rolling & drawing of purchased steel	-	17	15	1 856	69 991	1 481	3 255	53 844	187 802	325 313	510 308	10 757
331221	Cold-rolled steel shape mfg	-	6	4	677	33 591	554	1 252	26 538	74 203	207 208	279 298	1 209
331222	Steel wire drawing	-	11	11	1 179	36 400	927	2 003	27 306	113 599	118 105	231 010	9 548

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3313	Alumina & aluminum production & processing . . .	-	32	29	6 571	290 011	5 243	11 211	205 542	1 084 380	1 806 400	2 849 367	98 173
33131	Alumina & aluminum production & processing . . .	-	32	29	6 571	290 011	5 243	11 211	205 542	1 084 380	1 806 400	2 849 367	98 173
331311	Alumina refining	-	1	1	c	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum . . .	-	12	9	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	3	3	1 949	103 893	1 528	3 157	72 983	430 813	939 702	1 337 629	37 943
331316	Aluminum extruded product mfg	-	14	14	2 720	101 817	2 227	4 804	73 029	310 633	333 156	631 163	24 841
3314	Nonferrous metal (except aluminum) production & processing	-	42	30	4 853	186 020	3 820	8 005	130 273	457 870	1 190 536	1 661 707	48 758
33142	Copper rolling, drawing, extruding, & alloying . . .	-	9	8	1 291	49 269	1 050	2 259	36 764	170 909	425 938	601 638	13 889
331421	Copper rolling, drawing, & extruding . . .	-	4	4	f	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing . . .	-	4	3	e	D	D	D	D	D	D	D	3 749
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	-	33	22	3 562	136 751	2 770	5 746	93 509	286 961	764 598	1 060 069	34 869
331491	Other nonferrous metal rolling, drawing, & extruding	-	21	17	3 023	119 109	2 410	5 024	84 102	210 324	631 956	851 769	27 204
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	-	12	5	539	17 642	360	722	9 407	76 637	132 642	208 300	7 665
3315	Foundries	-	124	86	17 644	682 913	14 808	32 575	531 019	1 351 039	1 207 995	2 555 162	146 133
33151	Ferrous metal foundries	-	58	44	11 200	447 349	9 307	21 133	346 296	905 010	583 540	1 483 962	86 863
331511	Iron foundries	-	46	34	8 822	364 860	7 394	17 097	289 048	732 325	482 293	1 212 943	73 972
331512	Steel investment foundries	-	6	5	1 026	36 349	800	1 656	24 882	86 956	46 126	130 745	3 808
331513	Steel foundries (except investment)	-	6	5	1 352	46 140	1 113	2 380	32 366	85 729	55 121	140 274	9 083
33152	Nonferrous metal foundries	-	66	42	6 444	235 564	5 501	11 442	184 723	446 029	624 455	1 071 200	59 270
331521	Aluminum die-casting foundries	-	16	13	2 824	123 771	2 467	5 117	99 245	185 718	337 036	524 564	45 005
331522	Nonferrous (except aluminum) die-casting foundries	-	7	4	381	9 200	337	681	7 316	30 325	20 114	50 249	293
331524	Aluminum foundries (except die-casting) . . .	-	29	16	2 667	84 975	2 205	4 764	64 441	199 743	243 996	442 900	13 072
331525	Copper foundries (except die-casting) . . .	-	10	8	508	15 793	443	777	12 491	26 795	21 164	47 885	795
332	Fabricated metal product mfg	-	1 897	745	69 314	2 165 515	53 628	108 299	1 454 503	5 658 024	5 051 757	10 670 604	420 270
3321	Forging & stamping	-	114	69	6 558	215 854	4 999	10 450	152 628	554 712	643 162	1 176 485	67 185
33211	Forging & stamping	-	114	69	6 558	215 854	4 999	10 450	152 628	554 712	643 162	1 176 485	67 185
332111	Iron & steel forging	-	15	11	1 105	37 861	810	1 798	26 449	94 439	134 437	218 542	10 584
332114	Custom roll forming	-	13	9	681	19 791	502	1 032	13 879	55 133	159 138	208 616	D
332115	Crown & closure mfg	-	6	4	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	71	38	2 840	76 171	2 196	4 272	52 129	181 454	167 140	346 276	19 007
332117	Powder metallurgy part mfg	-	8	6	1 188	53 567	892	2 210	40 561	147 177	84 279	225 369	13 351
3322	Cutlery & handtool mfg	1	41	18	1 953	61 995	1 431	3 011	38 118	159 774	115 793	270 446	8 547
33221	Cutlery & handtool mfg	1	41	18	1 953	61 995	1 431	3 011	38 118	159 774	115 793	270 446	8 547
332211	Cutlery & flatware (except precious) mfg	-	3	1	c	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	3	31	13	1 161	35 032	862	1 803	22 194	81 691	51 886	133 091	2 828
332213	Saw blade & handsaw mfg	-	4	2	119	4 414	55	105	1 502	4 321	3 190	7 511	D
332214	Kitchen utensil, pot, & pan mfg	-	3	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	344	169	12 863	380 955	9 739	19 584	243 014	931 213	1 139 861	2 059 942	43 543
33231	Plate work & fabricated structural product mfg . . .	-	143	69	4 581	143 836	3 452	6 801	91 744	384 508	540 828	918 149	15 710
332311	Prefabricated metal building & component mfg	-	11	6	634	19 944	452	919	12 198	60 947	106 372	164 701	1 813
332312	Fabricated structural metal mfg	-	101	52	3 184	101 711	2 447	4 813	65 557	285 710	397 822	679 037	11 471
332313	Plate work mfg	1	31	11	763	22 181	553	1 069	13 989	37 851	36 634	74 411	2 426

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg—Con.												
33232	Ornamental & architectural metal products mfg.	-	201	100	8 282	237 119	6 287	12 783	151 270	546 705	599 033	1 141 793	27 833
332321	Metal window & door mfg.	-	39	21	2 657	69 191	2 152	4 305	46 493	207 421	300 878	507 634	6 143
332322	Sheet metal work mfg.	1	127	66	4 473	137 066	3 357	7 015	87 197	281 302	243 864	522 914	17 416
332323	Ornamental & architectural metal work mfg.	1	35	13	1 152	30 862	778	1 463	17 580	57 982	54 291	111 245	4 274
3324	Boiler, tank, & shipping container mfg.	-	49	27	2 744	92 562	2 234	4 522	67 853	288 192	426 201	706 228	10 626
33241	Power boiler & heat exchanger mfg.	-	7	4	399	12 462	332	664	8 868	24 073	24 110	47 596	1 018
332410	Power boiler & heat exchanger mfg.	-	7	4	399	12 462	332	664	8 868	24 073	24 110	47 596	1 018
33242	Metal tank (heavy gauge) mfg.	-	23	12	1 154	35 278	907	1 803	24 630	70 846	63 412	135 306	2 490
332420	Metal tank (heavy gauge) mfg.	-	23	12	1 154	35 278	907	1 803	24 630	70 846	63 412	135 306	2 490
33243	Metal can, box, & other metal container (light gauge) mfg.	-	19	11	1 191	44 822	995	2 055	34 355	193 273	338 679	523 326	7 118
332431	Metal can mfg.	-	5	5	542	26 177	438	891	21 054	135 841	280 051	414 517	4 663
332439	Other metal container mfg.	1	14	6	649	18 645	557	1 164	13 301	57 432	58 628	108 809	2 455
3325	Hardware mfg.	-	42	32	5 463	163 814	4 363	8 748	106 040	459 757	322 324	773 779	39 516
33251	Hardware mfg.	-	42	32	5 463	163 814	4 363	8 748	106 040	459 757	322 324	773 779	39 516
332510	Hardware mfg.	-	42	32	5 463	163 814	4 363	8 748	106 040	459 757	322 324	773 779	39 516
3326	Spring & wire product mfg.	-	72	37	4 353	116 193	3 585	7 036	82 850	277 146	232 852	508 412	16 090
33261	Spring & wire product mfg.	-	72	37	4 353	116 193	3 585	7 036	82 850	277 146	232 852	508 412	16 090
332611	Spring (heavy gauge) mfg.	-	8	4	615	20 058	510	1 095	15 131	38 923	39 287	78 631	1 681
332612	Spring (light gauge) mfg.	-	18	9	1 170	37 316	974	1 971	25 863	96 842	58 770	154 713	7 572
332618	Other fabricated wire product mfg.	-	46	24	2 568	58 819	2 101	3 970	41 856	141 381	134 795	275 068	6 837
3327	Machine shops, turned product, & screw, nut, & bolt mfg.	1	785	183	14 055	441 855	11 007	21 999	299 497	909 005	558 520	1 466 632	95 062
33271	Machine shops.	1	666	125	8 745	269 951	6 840	13 098	179 990	514 934	263 002	775 754	48 192
332710	Machine shops.	1	666	125	8 745	269 951	6 840	13 098	179 990	514 934	263 002	775 754	48 192
33272	Turned product & screw, nut, & bolt mfg.	-	119	58	5 310	171 904	4 167	8 901	119 507	394 071	295 518	690 878	46 870
332721	Precision turned product mfg.	-	87	39	3 683	116 815	2 936	6 080	81 306	230 415	108 334	339 769	31 872
332722	Bolt, nut, screw, rivet, & washer mfg.	-	32	19	1 627	55 089	1 231	2 821	38 201	163 656	187 184	351 109	14 998
3328	Coating, engraving, heat treating, & allied activities.	-	233	107	8 493	269 474	6 619	12 785	183 009	844 539	794 655	1 635 400	70 330
33281	Coating, engraving, heat treating, & allied activities.	-	233	107	8 493	269 474	6 619	12 785	183 009	844 539	794 655	1 635 400	70 330
332811	Metal heat treating.	-	51	24	1 791	73 712	1 347	2 893	50 570	250 615	175 924	424 645	23 493
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.	-	78	40	3 821	116 575	2 985	5 560	80 649	434 002	557 008	988 609	31 452
332813	Electroplating, plating, polishing, anodizing, & coloring.	1	104	43	2 881	79 187	2 287	4 332	51 790	159 922	61 723	222 146	15 385
3329	Other fabricated metal product mfg.	-	217	103	12 832	422 813	9 651	20 164	281 494	1 233 686	818 389	2 073 280	69 371
33291	Metal valve mfg.	-	41	32	4 692	164 012	3 696	8 216	119 689	594 766	417 382	1 035 133	24 926
332911	Industrial valve mfg.	-	8	7	1 275	42 210	991	2 023	28 907	102 604	63 586	163 395	1 772
332912	Fluid power valve & hose fitting mfg.	-	15	10	863	30 477	652	1 325	20 182	114 024	109 967	259 695	7 632
332913	Plumbing fixture fitting & trim mfg.	-	10	10	1 792	62 490	1 508	3 670	50 275	299 949	197 966	494 588	3 283
332919	Other metal valve & pipe fitting mfg.	-	8	5	762	28 835	545	1 198	20 325	78 189	45 863	117 455	12 239
33299	All other fabricated metal product mfg.	-	176	71	8 140	258 801	5 955	11 948	161 805	638 920	401 007	1 038 147	44 445
332991	Ball & roller bearing mfg.	-	10	10	2 387	89 052	1 811	3 578	58 994	277 109	116 718	393 253	17 123
332993	Ammunition (except small arms) mfg.	-	1	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.	-	26	14	1 238	34 708	1 003	2 146	24 755	75 934	59 622	132 540	6 241
332997	Industrial pattern mfg.	-	33	7	416	17 971	338	650	13 599	27 291	7 932	34 873	2 809
332998	Enameled iron & metal sanitary ware mfg.	-	4	2	119	4 127	71	150	1 841	7 138	6 487	13 471	D
332999	All other miscellaneous fabricated metal product mfg.	-	97	36	3 686	105 409	2 688	5 346	61 672	244 793	206 772	453 891	17 976

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	1 064	425	49 829	1 828 861	35 628	71 995	1 140 945	5 136 889	5 374 864	10 524 471	321 883
3331	Agriculture, construction, & mining machinery mfg.	-	77	35	3 949	117 910	2 927	5 713	73 130	314 711	284 568	596 797	26 102
33311	Agricultural implement mfg	-	46	21	2 596	73 868	2 027	3 861	48 077	215 153	200 913	414 831	21 731
333111	Farm machinery & equipment mfg	1	37	15	1 614	52 223	1 166	2 314	30 989	163 139	138 664	300 438	19 326
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	9	6	982	21 645	861	1 547	17 088	52 014	62 249	114 393	2 405
33312	Construction machinery mfg	1	26	11	999	31 868	655	1 371	18 240	77 055	62 349	139 544	3 634
333120	Construction machinery mfg	1	26	11	999	31 868	655	1 371	18 240	77 055	62 349	139 544	3 634
33313	Mining & oil & gas field machinery mfg	2	5	3	354	12 174	245	481	6 813	22 503	21 306	42 422	737
333131	Mining machinery & equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	118	44	3 843	148 309	2 407	4 959	79 059	312 669	291 278	602 760	33 505
33321	Sawmill & woodworking machinery mfg	-	13	8	690	25 211	394	855	12 080	59 998	48 012	106 214	3 070
333210	Sawmill & woodworking machinery mfg	-	13	8	690	25 211	394	855	12 080	59 998	48 012	106 214	3 070
33322	Plastics & rubber industry machinery mfg	1	11	2	205	6 613	119	214	3 139	17 636	15 367	33 804	547
333220	Plastics & rubber industry machinery mfg	1	11	2	205	6 613	119	214	3 139	17 636	15 367	33 804	547
33329	Other industrial machinery mfg	1	94	34	2 948	116 485	1 894	3 890	63 840	235 035	227 899	462 742	29 888
333291	Paper industry machinery mfg	1	12	6	383	15 553	240	562	8 714	27 292	28 064	54 331	1 034
333293	Printing machinery & equipment mfg	-	10	5	443	15 561	264	568	7 719	30 993	18 579	47 654	1 463
333294	Food product machinery mfg	-	13	4	509	26 767	316	681	13 285	58 426	60 240	116 113	D
333295	Semiconductor machinery mfg	-	3	2	c	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	2	51	16	1 335	49 828	861	1 660	28 413	87 604	108 201	201 426	8 401
3333	Commercial & service industry machinery mfg ..	1	41	12	1 813	59 209	1 067	2 204	27 386	144 939	115 427	260 649	5 532
33331	Commercial & service industry machinery mfg	1	41	12	1 813	59 209	1 067	2 204	27 386	144 939	115 427	260 649	5 532
333313	Office machinery mfg ..	2	3	3	297	8 720	140	310	2 558	24 404	12 382	36 823	1 377
333315	Photographic & photocopying equipment mfg	-	6	3	751	25 546	500	1 091	13 224	63 504	50 080	113 620	2 587
333319	Other commercial & service industry machinery mfg	2	24	5	686	22 944	371	700	10 479	54 769	51 080	105 993	1 414
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	55	36	7 425	238 647	5 521	10 788	149 681	837 269	597 074	1 439 399	33 441
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	55	36	7 425	238 647	5 521	10 788	149 681	837 269	597 074	1 439 399	33 441
333411	Air purification equipment mfg	-	5	4	633	13 575	527	1 076	9 375	43 315	43 965	86 371	D
333412	Industrial & commercial fan & blower mfg	-	6	5	1 228	43 514	929	2 215	28 415	95 823	55 524	152 505	D
333414	Heating equipment (except warm air furnaces) mfg	-	13	5	1 376	56 646	806	1 575	28 168	174 883	109 449	283 831	4 909
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	31	22	4 188	124 912	3 259	5 922	83 723	523 248	388 136	916 692	22 645
3335	Metalworking machinery mfg	1	518	157	10 834	415 109	7 963	16 727	276 012	768 637	370 352	1 141 420	62 360
33351	Metalworking machinery mfg	1	518	157	10 834	415 109	7 963	16 727	276 012	768 637	370 352	1 141 420	62 360
333511	Industrial mold mfg ...	1	130	41	2 635	107 784	2 085	4 657	78 860	197 449	63 589	264 042	24 728
333512	Machine tool (metal cutting types) mfg ...	-	13	9	571	23 389	289	591	9 339	29 235	47 433	77 115	2 244
333513	Machine tool (metal forming types) mfg ...	-	10	5	236	8 590	148	273	5 036	16 311	10 851	26 550	D
333514	Special die & tool, die set, jig, & fixture mfg ..	1	284	66	4 731	175 276	3 575	7 326	118 633	324 601	129 490	457 658	25 781
333515	Cutting tool & machine tool accessory mfg ..	2	50	17	1 106	35 766	823	1 615	25 384	71 440	34 174	102 937	4 986
333516	Rolling mill machinery & equipment mfg	-	4	3	237	9 161	176	364	6 286	23 677	18 829	41 352	D
333518	Other metalworking machinery mfg	1	27	16	1 318	55 143	867	1 901	32 474	105 924	65 986	171 766	2 658

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	-	45	30	10 556	447 596	7 974	16 607	319 134	1 749 012	2 545 763	4 313 485	94 804
33361	Engine, turbine, & power transmission equipment mfg	-	45	30	10 556	447 596	7 974	16 607	319 134	1 749 012	2 545 763	4 313 485	94 804
333611	Turbine & turbine generator set unit mfg	-	5	3	537	27 246	372	960	19 940	41 968	47 612	97 769	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	7	4	1 991	71 074	1 514	3 157	47 089	176 734	114 425	288 351	13 746
333613	Mechanical power transmission equipment mfg	-	14	8	1 572	57 623	1 152	2 306	37 698	136 418	63 723	198 396	D
333618	Other engine equipment mfg	-	19	15	6 456	291 653	4 936	10 184	214 407	1 393 892	2 320 003	3 728 969	70 993
3339	Other general-purpose machinery mfg	-	210	111	11 409	402 081	7 769	14 997	216 543	1 009 652	1 170 402	2 169 961	66 139
33391	Pump & compressor mfg	-	27	19	2 743	98 805	1 699	2 759	41 360	268 343	344 341	613 314	15 654
333911	Pump & pumping equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	17	12	849	29 373	519	1 087	14 966	153 746	180 702	326 189	8 400
333913	Measuring & dispensing pump mfg	-	4	4	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	67	45	4 921	173 377	3 470	7 042	103 410	415 991	594 929	1 006 652	38 086
333921	Elevator & moving stairway mfg	-	5	5	1 596	66 229	1 044	1 761	38 792	179 593	151 664	331 180	13 651
333922	Conveyor & conveying equipment mfg	-	34	20	1 271	40 492	852	1 903	22 149	78 456	80 179	158 679	11 400
333923	Overhead traveling crane, hoist, & monorail system mfg	5	9	6	412	12 660	278	550	7 445	30 918	50 045	77 387	1 845
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	19	14	1 642	53 996	1 296	2 828	35 024	127 024	313 041	439 406	11 190
33399	All other general-purpose machinery mfg	-	116	47	3 745	129 899	2 600	5 196	71 773	325 318	231 132	549 995	12 399
333992	Welding & soldering equipment mfg	-	7	4	351	14 439	222	443	6 945	26 476	14 649	37 929	1 087
333993	Packaging machinery mfg	1	10	3	193	7 460	119	240	3 075	14 149	9 057	23 144	288
333994	Industrial process furnace & oven mfg ..	1	11	5	431	16 433	280	582	8 226	39 398	22 530	61 641	1 788
333995	Fluid power cylinder & actuator mfg	-	11	7	488	17 027	355	771	10 900	68 720	29 609	98 029	1 603
333999	All other miscellaneous general-purpose machinery mfg	-	69	24	2 052	68 657	1 465	2 869	39 211	157 015	142 021	296 593	6 279
334	Computer & electronic product mfg	1	260	124	28 118	874 110	19 615	39 665	479 691	2 127 239	2 608 730	4 731 725	152 067
3341	Computer & peripheral equipment mfg	7	19	4	271	8 108	125	259	3 708	20 605	15 396	35 851	D
33411	Computer & peripheral equipment mfg	7	19	4	271	8 108	125	259	3 708	20 605	15 396	35 851	D
334119	Other computer peripheral equipment mfg	9	11	2	192	5 383	94	198	2 700	12 433	9 520	22 085	743
3342	Communications equipment mfg	-	20	8	6 525	252 941	3 491	7 410	109 334	464 259	363 058	825 464	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	15	8	6 477	251 730	3 461	7 346	108 575	461 022	355 129	814 443	24 433
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	15	8	6 477	251 730	3 461	7 346	108 575	461 022	355 129	814 443	24 433
3343	Audio & video equipment mfg	1	18	10	3 436	91 462	2 818	5 904	60 809	306 220	1 029 046	1 324 740	11 720
33431	Audio & video equipment mfg	1	18	10	3 436	91 462	2 818	5 904	60 809	306 220	1 029 046	1 324 740	11 720
334310	Audio & video equipment mfg	1	18	10	3 436	91 462	2 818	5 904	60 809	306 220	1 029 046	1 324 740	11 720

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	112	61	10 640	301 381	8 096	16 216	187 747	742 508	844 682	1 589 291	65 281
33441	Semiconductor & other electronic component mfg	—	112	61	10 640	301 381	8 096	16 216	187 747	742 508	844 682	1 589 291	65 281
334411	Electron tube mfg	—	3	1	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	6	19	5	e	D	D	D	D	D	D	D	721
334413	Semiconductor & related device mfg ...	—	5	1	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	1	4	3	837	20 231	722	1 287	14 617	40 036	15 391	55 725	D
334416	Electronic coil, transformer, & other inductor mfg	—	15	10	1 030	20 732	867	1 772	13 555	46 386	37 943	83 712	1 008
334417	Electronic connector mfg	1	11	7	752	24 534	541	1 068	11 431	104 638	55 048	155 707	10 049
334418	Printed circuit assembly (electronic assembly) mfg	—	11	9	1 396	35 919	1 020	1 989	20 712	98 146	177 928	277 179	9 407
334419	Other electronic component mfg	1	43	24	3 496	89 276	2 373	4 637	44 864	186 326	152 737	343 870	18 689
3345	Navigational, measuring, medical, & control instruments mfg	1	85	36	4 995	151 871	3 302	6 396	78 764	411 812	265 290	681 416	32 372
33451	Navigational, measuring, medical, & control instruments mfg	1	85	36	4 995	151 871	3 302	6 396	78 764	411 812	265 290	681 416	32 372
334510	Electromedical & electrotherapeutic apparatus mfg	1	5	3	202	6 981	55	165	1 330	12 958	7 656	20 737	622
334511	Search, detection, navigation, & guidance instrument mfg	—	6	1	c	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	10	5	1 831	50 872	1 500	2 955	34 582	131 357	102 480	235 300	10 126
334513	Industrial process control instrument mfg	—	16	11	738	20 285	457	695	8 478	61 589	46 050	108 499	7 230
334515	Electricity measuring & testing instrument mfg	5	12	6	1 073	35 530	661	1 378	17 465	100 689	59 703	161 153	6 528
334516	Analytical laboratory instrument mfg	—	7	2	243	8 808	58	114	1 459	23 983	6 397	30 848	D
334517	Irradiation apparatus mfg	2	6	1	157	4 837	70	159	2 109	15 097	11 975	26 916	1 702
334518	Watch, clock, & part mfg	—	3	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	3	17	5	275	10 242	155	284	4 714	25 324	13 819	39 637	449
3346	Mfg & reproducing magnetic & optical media .	1	6	5	2 251	68 347	1 783	3 480	39 329	181 835	91 258	274 963	17 046
33461	Mfg & reproducing magnetic & optical media	1	6	5	2 251	68 347	1 783	3 480	39 329	181 835	91 258	274 963	17 046
334611	Software reproducing .	9	2	1	c	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	3	3	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	182	114	21 728	681 986	17 600	34 030	495 634	2 024 544	2 010 371	4 027 493	89 540
3351	Electric lighting equipment mfg	—	18	7	1 040	30 564	733	1 331	16 340	150 113	127 830	274 899	7 278
33512	Lighting fixture mfg	—	17	7	g	D	D	D	D	D	D	D	7 278
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	—	8	3	782	23 354	529	922	11 341	109 053	103 888	210 694	D
335129	Other lighting equipment mfg	—	4	3	c	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	9	7	6 242	214 601	5 400	9 894	174 051	729 491	765 719	1 472 073	34 176
33521	Small electrical appliance mfg	—	3	2	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	—	3	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	6	5	i	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	—	3	3	i	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	75	40	6 950	227 950	5 344	10 909	149 792	546 766	372 417	924 963	18 276
33531	Electrical equipment mfg	-	75	40	6 950	227 950	5 344	10 909	149 792	546 766	372 417	924 963	18 276
335311	Power, distribution, & specialty transformer mfg	-	7	5	964	42 393	710	1 607	28 262	97 308	85 788	185 403	2 095
335312	Motor & generator mfg	-	27	19	3 933	119 699	3 177	6 216	82 827	230 754	144 561	378 598	10 004
335313	Switchgear & switchboard apparatus mfg	-	14	5	1 047	38 047	789	1 762	25 662	163 814	106 096	270 306	4 415
335314	Relay & industrial control mfg	1	27	11	1 006	27 811	668	1 324	13 041	54 890	35 972	90 656	1 762
3359	Other electrical equipment & component mfg	1	80	60	7 496	208 871	6 123	11 896	155 451	598 174	744 405	1 355 558	29 810
33591	Battery mfg	-	5	5	817	35 669	712	1 274	31 090	67 522	71 397	160 047	6 733
335911	Storage battery mfg ...	-	5	5	817	35 669	712	1 274	31 090	67 522	71 397	160 047	6 733
33592	Communication & energy wire & cable mfg	1	9	9	2 308	75 038	1 895	4 158	58 577	276 709	411 845	676 671	11 958
335929	Other communication & energy wire mfg ...	1	9	9	2 308	75 038	1 895	4 158	58 577	276 709	411 845	676 671	11 958
33593	Wiring device mfg	-	25	18	2 083	53 889	1 702	3 085	36 536	143 284	127 978	269 001	6 966
335931	Current-carrying wiring device mfg	-	23	16	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	2	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	41	28	2 288	44 275	1 814	3 379	29 248	110 659	133 185	249 839	4 153
335999	All other miscellaneous electrical equipment & component mfg	2	40	28	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	653	427	143 422	5 946 887	112 360	238 820	4 240 167	14 527 463	21 411 939	35 968 620	1 457 985
3361	Motor vehicle mfg	-	30	13	7 538	373 459	6 509	13 767	289 056	1 631 065	5 395 348	7 050 865	D
33611	Automobile & light duty motor vehicle mfg	-	24	11	7 173	358 853	6 205	13 140	278 093	1 600 870	5 309 404	6 933 870	D
336111	Automobile mfg	-	18	7	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	6	4	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	1	6	2	365	14 606	304	627	10 963	30 195	85 944	116 995	706
336120	Heavy duty truck mfg .	1	6	2	365	14 606	304	627	10 963	30 195	85 944	116 995	706
3362	Motor vehicle body & trailer mfg	-	176	116	24 900	757 760	20 569	42 193	538 563	1 658 370	3 607 950	5 232 319	84 978
33621	Motor vehicle body & trailer mfg	-	176	116	24 900	757 760	20 569	42 193	538 563	1 658 370	3 607 950	5 232 319	84 978
336211	Motor vehicle body mfg	2	46	29	4 422	129 371	3 565	7 555	100 425	252 477	384 001	641 996	11 556
336212	Truck trailer mfg	-	15	6	5 815	188 778	5 222	10 537	124 577	355 689	1 035 454	1 347 245	27 508
336213	Motor home mfg	-	27	17	6 389	202 424	5 082	10 025	145 783	550 560	1 240 730	1 784 465	24 957
336214	Travel trailer & camper mfg	-	88	64	8 274	237 187	6 700	14 076	167 778	499 644	947 765	1 458 613	20 957
3363	Motor vehicle parts mfg ...	-	356	246	96 419	4 172 936	76 081	163 726	3 082 738	9 801 512	11 129 579	20 995 605	1 154 197
33631	Motor vehicle gasoline engine & engine parts mfg	-	40	23	8 942	292 184	7 296	16 422	193 615	852 463	903 852	1 760 921	117 661
336311	Carburetor, piston, piston ring, & valve mfg	-	5	4	1 576	53 903	1 330	2 899	28 083	137 795	47 184	188 083	D
336312	Gasoline engine & engine parts mfg	-	35	19	7 366	238 281	5 966	13 523	165 532	714 668	856 668	1 572 838	D
33632	Motor vehicle electrical & electronic equipment mfg	-	63	35	12 199	504 317	10 139	18 927	402 568	889 184	1 160 911	2 055 319	80 904
336321	Vehicular lighting equipment mfg	-	12	7	5 203	216 105	4 093	8 563	158 187	423 832	333 729	756 500	30 581
336322	Other motor vehicle electrical & electronic equipment mfg	-	51	28	6 996	288 212	6 046	10 364	244 381	465 352	827 182	1 298 819	50 323
33633	Motor vehicle steering & suspension component (except spring) mfg	-	15	13	7 387	402 246	6 158	15 305	326 585	858 908	1 016 572	1 896 990	135 298
336330	Motor vehicle steering & suspension component (except spring) mfg	-	15	13	7 387	402 246	6 158	15 305	326 585	858 908	1 016 572	1 896 990	135 298
33634	Motor vehicle brake system mfg	-	11	9	1 635	48 147	1 230	2 617	33 678	186 061	155 378	340 811	6 730
336340	Motor vehicle brake system mfg	-	11	9	1 635	48 147	1 230	2 617	33 678	186 061	155 378	340 811	6 730

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33635	Motor vehicle transmission & power train parts mfg	-	45	36	31 875	1 746 090	22 575	50 684	1 215 114	3 992 339	4 404 973	8 403 241	429 202
336350	Motor vehicle transmission & power train parts mfg	-	45	36	31 875	1 746 090	22 575	50 684	1 215 114	3 992 339	4 404 973	8 403 241	429 202
33636	Motor vehicle seating & interior trim mfg	-	30	22	2 911	77 865	2 266	4 382	49 008	190 735	407 175	601 475	10 594
336360	Motor vehicle seating & interior trim mfg ...	-	30	22	2 911	77 865	2 266	4 382	49 008	190 735	407 175	601 475	10 594
33637	Motor vehicle metal stamping	-	54	45	12 934	536 206	10 791	23 438	427 478	1 116 958	1 238 842	2 364 426	141 451
336370	Motor vehicle metal stamping	-	54	45	12 934	536 206	10 791	23 438	427 478	1 116 958	1 238 842	2 364 426	141 451
33639	Other motor vehicle parts mfg	-	98	63	18 536	565 881	15 626	31 951	434 692	1 714 864	1 841 876	3 572 422	232 357
336391	Motor vehicle air-conditioning mfg	-	4	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	94	61	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	27	18	8 171	451 324	4 122	9 393	204 487	1 032 338	738 373	1 737 801	69 194
33641	Aerospace product & parts mfg	-	27	18	8 171	451 324	4 122	9 393	204 487	1 032 338	738 373	1 737 801	69 194
336412	Aircraft engine & engine parts mfg	-	11	10	5 836	341 666	2 839	6 682	150 400	647 018	597 498	1 219 466	D
336413	Other aircraft part & auxiliary equipment mfg	-	14	7	g	D	D	D	D	D	D	D	34 520
3365	Railroad rolling stock mfg ..	-	7	5	1 502	51 701	1 084	2 034	29 290	106 242	124 141	234 002	D
33651	Railroad rolling stock mfg	-	7	5	1 502	51 701	1 084	2 034	29 290	106 242	124 141	234 002	D
336510	Railroad rolling stock mfg	-	7	5	1 502	51 701	1 084	2 034	29 290	106 242	124 141	234 002	D
3366	Ship & boat building	1	21	13	3 253	91 881	2 671	5 368	66 045	197 779	288 044	488 145	9 768
33661	Ship & boat building	1	21	13	3 253	91 881	2 671	5 368	66 045	197 779	288 044	488 145	9 768
336611	Ship building & repairing	-	6	4	g	D	D	D	D	D	D	D	D
336612	Boat building	1	15	9	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	2	36	16	1 639	47 826	1 324	2 339	29 988	100 157	128 504	229 883	5 494
33699	Other transportation equipment mfg	2	36	16	1 639	47 826	1 324	2 339	29 988	100 157	128 504	229 883	5 494
336991	Motorcycle, bicycle, & parts mfg	-	7	3	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	2	27	13	1 398	40 461	1 107	1 958	24 681	84 508	121 793	207 601	5 000
337	Furniture & related product mfg	-	509	185	26 150	666 195	21 672	44 606	480 225	1 594 960	1 282 549	2 864 951	75 745
3371	Household & institutional furniture & kitchen cabinet mfg	-	360	110	15 592	382 673	13 182	26 790	283 536	977 501	787 918	1 757 669	40 453
33711	Wood kitchen cabinet & counter top mfg	-	190	49	5 674	141 234	4 766	9 523	107 045	394 538	304 176	698 860	18 173
337110	Wood kitchen cabinet & counter top mfg ...	-	190	49	5 674	141 234	4 766	9 523	107 045	394 538	304 176	698 860	18 173
33712	Household & institutional furniture mfg	-	170	61	9 918	241 439	8 416	17 267	176 491	582 963	483 742	1 058 809	22 280
337121	Upholstered household furniture mfg	-	34	13	2 427	61 024	2 095	4 283	44 250	133 400	136 936	269 493	5 543
337122	Nonupholstered wood household furniture mfg	1	81	28	3 510	84 585	3 063	6 336	63 737	185 789	145 415	326 725	5 763
337124	Metal household furniture mfg	-	14	8	1 803	40 045	1 478	3 052	26 695	125 178	100 819	224 484	7 362
337125	Household furniture (except wood & metal) mfg	-	8	2	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	27	8	852	20 534	656	1 233	13 687	50 545	30 853	80 671	1 566
337129	Wood television, radio, & sewing machine cabinet mfg	-	6	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	—	118	60	8 850	243 167	7 263	15 105	173 526	526 052	410 149	930 415	31 728
33721	Office furniture (including fixtures) mfg	—	118	60	8 850	243 167	7 263	15 105	173 526	526 052	410 149	930 415	31 728
337211	Wood office furniture mfg	—	32	22	5 113	132 970	4 342	9 482	102 593	307 522	245 193	551 833	16 912
337212	Custom architectural woodwork & millwork mfg	—	25	10	653	20 542	497	963	12 583	33 499	21 760	55 095	1 093
337214	Office furniture (except wood) mfg	3	12	8	595	14 441	461	825	9 527	46 219	34 652	81 150	5 484
337215	Showcase, partition, shelving, & locker mfg	1	49	20	2 489	75 214	1 963	3 835	48 823	138 812	108 544	242 337	8 239
3379	Other furniture related product mfg	—	31	15	1 708	40 355	1 227	2 711	23 163	91 407	84 482	176 867	3 564
33791	Mattress mfg	—	15	8	457	14 202	276	606	6 916	37 262	33 845	71 328	2 373
337910	Mattress mfg	—	15	8	457	14 202	276	606	6 916	37 262	33 845	71 328	2 373
33792	Blind & shade mfg	1	16	7	1 251	26 153	951	2 105	16 247	54 145	50 637	105 539	1 191
337920	Blind & shade mfg	1	16	7	1 251	26 153	951	2 105	16 247	54 145	50 637	105 539	1 191
339	Miscellaneous mfg	—	620	152	23 771	757 440	16 517	31 011	411 983	2 805 161	1 205 112	4 030 241	112 852
3391	Medical equipment & supplies mfg	—	260	50	12 042	444 869	7 735	14 547	209 707	1 783 110	610 259	2 407 438	74 886
33911	Medical equipment & supplies mfg	—	260	50	12 042	444 869	7 735	14 547	209 707	1 783 110	610 259	2 407 438	74 886
339111	Laboratory apparatus & furniture mfg	4	8	3	135	4 376	64	132	1 504	12 327	4 674	16 727	281
339112	Surgical & medical instrument mfg	1	44	15	3 701	124 452	2 675	5 642	69 372	413 578	157 913	570 285	19 008
339113	Surgical appliance & supplies mfg	—	33	15	6 384	270 989	3 729	6 572	112 990	1 259 357	409 552	1 683 598	50 527
339114	Dental equipment & supplies mfg	4	17	5	692	19 115	445	874	9 202	38 633	16 845	55 319	2 829
339115	Ophthalmic goods mfg	4	7	2	118	2 485	86	137	1 445	6 378	3 938	10 358	495
339116	Dental laboratories	5	151	10	1 012	23 452	736	1 190	15 194	52 837	17 337	71 151	1 746
3399	Other miscellaneous mfg ..	—	360	102	11 729	312 571	8 782	16 464	202 276	1 022 051	594 853	1 622 803	37 966
33991	Jewelry & silverware mfg	2	33	5	494	14 080	395	734	10 865	48 757	20 744	69 288	637
339911	Jewelry (except costume) mfg	1	20	5	438	12 964	351	668	10 138	46 662	19 593	66 037	592
33992	Sporting & athletic goods mfg	—	40	12	1 339	31 457	955	1 992	19 438	85 612	94 483	187 072	2 569
339920	Sporting & athletic goods mfg	—	40	12	1 339	31 457	955	1 992	19 438	85 612	94 483	187 072	2 569
33993	Doll, toy, & game mfg ...	—	24	7	995	22 137	772	1 257	12 073	151 194	99 655	250 929	3 766
339932	Game, toy, & children's vehicle mfg	—	17	6	946	21 511	745	1 200	11 696	150 055	98 310	248 440	D
33994	Office supplies (except paper) mfg	5	19	7	434	10 941	340	655	6 914	22 422	19 607	41 889	1 265
339941	Pen & mechanical pencil mfg	—	2	1	c	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	7	4	3	164	5 101	135	322	3 510	10 663	12 886	23 627	D
33995	Sign mfg	2	134	17	1 358	36 216	855	1 528	16 998	73 504	48 334	123 171	3 217
339950	Sign mfg	2	134	17	1 358	36 216	855	1 528	16 998	73 504	48 334	123 171	3 217
33999	All other miscellaneous mfg	—	110	54	7 109	197 740	5 465	10 298	135 988	640 562	312 030	950 454	26 512
339991	Gasket, packing, & sealing device mfg ...	—	13	10	1 530	38 611	1 233	2 437	28 784	112 426	65 525	178 835	6 085
339992	Musical instrument mfg	1	18	8	1 283	39 094	1 146	2 274	33 095	100 587	32 514	131 724	3 191
339994	Broom, brush, & mop mfg	5	6	3	c	D	D	D	D	D	D	D	D
339995	Burial casket mfg	—	20	15	2 459	78 914	1 643	3 191	48 555	315 387	130 840	444 495	11 930
339999	All other miscellaneous mfg	—	50	17	1 626	37 104	1 304	2 190	23 518	98 758	73 645	173 488	4 842

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BLOOMINGTON, IN MSA												
	Manufacturing	-	122	39	8 817	302 554	7 410	13 988	221 803	1 094 026	1 417 232	2 444 226	44 419
323	Printing & related support activities	4	20	6	355	9 306	274	524	6 409	19 350	13 131	32 436	1 526
3231	Printing & related support activities	4	20	6	355	9 306	274	524	6 409	19 350	13 131	32 436	1 526
32311	Printing	4	19	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	10	4	274	8 756	229	487	5 966	23 232	12 994	36 085	3 500
3261	Plastics product mfg	2	8	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	14	8	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	10	7	311	11 359	247	483	7 913	16 670	10 967	27 811	D
32799	All other nonmetallic mineral product mfg	-	10	7	311	11 359	247	483	7 913	16 670	10 967	27 811	D
327991	Cut stone & stone product mfg	-	10	7	311	11 359	247	483	7 913	16 670	10 967	27 811	D
332	Fabricated metal product mfg	1	8	4	331	8 181	234	505	4 548	20 410	18 340	37 841	1 511
333	Machinery mfg	-	6	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	19	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	9	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	9	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	1	g	D	D	D	D	D	D	D	D
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA												
31-33	Manufacturing	1	14 080	5 205	660 689	24 785 382	457 284	943 383	14 112 493	72 622 192	73 308 763	145 631 728	6 094 310
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IL Part)	1	13 307	4 906	601 701	22 016 416	412 652	848 543	12 106 543	64 048 310	61 153 748	124 949 232	5 039 928
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IN Part)	-	569	217	49 462	2 372 725	37 307	79 659	1 724 496	7 692 325	11 002 978	18 651 480	907 596
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (WI Part)	-	204	82	9 526	396 241	7 325	15 181	281 454	881 557	1 152 037	2 031 016	146 786
311	Food mfg	2	968	356	60 673	1 891 456	43 954	91 804	1 197 751	8 586 698	8 444 266	17 013 983	494 798
312	Beverage & tobacco product mfg	1	42	19	h	D	D	D	D	D	D	D	D
313	Textile mills	3	64	12	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	223	50	h	D	D	D	D	D	D	D	D
315	Apparel mfg	2	219	63	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	1	40	15	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	253	67	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	307	218	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 982	463	k	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Manufacturing—Con.												
324	Petroleum & coal products mfg	—	74	29	h	D	D	D	D	D	D	D	D
325	Chemical mfg	1	626	311	46 729	2 279 814	23 792	49 365	924 324	10 176 023	7 759 952	17 861 640	933 446
326	Plastics & rubber products mfg	1	794	455	k	D	D	D	D	D	D	D	378 704
327	Nonmetallic mineral product mfg	2	395	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	262	166	l	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	2 942	1 094	97 993	3 437 556	74 316	154 633	2 216 814	7 877 522	6 120 662	13 976 945	551 562
333	Machinery mfg	—	1 726	609	67 472	2 722 311	43 811	90 715	1 508 124	6 405 822	5 481 511	11 960 300	353 618
334	Computer & electronic product mfg	—	678	316	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	395	204	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	309	162	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	632	136	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	1 149	284	k	D	D	D	D	D	D	D	D
	Gary, IN PMSA												
31-33	Manufacturing	—	569	217	49 462	2 372 725	37 307	79 659	1 724 496	7 692 325	11 002 978	18 651 480	907 596
311	Food mfg	—	32	13	1 718	49 946	1 269	2 286	27 914	183 041	243 260	427 845	16 337
3112	Grain & oilseed milling	—	1	1	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	1	1	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	20	7	529	7 584	336	476	4 318	22 908	25 695	47 896	582
31181	Bread & bakery product mfg	1	18	6	e	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	15	4	e	D	D	D	D	D	D	D	204
3119	Other food mfg	—	3	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	21	8	316	6 422	263	500	4 781	17 103	18 934	35 827	D
322	Paper mfg	—	6	5	386	15 461	315	706	11 337	54 714	44 732	99 118	3 402
3222	Converted paper product mfg	—	5	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	57	10	774	24 167	512	991	14 560	20 501	59 045	79 469	6 322
3231	Printing & related support activities	1	57	10	774	24 167	512	991	14 560	20 501	59 045	79 469	6 322
32311	Printing	1	52	10	759	23 798	502	977	14 298	19 507	58 851	78 282	6 258
323110	Commercial lithographic printing ..	1	29	8	504	15 931	353	726	11 414	1 159	44 420	45 875	3 781

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Gary, IN PMSA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	-	11	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	11	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	-	6	2									
324122	Asphalt shingle & coating materials mfg	-	3	2	f	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	-	4	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	33	17	1 870	94 414	1 251	2 758	54 886	552 648	506 924	1 063 092	81 896
3251	Basic chemical mfg	-	19	12	1 040	53 400	590	1 341	26 915	339 704	222 617	563 820	72 263
32518	Other basic inorganic chemical mfg	-	8	7	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	8	7	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	2	4	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	2	4	3	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	2	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	9	877	28 147	640	1 266	14 172	86 003	60 764	144 288	15 525
3261	Plastics product mfg	-	15	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	9	6	592	14 246	477	955	8 412	48 231	36 243	84 330	12 188
326199	All other plastics product mfg	-	8	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	47	20	1 395	53 040	1 055	2 226	38 633	173 242	137 253	312 715	15 695
3271	Clay product & refractory mfg	-	11	4	292	9 490	215	448	6 842	39 202	19 319	59 528	D
32712	Clay building material & refractories mfg	-	10	4	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	19	7	448	15 380	323	584	9 897	41 686	41 924	85 619	7 807
3274	Lime & gypsum product mfg	-	4	2	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	11	7	378	16 786	284	628	12 844	46 146	24 471	70 128	3 360
32799	All other nonmetallic mineral product mfg ...	-	9	6	e	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg..	-	5	5	305	14 320	221	504	11 051	38 419	15 452	53 455	2 652
331	Primary metal mfg	-	23	19	30 128	1 656 803	22 908	50 515	1 259 239	4 911 889	5 906 414	10 767 795	649 613
3311	Iron & steel mills & ferroalloy mfg	-	9	9	28 885	1 603 317	21 913	48 356	1 218 452	4 781 946	5 578 653	10 309 464	637 951
33111	Iron & steel mills & ferroalloy mfg	-	9	9	28 885	1 603 317	21 913	48 356	1 218 452	4 781 946	5 578 653	10 309 464	637 951
331111	Iron & steel mills	-	9	9	28 885	1 603 317	21 913	48 356	1 218 452	4 781 946	5 578 653	10 309 464	637 951
3312	Steel product mfg from purchased steel	-	5	5	671	33 268	558	1 293	27 285	82 480	228 793	310 231	D
33122	Rolling & drawing of purchased steel	-	4	4	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	3	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	4	3	299	9 313	216	417	5 590	23 321	83 130	108 054	D
33131	Alumina & aluminum production & processing.....	-	4	3	299	9 313	216	417	5 590	23 321	83 130	108 054	D
3315	Foundries	-	3	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Gary, IN PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	139	54	4 002	147 122	3 083	6 188	101 452	403 383	393 857	785 142	26 271
3321	Forging & stamping	—	5	2	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	5	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	28	12	638	22 105	483	969	14 488	54 341	72 333	121 476	2 789
33231	Plate work & fabricated structural product mfg ..	—	16	7	327	11 055	237	480	6 811	32 664	58 939	86 633	1 544
332312	Fabricated structural metal mfg	—	13	6	268	9 265	192	388	5 557	27 519	57 920	80 159	1 367
33232	Ornamental & architectural metal products mfg	1	12	5	311	11 050	246	489	7 677	21 677	13 394	34 843	1 245
332322	Sheet metal work mfg ..	—	7	5	289	10 423	229	460	7 315	20 815	12 092	32 676	1 212
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	68	18	1 083	38 082	866	1 637	26 530	74 821	32 819	108 584	5 487
33271	Machine shops	1	62	17	986	34 417	786	1 466	23 929	67 427	27 945	96 622	4 779
332710	Machine shops	1	62	17	986	34 417	786	1 466	23 929	67 427	27 945	96 622	4 779
3328	Coating, engraving, heat treating, & allied activities ..	3	18	13	698	27 279	558	1 180	20 033	74 473	35 719	107 886	6 887
33281	Coating, engraving, heat treating, & allied activities ..	3	18	13	698	27 279	558	1 180	20 033	74 473	35 719	107 886	6 887
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	4	4	4	325	12 179	268	538	9 156	34 779	27 701	59 949	1 964
3329	Other fabricated metal product mfg	—	9	4	845	31 825	577	1 118	18 804	76 207	29 136	106 480	6 650
33299	All other fabricated metal product mfg	—	9	4	845	31 825	577	1 118	18 804	76 207	29 136	106 480	6 650
332991	Ball & roller bearing mfg	—	2	2	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	3	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	49	23	1 702	65 565	1 185	2 612	37 265	154 242	118 186	266 416	10 540
3331	Agriculture, construction, & mining machinery mfg	1	7	2	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	4	3	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	16	5	412	14 962	301	615	10 174	40 689	27 809	66 524	2 161
33351	Metalworking machinery mfg	—	16	5	412	14 962	301	615	10 174	40 689	27 809	66 524	2 161
3339	Other general-purpose machinery mfg	—	21	13	695	24 255	459	1 014	11 132	57 713	52 167	109 279	1 764
33399	All other general-purpose machinery mfg	—	12	6	488	17 978	330	733	7 698	44 495	30 826	74 916	1 431
333999	All other miscellaneous general-purpose machinery mfg	—	7	3	317	11 361	226	486	4 107	27 150	16 667	43 240	1 061
334	Computer & electronic product mfg	3	18	5	273	6 275	191	342	3 123	15 243	13 072	28 495	495
336	Transportation equipment mfg	—	16	7	1 862	60 584	1 383	2 715	35 696	163 048	261 157	429 792	12 136
3363	Motor vehicle parts mfg ...	—	6	3	355	9 072	291	679	6 417	57 257	135 803	195 110	D
3365	Railroad rolling stock mfg ..	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
33651	Railroad rolling stock mfg	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
336510	Railroad rolling stock mfg	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
337	Furniture & related product mfg	2	26	4	298	6 831	225	389	4 563	14 787	12 458	27 227	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	22	4	261	5 664	198	342	3 830	12 536	11 098	23 632	D
339	Miscellaneous mfg	2	50	11	979	24 814	683	1 317	12 917	63 377	26 171	88 725	2 365
3391	Medical equipment & supplies mfg	1	23	5	542	13 450	384	733	6 906	29 127	8 751	37 565	1 393
33911	Medical equipment & supplies mfg	1	23	5	542	13 450	384	733	6 906	29 127	8 751	37 565	1 393
339112	Surgical & medical instrument mfg	—	4	3	362	9 286	240	510	4 277	20 359	4 995	24 981	710
3399	Other miscellaneous mfg ..	3	27	6	437	11 364	299	584	6 011	34 250	17 420	51 160	972

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31-33	CINCINNATI-HAMILTON, OH-KY-IN CMSA												
	Manufacturing	-	2 686	1 045	139 924	5 357 729	93 955	191 998	3 057 171	18 883 613	16 469 729	35 239 117	1 463 667
	Cincinnati-Hamilton, OH-KY-IN CMSA (IN Part)	-	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati-Hamilton, OH-KY-IN CMSA (KY Part)	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati-Hamilton, OH-KY-IN CMSA (OH Part)	-	2 236	860	117 591	4 593 283	77 613	158 759	2 584 528	16 449 317	14 277 182	30 657 162	1 286 851
311	Food mfg	1	156	66	j	D	D	D	D	D	D	D	114 135
312	Beverage & tobacco product mfg	-	17	13	h	D	D	D	D	D	D	D	D
313	Textile mills	3	15	9	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	48	15	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	29	12	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	72	18	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	103	71	8 810	313 604	6 665	14 634	215 767	882 076	1 008 549	1 887 737	89 233
323	Printing & related support activities	1	393	116	10 814	369 598	7 805	15 484	225 743	902 215	521 822	1 419 311	54 918
324	Petroleum & coal products mfg	-	38	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	152	71	9 633	431 555	5 808	11 709	235 572	2 633 385	2 428 589	5 040 623	172 010
326	Plastics & rubber products mfg	1	140	75	9 036	274 527	6 916	13 781	173 554	731 575	683 985	1 413 317	91 751
327	Nonmetallic mineral product mfg	1	111	42	2 786	95 365	2 139	4 204	64 893	269 394	239 083	510 028	25 724
331	Primary metal mfg	-	40	26	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	535	188	18 623	623 307	13 784	27 607	407 199	1 394 083	1 186 888	2 588 580	113 506
333	Machinery mfg	-	288	133	20 476	842 261	11 313	23 183	383 084	2 018 845	1 663 052	3 583 195	122 495
334	Computer & electronic product mfg	1	85	34	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	63	35	5 710	192 502	3 948	8 324	107 711	516 102	437 358	959 982	D
336	Transportation equipment mfg	-	74	43	14 925	870 824	9 140	18 433	429 461	2 670 791	3 751 560	6 499 887	D
337	Furniture & related product mfg	1	117	26	2 365	63 427	1 701	3 181	37 445	144 366	124 860	271 190	5 900
339	Miscellaneous mfg	1	205	42	5 327	156 781	3 571	6 912	78 515	442 440	308 165	739 313	27 121
	Cincinnati, OH-KY-IN PMSA												
31-33	Manufacturing	-	2 290	890	119 533	4 538 513	78 998	159 800	2 494 921	14 558 177	14 203 781	28 671 346	1 267 606
	Cincinnati, OH-KY-IN PMSA (IN Part)	-	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati, OH-KY-IN PMSA (KY Part)	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati, OH-KY-IN PMSA (OH Part)	-	1 840	705	97 200	3 774 067	62 656	126 561	2 022 278	12 123 881	12 011 234	24 089 391	1 090 790

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg	1	139	62	10 102	322 426	6 324	13 455	183 844	1 787 723	1 479 877	3 240 819	113 098
3112	Grain & oilseed milling	—	4	3	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	—	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	3	9	8	2 048	57 313	1 592	3 419	39 713	174 543	274 311	448 738	26 064
31141	Frozen food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
311412	Frozen specialty food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
31142	Fruit & vegetable canning, pickling, & drying	—	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
311421	Fruit & vegetable canning	—	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
3115	Dairy product mfg	2	7	4	586	19 777	299	703	9 713	57 838	142 051	200 505	D
31151	Dairy product (except frozen) mfg	—	4	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
31161	Animal slaughtering & processing	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
311612	Meat processed from carcasses	—	12	6	1 998	66 854	1 052	2 409	36 925	244 454	238 764	479 018	D
3118	Bakeries & tortilla mfg	—	63	19	2 492	77 807	1 621	3 272	49 666	767 568	216 374	982 176	9 788
31181	Bread & bakery product mfg	—	56	13	1 373	33 100	710	1 298	15 302	108 373	49 738	158 225	1 975
311811	Retail bakeries	1	41	7	436	5 675	267	355	3 663	11 862	5 098	16 982	580
311812	Commercial bakeries	—	15	6	937	27 425	443	943	11 639	96 511	44 640	141 243	1 395
31182	Cookie, cracker, & pasta mfg	—	7	6	1 119	44 707	911	1 974	34 364	659 195	166 636	823 951	7 813
311821	Cookie & cracker mfg	—	5	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	3	23	14	1 942	66 339	989	2 242	26 609	220 315	307 210	525 553	39 322
31193	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
311930	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
31194	Seasoning & dressing mfg	—	7	6	706	26 576	273	605	6 505	59 371	79 992	138 621	25 422
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	2	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	1	5	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg	5	8	3	521	12 776	411	880	8 809	34 152	50 114	84 192	3 500
311999	All other miscellaneous food mfg	9	6	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	15	12	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	15	12	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	6	5	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	961	34 504	391	882	14 765	368 051	265 894	634 974	D
31214	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	3	14	9	f	D	D	D	D	D	D	D	D
3132	Fabric mills	3	7	6	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	42	12	993	25 230	619	1 242	13 673	39 367	58 586	103 085	1 385
3141	Textile furnishings mills	—	17	5	e	D	D	D	D	D	D	D	522
31412	Curtain & linen mills	—	16	5	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	6	4	409	10 356	239	491	4 688	16 383	29 908	50 688	450
3149	Other textile product mills	1	25	7	f	D	D	D	D	D	D	D	863
31499	All other textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535
314999	All other miscellaneous textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	—	27	11	801	13 311	608	961	9 009	43 529	78 944	121 859	D
3152	Cut & sew apparel mfg	—	18	8	583	9 175	462	678	6 552	35 190	70 303	104 775	D
31522	Men's & boys' cut & sew apparel mfg	—	8	6	478	7 143	382	551	5 459	30 850	64 083	94 196	878
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	57	13	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	46	10	g	D	D	D	D	D	D	D	D
32191	Millwork	2	20	3	266	6 253	211	433	4 878	12 324	18 512	30 748	D
32199	All other wood product mfg	4	12	5	637	13 971	507	892	9 611	27 106	26 794	54 440	1 599
321999	All other miscellaneous wood product mfg	7	11	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	73	51	5 215	164 903	4 114	9 054	112 929	440 170	582 972	1 021 788	47 982
3221	Pulp, paper, & paperboard mills	—	5	5	388	14 734	302	684	10 876	51 205	35 692	85 762	2 338
32213	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	2	68	46	4 827	150 169	3 812	8 370	102 053	388 965	547 280	936 026	45 644
32221	Paperboard container mfg	1	36	28	2 604	85 626	2 016	4 353	56 114	216 646	308 482	527 467	28 567
322211	Corrugated & solid fiber box mfg	—	16	13	1 196	40 971	856	1 820	23 745	101 483	158 653	256 590	17 530
322212	Folding paperboard box mfg	3	10	8	1 042	33 363	874	1 956	25 225	82 342	99 525	187 695	7 303
322214	Fiber can, tube, drum, & similar products mfg	—	7	5	279	9 106	215	455	5 767	29 118	43 455	72 333	D
32222	Paper bag & coated & treated paper mfg	3	12	7	1 562	46 601	1 292	3 121	34 860	127 368	181 205	306 400	14 105
322224	Uncoated paper & multiwall bag mfg	3	3	3	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
322299	All other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
323	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
3231	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
32311	Printing	1	300	81	8 828	299 063	6 356	12 606	179 485	742 138	460 561	1 198 650	44 401
323110	Commercial lithographic printing	1	138	35	5 249	181 061	3 839	7 666	110 998	455 775	237 002	692 369	21 831
323111	Commercial gravure printing	5	2	2	e	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	—	22	11	663	23 483	423	794	10 810	44 797	74 583	118 720	7 739
323113	Commercial screen printing	—	28	9	895	25 981	644	1 310	14 805	77 286	64 530	138 702	3 875
323114	Quick printing	2	60	6	430	10 313	308	487	6 074	21 182	10 692	31 865	1 189
323116	Manifold business form printing	3	10	7	621	21 153	410	894	11 437	47 399	28 686	76 044	1 060
323117	Book printing	—	6	3	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	50	21	1 272	47 678	915	1 854	31 133	93 469	22 349	115 829	7 523
323122	Prepress services	1	43	19	1 079	43 243	743	1 513	27 422	85 210	20 929	106 379	6 683
324	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
3241	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
32412	Asphalt paving, roofing, & saturated materials mfg	—	29	6	508	19 814	381	932	13 868	53 433	204 153	259 714	4 357
324122	Asphalt shingle & coating materials mfg	—	5	3	337	13 602	262	677	10 467	24 782	76 438	100 708	2 331
32419	Other petroleum & coal products mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757
324191	Petroleum lubricating oil & grease mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	—	130	65	9 182	413 196	5 554	11 162	226 692	2 536 562	2 355 482	4 875 290	158 466
3251	Basic chemical mfg	—	27	14	2 706	127 553	1 788	3 603	78 473	543 368	649 586	1 192 412	68 707
32513	Dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
325132	Synthetic organic dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
32518	Other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
325188	All other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
32519	Other basic organic chemical mfg	—	7	5	1 299	62 321	831	1 491	35 909	224 153	429 131	651 027	31 565
325199	All other basic organic chemical mfg	—	5	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
32521	Resin & synthetic rubber mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
325211	Plastics material & resin mfg	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
32541	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
325412	Pharmaceutical preparation mfg	—	7	4	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	25	13	991	39 685	472	898	14 568	124 588	170 031	297 613	22 236
32551	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
325510	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
32552	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
325520	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
3256	Soap, cleaning compound, & toilet preparation mfg	1	24	16	h	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	20	12	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	10	7	1 235	59 376	988	1 843	44 921	454 832	668 175	1 113 059	23 314
325612	Polish & other sanitation good mfg	—	7	3	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	38	14	f	D	D	D	D	D	D	D	D
32591	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
325910	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
32599	All other chemical product & preparation mfg	2	19	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	113	59	7 218	221 100	5 553	11 053	141 275	612 965	585 014	1 200 308	80 565
3261	Plastics product mfg	1	99	54	6 856	210 669	5 282	10 504	134 724	589 315	563 929	1 155 358	80 008
32611	Unsupported plastics film, sheet, & bag mfg	—	10	6	641	25 600	473	991	15 210	81 954	80 982	163 102	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	7	3	345	16 236	238	509	8 711	60 410	58 653	119 151	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	2	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	4	1	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
326160	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
32619	Other plastics product mfg	3	60	33	3 903	109 958	2 988	5 670	66 353	255 404	248 069	502 415	27 845
326199	All other plastics product mfg	3	59	32	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	14	5	362	10 431	271	549	6 551	23 650	21 085	44 950	557

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	89	36	2 455	84 815	1 868	3 650	56 484	236 548	209 497	447 332	22 638
3272	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
32721	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
3273	Cement & concrete product mfg	2	48	18	1 050	35 762	803	1 545	23 102	90 799	85 510	176 368	10 575
32732	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
327320	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
32739	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
327390	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
3274	Lime & gypsum product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32741	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
327410	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	14	8	442	14 812	294	546	7 746	50 271	50 241	100 706	3 504
32799	All other nonmetallic mineral product mfg	—	11	8	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	32	19	2 914	105 765	2 090	4 481	70 728	272 565	275 948	538 374	16 783
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	4	2	304	11 009	159	415	5 109	20 114	33 875	55 347	D
33142	Copper rolling, drawing, extruding, & alloying	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	24	14	1 648	52 738	1 255	2 625	36 958	98 411	51 175	150 468	5 864
33151	Ferrous metal foundries	—	5	5	860	29 191	679	1 466	21 762	54 789	28 627	84 138	4 067
331511	Iron foundries	—	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	19	9	788	23 547	576	1 159	15 196	43 622	22 548	66 330	1 797
331524	Aluminum foundries (except die-casting)	—	12	8	709	21 892	510	1 037	13 946	39 829	20 456	60 415	D
332	Fabricated metal product mfg	—	446	161	16 330	539 133	12 104	23 786	352 623	1 179 584	976 738	2 163 816	88 268
3321	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
33211	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
332116	Metal stamping	1	16	8	797	22 648	628	1 284	16 488	50 260	68 492	117 931	D
3322	Cutlery & handtool mfg	—	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
33221	Cutlery & handtool mfg	—	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
332212	Hand & edge tool mfg	—	13	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	95	36	3 488	114 184	2 492	5 037	71 933	264 023	223 338	487 640	17 934
33231	Plate work & fabricated structural product mfg	—	37	14	901	31 267	591	1 186	17 793	75 218	87 867	163 486	4 458
332312	Fabricated structural metal mfg	—	25	9	610	20 555	426	839	12 757	51 957	65 636	117 748	3 428
33232	Ornamental & architectural metal products mfg	—	58	22	2 587	82 917	1 901	3 851	54 140	188 805	135 471	324 154	13 476
332321	Metal window & door mfg	—	9	4	1 265	40 972	944	1 963	26 980	105 860	81 835	187 470	6 828
332322	Sheet metal work mfg	1	36	16	1 146	36 297	849	1 659	24 011	68 733	42 304	111 287	6 171
3324	Boiler, tank, & shipping container mfg	—	13	9	2 035	66 641	1 731	3 007	53 699	107 295	153 392	271 182	D
33242	Metal tank (heavy gauge) mfg	—	2	2	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	2	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	10	7	g	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	f	D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	8	5	454	13 096	327	673	7 870	32 426	55 354	88 218	D
3325	Hardware mfg	—	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
33251	Hardware mfg	—	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
332510	Hardware mfg	—	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D

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	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
33261	Spring & wire product mfg	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
332612	Spring (light gauge) mfg	3	3	2	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	5	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	182	44	3 971	130 684	2 933	6 294	87 262	309 225	128 979	433 855	20 566
33271	Machine shops	—	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
332710	Machine shops	—	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
33272	Turned product & screw, nut, & bolt mfg	1	27	16	1 432	40 551	982	2 044	26 292	91 787	52 828	144 409	5 001
332721	Precision turned product mfg	—	21	11	1 138	31 178	750	1 608	19 418	72 383	34 679	106 978	2 584
332722	Bolt, nut, screw, rivet, & washer mfg	4	6	5	294	9 373	232	436	6 874	19 404	18 149	37 431	2 417
3328	Coating, engraving, heat treating, & allied activities .	—	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
33281	Coating, engraving, heat treating, & allied activities	—	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
332811	Metal heat treating	—	15	9	364	11 815	269	382	7 509	36 116	4 244	40 344	1 587
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	20	7	607	18 215	445	928	12 383	33 552	31 635	65 031	3 790
332813	Electroplating, plating, polishing, anodizing, & coloring	—	20	8	497	17 741	370	781	9 905	43 044	21 828	64 841	2 954
3329	Other fabricated metal product mfg	2	45	22	2 049	73 936	1 411	2 869	41 509	170 829	125 637	298 541	16 848
33291	Metal valve mfg	1	13	11	1 339	46 367	884	1 770	24 675	119 034	96 963	218 333	13 109
332911	Industrial valve mfg	1	7	7	856	30 559	522	1 039	14 943	74 308	71 934	148 550	3 541
332912	Fluid power valve & hose fitting mfg	—	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	4	32	11	710	27 569	527	1 099	16 834	51 795	28 674	80 208	3 739
332999	All other miscellaneous fabricated metal product mfg	1	19	7	355	12 679	237	455	5 918	22 184	14 346	36 482	1 491
333	Machinery mfg	—	245	112	18 628	769 395	10 340	21 275	348 789	1 891 638	1 482 643	3 272 013	112 957
3331	Agriculture, construction, & mining machinery mfg	1	10	3	345	11 236	268	482	6 923	29 348	23 241	54 196	D
3332	Industrial machinery mfg	—	41	21	2 677	115 458	1 260	2 525	49 101	427 555	276 178	707 310	14 136
33322	Plastics & rubber industry machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	37	18	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	7	4	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	19	10	737	28 916	451	1 020	14 757	54 198	42 618	101 434	2 678
3333	Commercial & service industry machinery mfg	—	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
33331	Commercial & service industry machinery mfg	—	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	2	1	e	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	3	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	14	4	468	14 957	302	641	8 808	34 559	35 277	68 934	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
33351	Metalworking machinery mfg	-	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
333512	Machine tool (metal cutting types) mfg ...	-	8	8	3 430	159 085	1 397	2 492	53 709	434 967	415 948	742 101	D
333513	Machine tool (metal forming types) mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	1	35	8	501	15 167	359	613	10 134	29 454	19 018	47 770	3 564
333515	Cutting tool & machine tool accessory mfg ..	2	22	6	376	13 615	260	575	7 820	25 474	11 729	38 121	3 181
333516	Rolling mill machinery & equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
33361	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
333613	Mechanical power transmission equipment mfg	5	6	3	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	69	39	6 214	255 973	3 560	7 553	116 774	557 697	441 647	998 359	21 986
33391	Pump & compressor mfg	-	12	8	1 900	63 414	1 112	2 382	28 764	146 447	174 528	316 454	5 717
333911	Pump & pumping equipment mfg	-	5	4	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	4	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	3	2	467	21 329	325	680	13 208	59 748	49 132	107 860	2 322
33392	Material handling equipment mfg	-	14	10	1 531	73 936	743	1 508	29 855	115 060	122 977	239 203	3 302
333921	Elevator & moving stairway mfg	-	3	3	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	9	6	1 206	53 156	580	1 197	16 820	83 316	100 010	183 932	2 110
33399	All other general-purpose machinery mfg	1	43	21	2 783	118 623	1 705	3 663	58 155	296 190	144 142	442 702	12 967
333991	Power-driven handtool mfg	-	4	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	7	4	684	35 785	459	1 143	20 313	127 900	34 607	160 754	2 543
333999	All other miscellaneous general-purpose machinery mfg	2	19	9	923	33 888	556	1 150	15 762	87 192	49 939	138 085	3 804
334	Computer & electronic product mfg	1	78	34	4 781	168 782	2 525	5 190	66 683	329 639	397 049	724 161	40 223
3342	Communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
3343	Audio & video equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	17	9	g	D	D	D	D	D	D	D	19 861
33441	Semiconductor & other electronic component mfg	-	17	9	g	D	D	D	D	D	D	D	19 861
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
33451	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	1	e	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	9	3	278	10 157	139	285	4 402	23 545	18 463	41 983	760
335	Electrical equipment, appliance, & component mfg	-	51	28	4 236	141 730	2 865	6 044	74 290	369 672	324 209	700 852	D
3351	Electric lighting equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	6	5	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg...	-	3	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
33531	Electrical equipment mfg	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
335312	Motor & generator mfg	-	8	5	705	25 838	474	1 064	14 977	71 939	33 440	108 261	D
335314	Relay & industrial control mfg	-	12	5	833	32 728	491	1 164	15 924	74 366	68 599	150 023	3 850
3359	Other electrical equipment & component mfg	-	13	8	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
335931	Current-carrying wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
336	Transportation equipment mfg	-	65	39	14 369	849 608	8 806	17 777	417 336	2 627 112	3 682 402	6 385 830	436 555
3362	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
33621	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
3363	Motor vehicle parts mfg ...	-	37	23	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	9	6	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33636	Motor vehicle seating & interior trim mfg	7	2	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg . . .	7	2	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	5	2									
336370	Motor vehicle metal stamping	—	5	2									
33639	Other motor vehicle parts mfg	3	11	6									
336399	All other motor vehicle parts mfg	3	11	6									
3364	Aerospace product & parts mfg	—	15	9	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	15	9	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	9	7	i	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	103	20									
3371	Household & institutional furniture & kitchen cabinet mfg	1	64	6	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	1	42	2									
337110	Wood kitchen cabinet & counter top mfg . . .	1	42	2									
3372	Office furniture (including fixtures) mfg	2	29	9									
33721	Office furniture (including fixtures) mfg	2	29	9									
337215	Showcase, partition, shelving, & locker mfg	3	19	7									
3379	Other furniture related product mfg	—	10	5	e	D	D	D	D	D	D	D	D
33791	Mattress mfg	—	7	4									
337910	Mattress mfg	—	7	4									
339	Miscellaneous mfg	1	181	35									
3391	Medical equipment & supplies mfg	—	74	11									
33911	Medical equipment & supplies mfg	—	74	11									
339112	Surgical & medical instrument mfg	—	13	5									
339113	Surgical appliance & supplies mfg	—	9	2	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	1	107	24									
33991	Jewelry & silverware mfg	—	18	4									
33995	Sign mfg	2	49	9									
339950	Sign mfg	2	49	9									
33999	All other miscellaneous mfg	1	17	6									
339991	Gasket, packing, & sealing device mfg	4	4	3									
339995	Burial casket mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ELKHART-GOSHEN, IN MSA												
31-33	Manufacturing	1	894	464	56 087	1 610 765	44 247	86 698	1 093 838	3 861 781	5 115 386	8 999 868	214 951
311	Food mfg.....	-	19	7	821	20 698	613	1 223	14 420	45 611	174 923	226 446	2 341
3118	Bakeries & tortilla mfg.....	-	9	3	261	5 412	171	268	3 009	26 503	17 445	43 947	346
31181	Bread & bakery product mfg.....	-	8	3	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	26	7	597	11 679	509	970	8 545	20 698	20 445	41 846	D
3141	Textile furnishings mills....	-	17	6	509	10 129	443	860	7 506	17 535	18 051	36 200	609
31412	Curtain & linen mills.....	-	14	6	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	-	13	5	452	8 691	394	777	6 448	12 878	12 386	25 365	D
321	Wood product mfg.....	1	91	48	6 293	183 300	5 133	10 117	134 257	372 464	649 231	1 023 225	13 819
3219	Other wood product mfg....	1	81	43	5 969	175 891	4 857	9 583	128 872	353 049	612 142	967 813	12 390
32191	Millwork.....	-	30	17	1 324	34 664	1 124	2 169	26 205	61 725	116 122	179 277	2 289
321911	Wood window & door mfg.....	1	11	7	647	15 657	567	1 019	11 670	30 888	29 425	59 834	765
321912	Cut stock, resawing lumber, & planing....	-	8	4	265	8 064	207	496	6 812	8 933	58 247	69 296	448
321918	Other millwork (including flooring)...	-	11	6	412	10 943	350	654	7 723	21 904	28 450	50 147	1 076
32199	All other wood product mfg.....	1	45	24	4 569	139 824	3 669	7 285	101 628	288 625	493 441	783 267	10 015
321991	Manufactured home (mobile home) mfg..	1	23	20	4 075	125 622	3 290	6 575	93 348	261 331	455 566	717 796	8 132
321992	Prefabricated wood building mfg.....	-	6	2	253	9 016	182	345	4 680	15 924	22 031	37 972	613
322	Paper mfg.....	4	4	3	300	10 128	214	364	4 904	19 339	22 533	41 982	2 536
3222	Converted paper product mfg.....	4	4	3	300	10 128	214	364	4 904	19 339	22 533	41 982	2 536
32221	Paperboard container mfg.....	4	4	3	300	10 128	214	364	4 904	19 339	22 533	41 982	2 536
323	Printing & related support activities.....	-	30	5	409	14 524	279	534	7 870	34 689	26 061	61 066	1 516
3231	Printing & related support activities.....	-	30	5	409	14 524	279	534	7 870	34 689	26 061	61 066	1 516
32311	Printing.....	-	28	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	21	10	g	D	D	D	D	D	D	D	16 290
3251	Basic chemical mfg.....	2	2	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	2	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	2	2	2	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	101	68	5 833	142 890	4 787	8 859	99 737	355 956	395 989	750 774	30 590
3261	Plastics product mfg.....	1	84	57	4 077	101 317	3 307	6 152	69 670	286 476	327 598	614 495	24 975
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	1	12	9	593	18 401	454	946	12 597	77 165	76 542	152 636	9 949
326122	Plastics pipe & pipe fitting mfg.....	1	6	5	404	12 907	330	702	9 450	60 912	65 407	125 571	9 028
32614	Polystyrene foam product mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg.....	-	11	11	885	22 070	729	1 239	15 570	74 789	116 954	191 712	2 901
326150	Urethane & other foam product (except polystyrene) mfg.....	-	11	11	885	22 070	729	1 239	15 570	74 789	116 954	191 712	2 901
32619	Other plastics product mfg.....	2	48	31	2 094	47 177	1 736	3 253	33 185	102 811	82 692	187 122	9 426
326199	All other plastics product mfg.....	2	47	31	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	17	11	1 756	41 573	1 480	2 707	30 067	69 480	68 391	136 279	5 615
32629	Other rubber product mfg.....	-	15	11	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use.....	-	9	8	1 478	35 563	1 230	2 248	25 568	54 826	39 692	93 051	D
326299	All other rubber product mfg.....	-	6	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ELKHART-GOSHEN, IN MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	34	16	1 679	46 961	1 285	2 756	28 822	108 571	200 254	309 136	7 238
3272	Glass & glass product mfg	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
32721	Glass & glass product mfg	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
327215	Glass product mfg made of purchased glass	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
3274	Lime & gypsum product mfg	-	4	4	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	4	4	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	-	4	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	14	11	1 493	48 229	1 177	2 530	34 496	171 969	179 639	350 282	6 147
3312	Steel product mfg from purchased steel	-	4	3	282	9 178	217	434	6 557	52 396	53 848	105 900	2 171
3313	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	2 040
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	156	69	6 109	169 723	4 934	9 861	118 916	390 551	418 544	801 720	28 441
3321	Forging & stamping	1	22	10	556	14 011	460	1 015	9 679	31 959	37 554	69 439	3 155
33211	Forging & stamping	1	22	10	556	14 011	460	1 015	9 679	31 959	37 554	69 439	3 155
332116	Metal stamping	1	17	7	438	10 559	354	721	7 249	23 043	23 937	46 724	2 726
3323	Architectural & structural metals mfg	-	48	27	2 778	68 808	2 284	4 519	48 439	168 343	240 375	407 683	6 607
33231	Plate work & fabricated structural product mfg	-	17	9	641	17 272	528	1 072	12 005	53 977	104 169	156 571	2 280
332311	Prefabricated metal building & component mfg	-	3	3	291	6 554	227	479	4 478	29 706	68 317	96 060	D
332312	Fabricated structural metal mfg	-	12	6	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	31	18	2 137	51 536	1 756	3 447	36 434	114 366	136 206	251 112	4 327
332321	Metal window & door mfg	-	10	7	970	19 866	861	1 551	16 061	45 715	57 729	104 270	1 383
332322	Sheet metal work mfg	-	16	9	880	24 492	700	1 502	16 403	55 608	64 028	119 251	1 439
332323	Ornamental & architectural metal work mfg	-	5	2	287	7 178	195	394	3 970	13 043	14 449	27 591	1 505
3325	Hardware mfg	4	8	6	361	9 513	277	479	5 713	20 906	22 140	43 237	1 153
33251	Hardware mfg	4	8	6	361	9 513	277	479	5 713	20 906	22 140	43 237	1 153
332510	Hardware mfg	4	8	6	361	9 513	277	479	5 713	20 906	22 140	43 237	1 153
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	39	7	574	17 665	445	837	11 437	29 626	17 638	47 688	1 191
33271	Machine shops	1	30	5	357	10 355	274	521	6 756	17 788	9 739	27 744	878
332710	Machine shops	1	30	5	357	10 355	274	521	6 756	17 788	9 739	27 744	878
3328	Coating, engraving, heat treating, & allied activities	3	13	5	317	9 390	274	529	7 389	18 884	6 240	25 067	570
33281	Coating, engraving, heat treating, & allied activities	3	13	5	317	9 390	274	529	7 389	18 884	6 240	25 067	570
3329	Other fabricated metal product mfg	-	16	9	1 073	37 090	822	1 727	26 272	91 221	59 053	142 938	14 307
33291	Metal valve mfg	-	3	3	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	13	6	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	5	3	279	8 062	224	458	5 499	11 848	13 381	25 346	2 103
333	Machinery mfg	-	56	19	1 380	44 482	989	1 996	27 136	89 730	68 013	157 576	7 780
3335	Metalworking machinery mfg	1	36	10	539	21 307	388	764	14 020	35 033	14 837	49 540	2 355
33351	Metalworking machinery mfg	1	36	10	539	21 307	388	764	14 020	35 033	14 837	49 540	2 355
3339	Other general-purpose machinery mfg	-	9	5	359	9 083	283	624	5 754	23 074	26 371	49 365	4 423

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ELKHART-GOSHEN, IN MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	16	9	2 888	71 851	1 857	3 346	38 678	126 455	86 047	212 719	10 822
3342	Communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	685	19 504	510	915	12 006	56 502	24 511	81 205	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	685	19 504	510	915	12 006	56 502	24 511	81 205	D
334512	Automatic environmental control mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	14	8	820	21 202	565	1 315	10 987	38 225	43 142	81 421	5 455
3353	Electrical equipment mfg ..	2	8	4	563	15 613	379	940	7 803	22 187	18 884	41 650	D
33531	Electrical equipment mfg.....	2	8	4	563	15 613	379	940	7 803	22 187	18 884	41 650	D
335314	Relay & industrial control mfg.....	4	4	2	384	10 573	235	567	4 908	6 015	8 976	15 153	236
336	Transportation equipment mfg.....	1	193	130	20 774	605 921	16 569	32 550	430 434	1 399 956	2 469 866	3 889 985	68 098
3362	Motor vehicle body & trailer mfg.....	-	111	81	14 649	436 270	11 684	23 256	313 761	983 379	1 957 053	2 955 514	48 089
33621	Motor vehicle body & trailer mfg.....	-	111	81	14 649	436 270	11 684	23 256	313 761	983 379	1 957 053	2 955 514	48 089
336211	Motor vehicle body mfg.....	-	22	15	h	D	D	D	D	D	D	D	6 128
336213	Motor home mfg.....	-	21	14	h	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg.....	-	66	52	7 034	200 279	5 680	11 962	141 609	421 922	808 144	1 239 700	19 666
3363	Motor vehicle parts mfg ...	2	60	36	4 370	113 146	3 482	6 406	78 322	298 358	340 890	644 396	14 689
33632	Motor vehicle electrical & electronic equipment mfg.....	3	13	6	494	11 513	389	601	6 945	31 475	43 132	75 104	1 907
336322	Other motor vehicle electrical & electronic equipment mfg.....	3	9	5	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	4	4	256	6 900	202	391	5 070	28 031	70 407	98 166	1 666
336350	Motor vehicle transmission & power train parts mfg.....	-	4	4	256	6 900	202	391	5 070	28 031	70 407	98 166	1 666
33636	Motor vehicle seating & interior trim mfg.....	3	17	12	1 382	32 700	1 155	2 276	24 313	54 965	76 203	131 996	2 343
336360	Motor vehicle seating & interior trim mfg ...	3	17	12	1 382	32 700	1 155	2 276	24 313	54 965	76 203	131 996	2 343
33639	Other motor vehicle parts mfg.....	1	23	12	2 127	58 632	1 651	2 989	39 822	173 977	137 785	316 051	8 584
336399	All other motor vehicle parts mfg.....	1	20	11	g	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	6	3	729	23 909	620	1 388	16 934	44 155	70 306	115 444	1 080
33661	Ship & boat building.....	-	6	3	729	23 909	620	1 388	16 934	44 155	70 306	115 444	1 080
336612	Boat building.....	-	5	3	f	D	D	D	D	D	D	D	1 080
3369	Other transportation equipment mfg.....	2	10	7	821	26 902	619	1 224	17 153	58 823	76 471	134 634	3 512
33699	Other transportation equipment mfg.....	2	10	7	821	26 902	619	1 224	17 153	58 823	76 471	134 634	3 512
336999	All other transportation equipment mfg.....	2	9	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ELKHART-GOSHEN, IN MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	72	38	3 736	98 195	3 103	6 286	71 758	205 466	167 399	368 111	8 206
3371	Household & institutional furniture & kitchen cabinet mfg	1	48	21	1 889	43 963	1 563	2 984	32 286	100 755	84 600	184 104	3 898
33711	Wood kitchen cabinet & counter top mfg	—	24	13	1 367	33 455	1 142	2 225	24 681	80 855	62 065	142 580	3 018
337110	Wood kitchen cabinet & counter top mfg ...	—	24	13	1 367	33 455	1 142	2 225	24 681	80 855	62 065	142 580	3 018
33712	Household & institutional furniture mfg	1	24	8	522	10 508	421	759	7 605	19 900	22 535	41 524	880
3372	Office furniture (including fixtures) mfg	—	16	11	1 473	46 446	1 239	2 510	34 096	86 055	62 357	144 092	4 045
33721	Office furniture (including fixtures) mfg	—	16	11	1 473	46 446	1 239	2 510	34 096	86 055	62 357	144 092	4 045
337212	Custom architectural woodwork & millwork mfg	—	8	5	340	10 183	280	527	7 247	15 483	11 144	26 624	561
337215	Showcase, partition, shelving, & locker mfg	—	2	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	2	8	6	374	7 786	301	792	5 376	18 656	20 442	39 915	263
33792	Blind & shade mfg	2	5	5	346	6 935	279	753	4 963	18 617	18 617	36 560	D
337920	Blind & shade mfg	2	5	5	346	6 935	279	753	4 963	17 194	18 617	36 560	D
339	Miscellaneous mfg	1	38	13	1 683	53 196	1 443	2 760	41 552	130 559	50 782	181 257	4 574
3399	Other miscellaneous mfg ..	—	29	13	1 621	51 622	1 387	2 657	40 373	125 781	48 080	173 746	4 495
33999	All other miscellaneous mfg	—	20	11	1 561	50 193	1 338	2 577	39 597	123 265	46 143	169 321	4 251
339992	Musical instrument mfg	—	10	6	1 060	34 234	954	1 865	29 768	85 512	27 682	112 108	2 107
339999	All other miscellaneous mfg	—	7	4	458	14 793	352	654	9 110	35 240	16 724	52 953	D
31-33	EVANSVILLE-HENDERSON, IN-KY MSA												
	Manufacturing	—	433	174	30 411	1 101 461	21 331	43 061	674 499	4 564 313	4 426 593	8 946 000	333 162
	Evansville-Henderson, IN-KY MSA (IN Part)	—	355	130	23 549	893 452	15 866	31 660	526 019	3 652 150	3 598 705	7 223 062	257 843
	Evansville-Henderson, IN-KY MSA (KY Part)	—	78	44	6 862	208 009	5 465	11 401	148 480	912 163	827 888	1 722 938	75 319
311	Food mfg	—	27	12	3 505	132 748	1 144	2 193	29 675	1 307 856	331 892	1 630 020	33 898
3115	Dairy product mfg	—	3	2	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	2	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	4	1	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	1	e	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	6	6	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	9	5	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	2	1	e	D	D	D	D	D	D	D	D
313	Textile mills	9	6	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	9	3	1	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	3	1	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	9	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	5	2	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	2	2	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	—	2	2	f	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	18	6	465	10 150	397	918	7 813	19 173	30 960	50 589	1 403
3219	Other wood product mfg ...	—	12	4	341	7 348	295	727	5 801	14 719	22 399	37 340	978
322	Paper mfg	—	8	5	858	34 598	542	1 280	19 670	73 242	82 960	153 353	5 123
3222	Converted paper product mfg	—	7	4	f	D	D	D	D	D	D	D	5 123
32221	Paperboard container mfg	—	3	3	f	D	D	D	D	D	D	D	5 080
322212	Folding paperboard box mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EVANSVILLE-HENDERSON, IN-KY MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	7	42	8	618	17 158	474	863	11 663	38 677	27 153	65 715	3 553
3231	Printing & related support activities.....	7	42	8	618	17 158	474	863	11 663	38 677	27 153	65 715	3 553
32311	Printing.....	7	38	8	600	16 769	461	840	11 417	38 116	26 832	64 832	3 510
323110	Commercial lithographic printing ..	5	24	5	345	9 631	256	510	6 397	19 471	11 411	30 820	1 257
324	Petroleum & coal products mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	29	16	3 943	179 982	2 290	4 422	100 910	872 151	993 067	1 832 213	82 159
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	—	8	5	f	D	D	D	D	D	D	D	4 179
32551	Paint & coating mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
325510	Paint & coating mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
32552	Adhesive mfg.....	—	6	3	462	11 972	318	637	6 095	28 467	21 436	49 867	D
325520	Adhesive mfg.....	—	6	3	462	11 972	318	637	6 095	28 467	21 436	49 867	D
3259	Other chemical product mfg.....	—	9	5	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
32599	All other chemical product & preparation mfg.....	—	9	5	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
325991	Custom compounding of purchased resin...	—	9	5	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
326	Plastics & rubber products mfg.....	—	41	26	3 823	101 116	3 063	6 370	69 244	245 774	235 543	479 613	25 440
3261	Plastics product mfg.....	—	39	26	h	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	—	5	3	315	10 130	257	506	6 825	24 045	40 705	64 357	D
32619	Other plastics product mfg.....	—	29	19	3 222	83 305	2 602	5 453	58 360	206 819	161 359	366 704	23 351
326199	All other plastics product mfg.....	—	29	19	3 222	83 305	2 602	5 453	58 360	206 819	161 359	366 704	23 351
327	Nonmetallic mineral product mfg.....	—	20	9	874	32 743	692	1 523	24 348	93 530	94 549	188 031	7 991
3272	Glass & glass product mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	—	3	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	—	11	6	269	8 219	206	451	5 562	22 285	17 490	39 477	D
331	Primary metal mfg.....	—	12	9	5 223	225 706	4 378	9 344	170 568	923 683	1 235 344	2 127 579	D
3313	Alumina & aluminum production & processing..	—	6	5	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	—	6	5	h	D	D	D	D	D	D	D	D
331312	Primary aluminum production.....	—	2	2	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries.....	—	3	2	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	—	3	2	g	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries.....	—	1	1	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	2	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EVANSVILLE-HENDERSON, IN-KY MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	76	28	2 480	77 481	1 880	3 667	50 995	168 858	167 999	334 871	15 191
3321	Forging & stamping	-	7	5	433	14 893	363	794	11 410	48 542	60 863	108 291	3 973
33211	Forging & stamping	-	7	5	433	14 893	363	794	11 410	48 542	60 863	108 291	3 973
332115	Crown & closure mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	15	8	631	21 574	446	910	14 022	41 940	35 920	76 713	2 712
33231	Plate work & fabricated structural product mfg ..	-	9	6	491	17 004	333	693	10 762	31 954	31 369	62 205	D
332312	Fabricated structural metal mfg	-	6	5	e	D	D	D	D	D	D	D	2 081
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	30	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	-	10	5	379	8 541	297	482	5 421	17 416	8 594	26 303	1 955
33281	Coating, engraving, heat treating, & allied activities	-	10	5	379	8 541	297	482	5 421	17 416	8 594	26 303	1 955
333	Machinery mfg	1	59	22	1 568	58 407	1 118	2 257	38 975	95 250	81 330	184 896	8 061
3332	Industrial machinery mfg ..	-	6	2	385	14 273	252	391	9 157	15 074	32 483	56 795	1 799
33329	Other industrial machinery mfg	-	4	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	35	12	716	30 816	536	1 192	22 164	47 531	21 797	69 341	4 468
33351	Metalworking machinery mfg	2	35	12	716	30 816	536	1 192	22 164	47 531	21 797	69 341	4 468
333511	Industrial mold mfg	1	13	5	262	12 326	219	493	10 040	22 108	6 262	28 185	2 183
333514	Special die & tool, die set, jig, & fixture mfg .	2	20	5	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	5	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	6	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	11	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	4	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	21	8	495	11 470	378	786	7 915	13 796	15 111	39 403	660
3371	Household & institutional furniture & kitchen cabinet mfg	-	16	7	e	D	D	D	D	D	D	D	446
33712	Household & institutional furniture mfg	-	9	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	34	4	555	15 161	378	714	7 654	49 861	34 076	84 589	890
3399	Other miscellaneous mfg ..	1	18	4	489	13 955	331	653	7 013	46 520	32 571	79 696	727
33992	Sporting & athletic goods mfg	-	3	1	e	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	3	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORT WAYNE, IN MSA													
31-33	Manufacturing	—	955	432	69 514	2 347 224	52 263	107 676	1 543 480	6 445 764	8 863 305	15 295 787	439 468
311	Food mfg	—	37	19	2 839	82 608	1 746	3 727	44 814	343 398	684 521	1 023 165	43 397
3114	Fruit & vegetable preserving & specialty food mfg	—	3	3	285	6 697	215	400	4 448	20 303	31 163	52 627	D
31142	Fruit & vegetable canning, pickling, & drying	—	3	3	285	6 697	215	400	4 448	20 303	31 163	52 627	D
311421	Fruit & vegetable canning	—	3	3	285	6 697	215	400	4 448	20 303	31 163	52 627	D
3115	Dairy product mfg	—	4	4	661	23 923	500	1 152	14 930	119 090	233 436	350 552	17 367
31152	Ice cream & frozen dessert mfg	—	2	2	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	11	4	646	21 498	235	483	5 722	48 683	26 854	75 562	D
31181	Bread & bakery product mfg	—	10	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	5	3	f	D	D	D	D	D	D	D	461
3119	Other food mfg	2	7	4	f	D	D	D	D	D	D	D	12 143
31191	Snack food mfg	—	4	3	681	13 052	426	844	8 098	55 488	26 965	82 204	D
311919	Other snack food mfg	—	4	3	681	13 052	426	844	8 098	55 488	26 965	82 204	D
314	Textile product mills	1	10	2	267	4 229	259	524	3 385	5 953	15 347	21 120	246
321	Wood product mfg	—	45	12	1 698	41 819	1 415	2 483	28 375	88 514	115 856	204 768	1 613
3219	Other wood product mfg	—	39	11	1 581	39 268	1 321	2 275	26 484	81 852	108 148	190 780	1 474
32199	All other wood product mfg	—	15	6	1 257	31 909	1 066	1 839	21 461	67 353	89 179	157 324	984
321991	Manufactured home (mobile home) mfg	—	2	2	f	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	—	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	19	14	1 390	47 016	1 041	2 170	31 604	149 325	200 650	350 800	4 967
3222	Converted paper product mfg	—	19	14	1 390	47 016	1 041	2 170	31 604	149 325	200 650	350 800	4 967
32221	Paperboard container mfg	1	13	10	1 004	32 823	746	1 564	21 449	72 141	111 289	183 393	3 775
322211	Corrugated & solid fiber box mfg	—	7	5	520	18 331	355	717	11 005	38 137	62 466	100 568	2 251
322212	Folding paperboard box mfg	3	3	3	346	11 166	280	619	7 975	21 893	29 515	51 045	D
323	Printing & related support activities	5	81	20	1 730	47 399	1 274	2 521	29 994	96 271	73 388	169 876	7 010
3231	Printing & related support activities	5	81	20	1 730	47 399	1 274	2 521	29 994	96 271	73 388	169 876	7 010
32311	Printing	6	68	14	1 434	39 601	1 043	2 209	24 157	81 942	67 696	148 703	6 317
323110	Commercial lithographic printing	6	36	11	1 124	31 015	836	1 837	19 605	62 460	52 619	114 168	5 130
32312	Support activities for printing	1	13	6	296	7 798	231	312	5 837	14 329	5 692	21 173	693
325	Chemical mfg	—	22	10	993	35 785	454	948	12 336	99 533	95 045	194 074	4 054
3256	Soap, cleaning compound, & toilet preparation mfg	—	5	3	525	19 229	143	279	3 190	37 088	36 992	74 139	515
32561	Soap & cleaning compound mfg	—	5	3	525	19 229	143	279	3 190	37 088	36 992	74 139	515
325611	Soap & other detergent mfg	—	4	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	68	51	9 470	274 158	7 505	14 382	186 566	584 061	597 889	1 193 210	67 351
3261	Plastics product mfg	4	46	37	5 580	151 235	4 503	8 819	101 918	380 302	380 211	764 066	37 529
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	5	4	415	12 940	290	551	7 203	34 340	21 450	55 496	2 188
326121	Unsupported plastics profile shape mfg	2	5	4	415	12 940	290	551	7 203	34 340	21 450	55 496	2 188
32614	Polystyrene foam product mfg	6	2	2	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	6	2	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	9	2	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	9	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	36	28	4 035	106 328	3 286	6 496	74 817	264 584	228 888	493 570	21 758
326199	All other plastics product mfg	3	36	28	4 035	106 328	3 286	6 496	74 817	264 584	228 888	493 570	21 758

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT WAYNE, IN MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	-	22	14	3 890	122 923	3 002	5 563	84 648	203 759	217 678	429 144	29 822
32621	Tire mfg	-	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	19	12	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	13	10	1 965	56 679	1 345	2 841	31 949	109 159	95 072	196 025	18 311
326299	All other rubber product mfg	-	6	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	36	17	1 561	54 492	1 277	2 704	41 161	135 584	150 067	285 230	12 108
3272	Glass & glass product mfg	-	6	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	6	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	6	2	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	22	11	e	D	D	D	D	D	D	D	3 489
3279	Other nonmetallic mineral product mfg	4	5	3	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	5	4	2	251	8 031	190	422	5 583	20 198	23 492	43 770	D
331	Primary metal mfg	-	43	33	5 657	214 541	4 606	9 740	164 110	538 855	963 646	1 504 556	38 718
3311	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	6	4	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	3	2	431	8 518	338	751	6 784	36 662	42 889	80 177	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	3	2	431	8 518	338	751	6 784	36 662	42 889	80 177	D
3314	Nonferrous metal (except aluminum) production & processing	-	11	8	1 018	40 386	840	1 781	31 577	97 411	449 026	547 804	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	3	3	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	8	5	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	6	4	f	D	D	D	D	D	D	D	7 524
3315	Foundries	-	21	17	2 806	102 970	2 296	4 891	76 553	220 784	267 370	486 934	8 917
33151	Ferrous metal foundries ..	-	8	5	g	D	D	D	D	D	D	D	5 890
331511	Iron foundries	-	8	5	g	D	D	D	D	D	D	D	5 890
33152	Nonferrous metal foundries	-	13	12	g	D	D	D	D	D	D	D	3 027
331524	Aluminum foundries (except die-casting) ..	-	7	7	1 345	48 177	1 116	2 451	36 875	100 831	169 008	269 007	2 250
332	Fabricated metal product mfg	-	194	71	7 375	226 331	5 592	11 223	145 035	575 813	539 091	1 108 967	39 340
3321	Forging & stamping	-	10	6	589	17 175	421	889	11 136	36 758	33 486	69 845	2 131
33211	Forging & stamping	-	10	6	589	17 175	421	889	11 136	36 758	33 486	69 845	2 131
332116	Metal stamping	-	8	5	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	30	19	1 759	59 944	1 253	2 513	35 766	194 954	246 045	441 239	4 835
33231	Plate work & fabricated structural product mfg ..	-	14	7	798	32 751	536	1 083	19 869	95 661	120 955	218 381	854
332311	Prefabricated metal building & component mfg	-	2	1	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	9	6	f	D	D	D	D	D	D	D	295
33232	Ornamental & architectural metal products mfg	-	16	12	961	27 193	717	1 430	15 897	99 293	125 090	222 858	3 981
332321	Metal window & door mfg	-	4	4	e	D	D	D	D	D	D	D	1 747
332322	Sheet metal work mfg ..	-	9	6	333	9 424	235	442	5 055	23 209	16 310	39 325	1 339

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT WAYNE, IN MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3325	Hardware mfg.....	—	4	4	f	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	—	4	4	f	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	—	4	4	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	—	93	18	1 678	54 688	1 355	2 985	38 873	103 848	99 283	201 211	15 933
33271	Machine shops.....	2	78	8	739	21 795	596	1 511	14 901	35 243	23 701	58 186	4 525
332710	Machine shops.....	2	78	8	739	21 795	596	1 511	14 901	35 243	23 701	58 186	4 525
33272	Turned product & screw, nut, & bolt mfg.....	—	15	10	939	32 893	759	1 474	23 972	68 605	75 582	143 025	11 408
332721	Precision turned product mfg.....	—	11	6	567	18 306	451	872	12 416	35 590	14 323	49 477	9 235
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	4	4	372	14 587	308	602	11 556	33 015	61 259	93 548	2 173
3328	Coating, engraving, heat treating, & allied activities.	2	28	13	971	23 759	769	1 310	16 208	56 083	16 776	72 226	6 193
33281	Coating, engraving, heat treating, & allied activities.....	2	28	13	971	23 759	769	1 310	16 208	56 083	16 776	72 226	6 193
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	3	13	6	512	10 581	387	571	7 247	32 898	10 158	42 217	3 898
332813	Electroplating, plating, polishing, anodizing, & coloring.....	2	9	4	279	8 046	224	423	4 954	12 353	3 614	16 174	742
3329	Other fabricated metal product mfg.....	—	21	9	907	26 812	692	1 460	17 633	62 943	39 448	101 505	3 242
33299	All other fabricated metal product mfg.....	—	18	7	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	153	71	7 124	243 635	4 867	9 456	138 738	494 162	361 803	853 768	48 606
3331	Agriculture, construction, & mining machinery mfg....	1	13	8	662	21 949	463	963	13 475	51 221	46 106	96 365	918
33312	Construction machinery mfg.....	1	6	5	412	13 606	274	599	8 106	36 966	31 033	68 201	502
333120	Construction machinery mfg.....	1	6	5	412	13 606	274	599	8 106	36 966	31 033	68 201	502
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	10	5	1 001	22 517	722	1 333	13 054	70 335	52 829	123 005	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	10	5	1 001	22 517	722	1 333	13 054	70 335	52 829	123 005	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg.....	—	5	4	900	19 897	654	1 213	11 691	63 986	42 900	106 857	D
3335	Metalworking machinery mfg.....	—	86	37	2 580	98 449	1 859	4 021	68 144	188 957	83 499	270 586	14 292
33351	Metalworking machinery mfg.....	—	86	37	2 580	98 449	1 859	4 021	68 144	188 957	83 499	270 586	14 292
333511	Industrial mold mfg....	—	22	11	529	21 343	410	899	16 506	38 871	11 434	50 816	4 021
333514	Special die & tool, die set, jig, & fixture mfg.	—	48	15	1 226	43 488	855	1 845	29 865	83 260	36 358	119 218	8 544
333515	Cutting tool & machine tool accessory mfg..	—	9	5	e	D	D	D	D	D	D	D	919
333518	Other metalworking machinery mfg.....	—	6	5	495	22 193	350	784	13 786	49 296	29 767	79 023	D
3336	Engine, turbine, & power transmission equipment mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg....	—	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	24	15	2 217	75 220	1 499	2 363	33 964	138 655	143 622	282 919	17 637
33391	Pump & compressor mfg.....	—	4	3	1 244	40 495	817	949	13 769	61 051	88 469	151 308	D
333913	Measuring & dispensing pump mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	—	5	4	423	14 045	268	540	6 574	20 172	22 889	42 506	9 990
33399	All other general-purpose machinery mfg.....	—	15	8	550	20 680	414	874	13 621	57 432	32 264	89 105	D
333995	Fluid power cylinder & actuator mfg.....	—	6	4	311	11 006	238	514	7 306	40 210	13 899	53 498	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FORT WAYNE, IN MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	37	19	7 714	294 648	4 656	9 759	134 756	606 243	463 033	1 070 884	35 888
3342	Communications equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	1	18	11	1 969	49 283	1 430	2 681	27 514	106 120	74 616	183 299	12 252
33441	Semiconductor & other electronic component mfg.....	1	18	11	1 969	49 283	1 430	2 681	27 514	106 120	74 616	183 299	12 252
334415	Electronic resistor mfg.....	1	3	3	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	5	4	924	24 761	554	1 167	10 341	57 988	52 118	112 206	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	14	5	955	25 409	730	1 389	14 223	71 494	72 148	144 872	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	14	5	955	25 409	730	1 389	14 223	71 494	72 148	144 872	D
334512	Automatic environmental control mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	26	22	3 854	112 327	3 000	5 870	73 688	297 005	341 440	629 899	8 275
3352	Household appliance mfg..	-	1	1	e	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	10	9	2 433	82 758	1 877	3 560	52 679	175 204	109 917	284 722	3 895
33531	Electrical equipment mfg.....	-	10	9	2 433	82 758	1 877	3 560	52 679	175 204	109 917	284 722	3 895
335311	Power, distribution, & specialty transformer mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	5	5	1 784	59 758	1 346	2 469	36 161	103 201	53 938	156 949	2 410
3359	Other electrical equipment & component mfg.....	-	11	10	975	22 764	808	1 708	17 178	96 174	189 650	282 436	3 909
33592	Communication & energy wire & cable mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg...	-	2	2	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg.....	1	3	3	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg.....	1	3	3	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	-	6	5	315	6 647	241	460	4 630	17 505	16 676	33 882	952
335999	All other miscellaneous electrical equipment & component mfg.....	-	6	5	315	6 647	241	460	4 630	17 505	16 676	33 882	952
336	Transportation equipment mfg.....	-	66	44	14 798	586 710	12 311	27 767	459 926	2 107 175	4 008 200	6 107 906	116 242
3361	Motor vehicle mfg.....	-	3	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg...	-	1	1	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg..	-	1	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	9	7	g	D	D	D	D	D	D	D	1 950
33621	Motor vehicle body & trailer mfg.....	-	9	7	g	D	D	D	D	D	D	D	1 950
336212	Truck trailer mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336213	Motor home mfg.....	-	3	2	g	D	D	D	D	D	D	D	D

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	FORT WAYNE, IN MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	-	47	30	8 933	329 086	7 318	16 279	248 964	949 537	1 053 336	1 997 150	63 156
33631	Motor vehicle gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	3	3	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	3	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	12	8	3 211	164 926	2 368	5 448	134 950	467 752	655 605	1 115 831	D
336350	Motor vehicle transmission & power train parts mfg	-	12	8	3 211	164 926	2 368	5 448	134 950	467 752	655 605	1 115 831	D
33637	Motor vehicle metal stamping	-	7	4	565	18 170	447	1 029	12 728	42 135	52 888	95 275	7 556
336370	Motor vehicle metal stamping	-	7	4	565	18 170	447	1 029	12 728	42 135	52 888	95 275	7 556
33639	Other motor vehicle parts mfg	1	10	7	935	28 332	782	1 724	22 234	83 397	69 773	152 517	10 171
336399	All other motor vehicle parts mfg	1	10	7	935	28 332	782	1 724	22 234	83 397	69 773	152 517	10 171
3364	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	6	2	2	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	6	2	2	e	D	D	D	D	D	D	D	D
336612	Boat building	6	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	40	13	1 260	35 351	934	1 905	21 352	65 047	45 385	110 540	2 131
3371	Household & institutional furniture & kitchen cabinet mfg	-	30	8	1 000	27 343	782	1 603	17 459	45 749	32 161	77 858	1 417
33711	Wood kitchen cabinet & counter top mfg	-	20	4	524	14 032	423	863	10 032	23 647	16 923	40 526	862
337110	Wood kitchen cabinet & counter top mfg ...	-	20	4	524	14 032	423	863	10 032	23 647	16 923	40 526	862
33712	Household & institutional furniture mfg	-	10	4	476	13 311	359	740	7 427	22 102	15 238	37 332	555
337121	Upholstered household furniture mfg	-	4	3	398	11 861	295	630	6 412	19 493	11 600	31 091	387
339	Miscellaneous mfg	-	54	11	1 433	34 192	1 018	1 728	19 101	182 294	113 541	297 714	6 014
3399	Other miscellaneous mfg ..	-	34	10	1 302	30 470	924	1 564	16 590	172 422	110 654	284 838	5 727
33993	Doll, toy, & game mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	8	4	483	10 445	315	645	6 868	29 708	20 254	50 554	D
339991	Gasket, packing, & sealing device mfg ...	-	4	3	353	8 328	203	423	5 442	21 152	18 031	40 234	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANAPOLIS, IN MSA												
31-33	Manufacturing	-	2 014	712	106 283	4 305 855	77 364	158 183	2 767 592	15 170 091	12 016 247	26 773 226	974 154
311	Food mfg	-	77	35	5 713	188 896	3 701	7 471	105 857	797 825	1 047 755	1 841 945	72 617
3112	Grain & oilseed milling ...	-	6	5	1 137	48 310	844	1 946	34 813	322 862	512 144	827 317	46 767
31122	Starch & vegetable fats & oils mfg	-	3	3	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	4	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	4	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	3	3	659	21 875	478	989	14 637	61 278	157 019	217 501	2 419
311511	Fluid milk mfg	-	3	3	659	21 875	478	989	14 637	61 278	157 019	217 501	2 419
3116	Meat product mfg	2	6	3	464	12 019	346	685	5 658	62 479	60 610	123 146	4 888
31161	Animal slaughtering & processing	2	6	3	464	12 019	346	685	5 658	62 479	60 610	123 146	4 888
311612	Meat processed from carcasses	1	3	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	35	14	2 096	66 717	1 256	2 284	32 360	222 308	131 232	355 794	10 509
31181	Bread & bakery product mfg	-	32	13	2 000	64 539	1 197	2 155	30 750	218 648	125 714	346 290	D
311812	Commercial bakeries ..	-	14	9	1 751	60 356	1 014	1 958	28 306	208 957	118 317	329 160	9 995
3119	Other food mfg	-	11	6	757	24 249	402	864	10 229	61 590	71 212	133 351	4 158
31193	Flavoring syrup & concentrate mfg	-	2	1	e	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg	-	2	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	5	2	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	7	10	7	1 252	46 123	390	907	12 277	337 999	391 037	725 850	15 469
3121	Beverage mfg	7	10	7	1 252	46 123	390	907	12 277	337 999	391 037	725 850	15 469
31211	Soft drink & ice mfg	7	7	7	1 239	45 898	381	900	12 147	336 853	390 006	723 720	D
312111	Soft drink mfg	7	4	4	g	D	D	D	D	D	D	D	D
314	Textile product mills	1	34	6	596	16 205	493	852	8 023	27 448	17 814	44 780	1 468
3149	Other textile product mills ..	-	20	5	497	14 682	419	734	7 128	25 005	15 381	39 921	D
31499	All other textile product mills	-	10	4	419	12 814	356	611	5 901	21 366	12 197	33 099	D
314999	All other miscellaneous textile product mills ..	-	10	4	419	12 814	356	611	5 901	21 366	12 197	33 099	D
315	Apparel mfg	2	18	4	351	7 862	297	557	4 886	19 268	16 846	35 773	854
3152	Cut & sew apparel mfg	2	15	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	60	24	2 147	56 355	1 762	3 360	34 857	127 272	144 155	271 608	9 833
3212	Veneer, plywood, & engineered wood product mfg	1	11	9	1 221	32 225	1 057	1 996	20 110	71 137	66 711	135 602	5 719
32121	Veneer, plywood, & engineered wood product mfg	1	11	9	1 221	32 225	1 057	1 996	20 110	71 137	66 711	135 602	5 719
321211	Hardwood veneer & plywood mfg	-	6	6	958	26 351	848	1 618	16 394	60 192	53 727	111 542	4 979
3219	Other wood product mfg ...	2	45	12	791	20 989	591	1 131	12 299	46 509	60 723	107 599	3 496
32191	Millwork	1	12	5	407	13 448	274	629	6 951	28 034	41 465	69 827	2 547
321912	Cut stock, resawing lumber, & planing	-	3	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	36	26	3 063	100 023	2 261	4 746	61 530	309 259	372 707	673 979	21 735
3222	Converted paper product mfg	-	35	25	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	21	13	1 453	53 353	1 114	2 279	33 195	128 888	136 818	263 060	10 813
322211	Corrugated & solid fiber box mfg	-	15	10	827	28 408	639	1 290	17 095	68 288	99 665	167 912	D
322212	Folding paperboard box mfg	-	4	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	6	6	526	18 379	409	884	12 876	75 699	126 883	199 844	6 653
322221	Coated & laminated packaging paper & plastics film mfg	-	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	-	6	4	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	3	3	360	11 375	268	591	7 726	27 569	25 275	51 907	D

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	INDIANAPOLIS, IN MSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32229	Other converted paper product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	312	70	6 438	191 578	4 665	8 913	116 551	495 756	398 554	892 910	33 569
3231	Printing & related support activities.....	1	312	70	6 438	191 578	4 665	8 913	116 551	495 756	398 554	892 910	33 569
32311	Printing	1	271	52	5 331	158 206	3 810	7 256	96 209	430 985	379 403	808 844	28 953
323110	Commercial	1	134	31	2 662	89 586	1 827	3 706	52 177	189 784	201 692	391 118	22 069
323113	lithographic printing ..	-	20	2	878	18 652	698	1 220	11 772	69 996	98 674	167 680	1 193
323114	Commercial screen printing.....	2	66	3	550	14 326	344	470	6 500	26 968	14 757	41 373	1 653
323116	Quick printing	-	11	8	654	19 951	522	1 053	15 314	88 429	26 502	115 063	2 642
323119	Manifold business form printing	4	23	3	359	8 355	257	505	5 769	26 694	8 918	35 624	845
323119	Other commercial printing.....	3	41	18	1 107	33 372	855	1 657	20 342	64 771	19 151	84 066	4 616
32312	Support activities for printing.....	3	16	8	519	12 593	433	825	8 683	23 960	9 085	33 100	2 562
323121	Tradebinding & related work	3	25	10	588	20 779	422	832	11 659	40 811	10 066	50 966	2 054
323122	Prepress services	-	74	28	6 104	370 064	3 356	6 924	157 717	5 276 023	1 658 846	6 477 847	107 063
325	Chemical mfg	-	8	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	10	4	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	10	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	7	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	1	10	7	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	9	6	388	18 032	260	423	9 759	32 738	64 309	103 483	1 641
32551	Paint & coating mfg	1	9	6	388	18 032	260	423	9 759	32 738	64 309	103 483	1 641
325510	Paint & coating mfg	5	22	8	f	D	D	D	D	D	D	D	5 179
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	20	6	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	8	2	2	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	8	2	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	2	23	7	f	D	D	D	D	D	D	D	8 591
3259	Other chemical product mfg	2	18	6	e	D	D	D	D	D	D	D	8 262
32599	All other chemical product & preparation mfg	-	8	4	303	10 830	219	447	6 648	30 020	38 900	68 663	4 256
325991	Custom compounding of purchased resin ...	1	98	47	6 121	174 820	4 780	9 367	114 387	497 285	422 731	917 376	42 935
326	Plastics & rubber products mfg	2	70	41	4 940	134 212	3 817	7 573	85 821	298 502	324 221	620 787	36 902
3261	Plastics product mfg	2	9	7	708	21 060	518	982	11 933	40 285	35 817	76 048	2 454
32611	Unsupported plastics film, sheet, & bag mfg ..	-	3	2	396	10 033	315	583	6 958	11 118	12 203	23 061	1 418
326111	Unsupported plastics bag mfg	1	48	30	3 833	100 268	2 968	5 792	63 994	214 674	230 776	444 292	29 190
32619	Other plastics product mfg	1	43	28	3 734	97 935	2 890	5 633	62 298	211 032	228 564	438 392	29 153
326199	All other plastics product mfg	1	28	6	1 181	40 608	963	1 794	28 566	198 783	98 510	296 589	6 033
3262	Rubber product mfg	1	16	5	1 078	38 133	874	1 605	26 496	193 650	91 164	284 068	5 339
32629	Other rubber product mfg	-	7	3	f	D	D	D	D	D	D	D	4 172
326291	Rubber product mfg for mechanical use												

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANAPOLIS, IN MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	90	31	3 778	136 831	2 880	6 146	91 910	325 454	291 865	626 462	28 111
3272	Glass & glass product mfg	—	15	4	1 026	36 468	863	1 928	29 269	103 452	76 056	181 384	D
32721	Glass & glass product mfg	—	15	4	1 026	36 468	863	1 928	29 269	103 452	76 056	181 384	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	14	3	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	54	19	1 303	46 174	952	2 034	28 963	117 214	123 178	240 047	11 015
32732	Ready-mix concrete mfg	4	30	9	611	24 465	520	1 090	17 043	66 911	69 828	136 576	3 392
327320	Ready-mix concrete mfg	4	30	9	611	24 465	520	1 090	17 043	66 911	69 828	136 576	3 392
32733	Concrete pipe, brick, & block mfg	1	7	6	e	D	D	D	D	D	D	D	5 350
32739	Other concrete product mfg	2	15	4	321	11 045	234	526	6 234	20 609	23 040	43 900	D
327390	Other concrete product mfg	2	15	4	321	11 045	234	526	6 234	20 609	23 040	43 900	D
3279	Other nonmetallic mineral product mfg	—	15	7	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	12	6	1 254	48 674	901	1 862	29 264	87 013	87 211	181 891	6 682
327993	Mineral wool mfg	—	5	3	1 007	40 457	746	1 527	25 947	68 215	73 308	148 748	D
331	Primary metal mfg	—	35	25	4 951	243 144	3 971	8 757	186 274	471 855	509 163	983 196	89 547
3312	Steel product mfg from purchased steel	—	4	4	279	8 971	218	504	6 243	22 507	34 657	55 807	657
33122	Rolling & drawing of purchased steel	—	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	7	5	1 363	53 261	967	2 020	31 538	90 307	226 450	323 265	D
33142	Copper rolling, drawing, extruding, & alloying	—	2	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	5	4	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	3	3	274	11 887	132	168	2 660	S	S	68 539	D
3315	Foundries	—	20	12	3 023	170 185	2 591	5 756	141 171	327 954	199 071	524 120	D
33151	Ferrous metal foundries	—	9	8	2 289	145 605	1 945	4 550	122 154	255 585	122 534	375 570	D
331511	Iron foundries	—	6	5	1 990	137 292	1 707	4 060	116 262	240 385	112 780	351 300	38 838
33152	Nonferrous metal foundries	—	11	4	734	24 580	646	1 206	19 017	72 369	76 537	148 550	D
331521	Aluminum die-casting foundries	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	433	158	15 105	513 633	11 428	23 417	329 679	1 291 934	866 406	2 192 006	84 471
3321	Forging & stamping	1	14	7	623	35 611	441	1 149	25 877	90 184	66 419	150 034	3 222
33211	Forging & stamping	1	14	7	623	35 611	441	1 149	25 877	90 184	66 419	150 034	3 222
332117	Powder metallurgy part mfg	—	3	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	75	34	2 942	99 854	2 061	4 563	58 372	229 210	238 145	466 252	10 236
33231	Plate work & fabricated structural product mfg	—	21	8	449	16 890	308	669	9 251	46 548	96 375	142 990	2 442
332312	Fabricated structural metal mfg	—	16	7	367	14 579	247	566	7 636	41 730	92 367	134 342	1 501
33232	Ornamental & architectural metal products mfg	1	54	26	2 493	82 964	1 753	3 894	49 121	182 662	141 770	323 262	7 794
332321	Metal window & door mfg	—	6	2	e	D	D	D	D	D	D	D	1 216
332322	Sheet metal work mfg	1	35	19	1 756	56 477	1 305	2 872	36 094	111 550	79 560	190 974	6 316
332323	Ornamental & architectural metal work mfg	1	13	5	e	D	D	D	D	D	D	D	262
3324	Boiler, tank, & shipping container mfg	1	8	4	290	10 035	200	400	6 257	20 562	15 248	35 994	772
3325	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
33251	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
332510	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
3326	Spring & wire product mfg	1	10	6	620	17 817	505	987	12 904	36 048	28 130	64 515	848
33261	Spring & wire product mfg	1	10	6	620	17 817	505	987	12 904	36 048	28 130	64 515	848
332611	Spring (heavy gauge) mfg	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANAPOLIS, IN MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	192	52	4 114	131 021	3 188	6 217	86 913	254 871	128 018	383 715	22 376
33271	Machine shops	1	162	36	2 405	75 600	1 855	3 433	49 931	141 569	68 516	209 096	10 300
332710	Machine shops	1	162	36	2 405	75 600	1 855	3 433	49 931	141 569	68 516	209 096	10 300
33272	Turned product & screw, nut, & bolt mfg	1	30	16	1 709	55 421	1 333	2 784	36 982	113 302	59 502	174 619	12 076
332721	Precision turned product mfg	1	19	11	1 442	46 946	1 129	2 416	31 579	91 797	43 834	137 762	11 104
332722	Bolt, nut, screw, rivet, & washer mfg	2	11	5	267	8 475	204	368	5 403	21 505	15 668	36 857	972
3328	Coating, engraving, heat treating, & allied activities.	—	69	26	2 312	65 944	1 777	3 326	42 525	152 022	87 464	244 781	20 094
33281	Coating, engraving, heat treating, & allied activities	—	69	26	2 312	65 944	1 777	3 326	42 525	152 022	87 464	244 781	20 094
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	25	10	1 067	31 070	803	1 453	19 875	81 590	59 290	146 017	15 536
332813	Electroplating, plating, polishing, anodizing, & coloring	—	32	11	1 025	26 689	815	1 553	18 000	53 177	24 916	78 243	2 519
3329	Other fabricated metal product mfg	—	53	22	2 576	92 184	1 952	4 130	58 836	303 631	215 010	554 207	17 687
33291	Metal valve mfg	—	8	6	591	22 037	445	957	14 090	101 454	91 179	227 975	7 366
332911	Industrial valve mfg ...	—	5	4	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	45	16	1 985	70 147	1 507	3 173	44 746	202 177	123 831	326 232	10 321
332991	Ball & roller bearing mfg	—	3	3	f	D	D	D	D	D	D	D	5 741
332999	All other miscellaneous fabricated metal product mfg	—	27	10	1 036	31 184	782	1 712	19 662	62 779	52 329	115 103	4 312
333	Machinery mfg	—	237	88	11 113	432 774	7 917	15 099	273 561	1 022 414	1 454 239	2 477 419	61 745
3331	Agriculture, construction, & mining machinery mfg	1	15	9	637	21 424	452	845	12 104	51 192	61 670	112 534	4 619
33311	Agricultural implement mfg	—	9	6	479	16 720	362	676	9 755	39 610	50 171	89 479	3 940
333111	Farm machinery & equipment mfg	—	5	3	e	D	D	D	D	D	D	D	3 571
3332	Industrial machinery mfg ..	—	27	10	857	36 117	517	1 076	17 978	71 885	67 662	138 941	4 210
33321	Sawmill & woodworking machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	25	8	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	2	10	3	339	11 973	139	291	4 274	27 633	23 006	51 079	944
33331	Commercial & service industry machinery mfg	2	10	3	339	11 973	139	291	4 274	27 633	23 006	51 079	944
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	13	8	1 997	69 766	1 737	2 787	54 156	256 645	222 786	484 966	6 693
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	13	8	1 997	69 766	1 737	2 787	54 156	256 645	222 786	484 966	6 693
333412	Industrial & commercial fan & blower mfg	—	2	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	10	5	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	94	23	1 775	67 546	1 162	2 431	38 063	105 477	77 241	180 544	6 554
33351	Metalworking machinery mfg	1	94	23	1 775	67 546	1 162	2 431	38 063	105 477	77 241	180 544	6 554
333512	Machine tool (metal cutting types) mfg ...	—	3	3	e	D	D	D	D	D	D	D	1 450
333514	Special die & tool, die set, jig, & fixture mfg ..	—	54	10	700	26 099	525	1 082	17 368	41 553	19 421	59 798	2 890
333518	Other metalworking machinery mfg	2	12	6	460	17 653	294	615	10 226	31 747	16 356	47 882	985

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	INDIANAPOLIS, IN MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	—	14	7	3 145	136 476	2 439	4 604	102 367	336 951	799 780	1 129 963	30 169
33361	Engine, turbine, & power transmission equipment mfg	—	14	7	3 145	136 476	2 439	4 604	102 367	336 951	799 780	1 129 963	30 169
333611	Turbine & turbine generator set unit mfg	—	2	1	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	64	28	2 363	89 472	1 471	3 065	44 619	172 631	202 094	379 392	8 556
33391	Pump & compressor mfg	—	10	8	664	30 331	294	497	10 429	49 095	70 720	128 124	2 455
333911	Pump & pumping equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	8	6	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	3	25	11	863	28 149	645	1 578	18 553	64 944	81 964	144 567	2 874
333922	Conveyor & conveying equipment mfg	1	18	7	471	15 228	338	849	9 480	30 812	38 696	70 742	1 552
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	4	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	29	9	836	30 992	532	990	15 637	58 592	49 410	106 701	3 227
333994	Industrial process furnace & oven mfg ..	—	6	3	315	12 094	208	420	6 075	31 469	15 855	46 740	D
333999	All other miscellaneous general-purpose machinery mfg	—	20	5	e	D	D	D	D	D	D	D	1 460
334	Computer & electronic product mfg	4	75	33	4 482	128 956	2 954	6 021	62 279	372 328	376 759	760 226	23 862
3342	Communications equipment mfg	4	10	2	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	7	2	345	8 240	227	399	4 517	18 020	12 989	31 139	788
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	7	2	345	8 240	227	399	4 517	18 020	12 989	31 139	788
3343	Audio & video equipment mfg	5	6	4	1 637	46 137	1 239	2 610	25 125	163 476	240 166	416 672	D
33431	Audio & video equipment mfg	5	6	4	1 637	46 137	1 239	2 610	25 125	163 476	240 166	416 672	D
334310	Audio & video equipment mfg	5	6	4	1 637	46 137	1 239	2 610	25 125	163 476	240 166	416 672	D
3344	Semiconductor & other electronic component mfg	1	26	11	1 104	28 434	817	1 658	15 555	59 521	41 153	97 541	4 743
33441	Semiconductor & other electronic component mfg	1	26	11	1 104	28 434	817	1 658	15 555	59 521	41 153	97 541	4 743
334418	Printed circuit assembly (electronic assembly) mfg	1	3	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	10	7	485	10 501	372	668	5 476	19 916	15 913	35 877	412
3345	Navigational, measuring, medical, & control instruments mfg	1	23	11	952	33 820	416	856	11 238	100 592	58 317	160 473	9 090
33451	Navigational, measuring, medical, & control instruments mfg	1	23	11	952	33 820	416	856	11 238	100 592	58 317	160 473	9 090
334515	Electricity measuring & testing instrument mfg	1	6	4	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	30	10	795	27 877	491	903	13 785	60 887	42 109	103 342	1 900
3353	Electrical equipment mfg ..	2	14	5	350	13 982	228	424	7 495	24 420	17 429	41 825	416
33531	Electrical equipment mfg	2	14	5	350	13 982	228	424	7 495	24 420	17 429	41 825	416

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANAPOLIS, IN MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	91	49	28 280	1 510 389	21 662	46 350	1 095 040	3 318 773	3 657 604	6 976 967	357 658
3362	Motor vehicle body & trailer mfg	5	9	4	351	9 075	287	612	6 583	17 390	17 987	35 669	D
33621	Motor vehicle body & trailer mfg	5	9	4	351	9 075	287	612	6 583	17 390	17 987	35 669	D
336211	Motor vehicle body mfg	6	7	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	55	33	22 596	1 191 235	18 612	39 433	941 673	2 708 502	3 065 130	5 792 990	325 350
33631	Motor vehicle gasoline engine & engine parts mfg	—	11	8	2 315	75 278	1 825	3 722	47 941	213 915	296 161	514 431	50 004
336312	Gasoline engine & engine parts mfg	—	8	6	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	11	7	i	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	10	6	4 756	239 119	4 207	6 942	211 790	354 266	717 317	1 074 452	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	5	4	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	5	4	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	4	3	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	4	3	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	5	3	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	5	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	15	4	2 103	59 105	1 881	4 142	49 037	184 667	329 880	515 027	35 740
336399	All other motor vehicle parts mfg	—	15	4	2 103	59 105	1 881	4 142	49 037	184 667	329 880	515 027	35 740
3364	Aerospace product & parts mfg	—	11	10	5 211	305 931	2 671	6 148	144 090	584 461	558 621	1 123 663	30 889
33641	Aerospace product & parts mfg	—	11	10	5 211	305 931	2 671	6 148	144 090	584 461	558 621	1 123 663	30 889
336412	Aircraft engine & engine parts mfg	—	6	6	h	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	4	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	96	26	2 347	65 458	1 763	3 562	42 006	142 069	126 520	266 011	13 136
3371	Household & institutional furniture & kitchen cabinet mfg	—	65	12	1 389	37 911	1 075	2 162	27 007	89 115	79 718	167 635	10 292
33711	Wood kitchen cabinet & counter top mfg	—	38	7	554	13 891	422	836	9 277	26 099	29 191	55 197	8 709
337110	Wood kitchen cabinet & counter top mfg ...	—	38	7	554	13 891	422	836	9 277	26 099	29 191	55 197	8 709
33712	Household & institutional furniture mfg	—	27	5	835	24 020	653	1 326	17 730	63 016	50 527	112 438	1 583
337125	Household furniture (except wood & metal) mfg	—	2	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	26	12	814	22 977	590	1 163	12 516	43 555	35 918	78 023	D
33721	Office furniture (including fixtures) mfg	1	26	12	814	22 977	590	1 163	12 516	43 555	35 918	78 023	D
337215	Showcase, partition, shelving, & locker mfg	1	15	6	461	12 990	339	636	7 164	21 923	20 541	42 055	645

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INDIANAPOLIS, IN MSA—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	179	39	3 287	86 117	2 307	4 254	51 118	246 510	164 601	418 792	6 911
3391	Medical equipment & supplies mfg.....	1	84	17	1 457	43 726	989	1 781	23 168	129 292	66 902	198 177	4 033
33911	Medical equipment & supplies mfg.....	1	84	17	1 457	43 726	989	1 781	23 168	129 292	66 902	198 177	4 033
339112	Surgical & medical instrument mfg.....	1	13	2	405	12 555	277	554	6 798	33 944	33 477	64 345	1 451
339113	Surgical appliance & supplies mfg.....	—	9	5	410	14 694	290	550	6 915	60 485	19 654	84 674	1 530
339116	Dental laboratories ...	5	50	4	395	9 666	268	432	5 846	20 019	7 120	27 768	580
3399	Other miscellaneous mfg ..	1	95	22	1 830	42 391	1 318	2 473	27 950	117 218	97 699	220 615	2 878
33991	Jewelry & silverware mfg.....	1	12	4	400	11 443	329	629	9 661	42 715	14 585	57 171	460
339911	Jewelry (except costume) mfg.....	1	6	4	e	D	D	D	D	D	D	D	448
33992	Sporting & athletic goods mfg.....	1	16	5	412	8 328	252	549	5 038	22 163	42 800	70 134	590
339920	Sporting & athletic goods mfg.....	1	16	5	412	8 328	252	549	5 038	22 163	42 800	70 134	590
33995	Sign mfg.....	3	45	5	407	10 131	238	430	4 655	19 878	14 065	33 919	917
339950	Sign mfg.....	3	45	5	407	10 131	238	430	4 655	19 878	14 065	33 919	917
33999	All other miscellaneous mfg.....	1	15	6	436	9 317	359	672	6 762	25 836	22 758	49 464	D
KOKOMO, IN MSA													
31-33	Manufacturing	—	102	38	20 972	1 108 437	14 515	31 994	749 004	2 426 429	2 483 168	4 931 445	303 765
311	Food mfg.....	7	7	2	261	5 134	183	339	2 931	17 469	34 814	52 014	1 025
326	Plastics & rubber products mfg.....	—	6	5	463	14 397	317	654	7 569	42 650	36 427	79 240	3 454
3261	Plastics product mfg.....	—	6	5	463	14 397	317	654	7 569	42 650	36 427	79 240	3 454
32619	Other plastics product mfg.....	—	6	5	463	14 397	317	654	7 569	42 650	36 427	79 240	3 454
326199	All other plastics product mfg.....	—	6	5	463	14 397	317	654	7 569	42 650	36 427	79 240	3 454
327	Nonmetallic mineral product mfg.....	—	7	3	306	9 989	255	532	7 627	29 268	11 194	39 454	1 662
331	Primary metal mfg.....	—	5	3	815	42 213	573	1 276	27 754	79 213	156 393	238 999	D
3314	Nonferrous metal (except aluminum) production & processing.....	—	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	16	6	289	8 388	222	359	4 909	14 955	8 523	23 637	500
333	Machinery mfg.....	2	11	6	479	18 295	379	810	13 181	52 288	24 014	74 566	14 450
336	Transportation equipment mfg.....	—	5	5	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	5	5	j	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	—	4	4	j	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	—	4	4	j	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	—	1	1	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LAFAYETTE, IN MSA												
31-33	Manufacturing	-	162	77	21 654	840 343	17 185	36 202	547 518	3 258 422	5 839 513	9 084 178	431 091
311	Food mfg	-	21	12	2 723	91 968	2 342	4 763	61 376	668 783	805 998	1 473 144	33 994
3112	Grain & oilseed milling	-	4	4	569	25 939	456	1 083	20 557	285 352	605 166	889 751	D
31122	Starch & vegetable fats & oils mfg	-	4	4	569	25 939	456	1 083	20 557	285 352	605 166	889 751	D
311221	Wet corn milling	-	2	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	3	1	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	3	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	3	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	10	6	1 576	82 012	1 011	2 134	52 347	465 104	372 890	843 140	D
3254	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	6	683	17 285	551	1 045	10 501	39 674	23 311	62 798	3 218
3261	Plastics product mfg	-	9	6	683	17 285	551	1 045	10 501	39 674	23 311	62 798	3 218
32619	Other plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	12	827	21 790	644	1 137	14 673	63 668	49 650	113 246	3 740
333	Machinery mfg	-	13	6	3 165	135 490	2 296	4 819	88 165	734 909	741 698	1 492 966	32 974
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	12	7	1 724	52 683	1 222	2 507	29 334	123 906	86 336	213 051	17 160
3344	Semiconductor & other electronic component mfg	-	2	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	1	1	e	D	D	D	D	D	D	D	D

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31-33	LAFAYETTE, IN MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	4	8	5	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	4	8	5	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	1	1	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	9	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	7	6 892	299 377	5 801	12 822	187 206	823 971	3 369 531	4 143 338	D
3361	Motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	2	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	1	1	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	h	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	5	3	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	2	f	D	D	D	D	D	D	D	1 201
3379	Other furniture related product mfg	—	2	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	2	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	7	4	1 045	27 227	912	1 767	21 037	84 544	43 097	127 308	D
3399	Other miscellaneous mfg	—	5	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg	—	1	1	f	D	D	D	D	D	D	D	D
	LOUISVILLE, KY-IN MSA												
31-33	Manufacturing	—	1 333	540	80 938	2 882 136	63 011	129 224	2 034 239	17 272 778	16 876 617	34 196 572	812 075
	Louisville, KY-IN MSA (IN Part)	1	370	152	20 027	557 652	16 163	33 253	394 044	1 720 684	1 616 687	3 337 641	147 330
	Louisville, KY-IN MSA (KY Part)	—	963	388	60 911	2 324 484	46 848	95 971	1 640 195	15 552 094	15 259 930	30 858 931	664 745
311	Food mfg	—	80	38	7 226	196 701	5 768	11 938	134 540	926 087	1 077 848	1 994 916	58 141
3114	Fruit & vegetable preserving & specialty food mfg	—	8	6	870	25 814	684	1 562	14 718	91 457	131 921	223 377	18 962
31142	Fruit & vegetable canning, pickling, & drying	—	7	5	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	5	3	e	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	10	7	2 229	56 384	1 868	4 145	41 419	136 008	404 728	534 099	4 831
31161	Animal slaughtering & processing	—	10	7	2 229	56 384	1 868	4 145	41 419	136 008	404 728	534 099	4 831
311611	Animal (except poultry) slaughtering	—	5	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	3	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	36	11	2 498	67 525	1 951	3 842	48 718	437 410	240 209	674 167	23 054
31181	Bread & bakery product mfg	1	30	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	1	10	5	589	14 643	269	591	5 007	32 718	25 237	57 957	623
31182	Cookie, cracker, & pasta mfg	1	6	6	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	1	3	3	f	D	D	D	D	D	D	D	D

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31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	13	9	1 273	36 223	1 019	1 846	23 078	203 143	165 288	368 096	8 144
31191	Snack food mfg	—	5	4	923	24 902	779	1 350	16 448	117 047	107 297	224 323	4 036
311919	Other snack food mfg .	—	4	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	11	8	3 504	164 363	2 500	5 015	110 312	3 281 830	837 815	4 123 812	21 534
3121	Beverage mfg	—	9	6	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	5	2	e	D	D	D	D	D	D	D	D
31214	Distilleries	—	4	4	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	4	4	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	2	2	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	2	2	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	1	1	g	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	19	8	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	11	5	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	11	5	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	5	4	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	8	3	337	7 854	261	400	4 779	19 070	13 014	31 349	D
31499	All other textile product mills	—	5	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	16	7	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	4	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	12	4	316	5 598	234	418	2 801	12 584	3 828	15 397	D
31599	Apparel accessories & other apparel mfg	1	12	4	316	5 598	234	418	2 801	12 584	3 828	15 397	D
315991	Hat, cap, & millinery mfg	—	4	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	77	32	2 732	63 457	2 255	4 379	44 085	110 399	159 411	269 739	D
3212	Veneer, plywood, & engineered wood product mfg	—	21	14	1 107	25 002	898	1 823	16 279	45 679	59 325	104 028	D
32121	Veneer, plywood, & engineered wood product mfg	—	21	14	1 107	25 002	898	1 823	16 279	45 679	59 325	104 028	D
321211	Hardwood veneer & plywood mfg	—	13	10	840	18 213	691	1 382	12 039	32 670	43 223	74 948	D
3219	Other wood product mfg ...	1	48	18	1 555	36 533	1 300	2 449	26 510	60 598	85 735	147 274	D
32191	Millwork	1	19	9	f	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing....	1	8	5	520	11 478	441	908	8 416	17 604	26 784	45 939	D
32192	Wood container & pallet mfg	2	22	6	576	15 354	492	936	11 457	21 459	38 044	59 866	D
321920	Wood container & pallet mfg	2	22	6	576	15 354	492	936	11 457	21 459	38 044	59 866	D
322	Paper mfg	—	42	29	2 856	89 180	2 209	4 791	59 782	210 364	359 151	568 368	19 301
3222	Converted paper product mfg	—	42	29	2 856	89 180	2 209	4 791	59 782	210 364	359 151	568 368	19 301
32221	Paperboard container mfg	—	22	18	1 822	58 428	1 409	3 000	38 847	133 351	223 578	356 763	D
322211	Corrugated & solid fiber box mfg	—	14	12	1 271	39 348	957	1 894	24 287	91 490	148 890	239 582	9 813
32222	Paper bag & coated & treated paper mfg	—	6	4	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	—	9	4	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	4	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	176	48	6 839	200 949	5 284	11 077	139 861	439 170	281 880	718 533	59 550
3231	Printing & related support activities.....	—	176	48	6 839	200 949	5 284	11 077	139 861	439 170	281 880	718 533	59 550
32311	Printing	—	158	46	6 684	196 940	5 156	10 854	136 925	432 267	279 939	709 709	58 841
323110	Commercial lithographic printing ..	—	70	25	4 533	141 178	3 624	7 961	101 345	300 270	202 639	499 837	46 602
323112	Commercial flexographic printing ..	—	6	4	757	22 066	576	1 165	14 745	50 032	14 612	64 650	D
323114	Quick printing	2	42	2	270	6 258	179	307	3 988	13 042	6 880	19 892	652
323119	Other commercial printing.....	9	17	3	310	6 378	179	289	3 010	14 658	8 637	22 731	883

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	1	83	41	5 877	278 558	3 762	8 214	164 282	1 202 820	1 475 318	2 683 848	110 568
3251	Basic chemical mfg	—	20	11	1 592	75 051	1 007	2 425	44 875	249 582	271 757	516 209	24 840
32518	Other basic inorganic chemical mfg	—	6	6	f	D	D	D	D	D	D	D	13 345
325188	All other basic inorganic chemical mfg	—	6	6	f	D	D	D	D	D	D	D	13 345
32519	Other basic organic chemical mfg	—	9	4	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	8	3	369	19 150	247	527	11 765	90 115	140 191	226 101	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	12	11	2 400	126 995	1 665	3 590	77 657	609 880	898 110	1 524 835	66 815
32521	Resin & synthetic rubber mfg	—	12	11	2 400	126 995	1 665	3 590	77 657	609 880	898 110	1 524 835	66 815
325211	Plastics material & resin mfg	—	9	8	1 448	77 463	952	2 120	41 984	399 052	692 287	1 092 468	54 806
325212	Synthetic rubber mfg ..	—	3	3	952	49 532	713	1 470	35 673	210 828	205 823	432 367	12 009
3255	Paint, coating, & adhesive mfg	1	23	12	834	31 443	360	676	10 440	178 786	115 996	296 885	3 746
32551	Paint & coating mfg	—	20	11	760	28 993	308	577	8 850	169 314	103 399	275 247	3 512
325510	Paint & coating mfg ...	—	20	11	760	28 993	308	577	8 850	169 314	103 399	275 247	3 512
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	9	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	7	2	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	13	4	e	D	D	D	D	D	D	D	6 410
326	Plastics & rubber products mfg	3	67	39	5 598	138 052	4 637	9 592	97 717	302 780	305 030	605 452	26 607
3261	Plastics product mfg	3	55	35	5 101	125 425	4 214	8 790	87 629	274 232	282 379	555 061	22 016
32611	Unsupported plastics film, sheet, & bag mfg ..	—	7	7	505	14 057	412	817	9 932	45 732	39 372	84 837	2 349
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	36	20	4 059	101 506	3 362	7 226	71 287	192 497	204 484	396 897	15 935
326199	All other plastics product mfg	4	31	18	3 868	96 848	3 206	6 967	67 818	187 499	200 429	387 844	15 783
3262	Rubber product mfg	2	12	4	497	12 627	423	802	10 088	28 548	22 651	50 391	4 591
32629	Other rubber product mfg	2	9	4	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	62	28	2 214	63 838	1 609	3 122	40 009	246 949	162 199	412 675	36 253
3271	Clay product & refractory mfg	—	10	6	597	14 794	448	865	9 825	37 481	30 292	68 696	D
32712	Clay building material & refractories mfg	—	3	2	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	—	12	3	271	7 826	218	327	3 869	21 330	18 063	39 300	D
32721	Glass & glass product mfg	—	12	3	271	7 826	218	327	3 869	21 330	18 063	39 300	D
3273	Cement & concrete product mfg	—	30	14	1 053	34 142	741	1 580	22 926	167 966	93 153	264 383	D
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	1	18	8	533	15 193	356	748	9 287	50 414	43 225	93 923	4 825
327320	Ready-mix concrete mfg	1	18	8	533	15 193	356	748	9 287	50 414	43 225	93 923	4 825
3279	Other nonmetallic mineral product mfg	—	7	4	e	D	D	D	D	D	D	D	4 171
32799	All other nonmetallic mineral product mfg ...	—	6	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	18	10	1 437	45 433	1 183	2 566	30 258	104 778	231 358	333 288	14 863
3313	Alumina & aluminum production & processing ..	—	7	6	1 037	33 018	886	1 945	23 100	70 797	130 015	199 844	8 885
33131	Alumina & aluminum production & processing	—	7	6	1 037	33 018	886	1 945	23 100	70 797	130 015	199 844	8 885
331316	Aluminum extruded product mfg	—	3	3	f	D	D	D	D	D	D	D	D

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31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	247	94	8 627	270 262	6 393	12 751	175 436	705 678	737 709	1 435 250	60 505
3321	Forging & stamping	-	13	11	1 161	31 579	980	2 040	22 622	67 062	103 868	170 874	6 056
33211	Forging & stamping	-	13	11	1 161	31 579	980	2 040	22 622	67 062	103 868	170 874	6 056
332116	Metal stamping	-	9	8	876	20 766	752	1 550	15 979	37 913	67 949	105 853	2 918
3323	Architectural & structural metals mfg	1	67	24	1 243	38 964	850	1 603	22 130	94 728	85 117	177 206	6 836
33231	Plate work & fabricated structural product mfg	1	30	11	611	19 693	393	812	10 253	45 661	48 449	95 490	1 398
332312	Fabricated structural metal mfg	1	23	10	f	D	D	D	D	D	D	D	1 238
33232	Ornamental & architectural metal products mfg	2	37	13	632	19 271	457	791	11 877	49 067	36 668	81 716	5 438
332322	Sheet metal work mfg	1	25	13	543	17 316	392	678	10 607	46 237	33 003	75 216	D
3324	Boiler, tank, & shipping container mfg	-	10	6	1 734	56 956	1 150	2 314	33 125	137 157	117 994	255 286	6 451
33241	Power boiler & heat exchanger mfg	-	4	2	g	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	4	2	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	4	3	286	10 327	126	282	3 304	32 767	31 871	64 651	D
332420	Metal tank (heavy gauge) mfg	-	4	3	286	10 327	126	282	3 304	32 767	31 871	64 651	D
3325	Hardware mfg	-	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D
33251	Hardware mfg	-	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D
332510	Hardware mfg	-	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	90	24	1 691	52 625	1 308	2 637	35 364	94 212	46 430	140 796	9 426
33271	Machine shops	1	85	20	1 367	42 212	1 048	2 062	28 016	72 489	35 834	108 422	7 263
332710	Machine shops	1	85	20	1 367	42 212	1 048	2 062	28 016	72 489	35 834	108 422	7 263
33272	Turned product & screw, nut, & bolt mfg	-	5	4	324	10 413	260	575	7 348	21 723	10 596	32 374	2 163
332721	Precision turned product mfg	-	3	3	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	3	19	8	e	D	D	D	D	D	D	D	9 324
33281	Coating, engraving, heat treating, & allied activities	3	19	8	e	D	D	D	D	D	D	D	9 324
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	5	11	5	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	28	10	1 591	55 869	1 192	2 408	41 193	216 390	309 732	519 888	18 195
33291	Metal valve mfg	-	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	26	9	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	18	7	1 074	35 961	802	1 734	26 965	169 106	282 463	446 655	16 145
333	Machinery mfg	1	133	58	6 796	237 919	4 299	8 965	121 584	514 720	521 019	1 031 757	23 443
3331	Agriculture, construction, & mining machinery mfg	1	8	3	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	5	3	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	-	21	8	872	35 374	508	1 062	17 012	76 353	56 038	134 183	2 412
33329	Other industrial machinery mfg	-	17	8	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	3	2	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	1	7	4	793	22 391	569	1 074	13 191	33 732	38 259	73 183	2 021
33331	Commercial & service industry machinery mfg	1	7	4	793	22 391	569	1 074	13 191	33 732	38 259	73 183	2 021
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	1	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	5	3	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	17	11	1 799	52 121	1 332	2 913	30 246	141 331	135 391	275 952	5 515
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	17	11	1 799	52 121	1 332	2 913	30 246	141 331	135 391	275 952	5 515
333411	Air purification equipment mfg	1	10	6	1 034	29 376	750	1 617	16 152	69 956	70 669	139 699	3 122
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	34	9	517	19 942	393	827	13 295	30 383	20 033	50 744	2 478
33351	Metalworking machinery mfg	2	34	9	517	19 942	393	827	13 295	30 383	20 033	50 744	2 478
333514	Special die & tool, die set, jig, & fixture mfg .	3	17	3	261	10 081	213	449	7 524	15 178	9 128	24 083	1 001
3339	Other general-purpose machinery mfg	1	44	22	2 523	99 824	1 312	2 679	43 569	219 381	246 655	459 208	9 810
33392	Material handling equipment mfg	—	19	13	1 380	56 822	678	1 485	24 174	119 759	166 602	280 705	D
333922	Conveyor & conveying equipment mfg	—	15	10	1 234	51 992	565	1 251	21 526	104 096	148 328	246 527	3 862
33399	All other general-purpose machinery mfg	4	23	8	f	D	D	D	D	D	D	D	4 392
333993	Packaging machinery mfg	7	4	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	17	5	420	16 403	229	406	7 626	34 216	30 191	62 995	D
334	Computer & electronic product mfg	1	26	11	g	D	D	D	D	D	D	D	17 403
3344	Semiconductor & other electronic component mfg	2	12	5	f	D	D	D	D	D	D	D	11 613
33441	Semiconductor & other electronic component mfg	2	12	5	f	D	D	D	D	D	D	D	11 613
334417	Electronic connector mfg	—	3	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	26	14	i	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	8	7	i	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	7	6	i	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	3	2	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	10	3	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	10	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	50	24	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
33621	Motor vehicle body & trailer mfg	—	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
336211	Motor vehicle body mfg	—	3	3	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	28	12	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	1	6	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	1	6	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	1	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	1	1	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33636	Motor vehicle seating & interior trim mfg	—	3	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg . . .	—	3	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	9	5		842	18 690	735	1 307	15 112	84 068	95 641	180 768
336399	All other motor vehicle parts mfg	1	9	5		842	18 690	735	1 307	15 112	84 068	95 641	180 768
3366	Ship & boat building	—	6	3	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	6	3	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	4	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	81	24		2 910	81 691	2 449	5 119	61 094	177 166	149 578	326 339
3371	Household & institutional furniture & kitchen cabinet mfg	—	53	14		1 653	46 226	1 420	3 064	36 001	96 808	92 476	188 876
33711	Wood kitchen cabinet & counter top mfg	—	35	10		1 019	28 628	857	1 808	22 583	61 707	76 410	137 863
337110	Wood kitchen cabinet & counter top mfg . . .	—	35	10		1 019	28 628	857	1 808	22 583	61 707	76 410	137 863
33712	Household & institutional furniture mfg	—	18	4		634	17 598	563	1 256	13 418	35 101	16 066	51 013
337122	Nonupholstered wood household furniture mfg	—	10	3	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	20	8		1 132	31 656	938	1 879	22 833	69 089	45 346	114 269
33721	Office furniture (including fixtures) mfg	—	20	8		1 132	31 656	938	1 879	22 833	69 089	45 346	114 269
337211	Wood office furniture mfg	—	5	3		881	25 960	737	1 556	19 038	52 872	34 283	86 995
339	Miscellaneous mfg	1	102	22		1 639	46 615	1 149	2 107	26 537	108 031	56 666	164 613
3391	Medical equipment & supplies mfg	1	41	8		565	17 000	401	732	9 219	39 298	19 538	59 908
33911	Medical equipment & supplies mfg	1	41	8		565	17 000	401	732	9 219	39 298	19 538	59 908
3399	Other miscellaneous mfg	1	61	14		1 074	29 615	748	1 375	17 318	68 733	37 128	104 705
33999	All other miscellaneous mfg	—	18	8		706	20 586	495	925	12 532	48 968	24 629	72 773
339991	Gasket, packing, & sealing device mfg	—	3	3		388	14 110	271	586	9 189	28 917	14 095	42 586
339999	All other miscellaneous mfg	1	10	4	e	D	D	D	D	D	D	D	D
	MUNCIE, IN MSA												
31-33	Manufacturing	—	176	77		9 972	402 577	7 525	15 244	264 102	882 850	879 486	1 764 475
322	Paper mfg	—	6	5		450	14 658	377	786	11 692	46 911	57 401	103 198
3222	Converted paper product mfg	—	5	4	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	20	8		530	13 602	416	766	8 558	34 334	14 476	48 303
3231	Printing & related support activities	—	20	8		530	13 602	416	766	8 558	34 334	14 476	48 303
32311	Printing	—	19	8	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	10	5		389	10 550	330	657	7 143	28 051	10 258	37 726
326	Plastics & rubber products mfg	—	7	4		255	6 594	190	358	3 999	20 869	41 585	62 183
3261	Plastics product mfg	—	6	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	8	7		587	19 023	461	1 109	13 367	77 310	58 486	137 025
3312	Steel product mfg from purchased steel	—	2	2	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	2	2	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUNCIE, IN MSA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	57	25	1 909	53 544	1 504	2 789	35 056	149 918	86 947	233 696	9 452
3321	Forging & stamping	-	7	5	477	12 568	352	575	8 728	50 370	28 574	76 487	3 183
33211	Forging & stamping	-	7	5	477	12 568	352	575	8 728	50 370	28 574	76 487	3 183
332116	Metal stamping	1	3	2	e	D	D	D	D	D	D	D	814
3326	Spring & wire product mfg	-	10	5	370	7 949	324	635	6 070	34 587	26 911	60 983	965
33261	Spring & wire product mfg	-	10	5	370	7 949	324	635	6 070	34 587	26 911	60 983	965
332618	Other fabricated wire product mfg	-	8	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	17	5	e	D	D	D	D	D	D	D	D
33271	Machine shops	-	15	4	345	10 514	279	408	6 105	20 777	7 612	28 642	2 157
332710	Machine shops	-	15	4	345	10 514	279	408	6 105	20 777	7 612	28 642	2 157
3328	Coating, engraving, heat treating, & allied activities	3	13	7	330	9 438	267	524	5 757	18 125	5 885	23 899	1 244
33281	Coating, engraving, heat treating, & allied activities	3	13	7	330	9 438	267	524	5 757	18 125	5 885	23 899	1 244
333	Machinery mfg	-	32	11	1 008	44 491	656	1 452	24 780	99 364	40 570	142 487	10 893
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	1	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	1	e	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	2	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	20	6	447	23 066	352	825	15 347	40 640	10 867	54 171	7 968
33351	Metalworking machinery mfg	1	20	6	447	23 066	352	825	15 347	40 640	10 867	54 171	7 968
333511	Industrial mold mfg	-	6	3	306	17 895	241	599	11 533	29 908	7 863	40 390	7 260
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	7	3 961	196 584	2 947	6 222	126 212	333 357	474 764	812 511	33 159
3363	Motor vehicle parts mfg	-	10	7	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	26 713
336350	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	26 713
33637	Motor vehicle metal stamping	-	5	3	481	17 397	407	939	11 517	41 899	29 619	72 852	D
336370	Motor vehicle metal stamping	-	5	3	481	17 397	407	939	11 517	41 899	29 619	72 852	D
SOUTH BEND, IN MSA													
31-33	Manufacturing	-	457	179	20 435	698 851	14 401	28 757	410 912	1 998 879	2 139 281	4 149 716	146 884
311	Food mfg	-	22	9	654	16 144	450	902	10 641	50 654	100 310	150 147	2 368
3116	Meat product mfg	-	4	3	258	5 956	190	454	3 914	15 876	59 450	74 457	679
31161	Animal slaughtering & processing	-	4	3	258	5 956	190	454	3 914	15 876	59 450	74 457	679
316	Leather & allied product mfg	2	4	3	256	5 148	160	272	2 085	10 623	13 200	23 889	D
3169	Other leather & allied product mfg	2	4	3	256	5 148	160	272	2 085	10 623	13 200	23 889	D
31699	Other leather & allied product mfg	2	4	3	256	5 148	160	272	2 085	10 623	13 200	23 889	D
321	Wood product mfg	-	9	3	338	7 499	258	467	5 410	27 910	83 543	109 518	857
3219	Other wood product mfg	-	8	2	e	D	D	D	D	D	D	D	D
32191	Millwork	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH BEND, IN MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	3	9	6	527	16 313	401	745	10 501	39 565	71 163	110 967	2 064
3222	Converted paper product mfg	3	9	6	527	16 313	401	745	10 501	39 565	71 163	110 967	2 064
32221	Paperboard container mfg	3	6	6	507	15 738	384	711	10 068	38 560	69 817	108 468	D
322211	Corrugated & solid fiber box mfg	3	4	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	39	10	633	20 634	439	872	12 719	39 599	22 795	61 626	2 172
3231	Printing & related support activities	1	39	10	633	20 634	439	872	12 719	39 599	22 795	61 626	2 172
32311	Printing	1	36	10	611	20 070	425	842	12 294	38 740	22 316	60 280	2 114
323110	Commercial lithographic printing ..	1	16	6	366	15 063	269	553	9 210	28 929	15 383	43 514	1 549
325	Chemical mfg	—	14	6	400	17 120	212	496	8 265	50 589	151 701	203 508	13 127
326	Plastics & rubber products mfg	—	45	27	3 138	82 437	2 557	5 280	54 442	202 304	199 423	401 822	21 136
3261	Plastics product mfg	—	37	25	2 803	74 515	2 258	4 667	47 943	182 561	187 129	370 182	19 522
32619	Other plastics product mfg	—	32	23	2 745	72 853	2 211	4 590	47 128	179 417	183 242	362 801	19 245
326199	All other plastics product mfg	—	31	22	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	8	2	335	7 922	299	613	6 499	19 743	12 294	31 640	1 614
32621	Tire mfg	—	4	1	e	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	12	5	306	13 078	215	465	8 064	44 960	30 729	76 351	D
331	Primary metal mfg	—	11	8	1 731	53 649	1 445	2 988	39 747	118 795	162 417	276 637	4 722
3312	Steel product mfg from purchased steel	—	2	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
33131	Alumina & aluminum production & processing	—	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
331316	Aluminum extruded product mfg	—	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
3315	Foundries	—	5	3	887	28 886	737	1 503	22 076	60 382	42 535	102 426	2 464
33151	Ferrous metal foundries ..	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	114	50	4 219	153 437	3 185	6 607	102 867	545 751	678 862	1 216 788	28 541
3323	Architectural & structural metals mfg	2	22	11	508	14 756	370	728	9 140	28 382	22 631	50 786	1 258
33232	Ornamental & architectural metal products mfg	3	14	6	320	9 422	230	465	5 644	17 714	15 022	32 537	891
3325	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	51	14	915	29 375	725	1 408	20 616	51 422	19 587	70 666	4 321
33271	Machine shops	1	40	10	619	19 959	468	903	13 455	34 002	13 532	47 165	3 453
332710	Machine shops	1	40	10	619	19 959	468	903	13 455	34 002	13 532	47 165	3 453
33272	Turned product & screw, nut, & bolt mfg	1	11	4	296	9 416	257	505	7 161	17 420	6 055	23 501	868
332721	Precision turned product mfg	—	10	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	—	12	9	1 264	64 544	857	1 930	42 218	352 840	551 505	897 985	16 120
33281	Coating, engraving, heat treating, & allied activities	—	12	9	1 264	64 544	857	1 930	42 218	352 840	551 505	897 985	16 120
332811	Metal heat treating	—	5	3	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH BEND, IN MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	2	14	6	665	20 213	531	1 111	14 246	36 802	30 764	67 721	1 854
33299	All other fabricated metal product mfg.....	—	10	3	428	12 626	370	779	9 693	21 792	13 531	35 161	866
332996	Fabricated pipe & pipe fitting mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	59	16	1 378	55 942	862	1 804	30 429	95 608	59 396	159 025	5 834
3335	Metalworking machinery mfg.....	1	39	9	802	35 789	559	1 207	22 294	60 284	27 989	95 190	3 619
33351	Metalworking machinery mfg.....	1	39	9	802	35 789	559	1 207	22 294	60 284	27 989	95 190	3 619
333514	Special die & tool, die set, jig, & fixture mfg.	—	21	5	489	22 242	332	734	12 725	38 421	18 208	62 064	2 635
334	Computer & electronic product mfg.....	5	12	7	916	19 806	541	1 130	8 079	43 692	25 964	70 882	D
3344	Semiconductor & other electronic component mfg.....	9	4	3	655	9 875	449	955	4 965	18 070	15 698	34 858	D
33441	Semiconductor & other electronic component mfg.....	9	4	3	655	9 875	449	955	4 965	18 070	15 698	34 858	D
334419	Other electronic component mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	13	6	855	29 400	623	1 097	17 642	83 768	74 055	154 389	4 163
3359	Other electrical equipment & component mfg.....	—	9	4	712	25 528	530	917	15 837	72 973	60 515	129 935	3 568
33593	Wiring device mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	—	7	3	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg.....	—	7	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	27	15	3 943	168 530	2 348	4 311	82 757	540 796	406 921	970 330	34 606
3361	Motor vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	1	14	7	1 203	31 442	897	1 852	20 612	84 233	57 493	140 272	D
33631	Motor vehicle gasoline engine & engine parts mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	5	7	4	430	7 924	360	637	5 442	13 666	10 478	24 605	578
336322	Other motor vehicle electrical & electronic equipment mfg.....	5	7	4	430	7 924	360	637	5 442	13 666	10 478	24 605	578
3364	Aerospace product & parts mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	—	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	—	4	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	8	37	4	806	32 611	424	815	12 457	86 933	37 191	124 734	8 063
3391	Medical equipment & supplies mfg.....	9	19	2	595	25 968	293	574	9 572	71 860	30 682	102 803	D
33911	Medical equipment & supplies mfg.....	9	19	2	595	25 968	293	574	9 572	71 860	30 682	102 803	D
339112	Surgical & medical instrument mfg.....	9	3	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TERRE HAUTE, IN MSA												
31-33	Manufacturing	-	181	72	10 684	377 272	8 126	16 066	254 024	1 479 721	1 437 640	2 922 413	144 254
322	Paper mfg	-	7	6	778	29 948	577	1 314	21 163	87 300	137 650	225 789	6 767
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	21	9	569	14 535	384	772	9 060	22 513	35 070	56 758	3 735
3231	Printing & related support activities	1	21	9	569	14 535	384	772	9 060	22 513	35 070	56 758	3 735
32311	Printing	2	19	7	e	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	3	6	4	282	6 843	193	409	4 480	6 836	21 385	27 504	D
325	Chemical mfg	-	16	9	2 099	103 520	1 571	3 244	76 123	706 870	511 593	1 229 768	34 894
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	3	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	7	1 826	63 663	1 449	2 944	47 213	213 918	183 365	403 584	60 360
3261	Plastics product mfg	-	7	7	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	4	4	1 522	55 973	1 215	2 573	41 309	198 755	168 733	373 612	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	484	19 170	382	789	12 451	67 053	185 897	251 831	D
332	Fabricated metal product mfg	1	30	9	1 074	26 652	670	1 249	13 989	57 690	74 735	128 814	4 871
3329	Other fabricated metal product mfg	-	3	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	20	8	487	13 110	356	683	7 919	25 716	13 520	37 665	1 754
334	Computer & electronic product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	-	1	1	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	4	g	D	D	D	D	D	D	D	6 211
3362	Motor vehicle body & trailer mfg	-	3	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	1	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAMS COUNTY, IN													
31-33	Manufacturing	-	67	37	6 536	189 603	5 323	11 455	133 744	485 380	950 642	1 428 942	31 724
321	Wood product mfg	-	8	3	565	15 363	473	923	10 353	28 134	37 078	66 079	763
3219	Other wood product mfg . . .	-	7	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	1 081	27 931	906	1 723	20 229	59 332	69 671	129 183	2 342
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	6	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	4	4	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	4	4	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	2	2	g	D	D	D	D	D	D	D	D
ALLEN COUNTY, IN													
31-33	Manufacturing	-	576	223	36 585	1 362 019	26 869	54 967	891 281	3 762 082	5 410 554	9 182 170	231 086
311	Food mfg	1	24	9	1 495	46 957	863	1 830	20 649	124 307	190 974	314 301	16 478
3118	Bakeries & tortilla mfg	-	8	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	7	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	13	8	858	29 772	639	1 367	21 561	110 898	160 258	272 283	3 704
3222	Converted paper product mfg	-	13	8	858	29 772	639	1 367	21 561	110 898	160 258	272 283	3 704
32221	Paperboard container mfg	2	9	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	59	15	942	28 369	696	1 189	17 644	57 148	38 105	96 947	3 832
3231	Printing & related support activities	3	59	15	942	28 369	696	1 189	17 644	57 148	38 105	96 947	3 832
32311	Printing	3	48	10	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	33	25	4 862	150 894	3 951	7 549	107 797	306 422	305 675	630 626	38 448
3261	Plastics product mfg	4	24	20	2 927	83 107	2 278	4 709	53 688	207 121	181 504	391 967	26 919
32619	Other plastics product mfg	3	17	14	1 902	52 479	1 506	3 181	36 437	129 300	105 239	234 865	14 755
326199	All other plastics product mfg	3	17	14	1 902	52 479	1 506	3 181	36 437	129 300	105 239	234 865	14 755
3262	Rubber product mfg	-	9	5	1 935	67 787	1 673	2 840	54 109	99 301	124 171	238 659	11 529
32621	Tire mfg	-	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	6	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	20	13	2 520	107 987	2 019	4 387	82 017	231 975	403 163	635 719	24 015
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	8	6	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	7	5	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	6	4	f	D	D	D	D	D	D	D	7 524
3315	Foundries	-	6	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	5	4	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	3	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLEN COUNTY, IN— Con. Manufacturing— Con.												
332	Fabricated metal product mfg	-	111	32	2 661	79 979	2 066	4 095	50 733	169 169	113 553	280 050	13 612
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	49	8	678	18 758	552	1 010	12 310	33 336	24 026	57 124	3 560
3328	Coating, engraving, heat treating, & allied activities	-	22	8	554	14 653	425	803	9 337	36 832	10 324	46 517	4 443
33281	Coating, engraving, heat treating, & allied activities	-	22	8	554	14 653	425	803	9 337	36 832	10 324	46 517	4 443
333	Machinery mfg	-	96	46	5 223	170 572	3 665	6 779	98 056	355 603	284 472	637 606	31 917
3331	Agriculture, construction, & mining machinery mfg	1	8	6	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	48	21	1 559	56 861	1 133	2 432	40 718	102 472	55 102	155 412	9 097
33351	Metalworking machinery mfg	-	48	21	1 559	56 861	1 133	2 432	40 718	102 472	55 102	155 412	9 097
333514	Special die & tool, die set, jig, & fixture mfg	-	32	10	936	31 370	675	1 453	22 868	62 832	30 410	93 287	6 955
3339	Other general-purpose machinery mfg	-	18	11	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	4	3	1 244	40 495	817	949	13 769	61 051	88 469	151 308	D
333913	Measuring & dispensing pump mfg	-	3	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	20	7	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	12	9	g	D	D	D	D	D	D	D	1 878
3353	Electrical equipment mfg ..	-	7	6	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	7	6	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	37	21	8 153	387 010	6 662	14 926	308 263	1 478 068	3 187 711	4 664 095	D
3361	Motor vehicle mfg	-	3	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	26	12	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	8	5	g	D	D	D	D	D	D	D	875
336350	Motor vehicle transmission & power train parts mfg	-	8	5	g	D	D	D	D	D	D	D	875
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLEN COUNTY, IN— Con. Manufacturing— Con.												
337	Furniture & related product mfg	-	26	11	f	D	D	D	D	D	D	D	1 646
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	6	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	46	8	1 262	30 817	873	1 443	16 881	170 973	110 273	283 279	D
3399	Other miscellaneous mfg	-	30	7	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg	-	2	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
	BARTHOLOMEW COUNTY, IN												
31-33	Manufacturing	-	145	68	13 311	412 096	10 184	21 144	282 536	1 321 947	1 767 586	3 096 712	123 301
311	Food mfg	-	4	4	1 281	36 177	454	1 021	11 514	107 744	75 736	183 598	3 145
3118	Bakeries & tortilla mfg	-	1	1	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	7	757	17 965	654	1 240	13 443	39 210	35 283	74 861	4 624
3261	Plastics product mfg	-	11	7	757	17 965	654	1 240	13 443	39 210	35 283	74 861	4 624
32619	Other plastics product mfg	-	9	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	752	27 296	646	1 483	23 085	56 343	43 911	99 495	3 626
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	33	16	1 059	33 097	817	1 761	21 678	74 603	47 529	122 376	20 010
333	Machinery mfg	-	31	11	3 596	145 971	2 855	6 169	109 949	615 314	1 060 747	1 688 447	32 864
3336	Engine, turbine, & power transmission equipment mfg	-	8	6	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	8	6	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	4	680	18 689	488	1 005	10 430	37 358	66 134	103 811	D
336	Transportation equipment mfg	1	13	10	3 022	81 486	2 538	5 041	59 603	221 532	264 411	484 048	40 219
3363	Motor vehicle parts mfg	1	12	10	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	4	4	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	4	4	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	5	5	1 506	37 889	1 333	2 615	30 533	116 631	128 836	244 124	D
336399	All other motor vehicle parts mfg	-	5	5	1 506	37 889	1 333	2 615	30 533	116 631	128 836	244 124	D
337	Furniture & related product mfg	-	10	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	10	2	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	5	1	g	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	2	1	g	D	D	D	D	D	D	D	D
	BENTON COUNTY, IN												
31-33	Manufacturing	1	16	7	562	12 556	404	783	8 222	29 798	29 360	58 825	1 100
	BLACKFORD COUNTY, IN												
31-33	Manufacturing	1	28	19	2 081	58 575	1 711	3 580	40 486	143 155	178 997	299 191	11 256
332	Fabricated metal product mfg	-	3	3	670	18 640	588	1 326	14 736	34 053	58 671	94 108	2 853

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOONE COUNTY, IN													
31-33	Manufacturing	1	73	21	1 769	48 494	1 365	2 552	31 067	108 055	83 046	190 887	4 641
CARROLL COUNTY, IN													
31-33	Manufacturing	—	33	9	2 191	50 265	1 935	3 828	39 096	120 422	379 313	500 808	2 943
311	Food mfg	—	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	1	1	g	D	D	D	D	D	D	D	D
CASS COUNTY, IN													
31-33	Manufacturing	—	60	35	6 129	157 914	5 258	11 350	121 893	362 088	635 668	994 332	29 250
311	Food mfg	—	4	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	5	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	2	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	9	9	2 613	62 620	2 307	4 766	49 433	145 346	101 804	248 622	13 153
3363	Motor vehicle parts mfg	1	9	9	2 613	62 620	2 307	4 766	49 433	145 346	101 804	248 622	13 153
33632	Motor vehicle electrical & electronic equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	3	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	3	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	2	4	4	1 216	22 946	1 115	2 223	18 217	65 975	45 819	111 537	5 573
336399	All other motor vehicle parts mfg	2	4	4	1 216	22 946	1 115	2 223	18 217	65 975	45 819	111 537	5 573
CLARK COUNTY, IN													
31-33	Manufacturing	2	163	59	i	D	D	D	D	D	D	D	53 588
321	Wood product mfg	2	18	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	15	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	15	4	f	D	D	D	D	D	D	D	D
32311	Printing	—	14	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	8	11	5	831	38 793	608	1 311	28 550	141 605	105 920	239 101	D
3256	Soap, cleaning compound, & toilet preparation mfg	9	3	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	3	2	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	28	7	766	21 605	609	1 172	14 384	43 334	49 300	92 913	12 320
333	Machinery mfg	—	17	7	802	26 750	548	1 215	14 324	56 472	58 231	113 601	2 032
336	Transportation equipment mfg	1	8	4	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	4	3	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	4	3	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	3	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARK COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	15	8	g	D	D	D	D	D	D	D	2 324
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	5	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	9	4	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	9	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D
CLAY COUNTY, IN													
31-33	Manufacturing	-	34	13	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
CLINTON COUNTY, IN													
31-33	Manufacturing	-	49	25	4 959	148 125	4 263	8 402	103 644	672 656	864 198	1 565 143	42 311
311	Food mfg	-	11	6	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg...	-	1	1	f	D	D	D	D	D	D	D	D
DAVISS COUNTY, IN													
31-33	Manufacturing	-	51	16	1 947	37 371	1 560	3 104	26 807	118 654	231 185	350 020	7 427
311	Food mfg	-	10	4	g	D	D	D	D	D	D	D	656
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
DEARBORN COUNTY, IN													
31-33	Manufacturing	-	39	14	g	D	D	D	D	D	D	D	15 556
312	Beverage & tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31214	Distilleries	-	2	2	f	D	D	D	D	D	D	D	D
312140	Distilleries	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
339995	Burial casket mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DECATUR COUNTY, IN													
31-33	Manufacturing	-	52	18	4 926	155 606	4 141	8 885	123 580	448 738	408 996	847 946	27 131
332	Fabricated metal product mfg	-	12	4	2 700	84 280	2 380	5 418	71 795	333 109	226 122	548 995	D
3325	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	6	753	26 587	583	1 281	17 227	39 689	47 377	86 161	2 240
DE KALB COUNTY, IN													
31-33	Manufacturing	1	119	71	11 000	364 305	8 336	16 720	247 761	982 879	1 065 818	2 040 228	67 797
321	Wood product mfg	-	8	4	653	14 399	572	783	10 631	32 396	46 352	78 774	D
3219	Other wood product mfg ...	-	8	4	653	14 399	572	783	10 631	32 396	46 352	78 774	D
32199	All other wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	14	10	2 070	66 814	1 452	2 701	36 822	146 632	140 050	280 685	12 622
3261	Plastics product mfg	6	10	8	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	8	6	760	21 716	604	1 139	14 834	60 254	32 831	93 037	4 437
326199	All other plastics product mfg	3	8	6	760	21 716	604	1 139	14 834	60 254	32 831	93 037	4 437
3262	Rubber product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	4	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	3	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	9	2 056	68 691	1 687	3 617	54 238	208 210	242 011	452 088	9 510
3315	Foundries	-	7	7	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	27	16	2 015	68 227	1 552	3 083	46 784	221 036	289 543	511 176	10 457
3323	Architectural & structural metals mfg	-	8	7	968	35 302	684	1 381	22 045	146 307	211 543	358 365	2 318
33231	Plate work & fabricated structural product mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	8	630	24 114	388	856	12 490	46 730	33 788	79 160	2 636
335	Electrical equipment, appliance, & component mfg	1	6	6	546	11 819	402	848	7 055	26 251	29 309	55 123	1 084
336	Transportation equipment mfg	-	8	4	1 024	45 022	778	1 694	33 270	134 380	114 910	248 092	20 308
3363	Motor vehicle parts mfg ...	-	7	4	g	D	D	D	D	D	D	D	20 308
33635	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DELAWARE COUNTY, IN													
31-33	Manufacturing	-	176	77	9 972	402 577	7 525	15 244	264 102	882 850	879 486	1 764 475	68 058
323	Printing & related support activities.....	-	20	8	530	13 602	416	766	8 558	34 334	14 476	48 303	2 687
3231	Printing & related support activities.....	-	20	8	530	13 602	416	766	8 558	34 334	14 476	48 303	2 687
32311	Printing	-	19	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	587	19 023	461	1 109	13 367	77 310	58 486	137 025	3 800
332	Fabricated metal product mfg	-	57	25	1 909	53 544	1 504	2 789	35 056	149 918	86 947	233 696	9 452
333	Machinery mfg	-	32	11	1 008	44 491	656	1 452	24 780	99 364	40 570	142 487	10 893
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	7	3 961	196 584	2 947	6 222	126 212	333 357	474 764	812 511	33 159
3363	Motor vehicle parts mfg ...	-	10	7	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	26 713
336350	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	26 713
DUBOIS COUNTY, IN													
31-33	Manufacturing	-	114	66	12 450	327 936	10 442	22 874	251 285	815 239	827 320	1 637 021	53 349
311	Food mfg	-	7	3	780	15 636	655	1 376	12 209	18 139	82 734	96 718	1 248
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	27	15	1 685	43 029	1 508	3 285	36 972	75 434	148 767	223 662	8 904
3212	Veneer, plywood, & engineered wood product mfg	-	5	5	720	19 348	613	1 330	16 115	31 557	72 029	103 047	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	5	720	19 348	613	1 330	16 115	31 557	72 029	103 047	D
321211	Hardwood veneer & plywood mfg	-	4	4	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	1	17	10	918	22 535	852	1 879	19 944	41 939	73 493	115 356	D
32191	Millwork	1	13	10	891	22 114	830	1 844	19 643	40 985	72 506	113 417	D
321912	Cut stock, resawing lumber, & planing....	1	10	9	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	6	6	982	24 702	794	1 642	19 152	47 092	25 311	72 442	D
3262	Rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DUBOIS COUNTY, IN—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	39	29	6 201	164 609	5 365	11 476	129 579	488 145	346 186	832 589	19 661
3371	Household & institutional furniture & kitchen cabinet mfg	-	25	19	3 456	94 044	3 045	6 607	74 168	310 223	202 958	510 798	8 810
33711	Wood kitchen cabinet & counter top mfg	-	9	5	f	D	D	D	D	D	D	D	1 324
337110	Wood kitchen cabinet & counter top mfg ...	-	9	5	f	D	D	D	D	D	D	D	1 324
33712	Household & institutional furniture mfg	-	16	14	h	D	D	D	D	D	D	D	7 486
337121	Upholstered household furniture mfg	-	4	3	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	1	9	8	1 055	29 541	886	2 017	22 490	62 116	59 848	119 385	2 003
3372	Office furniture (including fixtures) mfg	-	14	10	2 745	70 565	2 320	4 869	55 411	177 922	143 228	321 791	10 851
33721	Office furniture (including fixtures) mfg	-	14	10	2 745	70 565	2 320	4 869	55 411	177 922	143 228	321 791	10 851
337211	Wood office furniture mfg	-	11	9	h	D	D	D	D	D	D	D	D
	ELKHART COUNTY, IN												
31-33	Manufacturing	1	894	464	56 087	1 610 765	44 247	86 698	1 093 838	3 861 781	5 115 386	8 999 868	214 951
311	Food mfg	-	19	7	821	20 698	613	1 223	14 420	45 611	174 923	226 446	2 341
314	Textile product mills	1	26	7	597	11 679	509	970	8 545	20 698	20 445	41 846	D
3141	Textile furnishings mills....	-	17	6	509	10 129	443	860	7 506	17 535	18 051	36 200	609
321	Wood product mfg	1	91	48	6 293	183 300	5 133	10 117	134 257	372 464	649 231	1 023 225	13 819
3219	Other wood product mfg ...	1	81	43	5 969	175 891	4 857	9 583	128 872	353 049	612 142	967 813	12 390
32191	Millwork	-	30	17	1 324	34 664	1 124	2 169	26 205	61 725	116 122	179 277	2 289
321911	Wood window & door mfg	1	11	7	647	15 657	567	1 019	11 670	30 888	29 425	59 834	765
32199	All other wood product mfg	1	45	24	4 569	139 824	3 669	7 285	101 628	288 625	493 441	783 267	10 015
321991	Manufactured home (mobile home) mfg ..	1	23	20	4 075	125 622	3 290	6 575	93 348	261 331	455 566	717 796	8 132
325	Chemical mfg	-	21	10	g	D	D	D	D	D	D	D	16 290
326	Plastics & rubber products mfg	1	101	68	5 833	142 890	4 787	8 859	99 737	355 956	395 989	750 774	30 590
3261	Plastics product mfg	1	84	57	4 077	101 317	3 307	6 152	69 670	286 476	327 598	614 495	24 975
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	12	9	593	18 401	454	946	12 597	77 165	76 542	152 636	9 949
32615	Urethane & other foam product (except polystyrene) mfg	-	11	11	885	22 070	729	1 239	15 570	74 789	116 954	191 712	2 901
326150	Urethane & other foam product (except polystyrene) mfg	-	11	11	885	22 070	729	1 239	15 570	74 789	116 954	191 712	2 901
32619	Other plastics product mfg	2	48	31	2 094	47 177	1 736	3 253	33 185	102 811	82 692	187 122	9 426
326199	All other plastics product mfg	2	47	31	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	17	11	1 756	41 573	1 480	2 707	30 067	69 480	68 391	136 279	5 615
32629	Other rubber product mfg	-	15	11	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	9	8	1 478	35 563	1 230	2 248	25 568	54 826	39 692	93 051	D
327	Nonmetallic mineral product mfg	-	34	16	1 679	46 961	1 285	2 756	28 822	108 571	200 254	309 136	7 238
3272	Glass & glass product mfg .	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
32721	Glass & glass product mfg	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
327215	Glass product mfg made of purchased glass.....	-	10	8	1 067	25 974	828	1 766	15 309	52 693	101 831	155 203	3 269
331	Primary metal mfg	-	14	11	1 493	48 229	1 177	2 530	34 496	171 969	179 639	350 282	6 147
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	2 040
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D

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31-33	ELKHART COUNTY, IN—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	156	69	6 109	169 723	4 934	9 861	118 916	390 551	418 544	801 720	28 441
3321	Forging & stamping	1	22	10	556	14 011	460	1 015	9 679	31 959	37 554	69 439	3 155
33211	Forging & stamping	1	22	10	556	14 011	460	1 015	9 679	31 959	37 554	69 439	3 155
3323	Architectural & structural metals mfg	—	48	27	2 778	68 808	2 284	4 519	48 439	168 343	240 375	407 683	6 607
33231	Plate work & fabricated structural product mfg ..	—	17	9	641	17 272	528	1 072	12 005	53 977	104 169	156 571	2 280
33232	Ornamental & architectural metal products mfg	—	31	18	2 137	51 536	1 756	3 447	36 434	114 366	136 206	251 112	4 327
332321	Metal window & door mfg	—	10	7	970	19 866	861	1 551	16 061	45 715	57 729	104 270	1 383
332322	Sheet metal work mfg ..	—	16	9	880	24 492	700	1 502	16 403	55 608	64 028	119 251	1 439
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	39	7	574	17 665	445	837	11 437	29 626	17 638	47 688	1 191
3329	Other fabricated metal product mfg	—	16	9	1 073	37 090	822	1 727	26 272	91 221	59 053	142 938	14 307
33291	Metal valve mfg	—	3	3	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	56	19	1 380	44 482	989	1 996	27 136	89 730	68 013	157 576	7 780
3335	Metalworking machinery mfg	1	36	10	539	21 307	388	764	14 020	35 033	14 837	49 540	2 355
33351	Metalworking machinery mfg	1	36	10	539	21 307	388	764	14 020	35 033	14 837	49 540	2 355
334	Computer & electronic product mfg	—	16	9	2 888	71 851	1 857	3 346	38 678	126 455	86 047	212 719	10 822
3342	Communications equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	7	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	7	3	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	4	685	19 504	510	915	12 006	56 502	24 511	81 205	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	4	685	19 504	510	915	12 006	56 502	24 511	81 205	D
334512	Automatic environmental control mfg	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	14	8	820	21 202	565	1 315	10 987	38 225	43 142	81 421	5 455
3353	Electrical equipment mfg ..	2	8	4	563	15 613	379	940	7 803	22 187	18 884	41 650	D
33531	Electrical equipment mfg	2	8	4	563	15 613	379	940	7 803	22 187	18 884	41 650	D
336	Transportation equipment mfg	1	193	130	20 774	605 921	16 569	32 550	430 434	1 399 956	2 469 866	3 889 985	68 098
3362	Motor vehicle body & trailer mfg	—	111	81	14 649	436 270	11 684	23 256	313 761	983 379	1 957 053	2 955 514	48 089
33621	Motor vehicle body & trailer mfg	—	111	81	14 649	436 270	11 684	23 256	313 761	983 379	1 957 053	2 955 514	48 089
336211	Motor vehicle body mfg	—	22	15	h	D	D	D	D	D	D	D	6 128
336213	Motor home mfg	—	21	14	h	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	66	52	7 034	200 279	5 680	11 962	141 609	421 922	808 144	1 239 700	19 666
3363	Motor vehicle parts mfg ...	2	60	36	4 370	113 146	3 482	6 406	78 322	298 358	340 890	644 396	14 689
33636	Motor vehicle seating & interior trim mfg	3	17	12	1 382	32 700	1 155	2 276	24 313	54 965	76 203	131 996	2 343
336360	Motor vehicle seating & interior trim mfg ...	3	17	12	1 382	32 700	1 155	2 276	24 313	54 965	76 203	131 996	2 343
33639	Other motor vehicle parts mfg	1	23	12	2 127	58 632	1 651	2 989	39 822	173 977	137 785	316 051	8 584
336399	All other motor vehicle parts mfg	1	20	11	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ELKHART COUNTY, IN												
	—Con.												
31-33	Manufacturing—												
	Con.												
336	Transportation equipment mfg—Con.												
3366	Ship & boat building	—	6	3	729	23 909	620	1 388	16 934	44 155	70 306	115 444	1 080
33661	Ship & boat building	—	6	3	729	23 909	620	1 388	16 934	44 155	70 306	115 444	1 080
336612	Boat building	—	5	3	f	D	D	D	D	D	D	D	1 080
3369	Other transportation equipment mfg	2	10	7	821	26 902	619	1 224	17 153	58 823	76 471	134 634	3 512
33699	Other transportation equipment mfg	2	10	7	821	26 902	619	1 224	17 153	58 823	76 471	134 634	3 512
336999	All other transportation equipment mfg	2	9	7	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	72	38	3 736	98 195	3 103	6 286	71 758	205 466	167 399	368 111	8 206
3371	Household & institutional furniture & kitchen cabinet mfg	1	48	21	1 889	43 963	1 563	2 984	32 286	100 755	84 600	184 104	3 898
33711	Wood kitchen cabinet & counter top mfg	—	24	13	1 367	33 455	1 142	2 225	24 681	80 855	62 065	142 580	3 018
337110	Wood kitchen cabinet & counter top mfg ...	—	24	13	1 367	33 455	1 142	2 225	24 681	80 855	62 065	142 580	3 018
33712	Household & institutional furniture mfg	1	24	8	522	10 508	421	759	7 605	19 900	22 535	41 524	880
3372	Office furniture (including fixtures) mfg	—	16	11	1 473	46 446	1 239	2 510	34 096	86 055	62 357	144 092	4 045
33721	Office furniture (including fixtures) mfg	—	16	11	1 473	46 446	1 239	2 510	34 096	86 055	62 357	144 092	4 045
337215	Showcase, partition, shelving, & locker mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	38	13	1 683	53 196	1 443	2 760	41 552	130 559	50 782	181 257	4 574
3399	Other miscellaneous mfg ...	—	29	13	1 621	51 622	1 387	2 657	40 373	125 781	48 080	173 746	4 495
33999	All other miscellaneous mfg	—	20	11	1 561	50 193	1 338	2 577	39 597	123 265	46 143	169 321	4 251
339992	Musical instrument mfg	—	10	6	1 060	34 234	954	1 865	29 768	85 512	27 682	112 108	2 107
	FAYETTE COUNTY, IN												
31-33	Manufacturing	—	36	17	4 809	217 039	3 860	8 482	164 344	688 001	566 634	1 254 273	D
333	Machinery mfg	—	12	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	3	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	4	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	—	1	1	h	D	D	D	D	D	D	D	D
	FLOYD COUNTY, IN												
31-33	Manufacturing	1	135	60	7 499	204 050	5 970	12 499	140 841	668 241	574 649	1 243 176	55 735
311	Food mfg	—	7	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	4	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	1	1	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	17	9	640	14 155	541	1 053	9 278	27 289	28 532	55 305	D
323	Printing & related support activities	—	13	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	13	4	f	D	D	D	D	D	D	D	D
32311	Printing	—	10	4	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	8	6	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	8	8	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	9	6	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	5	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	26	12	900	23 971	665	1 306	17 096	58 141	30 130	86 990	D
333	Machinery mfg	—	13	5	f	D	D	D	D	D	D	D	D

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FLOYD COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	2	10	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	7	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	3	2	f	D	D	D	D	D	D	D	D
FOUNTAIN COUNTY, IN													
31-33	Manufacturing	1	22	11	2 616	67 793	2 193	4 383	50 565	155 745	123 329	282 830	31 715
331	Primary metal mfg	—	3	2	f	D	D	D	D	D	D	D	D
3315	Foundries	—	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	3	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, IN													
31-33	Manufacturing	—	19	6	812	23 282	566	1 134	13 633	68 317	68 377	134 460	2 376
FULTON COUNTY, IN													
31-33	Manufacturing	2	52	26	3 004	79 133	2 435	5 228	57 887	191 185	233 378	424 420	12 199
332	Fabricated metal product mfg	—	15	7	737	20 312	570	1 226	14 771	52 267	48 911	101 390	5 324
GIBSON COUNTY, IN													
31-33	Manufacturing	—	42	18	2 142	54 321	1 744	3 794	40 955	135 096	198 517	336 079	10 792
335	Electrical equipment, appliance, & component mfg	—	4	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	4	2	f	D	D	D	D	D	D	D	D
GRANT COUNTY, IN													
31-33	Manufacturing	—	80	39	9 375	395 185	7 924	16 988	313 495	736 775	1 054 153	1 784 354	100 323
326	Plastics & rubber products mfg	—	6	5	504	16 846	406	858	11 860	34 629	38 003	72 672	D
327	Nonmetallic mineral product mfg	—	3	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRANT COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	8	7	3 349	185 284	2 943	6 435	157 640	228 443	304 207	535 725	55 770
3363	Motor vehicle parts mfg ...	-	6	5	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
GREENE COUNTY, IN													
31-33	Manufacturing	-	26	8	1 136	18 526	973	1 746	13 862	37 370	133 842	171 688	2 341
HAMILTON COUNTY, IN													
31-33	Manufacturing	1	191	56	5 687	185 833	4 065	7 754	104 204	491 490	339 525	836 301	28 502
326	Plastics & rubber products mfg	-	13	7	972	30 522	776	1 465	19 565	169 046	66 794	236 858	1 975
332	Fabricated metal product mfg	-	30	11	1 033	35 415	741	1 579	21 539	71 220	37 487	109 053	8 606
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	15	4	f	D	D	D	D	D	D	D	6 793
336	Transportation equipment mfg	-	8	5	977	31 996	690	1 196	16 280	73 354	56 027	131 019	D
3363	Motor vehicle parts mfg ...	-	5	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
HANCOCK COUNTY, IN													
31-33	Manufacturing	-	66	16	2 564	88 447	1 901	4 054	54 293	273 495	436 583	712 867	52 662
336	Transportation equipment mfg	-	5	5	1 361	49 237	1 054	2 341	30 969	162 275	298 188	462 881	D
3363	Motor vehicle parts mfg ...	-	4	4	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
HARRISON COUNTY, IN													
31-33	Manufacturing	-	38	15	h	D	D	D	D	D	D	D	9 390
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	4	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
HENDRICKS COUNTY, IN													
31-33	Manufacturing	-	80	22	1 537	48 483	1 090	2 175	28 099	108 324	139 577	248 412	13 435

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HENRY COUNTY, IN													
31-33	Manufacturing	-	57	17	3 516	164 766	2 818	6 913	131 291	297 348	397 737	688 671	27 314
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	3	3	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
HOWARD COUNTY, IN													
31-33	Manufacturing	-	80	31	20 018	1 077 938	13 762	30 444	728 047	2 341 426	2 366 213	4 732 158	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	4	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	4	4	j	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	4	4	j	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	4	4	j	D	D	D	D	D	D	D	D
HUNTINGTON COUNTY, IN													
31-33	Manufacturing	-	78	42	7 451	207 753	5 618	11 773	121 922	652 770	593 595	1 245 462	39 734
332	Fabricated metal product mfg	-	18	8	1 068	27 972	783	1 258	15 472	79 145	58 543	135 760	7 169
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	6	1 927	49 974	1 382	2 887	25 497	111 895	121 726	236 514	8 746
3344	Semiconductor & other electronic component mfg	-	4	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6	2 083	54 055	1 859	4 314	40 799	226 907	174 318	398 533	D
3363	Motor vehicle parts mfg . . .	-	6	6	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON COUNTY, IN													
31-33	Manufacturing	-	90	39	5 848	179 375	4 560	9 685	116 294	544 671	643 337	1 182 656	46 307
332	Fabricated metal product mfg	-	8	5	824	21 803	632	1 153	9 848	52 052	54 811	108 489	5 112
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	5	697	31 820	533	1 236	24 431	105 776	98 191	200 600	5 001
336	Transportation equipment mfg	-	6	5	1 968	65 017	1 473	3 437	38 987	197 637	248 131	444 144	D
3363	Motor vehicle parts mfg . . .	-	5	5	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
JASPER COUNTY, IN													
31-33	Manufacturing	-	33	13	1 479	35 170	1 239	2 502	24 675	134 349	144 652	279 375	16 519
332	Fabricated metal product mfg	-	7	4	f	D	D	D	D	D	D	D	D
JAY COUNTY, IN													
31-33	Manufacturing	-	39	23	3 751	86 594	3 250	6 079	68 988	236 411	295 465	539 091	33 205
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	3	1 035	22 618	857	1 446	17 123	26 853	38 716	65 229	2 249
3326	Spring & wire product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, IN													
31-33	Manufacturing	-	51	20	3 655	97 322	2 787	5 594	64 801	257 504	290 430	548 870	30 340
333	Machinery mfg	1	10	4	721	25 170	513	1 094	18 245	80 764	50 592	131 268	5 450
336	Transportation equipment mfg	-	5	4	1 616	42 447	1 232	2 428	27 286	106 942	185 527	293 950	20 713
3363	Motor vehicle parts mfg . . .	-	4	4	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
JENNINGS COUNTY, IN													
31-33	Manufacturing	-	42	22	2 410	55 693	2 002	4 166	41 616	145 379	120 395	263 150	28 924
326	Plastics & rubber products mfg	-	8	5	651	12 663	555	994	9 128	44 409	48 989	93 375	D
3261	Plastics product mfg	-	8	5	651	12 663	555	994	9 128	44 409	48 989	93 375	D
332	Fabricated metal product mfg	2	12	7	535	10 288	419	846	8 046	21 542	9 567	30 662	1 296

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSON COUNTY, IN													
31-33	Manufacturing	1	126	48	6 486	204 570	4 977	10 285	124 485	530 976	768 668	1 305 522	81 383
321	Wood product mfg	-	11	8	1 018	30 495	826	1 760	17 149	73 871	78 109	149 888	5 835
3212	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
321211	Hardwood veneer & plywood mfg	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	8	7	841	24 068	695	1 492	17 710	65 111	103 857	167 122	16 143
3261	Plastics product mfg	3	8	7	841	24 068	695	1 492	17 710	65 111	103 857	167 122	16 143
32619	Other plastics product mfg	1	6	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	6	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	7	914	35 146	663	1 435	19 380	119 711	93 665	212 770	5 510
333	Machinery mfg	-	23	9	685	24 732	487	963	13 138	39 716	37 523	76 436	2 205
334	Computer & electronic product mfg	-	6	4	604	21 199	314	718	8 792	44 666	148 836	204 210	10 695
336	Transportation equipment mfg	1	7	5	1 574	43 603	1 371	2 608	32 812	135 153	209 191	344 675	26 535
3363	Motor vehicle parts mfg ...	1	7	5	1 574	43 603	1 371	2 608	32 812	135 153	209 191	344 675	26 535
33639	Other motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
KNOX COUNTY, IN													
31-33	Manufacturing	-	44	16	1 715	46 229	1 370	2 624	33 283	122 529	166 800	289 096	16 327
327	Nonmetallic mineral product mfg	-	5	2	f	D	D	D	D	D	D	D	D
KOSCIUSKO COUNTY, IN													
31-33	Manufacturing	-	186	85	14 949	514 076	11 122	22 395	311 191	1 716 502	1 259 505	2 969 180	107 363
311	Food mfg	4	11	6	813	20 912	531	1 065	10 724	52 770	91 072	144 412	4 126
3116	Meat product mfg	8	3	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	8	3	3	f	D	D	D	D	D	D	D	D
311615	Poultry processing	8	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	10	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	10	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	10	4	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	15	10	1 008	28 566	894	1 854	20 909	75 877	58 516	134 376	4 375
3261	Plastics product mfg	-	13	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	3	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	41	22	1 330	38 278	1 027	2 137	25 730	92 436	75 294	158 361	6 194
333	Machinery mfg	-	11	5	881	27 027	677	1 405	17 699	103 142	58 018	161 406	9 888
336	Transportation equipment mfg	-	13	9	1 839	68 286	1 480	3 173	52 153	186 811	309 854	491 597	18 539
3363	Motor vehicle parts mfg ...	-	5	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	4	3	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	4	3	f	D	D	D	D	D	D	D	D
336612	Boat building	-	4	3	f	D	D	D	D	D	D	D	D

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KOSCIUSKO COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	20	8	4 224	187 020	2 492	3 854	77 487	847 227	268 013	1 121 931	36 194
3391	Medical equipment & supplies mfg.....	-	15	7	4 141	185 567	2 426	3 745	76 781	844 576	266 508	1 117 729	35 906
33911	Medical equipment & supplies mfg.....	-	15	7	4 141	185 567	2 426	3 745	76 781	844 576	266 508	1 117 729	35 906
339113	Surgical appliance & supplies mfg.....	-	5	5	4 027	181 764	2 340	3 568	74 420	838 188	264 407	1 109 433	D
LAGRANGE COUNTY, IN													
31-33	Manufacturing	-	77	33	4 765	154 337	3 832	8 629	114 545	371 731	516 176	887 445	19 151
321	Wood product mfg.....	-	14	9	1 548	61 896	1 346	3 032	51 479	159 451	225 072	384 444	8 137
3219	Other wood product mfg...	-	12	8	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	5	5	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	13	8	1 350	43 282	1 030	2 401	31 357	112 542	168 954	281 576	3 299
3362	Motor vehicle body & trailer mfg.....	-	8	5	668	22 772	528	1 198	15 863	47 650	89 592	138 230	836
33621	Motor vehicle body & trailer mfg.....	-	8	5	668	22 772	528	1 198	15 863	47 650	89 592	138 230	836
336214	Travel trailer & camper mfg.....	-	5	3	550	19 738	437	1 029	13 844	42 103	82 110	125 149	D
LAKE COUNTY, IN													
31-33	Manufacturing	-	423	165	37 109	1 748 258	28 136	59 721	1 262 167	5 978 438	8 363 761	14 297 855	630 669
311	Food mfg.....	-	25	9	g	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311221	Wet corn milling.....	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	-	10	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	10	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	23	13	1 429	79 571	983	2 386	47 630	430 403	404 566	840 089	D
3251	Basic chemical mfg.....	-	13	10	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	12	6	598	21 434	404	738	9 546	65 332	37 152	100 089	D
3261	Plastics product mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	40	17	1 081	38 736	819	1 736	27 572	135 791	120 626	258 785	D
331	Primary metal mfg.....	-	15	13	j	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	5	5	21 139	1 149 276	16 124	35 153	867 672	3 666 237	3 480 133	7 089 870	D
33111	Iron & steel mills & ferroalloy mfg.....	-	5	5	21 139	1 149 276	16 124	35 153	867 672	3 666 237	3 480 133	7 089 870	D
331111	Iron & steel mills.....	-	5	5	21 139	1 149 276	16 124	35 153	867 672	3 666 237	3 480 133	7 089 870	D
3312	Steel product mfg from purchased steel.....	-	4	4	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel.....	-	3	3	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg.....	-	3	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAKE COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	108	41	2 490	85 997	1 956	3 920	60 070	200 145	241 404	429 661	10 763
3323	Architectural & structural metals mfg	—	28	12	638	22 105	483	969	14 488	54 341	72 333	121 476	2 789
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	50	15	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	47	14	f	D	D	D	D	D	D	D	3 727
332710	Machine shops	2	47	14	f	D	D	D	D	D	D	D	3 727
333	Machinery mfg	—	37	17	1 208	41 595	815	1 778	21 809	89 317	57 150	143 009	D
3339	Other general-purpose machinery mfg	—	19	11	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	7	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
33651	Railroad rolling stock mfg	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
336510	Railroad rolling stock mfg	—	4	4	1 471	50 707	1 063	1 993	28 708	103 978	121 520	228 999	D
339	Miscellaneous mfg	2	35	9	847	20 806	601	1 164	11 260	54 894	22 593	76 631	2 103
3391	Medical equipment & supplies mfg	1	18	5	524	12 947	372	714	6 672	27 871	8 133	35 672	D
33911	Medical equipment & supplies mfg	1	18	5	524	12 947	372	714	6 672	27 871	8 133	35 672	D
LA PORTE COUNTY, IN													
31-33	Manufacturing	—	189	95	10 835	351 238	7 863	16 090	213 317	1 065 607	951 661	2 007 896	78 030
311	Food mfg	—	8	4	670	22 926	492	962	11 607	41 927	39 903	81 773	6 502
3118	Bakeries & tortilla mfg	—	5	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	18	9	691	18 155	592	1 040	13 069	38 447	38 025	76 978	3 152
331	Primary metal mfg	—	7	6	1 565	58 563	1 284	2 692	41 482	146 510	115 565	259 461	20 758
3315	Foundries	—	5	4	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	4	3	1 271	46 400	1 046	2 238	32 851	105 539	62 576	166 055	D
331512	Steel investment foundries	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	56	26	2 088	65 865	1 603	3 147	43 641	200 577	210 555	413 101	13 978
333	Machinery mfg	—	28	15	1 818	71 018	1 161	2 362	36 230	262 003	231 695	482 863	9 455
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	783	33 278	498	891	17 272	107 900	70 363	178 241	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	3	3	783	33 278	498	891	17 272	107 900	70 363	178 241	D
333414	Heating equipment (except warm air furnaces) mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	10	6	610	21 469	427	995	12 592	113 356	126 284	229 434	4 542
336	Transportation equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	3	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAWRENCE COUNTY, IN													
31-33	Manufacturing	-	75	30	5 322	194 970	4 457	9 156	154 053	448 672	610 602	1 062 956	39 251
327	Nonmetallic mineral product mfg	-	15	7	567	20 377	440	941	14 395	58 115	36 010	93 623	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	8	540	15 547	412	834	10 128	36 774	30 160	66 651	3 105
336	Transportation equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MADISON COUNTY, IN													
31-33	Manufacturing	-	133	50	12 144	534 308	10 033	19 282	428 678	925 405	1 336 333	2 256 822	79 619
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	27	11	1 333	49 191	1 043	2 164	35 177	114 634	71 467	179 231	3 417
336	Transportation equipment mfg	-	7	5	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	5	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	4	4	i	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARION COUNTY, IN													
31-33	Manufacturing	-	1 194	437	66 571	2 898 583	46 673	97 138	1 800 650	11 970 555	8 013 181	19 561 285	600 562
311	Food mfg	-	48	26	4 312	148 198	2 797	5 779	85 692	691 976	651 996	1 336 392	60 055
3112	Grain & oilseed milling	-	5	4	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	2	2	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	20	9	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	19	8	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	9	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	10	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	7	10	7	1 252	46 123	390	907	12 277	337 999	391 037	725 850	15 469
3121	Beverage mfg	7	10	7	1 252	46 123	390	907	12 277	337 999	391 037	725 850	15 469
31211	Soft drink & ice mfg	7	7	7	1 239	45 898	381	900	12 147	336 853	390 006	723 720	D
312111	Soft drink mfg	7	4	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg	3	20	8	571	13 344	478	816	8 943	31 147	39 867	72 629	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARION COUNTY, IN—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	24	21	2 558	83 176	1 874	3 853	50 272	237 177	247 816	479 347	15 555
3222	Converted paper product mfg	-	23	20	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	13	11	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	10	8	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	219	58	5 263	155 367	3 852	7 330	95 513	395 270	353 005	747 093	27 735
3231	Printing & related support activities	1	219	58	5 263	155 367	3 852	7 330	95 513	395 270	353 005	747 093	27 735
32311	Printing	-	183	40	4 175	122 629	3 013	5 713	75 655	331 723	334 133	664 531	D
323110	Commercial lithographic printing	-	88	24	2 118	72 793	1 475	3 002	44 144	164 900	184 386	349 010	19 236
323113	Commercial screen printing	-	16	2	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	2	36	18	1 088	32 738	839	1 617	19 858	63 547	18 872	82 562	D
323121	Tradebinding & related work	3	13	8	f	D	D	D	D	D	D	D	D
323122	Prepress services	2	23	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	55	23	5 320	350 966	2 884	5 934	146 919	5 205 437	1 557 034	6 305 947	99 420
3251	Basic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	9	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	9	4	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	7	2	h	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	47	18	1 729	50 763	1 331	2 680	31 803	133 650	122 562	256 401	9 268
3261	Plastics product mfg	1	32	16	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	18	10	956	23 738	749	1 469	14 768	63 987	60 706	124 491	5 672
326199	All other plastics product mfg	-	16	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	46	16	1 318	41 031	909	1 883	23 116	95 754	103 171	200 421	D
3273	Cement & concrete product mfg	1	24	10	756	24 674	525	1 093	14 864	64 755	64 922	129 222	3 430
331	Primary metal mfg	-	16	12	3 408	189 451	2 776	6 412	151 643	359 429	288 196	650 999	51 604
3314	Nonferrous metal (except aluminum) production & processing	-	3	2	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	10	7	2 069	138 859	1 766	4 156	117 215	241 554	112 627	352 334	D
33151	Ferrous metal foundries	-	6	6	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	266	106	9 939	334 023	7 540	15 376	214 203	856 375	546 348	1 443 704	57 640
3323	Architectural & structural metals mfg	1	51	25	2 179	71 179	1 562	3 419	43 974	150 206	157 143	306 838	8 113
33232	Ornamental & architectural metal products mfg	1	34	18	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	23	14	1 525	48 530	1 145	2 540	31 565	91 088	54 218	145 203	5 638
3325	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
33251	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
332510	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	104	32	2 233	75 744	1 747	3 535	50 796	145 024	77 993	223 599	10 418
33271	Machine shops	1	89	25	1 430	48 418	1 084	2 181	31 613	91 579	48 661	139 993	6 020
332710	Machine shops	1	89	25	1 430	48 418	1 084	2 181	31 613	91 579	48 661	139 993	6 020
33272	Turned product & screw, nut, & bolt mfg	-	15	7	803	27 326	663	1 354	19 183	53 445	29 332	83 606	4 398
332721	Precision turned product mfg	-	8	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARION COUNTY, IN—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	-	48	19	1 621	44 873	1 238	2 293	29 821	109 166	52 156	166 991	D
33281	Coating, engraving, heat treating, & allied activities.....	-	48	19	1 621	44 873	1 238	2 293	29 821	109 166	52 156	166 991	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	-	15	5	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	22	9	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	34	15	1 715	61 823	1 289	2 651	39 723	200 654	141 737	378 838	10 323
33299	All other fabricated metal product mfg.....	-	27	10	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	14	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	125	46	8 176	326 820	5 889	11 029	212 451	822 804	1 288 455	2 111 235	49 570
3332	Industrial machinery mfg ..	-	15	7	587	24 436	332	645	10 822	50 235	45 445	94 722	2 930
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	8	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	8	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	1	45	9	928	36 308	549	1 170	17 041	53 656	53 503	105 779	3 433
33351	Metalworking machinery mfg.....	1	45	9	928	36 308	549	1 170	17 041	53 656	53 503	105 779	3 433
3336	Engine, turbine, & power transmission equipment mfg.....	-	11	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	-	11	4	h	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	1	37	18	1 649	64 277	1 023	2 239	32 109	131 097	162 704	296 328	6 425
33391	Pump & compressor mfg.....	-	7	5	534	27 067	227	386	9 089	40 558	63 173	110 200	D
33392	Material handling equipment mfg.....	3	14	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	45	19	1 932	55 774	1 140	2 286	25 865	146 588	97 052	243 492	D
3345	Navigational, measuring, medical, & control instruments mfg.....	1	14	7	702	23 442	329	696	8 632	74 533	35 554	110 758	D
33451	Navigational, measuring, medical, & control instruments mfg.....	1	14	7	702	23 442	329	696	8 632	74 533	35 554	110 758	D
336	Transportation equipment mfg.....	-	45	22	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	28	14	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33637	Motor vehicle metal stamping	-	2	2	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	5	5	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	5	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	4	4	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	44	13	1 455	43 779	1 096	2 187	26 864	96 636	70 360	166 716	2 937
3371	Household & institutional furniture & kitchen cabinet mfg	-	24	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	13	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	16	8	f	D	D	D	D	D	D	D	870
33721	Office furniture (including fixtures) mfg	1	16	8	f	D	D	D	D	D	D	D	870
339	Miscellaneous mfg	1	115	27	2 517	68 422	1 751	3 335	40 115	198 791	134 918	340 221	5 840
3391	Medical equipment & supplies mfg	1	52	12	1 170	35 754	815	1 509	18 976	114 130	60 455	176 454	3 374
33911	Medical equipment & supplies mfg	1	52	12	1 170	35 754	815	1 509	18 976	114 130	60 455	176 454	3 374
3399	Other miscellaneous mfg ..	1	63	15	1 347	32 668	936	1 826	21 139	84 661	74 463	163 767	2 466
MARSHALL COUNTY, IN													
31-33	Manufacturing	1	143	83	8 588	230 153	6 756	14 057	159 772	718 479	803 530	1 516 012	51 100
321	Wood product mfg	2	13	7	645	14 882	493	1 047	9 594	44 188	81 987	126 070	3 115
3219	Other wood product mfg ...	2	10	7	630	14 602	480	1 027	9 381	43 514	80 888	124 292	3 051
322	Paper mfg	2	7	6	584	17 380	396	782	9 814	50 219	62 633	113 094	D
3222	Converted paper product mfg	2	7	6	584	17 380	396	782	9 814	50 219	62 633	113 094	D
326	Plastics & rubber products mfg	-	20	13	2 390	57 420	2 013	4 297	44 900	164 644	154 209	316 369	11 944
3261	Plastics product mfg	-	17	11	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	11	6	1 233	27 375	1 043	2 149	21 625	59 317	67 729	127 596	6 241
326191	Plastics plumbing fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	4	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	3	9	8	697	21 576	558	1 154	14 250	96 546	54 102	151 127	10 427
332	Fabricated metal product mfg	1	28	15	1 107	33 155	906	1 948	24 172	103 690	69 599	170 678	5 305
3329	Other fabricated metal product mfg	-	8	7	597	17 714	485	1 006	12 749	44 971	30 867	75 890	2 602
336	Transportation equipment mfg	2	17	12	1 734	43 397	1 349	2 672	30 376	97 231	154 554	253 838	7 460
3363	Motor vehicle parts mfg ...	-	10	9	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	3	581	14 639	423	796	8 067	31 965	53 644	87 010	3 320
336399	All other motor vehicle parts mfg	-	3	3	581	14 639	423	796	8 067	31 965	53 644	87 010	3 320
MARTIN COUNTY, IN													
31-33	Manufacturing	-	9	4	575	17 691	502	1 067	13 791	57 922	75 993	133 371	4 228

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MIAMI COUNTY, IN													
31-33	Manufacturing	-	50	21	2 491	64 038	1 793	3 427	42 911	228 533	156 694	385 887	6 754
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONROE COUNTY, IN													
31-33	Manufacturing	-	122	39	8 817	302 554	7 410	13 988	221 803	1 094 026	1 417 232	2 444 226	44 419
333	Machinery mfg	-	6	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	19	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	9	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	9	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	1	g	D	D	D	D	D	D	D	D
MONTGOMERY COUNTY, IN													
31-33	Manufacturing	-	67	29	7 634	264 073	5 828	11 773	181 766	890 593	993 498	1 878 669	84 179
323	Printing & related support activities	-	13	6	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	13	6	h	D	D	D	D	D	D	D	D
32311	Printing	-	11	5	h	D	D	D	D	D	D	D	D
323117	Book printing	-	2	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	17	6	600	21 792	448	973	14 076	46 395	55 782	101 709	1 930
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	1 368	50 175	1 023	2 051	31 875	114 198	103 667	219 239	D
3363	Motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORGAN COUNTY, IN													
31-33	Manufacturing	7	65	20	2 869	78 670	2 109	4 253	46 617	252 060	219 779	472 305	14 113
334	Computer & electronic product mfg.....	9	2	2	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
NEWTON COUNTY, IN													
31-33	Manufacturing	-	29	11	1 474	34 428	1 235	2 311	24 471	88 864	87 823	176 521	6 986
NOBLE COUNTY, IN													
31-33	Manufacturing	-	143	80	10 818	309 186	8 831	17 730	221 290	874 280	941 949	1 821 730	67 808
311	Food mfg.....	-	8	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	14	5	671	14 271	520	931	10 208	32 240	26 750	60 971	4 459
3231	Printing & related support activities.....	-	14	5	671	14 271	520	931	10 208	32 240	26 750	60 971	4 459
326	Plastics & rubber products mfg.....	-	14	13	1 898	54 708	1 639	3 446	41 661	155 369	83 061	239 013	11 575
3261	Plastics product mfg.....	-	10	9	g	D	D	D	D	D	D	D	9 849
32619	Other plastics product mfg.....	-	8	7	948	28 877	793	1 672	21 276	88 766	40 893	130 507	D
326199	All other plastics product mfg.....	-	8	7	948	28 877	793	1 672	21 276	88 766	40 893	130 507	D
331	Primary metal mfg.....	-	6	5	804	19 252	665	1 415	14 327	49 799	54 624	104 491	3 539
3315	Foundries.....	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	32	17	1 316	37 423	1 098	2 276	27 981	82 709	89 965	170 434	7 705
333	Machinery mfg.....	-	20	6	587	21 521	388	757	12 332	48 575	41 469	93 144	2 771
335	Electrical equipment, appliance, & component mfg.....	2	9	9	829	18 138	686	1 320	13 610	58 374	47 935	106 477	2 466
3359	Other electrical equipment & component mfg.....	4	8	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	11	10	2 686	88 224	2 187	4 338	59 796	197 634	348 740	550 971	25 182
3363	Motor vehicle parts mfg ...	-	10	10	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
ORANGE COUNTY, IN													
31-33	Manufacturing	-	34	16	2 478	55 276	2 114	4 652	43 040	137 751	158 469	296 406	8 368
337	Furniture & related product mfg.....	-	8	5	1 316	27 673	1 127	2 569	20 797	66 774	68 579	135 286	5 571
3372	Office furniture (including fixtures) mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg.....	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OWEN COUNTY, IN													
31-33	Manufacturing	-	24	6	1 242	31 507	870	1 748	18 115	52 928	55 342	109 179	6 962
339	Miscellaneous mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
PARKE COUNTY, IN													
31-33	Manufacturing	1	17	7	641	13 684	525	1 021	9 420	41 701	49 546	92 077	4 358
PERRY COUNTY, IN													
31-33	Manufacturing	1	27	11	1 211	33 593	1 069	1 982	28 000	77 543	64 654	141 121	3 752
PORTER COUNTY, IN													
31-33	Manufacturing	-	146	52	12 353	624 467	9 171	19 938	462 329	1 713 887	2 639 217	4 353 625	276 927
331	Primary metal mfg.....	-	8	6	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	4	4	7 746	454 041	5 789	13 203	350 780	1 115 709	2 098 520	3 219 594	D
33111	Iron & steel mills & ferroalloy mfg.....	-	4	4	7 746	454 041	5 789	13 203	350 780	1 115 709	2 098 520	3 219 594	D
331111	Iron & steel mills.....	-	4	4	7 746	454 041	5 789	13 203	350 780	1 115 709	2 098 520	3 219 594	D
332	Fabricated metal product mfg.....	-	31	13	1 512	61 125	1 127	2 268	41 382	203 238	152 453	355 481	15 508
3329	Other fabricated metal product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
POSEY COUNTY, IN													
31-33	Manufacturing	-	31	15	h	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
PULASKI COUNTY, IN													
31-33	Manufacturing	-	20	11	1 353	41 096	1 079	2 078	25 920	78 950	135 304	218 088	9 209
PUTNAM COUNTY, IN													
31-33	Manufacturing	-	25	11	2 482	64 772	2 017	3 984	45 813	187 407	236 105	421 660	23 243
326	Plastics & rubber products mfg.....	-	3	3	1 224	28 168	1 007	1 879	19 967	80 749	133 907	214 616	D
3261	Plastics product mfg.....	-	3	3	1 224	28 168	1 007	1 879	19 967	80 749	133 907	214 616	D
32619	Other plastics product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	-	2	2	f	D	D	D	D	D	D	D	D
RANDOLPH COUNTY, IN													
31-33	Manufacturing	1	54	23	3 080	86 485	2 264	4 354	62 841	194 791	163 644	360 983	8 353
336	Transportation equipment mfg.....	-	4	3	722	21 765	564	1 182	18 090	37 843	47 907	85 378	659

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RIPLEY COUNTY, IN													
31-33	Manufacturing	-	35	10	3 168	109 874	2 071	4 287	59 388	567 523	183 469	755 221	D
339	Miscellaneous mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339995	Burial casket mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
RUSH COUNTY, IN													
31-33	Manufacturing	-	32	12	1 081	32 370	786	1 701	19 888	188 925	100 127	289 079	5 846
ST. JOSEPH COUNTY, IN													
31-33	Manufacturing	-	457	179	20 435	698 851	14 401	28 757	410 912	1 998 879	2 139 281	4 149 716	146 884
311	Food mfg.....	-	22	9	654	16 144	450	902	10 641	50 654	100 310	150 147	2 368
322	Paper mfg.....	3	9	6	527	16 313	401	745	10 501	39 565	71 163	110 967	2 064
3222	Converted paper product mfg.....	3	9	6	527	16 313	401	745	10 501	39 565	71 163	110 967	2 064
32221	Paperboard container mfg.....	3	6	6	507	15 738	384	711	10 068	38 560	69 817	108 468	D
323	Printing & related support activities.....	1	39	10	633	20 634	439	872	12 719	39 599	22 795	61 626	2 172
3231	Printing & related support activities.....	1	39	10	633	20 634	439	872	12 719	39 599	22 795	61 626	2 172
32311	Printing.....	1	36	10	611	20 070	425	842	12 294	38 740	22 316	60 280	2 114
326	Plastics & rubber products mfg.....	-	45	27	3 138	82 437	2 557	5 280	54 442	202 304	199 423	401 822	21 136
3261	Plastics product mfg.....	-	37	25	2 803	74 515	2 258	4 667	47 943	182 561	187 129	370 182	19 522
32619	Other plastics product mfg.....	-	32	23	2 745	72 853	2 211	4 590	47 128	179 417	183 242	362 801	19 245
326199	All other plastics product mfg.....	-	31	22	h	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	11	8	1 731	53 649	1 445	2 988	39 747	118 795	162 417	276 637	4 722
3313	Alumina & aluminum production & processing..	-	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
33131	Alumina & aluminum production & processing.....	-	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
331316	Aluminum extruded product mfg.....	-	3	3	503	13 166	437	935	9 302	33 802	70 392	102 696	D
3315	Foundries.....	-	5	3	887	28 886	737	1 503	22 076	60 382	42 535	102 426	2 464
33151	Ferrous metal foundries..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	114	50	4 219	153 437	3 185	6 607	102 867	545 751	678 862	1 216 788	28 541
3323	Architectural & structural metals mfg.....	2	22	11	508	14 756	370	728	9 140	28 382	22 631	50 786	1 258
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	51	14	915	29 375	725	1 408	20 616	51 422	19 587	70 666	4 321
33271	Machine shops.....	1	40	10	619	19 959	468	903	13 455	34 002	13 532	47 165	3 453
332710	Machine shops.....	1	40	10	619	19 959	468	903	13 455	34 002	13 532	47 165	3 453
3328	Coating, engraving, heat treating, & allied activities..	-	12	9	1 264	64 544	857	1 930	42 218	352 840	551 505	897 985	16 120
33281	Coating, engraving, heat treating, & allied activities.....	-	12	9	1 264	64 544	857	1 930	42 218	352 840	551 505	897 985	16 120
332811	Metal heat treating....	-	5	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	2	14	6	665	20 213	531	1 111	14 246	36 802	30 764	67 721	1 854
333	Machinery mfg.....	1	59	16	1 378	55 942	862	1 804	30 429	95 608	59 396	159 025	5 834
3335	Metalworking machinery mfg.....	1	39	9	802	35 789	559	1 207	22 294	60 284	27 989	95 190	3 619
33351	Metalworking machinery mfg.....	1	39	9	802	35 789	559	1 207	22 294	60 284	27 989	95 190	3 619

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. JOSEPH COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	5	12	7	916	19 806	541	1 130	8 079	43 692	25 964	70 882	D
3344	Semiconductor & other electronic component mfg.....	9	4	3	655	9 875	449	955	4 965	18 070	15 698	34 858	D
33441	Semiconductor & other electronic component mfg.....	9	4	3	655	9 875	449	955	4 965	18 070	15 698	34 858	D
334419	Other electronic component mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	13	6	855	29 400	623	1 097	17 642	83 768	74 055	154 389	4 163
3359	Other electrical equipment & component mfg.....	—	9	4	712	25 528	530	917	15 837	72 973	60 515	129 935	3 568
336	Transportation equipment mfg.....	—	27	15	3 943	168 530	2 348	4 311	82 757	540 796	406 921	970 330	34 606
3361	Motor vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	1	14	7	1 203	31 442	897	1 852	20 612	84 233	57 493	140 272	D
3364	Aerospace product & parts mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	—	4	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	8	37	4	806	32 611	424	815	12 457	86 933	37 191	124 734	8 063
3391	Medical equipment & supplies mfg.....	9	19	2	595	25 968	293	574	9 572	71 860	30 682	102 803	D
33911	Medical equipment & supplies mfg.....	9	19	2	595	25 968	293	574	9 572	71 860	30 682	102 803	D
SCOTT COUNTY, IN													
31-33	Manufacturing	—	34	18	h	D	D	D	D	D	D	D	28 617
326	Plastics & rubber products mfg.....	1	6	6	g	D	D	D	D	D	D	D	6 967
3261	Plastics product mfg.....	1	5	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	3	3	f	D	D	D	D	D	D	D	D
SHELBY COUNTY, IN													
31-33	Manufacturing	—	86	42	6 656	218 467	5 151	10 690	149 499	509 731	679 555	1 188 825	99 237
326	Plastics & rubber products mfg.....	—	11	8	2 070	58 481	1 550	3 020	37 880	104 186	106 913	208 910	D
3261	Plastics product mfg.....	—	7	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	5	5	g	D	D	D	D	D	D	D	9 370
326199	All other plastics product mfg.....	1	5	5	g	D	D	D	D	D	D	D	9 370
327	Nonmetallic mineral product mfg.....	—	7	4	1 471	59 416	1 150	2 560	42 299	134 225	111 080	250 294	15 086
3272	Glass & glass product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	—	1	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	19	7	699	19 848	600	1 174	15 032	45 421	47 083	92 837	2 723
336	Transportation equipment mfg.....	—	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPENCER COUNTY, IN													
31-33	Manufacturing	-	19	9	1 369	36 337	1 106	2 329	26 922	73 034	59 315	133 973	6 046
STARKE COUNTY, IN													
31-33	Manufacturing	-	19	11	1 357	29 746	1 082	2 051	19 255	72 309	71 343	143 319	5 628
STEBEN COUNTY, IN													
31-33	Manufacturing	1	110	64	6 774	189 013	5 457	11 458	138 219	517 571	531 349	1 056 528	38 446
326	Plastics & rubber products mfg	-	10	8	688	16 055	567	1 151	10 404	26 623	25 914	52 357	2 612
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	6	5	525	10 106	436	935	6 526	19 639	20 438	39 958	1 718
326199	All other plastics product mfg	-	6	5	525	10 106	436	935	6 526	19 639	20 438	39 958	1 718
332	Fabricated metal product mfg	-	30	14	1 247	37 390	1 008	2 042	27 569	88 872	66 721	155 478	8 078
336	Transportation equipment mfg	1	16	13	2 330	68 365	1 876	4 213	51 638	208 954	248 589	460 980	16 783
3363	Motor vehicle parts mfg ...	1	12	12	g	D	D	D	D	D	D	D	16 700
33631	Motor vehicle gasoline engine & engine parts mfg	-	4	4	833	22 820	710	1 519	17 712	62 338	62 843	125 550	9 617
336312	Gasoline engine & engine parts mfg	-	4	4	833	22 820	710	1 519	17 712	62 338	62 843	125 550	9 617
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
SULLIVAN COUNTY, IN													
31-33	Manufacturing	-	18	7	579	14 280	473	940	9 581	31 823	41 579	72 966	3 641
SWITZERLAND COUNTY, IN													
31-33	Manufacturing	2	6	3	619	10 684	567	1 034	9 361	29 019	29 896	58 666	1 072
TIPPECANOE COUNTY, IN													
31-33	Manufacturing	-	113	52	16 695	692 218	12 922	27 800	443 874	2 585 766	4 975 315	7 519 035	388 780
311	Food mfg	-	10	6	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	23	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TIPPECANOE COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	4	11	6	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	7	7	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	7	7	4	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	7	5	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
TIPTON COUNTY, IN													
31-33	Manufacturing	1	22	7	954	30 499	753	1 550	20 957	85 003	116 955	199 287	D
VANDERBURGH COUNTY, IN													
31-33	Manufacturing	—	271	104	17 536	607 718	11 415	22 582	330 522	2 317 378	1 464 847	3 824 568	125 995
311	Food mfg.....	—	16	8	h	D	D	D	D	D	D	D	31 066
3115	Dairy product mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	6	4	2	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	—	1	1	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	—	1	1	f	D	D	D	D	D	D	D	D
314912	Canvas & related product mills.....	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	3	3	f	D	D	D	D	D	D	D	5 080
323	Printing & related support activities.....	6	32	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	6	32	7	f	D	D	D	D	D	D	D	D
32311	Printing.....	6	28	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	17	9	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	—	6	4	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin...	—	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VANDERBURGH COUNTY, IN—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	28	16	h	D	D	D	D	D	D	D	17 323
3261	Plastics product mfg	-	26	16	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	19	11	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	19	11	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	9	4	681	27 969	534	1 161	20 798	80 228	83 102	163 350	D
332	Fabricated metal product mfg	1	50	17	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	35	14	1 083	41 297	752	1 527	26 484	71 659	64 784	144 205	5 462
335	Electrical equipment, appliance, & component mfg	-	6	5	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	25	4	531	14 695	357	685	7 380	48 658	33 102	82 416	811
VERMILLION COUNTY, IN													
31-33	Manufacturing	-	10	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
VIGO COUNTY, IN													
31-33	Manufacturing	-	137	55	7 464	255 164	5 627	11 506	172 240	989 250	897 924	1 891 780	D
322	Paper mfg	-	6	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	17	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	2	17	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	6	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	6	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	4	4	1 522	55 973	1 215	2 573	41 309	198 755	168 733	373 612	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	23	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WABASH COUNTY, IN													
31-33	Manufacturing	-	77	39	5 300	156 343	4 254	8 290	106 445	353 999	462 411	812 840	25 232
331	Primary metal mfg	-	5	4	845	31 126	662	1 556	20 430	95 218	172 866	269 283	3 755
332	Fabricated metal product mfg	-	10	6	1 035	36 175	805	1 681	25 060	80 385	46 396	125 418	1 480
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	8	551	18 175	388	768	9 222	40 729	21 709	62 485	1 900
334	Computer & electronic product mfg	-	3	3	503	12 070	426	805	8 758	30 870	20 254	51 044	D
WARRICK COUNTY, IN													
31-33	Manufacturing	-	53	11	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	3	3	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing,	-	3	3	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, IN													
31-33	Manufacturing	-	40	14	2 824	66 863	2 450	4 776	53 829	164 686	135 901	298 746	9 303
332	Fabricated metal product mfg	-	6	3	561	18 241	443	1 002	15 350	52 095	20 678	73 008	D
3321	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	9	2	1 007	23 978	926	1 858	18 944	44 457	40 441	84 316	1 080
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	3	1	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, IN													
31-33	Manufacturing	1	132	74	8 940	270 038	7 107	14 504	184 993	715 283	885 077	1 598 654	75 807
311	Food mfg	-	10	7	661	22 131	503	1 068	15 038	142 677	152 915	288 731	14 973
326	Plastics & rubber products mfg	-	10	7	1 105	27 935	951	2 039	23 051	76 971	127 234	205 307	8 369
3261	Plastics product mfg	-	8	6	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	7	6	897	31 137	743	1 706	24 187	65 752	60 405	127 912	12 442
3315	Foundries	-	6	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	10	1 052	37 784	830	1 518	23 073	64 461	88 836	159 262	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	WAYNE COUNTY, IN—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg	4	5	2	f	D	D	D	D	D	D	D	D	
3346	Mfg & reproducing magnetic & optical media	3	2	2	f	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	3	2	2	f	D	D	D	D	D	D	D	D	
334612	Prerecorded CD (except software), tape, & record reproducing	—	1	1	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	—	1	1	f	D	D	D	D	D	D	D	D	
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D	
335929	Other communication & energy wire mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	6	7	5		804	23 080	674	1 319	14 685	43 814	67 452	113 304	4 376
337	Furniture & related product mfg	—	4	3		644	15 777	504	1 046	9 985	44 571	31 473	76 470	706
339	Miscellaneous mfg	1	20	12		663	17 438	472	1 010	11 854	48 949	44 990	93 690	2 782
3399	Other miscellaneous mfg	1	16	12	f	D	D	D	D	D	D	D	D	2 748
33999	All other miscellaneous mfg	1	11	10		568	15 346	401	877	10 567	42 958	41 770	84 659	2 363
339995	Burial casket mfg	1	11	10		568	15 346	401	877	10 567	42 958	41 770	84 659	2 363
	WELLS COUNTY, IN													
31-33	Manufacturing	—	49	28		3 615	106 242	2 475	5 417	62 344	245 136	247 281	490 162	50 220
311	Food mfg	—	4	4		532	8 457	275	490	5 879	59 575	37 934	97 919	D
326	Plastics & rubber products mfg	—	5	5	f	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	3	3		505	9 364	340	698	6 578	18 217	27 595	44 574	D
32629	Other rubber product mfg	—	3	3		505	9 364	340	698	6 578	18 217	27 595	44 574	D
326291	Rubber product mfg for mechanical use	—	3	3		505	9 364	340	698	6 578	18 217	27 595	44 574	D
332	Fabricated metal product mfg	—	8	4		594	17 161	405	1 249	10 613	33 639	30 089	63 465	1 580
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
	WHITE COUNTY, IN													
31-33	Manufacturing	1	56	21		3 402	90 568	2 817	5 416	66 905	229 187	411 164	637 984	21 221
332	Fabricated metal product mfg	—	15	6		855	28 280	636	1 283	19 659	108 459	163 253	268 579	7 912
336	Transportation equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	1	g	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WHITLEY COUNTY, IN													
31-33	Manufacturing	-	66	31	4 327	117 302	3 642	7 344	86 428	317 517	595 415	908 823	18 907
331	Primary metal mfg	-	5	4	586	22 157	498	1 081	15 603	63 670	299 769	362 924	D
332	Fabricated metal product mfg	-	21	6	659	21 061	507	983	14 102	45 478	20 611	65 497	4 933
336	Transportation equipment mfg	-	4	4	g	D	D	D	D	D	D	D	6 169
3363	Motor vehicle parts mfg . . .	-	4	4	g	D	D	D	D	D	D	D	6 169
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANDERSON, IN													
31-33	Manufacturing	-	59	20	8 999	455 951	7 458	14 164	370 680	717 721	1 054 828	1 769 133	68 643
336	Transportation equipment mfg	-	4	4	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	4	4	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	4	4	i	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
ANGOLA, IN													
31-33	Manufacturing	3	52	30	2 936	82 303	2 359	4 772	59 053	230 667	214 951	450 950	20 642
332	Fabricated metal product mfg	-	16	8	807	24 081	636	1 287	17 612	57 484	27 512	85 095	5 405
336	Transportation equipment mfg	3	7	6	906	25 075	754	1 577	18 354	75 731	86 950	163 811	9 415
3363	Motor vehicle parts mfg . . .	3	6	6	f	D	D	D	D	D	D	D	D
ATTICA, IN													
31-33	Manufacturing	-	7	4	1 151	36 265	948	1 963	25 536	77 161	55 907	133 881	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AUBURN, IN													
31-33	Manufacturing	1	35	19	5 106	190 085	3 735	8 016	125 482	458 974	444 312	895 163	40 515
326	Plastics & rubber products mfg	3	3	3	1 424	51 422	917	1 671	25 527	115 710	111 358	220 920	9 765
3261	Plastics product mfg	5	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	4	f	D	D	D	D	D	D	D	D
3315	Foundries	—	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	5	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	5	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
AURORA, IN													
31-33	Manufacturing	—	8	4	921	33 012	539	954	14 620	82 853	54 113	134 158	D
339	Miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
339995	Burial casket mfg	—	1	1	f	D	D	D	D	D	D	D	D
BATESVILLE, IN *													
31-33	Manufacturing	—	10	5	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	3	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	1	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	1	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	1	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
339995	Burial casket mfg	—	1	1	f	D	D	D	D	D	D	D	D
BEDFORD, IN													
31-33	Manufacturing	—	39	17	3 327	147 860	2 854	6 191	120 610	311 883	491 862	805 705	28 295
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	—	1	1	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	1	1	g	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
BEECH GROVE, IN *													
31-33	Manufacturing	—	48	21	1 891	62 396	1 262	2 528	33 301	158 314	177 456	339 054	14 736

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERNE, IN													
31-33	Manufacturing	1	16	11	g	D	D	D	D	D	D	D	10 108
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLOOMINGTON, IN													
31-33	Manufacturing	-	61	17	5 013	159 412	4 577	8 428	136 699	641 806	1 177 032	1 751 290	21 740
334	Computer & electronic product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
BLUFFTON, IN													
31-33	Manufacturing	-	24	16	2 283	67 390	1 545	3 085	36 989	164 865	129 634	293 738	33 572
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRAZIL, IN													
31-33	Manufacturing	1	20	9	552	15 066	423	651	9 833	38 544	32 058	70 842	3 526
BREMEN, IN													
31-33	Manufacturing	1	36	25	2 545	67 440	2 066	4 137	47 520	198 991	216 490	409 068	10 825
326	Plastics & rubber products mfg	-	10	7	1 074	26 147	934	2 013	21 431	70 676	69 625	136 886	3 404
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
BUTLER, IN													
31-33	Manufacturing	-	10	7	1 037	28 612	889	1 763	21 312	102 263	131 110	232 748	3 669
332	Fabricated metal product mfg	-	7	5	f	D	D	D	D	D	D	D	D
CARMEL, IN													
31-33	Manufacturing	3	53	15	1 304	44 216	845	1 609	22 265	77 728	99 469	177 821	5 257
CHARLESTOWN, IN													
31-33	Manufacturing	1	16	5	f	D	D	D	D	D	D	D	7 775

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESTERTON, IN													
31-33	Manufacturing	-	14	6	i	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	i	D	D	D	D	D	D	D	D
CLARKSVILLE, IN													
31-33	Manufacturing	7	26	7	1 297	51 983	1 005	2 141	38 405	149 981	107 357	248 991	10 222
325	Chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	1	1	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	1	1	f	D	D	D	D	D	D	D	D
CLINTON, IN													
31-33	Manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
COLUMBIA CITY, IN													
31-33	Manufacturing	-	25	12	1 658	47 042	1 405	2 753	37 210	102 402	105 902	209 283	3 691
COLUMBUS, IN													
31-33	Manufacturing	-	96	50	11 647	366 248	8 854	18 448	252 151	1 055 077	1 212 648	2 273 142	114 152
311	Food mfg	-	4	4	1 281	36 177	454	1 021	11 514	107 744	75 736	183 598	3 145
3118	Bakeries & tortilla mfg	-	1	1	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	594	14 365	516	987	10 833	28 566	26 729	55 716	3 763
3261	Plastics product mfg	-	6	4	594	14 365	516	987	10 833	28 566	26 729	55 716	3 763
32619	Other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	12	880	27 843	664	1 476	17 854	63 217	37 140	98 540	19 584
333	Machinery mfg	-	20	8	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	9	8	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	9	8	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	5	5	1 506	37 889	1 333	2 615	30 533	116 631	128 836	244 124	D
336399	All other motor vehicle parts mfg	-	5	5	1 506	37 889	1 333	2 615	30 533	116 631	128 836	244 124	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBUS, IN—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	7	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	5	1	g	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	2	1	g	D	D	D	D	D	D	D	D
CONNERSVILLE, IN													
31-33	Manufacturing	-	32	16	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	h	D	D	D	D	D	D	D	D
CORYDON, IN													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
CRAWFORDSVILLE, IN													
31-33	Manufacturing	-	37	25	i	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	9	5	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	9	5	h	D	D	D	D	D	D	D	D
32311	Printing	-	8	5	h	D	D	D	D	D	D	D	D
323117	Book printing	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	7	6		21 161	423	932	13 640	45 377	55 191	100 013	1 872
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
CROWN POINT, IN													
31-33	Manufacturing	-	32	7	760	22 379	483	1 028	11 484	57 249	44 842	100 857	2 185
DECATUR, IN													
31-33	Manufacturing	-	21	15	3 310	103 315	2 722	6 117	75 321	286 255	740 636	1 018 157	17 506
321	Wood product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	5	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	3	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	3	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	2	2	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
DELPHI, IN													
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	103	
DUNKIRK, IN *													
31-33	Manufacturing	-	3	2	f	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	
3272	Glass & glass product mfg .	-	2	2	f	D	D	D	D	D	D	D	
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	
EAST CHICAGO, IN													
31-33	Manufacturing	-	51	32	16 068	812 350	11 666	24 707	559 362	2 405 111	2 537 738	4 894 170	321 139
331	Primary metal mfg	-	5	4	j	D	D	D	D	D	D	D	
3311	Iron & steel mills & ferroalloy mfg	-	3	3	j	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	-	3	3	j	D	D	D	D	D	D	D	
331111	Iron & steel mills	-	3	3	j	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	
3365	Railroad rolling stock mfg ..	-	3	3	g	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg	-	3	3	g	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg	-	3	3	g	D	D	D	D	D	D	D	
EDINBURGH, IN *													
31-33	Manufacturing	1	23	17	1 719	46 409	1 443	2 880	30 120	116 102	120 303	232 420	19 266
321	Wood product mfg	-	2	2	f	D	D	D	D	D	D	D	
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	
321211	Hardwood veneer & plywood mfg	-	2	2	f	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	6	6	594	15 615	496	1 027	11 209	33 954	38 862	72 477	9 924
3261	Plastics product mfg	1	6	6	594	15 615	496	1 027	11 209	33 954	38 862	72 477	9 924
32619	Other plastics product mfg	1	5	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	5	5	f	D	D	D	D	D	D	D	D
ELKHART, IN													
31-33	Manufacturing	1	349	177	17 947	554 524	13 772	26 064	349 761	1 481 111	1 534 860	3 023 546	74 629
321	Wood product mfg	1	27	16	1 372	33 800	1 185	2 186	24 868	74 024	114 764	188 330	2 395
3219	Other wood product mfg ...	1	24	15	g	D	D	D	D	D	D	D	D
32191	Millwork	-	15	11	851	21 004	734	1 312	15 260	43 902	57 653	101 391	1 678
325	Chemical mfg	-	11	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	36	25	1 814	43 907	1 429	2 497	29 939	126 605	174 369	302 399	9 547
3261	Plastics product mfg	1	34	24	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	7	7	693	17 636	559	933	12 095	67 953	107 078	175 019	D
326150	Urethane & other foam product (except polystyrene) mfg	-	7	7	693	17 636	559	933	12 095	67 953	107 078	175 019	D
32619	Other plastics product mfg	1	16	10	605	13 404	454	845	8 958	23 825	22 459	47 771	2 781
326199	All other plastics product mfg	1	15	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	14	8	913	25 741	743	1 663	17 226	66 171	152 876	219 257	4 331
3272	Glass & glass product mfg .	-	6	5	565	13 720	454	1 020	8 771	34 545	76 932	111 861	D
32721	Glass & glass product mfg	-	6	5	565	13 720	454	1 020	8 771	34 545	76 932	111 861	D
327215	Glass product mfg made of purchased glass.....	-	6	5	565	13 720	454	1 020	8 771	34 545	76 932	111 861	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ELKHART, IN—Con. Manufacturing—Con.												
332	Fabricated metal product mfg	1	79	37	3 381	99 309	2 715	5 547	69 547	218 089	198 067	411 080	18 958
3323	Architectural & structural metals mfg	—	24	13	1 305	31 533	1 085	2 144	22 559	63 571	100 797	166 439	3 205
33232	Ornamental & architectural metal products mfg	—	16	8	1 073	24 452	893	1 755	17 776	48 864	81 713	131 541	2 454
332321	Metal window & door mfg	—	5	3	639	13 863	560	1 064	11 166	29 513	43 926	74 272	D
3329	Other fabricated metal product mfg	—	9	5	747	27 901	565	1 199	19 977	76 645	44 813	114 020	12 033
33291	Metal valve mfg	—	3	3	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	28	10	702	25 794	438	901	15 143	48 540	39 615	88 156	6 098
334	Computer & electronic product mfg	1	7	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	4	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	4	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	59	34	4 328	126 807	3 342	6 063	87 958	321 728	523 207	846 496	7 548
3362	Motor vehicle body & trailer mfg	1	32	21	2 529	69 416	1 882	3 574	46 980	141 672	329 787	472 911	3 559
33621	Motor vehicle body & trailer mfg	1	32	21	2 529	69 416	1 882	3 574	46 980	141 672	329 787	472 911	3 559
336211	Motor vehicle body mfg	1	7	5	547	16 479	478	923	10 961	33 227	90 799	125 129	881
336213	Motor home mfg	2	8	4	910	24 201	501	1 001	15 685	65 609	161 355	226 859	880
336214	Travel trailer & camper mfg	1	17	12	1 072	28 736	903	1 650	20 334	42 836	77 633	120 923	1 798
3363	Motor vehicle parts mfg ...	1	21	10	1 359	43 071	1 102	1 651	31 404	147 458	147 925	295 948	3 146
33639	Other motor vehicle parts mfg	—	8	3	749	26 050	605	830	19 034	103 818	53 548	157 152	1 437
336399	All other motor vehicle parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	20	11	734	19 351	587	1 098	13 277	36 188	37 083	73 745	1 350
339	Miscellaneous mfg	—	21	8	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	14	8	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	13	8	g	D	D	D	D	D	D	D	D
339992	Musical instrument mfg	—	8	6	g	D	D	D	D	D	D	D	D
31-33	ELWOOD, IN *		23	12	1 682	40 717	1 432	3 007	31 172	114 490	205 250	318 310	7 872
336	Transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	EVANSVILLE, IN		213	84	15 029	528 076	9 543	18 994	280 810	2 148 005	1 255 216	3 445 998	100 980
311	Food mfg	—	12	5	h	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	2	2	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	2	2	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	6	4	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	5	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	5	3	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	3	3	f	D	D	D	D	D	D	D	5 080

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	EVANSVILLE, IN—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	6	32	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	6	32	7	f	D	D	D	D	D	D	D	D
32311	Printing	6	28	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	14	8	1 621	61 615	890	1 564	29 079	259 647	270 154	533 347	D
3254	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	5	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	23	14	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	21	14	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	15	9	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	15	9	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	9	4	681	27 969	534	1 161	20 798	80 228	83 102	163 350	D
332	Fabricated metal product mfg	1	38	16	g	D	D	D	D	D	D	D	11 773
333	Machinery mfg	1	23	10	862	31 830	586	1 155	19 675	54 651	57 476	119 226	3 701
335	Electrical equipment, appliance, & component mfg	—	3	3	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
	FISHERS, IN												
31-33	Manufacturing	3	24	10	635	22 026	430	897	11 980	50 937	44 986	97 528	2 163
	FORT WAYNE, IN												
31-33	Manufacturing	—	390	155	22 830	846 334	15 779	31 764	498 390	2 043 352	2 222 732	4 258 917	119 865
311	Food mfg	—	20	8	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	7	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	6	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	11	8	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	11	8	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	8	6	f	D	D	D	D	D	D	D	2 869
323	Printing & related support activities.....	4	54	14	884	26 799	643	1 070	16 566	55 062	31 496	88 244	3 456
3231	Printing & related support activities.....	4	54	14	884	26 799	643	1 070	16 566	55 062	31 496	88 244	3 456
32311	Printing	4	43	9	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	18	14	1 295	40 224	993	2 063	25 666	96 423	91 578	187 808	13 135
3261	Plastics product mfg	2	12	11	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	8	7	678	19 706	530	1 214	13 946	46 310	31 785	78 019	4 699
326199	All other plastics product mfg	—	8	7	678	19 706	530	1 214	13 946	46 310	31 785	78 019	4 699

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT WAYNE, IN—Con. Manufacturing—Con.												
331	Primary metal mfg	-	17	13	g	D	D	D	D	D	D	D	23 782
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	7	6	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	6	5	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	5	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	5	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	5	4	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	77	22	1 624	46 559	1 289	2 547	30 667	92 978	49 097	140 821	9 195
333	Machinery mfg	-	65	34	3 865	136 296	2 683	4 843	77 884	266 702	228 529	492 912	18 520
3331	Agriculture, construction, & mining machinery mfg	1	5	5	522	17 614	375	785	11 166	38 933	33 738	71 985	552
3335	Metalworking machinery mfg	-	32	15	1 227	47 572	876	1 907	34 738	88 326	50 054	136 340	7 723
33351	Metalworking machinery mfg	-	32	15	1 227	47 572	876	1 907	34 738	88 326	50 054	136 340	7 723
333514	Special die & tool, die set, jig, & fixture mfg	-	20	5	663	24 491	460	1 014	18 127	51 575	26 532	78 393	5 760
3339	Other general-purpose machinery mfg	-	15	9	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	4	3	1 244	40 495	817	949	13 769	61 051	88 469	151 308	D
333913	Measuring & dispensing pump mfg	-	3	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	13	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	8	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	6	6	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	6	6	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	23	14	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	17	9	h	D	D	D	D	D	D	D	9 954
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	6	4	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	6	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D

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	FORT WAYNE, IN—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	-	30	4	791	19 020	585	858	9 727	138 774	87 140	226 154	D
3399	Other miscellaneous mfg . .	-	17	3	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg . . .	-	2	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
	FRANKFORT, IN												
31-33	Manufacturing	-	28	18	h	D	D	D	D	D	D	D	34 587
311	Food mfg	-	7	4	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
	FRANKLIN, IN												
31-33	Manufacturing	1	39	22	3 719	118 943	2 918	5 983	74 549	333 321	448 915	779 807	51 431
332	Fabricated metal product mfg	-	9	5	744	30 147	529	1 208	16 574	109 719	87 572	196 841	5 018
336	Transportation equipment mfg	1	3	3	1 446	39 853	1 258	2 381	29 722	124 782	185 997	311 612	25 729
3363	Motor vehicle parts mfg . . .	1	3	3	1 446	39 853	1 258	2 381	29 722	124 782	185 997	311 612	25 729
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
	GARRETT, IN												
31-33	Manufacturing	1	26	17	1 733	43 284	1 305	2 316	26 775	96 784	105 432	202 159	4 585
321	Wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	-	2	2	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg . .	-	1	1	f	D	D	D	D	D	D	D	D
	GARY, IN												
31-33	Manufacturing	-	62	29	10 066	511 255	8 125	17 658	418 366	1 802 488	1 578 085	3 377 401	183 177
331	Primary metal mfg	-	5	5	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GOSHEN, IN													
31-33	Manufacturing	-	105	58	7 397	200 790	5 958	11 711	139 799	449 604	622 563	1 070 781	29 445
326	Plastics & rubber products mfg	-	15	13	1 923	48 875	1 621	3 070	35 648	106 746	95 631	199 859	D
3262	Rubber product mfg	-	10	9	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	10	9	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	9	8	1 478	35 563	1 230	2 248	25 568	54 826	39 692	93 051	D
332	Fabricated metal product mfg	-	17	7	622	14 353	512	976	10 350	27 315	28 926	56 263	2 732
336	Transportation equipment mfg	1	21	15	2 287	67 218	1 792	3 732	46 370	154 315	264 038	421 166	7 307
3362	Motor vehicle body & trailer mfg	-	12	9	1 465	45 568	1 213	2 652	34 444	96 214	192 740	290 804	3 078
33621	Motor vehicle body & trailer mfg	-	12	9	1 465	45 568	1 213	2 652	34 444	96 214	192 740	290 804	3 078
336214	Travel trailer & camper mfg	-	7	5	936	31 232	799	1 883	25 268	67 740	143 415	212 915	1 498
3363	Motor vehicle parts mfg . . .	3	9	6	822	21 650	579	1 080	11 926	58 101	71 298	130 362	4 229
33639	Other motor vehicle parts mfg	3	3	3	518	14 074	335	608	7 479	48 160	57 309	106 179	D
336399	All other motor vehicle parts mfg	3	3	3	518	14 074	335	608	7 479	48 160	57 309	106 179	D
337	Furniture & related product mfg	-	10	6	889	21 916	751	1 462	16 176	59 537	35 342	94 619	2 499
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	5	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	5	4	797	20 025	670	1 304	14 756	56 057	32 775	88 606	D
337110	Wood kitchen cabinet & counter top mfg . . .	-	5	4	797	20 025	670	1 304	14 756	56 057	32 775	88 606	D
GREENCASTLE, IN													
31-33	Manufacturing	-	10	6	2 208	57 232	1 813	3 477	41 169	164 365	207 157	371 466	22 407
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
GREENFIELD, IN													
31-33	Manufacturing	-	23	7	768	27 640	525	1 119	15 755	94 585	124 148	217 815	3 290
GREENSBURG, IN													
31-33	Manufacturing	-	28	8	2 096	69 960	1 727	4 087	56 301	291 399	193 976	480 498	8 135
332	Fabricated metal product mfg	-	8	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	g	D	D	D	D	D	D	D	D
GREENWOOD, IN													
31-33	Manufacturing	-	45	10	1 013	36 074	605	1 271	17 217	78 753	198 170	289 611	10 534

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMMOND, IN													
31-33	Manufacturing	-	76	40	4 195	171 427	3 241	7 068	110 610	556 299	908 777	1 468 048	40 022
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	5	831	50 388	678	1 681	33 086	220 289	289 516	514 855	D
331	Primary metal mfg	-	5	4	608	28 989	462	1 038	21 158	72 994	160 223	234 531	D
332	Fabricated metal product mfg	-	24	9	692	24 171	546	1 099	17 467	65 446	133 639	191 999	2 099
HARTFORD CITY, IN													
31-33	Manufacturing	1	20	13	1 543	46 274	1 258	2 622	31 788	119 545	134 194	228 976	8 393
332	Fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
HUNTINGBURG, IN													
31-33	Manufacturing	1	18	11	1 962	44 378	1 734	3 889	36 842	104 046	142 046	239 485	6 856
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	6	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	5	3	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	5	3	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	4	3	f	D	D	D	D	D	D	D	D
HUNTINGTON, IN													
31-33	Manufacturing	-	56	34	6 337	174 980	4 649	9 548	99 092	578 614	528 480	1 105 599	36 797
332	Fabricated metal product mfg	-	11	7	997	24 825	724	1 134	13 205	73 633	55 475	127 448	6 955
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	6	1 927	49 974	1 382	2 887	25 497	111 895	121 726	236 514	8 746
3344	Semiconductor & other electronic component mfg	-	4	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	5	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANAPOLIS, IN (CC) *												
31-33	Manufacturing	-	1 094	397									517 000
311	Food mfg	-	44	23	h	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	4	3		1 025	43 920	775	1 763	32 552	315 644	238 680	546 291
31122	Starch & vegetable fats & oils mfg	-	2	2	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	17	7	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	16	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	8	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	10	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	8	9	6	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	8	9	6	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	6	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	19	8	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	23	20	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	22	19	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	13	11	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	10	8	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	205	53	4 971	146 820	3 650	6 943	90 702	379 617	345 232	723 833	22 107
3231	Printing & related support activities	-	205	53	4 971	146 820	3 650	6 943	90 702	379 617	345 232	723 833	22 107
32311	Printing	-	170	36	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	80	21	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	15	2	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	3	35	17	g	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	3	13	8	f	D	D	D	D	D	D	D	D
323122	Prepress services	3	22	9	507	18 130	360	696	9 939	35 016	8 322	43 421	D
325	Chemical mfg	-	52	23	i	D	D	D	D	D	D	D	99 383
3251	Basic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	9	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	9	4	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	7	2	h	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	46	18	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	31	16	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	18	10	956	23 738	749	1 469	14 768	63 987	60 706	124 491	5 672
326199	All other plastics product mfg	-	16	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	38	14	1 069	33 373	747	1 573	19 941	78 934	89 314	169 305	D
3273	Cement & concrete product mfg	1	22	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANAPOLIS, IN (CC) *—Con. Manufacturing— Con.												
331	Primary metal mfg	—	14	11	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	9	6	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	5	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	239	94	8 993	303 843	6 848	13 890	193 805	788 453	506 614	1 331 110	42 577
3323	Architectural & structural metals mfg	1	49	24	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	32	17	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	21	13	g	D	D	D	D	D	D	D	D
3325	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
33251	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
332510	Hardware mfg	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	87	25	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	75	20	g	D	D	D	D	D	D	D	D
332710	Machine shops	1	75	20	g	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	—	12	5	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg	—	7	4	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	1	45	17	g	D	D	D	D	D	D	D	4 850
33281	Coating, engraving, heat treating, & allied activities	1	45	17	g	D	D	D	D	D	D	D	4 850
332813	Electroplating, plating, polishing, anodizing, & coloring	1	21	9	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	30	13	1 580	58 201	1 182	2 421	37 680	193 719	139 020	369 405	D
33299	All other fabricated metal product mfg	—	23	8	g	D	D	D	D	D	D	D	2 753
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	112	43	7 778	312 041	5 599	10 565	204 823	795 249	1 259 747	2 055 462	48 665
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	7	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	41	9	f	D	D	D	D	D	D	D	3 360
33351	Metalworking machinery mfg	1	41	9	f	D	D	D	D	D	D	D	3 360
3336	Engine, turbine, & power transmission equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	32	17	1 608	62 432	996	2 184	31 255	127 944	157 829	288 199	D
33391	Pump & compressor mfg	—	7	5	534	27 067	227	386	9 089	40 558	63 173	110 200	D
33392	Material handling equipment mfg	3	12	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	37	15	1 535	42 300	918	1 851	19 788	87 676	73 344	160 378	D

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31-33	INDIANAPOLIS, IN (CC) *—Con. Manufacturing— Con.												
336	Transportation equipment mfg	-	42	19	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	27	13	7 172	410 184	6 219	13 977	344 560	1 067 454	1 101 582	2 191 590	111 697
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	4	3	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	4	3	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	4	4	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	40	12	1 335	40 304	1 013	2 011	24 882	92 280	65 889	157 856	2 815
3371	Household & institutional furniture & kitchen cabinet mfg	-	21	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	13	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	15	8	f	D	D	D	D	D	D	D	870
33721	Office furniture (including fixtures) mfg	1	15	8	f	D	D	D	D	D	D	D	870
339	Miscellaneous mfg	1	109	24	2 150	59 935	1 511	2 773	34 504	181 219	90 230	273 301	D
3391	Medical equipment & supplies mfg	1	51	11	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	1	51	11	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	58	13	g	D	D	D	D	D	D	D	D
31-33	INDIANAPOLIS CITY (BALANCE), IN *												
31-33	Manufacturing	-	1 093	397	59 135	2 525 515	41 838	86 238	1 565 380	11 048 165	7 297 218	17 918 825	517 000
311	Food mfg	-	44	23	h	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	4	3	1 025	43 920	775	1 763	32 552	315 644	238 680	546 291	D
31122	Starch & vegetable fats & oils mfg	-	2	2	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	17	7	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	16	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	8	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	10	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	8	9	6	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	8	9	6	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	6	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	19	8	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	23	20	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	22	19	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	13	11	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	10	8	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANAPOLIS CITY (BALANCE), IN *—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	-	205	53	4 971	146 820	3 650	6 943	90 702	379 617	345 232	723 833	22 107
3231	Printing & related support activities.....	-	205	53	4 971	146 820	3 650	6 943	90 702	379 617	345 232	723 833	22 107
32311	Printing.....	-	170	36	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	-	80	21	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing.....	-	15	2	f	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	3	35	17	g	D	D	D	D	D	D	D	D
323121	Tradebinding & related work.....	3	13	8	f	D	D	D	D	D	D	D	D
323122	Prepress services.....	3	22	9	507	18 130	360	696	9 939	35 016	8 322	43 421	D
325	Chemical mfg.....	-	52	23	i	D	D	D	D	D	D	D	99 383
3251	Basic chemical mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	9	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	9	4	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	7	2	h	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	46	18	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	1	31	16	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	18	10	956	23 738	749	1 469	14 768	63 987	60 706	124 491	5 672
326199	All other plastics product mfg.....	-	16	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	38	14	1 069	33 373	747	1 573	19 941	78 934	89 314	169 305	D
3273	Cement & concrete product mfg.....	1	22	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	14	11	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding.	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	9	6	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries.	-	5	5	g	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	239	94	8 993	303 843	6 848	13 890	193 805	788 453	506 614	1 331 110	42 577
3323	Architectural & structural metals mfg.....	1	49	24	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	1	32	17	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg.	1	21	13	g	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
33251	Hardware mfg.....	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
332510	Hardware mfg.....	1	5	4	1 531	57 975	1 234	2 509	36 006	199 953	85 628	284 702	8 880
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	87	25	g	D	D	D	D	D	D	D	D
33271	Machine shops.....	1	75	20	g	D	D	D	D	D	D	D	D
332710	Machine shops.....	1	75	20	g	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg.....	-	12	5	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	1	45	17	g	D	D	D	D	D	D	D	4 850
33281	Coating, engraving, heat treating, & allied activities.....	1	45	17	g	D	D	D	D	D	D	D	4 850
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	21	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	INDIANAPOLIS CITY (BALANCE), IN *—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	30	13	1 580	58 201	1 182	2 421	37 680	193 719	139 020	369 405	D
33299	All other fabricated metal product mfg	—	23	8	g	D	D	D	D	D	D	D	2 753
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	112	43	7 778	312 041	5 599	10 565	204 823	795 249	1 259 747	2 055 462	48 665
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	8	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	7	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	41	9	f	D	D	D	D	D	D	D	3 360
33351	Metalworking machinery mfg	1	41	9	f	D	D	D	D	D	D	D	3 360
3336	Engine, turbine, & power transmission equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	11	4	h	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	32	17	1 608	62 432	996	2 184	31 255	127 944	157 829	288 199	D
33391	Pump & compressor mfg	—	7	5	534	27 067	227	386	9 089	40 558	63 173	110 200	D
33392	Material handling equipment mfg	3	12	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	37	15	1 535	42 300	918	1 851	19 788	87 676	73 344	160 378	D
336	Transportation equipment mfg	—	42	19	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	27	13	7 172	410 184	6 219	13 977	344 560	1 067 454	1 101 582	2 191 590	111 697
33631	Motor vehicle gasoline engine & engine parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	4	2	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	4	3	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	4	3	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	4	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	4	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	4	4	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	40	12	1 335	40 304	1 013	2 011	24 882	92 280	65 889	157 856	2 815
3371	Household & institutional furniture & kitchen cabinet mfg	—	21	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	13	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	15	8	f	D	D	D	D	D	D	D	870
33721	Office furniture (including fixtures) mfg	1	15	8	f	D	D	D	D	D	D	D	870

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INDIANAPOLIS CITY (BALANCE), IN *—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	109	24	2 150	59 935	1 511	2 773	34 504	181 219	90 230	273 301	D
3391	Medical equipment & supplies mfg.....	1	51	11	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	1	51	11	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	1	58	13	g	D	D	D	D	D	D	D	D
	JASPER, IN												
31-33	Manufacturing	—	52	33	7 686	210 683	6 331	14 065	159 798	474 014	473 573	947 533	36 217
321	Wood product mfg.....	—	10	6	740	18 133	642	1 337	15 284	28 812	60 208	88 651	3 531
326	Plastics & rubber products mfg.....	1	4	4	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use.....	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	—	2	1	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	17	16	3 678	102 033	3 099	6 718	79 080	235 840	178 445	413 511	12 444
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	10	9	1 665	47 103	1 401	3 147	36 037	111 739	75 847	185 597	D
33712	Household & institutional furniture mfg.....	—	6	6	g	D	D	D	D	D	D	D	4 573
337121	Upholstered household furniture mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	—	7	7	2 013	54 930	1 698	3 571	43 043	124 101	102 598	227 914	D
33721	Office furniture (including fixtures) mfg.....	—	7	7	2 013	54 930	1 698	3 571	43 043	124 101	102 598	227 914	D
337211	Wood office furniture mfg.....	—	6	6	g	D	D	D	D	D	D	D	D
	JEFFERSONVILLE, IN												
31-33	Manufacturing	—	75	33	3 671	105 307	2 904	5 682	72 153	252 575	321 411	583 988	18 530
336	Transportation equipment mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	—	2	2	g	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	—	2	2	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	—	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENDALLVILLE, IN													
31-33	Manufacturing	-	48	29	4 528	125 258	3 661	7 392	92 149	424 341	423 962	850 107	26 658
311	Food mfg	-	4	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	5		564	16 187	478	1 033	12 349	34 314	29 166	63 201
336	Transportation equipment mfg	-	3	3		676	19 129	550	1 150	13 758	62 958	86 699	151 694
3363	Motor vehicle parts mfg ...	-	3	3		676	19 129	550	1 150	13 758	62 958	86 699	151 694
KNOX, IN													
31-33	Manufacturing	-	6	4	642	12 871	543	947	9 115	36 430	29 249	65 449	2 897
KOKOMO, IN													
31-33	Manufacturing	-	66	24	j	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	4	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	4	j	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	4	4	j	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	4	4	j	D	D	D	D	D	D	D	D
LAFAYETTE, IN													
31-33	Manufacturing	-	71	36	j	D	D	D	D	D	D	D	291 338
311	Food mfg	-	8	5	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	f	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	17	7		539	14 045	410	706	9 297	38 139	24 257	62 609
333	Machinery mfg	-	4	2	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAFAYETTE, IN—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	h	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	h	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	h	D	D	D	D	D	D	D	D
LA PORTE, IN													
31-33	Manufacturing	-	60	30	4 204	137 468	3 298	6 667	88 449	308 059	266 145	571 244	19 643
331	Primary metal mfg	-	4	4	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	4	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	3	3	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	8	731	22 097	610	1 207	16 310	50 031	43 234	92 054	2 029
LAWRENCE, IN *													
31-33	Manufacturing	2	30	8	626	19 564	502	957	12 110	30 313	29 493	61 896	D
LAWRENCEBURG, IN													
31-33	Manufacturing	-	14	6	1 076	45 913	873	1 615	33 752	98 577	66 674	142 885	9 823
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31214	Distilleries	-	1	1	f	D	D	D	D	D	D	D	D
312140	Distilleries	-	1	1	f	D	D	D	D	D	D	D	D
LEBANON, IN													
31-33	Manufacturing	-	32	13	1 137	30 512	877	1 559	19 508	71 396	53 507	124 552	2 032
LIGONIER, IN													
31-33	Manufacturing	-	29	16	3 157	93 659	2 608	5 296	68 479	193 639	273 440	469 046	21 262
326	Plastics & rubber products mfg	1	5	5	948	25 533	848	1 788	20 018	62 157	40 909	102 262	7 657
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	1 217	42 820	964	1 880	30 659	53 686	144 461	200 977	11 470
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
LOGANSPORT, IN													
31-33	Manufacturing	1	35	20	2 529	80 561	2 094	4 537	60 068	202 466	192 283	391 741	20 523
326	Plastics & rubber products mfg	-	4	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	6	6	1 153	36 510	959	2 024	27 933	97 534	77 401	174 821	D
3363	Motor vehicle parts mfg ...	1	6	6	1 153	36 510	959	2 024	27 933	97 534	77 401	174 821	D
33637	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
LOWELL, IN													
31-33	Manufacturing	-	11	5	861	26 890	694	1 389	19 852	99 787	61 041	160 668	7 870

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON, IN													
31-33	Manufacturing	-	31	12	3 183	83 141	2 455	4 938	57 339	230 263	269 076	500 205	28 057
333	Machinery mfg	1	7	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARION, IN													
31-33	Manufacturing	-	56	29	8 037	356 558	6 841	14 559	288 297	642 317	899 775	1 536 959	82 451
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	4	2 867	173 598	2 526	5 530	147 697	198 310	269 499	470 591	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
MARTINSVILLE, IN													
31-33	Manufacturing	8	26	7	1 611	45 880	1 263	2 653	26 247	166 775	121 978	288 901	8 562
334	Computer & electronic product mfg	9	1	1	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
MERRILLVILLE, IN													
31-33	Manufacturing	1	35	13	641	17 704	447	810	10 187	44 774	39 166	82 055	10 402

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MICHIGAN CITY, IN													
31-33	Manufacturing	-	69	40	4 621	153 295	3 055	6 504	85 917	516 876	440 220	946 910	46 296
332	Fabricated metal product mfg	-	23	11	760	21 701	532	1 034	11 752	78 679	57 031	134 776	8 075
333	Machinery mfg	-	9	8	1 188	49 728	745	1 653	26 953	209 678	187 018	386 306	6 523
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
MISHAWAKA, IN													
31-33	Manufacturing	1	128	48	5 253	162 913	3 846	7 937	99 997	360 347	279 105	636 499	28 036
326	Plastics & rubber products mfg	-	15	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	12	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	8	1 237	32 555	973	2 191	21 220	74 698	62 466	135 638	10 848
326199	All other plastics product mfg	-	10	8	1 237	32 555	973	2 191	21 220	74 698	62 466	135 638	10 848
331	Primary metal mfg	-	5	4	g	D	D	D	D	D	D	D	2 040
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	34	15	924	27 653	710	1 310	18 288	58 873	35 698	93 946	4 687
336	Transportation equipment mfg	1	6	4	502	13 104	331	779	7 147	15 652	15 337	29 880	D
MITCHELL, IN													
31-33	Manufacturing	-	10	7	1 449	31 562	1 184	2 125	22 335	104 139	94 851	200 712	6 569
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONTICELLO, IN													
31-33	Manufacturing	-	20	9	1 291	39 410	1 076	2 001	29 442	144 018	200 866	340 850	12 517
332	Fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	6 147
MOORESVILLE, IN													
31-33	Manufacturing	6	22	10	995	26 049	638	1 206	15 735	66 143	86 283	152 749	4 794
MUNCIE, IN													
31-33	Manufacturing	-	109	54	7 185	302 387	5 283	10 938	191 769	614 293	689 586	1 305 561	52 307
332	Fabricated metal product mfg	1	39	17	1 058	31 018	793	1 595	20 242	91 162	65 175	152 939	D
333	Machinery mfg	-	18	9	807	38 408	524	1 187	21 127	88 822	28 184	119 207	D
336	Transportation equipment mfg	-	7	6	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	7	6	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NAPPANEE, IN *													
31-33	Manufacturing	-	30	21	3 824	108 934	3 141	6 327	74 491	258 584	516 905	778 534	5 770
321	Wood product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	4	4	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	4	4	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	8	1 684	49 357	1 404	2 990	31 570	123 153	290 272	411 787	1 599
3362	Motor vehicle body & trailer mfg	-	7	6	1 601	46 805	1 346	2 844	29 707	117 333	278 574	394 331	D
33621	Motor vehicle body & trailer mfg	-	7	6	1 601	46 805	1 346	2 844	29 707	117 333	278 574	394 331	D
336213	Motor home mfg	-	2	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	4	3	f	D	D	D	D	D	D	D	D
NEW ALBANY, IN													
31-33	Manufacturing	1	100	54	6 779	188 183	5 440	11 534	130 805	634 275	535 009	1 168 694	D
311	Food mfg	-	7	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	4	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	10	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	10	4	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	4	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	5	5	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	8	5	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	9	4	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	20	12	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	7	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	5	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	5	3	f	D	D	D	D	D	D	D	D
NEW CASTLE, IN													
31-33	Manufacturing	-	20	9	2 607	139 163	2 172	5 515	115 271	212 960	338 901	547 968	23 411
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW HAVEN, IN													
31-33	Manufacturing	-	43	25	2 718	66 790	2 106	4 170	45 256	168 640	127 778	294 011	18 732
326	Plastics & rubber products mfg	-	3	3	501	12 147	428	911	9 169	25 324	23 842	49 440	D
333	Machinery mfg	-	11	7	871	20 905	727	1 345	14 452	50 562	32 035	83 088	11 682
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
NOBLESVILLE, IN													
31-33	Manufacturing	-	38	11	1 419	45 506	1 118	2 138	29 168	201 491	90 368	292 662	4 825
326	Plastics & rubber products mfg	-	4	4	801	26 291	647	1 234	17 075	160 568	60 178	221 722	1 583
NORTH MANCHESTER, IN													
31-33	Manufacturing	-	14	11	1 388	34 958	1 165	2 316	24 678	74 926	70 401	145 825	2 891
NORTH VERNON, IN													
31-33	Manufacturing	-	29	17	1 995	43 673	1 669	3 406	32 995	121 017	107 781	227 205	26 513
326	Plastics & rubber products mfg	-	6	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
PAOLI, IN													
31-33	Manufacturing	1	11	7	828	13 917	721	1 398	11 331	26 729	41 151	67 701	725
PERU, IN													
31-33	Manufacturing	-	36	18	2 195	57 694	1 537	2 953	38 748	215 746	148 565	365 001	5 845
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
PLYMOUTH, IN													
31-33	Manufacturing	1	46	32	2 796	78 380	2 194	4 556	53 573	310 255	335 981	645 003	23 366
326	Plastics & rubber products mfg	-	4	3	647	16 798	525	1 035	11 821	59 531	31 131	91 109	5 102
3261	Plastics product mfg	-	4	3	647	16 798	525	1 035	11 821	59 531	31 131	91 109	5 102
PORTAGE, IN													
31-33	Manufacturing	-	22	9	2 172	112 586	1 623	3 311	85 028	359 426	761 048	1 124 504	D
331	Primary metal mfg	-	3	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
PORTLAND, IN													
31-33	Manufacturing	1	26	19	2 357	51 504	1 946	3 789	38 357	135 937	245 216	383 692	D
332	Fabricated metal product mfg	-	6	3	g	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PRINCETON, IN													
31-33	Manufacturing	-	19	9	1 338	33 308	1 153	2 444	26 737	72 262	48 176	122 031	5 141
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	4	2	f	D	D	D	D	D	D	D	D
RENSSELAER, IN													
31-33	Manufacturing	-	13	7	834	17 678	710	1 448	12 591	94 314	84 435	178 708	15 561
RICHMOND, IN													
31-33	Manufacturing	1	95	61	8 093	250 083	6 519	13 378	174 514	660 737	839 953	1 500 169	66 058
311	Food mfg	-	7	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	7	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	6	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	7	6	897	31 137	743	1 706	24 187	65 752	60 405	127 912	12 442
3315	Foundries	-	6	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	10	1 025	36 879	813	1 491	22 423	59 845	88 308	153 932	D
334	Computer & electronic product mfg	3	3	2	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	3	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	3	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	7	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	14	9	551	14 870	416	899	10 899	44 278	38 802	83 069	2 664
3399	Other miscellaneous mfg ..	1	12	9	f	D	D	D	D	D	D	D	D
ROCHESTER, IN													
31-33	Manufacturing	3	29	15	1 725	44 984	1 422	3 173	33 769	97 025	153 720	251 625	4 365
RUSHVILLE, IN													
31-33	Manufacturing	-	16	5	733	22 311	531	1 216	14 290	167 203	77 514	244 890	3 884

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SALEM, IN													
31-33	Manufacturing	-	19	8	2 335	55 178	2 039	3 859	44 575	122 334	112 965	234 588	5 765
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
SCHERERVILLE, IN													
31-33	Manufacturing	4	16	6	579	21 754	378	787	10 851	59 243	43 806	99 700	5 378
SCOTTSBURG, IN													
31-33	Manufacturing	-	18	12	1 777	44 971	1 423	2 856	31 852	102 872	91 539	194 886	13 742
326	Plastics & rubber products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
SELLERSBURG, IN													
31-33	Manufacturing	1	11	7	799	20 831	615	1 331	13 205	47 656	68 618	117 621	3 313
SEYMOUR, IN													
31-33	Manufacturing	-	56	28	5 105	160 335	3 960	8 429	103 788	492 572	596 865	1 083 327	42 389
332	Fabricated metal product mfg	-	7	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	4	f	D	D	D	D	D	D	D	4 257
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBYVILLE, IN													
31-33	Manufacturing	-	53	32	5 113	171 612	3 852	8 281	112 906	383 386	355 985	740 155	69 196
326	Plastics & rubber products mfg	-	7	6	1 522	44 321	1 047	2 139	25 588	61 547	76 236	136 096	10 771
3261	Plastics product mfg	1	5	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	4	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	4	4	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	4	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
SOUTH BEND, IN													
31-33	Manufacturing	-	200	84	10 066	361 796	6 627	13 180	190 843	956 514	899 610	1 850 062	85 041
326	Plastics & rubber products mfg	-	14	7	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	12	7	834	23 200	715	1 369	15 632	60 762	109 688	171 856	4 859
32619	Other plastics product mfg	-	12	7	834	23 200	715	1 369	15 632	60 762	109 688	171 856	4 859
326199	All other plastics product mfg	-	12	7	834	23 200	715	1 369	15 632	60 762	109 688	171 856	4 859
332	Fabricated metal product mfg	-	53	25	2 135	67 170	1 588	3 245	42 651	139 229	203 754	340 905	18 117
3328	Coating, engraving, heat treating, & allied activities	-	6	4	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	6	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	23	8	763	31 454	499	1 036	16 907	56 909	33 741	93 978	3 193
334	Computer & electronic product mfg	7	5	4	730	12 654	447	952	5 152	22 375	23 032	46 308	D
3344	Semiconductor & other electronic component mfg	9	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	2	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	9	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	6	2 475	120 952	1 222	2 431	48 792	410 530	174 034	580 805	D
3363	Motor vehicle parts mfg	1	6	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
SPEEDWAY, IN *													
31-33	Manufacturing	-	18	9	4 822	288 869	3 001	7 313	188 474	729 135	504 439	1 232 294	66 492
336	Transportation equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPENCER, IN													
31-33	Manufacturing	-	11	4	1 095	28 453	750	1 515	15 933	45 554	47 417	94 073	6 711
339	Miscellaneous mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
SYRACUSE, IN													
31-33	Manufacturing	-	17	10	1 852	65 495	1 587	3 277	50 276	181 121	270 458	449 317	16 637
336	Transportation equipment mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
TELL CITY, IN													
31-33	Manufacturing	-	14	5	765	20 444	699	1 127	17 636	39 698	40 245	79 141	1 931
TERRE HAUTE, IN													
31-33	Manufacturing	-	92	42	5 998	200 279	4 552	9 348	137 581	788 416	611 878	1 398 421	63 481
322	Paper mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	12	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	2	2	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media.	-	1	1	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	-	1	1	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg.	-	1	1	g	D	D	D	D	D	D	D	D
TIPTON, IN													
31-33	Manufacturing	2	11	6	821	27 621	644	1 350	18 787	76 490	110 822	184 553	D
UNION CITY, IN													
31-33	Manufacturing	-	7	2	f	D	D	D	D	D	D	D	D
VALPARAISO, IN													
31-33	Manufacturing	-	54	18	2 134	82 382	1 567	3 250	52 937	276 909	279 982	552 250	30 694
332	Fabricated metal product mfg.....	-	9	5	1 016	41 166	736	1 553	27 250	147 535	121 261	266 951	9 596
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
VINCENNES, IN													
31-33	Manufacturing	-	25	10	1 281	35 887	1 013	1 947	25 370	92 644	144 771	237 587	14 217
327	Nonmetallic mineral product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WABASH, IN													
31-33	Manufacturing	-	32	18	2 900	87 462	2 346	4 439	61 542	177 477	184 852	357 746	16 276
332	Fabricated metal product mfg	-	4	3	864	30 713	676	1 430	21 282	69 786	40 652	109 033	880
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
WARSAW, IN													
31-33	Manufacturing	-	50	28	8 065	307 347	5 808	11 791	174 074	966 257	671 518	1 652 793	47 567
323	Printing & related support activities	-	5	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	5	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	5	1	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	8	3	h	D	D	D	D	D	D	D	15 971
3391	Medical equipment & supplies mfg	-	6	3	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	3	h	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	3	h	D	D	D	D	D	D	D	15 854
WASHINGTON, IN													
31-33	Manufacturing	-	13	7	1 353	26 123	1 110	2 363	19 515	95 059	190 772	286 599	D
311	Food mfg	-	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
WESTFIELD, IN													
31-33	Manufacturing	-	16	8	1 179	36 792	827	1 362	18 339	80 886	54 093	136 491	10 090
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
WEST LAFAYETTE, IN													
31-33	Manufacturing	-	20	5	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	1	1	f	D	D	D	D	D	D	D	D
WHITING, IN													
31-33	Manufacturing	-	9	5	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	3	3	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	3	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
WINCHESTER, IN													
31-33	Manufacturing	2	16	11	1 064	34 870	879	1 650	26 752	85 762	51 984	142 198	3 711

Table 4. Industry Statistics for Places: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
INDIANA		INDIANA—Con.	
Companies ¹	8 323	Quantity of electricity purchased for heat and power	1,000 kWh.. 33 113 387
All establishments	9 303	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 3 276 201
Establishments with 1 to 19 employees	5 357	Total value of shipments	\$1,000.. 142 270 702
Establishments with 20 to 99 employees	2 617	Value of resales	\$1,000.. 4 027 603
Establishments with 100 employees or more	1 329	Value added	\$1,000.. 67 210 944
All employees	625 692	Total inventories, beginning of year	\$1,000.. 14 406 482
Total compensation ²	\$1,000.. 28 483 753	Finished goods inventories, beginning of year	\$1,000.. 5 054 872
Annual payroll	\$1,000.. 22 121 447	Work-in-process inventories, beginning of year	\$1,000.. 3 784 601
Total fringe benefits	\$1,000.. 6 362 306	Materials and supplies inventories, beginning of year	\$1,000.. 5 567 009
Production workers, average for year	478 248	Total inventories, end of year	\$1,000.. 14 953 513
Production workers on March 12	476 049	Finished goods inventories, end of year	\$1,000.. 5 176 584
Production workers on May 12	478 580	Work-in-process inventories, end of year	\$1,000.. 4 307 948
Production workers on August 12	478 618	Materials and supplies inventories, end of year	\$1,000.. 5 468 981
Production workers on November 12	479 745	Gross book value of total assets at beginning of year	\$1,000.. 58 682 435
Production-worker hours	1,000.. 981 408	Total capital expenditures (new and used)	\$1,000.. 5 548 626
Production-worker wages	\$1,000.. 14 956 506	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 780 951
Total cost of materials	\$1,000.. 75 652 832	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 4 767 675
Cost of materials, parts, containers, etc., consumed	\$1,000.. 68 620 456	Total retirements ²	\$1,000.. 1 768 914
Cost of resales	\$1,000.. 2 837 102	Gross book value of total assets at end of year	\$1,000.. 62 462 147
Cost of fuels	\$1,000.. 988 511	Total depreciation during year ²	\$1,000.. 3 803 587
Cost of purchased electricity	\$1,000.. 1 398 852	Total rental payments ²	\$1,000.. 931 337
Cost of contract work	\$1,000.. 1 807 911	Buildings and other structures rental payments ²	\$1,000.. 354 099
		Machinery and equipment rental payments ²	\$1,000.. 577 235

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

INDIANA

Batesville is in Franklin and Ripley Counties.

Beach Grove. See “Indianapolis (consolidated city).”

Chesterfield is in Delaware and Madison Counties.

Cumberland is in Hancock and Marion Counties; see “Indianapolis (consolidated city).”

Dunkirk is in Blackford and Jay Counties.

Edinburgh is in Bartholomew and Johnson Counties.

Elwood is in Madison and Tipton Counties.

Indianapolis (balance). See “Indianapolis (consolidated city).”

Indianapolis (consolidated city) includes all of Marion County except Beech Grove, Lawrence, Southport, and Speedway, which are tabulated separately. The consolidated city includes Cumberland (part in Marion County), which also is tabulated separately. “Indianapolis (balance),” which is a place equivalent, includes Clermont, Crows Nest, Homecroft, Meridian Hills, North Crows Nest, Rocky Ripple, Spring Hill, Warren Park, Williams Creek, and Wynnedale, which are not populous enough for separate tabulation.

Lawrence. See “Indianapolis (consolidated city).”

Nappanee is in Elkhart and Kosciusko Counties.

Southport. See “Indianapolis (consolidated city).”

Speedway. See “Indianapolis (consolidated city).”

Appendix E. Metropolitan Areas

INDIANA

Bloomington, IN MSA

Monroe County, IN

Chicago—Gary—Kenosha, IL—IN—WI CMSA

Chicago, IL PMSA

Cook County, IL

DeKalb County, IL

DuPage County, IL

Grundy County, IL

Kane County, IL

Kendall County, IL

Lake County, IL

McHenry County, IL

Will County, IL

Gary, IN PMSA

Lake County, IN

Porter County, IN

Kankakee, IL PMSA

Kankakee County, IL

Kenosha, WI PMSA

Kenosha County, WI

Cincinnati, OH—KY—IN PMSA

Dearborn County, IN

Ohio County, IN

Boone County, KY

Campbell County, KY

Gallatin County, KY

Grant County, KY

Kenton County, KY

Pendleton County, KY

Brown County, OH

Clermont County, OH

Cincinnati, OH—KY—IN PMSA—Con.

Hamilton County, OH

Warren County, OH

Cincinnati—Hamilton, OH—KY—IN CMSA

Cincinnati, OH—KY—IN PMSA

Dearborn County, IN

Ohio County, IN

Boone County, KY

Campbell County, KY

Gallatin County, KY

Grant County, KY

Kenton County, KY

Pendleton County, KY

Brown County, OH

Clermont County, OH

Hamilton County, OH

Warren County, OH

Hamilton—Middletown, OH PMSA

Butler County, OH

Elkhart—Goshen, IN MSA

Elkhart County, IN

Evansville—Henderson, IN—KY MSA

Posey County, IN

Vanderburgh County, IN

Warrick County, IN

Henderson County, KY

Fort Wayne, IN MSA

Adams County, IN

Allen County, IN

De Kalb County, IN

Huntington County, IN

Wells County, IN

Whitley County, IN

Gary, IN PMSA

Lake County, IN

Porter County, IN

Indianapolis, IN MSA

Boone County, IN

Hamilton County, IN

Hancock County, IN

Hendricks County, IN

Johnson County, IN

Madison County, IN

Marion County, IN

Morgan County, IN

Shelby County, IN

Kokomo, IN MSA

Howard County, IN

Tipton County, IN

Lafayette, IN MSA

Clinton County, IN

Tippecanoe County, IN

Louisville, KY—IN MSA

Clark County, IN

Floyd County, IN

Harrison County, IN

Scott County, IN

Bullitt County, KY

Jefferson County, KY

Oldham County, KY

Muncie, IN MSA

Delaware County, IN

South Bend, IN MSA

St. Joseph County, IN

Terre Haute, IN MSA

Clay County, IN

Vermillion County, IN

Vigo County, IN

Kansas

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
KANSAS													
31-33	Manufacturing	-	3 309	1 151	193 742	6 532 458	141 169	289 801	4 052 455	17 650 640	29 196 131	46 296 431	1 460 240
311	Food mfg.....	-	304	116	30 934	793 013	24 809	55 419	568 486	2 463 226	10 012 242	12 459 037	162 670
3111	Animal food mfg.....	-	64	22	1 834	59 305	1 310	3 055	39 745	252 030	567 932	819 188	20 134
31111	Animal food mfg.....	-	64	22	1 834	59 305	1 310	3 055	39 745	252 030	567 932	819 188	20 134
311111	Dog & cat food mfg....	1	11	7	729	28 000	591	1 214	21 834	164 741	221 460	386 595	13 491
311119	Other animal food mfg.....	-	53	15	1 105	31 305	719	1 841	17 911	87 289	346 472	432 593	6 643
3112	Grain & oilseed milling	-	41	28	1 990	67 556	1 432	3 211	41 751	224 909	1 341 518	1 570 229	15 795
31121	Flour milling & malt mfg .	-	28	17	927	30 963	626	1 488	18 165	103 842	466 258	569 451	6 833
311211	Flour milling	-	28	17	927	30 963	626	1 488	18 165	103 842	466 258	569 451	6 833
31122	Starch & vegetable fats & oils mfg	-	9	8	796	28 245	600	1 326	18 148	41 797	850 544	896 780	6 987
311221	Wet corn milling	-	3	3	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	4	3	201	7 249	139	262	3 933	7 175	611 757	611 703	2 606
311225	Fats & oils refining & blending.....	-	1	1	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	5	4	3	267	8 348	206	397	5 438	79 270	24 716	103 998	1 975
311230	Breakfast cereal mfg..	5	4	3	267	8 348	206	397	5 438	79 270	24 716	103 998	1 975
3113	Sugar & confectionery product mfg.....	-	16	3	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	9	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	9	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	11	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	11	6	588	14 771	462	830	10 250	41 048	190 727	231 290	3 416
31151	Dairy product (except frozen) mfg.....	-	11	6	588	14 771	462	830	10 250	41 048	190 727	231 290	3 416
311511	Fluid milk mfg.....	-	4	3	346	9 512	250	454	6 630	25 889	86 217	111 362	1 957
311512	Creamery butter mfg..	-	1	1	c	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	65	26	17 411	405 481	15 370	35 244	332 567	958 099	7 082 084	8 024 154	63 991
31161	Animal slaughtering & processing.....	-	65	26	17 411	405 481	15 370	35 244	332 567	958 099	7 082 084	8 024 154	63 991
311611	Animal (except poultry) slaughtering	-	39	10	14 116	327 091	12 570	29 642	275 136	658 162	6 401 765	7 044 185	52 074
311612	Meat processed from carcasses	-	20	13	2 574	59 944	2 193	4 403	44 757	233 727	455 199	691 940	9 427
311613	Rendering & meat byproduct processing.....	-	4	2	c	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	71	14	3 805	109 843	1 811	3 617	53 030	458 543	187 371	645 660	15 134
31181	Bread & bakery product mfg.....	-	52	9	2 958	81 892	1 106	2 159	30 822	269 671	101 517	371 259	14 052
311811	Retail bakeries.....	4	33	-	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	18	9	2 827	79 958	1 022	2 058	29 879	266 083	99 002	365 138	13 836
31182	Cookie, cracker, & pasta mfg.....	-	16	5	803	27 095	672	1 403	21 783	186 669	84 309	270 653	748
311821	Cookie & cracker mfg .	-	3	1	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	9	2	c	D	D	D	D	D	D	D	617
311823	Dry pasta mfg.....	-	4	2	c	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	24	14	2 214	70 355	1 633	3 556	35 655	351 041	353 679	703 014	20 537
31191	Snack food mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	5	1	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg....	-	4	3	e	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	11	9	1 054	29 851	673	1 396	12 770	106 076	184 477	289 866	7 281
311991	Perishable prepared food mfg.....	-	4	4	560	11 840	405	839	6 209	46 738	58 601	104 870	3 635
311999	All other miscellaneous food mfg.....	-	7	5	494	18 011	268	557	6 561	59 338	125 876	184 996	3 646
312	Beverage & tobacco product mfg.....	2	23	9	909	29 694	361	788	8 995	111 706	277 132	387 568	13 766
3121	Beverage mfg.....	2	23	9	909	29 694	361	788	8 995	111 706	277 132	387 568	13 766
31211	Soft drink & ice mfg.....	2	17	8	829	28 725	301	716	8 311	106 055	272 281	377 122	13 373
312111	Soft drink mfg.....	2	7	7	720	26 405	254	627	7 218	98 331	270 794	368 275	13 037
313	Textile mills.....	8	11	3	203	3 727	151	252	2 133	5 783	10 968	16 739	1 126
3132	Fabric mills.....	6	7	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills	2	52	12	1 293	25 884	1 026	2 062	17 345	61 359	58 547	120 244	2 866
3149	Other textile product mills . .	2	30	10	1 196	24 209	951	1 941	16 519	57 747	55 928	114 028	2 767
31491	Textile bag & canvas mills	7	12	3	367	6 744	291	580	4 273	11 468	9 578	21 753	486
314912	Canvas & related product mills	6	9	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	18	7	829	17 465	660	1 361	12 246	46 279	46 350	92 275	2 281
314991	Rope, cordage, & twine mills	—	2	1	c	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills . .	1	16	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	45	16	1 490	23 885	1 230	2 280	17 769	60 636	67 039	125 069	1 249
3151	Apparel knitting mills	1	6	2	c	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	1	5	2	c	D	D	D	D	D	D	D	44
315191	Outerwear knitting mills	1	5	2	c	D	D	D	D	D	D	D	44
3152	Cut & sew apparel mfg	—	30	12	1 239	20 065	1 031	2 006	14 890	49 628	54 580	101 660	1 143
31521	Cut & sew apparel contractors	1	15	3	c	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	—	4	3	120	1 936	114	226	1 657	2 715	597	3 250	D
31522	Men's & boys' cut & sew apparel mfg	—	8	5	570	9 530	511	969	7 699	22 699	35 655	56 568	755
315228	Men's & boys' cut & sew other outerwear mfg	—	4	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	4	3	359	5 803	253	536	3 782	18 307	15 901	34 180	229
315232	Women's & girls' cut & sew blouse & shirt mfg	—	1	1	c	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	3	1	c	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	3	1	c	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	10	3	338	6 446	284	585	4 667	14 489	66 898	81 266	1 909
3162	Footwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	1	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	6	1	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	6	1	c	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	2	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	2	101	33	3 152	67 991	2 575	4 765	47 901	152 652	228 882	379 400	7 519
3212	Veneer, plywood, & engineered wood product mfg	2	14	4	267	5 084	224	418	3 508	11 354	14 128	25 480	861
32121	Veneer, plywood, & engineered wood product mfg	2	14	4	267	5 084	224	418	3 508	11 354	14 128	25 480	861
321214	Truss mfg	—	10	4	249	4 501	210	384	3 064	9 255	12 058	21 256	588
3219	Other wood product mfg	1	81	28	2 837	61 886	2 309	4 238	43 562	137 894	208 816	344 634	6 370
32191	Millwork	2	25	6	919	16 500	808	1 533	12 810	34 427	65 401	98 955	1 142
321911	Wood window & door mfg	—	9	2	194	3 815	164	287	2 592	6 550	6 316	12 807	329
321912	Cut stock, resawing lumber, & planing	—	7	2	147	2 961	128	258	2 173	8 785	33 031	41 204	101
321918	Other millwork (including flooring)	4	9	2	578	9 724	516	988	8 045	19 092	26 054	44 944	712
32192	Wood container & pallet mfg	1	25	7	446	9 234	378	684	6 342	20 917	23 448	44 226	895
321920	Wood container & pallet mfg	1	25	7	446	9 234	378	684	6 342	20 917	23 448	44 226	895
32199	All other wood product mfg	1	31	15	1 472	36 152	1 123	2 021	24 410	82 550	119 967	201 453	4 333
321991	Manufactured home (mobile home) mfg	—	4	4	628	17 208	516	853	12 675	44 828	64 447	109 268	636
321992	Prefabricated wood building mfg	5	10	7	626	14 328	443	870	8 753	27 754	43 372	70 082	2 387
321999	All other miscellaneous wood product mfg	1	17	4	218	4 616	164	298	2 982	9 968	12 148	22 103	1 310

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS—Con. Manufacturing—Con.												
322	Paper mfg	-	37	25	3 220	101 688	2 422	5 199	69 416	208 495	338 070	544 885	23 010
3221	Pulp, paper, & paperboard mills	-	1	1	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	c	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	c	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	36	24	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	15	13	1 704	58 341	1 216	2 735	36 626	94 905	192 465	286 474	14 501
322211	Corrugated & solid fiber box mfg	-	8	7	1 378	46 421	960	2 171	28 586	67 574	138 725	205 765	12 437
322215	Nonfolding sanitary food container mfg ...	-	1	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	11	6	715	16 912	580	1 149	12 570	53 872	72 986	126 727	2 180
322221	Coated & laminated packaging paper & plastics film mfg	-	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	5	2	202	5 487	119	262	2 808	15 791	21 409	37 172	534
322224	Uncoated paper & multiwall bag mfg	-	3	2	140	3 726	120	227	3 184	4 954	10 610	15 940	D
32223	Stationery product mfg ...	-	8	4	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	3	3	521	16 120	429	872	12 067	34 615	48 672	82 672	D
323	Printing & related support activities	1	436	104	13 078	375 416	9 617	18 672	235 894	947 768	739 806	1 680 942	62 016
3231	Printing & related support activities	1	436	104	13 078	375 416	9 617	18 672	235 894	947 768	739 806	1 680 942	62 016
32311	Printing	1	398	94	12 285	353 321	9 003	17 518	221 204	893 538	714 672	1 603 870	59 716
323110	Commercial lithographic printing ..	-	206	48	4 565	146 295	3 484	6 501	90 858	425 346	316 265	740 772	32 528
323112	Commercial flexographic printing ..	-	14	8	859	24 757	593	1 541	15 507	56 103	91 004	145 425	4 241
323113	Commercial screen printing	3	50	14	2 231	63 772	1 666	3 494	34 881	129 395	98 789	228 667	8 505
323114	Quick printing	2	65	4	393	8 768	275	437	5 230	17 141	10 326	27 427	848
323116	Manifold business form printing	-	20	12	2 808	75 085	1 932	3 451	51 531	160 252	168 511	328 490	9 791
323117	Book printing	-	9	4	1 000	24 531	717	1 476	17 252	77 010	13 426	89 837	1 852
323119	Other commercial printing	1	23	2	298	7 805	233	451	4 225	22 159	11 554	32 276	1 673
32312	Support activities for printing	5	38	10	793	22 095	614	1 154	14 690	54 230	25 134	77 072	2 300
323121	Tradebinding & related work	7	11	5	475	10 353	391	760	7 085	32 904	20 097	50 588	888
323122	Prepress services	-	27	5	318	11 742	223	394	7 605	21 326	5 037	26 484	1 412
324	Petroleum & coal products mfg	-	24	13	2 004	92 025	1 324	2 635	56 292	420 069	2 452 698	2 854 680	116 752
3241	Petroleum & coal products mfg	-	24	13	2 004	92 025	1 324	2 635	56 292	420 069	2 452 698	2 854 680	116 752
32411	Petroleum refineries ..	-	5	5	1 431	73 178	924	1 834	44 395	347 733	2 313 252	2 642 428	107 950
324110	Petroleum refineries ..	-	5	5	1 431	73 178	924	1 834	44 395	347 733	2 313 252	2 642 428	107 950
32412	Asphalt paving, roofing, & saturated materials mfg	2	12	4	375	12 656	299	623	9 101	49 770	86 526	136 289	3 800
324122	Asphalt shingle & coating materials mfg	1	4	3	305	8 993	246	509	6 797	39 492	62 212	101 639	D
32419	Other petroleum & coal products mfg	5	7	4	198	6 191	101	178	2 796	22 566	52 920	75 963	5 002
324191	Petroleum lubricating oil & grease mfg	5	6	4	c	D	D	D	D	D	D	D	D
325	Chemical mfg	1	128	61	6 647	267 659	4 037	8 245	131 029	1 503 844	1 434 989	2 931 356	158 324
3251	Basic chemical mfg	1	30	11	1 416	72 928	971	1 731	34 600	311 289	346 553	658 082	63 723
32512	Industrial gas mfg	3	12	3	165	7 372	106	233	4 934	91 497	80 200	171 350	D
325120	Industrial gas mfg	3	12	3	165	7 372	106	233	4 934	91 497	80 200	171 350	D
32518	Other basic inorganic chemical mfg	-	8	4	e	D	D	D	D	D	D	D	24 642
325188	All other basic inorganic chemical mfg	-	7	3	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	9	4	829	45 702	579	865	17 498	146 152	185 206	329 846	35 282
325199	All other basic organic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	11	4	392	16 251	280	634	10 987	80 603	123 765	196 783	6 827
32531	Fertilizer mfg	-	7	2	e	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	-	3	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KANSAS—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	4	24	14	2 037	77 422	915	1 901	27 199	485 047	175 178	658 967	26 692
32541	Pharmaceutical & medicine mfg	4	24	14	2 037	77 422	915	1 901	27 199	485 047	175 178	658 967	26 692
325411	Medicinal & botanical mfg	—	5	2	243	8 857	126	342	4 123	42 323	25 769	70 459	2 940
325412	Pharmaceutical preparation mfg	6	7	5	1 090	45 807	427	853	14 071	370 365	111 016	479 287	D
325413	In-vitro diagnostic substance mfg	—	2	1	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	1	10	6	e	D	D	D	D	D	D	D	1 283
3255	Paint, coating, & adhesive mfg	1	20	7	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	1	13	4	314	8 386	220	418	3 445	24 027	30 416	55 100	1 902
325510	Paint & coating mfg	1	13	4	314	8 386	220	418	3 445	24 027	30 416	55 100	1 902
32552	Adhesive mfg	1	7	3	c	D	D	D	D	D	D	D	D
325520	Adhesive mfg	1	7	3	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	13	8	1 015	42 857	708	1 583	27 857	426 493	583 709	1 009 043	16 422
32561	Soap & cleaning compound mfg	—	12	8	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	6	4	f	D	D	D	D	D	D	D	13 454
325612	Polish & other sanitation good mfg ..	—	5	3	281	9 055	177	404	3 555	20 486	47 867	66 687	D
3259	Other chemical product mfg	2	28	16	1 312	44 354	826	1 745	23 312	154 457	139 530	295 452	41 201
32591	Printing ink mfg	—	4	3	c	D	D	D	D	D	D	D	D
325910	Printing ink mfg	—	4	3	c	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	22	11	1 006	33 144	690	1 394	18 168	130 806	107 667	238 709	39 700
325991	Custom compounding of purchased resin ...	—	5	3	198	6 017	150	282	3 538	16 053	36 835	52 943	1 342
325998	All other miscellaneous chemical product & preparation mfg	4	13	8	775	26 373	523	1 086	14 229	112 893	69 225	182 243	38 145
326	Plastics & rubber products mfg	1	150	78	13 168	405 588	10 969	20 014	278 796	1 273 031	1 178 618	2 431 968	78 959
3261	Plastics product mfg	2	124	68	10 109	275 009	8 382	14 744	173 125	857 244	880 216	1 736 486	68 684
32611	Unsupported plastics film, sheet, & bag mfg ..	3	11	10	1 447	36 474	1 185	2 361	23 075	92 219	131 042	221 435	6 698
326111	Unsupported plastics bag mfg	—	5	5	555	14 692	486	926	9 749	52 273	64 301	115 731	D
326112	Unsupported plastics packaging film & sheet mfg	9	1	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	5	5	4	f	D	D	D	D	D	D	D	2 654
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	7	17	11	1 257	32 995	1 035	2 001	25 656	135 121	296 608	428 004	23 216
326121	Unsupported plastics profile shape mfg	9	6	4	768	21 110	650	1 305	16 830	93 914	235 627	324 946	18 841
326122	Plastics pipe & pipe fitting mfg	1	11	7	489	11 885	385	696	8 826	41 207	60 981	103 058	4 375
32614	Polystyrene foam product mfg	—	3	2	c	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	—	3	2	c	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	8	3	526	15 710	460	957	12 648	56 985	41 270	96 737	1 727
326160	Plastics bottle mfg	—	8	3	526	15 710	460	957	12 648	56 985	41 270	96 737	1 727
32619	Other plastics product mfg	—	74	40	6 641	183 960	5 527	9 036	108 359	556 191	395 792	958 096	35 630
326199	All other plastics product mfg	—	71	39	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	26	10	3 059	130 579	2 587	5 270	105 671	415 787	298 402	695 482	10 275
32621	Tire mfg	—	9	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	7	6	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	7	6	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	3	10	2	c	D	D	D	D	D	D	D	123

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg.....	1	208	66	5 815	188 746	4 707	9 488	141 015	661 796	427 728	1 092 540	120 382
3271	Clay product & refractory mfg.....	-	18	7	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg.....	-	8	7	420	10 002	340	538	6 766	32 242	14 854	46 983	2 465
327121	Brick & structural clay tile mfg.....	-	4	4	175	4 357	135	288	2 932	11 587	3 719	15 059	D
327125	Nonclay refractory mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.....	-	18	6	649	20 936	533	1 125	16 003	101 134	48 390	149 198	3 430
32721	Glass & glass product mfg.....	-	18	6	649	20 936	533	1 125	16 003	101 134	48 390	149 198	3 430
327211	Flat glass mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	12	4	e	D	D	D	D	D	D	D	2 170
3273	Cement & concrete product mfg.....	2	140	41	2 860	84 405	2 246	4 549	59 188	205 595	204 509	410 548	21 268
32731	Cement mfg.....	-	4	4	553	22 392	414	911	15 653	55 954	42 358	98 567	6 556
327310	Cement mfg.....	-	4	4	553	22 392	414	911	15 653	55 954	42 358	98 567	6 556
32732	Ready-mix concrete mfg.....	2	95	24	1 479	40 199	1 198	2 388	29 709	98 403	127 910	227 124	9 822
327320	Ready-mix concrete mfg.....	2	95	24	1 479	40 199	1 198	2 388	29 709	98 403	127 910	227 124	9 822
32733	Concrete pipe, brick, & block mfg.....	-	10	4	192	6 145	146	341	4 078	17 632	13 977	31 082	955
327332	Concrete pipe mfg.....	-	5	3	137	4 452	111	269	3 210	14 288	8 826	22 565	451
32739	Other concrete product mfg.....	3	31	9	636	15 669	488	909	9 748	33 606	20 264	53 775	3 935
327390	Other concrete product mfg.....	3	31	9	636	15 669	488	909	9 748	33 606	20 264	53 775	3 935
3274	Lime & gypsum product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	28	9	1 540	61 882	1 302	2 648	50 628	267 716	125 359	395 899	D
32799	All other nonmetallic mineral product mfg.....	-	26	8	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg.....	-	6	4	1 283	55 390	1 120	2 274	46 644	249 073	109 782	361 887	D
327999	All other miscellaneous nonmetallic mineral product mfg.....	-	7	3	121	2 762	83	178	1 672	10 062	9 057	18 709	D
331	Primary metal mfg.....	-	47	20	2 558	76 416	2 185	4 345	56 437	184 909	159 463	344 574	16 522
3312	Steel product mfg from purchased steel.....	1	6	2	c	D	D	D	D	D	D	D	2 969
33121	Iron & steel pipes & tubes mfg from purchased steel.....	-	4	2	133	3 779	115	239	3 122	15 115	31 044	45 961	D
331210	Iron & steel pipes & tubes mfg from purchased steel.....	-	4	2	133	3 779	115	239	3 122	15 115	31 044	45 961	D
3313	Alumina & aluminum production & processing..	-	3	2	109	2 861	95	222	1 833	7 241	17 034	24 498	465
33131	Alumina & aluminum production & processing.....	-	3	2	109	2 861	95	222	1 833	7 241	17 034	24 498	465
3315	Foundries.....	-	31	13	2 200	65 840	1 890	3 715	48 909	134 711	87 672	222 955	11 632
33151	Ferrous metal foundries.....	-	18	10	2 009	62 422	1 731	3 507	46 347	128 292	82 802	211 633	10 934
331511	Iron foundries.....	-	11	7	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	-	6	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	8	13	3	191	3 418	159	208	2 562	6 419	4 870	11 322	698
331524	Aluminum foundries (except die-casting) ..	8	8	3	168	3 041	139	179	2 262	5 829	4 548	10 410	677
332	Fabricated metal product mfg.....	1	594	177	14 035	402 492	10 326	20 105	246 521	952 574	801 731	1 743 191	59 329
3321	Forging & stamping.....	1	18	10	443	12 401	330	658	8 156	32 080	36 211	68 456	1 672
33211	Forging & stamping.....	1	18	10	443	12 401	330	658	8 156	32 080	36 211	68 456	1 672
332114	Custom roll forming.....	-	5	3	142	3 746	110	198	2 373	10 777	16 986	27 792	D
332116	Metal stamping.....	5	9	5	c	D	D	D	D	D	D	D	867
3322	Cutlery & handtool mfg.....	1	18	10	720	17 160	521	933	11 113	54 084	35 396	93 317	1 829
33221	Cutlery & handtool mfg.....	1	18	10	720	17 160	521	933	11 113	54 084	35 396	93 317	1 829
332212	Hand & edge tool mfg.....	1	14	8	519	11 972	378	707	7 803	41 037	26 845	67 622	D
332214	Kitchen utensil, pot, & pan mfg.....	-	3	2	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	—	131	52	4 814	125 972	3 697	7 532	81 003	344 738	373 834	702 638	14 846
33231	Plate work & fabricated structural product mfg ..	1	50	23	1 792	47 836	1 333	2 743	30 931	156 068	159 429	300 432	5 837
332312	Fabricated structural metal mfg	2	30	12	931	23 177	655	1 313	14 016	84 112	84 365	162 620	3 674
332313	Plate work mfg	—	15	10	808	23 425	649	1 368	16 427	69 212	72 146	132 037	2 110
33232	Ornamental & architectural metal products mfg.	—	81	29	3 022	78 136	2 364	4 789	50 072	188 670	214 405	402 206	9 009
332321	Metal window & door mfg.	—	21	12	1 352	28 929	1 031	1 953	17 375	77 198	109 276	186 141	3 934
332322	Sheet metal work mfg.	—	29	13	1 293	38 648	1 050	2 276	26 256	89 370	78 903	167 895	3 873
332323	Ornamental & architectural metal work mfg	1	31	4	377	10 559	283	560	6 441	22 102	26 226	48 170	1 202
3324	Boiler, tank, & shipping container mfg	2	24	17	1 545	48 825	1 034	2 021	27 865	105 643	125 197	231 077	8 695
33241	Power boiler & heat exchanger mfg	1	8	5	441	11 655	331	661	7 812	27 671	16 464	44 359	2 215
332410	Power boiler & heat exchanger mfg	1	8	5	441	11 655	331	661	7 812	27 671	16 464	44 359	2 215
33242	Metal tank (heavy gauge) mfg	—	10	7	803	27 972	460	890	13 182	50 040	59 864	109 944	3 986
332420	Metal tank (heavy gauge) mfg	—	10	7	803	27 972	460	890	13 182	50 040	59 864	109 944	3 986
33243	Metal can, box, & other metal container (light gauge) mfg	7	6	5	301	9 198	243	470	6 871	27 932	48 869	76 774	2 494
332431	Metal can mfg.	9	1	1	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	3	5	4	c	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	5	17	4	369	8 745	302	592	6 049	15 221	13 643	29 093	678
33261	Spring & wire product mfg	5	17	4	369	8 745	302	592	6 049	15 221	13 643	29 093	678
332618	Other fabricated wire product mfg	6	14	3	343	7 855	281	539	5 408	13 966	12 981	27 288	644
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	263	43	3 694	112 664	2 751	5 081	71 402	235 449	132 146	367 168	23 304
33271	Machine shops	1	236	34	3 066	94 350	2 277	4 097	59 162	192 050	107 209	299 866	14 388
332710	Machine shops	1	236	34	3 066	94 350	2 277	4 097	59 162	192 050	107 209	299 866	14 388
33272	Turned product & screw, nut, & bolt mfg	1	27	9	628	18 314	474	984	12 240	43 399	24 937	67 302	8 916
332721	Precision turned product mfg	—	19	8	559	16 489	417	897	10 980	39 199	21 380	59 631	8 252
3328	Coating, engraving, heat treating, & allied activities.	2	38	18	841	26 831	651	1 284	15 984	56 316	15 665	71 941	3 060
33281	Coating, engraving, heat treating, & allied activities	2	38	18	841	26 831	651	1 284	15 984	56 316	15 665	71 941	3 060
332811	Metal heat treating....	—	3	3	c	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	2	13	7	403	15 713	322	666	8 830	33 453	8 562	41 985	1 261
332813	Electroplating, plating, polishing, anodizing, & coloring	3	22	8	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	2	80	21	1 526	47 054	987	1 876	23 455	103 222	63 174	167 318	4 503
33291	Metal valve mfg	2	20	8	497	14 932	326	619	7 276	30 666	27 203	58 317	1 997
332911	Industrial valve mfg ...	2	8	4	270	9 601	141	275	3 710	15 591	17 103	32 985	1 352
332912	Fluid power valve & hose fitting mfg	3	10	4	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	60	13	1 029	32 122	661	1 257	16 179	72 556	35 971	109 001	2 506
332993	Ammunition (except small arms) mfg	—	1	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	9	2	175	4 071	137	286	2 793	12 117	13 663	26 155	637
332997	Industrial pattern mfg .	—	13	2	151	3 976	119	209	3 058	9 429	1 629	11 009	199
332999	All other miscellaneous fabricated metal product mfg	2	29	8	426	12 602	308	618	7 426	24 445	18 051	42 657	1 474

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS—Con. Manufacturing—Con.												
333	Machinery mfg	-	347	154	20 980	702 526	14 349	28 552	396 108	1 660 941	1 863 719	3 524 664	119 363
3331	Agriculture, construction, & mining machinery mfg.	-	104	49	7 343	238 433	5 229	10 656	151 775	611 143	668 548	1 286 232	40 721
33311	Agricultural implement mfg	-	76	30	4 811	141 444	3 541	7 229	90 262	264 287	352 163	626 520	22 846
333111	Farm machinery & equipment mfg	-	70	28	4 459	132 740	3 327	6 774	86 050	230 926	317 157	559 125	22 120
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	6	2	352	8 704	214	455	4 212	33 361	35 006	67 395	726
33312	Construction machinery mfg	-	20	17	2 332	90 209	1 549	3 124	56 645	314 945	302 330	617 565	17 433
333120	Construction machinery mfg	-	20	17	2 332	90 209	1 549	3 124	56 645	314 945	302 330	617 565	17 433
33313	Mining & oil & gas field machinery mfg	1	8	2	200	6 780	139	303	4 868	31 911	14 055	42 147	442
333132	Oil & gas field machinery & equipment mfg	1	7	2	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	46	23	2 351	90 158	1 432	2 620	41 189	164 148	208 339	377 058	8 558
33322	Plastics & rubber industry machinery mfg	-	5	4	201	8 654	119	236	4 619	16 832	21 061	37 477	1 100
333220	Plastics & rubber industry machinery mfg	-	5	4	201	8 654	119	236	4 619	16 832	21 061	37 477	1 100
33329	Other industrial machinery mfg	-	36	19	2 124	80 794	1 295	2 343	36 057	145 705	186 119	336 900	7 432
333293	Printing machinery & equipment mfg	-	9	4	497	19 393	313	626	9 251	30 428	32 001	63 606	D
333294	Food product machinery mfg	-	14	6	592	25 064	310	528	6 722	35 293	50 215	86 423	2 198
333298	All other industrial machinery mfg	-	8	6	859	31 370	572	1 003	17 676	72 519	97 271	172 506	4 511
3333	Commercial & service industry machinery mfg ..	2	21	12	929	23 916	655	1 441	14 224	67 070	46 592	113 761	2 427
33331	Commercial & service industry machinery mfg	2	21	12	929	23 916	655	1 441	14 224	67 070	46 592	113 761	2 427
333315	Photographic & photocopying equipment mfg	9	2	1	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	13	8	654	17 113	468	1 148	10 561	52 182	35 015	87 042	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	20	14	2 466	79 682	1 844	3 486	42 367	202 906	292 452	499 962	9 619
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	20	14	2 466	79 682	1 844	3 486	42 367	202 906	292 452	499 962	9 619
333411	Air purification equipment mfg	-	3	1	c	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	-	3	1	c	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	5	4	542	14 578	335	693	6 840	29 693	30 512	60 934	1 360
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	9	8	1 538	51 593	1 232	2 251	27 505	130 579	215 145	350 489	4 783
3335	Metalworking machinery mfg	2	50	12	973	36 668	643	1 269	21 645	69 744	46 613	112 363	15 203
33351	Metalworking machinery mfg	2	50	12	973	36 668	643	1 269	21 645	69 744	46 613	112 363	15 203
333511	Industrial mold mfg ...	-	15	4	184	6 351	143	270	4 345	11 352	5 586	16 904	991
333512	Machine tool (metal cutting types) mfg ...	9	2	2	c	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg ...	-	3	2	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	-	23	3	200	7 963	159	335	5 776	14 599	4 389	19 057	1 446
3336	Engine, turbine, & power transmission equipment mfg	-	9	6	940	28 691	652	1 192	17 115	92 405	134 507	221 291	6 032
33361	Engine, turbine, & power transmission equipment mfg	-	9	6	940	28 691	652	1 192	17 115	92 405	134 507	221 291	6 032
333612	Speed changer, industrial high-speed drive, & gear mfg	-	2	1	c	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	5	3	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	97	38	5 978	204 978	3 894	7 888	107 793	453 525	466 668	913 997	36 803
33391	Pump & compressor mfg	-	15	5	678	17 750	353	692	8 513	33 375	43 284	75 189	2 701
333911	Pump & pumping equipment mfg	1	9	3	462	11 645	221	423	5 755	13 710	29 112	41 978	1 997
333913	Measuring & dispensing pump mfg	-	2	2	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	34	17	2 514	91 481	1 616	3 326	42 501	218 513	236 783	452 459	7 324
333921	Elevator & moving stairway mfg	1	7	2	c	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	16	8	1 042	49 621	534	1 189	16 115	110 584	125 042	234 882	2 637
333923	Overhead traveling crane, hoist, & monorail system mfg	-	2	2	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	9	5	523	13 558	408	775	8 494	29 398	27 499	58 969	1 927
33399	All other general-purpose machinery mfg	1	48	16	2 786	95 747	1 925	3 870	56 779	201 637	186 601	386 349	26 778
333991	Power-driven handtool mfg	-	3	1	c	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	5	2	e	D	D	D	D	D	D	D	1 955
333993	Packaging machinery mfg	5	6	2	136	4 725	73	145	2 278	11 226	7 561	19 053	D
333994	Industrial process furnace & oven mfg ..	4	5	3	326	9 861	200	384	4 638	18 965	25 744	45 367	612
333995	Fluid power cylinder & actuator mfg	-	3	3	398	5 866	295	567	4 950	18 802	15 072	33 511	D
333996	Fluid power pump & motor mfg	-	4	2	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	20	3	384	11 916	279	525	6 916	21 015	18 531	39 913	1 720
334	Computer & electronic product mfg	1	112	40	5 927	201 435	3 218	6 855	74 434	491 339	344 338	805 669	30 962
3341	Computer & peripheral equipment mfg	-	14	4	541	29 319	233	445	7 891	90 211	102 100	188 933	5 395
33411	Computer & peripheral equipment mfg	-	14	4	541	29 319	233	445	7 891	90 211	102 100	188 933	5 395
334112	Computer storage device mfg	-	4	2	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	13	4	875	20 370	617	1 542	13 163	28 035	24 489	47 938	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	3	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	3	2	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	7	2	249	7 826	132	267	4 135	18 998	21 298	39 955	D
334290	Other communications equipment mfg	-	7	2	249	7 826	132	267	4 135	18 998	21 298	39 955	D
3343	Audio & video equipment mfg	5	7	3	144	3 348	81	151	1 560	7 701	10 030	17 581	400
33431	Audio & video equipment mfg	5	7	3	144	3 348	81	151	1 560	7 701	10 030	17 581	400
334310	Audio & video equipment mfg	5	7	3	144	3 348	81	151	1 560	7 701	10 030	17 581	400
3344	Semiconductor & other electronic component mfg	3	40	16	1 315	30 728	818	1 494	13 646	69 051	48 129	118 133	D
33441	Semiconductor & other electronic component mfg	3	40	16	1 315	30 728	818	1 494	13 646	69 051	48 129	118 133	D
334412	Bare printed circuit board mfg	3	6	1	172	3 739	131	246	2 028	4 131	7 716	11 701	D
334413	Semiconductor & related device mfg ...	9	5	2	169	3 517	56	73	1 044	8 511	5 128	13 193	1 464
334417	Electronic connector mfg	-	3	2	c	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	21	8	593	13 429	432	815	7 176	29 391	19 861	49 777	2 020

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	34	13	3 036	117 021	1 456	3 199	37 726	294 326	158 224	429 670	17 610
33451	Navigational, measuring, medical, & control instruments mfg	-	34	13	3 036	117 021	1 456	3 199	37 726	294 326	158 224	429 670	17 610
334511	Search, detection, navigation, & guidance instrument mfg	-	10	5	1 919	77 553	764	1 821	17 963	232 693	99 608	307 906	13 557
334513	Industrial process control instrument mfg	2	7	3	133	4 441	57	93	1 098	6 791	6 473	13 237	191
334515	Electricity measuring & testing instrument mfg	1	6	3	840	29 751	567	1 176	16 855	42 644	45 255	89 013	3 143
335	Electrical equipment, appliance, & component mfg	-	60	24	4 986	161 437	3 972	8 271	118 947	518 696	612 349	1 132 157	58 837
3351	Electric lighting equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	6	1	c	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	3	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	30	9	1 329	36 399	947	1 877	21 048	94 879	77 920	171 193	D
33531	Electrical equipment mfg	1	30	9	1 329	36 399	947	1 877	21 048	94 879	77 920	171 193	D
335311	Power, distribution, & specialty transformer mfg	-	6	2	298	8 522	196	356	4 385	18 769	14 146	32 306	D
335312	Motor & generator mfg	-	6	4	684	16 555	551	1 081	11 463	48 959	42 705	90 591	590
335313	Switchgear & switchboard apparatus mfg	3	6	1	133	4 098	91	214	2 392	13 865	7 396	21 576	714
335314	Relay & industrial control mfg	2	12	2	214	7 224	109	226	2 808	13 286	13 673	26 720	787
3359	Other electrical equipment & component mfg	-	20	12	2 717	92 841	2 209	4 658	72 347	315 814	445 102	766 869	22 469
33591	Battery mfg	-	4	4	1 578	58 564	1 407	2 958	49 331	178 110	203 269	382 716	13 961
335911	Storage battery mfg ...	-	4	4	1 578	58 564	1 407	2 958	49 331	178 110	203 269	382 716	13 961
33592	Communication & energy wire & cable mfg	-	6	6	860	25 168	630	1 365	18 538	108 859	232 646	346 005	6 583
335929	Other communication & energy wire mfg ...	-	6	6	860	25 168	630	1 365	18 538	108 859	232 646	346 005	6 583
33593	Wiring device mfg	-	5	2	264	8 703	162	320	4 276	27 940	8 388	36 400	1 885
335931	Current-carrying wiring device mfg	-	4	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	202	99	53 129	2 377 836	35 871	76 382	1 432 492	5 262 797	7 755 195	12 570 344	394 229
3361	Motor vehicle mfg	-	8	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	8	3	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	5	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	46	25	2 938	71 566	2 270	4 530	48 131	149 389	280 771	438 601	5 252
33621	Motor vehicle body & trailer mfg	-	46	25	2 938	71 566	2 270	4 530	48 131	149 389	280 771	438 601	5 252
336211	Motor vehicle body mfg	1	16	9	1 396	38 478	1 103	2 220	25 633	91 920	157 677	252 331	3 100
336212	Truck trailer mfg	-	11	4	225	5 223	188	387	4 068	9 261	15 283	25 483	1 022
336214	Travel trailer & camper mfg	-	19	12	1 317	27 865	979	1 923	18 430	48 208	107 811	160 787	1 130
3363	Motor vehicle parts mfg ...	-	48	18	h	D	D	D	D	D	D	D	13 929
33631	Motor vehicle gasoline engine & engine parts mfg	2	13	4	479	12 891	401	725	9 573	27 304	24 787	52 126	1 834
336312	Gasoline engine & engine parts mfg	1	10	3	443	11 918	371	673	8 832	25 257	23 458	48 760	1 660
33632	Motor vehicle electrical & electronic equipment mfg	-	15	5	1 693	35 276	1 093	1 925	20 538	58 809	147 975	211 416	5 157
336322	Other motor vehicle electrical & electronic equipment mfg	-	15	5	1 693	35 276	1 093	1 925	20 538	58 809	147 975	211 416	5 157
33634	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	-	12	5	1 298	36 078	1 176	2 551	29 300	114 894	130 743	246 176	6 031
336399	All other motor vehicle parts mfg	-	12	5	1 298	36 078	1 176	2 551	29 300	114 894	130 743	246 176	6 031
3364	Aerospace product & parts mfg	-	84	47	41 762	1 954 629	26 517	56 852	1 090 383	3 531 211	4 032 278	7 101 057	338 477
33641	Aerospace product & parts mfg	-	84	47	41 762	1 954 629	26 517	56 852	1 090 383	3 531 211	4 032 278	7 101 057	338 477
336411	Aircraft mfg	-	9	7	19 658	826 334	12 636	23 362	409 651	1 939 471	1 950 969	3 710 872	115 976
336412	Aircraft engine & engine parts mfg	-	6	5	g	D	D	D	D	D	D	D	16 351
336413	Other aircraft part & auxiliary equipment mfg	-	69	35	j	D	D	D	D	D	D	D	206 150
3365	Railroad rolling stock mfg ..	-	3	1	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	3	1	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	3	1	c	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	5	2	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	5	2	e	D	D	D	D	D	D	D	D
336612	Boat building	1	5	2	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	1	8	3	c	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	1	8	3	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	181	43	4 687	109 723	3 769	7 259	73 244	259 615	187 990	445 663	13 075
3371	Household & institutional furniture & kitchen cabinet mfg	1	137	30	3 155	71 841	2 557	5 015	50 632	169 035	120 434	288 605	6 770
33711	Wood kitchen cabinet & counter top mfg	1	83	17	2 090	44 152	1 721	3 228	32 674	106 165	70 790	176 258	3 547
337110	Wood kitchen cabinet & counter top mfg ...	1	83	17	2 090	44 152	1 721	3 228	32 674	106 165	70 790	176 258	3 547
33712	Household & institutional furniture mfg	1	54	13	1 065	27 689	836	1 787	17 958	62 870	49 644	112 347	3 223
337121	Upholstered household furniture mfg	1	12	2	c	D	D	D	D	D	D	D	398
337122	Nonupholstered wood household furniture mfg	1	24	3	297	5 849	253	518	4 389	16 771	14 294	30 667	D
337127	Institutional furniture mfg	1	16	8	540	17 985	397	928	10 919	38 515	25 580	64 311	2 583
3372	Office furniture (including fixtures) mfg	1	35	11	1 260	29 397	999	1 841	17 651	62 490	42 852	104 448	1 741
33721	Office furniture (including fixtures) mfg	1	35	11	1 260	29 397	999	1 841	17 651	62 490	42 852	104 448	1 741
337211	Wood office furniture mfg	-	5	1	133	3 437	93	191	1 958	9 647	5 895	15 509	D
337212	Custom architectural woodwork & millwork mfg	-	11	3	215	5 211	154	260	2 675	10 729	9 938	20 850	271
337215	Showcase, partition, shelving, & locker mfg	1	16	7	881	20 117	730	1 363	12 669	40 741	25 605	65 219	1 247
3379	Other furniture related product mfg	-	9	2	272	8 485	213	403	4 961	28 090	24 704	52 610	4 564
33791	Mattress mfg	-	8	2	e	D	D	D	D	D	D	D	4 564
337910	Mattress mfg	-	8	2	e	D	D	D	D	D	D	D	4 564
339	Miscellaneous mfg	1	237	55	5 189	118 831	3 967	7 628	74 534	434 915	177 729	624 475	17 375
3391	Medical equipment & supplies mfg	1	99	25	1 863	44 226	1 429	2 927	26 839	202 833	53 886	251 980	9 859
33911	Medical equipment & supplies mfg	1	99	25	1 863	44 226	1 429	2 927	26 839	202 833	53 886	251 980	9 859
339113	Surgical appliance & supplies mfg	-	14	8	715	16 992	532	1 473	8 594	135 317	26 944	156 974	7 904
339115	Ophthalmic goods mfg	-	8	5	e	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	2	60	10	675	16 592	532	821	11 832	35 989	9 992	46 112	859
3399	Other miscellaneous mfg ..	1	138	30	3 326	74 605	2 538	4 701	47 695	232 082	123 843	372 495	7 516
33992	Sporting & athletic goods mfg	2	21	3	c	D	D	D	D	D	D	D	227
339920	Sporting & athletic goods mfg	2	21	3	c	D	D	D	D	D	D	D	227
33994	Office supplies (except paper) mfg	-	10	1	f	D	D	D	D	D	D	D	245
339942	Lead pencil & art good mfg	-	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	3	61	14	1 226	29 039	902	1 725	17 299	59 544	24 966	84 680	3 167
339950	Sign mfg	3	61	14	1 226	29 039	902	1 725	17 299	59 544	24 966	84 680	3 167

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	1	35	12	1 325	30 624	947	1 877	18 998	83 953	66 719	152 282	3 812
339991	Gasket, packing, & sealing device mfg...	—	6	2	349	8 616	297	621	6 596	22 817	25 669	48 605	388
339994	Brush, mop, & broom mfg	—	4	3	528	12 506	296	624	6 015	39 900	24 708	65 832	2 353
339999	All other miscellaneous mfg	6	21	6	e	D	D	D	D	D	D	D	1 000

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA												
	Manufacturing	—	2 201	758	95 231	3 328 377	66 271	130 918	2 039 626	14 821 313	16 295 890	31 014 921	776 913
	Kansas City, MO—KS MSA (KS Part)	—	880	318	37 000	1 337 027	26 441	54 103	844 325	4 757 707	6 747 855	11 457 940	346 700
	Kansas City, MO—KS MSA (MO Part)	—	1 321	440	58 231	1 991 350	39 830	76 815	1 195 301	10 063 606	9 548 035	19 556 981	430 213
311	Food mfg	1	145	60	8 146	239 310	5 583	11 379	145 997	1 394 238	2 057 565	3 422 560	64 557
3111	Animal food mfg	1	12	7	486	15 322	339	830	9 230	24 865	86 997	111 841	3 414
31111	Animal food mfg	1	12	7	486	15 322	339	830	9 230	24 865	86 997	111 841	3 414
311119	Other animal food mfg	—	10	5	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	—	15	9	1 058	41 098	817	1 841	28 255	258 920	812 394	1 065 798	23 816
31121	Flour milling & malt mfg	—	8	4	362	15 544	287	716	11 521	96 381	300 457	396 655	9 625
311211	Flour milling	—	8	4	362	15 544	287	716	11 521	96 381	300 457	396 655	9 625
31122	Starch & vegetable fats & oils mfg	—	5	4	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	13	4	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	—	8	3	294	5 507	226	409	2 990	16 415	12 203	28 476	D
311330	Confectionery mfg from purchased chocolate	—	8	3	294	5 507	226	409	2 990	16 415	12 203	28 476	D
3115	Dairy product mfg	2	6	3	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	2	4	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	16	5	1 048	24 571	909	1 830	17 430	74 831	288 403	359 760	5 285
31161	Animal slaughtering & processing	—	16	5	1 048	24 571	909	1 830	17 430	74 831	288 403	359 760	5 285
311612	Meat processed from carcasses	1	4	2	273	5 543	250	491	3 552	12 494	52 600	64 874	D
311615	Poultry processing	—	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	51	15	2 154	68 438	1 340	2 693	39 620	321 272	189 756	505 911	4 600
31181	Bread & bakery product mfg	—	37	6	f	D	D	D	D	D	D	D	2 706
311812	Commercial bakeries	—	13	5	821	26 669	298	675	9 631	65 766	28 309	94 081	2 529
31182	Cookie, cracker, & pasta mfg	—	12	9	1 158	39 191	931	1 879	28 757	250 057	158 101	403 015	D
311821	Cookie & cracker mfg	—	4	2	f	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	—	5	4	438	16 432	307	604	9 777	107 825	68 661	170 739	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	22	15	2 559	71 352	1 603	3 173	41 042	656 952	584 941	1 226 684	25 747
31191	Snack food mfg	—	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	3	2	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	3	2	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	6	6	4	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	4	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg	1	11	8	712	19 923	429	819	8 297	67 161	133 923	200 881	D
311991	Perishable prepared food mfg	6	3	3	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	8	5	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	14	6	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	1	13	6	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	7	5	347	11 979	203	486	7 125	131 443	245 653	376 593	4 014
312111	Soft drink mfg	1	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	6	37	5	500	11 043	380	663	6 865	23 628	16 463	40 600	1 960
3149	Other textile product mills	6	22	5	459	10 443	345	605	6 505	22 282	15 085	37 889	1 927
31499	All other textile product mills	8	14	3	352	8 452	268	489	5 303	15 914	9 619	25 942	1 666
314999	All other miscellaneous textile product mills	8	14	3	352	8 452	268	489	5 303	15 914	9 619	25 942	1 666
315	Apparel mfg	2	45	13	g	D	D	D	D	D	D	D	1 647
3152	Cut & sew apparel mfg	2	27	11	f	D	D	D	D	D	D	D	1 328
31522	Men's & boys' cut & sew apparel mfg	2	8	5	f	D	D	D	D	D	D	D	1 044
315228	Men's & boys' cut & sew other outerwear mfg	3	4	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	48	14	911	20 058	763	1 327	12 940	38 801	68 929	107 235	2 045
3219	Other wood product mfg	2	43	12	f	D	D	D	D	D	D	D	1 500
32199	All other wood product mfg	1	13	5	267	7 451	203	402	3 686	10 807	6 451	17 481	599
321999	All other miscellaneous wood product mfg	1	12	5	e	D	D	D	D	D	D	D	599
322	Paper mfg	—	49	36	5 142	165 157	4 042	8 144	112 532	348 998	579 254	938 692	30 943
3222	Converted paper product mfg	—	48	35	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	25	21	2 242	81 368	1 726	3 710	55 118	148 392	307 708	466 702	D
322211	Corrugated & solid fiber box mfg	—	14	11	1 233	42 310	914	1 927	26 840	63 261	176 538	249 166	7 779
322212	Folding paperboard box mfg	—	5	5	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	2	11	7	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	7	5	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	5	5	840	19 238	698	1 055	12 641	43 617	71 227	114 813	D
32223	Stationery product mfg	—	8	5	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	4	4	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	—	2	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	9	4	2	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	9	4	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	396	83	10 685	331 522	7 796	15 160	211 838	681 554	537 312	1 216 030	52 447
3231	Printing & related support activities	1	396	83	10 685	331 522	7 796	15 160	211 838	681 554	537 312	1 216 030	52 447
32311	Printing	2	343	72	10 044	309 545	7 327	14 333	197 562	642 614	527 969	1 167 934	49 898
323110	Commercial lithographic printing	1	169	42	4 302	150 443	3 250	6 450	95 850	305 189	232 437	535 143	25 882
323112	Commercial flexographic printing	—	16	8	880	25 390	586	1 555	15 694	55 222	91 743	145 487	4 640
323113	Commercial screen printing	4	38	7	1 719	51 658	1 289	2 698	27 291	100 245	79 255	179 924	6 994
323114	Quick printing	1	62	4	840	22 008	634	1 144	17 021	58 869	22 673	81 310	2 995
323116	Manifold business form printing	—	11	4	1 417	34 870	921	1 437	25 814	63 650	73 851	138 662	4 202
323117	Book printing	—	7	3	355	7 513	258	342	5 449	23 739	7 902	31 736	2 985
323119	Other commercial printing	6	30	1	263	7 161	188	329	3 966	14 569	10 177	24 514	1 498
32312	Support activities for printing	—	53	11	641	21 977	469	827	14 276	38 940	9 343	48 096	2 549
323122	Prepress services	—	40	8	485	18 369	330	584	11 482	33 155	8 448	41 443	1 582

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
324	Petroleum & coal products mfg	3	18	5	367	13 521	202	459	6 792	30 789	67 623	97 947	D
3241	Petroleum & coal products mfg	3	18	5	367	13 521	202	459	6 792	30 789	67 623	97 947	D
325	Chemical mfg	—	114	56	7 623	317 106	3 986	8 579	139 728	2 894 046	1 599 414	4 447 170	105 039
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	—	8	3	g	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	—	5	2	g	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	—	5	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	24	13	2 477	101 052	1 048	2 113	34 614	1 788 903	449 879	2 180 531	17 638
32541	Pharmaceutical & medicine mfg	—	24	13	2 477	101 052	1 048	2 113	34 614	1 788 903	449 879	2 180 531	17 638
325412	Pharmaceutical preparation mfg	—	13	7	1 767	77 723	701	1 419	25 968	1 715 938	414 195	2 073 251	D
325413	In-vitro diagnostic substance mfg	—	2	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	26	11	1 407	44 773	947	2 074	24 239	126 899	117 453	247 135	8 876
32551	Paint & coating mfg	1	13	3	321	11 407	173	343	5 936	38 487	30 232	69 099	1 092
325510	Paint & coating mfg	1	13	3	321	11 407	173	343	5 936	38 487	30 232	69 099	1 092
32552	Adhesive mfg	2	13	8	1 086	33 366	774	1 731	18 303	88 412	87 221	178 036	7 784
325520	Adhesive mfg	2	13	8	1 086	33 366	774	1 731	18 303	88 412	87 221	178 036	7 784
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	22	11	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	20	10	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	11	4	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	—	7	4	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	21	11	937	33 683	502	966	15 883	94 987	94 172	189 403	D
32591	Printing ink mfg	1	13	7	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	13	7	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	8	4	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	119	70	6 502	164 355	4 922	9 691	114 410	528 926	597 153	1 123 827	64 179
3261	Plastics product mfg	4	99	61	5 943	148 593	4 517	8 861	104 740	473 715	557 197	1 030 798	62 902
32611	Unsupported plastics film, sheet, & bag mfg ..	1	8	6	382	13 631	278	587	6 321	50 003	37 786	87 483	1 830
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	9	7	4	616	18 180	515	1 146	14 456	116 613	240 645	353 123	21 602
326121	Unsupported plastics profile shape mfg	9	5	3	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	7	5	624	19 056	540	1 154	14 860	59 961	45 477	104 865	4 236
326160	Plastics bottle mfg	—	7	5	624	19 056	540	1 154	14 860	59 961	45 477	104 865	4 236
32619	Other plastics product mfg	1	66	41	3 887	86 398	2 834	5 286	61 605	211 999	193 251	410 105	32 249
326199	All other plastics product mfg	1	64	41	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	20	9	559	15 762	405	830	9 670	55 211	39 956	93 029	1 277
327	Nonmetallic mineral product mfg	1	111	48	3 452	121 174	2 788	5 685	92 672	414 121	260 561	677 068	106 285
3272	Glass & glass product mfg .	—	19	3	453	16 045	374	800	12 258	63 606	35 800	99 154	D
32721	Glass & glass product mfg	—	19	3	453	16 045	374	800	12 258	63 606	35 800	99 154	D
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	70	38	1 910	57 619	1 477	3 022	41 351	135 969	149 564	285 294	D
32732	Ready-mix concrete mfg .	4	42	25	1 147	35 458	904	1 770	26 342	76 826	101 795	178 888	9 182
327320	Ready-mix concrete mfg	4	42	25	1 147	35 458	904	1 770	26 342	76 826	101 795	178 888	9 182
32739	Other concrete product mfg	3	17	7	428	10 623	324	655	7 191	23 443	15 816	39 225	D
327390	Other concrete product mfg	3	17	7	428	10 623	324	655	7 191	23 443	15 816	39 225	D
3279	Other nonmetallic mineral product mfg	—	14	6	1 034	46 645	889	1 808	38 481	212 094	74 109	289 100	D
32799	All other nonmetallic mineral product mfg ...	—	13	5	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	4	3	904	43 289	788	1 614	36 389	203 569	65 711	272 096	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	KANSAS CITY, MO—KS MSA—Con.													
	Manufacturing—Con.													
331	Primary metal mfg	-	35	12	g	D	D	D	D	D	D	D	14 836	
3311	Iron & steel mills & ferroalloy mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	-	2	1	f	D	D	D	D	D	D	D	D	
331111	Iron & steel mills	-	2	1	f	D	D	D	D	D	D	D	D	
3312	Steel product mfg from purchased steel	-	6	4	e	D	D	D	D	D	D	D	D	
33122	Rolling & drawing of purchased steel	-	4	3	e	D	D	D	D	D	D	D	D	
331222	Steel wire drawing	-	3	3	e	D	D	D	D	D	D	D	D	
3315	Foundries	1	25	6	f	D	D	D	D	D	D	D	2 757	
33151	Ferrous metal foundries	-	10	4	e	D	D	D	D	D	D	D	2 193	
332	Fabricated metal product mfg	1	330	116		14 152	521 741	8 872	16 768	268 053	1 240 895	650 417	1 867 814	49 148
3321	Forging & stamping	1	12	8		403	12 191	269	549	7 473	48 070	72 871	113 389	2 298
33211	Forging & stamping	1	12	8		403	12 191	269	549	7 473	48 070	72 871	113 389	2 298
3322	Cutlery & handtool mfg	1	11	6		468	12 559	335	648	7 971	43 091	29 433	71 961	1 220
33221	Cutlery & handtool mfg	1	11	6		468	12 559	335	648	7 971	43 091	29 433	71 961	1 220
332212	Hand & edge tool mfg	1	10	5	e		D	D	D	D	D	D	D	
3323	Architectural & structural metals mfg	-	75	37		3 406	100 043	2 404	4 648	57 257	239 250	230 144	458 267	12 376
33231	Plate work & fabricated structural product mfg	-	27	15		1 513	46 000	1 047	2 006	24 918	126 695	119 579	235 930	4 758
332312	Fabricated structural metal mfg	-	22	12		1 192	34 244	839	1 610	19 066	101 055	102 939	199 225	3 930
33232	Ornamental & architectural metal products mfg	-	48	22		1 893	54 043	1 357	2 642	32 339	112 555	110 565	222 337	7 618
332321	Metal window & door mfg	-	8	4		374	9 762	275	486	5 503	24 545	37 644	61 222	1 616
332322	Sheet metal work mfg	-	26	11		697	25 004	515	1 033	15 356	49 558	41 855	92 247	4 233
332323	Ornamental & architectural metal work mfg	1	14	7		822	19 277	567	1 123	11 480	38 452	31 066	68 868	1 769
3324	Boiler, tank, & shipping container mfg	2	17	9		999	37 736	713	1 291	23 818	103 457	171 262	274 013	6 723
33242	Metal tank (heavy gauge) mfg	-	4	2	e		D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	4	2	e		D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	2	10	7		635	24 413	513	917	18 207	77 654	147 105	224 609	5 839
332431	Metal can mfg	2	4	3	e		D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	6	4	e		D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	126	22		1 506	48 395	1 185	2 269	33 487	88 172	37 802	123 553	12 867
33271	Machine shops	2	109	17		1 099	35 733	885	1 673	23 984	63 090	25 401	86 457	4 524
332710	Machine shops	2	109	17		1 099	35 733	885	1 673	23 984	63 090	25 401	86 457	4 524
33272	Turned product & screw, nut, & bolt mfg	1	17	5		407	12 662	300	596	9 503	25 082	12 401	37 096	8 343
332721	Precision turned product mfg	-	11	4		316	9 788	238	484	7 519	21 409	7 868	28 891	7 912
3328	Coating, engraving, heat treating, & allied activities	1	42	13		1 107	30 581	923	1 785	25 057	85 368	17 437	102 889	6 813
33281	Coating, engraving, heat treating, & allied activities	1	42	13		1 107	30 581	923	1 785	25 057	85 368	17 437	102 889	6 813
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	18	5		619	19 112	532	1 003	17 209	58 863	9 258	68 165	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	22	6	e		D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	1	34	17		6 015	273 234	2 866	5 213	108 931	618 716	80 695	698 199	5 944
33291	Metal valve mfg	6	11	4		560	21 348	302	574	8 019	74 611	23 998	98 106	2 429
332919	Other metal valve & pipe fitting mfg	9	3	1	e		D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	23	13		5 455	251 886	2 564	4 639	100 912	544 105	56 697	600 093	3 515
332992	Small arms ammunition mfg	-	1	1	g		D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	1	1	h		D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	10	6		424	13 331	298	553	7 490	26 996	23 921	50 609	1 631

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KANSAS CITY, MO—KS MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	189	73	7 699	273 838	4 865	9 339	135 095	564 329	655 629	1 220 761	37 590
3331	Agriculture, construction, & mining machinery mfg....	—	19	11	1 584	60 007	1 055	2 106	33 746	107 953	213 518	324 697	6 921
33311	Agricultural implement mfg	—	7	5	1 123	42 286	775	1 594	24 225	67 143	146 965	217 920	D
333111	Farm machinery & equipment mfg	—	5	4	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	1	10	6	e	D	D	D	D	D	D	D	1 952
333120	Construction machinery mfg	1	10	6	e	D	D	D	D	D	D	D	1 952
3332	Industrial machinery mfg ..	—	39	13	739	26 299	412	785	11 315	48 037	45 323	89 638	D
33329	Other industrial machinery mfg	—	31	10	600	21 324	341	636	9 317	37 365	39 368	72 777	D
333294	Food product machinery mfg	—	11	6	401	14 535	216	399	5 391	25 221	31 105	51 981	D
3333	Commercial & service industry machinery mfg ..	—	17	10	476	15 241	321	637	6 465	27 221	29 590	57 577	1 854
33331	Commercial & service industry machinery mfg	—	17	10	476	15 241	321	637	6 465	27 221	29 590	57 577	1 854
333319	Other commercial & service industry machinery mfg	—	10	4	e	D	D	D	D	D	D	D	783
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	687	17 154	503	852	11 468	78 799	78 315	157 202	3 261
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	12	6	687	17 154	503	852	11 468	78 799	78 315	157 202	3 261
333412	Industrial & commercial fan & blower mfg	1	4	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	5	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	42	11	1 073	42 284	756	1 573	26 340	78 158	29 087	105 176	6 462
33351	Metalworking machinery mfg	2	42	11	1 073	42 284	756	1 573	26 340	78 158	29 087	105 176	6 462
333511	Industrial mold mfg ...	—	15	4	487	21 443	356	793	13 900	38 721	9 222	47 776	3 120
333514	Special die & tool, die set, jig, & fixture mfg ..	2	19	4	276	10 232	225	475	7 713	15 262	9 628	24 017	2 205
3336	Engine, turbine, & power transmission equipment mfg	8	5	2	362	5 547	286	243	3 495	10 999	13 469	24 635	D
33361	Engine, turbine, & power transmission equipment mfg	8	5	2	362	5 547	286	243	3 495	10 999	13 469	24 635	D
333618	Other engine equipment mfg	9	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	55	20	2 778	107 306	1 532	3 143	42 266	213 162	246 327	461 836	16 254
33391	Pump & compressor mfg	—	5	2	403	10 776	176	373	4 886	16 557	28 627	44 366	D
333911	Pump & pumping equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	23	12	1 663	70 433	952	1 993	26 782	135 775	172 914	311 233	D
333921	Elevator & moving stairway mfg	—	1	1	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	17	8	1 010	53 477	530	1 131	18 193	110 293	137 754	246 840	2 967
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	5	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	3	27	6	712	26 097	404	777	10 598	60 830	44 786	106 237	11 145
334	Computer & electronic product mfg	—	88	36	6 131	195 807	2 711	5 554	62 251	659 440	344 025	997 544	56 526
3342	Communications equipment mfg	—	9	3	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	5	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	5	1	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO-KS MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	2	36	16	1 319	32 408	767	1 474	14 351	77 727	41 640	118 768	5 322
33441	Semiconductor & other electronic component mfg	2	36	16	1 319	32 408	767	1 474	14 351	77 727	41 640	118 768	5 322
334413	Semiconductor & related device mfg...	4	6	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	17	6	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	21	11	h	D	D	D	D	D	D	D	24 582
33451	Navigational, measuring, medical, & control instruments mfg	—	21	11	h	D	D	D	D	D	D	D	24 582
334511	Search, detection, navigation, & guidance instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	2	6	4	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	—	9	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	9	2	f	D	D	D	D	D	D	D	D
334611	Software reproducing	—	3	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	40	15	2 321	76 394	1 675	3 254	48 878	214 956	139 313	353 786	10 714
3351	Electric lighting equipment mfg	5	6	4	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	5	6	4	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	7	16	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	7	16	2	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	18	9	1 539	57 250	1 145	2 344	39 942	183 217	87 986	270 962	8 465
33591	Battery mfg	—	4	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	4	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	6	3	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	77	28	11 531	596 851	10 208	21 054	506 311	4 987 761	7 913 999	12 903 058	146 831
3361	Motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	45	14	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	13	3	f	D	D	D	D	D	D	D	3 180
336321	Vehicular lighting equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	9	4	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	9	4	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	5	7	5	600	18 513	486	905	11 678	33 229	46 889	80 429	5 738
336399	All other motor vehicle parts mfg	5	7	5	600	18 513	486	905	11 678	33 229	46 889	80 429	5 738
3365	Railroad rolling stock mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KANSAS CITY, MO—KS MSA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	139	31	2 657	66 161	2 038	3 658	41 678	126 324	105 624	231 020	7 957
3371	Household & institutional furniture & kitchen cabinet mfg	1	100	17	1 706	41 580	1 324	2 418	27 525	64 778	56 998	121 030	2 682
33711	Wood kitchen cabinet & counter top mfg	1	68	11	1 070	26 325	854	1 578	18 355	40 941	25 599	66 384	1 031
337110	Wood kitchen cabinet & counter top mfg ...	1	68	11	1 070	26 325	854	1 578	18 355	40 941	25 599	66 384	1 031
33712	Household & institutional furniture mfg	1	32	6	636	15 255	470	840	9 170	23 837	31 399	54 646	1 651
337127	Institutional furniture mfg	-	6	5	411	10 723	282	486	5 822	13 825	22 467	35 822	1 093
3372	Office furniture (including fixtures) mfg	2	31	11	655	15 963	484	815	9 053	34 191	24 083	58 305	D
33721	Office furniture (including fixtures) mfg	2	31	11	655	15 963	484	815	9 053	34 191	24 083	58 305	D
337212	Custom architectural woodwork & millwork mfg	-	10	4	254	6 241	201	326	3 741	13 342	10 136	23 602	D
337215	Showcase, partition, shelving, & locker mfg	5	16	5	268	6 274	196	311	3 554	11 102	7 603	18 664	414
3379	Other furniture related product mfg	-	8	3	296	8 618	230	425	5 100	27 355	24 543	51 685	D
339	Miscellaneous mfg	2	184	45	3 708	96 600	2 629	4 654	53 657	213 311	142 948	356 837	D
3391	Medical equipment & supplies mfg	2	77	20	1 483	38 883	1 039	1 737	21 366	102 163	44 466	146 562	D
33911	Medical equipment & supplies mfg	2	77	20	1 483	38 883	1 039	1 737	21 366	102 163	44 466	146 562	D
339113	Surgical appliance & supplies mfg	1	11	6	397	9 010	289	488	4 595	35 371	20 229	55 316	D
339116	Dental laboratories ...	3	47	9	593	14 333	468	731	10 469	34 193	8 070	42 510	D
3399	Other miscellaneous mfg ...	2	107	25	2 225	57 717	1 590	2 917	32 291	111 148	98 482	210 275	D
33995	Sign mfg	-	34	9	747	24 248	467	1 004	11 659	41 795	36 112	77 929	1 953
339950	Sign mfg	-	34	9	747	24 248	467	1 004	11 659	41 795	36 112	77 929	1 953
33999	All other miscellaneous mfg	2	32	10	1 061	24 100	801	1 378	14 576	48 336	46 355	95 166	4 244
339999	All other miscellaneous mfg	3	22	7	831	17 571	620	1 009	10 443	33 781	27 917	61 514	D
LAWRENCE, KS MSA													
31-33	Manufacturing	-	76	25	4 240	119 989	3 213	6 581	76 896	393 392	350 047	728 800	42 762
322	Paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	13	3	565	18 694	474	847	12 764	40 587	18 187	58 348	6 817
3231	Printing & related support activities	-	13	3	565	18 694	474	847	12 764	40 587	18 187	58 348	6 817
32311	Printing	-	11	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	6	2	473	16 313	411	724	11 241	35 881	14 767	50 191	D
325	Chemical mfg	-	5	3	461	21 336	289	651	12 664	43 769	105 577	148 022	D
326	Plastics & rubber products mfg	-	3	1	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	2	e	D	D	D	D	D	D	D	1 020
3323	Architectural & structural metals mfg	-	2	1	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	e	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	LAWRENCE, KS MSA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	2	5	2	f	D	D	D	D	D	D	D	D	
3342	Communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D	
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	—	7	1	f	D	D	D	D	D	D	D	605	
3372	Office furniture (including fixtures) mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	
33721	Office furniture (including fixtures) mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	
337215	Showcase, partition, shelving, & locker mfg.....	—	1	1	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	—	8	5	463	10 828	308	564	5 791	122 930	15 973	133 996	D	
3391	Medical equipment & supplies mfg.....	—	5	2	e	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg.....	—	5	2	e	D	D	D	D	D	D	D	D	
339113	Surgical appliance & supplies mfg.....	—	3	2	e	D	D	D	D	D	D	D	D	
	TOPEKA, KS MSA													
31-33	Manufacturing	—	140	49		7 722	265 397	6 334	12 630	196 613	949 419	854 119	1 805 627	44 246
311	Food mfg.....	—	15	9	2 046	61 507	1 770	3 882	42 461	356 545	327 004	684 054	22 167	
3111	Animal food mfg.....	—	2	2	e	D	D	D	D	D	D	D	D	
31111	Animal food mfg.....	—	2	2	e	D	D	D	D	D	D	D	D	
311111	Dog & cat food mfg....	—	2	2	e	D	D	D	D	D	D	D	D	
3116	Meat product mfg.....	2	3	2	e	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing.....	2	3	2	e	D	D	D	D	D	D	D	D	
311612	Meat processed from carcasses.....	—	1	1	e	D	D	D	D	D	D	D	D	
3119	Other food mfg.....	—	2	2	g	D	D	D	D	D	D	D	D	
31191	Snack food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	
311919	Other snack food mfg.	—	1	1	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	1	33	10	1 831	49 849	1 385	2 746	32 314	151 924	73 283	221 123	6 050	
3231	Printing & related support activities.....	1	33	10	1 831	49 849	1 385	2 746	32 314	151 924	73 283	221 123	6 050	
32311	Printing.....	—	27	8	g	D	D	D	D	D	D	D	D	
323116	Manifold business form printing.....	—	1	1	e	D	D	D	D	D	D	D	D	
323117	Book printing.....	—	2	1	f	D	D	D	D	D	D	D	D	
32312	Support activities for printing.....	7	6	2	e	D	D	D	D	D	D	D	D	
323121	Tradebinding & related work.....	7	3	2	e	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg.....	—	2	2	g	D	D	D	D	D	D	D	D	
3262	Rubber product mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	
32621	Tire mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	
326211	Tire mfg (except retreading).....	—	1	1	g	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg.....	1	24	6	362	9 920	278	449	6 731	21 336	23 175	44 824	1 739	
333	Machinery mfg.....	—	9	4	316	9 526	207	355	5 264	9 761	31 323	41 849	1 338	
339	Miscellaneous mfg.....	2	18	3	268	5 688	209	294	3 792	13 516	6 846	20 449	663	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WICHITA, KS MSA													
31-33	Manufacturing	-	702	261	66 234	2 716 386	44 239	90 385	1 496 207	5 722 124	7 009 309	12 218 010	493 267
311	Food mfg	-	41	19	2 218	60 958	1 604	2 863	33 917	179 074	753 698	926 969	9 114
3112	Grain & oilseed milling	-	8	5	e	D	D	D	D	D	D	D	D
31121	Flour milling & malt mfg	-	7	4	260	9 892	126	283	3 384	25 354	164 283	188 555	718
311211	Flour milling	-	7	4	260	9 892	126	283	3 384	25 354	164 283	188 555	718
3116	Meat product mfg	1	7	5	1 114	25 863	951	1 604	16 757	101 936	170 468	274 599	2 825
31161	Animal slaughtering & processing	1	7	5	1 114	25 863	951	1 604	16 757	101 936	170 468	274 599	2 825
311612	Meat processed from carcasses	1	4	4	g	D	D	D	D	D	D	D	2 745
3118	Bakeries & tortilla mfg	-	13	3	335	9 830	184	354	5 243	16 272	10 741	26 950	1 682
31181	Bread & bakery product mfg	-	11	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	6	3	294	9 214	156	320	4 913	15 119	9 730	24 785	D
312	Beverage & tobacco product mfg	3	6	3	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	3	6	3	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	3	5	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	3	3	3	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	12	4	645	11 422	544	1 106	8 308	21 433	19 344	41 502	D
3149	Other textile product mills	3	10	4	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	6	5	2	e	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	6	5	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	5	2	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	5	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	22	8	800	18 312	665	1 202	12 809	43 264	74 227	115 871	1 108
3219	Other wood product mfg	1	19	6	626	14 985	518	911	10 581	36 190	64 666	99 325	871
32199	All other wood product mfg	2	10	3	e	D	D	D	D	D	D	D	275
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	79	18	1 700	54 184	1 244	2 208	30 435	189 486	163 326	352 582	6 605
3231	Printing & related support activities	-	79	18	1 700	54 184	1 244	2 208	30 435	189 486	163 326	352 582	6 605
32311	Printing	-	72	16	1 604	51 022	1 167	2 060	28 013	184 237	162 014	346 002	6 408
323110	Commercial lithographic printing	-	37	9	1 012	35 556	739	1 270	20 035	152 244	140 875	292 461	4 062
323113	Commercial screen printing	-	11	3	286	7 547	196	376	3 747	14 316	8 184	22 788	985
324	Petroleum & coal products mfg	1	5	5	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	1	5	5	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	1	3	3	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	1	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	27	12	1 242	54 765	916	1 466	21 440	178 230	273 944	451 855	34 115
3251	Basic chemical mfg	-	7	4	675	38 780	508	685	13 514	136 558	204 976	340 166	29 522
32519	Other basic organic chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	7	3	252	6 450	185	361	2 600	17 169	22 584	40 699	1 785
326	Plastics & rubber products mfg	-	30	18	3 446	117 392	2 709	4 319	59 839	323 476	252 773	591 527	20 181
3261	Plastics product mfg	-	26	17	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	19	13	3 163	108 770	2 515	3 928	55 686	298 022	209 038	520 734	18 213
326199	All other plastics product mfg	-	19	13	3 163	108 770	2 515	3 928	55 686	298 022	209 038	520 734	18 213
327	Nonmetallic mineral product mfg	-	28	10	697	17 152	520	1 093	11 463	72 778	50 324	123 127	4 269
3273	Cement & concrete product mfg	-	20	5	392	9 473	294	644	6 471	28 343	32 622	61 404	1 882
331	Primary metal mfg	1	6	4	e	D	D	D	D	D	D	D	1 468
3315	Foundries	-	3	3	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	2	e	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WICHITA, KS MSA— Con. Manufacturing— Con.												
332	Fabricated metal product mfg	1	157	53	3 526	106 020	2 585	5 275	65 187	226 467	146 841	369 469	16 449
3323	Architectural & structural metals mfg	1	31	15	1 073	28 584	768	1 601	17 326	56 831	60 653	117 251	2 395
33231	Plate work & fabricated structural product mfg ..	2	13	8	386	10 123	248	517	6 032	20 363	21 945	42 237	797
332312	Fabricated structural metal mfg	2	10	5	271	7 521	167	365	4 537	14 684	17 687	32 548	598
33232	Ornamental & architectural metal products mfg	—	18	7	687	18 461	520	1 084	11 294	36 468	38 708	75 014	1 598
332322	Sheet metal work mfg ..	—	6	3	437	13 126	345	774	8 222	27 633	30 663	57 836	1 290
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	75	15	1 342	43 889	984	1 982	28 459	102 464	52 067	150 920	10 538
33271	Machine shops	1	66	12	1 084	35 030	809	1 615	23 229	82 756	38 195	118 376	6 055
332710	Machine shops	1	66	12	1 084	35 030	809	1 615	23 229	82 756	38 195	118 376	6 055
33272	Turned product & screw, nut, & bolt mfg	—	9	3	258	8 859	175	367	5 230	19 708	13 872	32 544	4 483
3328	Coating, engraving, heat treating, & allied activities ..	1	18	9	422	16 416	321	677	8 398	32 381	6 339	38 721	1 743
33281	Coating, engraving, heat treating, & allied activities	1	18	9	422	16 416	321	677	8 398	32 381	6 339	38 721	1 743
3329	Other fabricated metal product mfg	1	15	6	263	7 321	192	364	4 102	16 762	9 616	26 180	673
333	Machinery mfg	—	67	29	6 008	211 300	4 483	8 799	129 528	595 740	569 541	1 163 980	32 037
3331	Agriculture, construction, & mining machinery mfg	—	9	5	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	5	1	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	3	3	899	37 839	668	1 489	26 487	239 192	103 196	341 784	8 188
333120	Construction machinery mfg	—	3	3	899	37 839	668	1 489	26 487	239 192	103 196	341 784	8 188
3332	Industrial machinery mfg ..	—	8	5	643	23 563	444	746	13 907	50 984	79 462	131 099	D
33329	Other industrial machinery mfg	—	7	4	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	4	3	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
33331	Commercial & service industry machinery mfg	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
333319	Other commercial & service industry machinery mfg	—	5	4	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	1 291	48 200	1 045	1 942	24 002	94 978	182 820	281 314	5 000
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	5	4	1 291	48 200	1 045	1 942	24 002	94 978	182 820	281 314	5 000
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	3	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	19	6	1 178	35 315	811	1 522	18 756	70 080	68 085	137 455	5 306
33392	Material handling equipment mfg	—	7	3	413	9 591	303	587	6 153	29 655	20 480	50 677	2 069
33399	All other general-purpose machinery mfg	—	8	2	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	26	8	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	5	1	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	5	1	e	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WICHITA, KS MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	11	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	11	5	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	2	7	3	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	8	5	461	13 319	288	597	7 259	21 804	28 003	48 124	D
3353	Electrical equipment mfg	—	5	2	e	D	D	D	D	D	D	D	621
33531	Electrical equipment mfg	—	5	2	e	D	D	D	D	D	D	D	621
336	Transportation equipment mfg	—	85	42	39 678	1 861 022	24 818	53 485	1 015 292	3 318 506	3 330 378	6 163 523	318 277
3364	Aerospace product & parts mfg	—	60	35	39 348	1 853 539	24 576	53 126	1 010 900	3 304 004	3 306 454	6 124 688	317 197
33641	Aerospace product & parts mfg	—	60	35	39 348	1 853 539	24 576	53 126	1 010 900	3 304 004	3 306 454	6 124 688	317 197
336411	Aircraft mfg	—	5	5	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	53	28	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	38	8	1 108	28 359	916	1 935	21 005	81 514	50 004	131 281	2 219
3371	Household & institutional furniture & kitchen cabinet mfg	1	28	7	1 020	26 524	845	1 812	19 806	78 161	46 483	124 289	D
33711	Wood kitchen cabinet & counter top mfg	1	13	4	656	14 083	560	1 078	11 604	50 905	27 485	78 061	884
337110	Wood kitchen cabinet & counter top mfg	1	13	4	656	14 083	560	1 078	11 604	50 905	27 485	78 061	884
33712	Household & institutional furniture mfg	1	15	3	364	12 441	285	734	8 202	27 256	18 998	46 228	D
337127	Institutional furniture mfg	1	6	3	319	11 433	247	658	7 436	24 687	16 823	41 475	1 033
339	Miscellaneous mfg	5	55	10	1 012	24 683	742	1 444	14 955	50 434	16 905	67 698	D
3399	Other miscellaneous mfg	5	30	7	771	18 959	552	1 135	11 123	39 506	11 795	51 498	D
33995	Sign mfg	5	21	6	719	17 498	517	1 048	10 070	35 352	10 009	45 557	D
339950	Sign mfg	5	21	6	719	17 498	517	1 048	10 070	35 352	10 009	45 557	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLEN COUNTY, KS												
	Manufacturing	-	28	12	1 722	45 741	1 296	2 549	29 273	165 089	133 985	277 280	6 097
31-33	ATCHISON COUNTY, KS												
	Manufacturing	-	24	10	1 753	53 717	1 415	2 952	37 719	119 319	236 319	360 097	12 826
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D
31-33	BARTON COUNTY, KS												
	Manufacturing	-	45	10	1 608	34 031	1 102	2 258	21 600	112 463	190 925	308 063	5 194
31-33	BOURBON COUNTY, KS												
	Manufacturing	-	29	16	1 295	29 409	999	2 076	18 966	80 203	68 913	148 955	3 333
31-33	BROWN COUNTY, KS												
	Manufacturing	2	18	6	820	17 984	699	1 348	12 807	37 839	38 520	75 776	1 740
321	Wood product mfg	3	2	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	2	2	f	D	D	D	D	D	D	D	D
32191	Millwork	3	2	2	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	3	2	2	f	D	D	D	D	D	D	D	D
31-33	BUTLER COUNTY, KS												
	Manufacturing	-	52	14	1 704	58 803	1 237	2 441	35 767	243 746	915 891	1 132 736	22 742
324	Petroleum & coal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	f	D	D	D	D	D	D	D	D
31-33	CHEROKEE COUNTY, KS												
	Manufacturing	-	44	16	2 291	59 587	1 613	3 172	34 460	120 905	223 117	343 483	17 798
31-33	COWLEY COUNTY, KS												
	Manufacturing	-	47	19	3 793	107 253	3 123	5 510	78 476	367 249	773 465	1 176 714	24 315
326	Plastics & rubber products mfg	1	4	3	1 322	24 968	1 179	1 521	16 670	84 816	69 456	148 377	D
3261	Plastics product mfg	1	4	3	1 322	24 968	1 179	1 521	16 670	84 816	69 456	148 377	D
32619	Other plastics product mfg	-	3	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	1	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAWFORD COUNTY, KS													
31-33	Manufacturing	-	74	30	3 206	77 219	2 557	5 102	55 275	238 835	280 548	519 298	13 130
323	Printing & related support activities.....	2	11	7	554	14 171	418	831	10 003	31 389	34 200	65 212	1 394
3231	Printing & related support activities.....	2	11	7	554	14 171	418	831	10 003	31 389	34 200	65 212	1 394
32311	Printing	2	11	7	554	14 171	418	831	10 003	31 389	34 200	65 212	1 394
336	Transportation equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
DICKINSON COUNTY, KS													
31-33	Manufacturing	-	25	7	1 161	24 623	945	1 750	15 687	87 511	75 633	160 926	17 145
311	Food mfg.....	-	5	2	690	13 059	622	1 193	9 377	61 584	55 246	114 977	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
DONIPHAN COUNTY, KS													
31-33	Manufacturing	-	8	4	f	D	D	D	D	D	D	D	4 140
333	Machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg.	-	1	1	f	D	D	D	D	D	D	D	D
DOUGLAS COUNTY, KS													
31-33	Manufacturing	-	76	25	4 240	119 989	3 213	6 581	76 896	393 392	350 047	728 800	42 762
323	Printing & related support activities.....	-	13	3	565	18 694	474	847	12 764	40 587	18 187	58 348	6 817
3231	Printing & related support activities.....	-	13	3	565	18 694	474	847	12 764	40 587	18 187	58 348	6 817
32311	Printing	-	11	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	5	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	7	1	f	D	D	D	D	D	D	D	605
ELLIS COUNTY, KS													
31-33	Manufacturing	-	28	8	1 061	20 573	916	2 001	12 857	47 148	46 934	95 131	6 907
FINNEY COUNTY, KS													
31-33	Manufacturing	-	38	10	5 416	123 370	4 675	10 298	102 356	272 500	2 151 193	2 420 224	24 301
311	Food mfg.....	-	10	3	h	D	D	D	D	D	D	D	20 416
3116	Meat product mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	3	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	3	2	h	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORD COUNTY, KS													
31-33	Manufacturing	-	29	11	h	D	D	D	D	D	D	D	23 585
311	Food mfg	-	7	4	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	2	h	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, KS													
31-33	Manufacturing	1	25	8	806	22 038	596	1 179	14 209	60 214	89 845	151 015	5 171
HARVEY COUNTY, KS													
31-33	Manufacturing	-	55	23	2 855	87 914	2 235	4 257	60 384	195 547	249 989	446 608	13 911
333	Machinery mfg	-	6	4	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
JOHNSON COUNTY, KS													
31-33	Manufacturing	2	551	188	20 590	662 810	13 670	27 452	355 188	1 813 442	1 887 284	3 659 309	144 642
311	Food mfg	-	30	10	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	4	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	128	31	4 892	140 994	3 494	7 057	88 495	282 545	288 240	570 462	29 638
3231	Printing & related support activities	2	128	31	4 892	140 994	3 494	7 057	88 495	282 545	288 240	570 462	29 638
32311	Printing	2	118	30	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	54	16	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	-	6	4	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	4	16	6	1 586	48 708	1 193	2 545	25 779	93 949	74 593	168 880	D
323116	Manifold business form printing	-	4	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	22	15	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	13	9	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	13	9	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	5	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	7	30	16	1 516	43 548	1 244	2 662	31 293	161 220	285 183	440 199	D
3261	Plastics product mfg	7	25	14	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	14	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	14	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	20	12	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	55	23	2 035	58 994	1 532	2 990	37 361	173 527	153 221	319 058	10 588
3323	Architectural & structural metals mfg	-	7	5	519	12 888	410	848	8 043	63 603	55 139	112 778	2 197
333	Machinery mfg	1	47	22	1 827	66 320	1 078	2 066	31 434	170 614	194 797	367 319	16 436
3339	Other general-purpose machinery mfg	1	19	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSON COUNTY, KS													
—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	1	49	19	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	5	20	9	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	5	20	9	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	12	6	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	12	6	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	14	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	65	14	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	2	34	8	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	2	34	8	f	D	D	D	D	D	D	D	D
LABETTE COUNTY, KS													
31-33	Manufacturing	—	40	17	2 298	64 384	1 616	2 936	35 834	142 151	112 035	254 541	7 972
332	Fabricated metal product mfg	—	8	6	929	29 067	589	1 079	14 917	60 873	48 094	109 623	3 142
LEAVENWORTH COUNTY, KS													
31-33	Manufacturing	4	36	9	645	16 222	474	841	9 993	35 422	27 170	62 281	2 018
LYON COUNTY, KS													
31-33	Manufacturing	—	40	17	6 478	167 137	4 210	9 176	100 087	443 579	1 610 603	2 054 091	22 176
311	Food mfg	—	6	5	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	2	1	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	1	1	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	1	1	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	6	4	f	D	D	D	D	D	D	D	2 114
MCPHERSON COUNTY, KS													
31-33	Manufacturing	2	68	29	3 845	131 192	2 709	5 254	82 052	632 408	996 115	1 633 454	104 271
325	Chemical mfg	9	3	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	9	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	9	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	8	7	762	22 475	609	1 120	16 557	82 396	97 254	179 696	5 072
3261	Plastics product mfg	—	8	7	762	22 475	609	1 120	16 557	82 396	97 254	179 696	5 072
333	Machinery mfg	—	9	6	772	29 409	473	956	15 396	70 315	75 636	144 828	14 155

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARSHALL COUNTY, KS													
31-33	Manufacturing	-	21	7	880	23 041	685	1 385	16 573	46 582	58 437	106 827	2 047
336	Transportation equipment mfg	-	5	4	731	19 135	585	1 223	13 925	36 398	43 922	82 248	D
3362	Motor vehicle body & trailer mfg	-	5	4	731	19 135	585	1 223	13 925	36 398	43 922	82 248	D
33621	Motor vehicle body & trailer mfg	-	5	4	731	19 135	585	1 223	13 925	36 398	43 922	82 248	D
336211	Motor vehicle body mfg	-	1	1	f	D	D	D	D	D	D	D	D
MIAMI COUNTY, KS													
31-33	Manufacturing	4	31	6	682	19 058	519	794	12 392	35 968	26 601	58 175	1 540
MONTGOMERY COUNTY, KS													
31-33	Manufacturing	-	61	30	4 590	121 577	3 435	6 794	80 897	434 795	1 050 913	1 482 902	35 730
331	Primary metal mfg	2	5	4	597	16 810	541	1 053	11 527	31 525	16 928	48 322	D
3315	Foundries	1	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	5	747	25 723	422	863	12 553	94 808	111 633	201 060	5 037
336	Transportation equipment mfg	-	4	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEMAHA COUNTY, KS													
31-33	Manufacturing	-	19	8	1 047	30 279	771	1 419	14 738	68 106	138 703	209 453	3 024
NEOSHO COUNTY, KS													
31-33	Manufacturing	-	40	22	2 281	53 682	1 796	3 516	36 251	137 099	146 830	288 983	5 669
336	Transportation equipment mfg	-	5	4	f	D	D	D	D	D	D	D	286
3362	Motor vehicle body & trailer mfg	-	5	4	f	D	D	D	D	D	D	D	286
33621	Motor vehicle body & trailer mfg	-	5	4	f	D	D	D	D	D	D	D	286
336214	Travel trailer & camper mfg	-	5	4	f	D	D	D	D	D	D	D	286
POTTAWATOMIE COUNTY, KS													
31-33	Manufacturing	5	22	8	720	25 794	501	962	16 853	74 253	59 966	134 237	4 511
RENO COUNTY, KS													
31-33	Manufacturing	1	97	41	5 141	161 262	3 869	8 113	111 434	438 282	416 747	849 707	61 621
311	Food mfg	-	9	6	962	31 183	709	1 397	21 735	68 077	140 647	208 189	4 059
333	Machinery mfg	-	15	8	1 424	53 814	1 052	2 373	37 919	108 269	98 655	204 037	14 450
3339	Other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	9	5	f	D	D	D	D	D	D	D	D
REPUBLIC COUNTY, KS													
31-33	Manufacturing	7	8	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	9	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	9	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RILEY COUNTY, KS													
31-33	Manufacturing	-	28	5	533	14 443	422	810	10 594	45 845	30 505	75 779	1 688
SALINE COUNTY, KS													
31-33	Manufacturing	1	87	30	6 434	193 202	5 294	11 209	145 484	386 746	806 297	1 212 188	53 223
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	25	6	519	16 126	361	689	9 443	28 845	27 827	65 295	2 242
333	Machinery mfg	-	7	4	1 030	31 540	748	1 466	17 852	28 619	71 120	112 322	1 444
3331	Agriculture, construction, & mining machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	3	1 326	47 661	1 160	2 557	39 508	129 015	196 397	326 947	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	7	5	4	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	9	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	9	2	2	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg	9	1	1	f	D	D	D	D	D	D	D	D
SEDGWICK COUNTY, KS													
31-33	Manufacturing	-	595	224	61 675	2 569 669	40 767	83 687	1 400 056	5 282 831	5 843 429	10 638 666	456 614
311	Food mfg	-	32	17	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	6	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	6	5	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	4	4	g	D	D	D	D	D	D	D	2 745
314	Textile product mills	3	12	4	645	11 422	544	1 106	8 308	21 433	19 344	41 502	D
3149	Other textile product mills	3	10	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	12	6	f	D	D	D	D	D	D	D	888
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	69	16	1 604	52 066	1 168	2 090	28 950	184 428	161 478	345 639	6 457
3231	Printing & related support activities	-	69	16	1 604	52 066	1 168	2 090	28 950	184 428	161 478	345 639	6 457
32311	Printing	-	62	14	1 508	48 904	1 091	1 942	26 528	179 179	160 166	339 059	6 260
323110	Commercial lithographic printing	-	31	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	24	11	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	7	4	675	38 780	508	685	13 514	136 558	204 976	340 166	29 522
32519	Other basic organic chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SEDGWICK COUNTY, KS—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	23	12	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	20	12	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	15	10	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	15	10	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	140	49	3 316	101 346	2 424	4 995	62 223	216 905	137 529	350 784	16 045
3323	Architectural & structural metals mfg	1	24	11	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	15	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	68	15	g	D	D	D	D	D	D	D	10 422
33271	Machine shops	1	59	12	g	D	D	D	D	D	D	D	5 939
332710	Machine shops	1	59	12	g	D	D	D	D	D	D	D	5 939
333	Machinery mfg	-	57	23	4 283	147 573	3 221	6 283	88 033	458 300	430 291	889 378	D
3331	Agriculture, construction, & mining machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	8	5	643	23 563	444	746	13 907	50 984	79 462	131 099	D
33329	Other industrial machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
33331	Commercial & service industry machinery mfg	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	18	5	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	22	7	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	9	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	9	4	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	75	38	39 496	1 855 247	24 676	53 230	1 011 556	3 308 218	3 318 459	6 139 187	D
3364	Aerospace product & parts mfg	-	57	33	k	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	57	33	k	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	3	3	18 925	799 895	12 030	22 116	387 699	1 896 262	1 787 111	3 504 294	D
336413	Other aircraft part & auxiliary equipment mfg	-	52	28	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	27	5	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	3	21	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	53	10	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	5	28	7	f	D	D	D	D	D	D	D	D
33995	Sign mfg	5	20	6	f	D	D	D	D	D	D	D	D
339950	Sign mfg	5	20	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SEWARD COUNTY, KS													
31-33	Manufacturing	-	10	4	h	D	D	D	D	D	D	D	10 903
311	Food mfg	-	2	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	h	D	D	D	D	D	D	D	D
SHAWNEE COUNTY, KS													
31-33	Manufacturing	-	140	49	7 722	265 397	6 334	12 630	196 613	949 419	854 119	1 805 627	44 246
311	Food mfg	-	15	9	2 046	61 507	1 770	3 882	42 461	356 545	327 004	684 054	22 167
3119	Other food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	33	10	1 831	49 849	1 385	2 746	32 314	151 924	73 283	221 123	6 050
3231	Printing & related support activities	1	33	10	1 831	49 849	1 385	2 746	32 314	151 924	73 283	221 123	6 050
32311	Printing	-	27	8	g	D	D	D	D	D	D	D	D
323117	Book printing	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
SUMNER COUNTY, KS													
31-33	Manufacturing	-	44	8	1 262	45 119	998	1 565	32 429	95 587	100 157	194 615	D
336	Transportation equipment mfg	-	11	4	843	31 441	734	1 061	24 869	56 877	50 358	106 777	D
3364	Aerospace product & parts mfg	-	9	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	9	4	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	8	3	f	D	D	D	D	D	D	D	D
WILSON COUNTY, KS													
31-33	Manufacturing	-	29	10	1 256	35 033	984	2 194	22 582	82 009	179 063	261 504	6 482
WYANDOTTE COUNTY, KS													
31-33	Manufacturing	-	262	115	15 083	638 937	11 778	25 016	466 752	2 872 875	4 806 800	7 678 175	198 500
311	Food mfg	-	33	18	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	7	2	f	D	D	D	D	D	D	D	2 675
31161	Animal slaughtering & processing	-	7	2	f	D	D	D	D	D	D	D	2 675
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	5	f	D	D	D	D	D	D	D	1 072
31182	Cookie, cracker, & pasta mfg	-	4	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	7	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	7	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	32	9	f	D	D	D	D	D	D	D	1 595
3231	Printing & related support activities	-	32	9	f	D	D	D	D	D	D	D	1 595
32311	Printing	-	23	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	16	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	22	13	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	6	5	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	6	5	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WYANDOTTE COUNTY, KS—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	21	12	g	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	4	3	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	43	12	908	28 083	707	1 358	16 883	73 570	69 338	143 171	3 917
333	Machinery mfg	-	24	10	1 475	61 147	785	1 639	22 723	132 253	156 299	286 576	D
3339	Other general-purpose machinery mfg	-	10	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	7	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	4	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	15	6	f	D	D	D	D	D	D	D	682

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ABILENE, KS												
	Manufacturing	-	8	3	707	13 155	634	1 198	9 430	60 983	55 298	115 429	D
311	Food mfg	-	4	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
31-33	ARKANSAS CITY, KS												
	Manufacturing	-	15	7	687	16 661	499	1 083	12 195	57 367	139 594	195 518	D
31-33	ATCHISON, KS												
	Manufacturing	-	15	8	1 581	49 018	1 284	2 678	34 569	104 083	203 179	311 863	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D
31-33	BAXTER SPRINGS, KS												
	Manufacturing	-	13	6	973	22 507	753	1 424	14 242	49 921	93 199	144 033	4 447

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BELLEVILLE, KS													
31-33	Manufacturing	7	7	2	f	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	9	1	1	f	D	D	D	D	D	D	D	
3261	Plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	
32611	Unsupported plastics film, sheet, & bag mfg ..	9	1	1	f	D	D	D	D	D	D	D	
326113	Unsupported plastics film & sheet (except packaging) mfg	9	1	1	f	D	D	D	D	D	D	D	
BONNER SPRINGS, KS *													
31-33	Manufacturing	1	12	7	537	16 464	417	849	10 625	48 893	66 861	114 560	
CHANUTE, KS													
31-33	Manufacturing	-	26	15	1 713	37 002	1 325	2 555	23 870	89 177	98 187	189 634	
COFFEYVILLE, KS													
31-33	Manufacturing	2	22	10	950	27 371	791	1 473	17 075	53 112	37 328	90 087	
331	Primary metal mfg	2	4	3	f	D	D	D	D	D	D	D	
3315	Foundries	1	3	2	f	D	D	D	D	D	D	D	
COLUMBUS, KS													
31-33	Manufacturing	-	7	2	f	D	D	D	D	D	D	D	
DODGE CITY, KS													
31-33	Manufacturing	-	19	7	h	D	D	D	D	D	D	D	
311	Food mfg	-	5	4	h	D	D	D	D	D	D	D	
3116	Meat product mfg	-	3	2	h	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	3	2	h	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	3	2	h	D	D	D	D	D	D	D	
EL DORADO, KS													
31-33	Manufacturing	-	16	7	561	14 357	447	932	11 468	63 879	52 986	109 999	
EMPORIA, KS													
31-33	Manufacturing	-	30	16	i	D	D	D	D	D	D	D	
311	Food mfg	-	4	4	h	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	h	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	h	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	1	1	h	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	-	1	1	g	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	-	1	1	g	D	D	D	D	D	D	D	
311812	Commercial bakeries ..	-	1	1	g	D	D	D	D	D	D	D	
333	Machinery mfg	-	5	4	f	D	D	D	D	D	D	D	
FORT SCOTT, KS													
31-33	Manufacturing	-	24	16	1 277	29 061	982	2 049	18 708	79 285	68 039	147 136	
GARDNER, KS													
31-33	Manufacturing	-	16	9	1 677	48 077	1 201	2 762	28 997	126 699	232 675	358 680	
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	
323	Printing & related support activities	-	2	2	f	D	D	D	D	D	D	D	
3231	Printing & related support activities	-	2	2	f	D	D	D	D	D	D	D	
32311	Printing	-	2	2	f	D	D	D	D	D	D	D	
323112	Commercial flexographic printing ..	-	2	2	f	D	D	D	D	D	D	D	
GREAT BEND, KS													
31-33	Manufacturing	1	27	4	657	15 549	383	788	7 753	44 919	33 277	78 471	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAYS, KS													
31-33	Manufacturing	-	20	6	945	17 868	835	1 858	11 306	43 301	41 438	84 573	6 541
HESSTON, KS													
31-33	Manufacturing	-	7	4	1 277	47 535	977	1 926	32 506	87 881	110 920	199 629	D
333	Machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	2	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
HIAWATHA, KS													
31-33	Manufacturing	3	6	3	648	11 390	571	1 089	8 938	22 359	26 786	48 830	842
321	Wood product mfg	3	2	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	2	2	f	D	D	D	D	D	D	D	D
32191	Millwork	3	2	2	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	3	2	2	f	D	D	D	D	D	D	D	D
HUTCHINSON, KS													
31-33	Manufacturing	1	47	19	2 365	71 151	1 707	3 596	46 476	232 041	134 472	363 992	47 040
INDEPENDENCE, KS													
31-33	Manufacturing	-	11	7	835	19 143	685	1 342	13 660	70 281	49 674	119 681	205
IOLA, KS													
31-33	Manufacturing	-	17	7	g	D	D	D	D	D	D	D	2 212
KANSAS CITY, KS													
31-33	Manufacturing	-	249	109	14 624	623 809	11 438	24 306	456 737	2 826 709	4 737 076	7 562 109	D
311	Food mfg	-	31	17	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	7	2	f	D	D	D	D	D	D	D	2 675
31161	Animal slaughtering & processing	-	7	2	f	D	D	D	D	D	D	D	2 675
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	9	4	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	6	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	6	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	32	9	f	D	D	D	D	D	D	D	1 595
3231	Printing & related support activities	-	32	9	f	D	D	D	D	D	D	D	1 595
32311	Printing	-	23	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	16	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	21	12	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	6	5	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	6	5	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	4	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	20	11	g	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	42	11	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	22	10	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	10	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	7	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	KANSAS CITY, KS— Con.													
	Manufacturing— Con.													
336	Transportation equipment mfg	—	8	4	h	D	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D	
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D	
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D	
	LAWRENCE, KS													
31-33	Manufacturing	—	56	20		3 439	86 168	2 691	5 475	56 974	325 174	229 014	541 621	24 195
334	Computer & electronic product mfg	2	5	2	f	D	D	D	D	D	D	D	D	
3342	Communications equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D	
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D	
	LENEXA, KS													
31-33	Manufacturing	3	133	67		7 703	232 740	5 113	10 023	129 641	658 743	855 633	1 505 986	59 097
323	Printing & related support activities	3	32	9		2 833	78 565	1 982	3 661	49 778	156 584	156 861	314 517	16 867
3231	Printing & related support activities	3	32	9		2 833	78 565	1 982	3 661	49 778	156 584	156 861	314 517	16 867
32311	Printing	3	29	9		2 815	78 056	1 971	3 639	49 393	155 731	156 463	313 265	16 835
323113	Commercial screen printing	6	2	2	g	D	D	D	D	D	D	D	D	D
323116	Manifold business form printing	—	3	2	g	D	D	D	D	D	D	D	D	D
325	Chemical mfg	—	11	9		812	27 726	374	760	9 027	87 131	44 872	130 523	D
3254	Pharmaceutical & medicine mfg	—	9	7	f	D	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	9	7	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	9	8		898	27 433	732	1 649	20 628	124 115	249 943	369 527	18 605
3261	Plastics product mfg	8	7	6	f	D	D	D	D	D	D	D	D	18 605
333	Machinery mfg	—	13	8		615	22 257	369	750	11 419	68 094	79 468	147 042	3 743
	LIBERAL, KS													
31-33	Manufacturing	—	10	4	h	D	D	D	D	D	D	D	D	10 903
311	Food mfg	—	2	2	h	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	h	D	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	1	1	h	D	D	D	D	D	D	D	D	D
	MCPHERSON, KS													
31-33	Manufacturing	—	32	20		1 591	46 427	1 255	2 492	33 377	142 228	162 857	306 150	8 534
326	Plastics & rubber products mfg	—	7	6	f	D	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	7	6	f	D	D	D	D	D	D	D	D	D
	MARYSVILLE, KS													
31-33	Manufacturing	—	6	2	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
	MERRIAM, KS													
31-33	Manufacturing	2	36	10		564	18 022	444	810	11 288	39 699	28 001	66 425	3 195

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSION, KS													
31-33	Manufacturing	5	22	7	524	16 306	390	788	10 580	30 962	34 861	65 623	3 468
NEWTON, KS													
31-33	Manufacturing	1	32	14	1 146	29 914	899	1 764	20 616	79 755	86 032	166 247	3 530
OLATHE, KS													
31-33	Manufacturing	1	117	38	4 902	181 379	2 877	5 942	82 505	523 679	348 969	842 328	34 847
332	Fabricated metal product mfg	1	20	7	717	17 882	580	1 192	12 517	59 888	36 331	93 368	3 141
333	Machinery mfg	-	10	6	579	24 602	297	554	10 602	58 433	66 599	124 730	11 345
334	Computer & electronic product mfg	1	18	9	2 064	80 509	815	1 862	18 712	242 388	102 241	321 033	15 138
3345	Navigation, measuring, medical, & control instruments mfg	-	5	2	g	D	D	D	D	D	D	D	D
33451	Navigation, measuring, medical, & control instruments mfg	-	5	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
OTTAWA, KS													
31-33	Manufacturing	-	16	7	724	19 720	541	1 058	12 751	55 857	84 646	141 090	D
OVERLAND PARK, KS													
31-33	Manufacturing	4	106	21	1 632	50 657	1 132	2 256	27 815	115 593	111 024	226 434	12 029
PARSONS, KS													
31-33	Manufacturing	-	22	12	1 730	47 125	1 303	2 465	29 579	101 120	94 420	195 331	7 353
332	Fabricated metal product mfg	-	5	4	f	D	D	D	D	D	D	D	D
PITTSBURG, KS													
31-33	Manufacturing	-	36	19	2 322	55 888	1 881	3 751	40 790	187 244	199 752	386 343	8 949
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SALINA, KS													
31-33	Manufacturing	-	68	25	5 496	160 714	4 545	9 652	120 075	329 695	632 861	985 287	D
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	21	6	502	15 732	348	671	9 176	28 110	27 493	64 226	D
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	2	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
SHAWNEE, KS													
31-33	Manufacturing	-	42	12	g	D	D	D	D	D	D	D	12 950
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
SOUTH HUTCHINSON, KS													
31-33	Manufacturing	1	13	6	744	24 097	570	1 195	16 691	59 458	96 740	155 197	2 743
TOPEKA, KS													
31-33	Manufacturing	-	124	42	i	D	D	D	D	D	D	D	40 536
311	Food mfg	-	13	9	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	32	10	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	32	10	g	D	D	D	D	D	D	D	D
32311	Printing	-	26	8	g	D	D	D	D	D	D	D	5 360
323117	Book printing	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
WELLINGTON, KS													
31-33	Manufacturing	-	10	5	744	27 197	665	938	22 803	50 363	63 845	113 945	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WICHITA, KS												
31-33	Manufacturing	-	496	193	52 170	2 158 637	34 386	70 636	1 183 118	4 011 147	5 013 872	8 579 567	396 665
311	Food mfg	-	30	16	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	6	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	6	5	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	4	4	g	D	D	D	D	D	D	D	2 745
314	Textile product mills	3	10	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	3	8	4	641	11 382	540	1 102	8 281	21 335	19 243	41 304	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	57	14	1 378	46 819	1 002	1 784	26 009	172 577	153 170	325 352	5 598
3231	Printing & related support activities	-	57	14	1 378	46 819	1 002	1 784	26 009	172 577	153 170	325 352	5 598
32311	Printing	-	52	12	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	25	6	f	D	D	D	D	D	D	D	3 831
326	Plastics & rubber products mfg	-	17	9	2 396	97 118	1 845	2 664	44 675	248 905	193 199	458 634	15 318
3261	Plastics product mfg	-	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	11	7	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	11	7	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	119	44	2 922	88 851	2 147	4 459	54 656	191 291	119 561	307 944	12 191
3323	Architectural & structural metals mfg	1	21	10	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	12	4	568	15 264	429	903	9 294	31 647	32 923	63 938	1 450
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	57	11	1 017	33 615	759	1 560	22 286	80 266	38 133	115 873	D
33271	Machine shops	-	51	10	933	30 875	689	1 425	20 404	75 070	34 791	107 283	5 477
332710	Machine shops	-	51	10	933	30 875	689	1 425	20 404	75 070	34 791	107 283	5 477
333	Machinery mfg	-	47	20	4 129	142 367	3 129	6 122	85 751	453 193	421 601	875 732	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	6	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
33331	Commercial & service industry machinery mfg	3	6	5	615	15 267	423	984	9 861	41 900	27 216	69 782	1 553
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	12	5	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	19	5	f	D	D	D	D	D	D	D	5 157
336	Transportation equipment mfg	-	63	32	k	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	48	28	k	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	48	28	k	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	2	2	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	44	24	j	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	WICHITA, KS—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	3	25	5	f	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	3	19	4	f	D	D	D	D	D	D	D	
339	Miscellaneous mfg	5	46	10	981	24 086	719	1 403	14 588	49 126	16 128	65 619	
3399	Other miscellaneous mfg ..	5	25	7	f	D	D	D	D	D	D	D	
33995	Sign mfg	5	18	6	703	17 154	504	1 020	9 835	34 691	9 626	44 529	
339950	Sign mfg	5	18	6	703	17 154	504	1 020	9 835	34 691	9 626	44 529	
	WINFIELD, KS												
31-33	Manufacturing	—	14	5	1 378	27 678	1 199	1 623	18 165	89 818	73 444	157 522	6 713
326	Plastics & rubber products mfg	—	3	2	g	D	D	D	D	D	D	D	
3261	Plastics product mfg	—	3	2	g	D	D	D	D	D	D	D	
32619	Other plastics product mfg	—	3	2	g	D	D	D	D	D	D	D	
326199	All other plastics product mfg	—	2	2	g	D	D	D	D	D	D	D	

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
KANSAS		KANSAS—Con.	
Companies ¹	number.. 3 073	Quantity of electricity purchased for heat and power	1,000 kWh.. 7 961 200
All establishments	number.. 3 309	Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Establishments with 1 to 19 employees	number.. 2 158	Total value of shipments	\$1,000.. 46 296 431
Establishments with 20 to 99 employees	number.. 790	Value of resales	\$1,000.. 1 488 136
Establishments with 100 employees or more	number.. 361	Value added	\$1,000.. 17 650 640
All employees	number.. 193 742	Total inventories, beginning of year	\$1,000.. 6 250 698
Total compensation ²	\$1,000.. 8 328 594	Finished goods inventories, beginning of year	\$1,000.. 1 669 883
Annual payroll	\$1,000.. 6 532 458	Work-in-process inventories, beginning of year	\$1,000.. 2 627 260
Total fringe benefits	\$1,000.. 1 796 136	Materials and supplies inventories, beginning of year	\$1,000.. 1 953 555
Production workers, average for year	number.. 141 169	Total inventories, end of year	\$1,000.. 6 822 210
Production workers on March 12	number.. 139 432	Finished goods inventories, end of year	\$1,000.. 1 950 265
Production workers on May 12	number.. 141 152	Work-in-process inventories, end of year	\$1,000.. 2 884 567
Production workers on August 12	number.. 141 264	Materials and supplies inventories, end of year	\$1,000.. 1 987 378
Production workers on November 12	number.. 142 828	Gross book value of total assets at beginning of year	\$1,000.. 14 539 905
Production-worker hours	1,000.. 289 801	Total capital expenditures (new and used)	\$1,000.. 1 460 240
Production-worker wages	\$1,000.. 4 052 455	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 360 705
Total cost of materials	\$1,000.. 29 196 131	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 099 535
Cost of materials, parts, containers, etc., consumed	\$1,000.. 27 021 495	Total retirements ²	\$1,000.. 466 154
Cost of resales	\$1,000.. 1 099 373	Gross book value of total assets at end of year	\$1,000.. 15 533 991
Cost of fuels	\$1,000.. 210 508	Total depreciation during year ²	\$1,000.. 1 016 526
Cost of purchased electricity	\$1,000.. 380 102	Total rental payments ²	\$1,000.. 208 726
Cost of contract work	\$1,000.. 484 653	Buildings and other structures rental payments ²	\$1,000.. 96 234
		Machinery and equipment rental payments ²	\$1,000.. 112 492

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

KANSAS

Mulvane is in Sedgwick and Sumner Counties.

Bonner Springs is in Johnson and Wyandotte Counties.

Herington is in Dickinson and Morris Counties.

Manhattan is in Pottawatomie and Riley Counties.

Appendix E. Metropolitan Areas

KANSAS

Kansas City, MO—KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Clinton County, MO
Jackson County, MO
Lafayette County, MO

Kansas City, MO—KS MSA—Con.

Platte County, MO
Ray County, MO

Lawrence, KS MSA

Douglas County, KS

Topeka, KS MSA

Shawnee County, KS

Wichita, KS MSA

Butler County, KS
Harvey County, KS
Sedgwick County, KS

Kentucky

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
KENTUCKY													
31-33	Manufacturing	-	4 218	1 712	288 405	9 198 091	223 868	452 208	6 251 584	38 337 622	48 538 716	86 636 107	3 365 993
311	Food mfg	-	245	110	18 767	488 448	13 838	28 574	312 721	2 272 941	3 356 381	5 582 304	146 780
3111	Animal food mfg	-	28	10	f	D	D	D	D	D	D	D	6 660
31111	Animal food mfg	-	28	10	f	D	D	D	D	D	D	D	6 660
311111	Dog & cat food mfg ...	-	3	2	e	D	D	D	D	D	D	D	D
311119	Other animal food mfg	1	25	8	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	10	8	482	14 806	377	781	9 917	101 908	601 276	708 696	D
31121	Flour milling & malt mfg .	-	5	4	144	3 730	105	213	2 406	13 396	43 447	56 869	D
311211	Flour milling	-	5	4	144	3 730	105	213	2 406	13 396	43 447	56 869	D
31122	Starch & vegetable fats & oils mfg	-	5	4	338	11 076	272	568	7 511	88 512	557 829	651 827	2 178
311222	Soybean processing ..	-	1	1	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	3	3	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	19	3	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	7	2	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	7	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	18	14	2 434	67 078	2 098	4 649	53 174	319 029	458 737	766 870	60 085
31141	Frozen food mfg	-	7	6	1 587	37 596	1 408	3 142	31 360	81 348	208 290	289 606	46 420
311412	Frozen specialty food mfg	-	7	6	1 587	37 596	1 408	3 142	31 360	81 348	208 290	289 606	46 420
31142	Fruit & vegetable canning, pickling, & drying	-	11	8	847	29 482	690	1 507	21 814	237 681	250 447	477 264	13 665
311421	Fruit & vegetable canning	-	10	7	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	15	15	1 965	60 776	1 157	2 517	31 589	205 408	551 679	758 332	14 004
31151	Dairy product (except frozen) mfg	-	13	13	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	11	11	g	D	D	D	D	D	D	D	8 670
311514	Dry, condensed, & evaporated dairy product mfg	-	1	1	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	2	2	c	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	2	2	c	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	47	21	5 980	130 358	4 452	9 631	89 387	515 817	761 004	1 263 944	14 917
31161	Animal slaughtering & processing	1	47	21	5 980	130 358	4 452	9 631	89 387	515 817	761 004	1 263 944	14 917
311611	Animal (except poultry) slaughtering	2	23	7	2 325	56 914	1 668	3 695	35 318	101 662	450 969	549 422	5 749
311612	Meat processed from carcasses	-	15	7	1 260	34 964	815	1 826	24 673	217 759	181 823	396 720	5 235
311613	Rendering & meat byproduct processing	-	3	2	c	D	D	D	D	D	D	D	D
311615	Poultry processing	-	6	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	83	23	5 048	125 688	3 535	6 807	73 369	473 294	300 665	773 746	20 964
31181	Bread & bakery product mfg	-	72	15	2 881	73 705	1 668	3 027	34 030	174 537	151 292	325 622	9 116
311811	Retail bakeries	4	52	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	19	10	2 135	52 544	1 136	2 334	23 410	117 479	112 179	230 189	8 004
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	2	11	8	2 167	51 983	1 867	3 780	39 339	298 757	149 373	448 124	11 848
311821	Cookie & cracker mfg .	-	6	5	1 777	39 265	1 537	3 072	29 172	177 933	125 237	303 022	8 900
311822	Flour mixes & dough mfg from purchased flour	8	4	2	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	-	1	1	c	D	D	D	D	D	D	D	D
3119	Other food mfg	-	25	16	1 915	59 528	1 555	2 936	37 481	423 713	460 232	865 879	22 308
31191	Snack food mfg	-	8	6	1 319	42 211	1 137	2 136	27 662	232 193	316 585	544 905	15 541
311911	Roasted nuts & peanut butter mfg	-	4	3	648	21 153	571	1 187	15 244	146 756	264 046	407 132	8 240
311919	Other snack food mfg .	-	4	3	671	21 058	566	949	12 418	85 437	52 539	137 773	7 301
31192	Coffee & tea mfg	-	3	2	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	3	2	c	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	1	4	2	c	D	D	D	D	D	D	D	D
311942	Spice & extract mfg ...	1	3	2	c	D	D	D	D	D	D	D	D
31199	All other food mfg	2	7	5	178	4 220	151	296	2 891	15 690	18 342	33 868	889
311999	All other miscellaneous food mfg	2	5	3	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTUCKY—Con.													
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	55	33	6 711	267 634	4 345	8 949	161 442	3 934 697	1 312 257	5 204 386	48 810
	Beverage mfg	1	46	26	3 526	119 786	1 905	3 896	56 357	723 182	572 901	1 284 359	D
31211	Soft drink & ice mfg	4	28	12	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	13	9	1 080	35 437	262	556	6 762	82 644	133 038	215 837	6 657
312112	Bottled water mfg	—	3	1	c	D	D	D	D	D	D	D	D
312113	Ice mfg	1	12	2	c	D	D	D	D	D	D	D	923
31214	Distilleries	1	16	13	2 124	75 727	1 496	3 016	45 918	613 814	432 090	1 034 299	28 331
312140	Distilleries	1	16	13	2 124	75 727	1 496	3 016	45 918	613 814	432 090	1 034 299	28 331
3122	Tobacco mfg	—	9	7	3 185	147 848	2 440	5 053	105 085	3 211 515	739 356	3 920 027	D
31221	Tobacco stemming & redrying	—	4	3	e	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	4	3	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	5	4	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	2	1	g	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	6	26	11	1 544	34 812	1 312	2 506	25 593	106 990	111 780	215 762	D
3132	Fabric mills	6	15	8	980	24 196	855	1 797	18 269	86 338	83 432	166 418	D
31322	Narrow fabric mills & schiffli machine embroidery	—	5	2	e	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	4	1	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	6	3	3	345	8 824	323	651	7 427	28 848	31 000	57 360	D
313230	Nonwoven fabric mills	6	3	3	345	8 824	323	651	7 427	28 848	31 000	57 360	D
31324	Knit fabric mills	9	3	3	e	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	9	1	1	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	9	10	2	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	9	1	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	9	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	73	25	4 221	84 565	3 671	7 169	65 137	243 991	277 062	515 219	8 984
3141	Textile furnishings mills	1	34	10	1 570	34 473	1 268	2 291	21 702	93 213	79 797	168 820	1 697
31412	Curtain & linen mills	1	31	10	1 553	34 220	1 253	2 261	21 512	92 547	78 832	167 186	D
314121	Curtain & drapery mills	7	19	4	315	5 022	250	425	3 056	9 747	9 113	18 836	D
314129	Other household textile product mills	—	12	6	1 238	29 198	1 003	1 836	18 456	82 800	69 719	148 350	1 258
3149	Other textile product mills	—	39	15	2 651	50 092	2 403	4 878	43 435	150 778	197 265	346 399	7 287
31491	Textile bag & canvas mills	—	15	7	353	5 876	252	461	3 625	10 875	10 319	20 598	479
314911	Textile bag mills	—	4	4	125	2 054	108	201	1 584	3 580	3 304	6 922	D
314912	Canvas & related product mills	—	11	3	228	3 822	144	260	2 041	7 295	7 015	13 676	D
31499	All other textile product mills	—	24	8	2 298	44 216	2 151	4 417	39 810	139 903	186 946	325 801	6 808
314999	All other miscellaneous textile product mills	—	22	7	g	D	D	D	D	D	D	D	6 808
315	Apparel mfg	—	123	92	23 593	401 068	20 983	37 678	323 723	1 167 375	1 067 952	2 199 984	20 259
3151	Apparel knitting mills	—	9	7	i	D	D	D	D	D	D	D	4 772
31511	Hosiery & sock mills	—	5	3	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	3	2	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	4	4	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	4	4	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	96	78	17 803	279 231	15 595	27 794	216 833	741 391	634 825	1 365 108	13 492
31521	Cut & sew apparel contractors	2	30	21	h	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	2	14	13	2 483	33 799	2 299	4 090	30 427	70 435	2 710	70 569	D
315212	Women's, girls' & infants' cut & sew apparel contractors	1	16	8	g	D	D	D	D	D	D	D	1 248

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KENTUCKY—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31522	Men's & boys' cut & sew apparel mfg	—	47	42	8 895	147 661	7 422	13 152	103 456	390 086	354 982	747 564	7 011
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	3	3	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	15	10	1 643	22 224	1 525	2 829	19 196	40 922	26 165	62 435	226
315225	Men's & boys' cut & sew work clothing mfg	—	20	20	4 068	65 592	3 495	6 192	48 608	153 658	177 159	329 356	3 864
315228	Men's & boys' cut & sew other outerwear mfg	1	5	5	851	13 631	740	1 392	11 363	23 531	9 691	34 553	1 510
31523	Women's & girls' cut & sew apparel mfg	—	15	14	4 019	61 563	3 737	6 787	53 618	229 597	242 335	462 631	3 938
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	2	2	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	3	2	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	1	1	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	1	9	9	2 819	44 725	2 592	5 099	38 938	65 913	106 242	171 744	952
31529	Other cut & sew apparel mfg	—	4	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	18	7	f	D	D	D	D	D	D	D	1 995
31599	Apparel accessories & other apparel mfg	—	18	7	f	D	D	D	D	D	D	D	1 995
315991	Hat, cap, & millinery mfg	—	7	5	401	7 122	305	548	3 995	14 275	3 962	17 220	D
315999	Other apparel accessories & other apparel mfg	—	8	1	c	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	1	17	8	1 203	25 436	1 121	2 428	23 249	154 768	54 319	210 150	D
3161	Leather & hide tanning & finishing	—	4	3	c	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	4	3	c	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	4	3	c	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	3	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	3	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	—	1	1	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	—	2	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	8	10	2	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	8	10	2	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	8	6	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg	2	440	139	11 319	225 061	9 594	17 968	170 119	534 753	713 187	1 238 812	63 254
3211	Sawmills & wood preservation	2	192	58	3 908	71 662	3 424	6 328	56 391	192 836	276 549	466 083	26 334
32111	Sawmills & wood preservation	2	192	58	3 908	71 662	3 424	6 328	56 391	192 836	276 549	466 083	26 334
321113	Sawmills	2	181	54	3 671	65 917	3 241	5 941	52 552	171 644	221 508	391 409	24 320
321114	Wood preservation	—	11	4	237	5 745	183	387	3 839	21 192	55 041	74 674	2 014
3212	Veneer, plywood, & engineered wood product mfg	—	37	15	1 315	32 621	1 047	2 004	22 275	76 916	88 563	160 563	22 560
32121	Veneer, plywood, & engineered wood product mfg	—	37	15	1 315	32 621	1 047	2 004	22 275	76 916	88 563	160 563	22 560
321211	Hardwood veneer & plywood mfg	1	10	5	523	11 568	425	784	7 749	25 175	31 901	56 122	D
321213	Engineered wood member (except truss) mfg	—	2	2	e	D	D	D	D	D	D	D	D
321214	Truss mfg	—	23	7	488	10 622	383	742	6 956	21 074	25 421	46 585	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTUCKY—Con.													
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg...	2	211	66	6 096	120 778	5 123	9 636	91 453	265 001	348 075	612 166	14 360
32191	Millwork	2	83	31	3 222	65 376	2 730	5 419	51 972	150 593	176 169	326 123	7 234
321911	Wood window & door mfg	4	16	4	488	11 807	420	809	9 616	34 954	38 255	73 201	1 421
321912	Cut stock, resawing lumber, & planing....	2	46	21	1 826	34 779	1 633	3 257	27 819	64 468	86 072	152 655	2 892
321918	Other millwork (including flooring) ...	—	21	6	908	18 790	677	1 353	14 537	51 171	51 842	100 267	2 921
32192	Wood container & pallet mfg	1	93	25	1 872	35 960	1 621	2 857	26 586	72 518	108 607	181 662	4 603
321920	Wood container & pallet mfg	1	93	25	1 872	35 960	1 621	2 857	26 586	72 518	108 607	181 662	4 603
32199	All other wood product mfg	1	35	10	1 002	19 442	772	1 360	12 895	41 890	63 299	104 381	2 523
321991	Manufactured home (mobile home) mfg ..	4	2	2	c	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	—	28	7	655	11 834	491	944	7 849	24 731	33 367	57 703	1 977
322	Paper mfg	—	92	68	10 559	369 968	8 249	18 178	256 479	1 215 725	1 721 868	2 908 436	409 536
3221	Pulp, paper, & paperboard mills	—	9	9	1 757	100 401	1 266	3 005	68 104	402 268	455 024	852 861	327 401
32211	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
322110	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
32212	Paper mills	—	5	5	1 157	64 354	809	1 954	40 902	272 215	277 072	547 281	D
322121	Paper (except newsprint) mills	—	5	5	1 157	64 354	809	1 954	40 902	272 215	277 072	547 281	D
32213	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	83	59	8 802	269 567	6 983	15 173	188 375	813 457	1 266 844	2 055 575	82 135
32221	Paperboard container mfg	—	49	37	3 614	111 321	2 828	5 804	75 711	324 665	434 568	756 905	23 146
322211	Corrugated & solid fiber box mfg	—	33	24	2 181	67 713	1 625	3 318	43 223	166 922	266 771	432 217	14 363
322212	Folding paperboard box mfg	1	6	5	587	17 785	485	1 014	13 180	47 947	72 728	121 576	1 648
322214	Fiber can, tube, drum, & similar products mfg	1	4	2	127	4 179	107	214	2 822	9 471	15 154	24 659	2 759
322215	Nonfolding sanitary food container mfg ...	—	4	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	16	11	3 872	119 237	3 144	7 212	87 533	386 154	553 271	917 968	38 152
322222	Coated & laminated paper mfg	—	10	5	2 154	68 970	1 763	3 810	50 423	232 634	292 897	507 133	27 476
322224	Uncoated paper & multiwall bag mfg	3	4	4	g	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	—	13	7	636	18 390	501	1 103	12 485	40 800	149 541	189 468	D
322232	Envelope mfg	—	6	4	e	D	D	D	D	D	D	D	5 006
32229	Other converted paper product mfg	—	5	4	680	20 619	510	1 054	12 646	61 838	129 464	191 234	D
322291	Sanitary paper product mfg	—	2	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	—	3	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	449	108	14 792	428 089	11 856	22 629	309 729	1 033 142	607 465	1 632 400	76 524
3231	Printing & related support activities	1	449	108	14 792	428 089	11 856	22 629	309 729	1 033 142	607 465	1 632 400	76 524
32311	Printing	1	414	96	14 022	402 820	11 281	21 608	292 496	984 121	597 708	1 573 676	72 659
323110	Commercial lithographic printing ..	—	201	47	9 052	277 045	7 405	15 035	201 022	664 932	388 278	1 047 649	57 632
323111	Commercial gravure printing	—	4	1	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	—	13	8	384	10 061	284	580	6 334	30 935	27 013	57 366	2 622
323113	Commercial screen printing	1	39	10	803	19 544	604	1 091	11 645	51 544	30 367	82 291	1 884
323114	Quick printing	2	87	5	561	12 676	401	639	7 912	23 693	14 395	38 071	D
323116	Manifold business form printing	7	11	8	573	16 527	446	914	11 351	51 719	42 377	93 168	2 335
323117	Book printing	—	10	7	1 495	39 771	1 301	2 035	36 127	91 938	45 147	136 853	2 183
323119	Other commercial printing	6	45	8	560	11 394	317	496	5 491	31 237	18 087	48 266	2 610
32312	Support activities for printing	—	35	12	770	25 269	575	1 021	17 233	49 021	9 757	58 724	3 865
323121	Tradebinding & related work	—	7	2	146	2 505	132	171	1 949	4 053	936	4 919	308
323122	Prepress services	—	28	10	624	22 764	443	850	15 284	44 968	8 821	53 805	3 557

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTUCKY—Con.													
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	-	41	6	1 241	60 483	977	2 272	46 521	402 892	1 827 878	2 227 827	D
3241	Petroleum & coal products mfg	-	41	6	1 241	60 483	977	2 272	46 521	402 892	1 827 878	2 227 827	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	2	33	3	c	D	D	D	D	D	D	D	1 433
324121	Asphalt paving mixture & block mfg	2	33	3	c	D	D	D	D	D	D	D	1 433
325	Chemical mfg	-	173	83	14 120	648 376	8 684	19 449	374 712	3 542 890	3 907 275	7 460 926	276 803
3251	Basic chemical mfg	-	44	24	5 920	290 810	3 493	8 281	163 485	1 205 253	1 277 686	2 475 143	97 198
32512	Industrial gas mfg	-	15	2	478	24 275	346	769	16 956	151 494	109 050	256 771	D
325120	Industrial gas mfg	-	15	2	478	24 275	346	769	16 956	151 494	109 050	256 771	D
32513	Dye & pigment mfg	-	4	3	397	16 526	242	594	10 664	56 831	100 015	153 427	D
325132	Synthetic organic dye & pigment mfg	-	4	3	397	16 526	242	594	10 664	56 831	100 015	153 427	D
32518	Other basic inorganic chemical mfg	-	8	7	2 937	139 918	1 588	3 932	69 578	559 480	381 800	948 945	18 293
325188	All other basic inorganic chemical mfg	-	8	7	2 937	139 918	1 588	3 932	69 578	559 480	381 800	948 945	18 293
32519	Other basic organic chemical mfg	-	17	12	2 108	110 091	1 317	2 986	66 287	437 448	686 821	1 116 000	44 118
325191	Gum & wood chemical mfg	-	1	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	15	10	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	17	16	3 938	202 966	2 604	5 662	125 600	1 339 741	1 626 931	2 985 201	136 436
32521	Resin & synthetic rubber mfg	-	17	16	3 938	202 966	2 604	5 662	125 600	1 339 741	1 626 931	2 985 201	136 436
325211	Plastics material & resin mfg	-	14	13	2 986	153 434	1 891	4 192	89 927	1 128 913	1 421 108	2 552 834	124 427
325212	Synthetic rubber mfg ..	-	3	3	952	49 532	713	1 470	35 673	210 828	205 823	432 367	12 009
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	2	9	2	150	4 494	90	176	2 917	24 114	25 888	45 684	826
32531	Fertilizer mfg	2	8	2	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	2	7	2	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	11	4	159	3 988	86	135	1 989	17 559	22 907	40 629	1 193
32541	Pharmaceutical & medicine mfg	-	11	4	159	3 988	86	135	1 989	17 559	22 907	40 629	1 193
325414	Biological product (except diagnostic) mfg	1	5	3	c	D	D	D	D	D	D	D	218
3255	Paint, coating, & adhesive mfg	1	37	22	2 099	80 124	1 211	2 605	41 558	556 676	646 128	1 207 770	24 287
32551	Paint & coating mfg	-	30	16	1 242	46 044	608	1 177	18 739	384 158	256 109	642 322	7 126
325510	Paint & coating mfg ..	-	30	16	1 242	46 044	608	1 177	18 739	384 158	256 109	642 322	7 126
32552	Adhesive mfg	2	7	6	857	34 080	603	1 428	22 819	172 518	390 019	565 448	17 161
325520	Adhesive mfg	2	7	6	857	34 080	603	1 428	22 819	172 518	390 019	565 448	17 161
3256	Soap, cleaning compound, & toilet preparation mfg ..	5	16	4	861	27 589	560	1 162	15 985	219 115	163 810	383 405	9 847
32561	Soap & cleaning compound mfg	-	11	2	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	5	1	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	-	6	1	115	4 427	91	191	2 532	14 984	13 729	29 243	421
32562	Toilet preparation mfg ...	9	5	2	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	9	5	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	39	11	993	38 405	640	1 428	23 178	180 432	143 925	323 094	7 016
32591	Printing ink mfg	1	9	1	148	5 471	95	191	3 526	33 584	48 396	81 156	1 878
325910	Printing ink mfg	1	9	1	148	5 471	95	191	3 526	33 584	48 396	81 156	1 878
32592	Explosives mfg	-	8	3	195	7 016	115	262	3 613	32 894	37 729	69 563	653
325920	Explosives mfg	-	8	3	195	7 016	115	262	3 613	32 894	37 729	69 563	653
32599	All other chemical product & preparation mfg	1	22	7	650	25 918	430	975	16 039	113 954	57 800	172 375	4 485
325991	Custom compounding of purchased resin ...	3	9	4	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	11	3	406	17 490	298	701	12 998	93 881	36 219	130 697	3 085

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KENTUCKY—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	-	221	144	19 650	535 800	15 744	31 730	385 104	1 568 189	1 771 023	3 362 568	161 496
3261	Plastics product mfg.....	-	182	124	16 256	424 902	13 326	26 673	304 352	1 260 697	1 518 476	2 767 672	149 827
32611	Unsupported plastics film, sheet, & bag mfg...	-	14	11	989	36 370	741	1 658	23 721	125 345	188 855	314 748	20 051
326111	Unsupported plastics bag mfg.....	-	3	3	194	5 103	174	366	4 351	16 704	20 024	36 626	D
326112	Unsupported plastics packaging film & sheet mfg.....	1	3	2	148	5 480	115	258	3 643	14 975	16 983	31 811	D
326113	Unsupported plastics film & sheet (except packaging) mfg.....	-	8	6	647	25 787	452	1 034	15 727	93 666	151 848	246 311	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	-	14	9	f	D	D	D	D	D	D	D	15 809
326121	Unsupported plastics profile shape mfg....	-	7	3	e	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg.....	-	7	6	466	11 968	369	786	9 088	43 205	100 734	142 768	D
32613	Laminated plastics plate, sheet, & shape mfg....	-	6	2	e	D	D	D	D	D	D	D	972
326130	Laminated plastics plate, sheet, & shape mfg.....	-	6	2	e	D	D	D	D	D	D	D	972
32614	Polystyrene foam product mfg.....	-	9	7	1 357	41 974	1 170	2 434	33 442	131 689	246 370	376 346	9 192
326140	Polystyrene foam product mfg.....	-	9	7	1 357	41 974	1 170	2 434	33 442	131 689	246 370	376 346	9 192
32615	Urethane & other foam product (except polystyrene) mfg.....	-	12	9	1 281	29 338	1 084	1 747	22 435	134 808	115 522	251 361	2 871
326150	Urethane & other foam product (except polystyrene) mfg....	-	12	9	1 281	29 338	1 084	1 747	22 435	134 808	115 522	251 361	2 871
32616	Plastics bottle mfg.....	1	9	6	1 009	28 160	893	1 903	23 951	92 615	98 436	188 025	18 773
326160	Plastics bottle mfg....	1	9	6	1 009	28 160	893	1 903	23 951	92 615	98 436	188 025	18 773
32619	Other plastics product mfg.....	1	118	80	10 642	262 938	8 681	17 324	182 369	688 607	682 353	1 364 143	82 159
326191	Plastics plumbing fixture mfg.....	-	8	2	156	3 386	112	219	2 148	12 365	9 874	22 137	96
326199	All other plastics product mfg.....	1	110	78	10 486	259 552	8 569	17 105	180 221	676 242	672 479	1 342 006	82 063
3262	Rubber product mfg.....	-	39	20	3 394	110 898	2 418	5 057	80 752	307 492	252 547	594 896	11 669
32621	Tire mfg.....	-	19	4	1 046	46 802	745	1 747	38 062	100 698	112 807	229 749	D
326211	Tire mfg (except retreading).....	-	2	1	f	D	D	D	D	D	D	D	D
326212	Tire retreading.....	2	17	3	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg.....	-	3	3	901	28 793	646	1 558	20 311	106 841	64 199	186 929	D
326220	Rubber & plastics hoses & belting mfg..	-	3	3	901	28 793	646	1 558	20 311	106 841	64 199	186 929	D
32629	Other rubber product mfg.....	1	17	13	1 447	35 303	1 027	1 752	22 379	99 953	75 541	178 218	5 574
326291	Rubber product mfg for mechanical use.....	-	9	7	1 110	25 788	764	1 277	15 688	79 590	50 528	130 208	4 842
326299	All other rubber product mfg.....	2	8	6	337	9 515	263	475	6 691	20 363	25 013	48 010	732
327	Nonmetallic mineral product mfg.....	-	260	98	10 547	316 560	8 140	16 771	223 008	976 909	736 111	1 686 140	103 674
3271	Clay product & refractory mfg.....	-	28	17	2 110	59 524	1 690	3 433	43 045	157 202	103 993	249 558	26 708
32711	Pottery, ceramics, & plumbing fixture mfg....	1	17	8	770	18 296	600	1 071	12 508	44 890	17 336	60 515	566
327111	Vitreous china plumbing fixture & bathroom accessories mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg..	1	15	7	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg.....	-	11	9	1 340	41 228	1 090	2 362	30 537	112 312	86 657	189 043	26 142
327121	Brick & structural clay tile mfg.....	-	4	4	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg.....	-	3	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KENTUCKY—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3272	Glass & glass product mfg .	—	28	15	3 143	110 611	2 567	5 510	81 567	397 270	235 845	619 700	30 848
32721	Glass & glass product mfg	—	28	15	3 143	110 611	2 567	5 510	81 567	397 270	235 845	619 700	30 848
327212	Other pressed & blown glass & glassware mfg	—	9	5	1 309	53 319	1 049	2 346	39 419	198 508	67 646	255 271	20 349
327215	Glass product mfg made of purchased glass	—	19	10	1 834	57 292	1 518	3 164	42 148	198 762	168 199	364 429	10 499
3273	Cement & concrete product mfg	2	162	47	3 164	84 968	2 218	4 458	54 723	259 889	236 569	493 561	29 386
32731	Cement mfg	—	4	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	4	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg .	2	99	27	1 816	46 156	1 339	2 574	32 154	127 076	140 148	267 702	20 142
327320	Ready-mix concrete mfg	2	99	27	1 816	46 156	1 339	2 574	32 154	127 076	140 148	267 702	20 142
32733	Concrete pipe, brick, & block mfg	3	26	12	f	D	D	D	D	D	D	D	4 762
327331	Concrete block & brick mfg	2	18	8	491	13 622	241	530	5 679	32 830	32 536	64 714	3 313
327332	Concrete pipe mfg	6	8	4	c	D	D	D	D	D	D	D	1 449
32739	Other concrete product mfg	—	33	7	509	12 317	365	760	7 870	36 262	30 469	63 326	D
327390	Other concrete product mfg	—	33	7	509	12 317	365	760	7 870	36 262	30 469	63 326	D
3274	Lime & gypsum product mfg	—	6	3	f	D	D	D	D	D	D	D	D
32741	Lime mfg	—	2	2	f	D	D	D	D	D	D	D	D
327410	Lime mfg	—	2	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	36	16	g	D	D	D	D	D	D	D	D
32791	Abrasive product mfg . . .	—	3	1	c	D	D	D	D	D	D	D	D
327910	Abrasive product mfg . .	—	3	1	c	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg . . .	—	33	15	g	D	D	D	D	D	D	D	11 486
327992	Ground or treated mineral & earth mfg . .	—	6	2	137	5 611	90	208	3 474	20 629	18 378	38 631	D
327993	Mineral wool mfg	—	6	6	817	23 206	670	1 258	15 718	60 420	38 995	99 231	5 016
327999	All other miscellaneous nonmetallic mineral product mfg	2	15	7	440	9 280	330	690	6 844	20 325	15 327	35 428	D
331	Primary metal mfg	—	77	57	15 085	588 849	12 237	27 302	433 858	1 667 215	3 473 849	5 116 552	205 617
3311	Iron & steel mills & ferroalloy mfg	—	9	8	3 571	176 884	2 876	6 002	135 578	399 778	760 282	1 133 623	86 175
33111	Iron & steel mills & ferroalloy mfg	—	9	8	3 571	176 884	2 876	6 002	135 578	399 778	760 282	1 133 623	86 175
331111	Iron & steel mills	—	8	7	h	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	13	10	1 428	45 585	1 150	2 329	34 838	135 006	252 034	398 401	13 405
33121	Iron & steel pipes & tubes mfg from purchased steel	—	5	4	370	11 336	305	602	8 972	27 742	55 974	84 609	2 661
331210	Iron & steel pipes & tubes mfg from purchased steel	—	5	4	370	11 336	305	602	8 972	27 742	55 974	84 609	2 661
33122	Rolling & drawing of purchased steel	—	8	6	1 058	34 249	845	1 727	25 866	107 264	196 060	313 792	10 744
331222	Steel wire drawing	—	7	5	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing . .	—	17	15	4 813	203 165	3 624	8 479	133 897	604 268	1 777 473	2 380 936	36 893
33131	Alumina & aluminum production & processing	—	17	15	4 813	203 165	3 624	8 479	133 897	604 268	1 777 473	2 380 936	36 893
331312	Primary aluminum production	—	2	2	g	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum .	—	4	4	343	12 113	240	514	7 818	43 585	392 555	436 725	7 557
331315	Aluminum sheet, plate, & foil mfg	—	6	4	2 282	108 775	1 600	4 120	67 095	266 591	679 406	953 408	19 726
331316	Aluminum extruded product mfg	—	2	2	f	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	—	3	3	283	10 931	223	519	8 045	54 420	266 197	315 851	2 305

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTUCKY—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing	-	14	8	1 323	46 569	1 131	2 498	36 605	185 591	436 455	618 098	23 695
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	c	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	c	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying . . .	-	3	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	3	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	-	10	5	721	24 281	588	1 306	17 587	92 080	180 147	267 573	15 211
331491	Other nonferrous metal rolling, drawing, & extruding	-	7	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	24	16	3 950	116 646	3 456	7 994	92 940	342 572	247 605	585 494	45 449
33151	Ferrous metal foundries	-	7	6	925	26 484	779	1 448	20 412	73 511	47 773	119 643	4 222
331511	Iron foundries	1	4	3	529	15 116	452	817	11 285	27 610	20 470	46 583	D
331513	Steel foundries (except investment)	-	2	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	17	10	3 025	90 162	2 677	6 546	72 528	269 061	199 832	465 851	41 227
331521	Aluminum die-casting foundries	-	6	5	703	19 662	597	1 327	14 516	64 522	62 669	125 656	6 126
331522	Nonferrous (except aluminum) die-casting foundries	-	4	2	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	729	262	26 590	796 755	20 427	40 998	531 295	1 967 606	2 238 868	4 184 045	240 170
3321	Forging & stamping	-	44	27	3 229	92 668	2 640	5 414	64 737	218 494	263 854	482 767	23 360
33211	Forging & stamping	-	44	27	3 229	92 668	2 640	5 414	64 737	218 494	263 854	482 767	23 360
332111	Iron & steel forging	1	10	4	770	23 175	633	1 389	16 903	73 054	144 871	11 520	1 101
332114	Custom roll forming	-	6	4	364	12 932	283	605	7 355	30 651	39 737	71 201	1 101
332115	Crown & closure mfg	-	3	2	140	5 692	112	208	4 229	13 947	25 712	39 685	751
332116	Metal stamping	-	25	17	1 955	50 869	1 612	3 212	36 250	101 606	125 351	227 010	9 988
3322	Cutlery & handtool mfg	-	30	12	1 536	44 518	1 189	2 444	28 592	105 006	76 948	181 905	29 923
33221	Cutlery & handtool mfg	-	30	12	1 536	44 518	1 189	2 444	28 592	105 006	76 948	181 905	29 923
332212	Hand & edge tool mfg	-	23	7	841	27 964	602	1 186	16 561	63 087	42 712	106 498	D
332213	Saw blade & handsaw mfg	-	3	3	574	13 504	491	1 047	9 979	35 135	24 745	59 145	D
332214	Kitchen utensil, pot, & pan mfg	-	3	2	c	D	D	D	D	D	D	D	247
3323	Architectural & structural metals mfg	1	177	57	3 777	109 271	2 726	5 404	68 270	259 815	237 333	493 905	14 315
33231	Plate work & fabricated structural product mfg . .	2	68	26	1 738	51 535	1 260	2 481	31 914	110 335	115 900	227 504	5 142
332311	Prefabricated metal building & component mfg	1	15	2	240	6 599	172	314	3 194	13 951	11 860	25 926	379
332312	Fabricated structural metal mfg	2	43	19	1 072	33 803	729	1 490	20 644	68 620	90 944	160 918	3 679
332313	Plate work mfg	-	10	5	426	11 133	359	677	8 076	27 764	13 096	40 660	1 084
33232	Ornamental & architectural metal products mfg	1	109	31	2 039	57 736	1 466	2 923	36 356	149 480	121 433	266 401	9 173
332321	Metal window & door mfg	1	12	3	253	6 649	191	394	3 901	13 225	10 607	23 709	2 221
332322	Sheet metal work mfg	1	58	23	1 414	43 788	1 062	2 143	27 799	122 209	93 696	211 414	6 006
332323	Ornamental & architectural metal work mfg	2	39	5	372	7 299	213	386	4 656	14 046	17 130	31 278	946
3324	Boiler, tank, & shipping container mfg	-	26	17	2 489	78 765	1 733	3 553	48 409	184 598	169 714	354 754	8 189
33241	Power boiler & heat exchanger mfg	-	7	4	1 541	50 021	1 092	2 232	32 182	110 215	78 034	188 000	D
332410	Power boiler & heat exchanger mfg	-	7	4	1 541	50 021	1 092	2 232	32 182	110 215	78 034	188 000	D
33242	Metal tank (heavy gauge) mfg	-	12	10	717	21 025	456	904	10 541	52 651	57 715	110 566	2 776
332420	Metal tank (heavy gauge) mfg	-	12	10	717	21 025	456	904	10 541	52 651	57 715	110 566	2 776
33243	Metal can, box, & other metal container (light gauge) mfg	3	7	3	231	7 719	185	417	5 686	21 732	33 965	56 188	D
332439	Other metal container mfg	3	7	3	231	7 719	185	417	5 686	21 732	33 965	56 188	D
3325	Hardware mfg	-	16	13	2 198	60 988	1 749	3 567	43 070	143 072	168 774	312 997	10 611
33251	Hardware mfg	-	16	13	2 198	60 988	1 749	3 567	43 070	143 072	168 774	312 997	10 611
332510	Hardware mfg	-	16	13	2 198	60 988	1 749	3 567	43 070	143 072	168 774	312 997	10 611

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTUCKY—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	-	28	16	1 801	52 311	1 448	3 033	36 840	158 824	151 305	310 559	14 518
33261	Spring & wire product mfg	-	28	16	1 801	52 311	1 448	3 033	36 840	158 824	151 305	310 559	14 518
332611	Spring (heavy gauge) mfg	-	3	2	c	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	1	8	5	883	25 879	714	1 439	19 810	73 611	72 648	146 417	4 356
332618	Other fabricated wire product mfg	-	17	9	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	284	65	4 937	143 334	3 873	7 615	99 318	301 137	172 891	473 008	21 893
33271	Machine shops	1	252	46	3 788	115 532	2 987	6 012	79 827	217 128	98 584	314 125	16 132
332710	Machine shops	1	252	46	3 788	115 532	2 987	6 012	79 827	217 128	98 584	314 125	16 132
33272	Turned product & screw, nut, & bolt mfg	1	32	19	1 149	27 802	886	1 603	19 491	84 009	74 307	158 883	5 761
332721	Precision turned product mfg	-	21	12	674	14 965	516	939	10 352	35 400	32 328	67 586	2 813
332722	Bolt, nut, screw, rivet, & washer mfg	2	11	7	475	12 837	370	664	9 139	48 609	41 979	91 297	2 948
3328	Coating, engraving, heat treating, & allied activities.	-	56	24	1 817	57 327	1 430	2 728	36 331	167 109	421 260	568 956	77 022
33281	Coating, engraving, heat treating, & allied activities	-	56	24	1 817	57 327	1 430	2 728	36 331	167 109	421 260	568 956	77 022
332811	Metal heat treating	-	7	4	e	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	-	21	10	689	19 560	539	1 000	12 265	45 574	68 365	114 183	5 162
332813	Electroplating, plating, polishing, anodizing, & coloring	1	28	10	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	68	31	4 806	157 573	3 639	7 240	105 728	429 551	576 789	1 005 194	40 339
33291	Metal valve mfg	-	7	6	1 100	37 993	723	1 500	21 793	90 445	105 791	198 252	5 286
332911	Industrial valve mfg ...	-	3	3	439	15 919	323	560	10 920	33 060	20 985	56 195	2 880
332912	Fluid power valve & hose fitting mfg	-	1	1	e	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	61	25	3 706	119 580	2 916	5 740	83 935	339 106	470 998	806 942	35 053
332991	Ball & roller bearing mfg	1	5	4	998	32 902	839	1 622	24 367	90 816	83 314	176 372	6 678
332993	Ammunition (except small arms) mfg	-	1	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	7	4	392	10 550	330	716	7 245	23 549	48 133	71 301	D
332999	All other miscellaneous fabricated metal product mfg	-	39	15	2 086	69 104	1 577	3 068	47 842	210 665	330 375	536 777	18 466
333	Machinery mfg	-	370	157	25 459	832 154	17 757	35 297	472 287	2 319 005	2 508 629	4 833 832	111 964
3331	Agriculture, construction, & mining machinery mfg	-	43	16	2 091	71 198	1 460	2 889	42 366	209 026	291 701	498 788	12 153
33311	Agricultural implement mfg	1	17	6	455	11 449	335	724	7 422	21 142	42 834	64 017	1 888
333111	Farm machinery & equipment mfg	1	14	4	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	1	3	2	c	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	8	3	1 120	43 856	745	1 367	23 710	143 303	204 567	344 842	8 088
333120	Construction machinery mfg	-	8	3	1 120	43 856	745	1 367	23 710	143 303	204 567	344 842	8 088
33313	Mining & oil & gas field machinery mfg	1	18	7	516	15 893	380	798	11 234	44 581	44 300	89 929	2 177
333131	Mining machinery & equipment mfg	1	17	6	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	40	14	1 166	45 906	671	1 370	21 352	95 283	65 534	163 278	3 790
33329	Other industrial machinery mfg	-	34	12	1 063	42 837	602	1 244	19 739	90 019	61 603	154 081	3 756
333292	Textile machinery mfg ..	1	9	2	c	D	D	D	D	D	D	D	176
333293	Printing machinery & equipment mfg	-	5	3	335	16 818	183	407	8 672	25 973	10 720	36 797	D
333294	Food product machinery mfg	-	4	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	14	5	282	10 547	160	322	4 895	23 328	25 287	48 028	499

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KENTUCKY—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3333	Commercial & service industry machinery mfg ..	-	27	14	2 466	54 756	1 910	3 610	35 977	223 454	117 477	343 599	14 673
33331	Commercial & service industry machinery mfg	-	27	14	2 466	54 756	1 910	3 610	35 977	223 454	117 477	343 599	14 673
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	2	2	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	17	8	758	20 989	544	1 065	11 907	50 275	42 780	92 452	13 042
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	29	21	6 130	169 070	4 775	9 355	110 325	475 755	491 237	976 242	19 502
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	29	21	6 130	169 070	4 775	9 355	110 325	475 755	491 237	976 242	19 502
333411	Air purification equipment mfg	1	13	7	1 028	34 789	735	1 510	20 378	83 268	72 530	154 146	3 994
333414	Heating equipment (except warm air furnaces) mfg	2	4	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	9	9	4 080	107 788	3 400	6 754	77 616	317 697	350 844	678 758	11 417
3335	Metalworking machinery mfg	1	120	33	2 836	105 243	1 826	3 611	55 657	191 179	160 752	358 527	12 793
33351	Metalworking machinery mfg	1	120	33	2 836	105 243	1 826	3 611	55 657	191 179	160 752	358 527	12 793
333511	Industrial mold mfg ...	2	24	6	323	12 559	228	468	8 180	21 809	8 078	29 437	1 791
333512	Machine tool (metal cutting types) mfg ...	-	6	4	f	D	D	D	D	D	D	D	595
333514	Special die & tool, die set, jig, & fixture mfg ..	4	72	17	1 295	40 012	971	1 871	28 828	64 810	42 868	109 577	8 304
333515	Cutting tool & machine tool accessory mfg ..	6	10	3	142	4 526	107	180	2 922	8 650	2 877	11 358	1 823
3336	Engine, turbine, & power transmission equipment mfg	-	6	4	2 098	63 189	1 654	3 158	41 344	353 180	161 319	514 522	9 224
33361	Engine, turbine, & power transmission equipment mfg	-	6	4	2 098	63 189	1 654	3 158	41 344	353 180	161 319	514 522	9 224
333613	Mechanical power transmission equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	105	55	8 672	322 792	5 461	11 304	165 266	771 128	1 220 609	1 978 876	39 829
33391	Pump & compressor mfg	-	10	9	1 874	57 219	1 373	2 920	34 707	151 955	300 132	447 378	4 940
333911	Pump & pumping equipment mfg	-	5	5	f	D	D	D	D	D	D	D	1 727
333912	Air & gas compressor mfg	-	5	4	g	D	D	D	D	D	D	D	3 213
33392	Material handling equipment mfg	-	37	22	4 079	155 979	2 415	4 867	74 597	320 564	737 306	1 051 892	20 078
333921	Elevator & moving stairway mfg	-	2	2	c	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	22	12	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	13	8	2 182	73 527	1 550	2 974	42 959	173 968	516 306	690 027	14 801
33399	All other general-purpose machinery mfg	1	58	24	2 719	109 594	1 673	3 517	55 962	298 609	183 171	479 606	14 811
333992	Welding & soldering equipment mfg	-	4	3	213	7 748	95	205	2 727	24 952	26 870	52 546	1 111
333993	Packaging machinery mfg	2	6	4	905	44 556	593	1 391	25 853	142 324	50 290	191 559	3 857
333994	Industrial process furnace & oven mfg ..	-	6	4	278	10 390	179	386	5 242	16 849	38 238	52 942	1 423
333996	Fluid power pump & motor mfg	-	4	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	2	32	10	933	33 482	571	1 072	15 783	79 553	50 703	130 835	6 057

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KENTUCKY—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	76	39	10 540	403 665	5 630	11 364	115 542	1 140 037	1 303 072	2 409 189	55 754
3341	Computer & peripheral equipment mfg	-	8	5	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	8	5	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	5	4	i	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	3	12	7	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	8	5	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	8	5	3	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	6	3		216	7 541	124	249	3 274	15 072	9 821	25 924
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	6	3		216	7 541	124	249	3 274	15 072	9 821	25 924
33429	Other communications equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	8	6	692	21 704	489	914	11 829	44 029	118 974	163 286	881
33431	Audio & video equipment mfg	-	8	6	692	21 704	489	914	11 829	44 029	118 974	163 286	881
334310	Audio & video equipment mfg	-	8	6	692	21 704	489	914	11 829	44 029	118 974	163 286	881
3344	Semiconductor & other electronic component mfg	2	24	12	1 508	34 078	1 126	2 228	20 385	94 112	70 323	164 861	D
33441	Semiconductor & other electronic component mfg	2	24	12	1 508	34 078	1 126	2 228	20 385	94 112	70 323	164 861	D
334411	Electron tube mfg	4	3	3	590	12 467	424	861	7 523	33 783	22 933	57 221	D
334415	Electronic resistor mfg	-	3	2	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	4	3		456	10 922	353	762	6 484	28 456	28 046	56 278
334419	Other electronic component mfg	2	5	3		242	4 429	184	339	2 523	6 865	6 596	13 737
3345	Navigational, measuring, medical, & control instruments mfg	-	23	9	1 592	51 515	1 089	2 265	26 220	110 278	80 966	192 444	10 322
33451	Navigational, measuring, medical, & control instruments mfg	-	23	9	1 592	51 515	1 089	2 265	26 220	110 278	80 966	192 444	10 322
334512	Automatic environmental control mfg	-	4	3		811	26 702	562	1 179	11 139	50 281	42 333	93 757
334513	Industrial process control instrument mfg	-	4	2	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	1	1	c	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	4	1	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	83	49	17 850	610 094	15 125	29 471	482 835	1 731 602	2 167 803	3 901 990	127 891
3351	Electric lighting equipment mfg	1	20	7	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	5	3	g	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	5	3	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	7	15	4		546	12 298	409	853	7 955	31 256	43 435	74 680
335121	Residential electric lighting fixture mfg	9	11	2		429	8 999	314	628	5 818	25 395	38 149	63 411
335122	Commercial/industrial/institutional electric lighting fixture mfg	-	4	2		117	3 299	95	225	2 137	5 861	5 286	11 269

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KENTUCKY—Con. Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3352	Household appliance mfg...	-	9	8	i	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	8	7	i	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	3	2	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	3	3	2 133	69 195	1 995	3 162	62 548	131 119	472 980	603 920	D
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	37	21	5 706	168 822	4 716	9 573	121 696	625 285	423 502	1 055 391	18 768
33531	Electrical equipment mfg	-	37	21	5 706	168 822	4 716	9 573	121 696	625 285	423 502	1 055 391	18 768
335311	Power, distribution, & specialty transformer mfg	-	5	3	472	16 726	313	618	7 533	28 910	72 040	99 876	D
335312	Motor & generator mfg	-	13	9	2 666	60 604	2 418	4 626	50 204	233 997	229 181	463 908	D
335313	Switchgear & apparatus mfg	-	11	6	2 119	74 232	1 639	3 682	51 302	310 237	91 597	399 924	13 039
335314	Relay & industrial control mfg	-	8	3	449	17 260	346	647	12 657	52 141	30 684	91 683	2 249
3359	Other electrical equipment & component mfg	-	17	13	2 389	74 053	1 963	4 096	57 181	230 778	377 186	617 578	16 808
33591	Battery mfg	1	2	2	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	1	2	2	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	5	5	1 627	53 825	1 382	3 032	43 195	193 690	285 976	490 666	10 417
335929	Other communication & energy wire mfg ...	-	5	5	1 627	53 825	1 382	3 032	43 195	193 690	285 976	490 666	10 417
33599	All other electrical equipment & component mfg	-	6	4	c	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	-	2	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	175	112	42 423	1 795 949	34 490	73 360	1 350 423	11 501 994	18 808 409	30 311 099	1 196 699
3361	Motor vehicle mfg	-	8	5	16 552	1 029 455	14 025	31 742	806 202	9 159 385	15 253 149	24 470 769	D
33611	Automobile & light duty motor vehicle mfg	-	7	5	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	4	3	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	3	2	i	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	23	10	1 063	31 876	880	2 117	23 865	79 521	132 861	212 681	D
33621	Motor vehicle body & trailer mfg	-	23	10	1 063	31 876	880	2 117	23 865	79 521	132 861	212 681	D
336211	Motor vehicle body mfg	-	12	6	520	16 418	403	933	11 803	45 825	58 070	104 507	D
336212	Truck trailer mfg	-	3	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	110	84	22 726	665 562	17 858	36 563	469 369	2 076 133	3 181 854	5 218 653	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	12	7	2 346	69 874	1 973	3 660	53 455	169 468	473 288	645 943	26 638
336311	Carburetor, piston, piston ring, & valve mfg	-	3	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	9	4	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	18	10	3 165	68 053	2 667	5 362	52 472	171 328	143 095	306 053	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	18	10	3 165	68 053	2 667	5 362	52 472	171 328	143 095	306 053	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	4	3	1 198	36 924	840	1 595	21 957	49 720	279 783	327 224	23 649
336330	Motor vehicle steering & suspension component (except spring) mfg	-	4	3	1 198	36 924	840	1 595	21 957	49 720	279 783	327 224	23 649
33634	Motor vehicle brake system mfg	-	12	12	3 482	112 009	2 594	4 993	81 619	323 772	371 604	692 250	32 522
336340	Motor vehicle brake system mfg	-	12	12	3 482	112 009	2 594	4 993	81 619	323 772	371 604	692 250	32 522

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	KENTUCKY—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33635	Motor vehicle transmission & power train parts mfg	-	7	4	785	23 650	595	1 289	16 071	223 273	234 416	457 989	7 098
336350	Motor vehicle transmission & power train parts mfg	-	7	4	785	23 650	595	1 289	16 071	223 273	234 416	457 989	7 098
33636	Motor vehicle seating & interior trim mfg	-	8	8	2 204	54 847	1 889	4 058	41 675	241 194	503 114	743 795	8 890
336360	Motor vehicle seating & interior trim mfg ...	-	8	8	2 204	54 847	1 889	4 058	41 675	241 194	503 114	743 795	8 890
33637	Motor vehicle metal stamping	-	18	18	3 442	112 597	2 664	5 833	79 108	372 020	450 350	819 261	55 376
336370	Motor vehicle metal stamping	-	18	18	3 442	112 597	2 664	5 833	79 108	372 020	450 350	819 261	55 376
33639	Other motor vehicle parts mfg	3	31	22	6 104	187 608	4 636	9 773	123 012	525 358	726 204	1 226 138	65 339
336399	All other motor vehicle parts mfg	3	31	22	6 104	187 608	4 636	9 773	123 012	525 358	726 204	1 226 138	65 339
3364	Aerospace product & parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	23	9	f	D	D	D	D	D	D	D	D
33661	Ship & boat building ...	2	23	9	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	8	9	3	c	D	D	D	D	D	D	D	D
336612	Boat building	2	14	6	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	3	1	c	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	3	1	c	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	1	2	1	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	218	57	5 284	113 448	4 353	8 291	81 542	245 575	209 090	465 858	13 054
3371	Household & institutional furniture & kitchen cabinet mfg	1	164	33	2 890	59 172	2 414	4 498	43 474	101 517	108 068	220 922	7 918
33711	Wood kitchen cabinet & counter top mfg	2	101	16	1 297	28 027	1 028	1 782	18 890	52 388	36 727	89 161	5 525
337110	Wood kitchen cabinet & counter top mfg ...	2	101	16	1 297	28 027	1 028	1 782	18 890	52 388	36 727	89 161	5 525
33712	Household & institutional furniture mfg	1	63	17	1 593	31 145	1 386	2 716	24 584	49 129	71 341	131 761	2 393
337121	Upholstered household furniture mfg	4	8	3	315	5 099	281	516	3 854	9 296	11 512	21 342	523
337122	Nonupholstered wood household furniture mfg	-	42	8	921	18 885	792	1 661	14 874	38 697	33 193	70 532	1 445
337124	Metal household furniture mfg	-	3	2	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	2	6	4	155	2 612	130	213	1 908	-8 399	3 829	7 214	D
3372	Office furniture (including fixtures) mfg	-	44	21	2 158	49 906	1 776	3 490	35 485	129 171	92 344	221 269	3 986
33721	Office furniture (including fixtures) mfg	-	44	21	2 158	49 906	1 776	3 490	35 485	129 171	92 344	221 269	3 986
337211	Wood office furniture mfg	-	8	4	974	24 760	846	1 893	19 399	64 744	56 335	120 668	2 044
337212	Custom architectural woodwork & millwork mfg	-	12	5	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	1	23	11	760	15 692	560	889	8 956	40 213	23 032	63 498	1 648
3379	Other furniture related product mfg	1	10	3	236	4 370	163	303	2 583	14 887	8 678	23 667	1 150
33792	Blind & shade mfg	-	3	1	c	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	3	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KENTUCKY—Con. Manufacturing— Con.												
339	Miscellaneous mfg.....	1	275	54	6 907	170 877	5 335	9 824	106 265	609 326	364 438	968 628	33 603
3391	Medical equipment & supplies mfg.....	2	128	14	1 403	36 868	1 056	1 695	19 238	75 439	52 072	130 020	4 424
33911	Medical equipment & supplies mfg.....	2	128	14	1 403	36 868	1 056	1 695	19 238	75 439	52 072	130 020	4 424
339112	Surgical & medical instrument mfg.....	4	12	—	105	3 169	72	97	1 395	11 797	4 968	16 626	602
339113	Surgical appliance & supplies mfg.....	—	22	10	762	19 848	582	917	9 521	34 468	34 142	71 036	1 959
339114	Dental equipment & supplies mfg.....	—	5	1	c	D	D	D	D	D	D	D	D
339116	Dental laboratories...	5	85	3	339	7 802	272	441	5 506	16 759	6 264	23 169	522
3399	Other miscellaneous mfg...	1	147	40	5 504	134 009	4 279	8 129	87 027	533 887	312 366	838 608	29 179
33992	Sporting & athletic goods mfg.....	—	27	6	459	13 040	388	730	7 728	35 427	24 595	60 251	1 365
339920	Sporting & athletic goods mfg.....	—	27	6	459	13 040	388	730	7 728	35 427	24 595	60 251	1 365
33993	Doll, toy, & game mfg...	—	7	5	1 431	26 049	1 187	1 927	18 822	153 517	72 032	225 813	D
339932	Game, toy, & children's vehicle mfg.....	—	7	5	1 431	26 049	1 187	1 927	18 822	153 517	72 032	225 813	D
33994	Office supplies (except paper) mfg.....	—	6	3	588	8 974	560	1 072	7 773	13 146	19 722	32 746	D
339944	Carbon paper & inked ribbon mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg.....	1	62	10	986	24 359	698	1 288	13 966	62 832	44 518	104 194	9 069
339950	Sign mfg.....	1	62	10	986	24 359	698	1 288	13 966	62 832	44 518	104 194	9 069
33999	All other miscellaneous mfg.....	1	38	16	1 996	60 725	1 417	3 062	38 240	263 410	149 416	408 083	9 463
339991	Gasket, packing, & sealing device mfg...	1	10	7	1 033	32 021	792	1 764	22 534	71 519	67 319	136 824	4 153
339993	Fastener, button, needle, & pin mfg....	—	2	1	e	D	D	D	D	D	D	D	D
339995	Burial casket mfg.....	—	6	1	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg.....	7	14	6	337	8 427	247	412	4 660	31 447	47 233	78 627	2 735

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CINCINNATI– HAMILTON, OH–KY–IN CMSA Manufacturing	—	2 686	1 045	139 924	5 357 729	93 955	191 998	3 057 171	18 883 613	16 469 729	35 239 117	1 463 667
	Cincinnati–Hamilton, OH–KY–IN CMSA (IN Part).....	—	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati–Hamilton, OH–KY–IN CMSA (KY Part).....	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati–Hamilton, OH–KY–IN CMSA (OH Part).....	—	2 236	860	117 591	4 593 283	77 613	158 759	2 584 528	16 449 317	14 277 182	30 657 162	1 286 851
311	Food mfg.....	1	156	66	j	D	D	D	D	D	D	D	114 135
312	Beverage & tobacco product mfg.....	—	17	13	h	D	D	D	D	D	D	D	D
313	Textile mills.....	3	15	9	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	48	15	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	2	29	12	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg	1	72	18	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	103	71	8 810	313 604	6 665	14 634	215 767	882 076	1 008 549	1 887 737	89 233
323	Printing & related support activities	1	393	116	10 814	369 598	7 805	15 484	225 743	902 215	521 822	1 419 311	54 918
324	Petroleum & coal products mfg	—	38	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	152	71	9 633	431 555	5 808	11 709	235 572	2 633 385	2 428 589	5 040 623	172 010
326	Plastics & rubber products mfg	1	140	75	9 036	274 527	6 916	13 781	173 554	731 575	683 985	1 413 317	91 751
327	Nonmetallic mineral product mfg	1	111	42	2 786	95 365	2 139	4 204	64 893	269 394	239 083	510 028	25 724
331	Primary metal mfg	—	40	26	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	535	188	18 623	623 307	13 784	27 607	407 199	1 394 083	1 186 888	2 588 580	113 506
333	Machinery mfg	—	288	133	20 476	842 261	11 313	23 183	383 084	2 018 845	1 663 052	3 583 195	122 495
334	Computer & electronic product mfg	1	85	34	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	63	35	5 710	192 502	3 948	8 324	107 711	516 102	437 358	959 982	D
336	Transportation equipment mfg	—	74	43	14 925	870 824	9 140	18 433	429 461	2 670 791	3 751 560	6 499 887	D
337	Furniture & related product mfg	1	117	26	2 365	63 427	1 701	3 181	37 445	144 366	124 860	271 190	5 900
339	Miscellaneous mfg	1	205	42	5 327	156 781	3 571	6 912	78 515	442 440	308 165	739 313	27 121
	Cincinnati, OH—KY—IN PMSA												
31-33	Manufacturing	—	2 290	890	119 533	4 538 513	78 998	159 800	2 494 921	14 558 177	14 203 781	28 671 346	1 267 606
	Cincinnati, OH—KY—IN PMSA (IN Part)	—	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati, OH—KY—IN PMSA (KY Part)	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati, OH—KY—IN PMSA (OH Part)	—	1 840	705	97 200	3 774 067	62 656	126 561	2 022 278	12 123 881	12 011 234	24 089 391	1 090 790
311	Food mfg	1	139	62	10 102	322 426	6 324	13 455	183 844	1 787 723	1 479 877	3 240 819	113 098
3112	Grain & oilseed milling	—	4	3	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	—	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	3	9	8	2 048	57 313	1 592	3 419	39 713	174 543	274 311	448 738	26 064
31141	Frozen food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
311412	Frozen specialty food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
31142	Fruit & vegetable canning, pickling, & drying	—	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
311421	Fruit & vegetable canning	—	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
3115	Dairy product mfg	2	7	4	586	19 777	299	703	9 713	57 838	142 051	200 505	D
31151	Dairy product (except frozen) mfg	—	4	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
31161	Animal slaughtering & processing	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
311612	Meat processed from carcasses	—	12	6	1 998	66 854	1 052	2 409	36 925	244 454	238 764	479 018	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	—	63	19	2 492	77 807	1 621	3 272	49 666	767 568	216 374	982 176	9 788
31181	Bread & bakery product mfg	—	56	13	1 373	33 100	710	1 298	15 302	108 373	49 738	158 225	1 975
311811	Retail bakeries	1	41	7	436	5 675	267	355	3 663	11 862	5 098	16 982	580
311812	Commercial bakeries	—	15	6	937	27 425	443	943	11 639	96 511	44 640	141 243	1 395
31182	Cookie, cracker, & pasta mfg	—	7	6	1 119	44 707	911	1 974	34 364	659 195	166 636	823 951	7 813
311821	Cookie & cracker mfg	—	5	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	3	23	14	1 942	66 339	989	2 242	26 609	220 315	307 210	525 553	39 322
31193	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
311930	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
31194	Seasoning & dressing mfg	—	7	6	706	26 576	273	605	6 505	59 371	79 992	138 621	25 422
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	2	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	1	5	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg	5	8	3	521	12 776	411	880	8 809	34 152	50 114	84 192	3 500
311999	All other miscellaneous food mfg	9	6	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	15	12	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	15	12	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	6	5	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	961	34 504	391	882	14 765	368 051	265 894	634 974	D
31214	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	3	14	9	f	D	D	D	D	D	D	D	D
3132	Fabric mills	3	7	6	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	42	12	993	25 230	619	1 242	13 673	39 367	58 586	103 085	1 385
3141	Textile furnishings mills	—	17	5	e	D	D	D	D	D	D	D	522
31412	Curtain & linen mills	—	16	5	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	6	4	409	10 356	239	491	4 688	16 383	29 908	50 688	450
3149	Other textile product mills	1	25	7	f	D	D	D	D	D	D	D	863
31499	All other textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535
314999	All other miscellaneous textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535
315	Apparel mfg	—	27	11	801	13 311	608	961	9 009	43 529	78 944	121 859	D
3152	Cut & sew apparel mfg	—	18	8	583	9 175	462	678	6 552	35 190	70 303	104 775	D
31522	Men's & boys' cut & sew apparel mfg	—	8	6	478	7 143	382	551	5 459	30 850	64 083	94 196	878
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	57	13	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	46	10	g	D	D	D	D	D	D	D	D
32191	Millwork	2	20	3	266	6 253	211	433	4 878	12 324	18 512	30 748	D
32199	All other wood product mfg	4	12	5	637	13 971	507	892	9 611	27 106	26 794	54 440	1 599
321999	All other miscellaneous wood product mfg	7	11	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	73	51	5 215	164 903	4 114	9 054	112 929	440 170	582 972	1 021 788	47 982
3221	Pulp, paper, & paperboard mills	—	5	5	388	14 734	302	684	10 876	51 205	35 692	85 762	2 338
32213	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	2	68	46	4 827	150 169	3 812	8 370	102 053	388 965	547 280	936 026	45 644
32221	Paperboard container mfg	1	36	28	2 604	85 626	2 016	4 353	56 114	216 646	308 482	527 467	28 567
322211	Corrugated & solid fiber box mfg	—	16	13	1 196	40 971	856	1 820	23 745	101 483	158 653	256 590	17 530
322212	Folding paperboard box mfg	3	10	8	1 042	33 363	874	1 956	25 225	82 342	99 525	187 695	7 303
322214	Fiber can, tube, drum, & similar products mfg	—	7	5	279	9 106	215	455	5 767	29 118	43 455	72 333	D
32222	Paper bag & coated & treated paper mfg	3	12	7	1 562	46 601	1 292	3 121	34 860	127 368	181 205	306 400	14 105
322224	Uncoated paper & multiwall bag mfg	3	3	3	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
322299	All other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
323	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
3231	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
32311	Printing	1	300	81	8 828	299 063	6 356	12 606	179 485	742 138	460 561	1 198 650	44 401
323110	Commercial												
323111	lithographic printing	1	138	35	5 249	181 061	3 839	7 666	110 998	455 775	237 002	692 369	21 831
323111	Commercial gravure printing	5	2	2	e	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	—	22	11	663	23 483	423	794	10 810	44 797	74 583	118 720	7 739
323113	Commercial screen printing	—	28	9	895	25 981	644	1 310	14 805	77 286	64 530	138 702	3 875
323114	Quick printing	2	60	6	430	10 313	308	487	6 074	21 182	10 692	31 865	1 189
323116	Manifold business form printing	3	10	7	621	21 153	410	894	11 437	47 399	28 686	76 044	1 060
323117	Book printing	—	6	3	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	50	21	1 272	47 678	915	1 854	31 133	93 469	22 349	115 829	7 523
323122	Prepress services	1	43	19	1 079	43 243	743	1 513	27 422	85 210	20 929	106 379	6 683
324	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
3241	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
32412	Asphalt paving, roofing, & saturated materials mfg	—	29	6	508	19 814	381	932	13 868	53 433	204 153	259 714	4 357
324122	Asphalt shingle & coating materials mfg	—	5	3	337	13 602	262	677	10 467	24 782	76 438	100 708	2 331
32419	Other petroleum & coal products mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757
324191	Petroleum lubricating oil & grease mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757
325	Chemical mfg	—	130	65	9 182	413 196	5 554	11 162	226 692	2 536 562	2 355 482	4 875 290	158 466
3251	Basic chemical mfg	—	27	14	2 706	127 553	1 788	3 603	78 473	543 368	649 586	1 192 412	68 707
32513	Dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
325132	Synthetic organic dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
32518	Other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
325188	All other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
32519	Other basic organic chemical mfg	—	7	5	1 299	62 321	831	1 491	35 909	224 153	429 131	651 027	31 565
325199	All other basic organic chemical mfg	—	5	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
32521	Resin & synthetic rubber mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
325211	Plastics material & resin mfg	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
32541	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
325412	Pharmaceutical preparation mfg	—	7	4	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	—	25	13	991	39 685	472	898	14 568	124 588	170 031	297 613	22 236
32551	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
325510	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
32552	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
325520	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
3256	Soap, cleaning compound, & toilet preparation mfg	1	24	16	h	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	20	12	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	10	7	1 235	59 376	988	1 843	44 921	454 832	668 175	1 113 059	23 314
325612	Polish & other sanitation good mfg	—	7	3	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	38	14	f	D	D	D	D	D	D	D	D
32591	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
325910	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
32599	All other chemical product & preparation mfg	2	19	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	113	59	7 218	221 100	5 553	11 053	141 275	612 965	585 014	1 200 308	80 565
3261	Plastics product mfg	1	99	54	6 856	210 669	5 282	10 504	134 724	589 315	563 929	1 155 358	80 008
32611	Unsupported plastics film, sheet, & bag mfg	—	10	6	641	25 600	473	991	15 210	81 954	80 982	163 102	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	7	3	345	16 236	238	509	8 711	60 410	58 653	119 151	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	2	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	4	1	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
326160	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
32619	Other plastics product mfg	3	60	33	3 903	109 958	2 988	5 670	66 353	255 404	248 069	502 415	27 845
326199	All other plastics product mfg	3	59	32	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	14	5	362	10 431	271	549	6 551	23 650	21 085	44 950	557
327	Nonmetallic mineral product mfg	1	89	36	2 455	84 815	1 868	3 650	56 484	236 548	209 497	447 332	22 638
3272	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
32721	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
3273	Cement & concrete product mfg	2	48	18	1 050	35 762	803	1 545	23 102	90 799	85 510	176 368	10 575
32732	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
327320	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
32739	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
327390	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
3274	Lime & gypsum product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32741	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
327410	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	14	8	442	14 812	294	546	7 746	50 271	50 241	100 706	3 504
32799	All other nonmetallic mineral product mfg	—	11	8	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	-	32	19	2 914	105 765	2 090	4 481	70 728	272 565	275 948	538 374	16 783
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	4	2	304	11 009	159	415	5 109	20 114	33 875	55 347	D
33142	Copper rolling, drawing, extruding, & alloying	-	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	24	14	1 648	52 738	1 255	2 625	36 958	98 411	51 175	150 468	5 864
33151	Ferrous metal foundries	-	5	5	860	29 191	679	1 378	21 762	54 789	28 627	84 138	4 067
331511	Iron foundries	-	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	19	9	788	23 547	576	1 159	15 196	43 622	22 548	66 330	1 797
331524	Aluminum foundries (except die-casting)	-	12	8	709	21 892	510	1 037	13 946	39 829	20 456	60 415	D
332	Fabricated metal product mfg	-	446	161	16 330	539 133	12 104	23 786	352 623	1 179 584	976 738	2 163 816	88 268
3321	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
33211	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
332116	Metal stamping	1	16	8	797	22 648	628	1 284	16 488	50 260	68 492	117 931	D
3322	Cutlery & handtool mfg	-	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
33221	Cutlery & handtool mfg	-	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
332212	Hand & edge tool mfg	-	13	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	95	36	3 488	114 184	2 492	5 037	71 933	264 023	223 338	487 640	17 934
33231	Plate work & fabricated structural product mfg	-	37	14	901	31 267	591	1 186	17 793	75 218	87 867	163 486	4 458
332312	Fabricated structural metal mfg	-	25	9	610	20 555	426	839	12 757	51 957	65 636	117 748	3 428
33232	Ornamental & architectural metal products mfg	-	58	22	2 587	82 917	1 901	3 851	54 140	188 805	135 471	324 154	13 476
332321	Metal window & door mfg	-	9	4	1 265	40 972	944	1 963	26 980	105 860	81 835	187 470	6 828
332322	Sheet metal work mfg	1	36	16	1 146	36 297	849	1 659	24 011	68 733	42 304	111 287	6 171
3324	Boiler, tank, & shipping container mfg	-	13	9	2 035	66 641	1 731	3 007	53 699	107 295	153 392	271 182	D
33242	Metal tank (heavy gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	10	7	g	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	2	2	f	D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	8	5	454	13 096	327	673	7 870	32 426	55 354	88 218	D
3325	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
33251	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
332510	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
3326	Spring & wire product mfg	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
33261	Spring & wire product mfg	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
332612	Spring (light gauge) mfg	3	3	2	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	182	44	3 971	130 684	2 933	6 294	87 262	309 225	128 979	433 855	20 566
33271	Machine shops	-	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
332710	Machine shops	-	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
33272	Turned product & screw, nut, & bolt mfg	1	27	16	1 432	40 551	982	2 044	26 292	91 787	52 828	144 409	5 001
332721	Precision turned product mfg	-	21	11	1 138	31 178	750	1 608	19 418	72 383	34 679	106 978	2 584
332722	Bolt, nut, screw, rivet, & washer mfg	4	6	5	294	9 373	232	436	6 874	19 404	18 149	37 431	2 417

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	-	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
33281	Coating, engraving, heat treating, & allied activities	-	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
332811	Metal heat treating	-	15	9	364	11 815	269	382	7 509	36 116	4 244	40 344	1 587
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	20	7	607	18 215	445	928	12 383	33 552	31 635	65 031	3 790
332813	Electroplating, plating, polishing, anodizing, & coloring	-	20	8	497	17 741	370	781	9 905	43 044	21 828	64 841	2 954
3329	Other fabricated metal product mfg	2	45	22	2 049	73 936	1 411	2 869	41 509	170 829	125 637	298 541	16 848
33291	Metal valve mfg	1	13	11	1 339	46 367	884	1 770	24 675	119 034	96 963	218 333	13 109
332911	Industrial valve mfg	1	7	7	856	30 559	522	1 039	14 943	74 308	71 934	148 550	3 541
332912	Fluid power valve & hose fitting mfg	-	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	4	32	11	710	27 569	527	1 099	16 834	51 795	28 674	80 208	3 739
332999	All other miscellaneous fabricated metal product mfg	1	19	7	355	12 679	237	455	5 918	22 184	14 346	36 482	1 491
333	Machinery mfg	-	245	112	18 628	769 395	10 340	21 275	348 789	1 891 638	1 482 643	3 272 013	112 957
3331	Agriculture, construction, & mining machinery mfg	1	10	3	345	11 236	268	482	6 923	29 348	23 241	54 196	D
3332	Industrial machinery mfg	-	41	21	2 677	115 458	1 260	2 525	49 101	427 555	276 178	707 310	14 136
33322	Plastics & rubber industry machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	37	18	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	7	4	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	19	10	737	28 916	451	1 020	14 757	54 198	42 618	101 434	2 678
3333	Commercial & service industry machinery mfg	-	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
33331	Commercial & service industry machinery mfg	-	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	2	1	e	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	3	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	14	4	468	14 957	302	641	8 808	34 559	35 277	68 934	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
333415	AC & warm air heating & commercial/industrial refrig equip mfg	-	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
33351	Metalworking machinery mfg	-	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
333512	Machine tool (metal cutting types) mfg	-	8	8	3 430	159 085	1 397	2 492	53 709	434 967	415 948	742 101	D
333513	Machine tool (metal forming types) mfg	-	2	2	f	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg	1	35	8	501	15 167	359	613	10 134	29 454	19 018	47 770	3 564
333515	Cutting tool & machine tool accessory mfg	2	22	6	376	13 615	260	575	7 820	25 474	11 729	38 121	3 181
333516	Rolling mill machinery & equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
33361	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
333613	Mechanical power transmission equipment mfg	5	6	3	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	69	39	6 214	255 973	3 560	7 553	116 774	557 697	441 647	998 359	21 986
33391	Pump & compressor mfg	—	12	8	1 900	63 414	1 112	2 382	28 764	146 447	174 528	316 454	5 717
333911	Pump & pumping equipment mfg	—	5	4	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	4	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	—	3	2	467	21 329	325	680	13 208	59 748	49 132	107 860	2 322
33392	Material handling equipment mfg	—	14	10	1 531	73 936	743	1 508	29 855	115 060	122 977	239 203	3 302
333921	Elevator & moving stairway mfg	—	3	3	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	9	6	1 206	53 156	580	1 197	16 820	83 316	100 010	183 932	2 110
33399	All other general-purpose machinery mfg	1	43	21	2 783	118 623	1 705	3 663	58 155	296 190	144 142	442 702	12 967
333991	Power-driven handtool mfg	—	4	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	7	4	684	35 785	459	1 143	20 313	127 900	34 607	160 754	2 543
333999	All other miscellaneous general-purpose machinery mfg	2	19	9	923	33 888	556	1 150	15 762	87 192	49 939	138 085	3 804
334	Computer & electronic product mfg	1	78	34	4 781	168 782	2 525	5 190	66 683	329 639	397 049	724 161	40 223
3342	Communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
3343	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	17	9	g	D	D	D	D	D	D	D	19 861
33441	Semiconductor & other electronic component mfg	—	17	9	g	D	D	D	D	D	D	D	19 861
334413	Semiconductor & related device mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
33451	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
334510	Electromedical & electrotherapeutic apparatus mfg	—	2	1	e	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	9	3	278	10 157	139	285	4 402	23 545	18 463	41 983	760

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	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	51	28	4 236	141 730	2 865	6 044	74 290	369 672	324 209	700 852	D
3351	Electric lighting equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	6	5	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	3	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
33531	Electrical equipment mfg	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
335312	Motor & generator mfg	-	8	5	705	25 838	474	1 064	14 977	71 939	33 440	108 261	D
335314	Relay & industrial control mfg	-	12	5	833	32 728	491	1 164	15 924	74 366	68 599	150 023	3 850
3359	Other electrical equipment & component mfg	-	13	8	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
335931	Current-carrying wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
336	Transportation equipment mfg	-	65	39	14 369	849 608	8 806	17 777	417 336	2 627 112	3 682 402	6 385 830	436 555
3362	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
33621	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
3363	Motor vehicle parts mfg ...	-	37	23	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	9	6	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	7	2	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	7	2	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	5	2	331	12 096	261	554	9 771	33 568	22 668	55 758	D
336370	Motor vehicle metal stamping	-	5	2	331	12 096	261	554	9 771	33 568	22 668	55 758	D
33639	Other motor vehicle parts mfg	3	11	6	789	25 370	593	1 285	15 266	62 137	102 129	166 616	8 773
336399	All other motor vehicle parts mfg	3	11	6	789	25 370	593	1 285	15 266	62 137	102 129	166 616	8 773
3364	Aerospace product & parts mfg	-	15	9	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	15	9	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	9	7	i	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg..	-	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg.....	1	103	20	1 728	46 907	1 245	2 387	28 075	108 636	96 068	205 628	4 849
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	64	6	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg.....	1	42	2	293	6 818	214	420	4 628	19 788	15 275	35 938	361
337110	Wood kitchen cabinet & counter top mfg....	1	42	2	293	6 818	214	420	4 628	19 788	15 275	35 938	361
3372	Office furniture (including fixtures) mfg.....	2	29	9	786	21 347	603	1 174	13 887	42 975	32 067	75 128	2 429
33721	Office furniture (including fixtures) mfg.....	2	29	9	786	21 347	603	1 174	13 887	42 975	32 067	75 128	2 429
337215	Showcase, partition, shelving, & locker mfg.....	3	19	7	634	17 282	503	969	10 987	34 569	27 096	61 783	2 138
3379	Other furniture related product mfg.....	—	10	5	e	D	D	D	D	D	D	D	D
33791	Mattress mfg.....	—	7	4	426	13 529	272	480	6 242	36 305	38 843	75 258	1 722
337910	Mattress mfg.....	—	7	4	426	13 529	272	480	6 242	36 305	38 843	75 258	1 722
339	Miscellaneous mfg.....	1	181	35	4 750	142 236	3 148	6 022	70 653	383 554	276 252	655 426	26 029
3391	Medical equipment & supplies mfg.....	—	74	11	1 655	52 136	1 099	2 074	24 886	165 906	122 220	288 967	9 761
33911	Medical equipment & supplies mfg.....	—	74	11	1 655	52 136	1 099	2 074	24 886	165 906	122 220	288 967	9 761
339112	Surgical & medical instrument mfg.....	—	13	5	857	25 964	551	1 048	12 235	65 223	42 927	108 956	3 065
339113	Surgical appliance & supplies mfg.....	—	9	2	e	D	D	D	D	D	D	D	5 184
3399	Other miscellaneous mfg....	1	107	24	3 095	90 100	2 049	3 948	45 767	217 648	154 032	366 459	16 268
33991	Jewelry & silverware mfg.....	—	18	4	291	7 479	194	395	3 751	20 499	19 504	40 790	774
33995	Sign mfg.....	2	49	9	1 221	33 843	814	1 677	18 411	78 500	64 217	139 380	D
339950	Sign mfg.....	2	49	9	1 221	33 843	814	1 677	18 411	78 500	64 217	139 380	D
33999	All other miscellaneous mfg.....	1	17	6	1 255	41 659	787	1 436	19 255	104 003	62 155	163 398	D
339991	Gasket, packing, & sealing device mfg....	4	4	3	329	8 459	235	405	4 301	14 989	12 905	27 879	1 406
339995	Burial casket mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
	CLARKSVILLE—HOPKINSVILLE, TN—KY MSA												
31-33	Manufacturing	—	139	56	10 988	298 185	9 106	18 413	213 779	1 047 894	1 006 268	2 052 436	86 165
	Clarksville—Hopkinsville, TN—KY MSA (KY Part).....	1	56	24	4 469	115 442	3 632	7 513	79 897	332 176	452 316	780 814	23 190
	Clarksville—Hopkinsville, TN—KY MSA (TN Part).....	—	83	32	6 519	182 743	5 474	10 900	133 882	715 718	553 952	1 271 622	62 975
315	Apparel mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	—	6	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	9	3	323	8 692	267	535	5 244	4 760	24 667	29 532	D
3211	Sawmills & wood preservation.....	1	5	2	279	8 135	231	491	4 840	3 700	23 533	27 326	D
32111	Sawmills & wood preservation.....	1	5	2	279	8 135	231	491	4 840	3 700	23 533	27 326	D
321113	Sawmills.....	—	4	2	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg....	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	19	3	1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
3231	Printing & related support activities.....	—	19	3	1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
32311	Printing.....	—	19	3	1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
323110	Commercial lithographic printing...	—	4	1	f	D	D	D	D	D	D	D	D
323117	Book printing.....	—	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CLARKSVILLE–HOPKINSVILLE, TN–KY MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	—	5	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	11	5	620	17 179	533	1 211	13 608	38 191	33 992	70 860	1 205
3271	Clay product & refractory mfg	—	1	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	1	1	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	5	753	25 857	566	1 237	17 999	192 383	157 278	346 846	D
3314	Nonferrous metal (except aluminum) production & processing	—	4	3	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	2	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	22	7	503	13 232	396	786	8 687	35 091	28 382	63 123	943
3326	Spring & wire product mfg .	—	3	2	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	3	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	8	4	h	D	D	D	D	D	D	D	8 334
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refig equip mfg	—	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	4	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	5	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	9	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	9	1	1	e	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	9	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	6	1 218	32 937	917	2 127	20 821	102 022	105 769	208 373	D
3361	Motor vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	6	4	f	D	D	D	D	D	D	D	D
	EVANSVILLE–HENDERSON, IN–KY MSA												
31-33	Manufacturing	—	433	174	30 411	1 101 461	21 331	43 061	674 499	4 564 313	4 426 593	8 946 000	333 162
	Evansville–Henderson, IN–KY MSA (IN Part)	—	355	130	23 549	893 452	15 866	31 660	526 019	3 652 150	3 598 705	7 223 062	257 843
	Evansville–Henderson, IN–KY MSA (KY Part)	—	78	44	6 862	208 009	5 465	11 401	148 480	912 163	827 888	1 722 938	75 319
311	Food mfg	—	27	12	3 505	132 748	1 144	2 193	29 675	1 307 856	331 892	1 630 020	33 898
3115	Dairy product mfg	—	3	2	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	2	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	4	1	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	1	e	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	EVANSVILLE-HENDERSON, IN-KY MSA—Con.													
	Manufacturing—Con.													
311	Food mfg—Con.													
3118	Bakeries & tortilla mfg	6	6	2	f	D	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	9	5	1	e	D	D	D	D	D	D	D	D	
311812	Commercial bakeries	9	2	1	e	D	D	D	D	D	D	D	D	
313	Textile mills	9	6	1	e	D	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills	9	3	1	e	D	D	D	D	D	D	D	D	
31331	Textile & fabric finishing mills	9	3	1	e	D	D	D	D	D	D	D	D	
313312	Textile & fabric finishing mills	9	1	1	e	D	D	D	D	D	D	D	D	
314	Textile product mills	—	5	2	f	D	D	D	D	D	D	D	D	
3149	Other textile product mills	—	2	2	f	D	D	D	D	D	D	D	D	
31491	Textile bag & canvas mills	—	2	2	f	D	D	D	D	D	D	D	D	
314912	Canvas & related product mills	—	2	2	f	D	D	D	D	D	D	D	D	
321	Wood product mfg	—	18	6	e	465	10 150	397	918	7 813	19 173	30 960	50 589	1 403
3219	Other wood product mfg	—	12	4	e	341	7 348	295	727	5 801	14 719	22 399	37 340	978
322	Paper mfg	—	8	5	e	858	34 598	542	1 280	19 670	73 242	82 960	153 353	5 123
3222	Converted paper product mfg	—	7	4	f	D	D	D	D	D	D	D	D	5 123
32221	Paperboard container mfg	—	3	3	f	D	D	D	D	D	D	D	D	5 080
322212	Folding paperboard box mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	7	42	8	e	618	17 158	474	863	11 663	38 677	27 153	65 715	3 553
3231	Printing & related support activities	7	42	8	e	618	17 158	474	863	11 663	38 677	27 153	65 715	3 553
32311	Printing	7	38	8	e	600	16 769	461	840	11 417	38 116	26 832	64 832	3 510
323110	Commercial lithographic printing	5	24	5	e	345	9 631	256	510	6 397	19 471	11 411	30 820	1 257
324	Petroleum & coal products mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D	D
325	Chemical mfg	—	29	16	e	3 943	179 982	2 290	4 422	100 910	872 151	993 067	1 832 213	82 159
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	8	5	f	D	D	D	D	D	D	D	D	4 179
32551	Paint & coating mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
32552	Adhesive mfg	—	6	3	e	462	11 972	318	637	6 095	28 467	21 436	49 867	D
325520	Adhesive mfg	—	6	3	e	462	11 972	318	637	6 095	28 467	21 436	49 867	D
3259	Other chemical product mfg	—	9	5	e	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
32599	All other chemical product & preparation mfg	—	9	5	e	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
325991	Custom compounding of purchased resin	—	9	5	e	603	23 743	349	684	10 846	48 284	142 858	190 130	4 574
326	Plastics & rubber products mfg	—	41	26	e	3 823	101 116	3 063	6 370	69 244	245 774	235 543	479 613	25 440
3261	Plastics product mfg	—	39	26	h	D	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	3	e	315	10 130	257	506	6 825	24 045	40 705	64 357	D
32619	Other plastics product mfg	—	29	19	e	3 222	83 305	2 602	5 453	58 360	206 819	161 359	366 704	23 351
326199	All other plastics product mfg	—	29	19	e	3 222	83 305	2 602	5 453	58 360	206 819	161 359	366 704	23 351

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EVANSVILLE-HENDERSON, IN-KY MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	20	9	874	32 743	692	1 523	24 348	93 530	94 549	188 031	7 991
3272	Glass & glass product mfg	-	3	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	11	6	269	8 219	206	451	5 562	22 285	17 490	39 477	D
331	Primary metal mfg	-	12	9	5 223	225 706	4 378	9 344	170 568	923 683	1 235 344	2 127 579	D
3313	Alumina & aluminum production & processing	-	6	5	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	6	5	h	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	2	2	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	3	2	g	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	1	1	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	76	28	2 480	77 481	1 880	3 667	50 995	168 858	167 999	334 871	15 191
3321	Forging & stamping	-	7	5	433	14 893	363	794	11 410	48 542	60 863	108 291	3 973
33211	Forging & stamping	-	7	5	433	14 893	363	794	11 410	48 542	60 863	108 291	3 973
332115	Crown & closure mfg	-	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	15	8	631	21 574	446	910	14 022	41 940	35 920	76 713	2 712
33231	Plate work & fabricated structural product mfg	-	9	6	491	17 004	333	693	10 762	31 954	31 369	62 205	D
332312	Fabricated structural metal mfg	-	6	5	e	D	D	D	D	D	D	D	2 081
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	30	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	10	5	379	8 541	297	482	5 421	17 416	8 594	26 303	1 955
33281	Coating, engraving, heat treating, & allied activities	-	10	5	379	8 541	297	482	5 421	17 416	8 594	26 303	1 955
333	Machinery mfg	1	59	22	1 568	58 407	1 118	2 257	38 975	95 250	81 330	184 896	8 061
3332	Industrial machinery mfg	-	6	2	385	14 273	252	391	9 157	15 074	32 483	56 795	1 799
33329	Other industrial machinery mfg	-	4	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	35	12	716	30 816	536	1 192	22 164	47 531	21 797	69 341	4 468
33351	Metalworking machinery mfg	2	35	12	716	30 816	536	1 192	22 164	47 531	21 797	69 341	4 468
333511	Industrial mold mfg	1	13	5	262	12 326	219	493	10 040	22 108	6 262	28 185	2 183
333514	Special die & tool, die set, jig, & fixture mfg	2	20	5	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	5	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	6	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	11	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	4	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EVANSVILLE— HENDERSON, IN—KY MSA—Con. Manufacturing— Con.												
337	Furniture & related product mfg	1	21	8	495	11 470	378	786	7 915	13 796	15 111	39 403	660
3371	Household & institutional furniture & kitchen cabinet mfg	-	16	7	e	D	D	D	D	D	D	D	446
33712	Household & institutional furniture mfg	-	9	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	34	4	555	15 161	378	714	7 654	49 861	34 076	84 589	890
3399	Other miscellaneous mfg ..	1	18	4	489	13 955	331	653	7 013	46 520	32 571	79 696	727
33992	Sporting & athletic goods mfg	-	3	1	e	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	3	1	e	D	D	D	D	D	D	D	D
31-33	HUNTINGTON— ASHLAND, WV—KY— OH MSA Manufacturing	-	262	103	15 112	547 992	11 609	23 857	401 065	2 119 937	3 493 069	5 601 987	236 997
	Huntington—Ashland, WV—KY—OH MSA (KY Part)	-	73	32	5 607	235 714	4 529	9 458	183 294	746 147	2 348 730	3 079 435	144 185
	Huntington—Ashland, WV—KY—OH MSA (OH Part)	1	44	12	1 969	65 020	1 462	3 100	46 790	530 855	459 192	998 054	33 568
	Huntington—Ashland, WV—KY—OH MSA (WV Part)	1	145	59	7 536	247 258	5 618	11 299	170 981	842 935	685 147	1 524 498	59 244
311	Food mfg	3	11	5	540	15 440	173	347	3 341	43 235	30 967	74 395	1 790
3118	Bakeries & tortilla mfg	-	5	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	5	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	3	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	4	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	6	320	5 443	294	511	4 531	12 102	19 912	31 246	1 282
323	Printing & related support activities	-	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
3231	Printing & related support activities	-	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
32311	Printing	1	18	2	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	12	2	285	7 325	208	324	4 296	10 947	9 960	20 648	D
324	Petroleum & coal products mfg	-	7	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	7	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	20	13	1 677	74 499	1 121	2 489	50 478	364 321	553 175	922 853	47 626
3251	Basic chemical mfg	-	12	6	786	36 347	496	1 130	21 527	187 437	298 852	491 470	30 781
32513	Dye & pigment mfg	-	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	2	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	3	e	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	2	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	5	2	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	5	2	2	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	5	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUNTINGTON-ASHLAND, WV-KY-OH MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	5	533	15 550	398	873	9 862	33 733	32 846	66 229	D
3261	Plastics product mfg	-	8	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	8	731	22 103	566	1 176	16 044	39 769	51 262	90 987	2 485
3271	Clay product & refractory mfg	-	5	4	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	5	4	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	2	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	7	4 724	219 486	3 933	8 483	177 997	518 960	753 004	1 263 140	108 009
3311	Iron & steel mills & ferroalloy mfg	-	3	3	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	3	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	59	23	1 312	37 028	981	1 836	24 455	74 776	60 021	135 271	4 623
3323	Architectural & structural metals mfg	2	13	7	e	D	D	D	D	D	D	D	689
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	34	12	765	21 628	590	1 009	14 714	41 507	29 149	70 437	3 143
33271	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
332710	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
33272	Turned product & screw, nut, & bolt mfg	-	5	4	e	D	D	D	D	D	D	D	283
333	Machinery mfg	7	17	8	654	23 372	474	943	14 841	53 345	50 628	103 614	D
3331	Agriculture, construction, & mining machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
33313	Mining & oil & gas field machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
333131	Mining machinery & equipment mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
334	Computer & electronic product mfg	-	3	2	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	541	19 604	436	920	15 068	40 798	58 098	99 757	1 634
3365	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	23	2	f	D	D	D	D	D	D	D	1 237
3391	Medical equipment & supplies mfg	-	13	1	e	D	D	D	D	D	D	D	561
33911	Medical equipment & supplies mfg	-	13	1	e	D	D	D	D	D	D	D	561
339113	Surgical appliance & supplies mfg	-	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LEXINGTON, KY MSA												
31-33	Manufacturing	-	550	220	44 382	1 675 117	31 281	64 633	969 963	5 338 059	10 661 749	15 907 609	927 226
311	Food mfg	-	25	4	586	18 012	465	962	13 395	179 510	304 062	479 894	7 082
3119	Other food mfg	-	3	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	7	4	523	14 198	232	503	4 807	61 028	127 252	157 095	2 180
3121	Beverage mfg	-	5	3	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	4	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	7	3	1 631	26 826	1 368	2 790	20 060	48 985	14 707	62 616	D
3152	Cut & sew apparel mfg	3	4	3	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	2	1	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	-	2	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	1	1	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	3	370	7 343	282	480	4 580	14 946	15 018	29 581	914
322	Paper mfg	-	10	6	958	28 305	806	1 622	22 013	109 118	120 498	231 332	4 815
3222	Converted paper product mfg	-	10	6	958	28 305	806	1 622	22 013	109 118	120 498	231 332	4 815
32221	Paperboard container mfg	-	8	5	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	81	17	2 306	63 611	1 871	3 127	50 669	144 662	73 354	217 395	5 556
3231	Printing & related support activities	-	81	17	2 306	63 611	1 871	3 127	50 669	144 662	73 354	217 395	5 556
32311	Printing	-	74	15	g	D	D	D	D	D	D	D	5 033
323110	Commercial lithographic printing	2	33	3	292	7 927	219	412	5 108	19 091	7 068	26 160	929
323117	Book printing	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	8	590	20 619	309	605	10 549	233 641	137 940	366 771	3 870
3255	Paint, coating, & adhesive mfg	-	3	2	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	3	2	e	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	26	20	1 675	43 400	1 231	2 527	28 205	150 214	165 926	317 871	20 559
3261	Plastics product mfg	1	21	16	1 319	34 024	1 011	2 125	22 310	128 114	145 283	272 495	20 283
32619	Other plastics product mfg	1	16	11	883	21 636	705	1 436	14 568	76 363	68 912	145 196	7 049
326199	All other plastics product mfg	1	15	11	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	4	356	9 376	220	402	5 895	22 100	20 643	45 376	276
32629	Other rubber product mfg	-	4	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	32	19	1 989	62 172	1 543	3 497	45 245	190 361	152 357	337 755	11 634
3272	Glass & glass product mfg	-	5	4	990	37 526	827	1 955	29 713	117 764	96 069	214 432	6 441
32721	Glass & glass product mfg	-	5	4	990	37 526	827	1 955	29 713	117 764	96 069	214 432	6 441
327212	Other pressed & blown glass & glassware mfg	-	2	2	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	2	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	18	11	547	14 053	403	865	8 795	45 178	41 940	83 062	4 127
3279	Other nonmetallic mineral product mfg	3	6	3	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	3	6	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	313	10 559	218	491	7 179	48 066	335 324	383 105	4 758

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LEXINGTON, KY MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	101	42	3 890	106 436	3 015	6 015	69 587	321 155	267 840	586 519	24 868
3321	Forging & stamping	1	8	4	625	17 896	530	1 142	13 524	52 111	55 076	107 011	8 897
33211	Forging & stamping	1	8	4	625	17 896	530	1 142	13 524	52 111	55 076	107 011	8 897
332111	Iron & steel forging	2	4	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	20	10	695	19 289	544	1 111	13 426	48 610	42 883	91 495	2 353
33232	Ornamental & architectural metal products mfg	—	13	6	476	13 588	365	782	9 091	33 500	32 170	65 474	1 916
332322	Sheet metal work mfg	—	9	5	433	12 646	337	738	8 550	31 243	30 159	61 092	1 785
3325	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	—	3	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	3	2	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	—	2	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	43	12	800	18 792	643	1 132	12 708	64 432	38 162	102 016	3 349
33271	Machine shops	1	34	5	490	10 706	404	711	7 387	31 639	12 347	43 144	1 123
332710	Machine shops	1	34	5	490	10 706	404	711	7 387	31 639	12 347	43 144	1 123
33272	Turned product & screw, nut, & bolt mfg	1	9	7	310	8 086	239	421	5 321	32 793	25 815	58 872	2 226
3328	Coating, engraving, heat treating, & allied activities	—	11	6	358	8 312	273	459	4 520	19 601	6 305	25 947	2 779
33281	Coating, engraving, heat treating, & allied activities	—	11	6	358	8 312	273	459	4 520	19 601	6 305	25 947	2 779
3329	Other fabricated metal product mfg	1	10	5	456	15 812	233	521	5 366	38 737	24 935	61 899	2 977
33291	Metal valve mfg	—	2	2	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	62	27	5 709	194 681	4 124	8 110	123 627	510 571	879 910	1 383 704	32 239
3331	Agriculture, construction, & mining machinery mfg	—	7	3	1 147	45 686	735	1 435	26 685	148 070	214 410	357 803	D
33312	Construction machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	4	2	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	5	1 845	59 126	1 467	2 928	42 725	182 922	112 806	295 336	6 108
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	5	1 845	59 126	1 467	2 928	42 725	182 922	112 806	295 336	6 108
333411	Air purification equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	5	30	11	614	18 192	407	824	12 187	33 619	24 919	60 031	4 218
33351	Metalworking machinery mfg	5	30	11	614	18 192	407	824	12 187	33 619	24 919	60 031	4 218
333514	Special die & tool, die set, jig, & fixture mfg	5	20	7	447	12 664	297	621	8 872	21 857	18 556	42 462	3 531
3339	Other general-purpose machinery mfg	—	14	6	1 970	67 814	1 420	2 751	39 822	138 518	522 423	657 100	14 272
33392	Material handling equipment mfg	—	5	3	1 688	58 255	1 236	2 392	35 053	124 635	481 519	604 537	12 597
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	5	3	1 688	58 255	1 236	2 392	35 053	124 635	481 519	604 537	12 597
33399	All other general-purpose machinery mfg	1	9	3	282	9 559	184	359	4 769	13 883	40 904	52 563	1 675

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LEXINGTON, KY MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	22	15	i	D	D	D	D	D	D	D	42 265
3341	Computer & peripheral equipment mfg.....	-	4	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	4	2	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	-	3	2	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	4	8	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	4	8	6	f	D	D	D	D	D	D	D	D
334411	Electron tube mfg....	6	2	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	15	10	h	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	8	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	8	4	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg...	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	24	20	11 019	579 187	8 324	18 468	382 318	1 788 816	6 600 444	8 384 781	D
3361	Motor vehicle mfg.....	-	2	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	2	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg.....	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	-	20	19	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg....	-	2	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg...	-	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	7	7	1 085	32 825	737	1 603	19 162	65 043	84 534	148 571	6 904
336370	Motor vehicle metal stamping.....	-	7	7	1 085	32 825	737	1 603	19 162	65 043	84 534	148 571	6 904
33639	Other motor vehicle parts mfg.....	-	5	5	f	D	D	D	D	D	D	D	14 300
336399	All other motor vehicle parts mfg.....	-	5	5	f	D	D	D	D	D	D	D	14 300

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LEXINGTON, KY MSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	35	6	582	13 471	470	872	9 711	26 008	35 427	61 578	1 041
3371	Household & institutional furniture & kitchen cabinet mfg	-	26	2	376	8 253	328	602	6 596	17 528	29 426	46 991	606
33712	Household & institutional furniture mfg	-	8	2	287	6 448	255	490	5 270	14 032	26 873	40 939	414
339	Miscellaneous mfg	2	51	9	1 227	25 310	1 016	1 923	19 065	52 526	44 715	97 734	D
3399	Other miscellaneous mfg ..	1	23	8	1 112	22 712	934	1 825	17 805	45 622	41 024	87 022	1 956
33994	Office supplies (except paper) mfg	-	3	1	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	7	2	326	9 845	270	582	7 689	20 764	7 986	28 998	D
339991	Gasket, packing, & sealing device mfg ...	2	4	2	e	D	D	D	D	D	D	D	D
	LOUISVILLE, KY-IN MSA												
31-33	Manufacturing	-	1 333	540	80 938	2 882 136	63 011	129 224	2 034 239	17 272 778	16 876 617	34 196 572	812 075
	Louisville, KY-IN MSA (IN Part)	1	370	152	20 027	557 652	16 163	33 253	394 044	1 720 684	1 616 687	3 337 641	147 330
	Louisville, KY-IN MSA (KY Part)	-	963	388	60 911	2 324 484	46 848	95 971	1 640 195	15 552 094	15 259 930	30 858 931	664 745
311	Food mfg	-	80	38	7 226	196 701	5 768	11 938	134 540	926 087	1 077 848	1 994 916	58 141
3114	Fruit & vegetable preserving & specialty food mfg	-	8	6	870	25 814	684	1 562	14 718	91 457	131 921	223 377	18 962
31142	Fruit & vegetable canning, pickling, & drying	-	7	5	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	5	3	e	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	10	7	2 229	56 384	1 868	4 145	41 419	136 008	404 728	534 099	4 831
31161	Animal slaughtering & processing	-	10	7	2 229	56 384	1 868	4 145	41 419	136 008	404 728	534 099	4 831
311611	Animal (except poultry) slaughtering	-	5	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	36	11	2 498	67 525	1 951	3 842	48 718	437 410	240 209	674 167	23 054
31181	Bread & bakery product mfg	1	30	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	10	5	589	14 643	269	591	5 007	32 718	25 237	57 957	623
31182	Cookie, cracker, & pasta mfg	1	6	6	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	1	3	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	13	9	1 273	36 223	1 019	1 846	23 078	203 143	165 288	368 096	8 144
31191	Snack food mfg	-	5	4	923	24 902	779	1 350	16 448	117 047	107 297	224 323	4 036
311919	Other snack food mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	11	8	3 504	164 363	2 500	5 015	110 312	3 281 830	837 815	4 123 812	21 534
3121	Beverage mfg	-	9	6	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	5	2	e	D	D	D	D	D	D	D	D
31214	Distilleries	-	4	4	f	D	D	D	D	D	D	D	D
312140	Distilleries	-	4	4	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	2	2	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	19	8	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills ...	-	11	5	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	11	5	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	5	4	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	8	3	337	7 854	261	400	4 779	19 070	13 014	31 349	D
31499	All other textile product mills	-	5	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	-	16	7	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	12	4	316	5 598	234	418	2 801	12 584	3 828	15 397	D
31599	Apparel accessories & other apparel mfg	1	12	4	316	5 598	234	418	2 801	12 584	3 828	15 397	D
315991	Hat, cap, & millinery mfg	-	4	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	77	32	2 732	63 457	2 255	4 379	44 085	110 399	159 411	269 739	D
3212	Veneer, plywood, & engineered wood product mfg	-	21	14	1 107	25 002	898	1 823	16 279	45 679	59 325	104 028	D
32121	Veneer, plywood, & engineered wood product mfg	-	21	14	1 107	25 002	898	1 823	16 279	45 679	59 325	104 028	D
321211	Hardwood veneer & plywood mfg	-	13	10	840	18 213	691	1 382	12 039	32 670	43 223	74 948	D
3219	Other wood product mfg ...	1	48	18	1 555	36 533	1 300	2 449	26 510	60 598	85 735	147 274	D
32191	Millwork	1	19	9	f	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing....	1	8	5	520	11 478	441	908	8 416	17 604	26 784	45 939	D
32192	Wood container & pallet mfg	2	22	6	576	15 354	492	936	11 457	21 459	38 044	59 866	D
321920	Wood container & pallet mfg	2	22	6	576	15 354	492	936	11 457	21 459	38 044	59 866	D
322	Paper mfg	-	42	29	2 856	89 180	2 209	4 791	59 782	210 364	359 151	568 368	19 301
3222	Converted paper product mfg	-	42	29	2 856	89 180	2 209	4 791	59 782	210 364	359 151	568 368	19 301
32221	Paperboard container mfg	-	22	18	1 822	58 428	1 409	3 000	38 847	133 351	223 578	356 763	D
322211	Corrugated & solid fiber box mfg	-	14	12	1 271	39 348	957	1 894	24 287	91 490	148 890	239 582	9 813
32222	Paper bag & coated & treated paper mfg	-	6	4	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	9	4	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	4	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	176	48	6 839	200 949	5 284	11 077	139 861	439 170	281 880	718 533	59 550
3231	Printing & related support activities.....	-	176	48	6 839	200 949	5 284	11 077	139 861	439 170	281 880	718 533	59 550
32311	Printing	-	158	46	6 684	196 940	5 156	10 854	136 925	432 267	279 939	709 709	58 841
323110	Commercial lithographic printing ..	-	70	25	4 533	141 178	3 624	7 961	101 345	300 270	202 639	499 837	46 602
323112	Commercial flexographic printing ..	-	6	4	757	22 066	576	1 165	14 745	50 032	14 612	64 650	D
323114	Quick printing	2	42	2	270	6 258	179	307	3 988	13 042	6 880	19 892	652
323119	Other commercial printing.....	9	17	3	310	6 378	179	289	3 010	14 658	8 637	22 731	883
325	Chemical mfg	1	83	41	5 877	278 558	3 762	8 214	164 282	1 202 820	1 475 318	2 683 848	110 568
3251	Basic chemical mfg	-	20	11	1 592	75 051	1 007	2 425	44 875	249 582	271 757	516 209	24 840
32518	Other basic inorganic chemical mfg	-	6	6	f	D	D	D	D	D	D	D	13 345
325188	All other basic inorganic chemical mfg	-	6	6	f	D	D	D	D	D	D	D	13 345
32519	Other basic organic chemical mfg	-	9	4	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	8	3	369	19 150	247	527	11 765	90 115	140 191	226 101	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	12	11	2 400	126 995	1 665	3 590	77 657	609 880	898 110	1 524 835	66 815
32521	Resin & synthetic rubber mfg	-	12	11	2 400	126 995	1 665	3 590	77 657	609 880	898 110	1 524 835	66 815
325211	Plastics material & resin mfg	-	9	8	1 448	77 463	952	2 120	41 984	399 052	692 287	1 092 468	54 806
325212	Synthetic rubber mfg ..	-	3	3	952	49 532	713	1 470	35 673	210 828	205 823	432 367	12 009
3255	Paint, coating, & adhesive mfg	1	23	12	834	31 443	360	676	10 440	178 786	115 996	296 885	3 746
32551	Paint & coating mfg	-	20	11	760	28 993	308	577	8 850	169 314	103 399	275 247	3 512
325510	Paint & coating mfg ...	-	20	11	760	28 993	308	577	8 850	169 314	103 399	275 247	3 512
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	9	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	7	2	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	2	13	4	e	D	D	D	D	D	D	D	6 410
326	Plastics & rubber products mfg	3	67	39	5 598	138 052	4 637	9 592	97 717	302 780	305 030	605 452	26 607
3261	Plastics product mfg	3	55	35	5 101	125 425	4 214	8 790	87 629	274 232	282 379	555 061	22 016
32611	Unsupported plastics film, sheet, & bag mfg ..	—	7	7	505	14 057	412	817	9 932	45 732	39 372	84 837	2 349
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	36	20	4 059	101 506	3 362	7 226	71 287	192 497	204 484	396 897	15 935
326199	All other plastics product mfg	4	31	18	3 868	96 848	3 206	6 967	67 818	187 499	200 429	387 844	15 783
3262	Rubber product mfg	2	12	4	497	12 627	423	802	10 088	28 548	22 651	50 391	4 591
32629	Other rubber product mfg	2	9	4	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	62	28	2 214	63 838	1 609	3 122	40 009	246 949	162 199	412 675	36 253
3271	Clay product & refractory mfg	—	10	6	597	14 794	448	865	9 825	37 481	30 292	68 696	D
32712	Clay building material & refractories mfg	—	3	2	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	—	12	3	271	7 826	218	327	3 869	21 330	18 063	39 300	D
32721	Glass & glass product mfg	—	12	3	271	7 826	218	327	3 869	21 330	18 063	39 300	D
3273	Cement & concrete product mfg	—	30	14	1 053	34 142	741	1 580	22 926	167 966	93 153	264 383	D
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	1	18	8	533	15 193	356	748	9 287	50 414	43 225	93 923	4 825
327320	Ready-mix concrete mfg	1	18	8	533	15 193	356	748	9 287	50 414	43 225	93 923	4 825
3279	Other nonmetallic mineral product mfg	—	7	4	e	D	D	D	D	D	D	D	4 171
32799	All other nonmetallic mineral product mfg ..	—	6	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	18	10	1 437	45 433	1 183	2 566	30 258	104 778	231 358	333 288	14 863
3313	Alumina & aluminum production & processing ..	—	7	6	1 037	33 018	886	1 945	23 100	70 797	130 015	199 844	8 885
33131	Alumina & aluminum production & processing	—	7	6	1 037	33 018	886	1 945	23 100	70 797	130 015	199 844	8 885
331316	Aluminum extruded product mfg	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	247	94	8 627	270 262	6 393	12 751	175 436	705 678	737 709	1 435 250	60 505
3321	Forging & stamping	—	13	11	1 161	31 579	980	2 040	22 622	67 062	103 868	170 874	6 056
33211	Forging & stamping	—	13	11	1 161	31 579	980	2 040	22 622	67 062	103 868	170 874	6 056
332116	Metal stamping	—	9	8	876	20 766	752	1 550	15 979	37 913	67 949	105 853	2 918
3323	Architectural & structural metals mfg	1	67	24	1 243	38 964	850	1 603	22 130	94 728	85 117	177 206	6 836
33231	Plate work & fabricated structural product mfg ..	1	30	11	611	19 693	393	812	10 253	45 661	48 449	95 490	1 398
332312	Fabricated structural metal mfg	1	23	10	f	D	D	D	D	D	D	D	1 238
33232	Ornamental & architectural metal products mfg	2	37	13	632	19 271	457	791	11 877	49 067	36 668	81 716	5 438
332322	Sheet metal work mfg ..	1	25	13	543	17 316	392	678	10 607	46 237	33 003	75 216	D
3324	Boiler, tank, & shipping container mfg	—	10	6	1 734	56 956	1 150	2 314	33 125	137 157	117 994	255 286	6 451
33241	Power boiler & heat exchanger mfg	—	4	2	g	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	4	2	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	4	3	286	10 327	126	282	3 304	32 767	31 871	64 651	D
332420	Metal tank (heavy gauge) mfg	—	4	3	286	10 327	126	282	3 304	32 767	31 871	64 651	D
3325	Hardware mfg	—	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D
33251	Hardware mfg	—	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D
332510	Hardware mfg	—	7	4	369	10 390	276	531	5 936	30 112	41 486	72 290	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	90	24	1 691	52 625	1 308	2 637	35 364	94 212	46 430	140 796	9 426
33271	Machine shops	1	85	20	1 367	42 212	1 048	2 062	28 016	72 489	35 834	108 422	7 263
332710	Machine shops	1	85	20	1 367	42 212	1 048	2 062	28 016	72 489	35 834	108 422	7 263
33272	Turned product & screw, nut, & bolt mfg	—	5	4	324	10 413	260	575	7 348	21 723	10 596	32 374	2 163
332721	Precision turned product mfg	—	3	3	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	3	19	8	e	D	D	D	D	D	D	D	9 324
33281	Coating, engraving, heat treating, & allied activities	3	19	8	e	D	D	D	D	D	D	D	9 324
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	5	11	5	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	28	10	1 591	55 869	1 192	2 408	41 193	216 390	309 732	519 888	18 195
33291	Metal valve mfg	—	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	26	9	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	18	7	1 074	35 961	802	1 734	26 965	169 106	282 463	446 655	16 145
333	Machinery mfg	1	133	58	6 796	237 919	4 299	8 965	121 584	514 720	521 019	1 031 757	23 443
3331	Agriculture, construction, & mining machinery mfg	1	8	3	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	5	3	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	21	8	872	35 374	508	1 062	17 012	76 353	56 038	134 183	2 412
33329	Other industrial machinery mfg	—	17	8	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	1	7	4	793	22 391	569	1 074	13 191	33 732	38 259	73 183	2 021
33331	Commercial & service industry machinery mfg	1	7	4	793	22 391	569	1 074	13 191	33 732	38 259	73 183	2 021
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	5	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	17	11	1 799	52 121	1 332	2 913	30 246	141 331	135 391	275 952	5 515
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	17	11	1 799	52 121	1 332	2 913	30 246	141 331	135 391	275 952	5 515
333411	Air purification equipment mfg	1	10	6	1 034	29 376	750	1 617	16 152	69 956	70 669	139 699	3 122
333415	AC & warm air heating & commercial/industrial refrig equip mfg	—	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	34	9	517	19 942	393	827	13 295	30 383	20 033	50 744	2 478
33351	Metalworking machinery mfg	2	34	9	517	19 942	393	827	13 295	30 383	20 033	50 744	2 478
333514	Special die & tool, die set, jig, & fixture mfg	3	17	3	261	10 081	213	449	7 524	15 178	9 128	24 083	1 001
3339	Other general-purpose machinery mfg	1	44	22	2 523	99 824	1 312	2 679	43 569	219 381	246 655	459 208	9 810
33392	Material handling equipment mfg	—	19	13	1 380	56 822	678	1 485	24 174	119 759	166 602	280 705	D
333922	Conveyor & conveying equipment mfg	—	15	10	1 234	51 992	565	1 251	21 526	104 096	148 328	246 527	3 862
33399	All other general-purpose machinery mfg	4	23	8	f	D	D	D	D	D	D	D	4 392
333993	Packaging machinery mfg	7	4	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	17	5	420	16 403	229	406	7 626	34 216	30 191	62 995	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	26	11	g	D	D	D	D	D	D	D	17 403
3344	Semiconductor & other electronic component mfg.....	2	12	5	f	D	D	D	D	D	D	D	11 613
33441	Semiconductor & other electronic component mfg.....	2	12	5	f	D	D	D	D	D	D	D	11 613
334417	Electronic connector mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	26	14	i	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	8	7	i	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	-	7	6	i	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	10	3	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	10	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	50	24	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	-	3	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	3	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	-	3	2	i	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
33621	Motor vehicle body & trailer mfg.....	-	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
336211	Motor vehicle body mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	28	12	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg.....	1	6	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg....	1	6	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg....	-	3	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	2	2	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	-	2	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	1	9	5	842	18 690	735	1 307	15 112	84 068	95 641	180 768	D
336399	All other motor vehicle parts mfg.....	1	9	5	842	18 690	735	1 307	15 112	84 068	95 641	180 768	D
3366	Ship & boat building.....	-	6	3	g	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	-	6	3	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	-	4	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	81	24	2 910	81 691	2 449	5 119	61 094	177 166	149 578	326 339	7 410
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	53	14	1 653	46 226	1 420	3 064	36 001	96 808	92 476	188 876	D
33711	Wood kitchen cabinet & counter top mfg.....	-	35	10	1 019	28 628	857	1 808	22 583	61 707	76 410	137 863	2 003
337110	Wood kitchen cabinet & counter top mfg....	-	35	10	1 019	28 628	857	1 808	22 583	61 707	76 410	137 863	2 003
33712	Household & institutional furniture mfg.....	-	18	4	634	17 598	563	1 256	13 418	35 101	16 066	51 013	D
337122	Nonupholstered wood household furniture mfg.....	-	10	3	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY-IN MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	—	20	8	1 132	31 656	938	1 879	22 833	69 089	45 346	114 269	3 417
33721	Office furniture (including fixtures) mfg	—	20	8	1 132	31 656	938	1 879	22 833	69 089	45 346	114 269	3 417
337211	Wood office furniture mfg	—	5	3	881	25 960	737	1 556	19 038	52 872	34 283	86 995	D
339	Miscellaneous mfg	1	102	22	1 639	46 615	1 149	2 107	26 537	108 031	56 666	164 613	6 016
3391	Medical equipment & supplies mfg	1	41	8	565	17 000	401	732	9 219	39 298	19 538	59 908	2 588
33911	Medical equipment & supplies mfg	1	41	8	565	17 000	401	732	9 219	39 298	19 538	59 908	2 588
3399	Other miscellaneous mfg ..	1	61	14	1 074	29 615	748	1 375	17 318	68 733	37 128	104 705	3 428
33999	All other miscellaneous mfg	—	18	8	706	20 586	495	925	12 532	48 968	24 629	72 773	D
339991	Gasket, packing, & sealing device mfg...	—	3	3	388	14 110	271	586	9 189	28 917	14 095	42 586	D
339999	All other miscellaneous mfg	1	10	4	e	D	D	D	D	D	D	D	D
	OWENSBORO, KY MSA												
31-33	Manufacturing	—	114	52	8 011	276 755	6 002	12 740	187 336	1 106 787	1 854 403	2 938 207	341 107
311	Food mfg	1	12	7	1 587	50 262	898	1 971	28 141	310 463	758 920	1 061 842	17 356
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	5	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	2	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	1	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	7	7	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	5	5	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	3	3	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	3	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	12	7	916	30 945	719	1 551	19 575	98 728	181 391	277 874	6 635
3261	Plastics product mfg	—	10	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	5	4	677	23 780	512	1 112	13 938	61 692	47 226	108 678	4 968
326199	All other plastics product mfg	—	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	25	11	1 335	35 042	1 059	2 042	24 162	74 250	49 218	123 518	8 312
3321	Forging & stamping	—	5	3	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	5	3	f	D	D	D	D	D	D	D	D
332116	Metal stamping	—	4	3	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	5	5	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	4	4	280	7 594	190	356	4 481	15 781	11 543	27 190	606
332420	Metal tank (heavy gauge) mfg	—	4	4	280	7 594	190	356	4 481	15 781	11 543	27 190	606

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OWENSBORO, KY MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	2	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	3	586	14 365	509	1 133	11 005	46 146	28 438	74 511	D
3372	Office furniture (including fixtures) mfg	-	2	2	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	e	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	2	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ADAIR COUNTY, KY												
	Manufacturing	1	20	4	533	8 271	437	945	6 388	18 826	11 230	30 790	948
	ALLEN COUNTY, KY												
31-33	Manufacturing	-	12	8	1 858	41 573	1 648	3 250	34 058	110 617	173 371	285 057	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
	ANDERSON COUNTY, KY												
31-33	Manufacturing	-	20	10	g	D	D	D	D	D	D	D	16 584
	BALLARD COUNTY, KY												
31-33	Manufacturing	-	12	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BARREN COUNTY, KY													
31-33	Manufacturing	-	55	31	5 672	154 506	4 635	8 828	120 066	325 717	470 854	795 980	28 955
323	Printing & related support activities.....	-	2	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	2	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	2	605	22 211	490	922	16 444	9 915	77 417	90 050	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	6	5	1 865	51 380	1 470	3 047	45 518	100 597	178 222	276 423	14 061
3363	Motor vehicle parts mfg ...	1	5	5	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
BELL COUNTY, KY													
31-33	Manufacturing	1	22	8	858	18 647	681	1 432	12 283	50 564	77 607	125 843	4 031
BOONE COUNTY, KY													
31-33	Manufacturing	1	134	62	9 050	305 677	6 878	13 958	190 282	880 419	973 733	1 857 414	90 349
311	Food mfg	-	7	5	1 008	27 204	895	2 063	22 940	117 605	137 269	254 031	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	9	3	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	9	3	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	9	2	1	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	9	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	14	4	1 009	42 578	768	1 619	26 420	138 418	55 454	192 263	D
3231	Printing & related support activities.....	-	14	4	1 009	42 578	768	1 619	26 420	138 418	55 454	192 263	D
32311	Printing	-	12	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	9	3	867	36 785	663	1 393	22 415	125 370	54 051	177 932	D
326	Plastics & rubber products mfg	-	13	10	1 854	64 306	1 499	3 117	45 251	218 393	224 642	441 278	31 148
3261	Plastics product mfg	-	12	10	1 850	64 225	1 495	3 110	45 170	218 394	224 642	441 278	31 148
32619	Other plastics product mfg	1	7	6	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	7	6	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	24	9	762	25 335	597	1 093	16 094	54 651	62 804	118 269	4 094
333	Machinery mfg	1	22	11	1 503	58 964	846	1 731	24 112	112 850	106 969	220 797	4 097
3339	Other general-purpose machinery mfg	2	8	6	903	40 565	382	761	14 110	62 265	71 505	134 869	D
336	Transportation equipment mfg	4	4	4	787	24 724	671	1 218	15 279	69 308	124 403	193 379	D
3363	Motor vehicle parts mfg ...	5	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOURBON COUNTY, KY													
31-33	Manufacturing	-	19	9	g	D	D	D	D	D	D	D	D
315	Apparel mfg	5	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	5	2	2	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	1	1	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	1	1	f	D	D	D	D	D	D	D	D
BOYD COUNTY, KY													
31-33	Manufacturing	-	42	17	4 395	203 404	3 491	7 390	158 569	668 204	2 275 642	2 930 826	D
324	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	g	D	D	D	D	D	D	D	D
BOYLE COUNTY, KY													
31-33	Manufacturing	-	33	20	4 604	130 497	3 537	7 715	89 796	370 541	402 873	778 308	41 750
323	Printing & related support activities.....	-	2	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	6	5	547	15 637	365	754	9 319	71 994	38 308	108 673	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	g	D	D	D	D	D	D	D	D
BULLITT COUNTY, KY													
31-33	Manufacturing	-	49	12	2 959	85 600	2 438	5 076	63 661	172 024	168 685	344 783	D
323	Printing & related support activities.....	-	5	3	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	5	3	g	D	D	D	D	D	D	D	D
32311	Printing	-	5	3	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	4	3	g	D	D	D	D	D	D	D	D
BUTLER COUNTY, KY													
31-33	Manufacturing	-	15	9	1 886	37 600	1 664	3 550	29 197	228 665	133 079	355 051	9 207
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CALDWELL COUNTY, KY													
31-33	Manufacturing	1	19	4	659	18 660	537	1 239	12 879	49 438	73 066	121 558	4 493

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CALLOWAY COUNTY, KY													
31-33	Manufacturing	-	28	8	2 983	69 073	2 639	4 672	52 714	519 845	293 247	817 380	16 793
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
CAMPBELL COUNTY, KY													
31-33	Manufacturing	-	83	32	3 043	105 037	2 062	4 213	71 211	400 229	345 779	726 085	11 856
311	Food mfg	-	9	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	26	13	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	26	13	f	D	D	D	D	D	D	D	D
32311	Printing	-	21	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
CARROLL COUNTY, KY													
31-33	Manufacturing	-	18	11	2 378	94 814	1 658	3 675	58 654	634 872	801 157	1 408 720	113 459
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	3	f	D	D	D	D	D	D	D	D
CARTER COUNTY, KY													
31-33	Manufacturing	2	18	8	612	8 886	559	1 044	7 461	29 421	13 237	39 971	1 179
CASEY COUNTY, KY													
31-33	Manufacturing	1	27	9	946	15 957	742	1 454	12 440	34 533	45 237	80 341	1 535
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHRISTIAN COUNTY, KY													
31-33	Manufacturing	1	56	24	4 469	115 442	3 632	7 513	79 897	332 176	452 316	780 814	23 190
315	Apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARK COUNTY, KY													
31-33	Manufacturing	-	46	28	3 635	86 996	3 032	5 889	65 937	252 353	410 341	661 059	D
332	Fabricated metal product mfg	-	12	8	902	21 409	770	1 453	16 541	73 755	92 229	164 685	D
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON COUNTY, KY													
31-33	Manufacturing	2	15	6	671	9 900	572	792	7 753	24 217	21 599	45 700	517
DAVIESS COUNTY, KY													
31-33	Manufacturing	-	114	52	8 011	276 755	6 002	12 740	187 336	1 106 787	1 854 403	2 938 207	341 107
311	Food mfg	1	12	7	1 587	50 262	898	1 971	28 141	310 463	758 920	1 061 842	17 356
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	7	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	5	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	7	916	30 945	719	1 551	19 575	98 728	181 391	277 874	6 635
3261	Plastics product mfg	-	10	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	4	677	23 780	512	1 112	13 938	61 692	47 226	108 678	4 968
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	11	1 335	35 042	1 059	2 042	24 162	74 250	49 218	123 518	8 312
3321	Forging & stamping	-	5	3	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	5	3	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	4	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	3	586	14 365	509	1 133	11 005	46 146	28 438	74 511	D
FAYETTE COUNTY, KY													
31-33	Manufacturing	-	283	92	17 403	654 015	10 380	21 369	274 956	2 147 695	2 244 487	4 313 912	98 802
323	Printing & related support activities	2	58	12	955	26 071	602	1 121	15 278	54 270	26 162	80 343	D
3231	Printing & related support activities	2	58	12	955	26 071	602	1 121	15 278	54 270	26 162	80 343	D
32311	Printing	2	52	10	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	10	7	563	14 801	427	836	8 907	30 291	32 666	65 936	1 318
327	Nonmetallic mineral product mfg	-	16	10	872	26 288	651	1 450	18 240	65 051	42 363	104 200	3 127
332	Fabricated metal product mfg	-	40	15	g	D	D	D	D	D	D	D	6 523
3323	Architectural & structural metals mfg	1	14	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FAYETTE COUNTY, KY —Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg	—	29	12	3 881	136 772	2 765	5 440	82 032	379 548	625 351	1 000 113	D
3331	Agriculture, construction, & mining machinery mfg.	—	5	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.	—	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.	—	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	2	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	2	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	—	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	—	7	4	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.	—	3	2	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg.	—	3	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.	—	14	8	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.	—	3	1	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.	—	3	1	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.	—	2	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.	—	6	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg. ..	—	4	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.	—	4	1	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.	—	2	1	g	D	D	D	D	D	D	D	D
	FLEMING COUNTY, KY												
31-33	Manufacturing	—	19	6	650	14 646	560	1 151	11 603	22 304	32 350	54 809	2 552
	FRANKLIN COUNTY, KY												
31-33	Manufacturing	2	40	18	3 435	97 755	2 804	5 749	70 570	302 002	288 104	592 388	17 368
332	Fabricated metal product mfg.	—	10	6	791	24 079	602	1 376	16 095	42 828	36 205	78 673	6 556
336	Transportation equipment mfg.	6	4	3	897	28 817	734	1 756	20 966	117 911	127 383	244 010	6 014
3363	Motor vehicle parts mfg. ...	6	4	3	897	28 817	734	1 756	20 966	117 911	127 383	244 010	6 014
33639	Other motor vehicle parts mfg.	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.	9	1	1	f	D	D	D	D	D	D	D	D
	FULTON COUNTY, KY												
31-33	Manufacturing	2	14	9	1 087	23 362	895	1 774	17 893	80 526	113 735	194 140	4 837
	GRANT COUNTY, KY												
31-33	Manufacturing	—	16	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAVES COUNTY, KY													
31-33	Manufacturing	-	50	17	3 053	101 422	2 282	5 049	72 194	208 769	316 748	537 631	10 044
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
GRAYSON COUNTY, KY													
31-33	Manufacturing	-	31	13	2 462	47 782	2 223	4 506	40 961	107 878	275 856	382 522	7 191
332	Fabricated metal product mfg	-	8	5	684	16 016	585	1 246	12 654	31 476	42 998	74 365	4 917
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
GREENUP COUNTY, KY													
31-33	Manufacturing	-	13	7	600	23 424	479	1 024	17 264	48 522	59 851	108 638	D
HANCOCK COUNTY, KY													
31-33	Manufacturing	-	13	7	1 862	80 941	1 330	2 990	54 024	222 810	826 733	1 048 972	23 268
331	Primary metal mfg	-	4	3	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	3	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	2	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	2	1	g	D	D	D	D	D	D	D	D
HARDIN COUNTY, KY													
31-33	Manufacturing	-	68	30	7 162	216 829	5 575	11 493	155 799	734 376	895 834	1 633 932	72 093
325	Chemical mfg	-	5	4	637	26 667	381	935	17 013	145 858	334 392	479 848	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	254
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	6	3	717	23 122	593	1 267	17 820	90 351	72 873	160 448	D
3272	Glass & glass product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	8	1 541	44 932	1 184	2 218	30 897	89 976	64 314	154 515	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	579	17 495	488	1 236	13 634	36 332	67 551	103 027	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
HARDIN COUNTY, KY—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D	
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	2	1	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	2	1	f	D	D	D	D	D	D	D	D	
HARRISON COUNTY, KY														
31-33	Manufacturing	-	19	7		1 730	54 874	1 372	2 621	37 859	196 360	154 680	353 343	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
HART COUNTY, KY														
31-33	Manufacturing	-	10	4	f	D	D	D	D	D	D	D	D	415
HENDERSON COUNTY, KY														
31-33	Manufacturing	-	78	44		6 862	208 009	5 465	11 401	148 480	912 163	827 888	1 722 938	75 319
326	Plastics & rubber products mfg	1	8	6	762	15 350	589	1 092	10 113	37 620	44 277	80 532	5 747	
3261	Plastics product mfg	1	8	6	762	15 350	589	1 092	10 113	37 620	44 277	80 532	5 747	
32619	Other plastics product mfg	2	6	5	f	D	D	D	D	D	D	D	D	
326199	All other plastics product mfg	2	6	5	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	-	6	5	h	D	D	D	D	D	D	D	D	
3313	Alumina & aluminum production & processing ..	-	2	2	f	D	D	D	D	D	D	D	D	
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D	
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D	
3315	Foundries	-	2	2	g	D	D	D	D	D	D	D	D	
33152	Nonferrous metal foundries	-	2	2	g	D	D	D	D	D	D	D	D	
331524	Aluminum foundries (except die-casting) ..	-	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	7	4	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
HENRY COUNTY, KY														
31-33	Manufacturing	-	8	4		555	17 137	490	993	13 862	72 980	143 015	213 886	D
HOPKINS COUNTY, KY														
31-33	Manufacturing	-	55	21		2 606	89 727	1 939	3 602	60 478	245 189	347 981	572 793	17 420
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON COUNTY, KY													
31-33	Manufacturing	2	13	5	1 940	28 362	1 603	3 139	18 698	5 372	157 916	173 275	6 170
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, KY													
31-33	Manufacturing	-	873	366	56 948	2 201 425	43 631	89 155	1 551 948	15 278 704	14 925 764	30 261 607	D
311	Food mfg	1	57	32	i	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	6	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	5	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	4	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	3	27	10	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	22	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	9	5	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	3	5	5	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	9	8	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	3	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	9	6	h	D	D	D	D	D	D	D	16 460
3121	Beverage mfg	1	7	4	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	2	2	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	11	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	26	12	1 104	29 524	898	1 718	20 506	46 572	81 471	129 133	D
3219	Other wood product mfg ...	1	20	9	f	D	D	D	D	D	D	D	D
32191	Millwork	1	9	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	34	26	2 546	79 065	1 951	4 160	51 733	184 895	315 812	499 539	17 428
3222	Converted paper product mfg	-	34	26	2 546	79 065	1 951	4 160	51 733	184 895	315 812	499 539	17 428
32221	Paperboard container mfg	-	19	17	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	14	12	1 271	39 348	957	1 894	24 287	91 490	148 890	239 582	9 813
323	Printing & related support activities	1	136	34	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	136	34	h	D	D	D	D	D	D	D	D
32311	Printing	1	123	32	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	52	16	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JEFFERSON COUNTY, KY—Con.												
	Manufacturing—Con.												
325	Chemical mfg	-	63	32	4 740	231 664	2 927	6 352	130 060	1 037 915	1 299 611	2 351 674	94 905
3251	Basic chemical mfg	-	16	8	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	10	9	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	10	9	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	7	6	g	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	3	3	952	49 532	713	1 470	35 673	210 828	205 823	432 367	12 009
3255	Paint, coating, & adhesive mfg	1	19	12	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	17	11	750	28 750	301	569	8 747	168 461	102 257	273 222	D
325510	Paint & coating mfg	-	17	11	750	28 750	301	569	8 747	168 461	102 257	273 222	D
326	Plastics & rubber products mfg	-	39	22	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	33	20	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	21	11	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	19	10	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	43	20	1 597	46 506	1 125	2 163	27 736	159 170	117 483	277 588	D
3271	Clay product & refractory mfg	-	7	5	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	16	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	14	8	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	6	5	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	-	6	5	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	155	70	6 594	215 426	4 862	9 826	138 495	579 943	641 527	1 214 383	42 478
3321	Forging & stamping	-	11	10	g	D	D	D	D	D	D	D	6 052
33211	Forging & stamping	-	11	10	g	D	D	D	D	D	D	D	6 052
332116	Metal stamping	-	7	7	f	D	D	D	D	D	D	D	2 914
3323	Architectural & structural metals mfg	1	49	18	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	7	5	g	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	3	2	g	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	3	2	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	43	18	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	40	16	f	D	D	D	D	D	D	D	D
332710	Machine shops	1	40	16	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	18	6	1 179	44 889	937	1 908	33 476	184 920	294 081	474 297	D
33299	All other fabricated metal product mfg	-	16	5	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	12	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	84	38	4 716	168 333	2 825	5 766	79 611	354 903	343 322	708 115	17 839
3332	Industrial machinery mfg ..	-	14	7	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	12	7	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	1	5	4	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	1	5	4	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	4	3	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JEFFERSON COUNTY, KY—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	12	8	1 049	34 353	737	1 538	19 239	89 004	81 655	169 349	3 726
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	12	8	1 049	34 353	737	1 538	19 239	89 004	81 655	169 349	3 726
333411	Air purification equipment mfg	1	9	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	2	26	11	1 543	61 086	708	1 416	21 144	134 832	142 831	285 733	D
33392	Material handling equipment mfg	—	9	5	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	6	3	504	21 683	112	236	3 391	39 976	64 710	112 034	D
33399	All other general-purpose machinery mfg	5	15	5	f	D	D	D	D	D	D	D	3 990
334	Computer & electronic product mfg.....	—	11	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	12	10	i	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	6	6	i	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	6	6	i	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	2	2	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	—	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	33	14	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
33621	Motor vehicle body & trailer mfg	—	6	4	644	22 053	568	1 490	17 588	57 420	89 886	147 764	D
3363	Motor vehicle parts mfg ...	—	18	7	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	42	9	f	D	D	D	D	D	D	D	988
339	Miscellaneous mfg.....	1	82	18	1 317	39 766	901	1 688	22 066	88 169	45 581	133 797	D
3391	Medical equipment & supplies mfg	1	36	7	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	1	36	7	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	46	11	f	D	D	D	D	D	D	D	D
31-33	JESSAMINE COUNTY, KY												
	Manufacturing	—	67	25	2 379	67 858	1 834	3 678	45 366	327 000	349 776	675 443	D
31-33	KENTON COUNTY, KY												
	Manufacturing	2	161	64	6 810	233 449	4 874	10 337	133 138	860 506	628 437	1 482 800	47 869
313	Textile mills	4	4	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	10	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	10	7	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	4	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	7	14	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	30	7	936	32 133	696	1 437	20 335	63 671	53 490	117 370	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENTON COUNTY, KY													
—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	—	22	11	1 779	82 524	1 049	2 307	37 281	235 169	157 396	397 206	6 143
3335	Metalworking machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg	—	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	7	4	570	29 518	411	1 010	19 097	117 122	33 653	148 258	D
33399	All other general-purpose machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
KNOX COUNTY, KY													
31-33	Manufacturing	6	17	6	877	20 550	725	1 502	16 694	67 932	86 888	160 555	D
LARUE COUNTY, KY													
31-33	Manufacturing	—	12	4	641	10 114	548	971	7 332	11 354	14 011	25 312	378
LAUREL COUNTY, KY													
31-33	Manufacturing	1	44	18	2 595	57 434	1 849	3 812	35 031	130 592	188 963	319 125	12 385
311	Food mfg	—	4	4	1 174	29 780	673	1 519	15 109	63 113	100 891	163 979	6 470
3118	Bakeries & tortilla mfg	—	3	3	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	2	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	6	15	6	570	11 800	496	1 038	9 353	19 849	39 679	59 570	D
LEWIS COUNTY, KY													
31-33	Manufacturing	3	15	7	804	15 705	773	1 478	14 760	66 977	21 905	89 925	846
316	Leather & allied product mfg	3	2	2	f	D	D	D	D	D	D	D	D
LINCOLN COUNTY, KY													
31-33	Manufacturing	—	18	6	737	18 861	504	905	8 425	20 156	30 386	54 692	2 613
LOGAN COUNTY, KY													
31-33	Manufacturing	—	41	20	4 650	125 997	3 966	8 862	92 080	394 462	381 945	781 699	8 481
315	Apparel mfg	—	4	4	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	2	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	2	2	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	3	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MCCRACKEN COUNTY, KY													
31-33	Manufacturing	-	58	28	4 081	155 226	2 559	5 689	80 967	543 237	438 701	978 855	15 915
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	8	752	29 615	587	1 454	20 448	53 277	33 743	86 964	3 625
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	8	5	590	25 075	451	1 155	17 008	46 791	22 023	68 530	D
33271	Machine shops	-	8	5	590	25 075	451	1 155	17 008	46 791	22 023	68 530	D
332710	Machine shops	-	8	5	590	25 075	451	1 155	17 008	46 791	22 023	68 530	D
MCCREARY COUNTY, KY													
31-33	Manufacturing	-	16	6	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
MADISON COUNTY, KY													
31-33	Manufacturing	-	68	36	5 460	160 260	3 916	7 776	106 108	543 471	1 042 560	1 576 108	D
333	Machinery mfg	-	12	7	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	7	1 511	47 251	973	2 039	28 290	95 683	270 893	362 150	D
3363	Motor vehicle parts mfg	-	7	7	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	4	4	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	4	4	f	D	D	D	D	D	D	D	D
MARION COUNTY, KY													
31-33	Manufacturing	-	22	14	1 554	34 431	1 327	2 435	24 873	87 164	88 820	175 084	12 152
332	Fabricated metal product mfg	-	7	4	555	14 247	474	940	10 164	28 682	40 571	68 843	D
MARSHALL COUNTY, KY													
31-33	Manufacturing	-	35	18	2 881	140 991	2 022	4 538	93 131	747 050	970 273	1 715 484	89 050
325	Chemical mfg	-	11	9	1 989	109 949	1 342	3 188	72 985	623 556	772 935	1 396 312	D
3251	Basic chemical mfg	-	7	7	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MASON COUNTY, KY													
31-33	Manufacturing	-	19	14	3 167	85 637	2 478	5 032	55 888	200 430	356 511	545 464	18 523
314	Textile product mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	2	2	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
MERCER COUNTY, KY													
31-33	Manufacturing	-	16	8	3 053	94 865	2 357	4 634	62 546	272 356	623 155	888 681	46 079
314	Textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	1	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
METCALFE COUNTY, KY													
31-33	Manufacturing	-	13	7	1 829	36 968	1 695	3 346	31 819	107 918	123 392	231 391	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONROE COUNTY, KY													
31-33	Manufacturing	-	32	14	1 966	35 785	1 696	3 359	28 143	80 535	86 006	160 914	2 832
315	Apparel mfg	-	8	6	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	8	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
MONTGOMERY COUNTY, KY													
31-33	Manufacturing	-	32	17	2 124	45 411	1 770	3 306	31 409	99 524	181 475	281 359	26 908
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	617	13 310	493	918	8 399	32 327	21 424	53 681	1 095
MUHLENBERG COUNTY, KY													
31-33	Manufacturing	-	36	13	1 399	26 776	1 245	2 369	20 447	78 485	52 732	130 131	8 608
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NELSON COUNTY, KY													
31-33	Manufacturing	3	56	16	3 616	98 961	2 716	5 486	70 249	528 578	481 723	960 245	39 665
312	Beverage & tobacco product mfg	2	6	4	681	21 340	498	1 075	13 870	316 798	160 846	438 007	10 197
3121	Beverage mfg	2	6	4	681	21 340	498	1 075	13 870	316 798	160 846	438 007	10 197
31214	Distilleries	2	5	4	f	D	D	D	D	D	D	D	D
312140	Distilleries	2	5	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	907	26 666	685	1 365	20 890	59 415	77 792	133 906	13 820
3261	Plastics product mfg	-	5	3	907	26 666	685	1 365	20 890	59 415	77 792	133 906	13 820
336	Transportation equipment mfg	4	4	4	1 604	41 293	1 198	2 406	28 710	127 747	217 823	338 694	14 319
3363	Motor vehicle parts mfg ...	4	4	4	1 604	41 293	1 198	2 406	28 710	127 747	217 823	338 694	14 319
33639	Other motor vehicle parts mfg	7	2	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	7	2	2	g	D	D	D	D	D	D	D	D
NICHOLAS COUNTY, KY													
31-33	Manufacturing	5	5	2	f	D	D	D	D	D	D	D	D
OHIO COUNTY, KY													
31-33	Manufacturing	-	27	10	2 010	37 388	1 755	3 579	29 904	107 308	70 464	177 095	5 055
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
OLDHAM COUNTY, KY													
31-33	Manufacturing	-	41	10	1 004	37 459	779	1 740	24 586	101 366	165 481	252 541	8 637
PENDLETON COUNTY, KY													
31-33	Manufacturing	1	12	7	f	D	D	D	D	D	D	D	D
PERRY COUNTY, KY													
31-33	Manufacturing	-	9	4	614	16 485	500	982	12 432	43 325	52 671	91 393	D
PIKE COUNTY, KY													
31-33	Manufacturing	1	26	3	587	10 732	515	957	8 773	27 905	45 485	74 305	5 394
POWELL COUNTY, KY													
31-33	Manufacturing	-	16	7	1 185	19 228	1 060	2 020	15 360	138 233	36 064	175 325	2 645
333	Machinery mfg	-	5	1	f	D	D	D	D	D	D	D	127
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PULASKI COUNTY, KY													
31-33	Manufacturing	—	84	26	4 564	107 076	3 696	6 999	76 601	322 649	354 131	672 059	41 389
315	Apparel mfg	9	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	2	1	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	2	1	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	9	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	19	8		592	9 342	541	951	7 692	35 559	33 235	66 032
327	Nonmetallic mineral product mfg	—	6	3		648	20 713	466	917	15 218	51 268	22 356	73 303
333	Machinery mfg	—	4	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	4		853	21 969	641	1 478	14 348	45 995	65 471	108 767
3363	Motor vehicle parts mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
ROCKCASTLE COUNTY, KY													
31-33	Manufacturing	—	11	2	f	D	D	D	D	D	D	D	D
ROWAN COUNTY, KY													
31-33	Manufacturing	—	13	7	647	10 480	555	962	7 638	86 221	24 861	111 643	D
RUSSELL COUNTY, KY													
31-33	Manufacturing	—	24	6	2 098	40 511	1 971	3 422	36 462	220 286	150 030	348 927	2 309
315	Apparel mfg	—	1	1	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
SCOTT COUNTY, KY													
31-33	Manufacturing	—	45	21	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	23	10	g	D	D	D	D	D	D	D	9 827
3321	Forging & stamping	2	3	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	2	3	2	f	D	D	D	D	D	D	D	D
332111	Iron & steel forging ...	2	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	3	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
SHELBY COUNTY, KY													
31-33	Manufacturing	—	42	26	4 095	126 197	3 180	6 552	87 943	392 327	551 515	942 165	39 461
332	Fabricated metal product mfg	—	7	7		1 166	30 758	943	2 023	23 183	75 279	59 887	135 062
336	Transportation equipment mfg	—	4	4		1 392	52 067	1 129	2 266	40 267	178 049	216 480	395 482
3363	Motor vehicle parts mfg ...	—	4	4		1 392	52 067	1 129	2 266	40 267	178 049	216 480	395 482
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SIMPSON COUNTY, KY													
31-33	Manufacturing	-	34	13	3 390	107 152	2 954	5 834	88 402	235 679	320 647	549 361	24 544
322	Paper mfg	-	2	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	4	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	4	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	4	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
TAYLOR COUNTY, KY													
31-33	Manufacturing	-	38	11	4 088	96 606	3 602	6 848	80 392	293 348	308 480	599 761	5 103
315	Apparel mfg	-	1	1	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
321	Wood product mfg	-	8	3	618	12 960	449	922	10 362	29 123	27 660	55 632	1 436
3219	Other wood product mfg ...	-	6	2	f	D	D	D	D	D	D	D	D
32191	Millwork	-	5	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	-	3	1	f	D	D	D	D	D	D	D	D
TODD COUNTY, KY													
31-33	Manufacturing	1	19	7	1 299	25 734	1 171	2 241	21 431	51 790	94 470	147 267	2 080
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
TRIGG COUNTY, KY													
31-33	Manufacturing	-	19	7	1 083	26 522	931	1 798	20 525	73 058	84 407	158 031	D
UNION COUNTY, KY													
31-33	Manufacturing	2	18	7	1 214	29 296	934	1 958	20 760	102 599	72 637	167 027	6 094
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN COUNTY, KY													
31-33	Manufacturing	-	104	43									43 369
311	Food mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
3222	Converted paper product mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
32221	Paperboard container mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	9	f	D	D	D	D	D	D	D	9 474
3261	Plastics product mfg	1	8	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	3	f	D	D	D	D	D	D	D	4 009
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2		590	12 790	529	773	10 095	76 623	73 369	145 419
337	Furniture & related product mfg	-	8	3	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, KY													
31-33	Manufacturing	-	13	8		1 049	25 082	804	1 342	13 942	56 362	125 226	179 573
326	Plastics & rubber products mfg	-	7	5		719	17 336	541	960	9 489	35 357	57 534	92 030
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, KY													
31-33	Manufacturing	2	33	13		1 877	33 417	1 666	2 591	27 375	78 227	109 041	189 961
321	Wood product mfg	5	13	5		610	10 259	545	1 054	8 906	22 405	27 258	50 013
WEBSTER COUNTY, KY													
31-33	Manufacturing	-	19	8		798	16 438	671	1 196	11 581	48 032	37 172	82 467
WHITLEY COUNTY, KY													
31-33	Manufacturing	2	33	11		1 927	43 499	1 331	2 413	24 423	106 005	94 029	201 061
327	Nonmetallic mineral product mfg	-	6	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WOODFORD COUNTY, KY												
31-33	Manufacturing	-	22	9	h	D	D	D	D	D	D	D	49 827
323	Printing & related support activities	-	3	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	g	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALEXANDRIA, KY												
	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
	ASHLAND, KY												
31-33	Manufacturing	1	28	11	f	D	D	D	D	D	D	D	6 124
	BARDSTOWN, KY												
31-33	Manufacturing	2	24	9	2 529	73 402	1 974	4 066	53 975	354 910	335 480	649 395	30 447
312	Beverage & tobacco product mfg	4	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	2	2	f	D	D	D	D	D	D	D	D
31214	Distilleries	4	2	2	f	D	D	D	D	D	D	D	D
312140	Distilleries	4	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BEREA, KY													
31-33	Manufacturing	-	22	11	2 740	82 845	1 982	3 899	55 784	199 189	718 643	911 920	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	1 066	34 063	624	1 301	19 497	75 483	245 172	316 814	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
BOWLING GREEN, KY													
31-33	Manufacturing	-	88	41	i	D	D	D	D	D	D	D	41 485
311	Food mfg	-	5	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
3222	Converted paper product mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
32221	Paperboard container mfg	-	4	3	f	D	D	D	D	D	D	D	1 970
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	9	f	D	D	D	D	D	D	D	9 474
3261	Plastics product mfg	1	8	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2	590	12 790	529	773	10 095	76 623	73 369	145 419	1 319
CALVERT CITY, KY													
31-33	Manufacturing	-	15	9	g	D	D	D	D	D	D	D	78 557
325	Chemical mfg	-	8	8	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	6	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
CAMPBELLSVILLE, KY													
31-33	Manufacturing	-	25	9	3 469	83 159	3 150	5 891	69 748	262 915	279 369	541 367	3 607
315	Apparel mfg	-	1	1	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
CARROLLTON, KY													
31-33	Manufacturing	-	12	7	g	D	D	D	D	D	D	D	D
CORBIN, KY *													
31-33	Manufacturing	3	18	7	967	23 258	492	849	10 173	51 297	57 247	111 677	3 896

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COVINGTON, KY													
31-33	Manufacturing	1	45	16	1 491	40 714	1 262	2 463	29 043	148 337	173 322	321 133	8 150
CYNTHIANA, KY													
31-33	Manufacturing	-	13	6	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
DANVILLE, KY													
31-33	Manufacturing	-	27	16	4 137	116 714	3 250	7 122	81 763	313 948	369 724	688 755	39 270
323	Printing & related support activities.....	-	2	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	g	D	D	D	D	D	D	D	D
EDGEWOOD, KY													
31-33	Manufacturing	-	10	4	752	33 952	572	1 342	23 210	133 265	44 457	174 642	4 218
ELIZABETHTOWN, KY													
31-33	Manufacturing	-	46	25	6 558	198 826	5 095	10 292	142 324	693 186	823 249	1 521 120	D
325	Chemical mfg	-	5	4	637	26 667	381	935	17 013	145 858	334 392	479 848	D
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	8	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
ELIZABETHTOWN, KY														
—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	2	2	g	D	D	D	D	D	D	D	D	
33634	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336340	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
ERLANGER, KY														
31-33	Manufacturing	1	50	23		1 727	55 232	1 131	2 280	28 690	214 631	126 466	332 595	19 624
FLORENCE, KY														
31-33	Manufacturing	1	48	28		5 034	155 198	4 126	8 608	108 748	476 098	520 760	993 300	52 714
311	Food mfg	—	7	5		1 008	27 204	895	2 063	22 940	117 605	137 269	254 031	D
3114	Fruit & vegetable preserving & specialty food mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	9	2	2	f	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	9	2	2	f	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	7	7		1 270	40 793	1 046	2 141	30 135	146 461	153 394	297 583	D
3261	Plastics product mfg	1	7	7		1 270	40 793	1 046	2 141	30 135	146 461	153 394	297 583	D
32619	Other plastics product mfg	1	5	5	g	D	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	5	5	g	D	D	D	D	D	D	D	D	D
333	Machinery mfg	—	7	4		739	25 062	512	1 144	12 276	76 567	50 766	127 659	1 720
FRANKFORT, KY														
31-33	Manufacturing	3	28	12		2 760	79 056	2 256	4 574	57 985	266 113	236 922	504 486	14 239
332	Fabricated metal product mfg	—	6	5		749	23 262	584	1 337	15 576	36 070	33 651	69 380	6 478
336	Transportation equipment mfg	6	2	2	f	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	6	2	2	f	D	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
FRANKLIN, KY														
31-33	Manufacturing	—	26	11	h	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	4	2	f	D	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	—	4	2	f	D	D	D	D	D	D	D	D	D
32311	Printing	—	3	1	f	D	D	D	D	D	D	D	D	D
323111	Commercial gravure printing.....	—	1	1	f	D	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
FRANKLIN, KY—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	4	3	f	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	4	3	f	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	—	3	2	f	D	D	D	D	D	D	D	
336311	Carburetor, piston, piston ring, & valve mfg	—	2	2	f	D	D	D	D	D	D	D	
FULTON, KY													
31-33	Manufacturing	3	5	5	738	15 436	607	1 235	12 054	46 117	64 262	109 362	3 373
GEORGETOWN, KY													
31-33	Manufacturing	—	32	16	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	14	7	f	D	D	D	D	D	D	D	D
3321	Forging & stamping	2	2	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	2	2	2	f	D	D	D	D	D	D	D	D
332111	Iron & steel forging ...	2	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	3	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
GLASGOW, KY													
31-33	Manufacturing	—	35	25	5 166	140 616	4 256	8 085	112 176	298 275	438 084	735 842	27 804
323	Printing & related support activities	—	2	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	2	2	g	D	D	D	D	D	D	D	D
32311	Printing	—	2	2	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	5	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	5	5	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
GREENVILLE, KY													
31-33	Manufacturing	—	8	4	661	9 419	616	1 226	8 117	20 452	4 368	24 629	D
315	Apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D

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HARRODSBURG, KY													
31-33	Manufacturing	-	11	7	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
HENDERSON, KY													
31-33	Manufacturing	-	62	36	6 189	192 950	4 991	10 495	138 773	784 611	786 492	1 557 842	73 312
326	Plastics & rubber products mfg	1	7	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	7	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	5	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	5	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	g	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
HODGENVILLE, KY													
31-33	Manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
HOPKINSVILLE, KY													
31-33	Manufacturing	-	48	23	4 406	114 457	3 579	7 445	79 146	329 419	449 208	774 995	D
315	Apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	f	D	D	D	D	D	D	D	D
JEFFERSONTOWN, KY													
31-33	Manufacturing	1	107	44	4 447	139 811	2 999	5 919	74 046	356 431	269 960	631 954	20 684
323	Printing & related support activities.....	2	23	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	23	7	f	D	D	D	D	D	D	D	D
32311	Printing	2	22	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	6	509	15 572	392	818	9 771	38 957	28 789	67 438	1 547
333	Machinery mfg	3	17	8	1 100	40 111	649	1 366	18 697	91 098	56 884	151 307	3 709

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAWRENCEBURG, KY													
31-33	Manufacturing	-	17	9	g	D	D	D	D	D	D	D	D
LEBANON, KY													
31-33	Manufacturing	-	20	14	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	4	f	D	D	D	D	D	D	D	D
LEITCHFIELD, KY													
31-33	Manufacturing	-	14	10	g	D	D	D	D	D	D	D	6 726
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
LEXINGTON-FAYETTE, KY													
31-33	Manufacturing	-	283	92	17 403	654 015	10 380	21 369	274 956	2 147 695	2 244 487	4 313 912	98 802
323	Printing & related support activities	2	58	12	955	26 071	602	1 121	15 278	54 270	26 162	80 343	D
3231	Printing & related support activities	2	58	12	955	26 071	602	1 121	15 278	54 270	26 162	80 343	D
32311	Printing	2	52	10	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	10	7	563	14 801	427	836	8 907	30 291	32 666	65 936	1 318
327	Nonmetallic mineral product mfg	-	16	10	872	26 288	651	1 450	18 240	65 051	42 363	104 200	3 127
332	Fabricated metal product mfg	-	40	15	g	D	D	D	D	D	D	D	6 523
3323	Architectural & structural metals mfg	1	14	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	12	3 881	136 772	2 765	5 440	82 032	379 548	625 351	1 000 113	D
3331	Agriculture, construction, & mining machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	4	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	14	8	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	2	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LONDON, KY													
31-33	Manufacturing	-	22	9	1 876	43 014	1 272	2 615	24 403	106 556	143 084	249 155	8 213
311	Food mfg	-	4	4	1 174	29 780	673	1 519	15 109	63 113	100 891	163 979	6 470
3118	Bakeries & tortilla mfg	-	3	3	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	2	f	D	D	D	D	D	D	D	D
LOUISVILLE, KY													
31-33	Manufacturing	-	456	202	29 078	1 076 191	21 525	44 821	718 692	9 819 972	7 403 258	17 225 380	259 092
311	Food mfg	-	32	22	3 564	101 125	2 654	5 656	62 960	342 059	680 432	1 021 116	13 931
3116	Meat product mfg	-	6	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	5	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	4	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	3	f	D	D	D	D	D	D	D	686
3119	Other food mfg	-	7	7	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	3	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	6	5	h	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	2	2	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	15	9	851	22 007	721	1 401	16 526	31 983	53 238	87 042	D
3219	Other wood product mfg ...	-	12	8	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	19	13	1 305	38 676	988	2 013	25 162	85 467	173 318	258 684	8 235
3222	Converted paper product mfg	-	19	13	1 305	38 676	988	2 013	25 162	85 467	173 318	258 684	8 235
32221	Paperboard container mfg	-	10	9	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	8	7	801	23 796	587	1 156	14 269	52 027	79 360	130 569	6 260
323	Printing & related support activities	-	74	20	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	74	20	g	D	D	D	D	D	D	D	D
32311	Printing	-	67	19	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	32	11	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	39	18	2 204	101 056	1 182	2 752	48 651	437 839	383 466	826 266	33 759
3251	Basic chemical mfg	-	12	5	1 056	49 045	626	1 553	26 953	148 109	112 046	257 584	18 871
32518	Other basic inorganic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	15	9	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	15	9	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	-	15	9	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	23	14	1 241	30 024	970	1 799	18 716	86 004	84 861	169 199	4 443
3261	Plastics product mfg	-	19	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	9	5	634	15 544	481	917	8 574	46 352	33 160	78 207	2 267
326199	All other plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	25	11	864	23 925	606	1 218	15 233	67 656	59 213	127 829	19 525
332	Fabricated metal product mfg	-	81	39	4 502	150 821	3 370	6 757	100 121	430 362	482 739	906 417	31 682
3321	Forging & stamping	-	8	7	821	21 254	687	1 420	14 897	49 951	69 606	119 722	D
33211	Forging & stamping	-	8	7	821	21 254	687	1 420	14 897	49 951	69 606	119 722	D
332116	Metal stamping	-	5	5	581	12 346	494	1 009	9 270	22 491	42 024	64 871	D
3323	Architectural & structural metals mfg	1	26	12	594	19 943	411	756	11 018	58 941	35 161	92 488	1 934
3324	Boiler, tank, & shipping container mfg	-	3	2	g	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	g	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	17	8	516	17 738	392	830	12 104	30 636	15 723	46 372	3 019

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISVILLE, KY—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	12	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	10	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	8	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	35	17	2 525	90 259	1 578	3 216	45 242	179 362	184 474	369 159	7 555
3333	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	6	6	812	28 017	575	1 152	15 753	69 584	66 429	135 510	3 133
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	6	6	812	28 017	575	1 152	15 753	69 584	66 429	135 510	3 133
336	Transportation equipment mfg.....	-	9	4	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	44	13	1 006	31 163	678	1 269	17 045	70 638	33 662	104 521	4 205
3399	Other miscellaneous mfg ..	-	24	8	619	18 535	409	760	10 662	42 203	17 358	58 561	D
	MADISONVILLE, KY												
31-33	Manufacturing	-	30	15	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	MAYFIELD, KY												
31-33	Manufacturing	-	18	8	1 214	52 465	887	2 002	41 071	105 930	123 552	245 796	6 573
326	Plastics & rubber products mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
	MAYSVILLE, KY												
31-33	Manufacturing	-	18	13	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	2	2	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
	MIDDLESBOROUGH, KY												
31-33	Manufacturing	-	19	8	f	D	D	D	D	D	D	D	D
	MONTICELLO, KY												
31-33	Manufacturing	2	19	8	1 399	26 511	1 238	1 994	21 676	62 270	96 487	161 893	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MOUNT STERLING, KY													
31-33	Manufacturing	-	22	13	1 594	35 563	1 296	2 502	24 312	82 222	138 478	220 864	26 463
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
MURRAY, KY													
31-33	Manufacturing	-	22	6	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEWPORT, KY													
31-33	Manufacturing	-	31	17	1 655	65 009	1 187	2 500	42 899	187 672	226 580	396 895	7 819
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
NICHOLASVILLE, KY													
31-33	Manufacturing	-	48	18	2 130	61 574	1 659	3 384	42 125	314 311	337 679	650 514	D
OWENSBORO, KY													
31-33	Manufacturing	1	86	39	i	D	D	D	D	D	D	D	D
311	Food mfg	1	12	7	i	50 262	898	1 971	28 141	310 463	758 920	1 061 842	17 356
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	7	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	6	f	D	D	D	D	D	D	D	3 349
PADUCAH, KY													
31-33	Manufacturing	1	40	22	1 634	51 888	1 228	2 564	33 312	152 607	151 181	300 887	10 226
332	Fabricated metal product mfg	-	10	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	7	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	7	5	f	D	D	D	D	D	D	D	D
332710	Machine shops	-	7	5	f	D	D	D	D	D	D	D	D
PARIS, KY													
31-33	Manufacturing	-	12	8	g	D	D	D	D	D	D	D	D
315	Apparel mfg	5	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	5	2	2	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	1	1	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PRINCETON, KY													
31-33	Manufacturing	1	11	4	607	17 499	490	1 157	11 907	46 185	68 331	113 727	D
RICHMOND, KY													
31-33	Manufacturing	-	35	20	1 981	55 427	1 411	2 722	36 375	314 947	269 386	583 096	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
RUSSELLVILLE, KY													
31-33	Manufacturing	-	19	13	3 618	105 262	3 067	7 087	75 753	341 664	315 881	661 204	5 679
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
SCOTTSVILLE, KY													
31-33	Manufacturing	-	10	7	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
SHELBYVILLE, KY													
31-33	Manufacturing	1	30	20	2 473	69 850	1 865	3 690	43 566	188 972	250 679	438 018	25 996
332	Fabricated metal product mfg	-	5	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
SHEPHERDSVILLE, KY													
31-33	Manufacturing	-	17	5	1 460	40 584	1 249	2 623	32 969	87 459	52 449	139 263	D
323	Printing & related support activities	-	2	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	2	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	2	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHIVELY, KY													
31-33	Manufacturing	-	17	7	1 086	22 928	950	1 619	17 401	84 060	57 345	139 906	2 512
311	Food mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	-	1	1	f	D	D	D	D	D	D	D	D
SOMERSET, KY													
31-33	Manufacturing	-	42	12	2 315	58 762	1 731	3 420	37 312	138 120	169 783	305 767	28 697
315	Apparel mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors.....	9	2	1	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors.....	9	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
SPRINGFIELD, KY													
31-33	Manufacturing	-	13	8	1 049	25 082	804	1 342	13 942	56 362	125 226	179 573	7 248
326	Plastics & rubber products mfg.....	-	7	5	719	17 336	541	960	9 489	35 357	57 534	92 030	6 257
3261	Plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
STANFORD, KY													
31-33	Manufacturing	-	9	4	f	D	D	D	D	D	D	D	2 245
STANTON, KY													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
TOMPKINSVILLE, KY													
31-33	Manufacturing	-	16	8	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	5	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VERSAILLES, KY													
31-33	Manufacturing	-	17	9	h	D	D	D	D	D	D	D	49 717
323	Printing & related support activities.....	-	3	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	3	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	g	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WILLIAMSBURG, KY													
31-33	Manufacturing	-	6	3	531	7 719	497	979	6 903	19 055	34 887	54 129	397
WINCHESTER, KY													
31-33	Manufacturing	-	39	26	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	10	7	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
KENTUCKY		KENTUCKY—Con.	
Companies ¹	number.. 3 829	Quantity of electricity purchased for heat and power	1,000 kWh.. 35 491 360
All establishments	number.. 4 218	Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
Establishments with 1 to 19 employees	number.. 2 506	Total value of shipments	\$1,000.. 86 636 107
Establishments with 20 to 99 employees	number.. 1 027	Value of resales	\$1,000.. 1 860 865
Establishments with 100 employees or more	number.. 685	Value added	\$1,000.. 38 337 622
All employees	number.. 288 405	Total inventories, beginning of year	\$1,000.. 7 329 989
Total compensation ²	\$1,000.. 11 671 153	Finished goods inventories, beginning of year	\$1,000.. 2 639 360
Annual payroll	\$1,000.. 9 198 091	Work-in-process inventories, beginning of year	\$1,000.. 1 815 275
Total fringe benefits	\$1,000.. 2 473 062	Materials and supplies inventories, beginning of year	\$1,000.. 2 875 354
Production workers, average for year	number.. 223 868	Total inventories, end of year	\$1,000.. 7 635 629
Production workers on March 12	number.. 222 360	Finished goods inventories, end of year	\$1,000.. 2 782 484
Production workers on May 12	number.. 222 962	Work-in-process inventories, end of year	\$1,000.. 1 906 314
Production workers on August 12	number.. 225 308	Materials and supplies inventories, end of year	\$1,000.. 2 946 831
Production workers on November 12	number.. 224 842	Gross book value of total assets at beginning of year	\$1,000.. 29 613 859
Production-worker hours	1,000.. 452 208	Total capital expenditures (new and used)	\$1,000.. 3 365 993
Production-worker wages	\$1,000.. 6 251 584	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 346 800
Total cost of materials	\$1,000.. 48 538 716	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 3 019 193
Cost of materials, parts, containers, etc., consumed	\$1,000.. 44 678 351	Total retirements ²	\$1,000.. 790 685
Cost of resales	\$1,000.. 1 694 640	Gross book value of total assets at end of year	\$1,000.. 32 189 167
Cost of fuels	\$1,000.. 465 142	Total depreciation during year ²	\$1,000.. 2 128 216
Cost of purchased electricity	\$1,000.. 988 055	Total rental payments ²	\$1,000.. 368 718
Cost of contract work	\$1,000.. 712 528	Buildings and other structures rental payments ²	\$1,000.. 166 259
		Machinery and equipment rental payments ²	\$1,000.. 202 459

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

KENTUCKY

Corbin is in Knox and Whitley Counties.

Williamstown is in Grant and Pendleton Counties; it annexed into Pendleton County in May 1993.

Appendix E. Metropolitan Areas

KENTUCKY

Cincinnati, OH—KY—IN PMSA

Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH

Cincinnati—Hamilton, OH—KY—IN CMSA

Cincinnati, OH—KY—IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH
Hamilton—Middletown, OH PMSA
Butler County, OH

Clarksville—Hopkinsville, TN—KY MSA

Christian County, KY
Montgomery County, TN

Evansville—Henderson, IN—KY MSA

Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Lexington, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Madison County, KY
Scott County, KY
Woodford County, KY

Louisville, KY—IN MSA

Clark County, IN
Floyd County, IN
Harrison County, IN
Scott County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY

Owensboro, KY MSA

Daviess County, KY

Louisiana

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LOUISIANA													
31-33	Manufacturing	-	3 545	1 170	165 777	6 054 513	123 566	258 014	3 967 652	29 066 923	51 529 435	80 423 978	3 434 538
311	Food mfg.	1	401	147	15 918	403 460	11 304	21 914	239 001	1 589 837	3 381 287	4 938 462	114 081
3111	Animal food mfg.	1	17	7	283	7 693	215	444	5 059	53 894	177 506	232 454	1 014
31111	Animal food mfg.	1	17	7	283	7 693	215	444	5 059	53 894	177 506	232 454	1 014
311119	Other animal food mfg.	1	17	7	283	7 693	215	444	5 059	53 894	177 506	232 454	1 014
3112	Grain & oilseed milling	-	20	12	718	21 167	542	1 097	12 472	86 005	632 009	726 231	8 198
31121	Flour milling & malt mfg.	-	16	9	e	D	D	D	D	D	D	D	6 455
311211	Flour milling	1	5	2	c	D	D	D	D	D	D	D	D
311212	Rice milling	-	11	7	361	10 136	276	607	6 228	35 358	198 681	240 373	D
31122	Starch & vegetable fats & oils mfg.	-	4	3	c	D	D	D	D	D	D	D	1 743
311225	Fats & oils refining & blending	-	1	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.	-	46	27	2 946	85 779	2 479	5 801	64 043	241 546	864 323	1 083 220	34 901
31131	Sugar mfg.	-	25	23	2 298	73 837	1 902	4 681	55 807	206 984	834 050	1 018 732	31 319
311311	Sugarcane mills	1	22	20	1 581	44 457	1 324	3 343	34 798	154 728	298 297	432 320	22 699
311312	Cane sugar refining	-	3	3	717	29 380	578	1 338	21 009	52 256	535 753	586 412	8 620
31133	Confectionery mfg from purchased chocolate	-	8	1	456	7 981	419	829	5 347	19 330	18 430	36 696	D
311330	Confectionery mfg from purchased chocolate	-	8	1	456	7 981	419	829	5 347	19 330	18 430	36 696	D
31134	Nonchocolate confectionery mfg	7	10	3	179	3 532	150	273	2 603	13 894	9 847	24 466	707
311340	Nonchocolate confectionery mfg	7	10	3	179	3 532	150	273	2 603	13 894	9 847	24 466	707
3114	Fruit & vegetable preserving & specialty food mfg.	1	22	7	559	11 963	472	945	8 802	46 811	54 447	101 242	2 123
31142	Fruit & vegetable canning, pickling, & drying	1	13	6	512	11 311	428	909	8 429	45 173	52 592	97 749	1 965
311421	Fruit & vegetable canning	1	12	6	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	15	10	1 310	34 777	622	1 238	12 598	110 160	275 984	389 407	5 292
31151	Dairy product (except frozen) mfg	1	12	10	1 279	34 457	598	1 198	12 357	108 723	274 059	386 038	5 174
311511	Fluid milk mfg	1	12	10	1 279	34 457	598	1 198	12 357	108 723	274 059	386 038	5 174
3116	Meat product mfg	2	57	16	3 155	63 919	2 522	4 647	44 997	130 551	295 079	423 348	20 865
31161	Animal slaughtering & processing	2	57	16	3 155	63 919	2 522	4 647	44 997	130 551	295 079	423 348	20 865
311611	Animal (except poultry) slaughtering	9	16	2	162	2 296	145	210	1 890	5 691	25 463	31 211	D
311612	Meat processed from carcasses	3	30	8	801	21 453	598	1 078	11 034	53 681	121 715	175 576	3 027
311615	Poultry processing	-	8	4	2 108	38 420	1 744	3 276	31 466	64 368	145 156	207 010	14 387
3117	Seafood product preparation & packaging	2	61	23	1 589	35 479	1 306	2 382	26 793	107 900	185 198	292 914	6 981
31171	Seafood product preparation & packaging	2	61	23	1 589	35 479	1 306	2 382	26 793	107 900	185 198	292 914	6 981
311712	Fresh & frozen seafood processing	2	54	22	1 542	34 022	1 266	2 302	25 817	99 904	173 271	273 179	6 507
3118	Bakeries & tortilla mfg	1	105	20	2 713	68 156	1 263	2 076	23 713	139 124	84 996	224 120	5 212
31181	Bread & bakery product mfg	-	99	19	2 661	67 021	1 219	2 011	22 891	132 362	80 023	212 377	4 913
311811	Retail bakeries	3	73	4	489	5 212	305	368	2 906	10 718	6 103	16 882	504
311812	Commercial bakeries	-	26	15	2 172	61 809	914	1 643	19 985	121 644	73 920	195 495	4 409
3119	Other food mfg	1	58	25	2 645	74 527	1 883	3 284	40 524	673 846	811 745	1 465 526	29 495
31192	Coffee & tea mfg	-	9	6	824	28 368	636	1 284	19 502	401 113	638 603	1 016 483	19 722
311920	Coffee & tea mfg	-	9	6	824	28 368	636	1 284	19 502	401 113	638 603	1 016 483	19 722
31194	Seasoning & dressing mfg	6	18	10	832	24 582	503	688	8 520	129 774	77 057	207 769	4 774
311941	Mayonnaise, dressing, & other prepared sauce mfg	6	13	7	710	20 828	442	605	7 587	113 185	66 639	180 580	4 487
311942	Spice & extract mfg	-	5	3	122	3 754	61	83	933	16 589	10 418	27 189	287
31199	All other food mfg	1	25	8	897	19 092	680	1 179	11 240	134 497	90 173	226 920	4 397
311991	Perishable prepared food mfg	-	8	3	352	5 343	262	354	2 981	45 265	21 713	69 217	724
311999	All other miscellaneous food mfg	2	17	5	545	13 749	418	825	8 259	89 232	68 460	157 703	3 673
312	Beverage & tobacco product mfg	-	48	14	2 460	75 699	890	1 737	21 606	160 400	367 202	526 892	9 015
3121	Beverage mfg	-	47	14	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	35	11	2 227	71 261	720	1 532	18 494	95 462	292 316	386 412	7 577
312111	Soft drink mfg	1	10	9	2 068	67 545	596	1 258	15 775	81 861	280 063	360 622	6 665
312113	Ice mfg	3	23	1	c	D	D	D	D	D	D	D	D
31212	Breweries	4	7	2	c	D	D	D	D	D	D	D	D
312120	Breweries	4	7	2	c	D	D	D	D	D	D	D	D
313	Textile mills	6	12	2	103	2 039	89	167	1 437	4 350	4 446	8 792	411

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOUISIANA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills	3	67	13	1 287	22 068	1 049	1 837	13 963	51 547	53 346	105 082	2 525
3141	Textile furnishings mills	7	27	2	277	4 982	200	359	2 680	16 292	11 745	28 076	660
31411	Carpet & rug mills	9	2	1	c	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	9	2	1	c	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	2	25	1	c	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	23	1	c	D	D	D	D	D	D	D	D
3149	Other textile product mills . . .	1	40	11	1 010	17 086	849	1 478	11 283	35 255	41 601	77 006	1 865
31491	Textile bag & canvas mills	1	26	8	755	12 911	644	1 102	8 086	23 662	29 480	53 247	1 085
314911	Textile bag mills	—	13	8	658	11 009	568	970	6 816	20 437	26 445	46 909	897
31499	All other textile product mills	1	14	3	255	4 175	205	376	3 197	11 593	12 121	23 759	780
314991	Rope, cordage, & twine mills	—	4	1	151	3 027	124	262	2 429	9 718	9 863	19 607	560
314999	All other miscellaneous textile product mills . . .	6	10	2	104	1 148	81	114	768	1 875	2 258	4 152	220
315	Apparel mfg	—	87	46	9 328	158 543	8 678	15 022	133 578	1 155 002	622 678	1 744 086	10 784
3151	Apparel knitting mills	—	4	3	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	3	2	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	3	2	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	59	37	i	D	D	D	D	D	D	D	5 455
31521	Cut & sew apparel contractors	2	18	8	g	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	—	5	4	f	D	D	D	D	D	D	D	210
315212	Women's, girls', & infants' cut & sew apparel contractors . .	7	13	4	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	23	17	3 365	51 296	3 214	5 782	46 631	277 307	139 134	401 534	1 698
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	1	1	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	4	1	c	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	c	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	3	5	5	248	2 526	221	231	1 844	4 571	2 726	6 875	D
315228	Men's & boys' cut & sew other outerwear mfg	—	9	8	g	D	D	D	D	D	D	D	1 115
31523	Women's & girls' cut & sew apparel mfg	—	15	10	802	12 830	742	1 483	11 634	38 343	31 804	69 320	3 406
315232	Women's & girls' cut & sew blouse & shirt mfg	—	5	4	e	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	—	6	3	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	4	3	320	4 341	298	595	4 127	12 042	7 527	19 933	D
3159	Apparel accessories & other apparel mfg	7	24	6	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	7	24	6	f	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	—	2	2	c	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	9	4	2	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	16	2	c	D	D	D	D	D	D	D	574
316	Leather & allied product mfg	3	11	5	269	4 355	162	319	2 751	8 402	9 366	17 579	313
3169	Other leather & allied product mfg	—	7	3	207	3 505	136	260	2 141	6 332	5 764	11 889	198
31699	Other leather & allied product mfg	—	7	3	207	3 505	136	260	2 141	6 332	5 764	11 889	198
316992	Women's handbag & purse mfg	—	1	1	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	1	4	2	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOUISIANA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	—	213	84	9 178	245 019	7 935	17 904	196 052	624 904	1 262 663	1 882 540	59 084
3211	Sawmills & wood preservation	1	85	36	2 736	70 402	2 284	5 018	54 459	204 456	486 909	689 859	26 619
32111	Sawmills & wood preservation	1	85	36	2 736	70 402	2 284	5 018	54 459	204 456	486 909	689 859	26 619
321113	Sawmills	1	71	28	2 270	59 975	1 922	4 235	47 778	173 811	381 867	553 707	24 475
321114	Wood preservation	3	14	8	466	10 427	362	783	6 681	30 645	105 042	136 152	2 144
3212	Veneer, plywood, & engineered wood product mfg	—	28	25	5 029	144 500	4 450	10 733	119 568	351 685	679 556	1 027 997	28 590
32121	Veneer, plywood, & engineered wood product mfg	—	28	25	5 029	144 500	4 450	10 733	119 568	351 685	679 556	1 027 997	28 590
321212	Softwood veneer & plywood mfg	—	12	12	3 461	99 496	3 129	7 666	84 631	155 471	462 603	618 325	13 968
321213	Engineered wood member (except truss) mfg	—	3	3	345	10 446	303	640	8 479	87 502	86 761	172 411	2 102
321214	Truss mfg	—	4	3	c	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	—	7	6	1 001	29 268	860	2 057	23 309	97 184	111 803	207 565	11 753
3219	Other wood product mfg	2	100	23	1 413	30 117	1 201	2 153	22 025	68 763	96 198	164 684	3 875
32191	Millwork	3	39	9	549	11 326	468	860	8 424	23 657	38 480	62 152	1 623
321911	Wood window & door mfg	6	18	4	286	6 306	240	443	4 591	10 726	12 728	23 476	659
321912	Cut stock, resawing lumber, & planing	1	12	3	124	2 293	110	186	1 722	6 738	11 594	18 405	222
321918	Other millwork (including flooring)	—	9	2	139	2 727	118	231	2 111	6 193	14 158	20 271	742
32192	Wood container & pallet mfg	2	31	7	351	6 993	300	588	5 214	16 676	19 143	35 785	971
321920	Wood container & pallet mfg	2	31	7	351	6 993	300	588	5 214	16 676	19 143	35 785	971
32199	All other wood product mfg	—	30	7	513	11 798	433	705	8 387	28 430	38 575	66 747	1 281
321991	Manufactured home (mobile home) mfg	—	1	1	c	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	1	11	4	167	4 609	131	240	3 158	8 190	12 713	20 919	942
321999	All other miscellaneous wood product mfg	2	18	2	c	D	D	D	D	D	D	D	D
322	Paper mfg	—	56	46	11 455	487 322	9 095	19 728	344 191	1 902 007	2 393 300	4 318 166	210 392
3221	Pulp, paper, & paperboard mills	—	12	12	7 146	360 872	5 636	12 057	256 133	1 536 129	1 775 400	3 325 371	153 433
32212	Paper mills	—	7	7	4 350	218 038	3 430	7 461	152 506	867 191	967 520	1 848 029	97 100
322121	Paper (except newsprint) mills	—	6	6	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	5	5	2 796	142 834	2 206	4 596	103 627	668 938	807 880	1 477 342	56 333
322130	Paperboard mills	—	5	5	2 796	142 834	2 206	4 596	103 627	668 938	807 880	1 477 342	56 333
3222	Converted paper product mfg	—	44	34	4 309	126 450	3 459	7 671	88 058	365 878	617 900	992 795	56 959
32221	Paperboard container mfg	—	23	19	2 262	73 371	1 806	3 969	52 720	176 892	367 380	552 375	44 280
322211	Corrugated & solid fiber box mfg	1	12	10	1 197	39 671	924	2 082	26 090	84 421	160 656	244 229	5 915
322212	Folding paperboard box mfg	—	6	6	f	D	D	D	D	D	D	D	D
322213	Setup paperboard box mfg	—	1	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	11	7	g	D	D	D	D	D	D	D	10 993
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	5	5	2	480	7 509	398	832	4 479	18 390	23 190	40 240	1 428
322224	Uncoated paper & multiwall bag mfg	—	4	3	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	4	3	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	6	5	331	8 166	271	521	5 929	79 555	69 493	151 309	D
322299	All other converted paper product mfg	—	6	5	331	8 166	271	521	5 929	79 555	69 493	151 309	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOUISIANA—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	402	58	4 180	100 903	2 958	4 979	60 763	204 334	143 666	345 785	18 995
3231	Printing & related support activities.....	2	402	58	4 180	100 903	2 958	4 979	60 763	204 334	143 666	345 785	18 995
32311	Printing.....	2	375	57	4 034	96 761	2 847	4 807	58 178	196 768	141 256	335 817	17 786
323110	Commercial lithographic printing ..	2	175	36	2 330	59 524	1 617	2 745	34 996	118 019	83 215	199 126	13 906
323112	Commercial flexographic printing .	—	6	3	251	6 424	183	379	4 375	15 476	17 275	32 503	413
323113	Commercial screen printing.....	2	41	6	364	6 983	249	422	3 509	12 168	10 263	22 723	764
323114	Quick printing.....	3	80	5	478	10 202	337	500	6 476	20 168	11 012	31 145	1 234
323116	Manifold business form printing.....	3	12	4	211	5 371	168	327	3 775	13 747	7 712	21 440	303
323119	Other commercial printing.....	4	41	2	268	5 342	189	282	3 150	9 540	7 490	16 939	650
32312	Support activities for printing.....	6	27	1	146	4 142	111	172	2 585	7 566	2 410	9 968	1 209
323122	Prepress services	5	22	1	127	3 689	96	146	2 295	6 703	2 268	8 962	1 182
324	Petroleum & coal products mfg.....	—	54	35	10 514	641 047	6 832	16 327	383 453	4 891 682	21 637 826	26 644 065	796 106
3241	Petroleum & coal products mfg.....	—	54	35	10 514	641 047	6 832	16 327	383 453	4 891 682	21 637 826	26 644 065	796 106
32411	Petroleum refineries	—	25	22	9 445	604 503	6 166	14 855	361 436	4 657 516	21 031 524	25 795 152	786 353
324110	Petroleum refineries ..	—	25	22	9 445	604 503	6 166	14 855	361 436	4 657 516	21 031 524	25 795 152	786 353
32412	Asphalt paving, roofing, & saturated materials mfg.....	5	12	4	178	5 272	114	208	3 395	14 838	57 561	72 046	1 074
324121	Asphalt paving mixture & block mfg.....	5	12	4	178	5 272	114	208	3 395	14 838	57 561	72 046	1 074
32419	Other petroleum & coal products mfg.....	1	17	9	891	31 272	552	1 264	18 622	219 328	548 741	776 867	8 679
324191	Petroleum lubricating oil & grease mfg.....	2	11	5	668	20 157	389	928	11 518	83 211	350 949	431 763	5 692
324199	All other petroleum & coal products mfg ..	—	6	4	223	11 115	163	336	7 104	136 117	197 792	345 104	2 987
325	Chemical mfg.....	—	264	133	27 648	1 560 861	17 202	39 135	910 978	12 528 162	14 886 683	27 286 165	1 832 786
3251	Basic chemical mfg.....	—	104	61	14 485	824 597	8 907	21 503	491 564	5 596 215	6 728 673	12 235 369	931 935
32511	Petrochemical mfg.....	—	7	7	1 107	65 403	642	1 492	39 796	473 808	1 001 090	1 449 285	73 605
325110	Petrochemical mfg.....	—	7	7	1 107	65 403	642	1 492	39 796	473 808	1 001 090	1 449 285	73 605
32512	Industrial gas mfg.....	—	34	10	f	D	D	D	D	D	D	D	D
325120	Industrial gas mfg.....	—	34	10	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	33	20	2 725	139 162	1 797	4 123	85 964	823 082	719 223	1 522 216	148 588
325181	Alkalies & chlorine mfg.....	—	4	4	591	34 852	398	882	22 558	259 460	231 846	488 935	45 349
325182	Carbon black mfg.....	—	5	5	632	33 236	341	858	16 727	214 045	165 407	376 679	49 341
325188	All other basic inorganic chemical mfg.....	—	24	11	1 502	71 074	1 058	2 383	46 679	349 577	321 970	656 602	53 898
32519	Other basic organic chemical mfg.....	—	27	23	9 433	558 658	5 646	14 107	326 343	3 932 413	4 670 109	8 573 256	674 068
325191	Gum & wood chemical mfg.....	—	2	1	c	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	—	23	20	8 705	518 428	5 207	13 029	302 927	3 678 082	4 535 851	8 173 199	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	30	27	i	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg.....	—	29	27	6 935	433 446	4 497	9 610	251 713	1 877 842	5 283 983	7 148 492	421 003
325211	Plastics material & resin mfg.....	—	22	20	5 249	339 775	3 312	7 053	191 813	1 429 792	4 647 609	6 057 956	383 963
325212	Synthetic rubber mfg..	—	7	7	1 686	93 671	1 185	2 557	59 900	448 050	636 374	1 090 536	37 040
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	26	15	2 960	171 374	1 869	4 288	103 907	1 970 781	1 724 679	3 679 811	379 668
32531	Fertilizer mfg.....	—	15	9	1 590	88 176	1 029	2 318	55 948	611 200	1 147 046	1 755 951	337 907
325311	Nitrogenous fertilizer mfg.....	—	4	4	663	38 898	377	939	21 422	326 545	482 085	810 472	D
325312	Phosphatic fertilizer mfg.....	—	5	4	858	48 121	599	1 303	33 713	281 778	648 404	925 081	D
32532	Pesticide & other agricultural chemical mfg.....	—	11	6	1 370	83 198	840	1 970	47 959	1 359 581	577 633	1 923 860	41 761
325320	Pesticide & other agricultural chemical mfg.....	—	11	6	1 370	83 198	840	1 970	47 959	1 359 581	577 633	1 923 860	41 761

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOUISIANA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	2	16	8	914	30 738	480	723	12 482	95 743	94 747	189 461	5 696
32541	Pharmaceutical & medicine mfg	2	16	8	914	30 738	480	723	12 482	95 743	94 747	189 461	5 696
325412	Pharmaceutical preparation mfg	2	6	4	660	24 572	346	495	10 319	81 246	91 278	171 923	4 985
325414	Biological product (except diagnostic) mfg	—	5	3	188	4 808	86	145	1 453	13 599	3 155	16 714	D
3255	Paint, coating, & adhesive mfg	—	14	5	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	11	3	322	10 413	163	259	4 222	56 083	47 983	102 654	D
325510	Paint & coating mfg	—	11	3	322	10 413	163	259	4 222	56 083	47 983	102 654	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	34	8	1 264	66 688	737	1 777	32 439	2 795 335	860 143	3 648 970	84 272
32561	Soap & cleaning compound mfg	—	27	7	1 212	64 995	702	1 727	31 796	2 789 525	857 251	3 640 274	84 061
325611	Soap & other detergent mfg	—	13	2	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	1	10	1	135	3 452	113	254	2 123	5 957	13 367	19 855	1 054
325613	Surface active agent mfg	—	4	4	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	40	9	668	21 401	459	826	12 796	121 842	134 406	255 419	7 069
32599	All other chemical product & preparation mfg	2	32	7	574	18 101	404	710	10 917	112 891	121 186	233 001	6 566
325991	Custom compounding of purchased resin	1	9	3	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	2	22	4	301	9 531	207	447	6 236	76 149	61 609	137 703	4 427
326	Plastics & rubber products mfg	1	123	46	4 796	125 006	3 744	7 763	82 948	407 544	351 604	756 371	51 693
3261	Plastics product mfg	1	92	40	3 952	99 194	3 239	6 558	70 140	304 947	321 360	624 882	38 135
32611	Unsupported plastics film, sheet, & bag mfg	1	16	12	1 638	42 204	1 358	2 698	29 603	153 167	160 663	312 777	18 081
326111	Unsupported plastics bag mfg	3	9	6	f	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	—	1	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	6	5	822	24 761	671	1 360	17 100	110 893	112 329	222 742	14 598
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	12	7	469	10 958	351	634	5 863	25 229	50 941	77 675	2 660
326121	Unsupported plastics profile shape mfg	—	3	2	c	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	2	9	5	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	7	4	338	10 905	291	613	8 867	43 294	33 221	76 023	3 332
326160	Plastics bottle mfg	—	7	4	338	10 905	291	613	8 867	43 294	33 221	76 023	3 332
32619	Other plastics product mfg	1	53	15	1 361	32 112	1 138	2 412	23 309	73 548	69 571	141 865	13 757
326191	Plastics plumbing fixture mfg	3	12	2	126	2 823	96	171	1 771	6 057	3 862	9 935	652
326199	All other plastics product mfg	1	41	13	1 235	29 289	1 042	2 241	21 538	67 491	65 709	131 930	13 105
3262	Rubber product mfg	1	31	6	844	25 812	505	1 205	12 808	102 597	30 244	131 489	13 558
32621	Tire mfg	4	14	2	c	D	D	D	D	D	D	D	D
326212	Tire retreading	3	12	2	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	3	16	3	c	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	2	10	2	134	4 413	97	202	2 581	18 023	5 068	23 249	2 091

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISIANA—Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	1	192	59	5 423	151 242	4 287	8 307	106 543	391 850	388 010	776 354	32 112
3271	Clay product & refractory mfg	1	16	4	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	6	4	c	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	4	4	c	D	D	D	D	D	D	D	478
3272	Glass & glass product mfg	—	15	3	1 515	46 583	1 306	2 411	38 936	133 457	60 945	191 893	7 601
32721	Glass & glass product mfg	—	15	3	1 515	46 583	1 306	2 411	38 936	133 457	60 945	191 893	7 601
327212	Other pressed & blown glass & glassware mfg	—	2	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	130	40	2 841	73 107	2 169	4 182	46 408	159 458	186 052	344 071	18 413
32732	Ready-mix concrete mfg	4	80	27	1 653	41 438	1 328	2 415	29 213	96 470	129 480	226 048	9 518
327320	Ready-mix concrete mfg	4	80	27	1 653	41 438	1 328	2 415	29 213	96 470	129 480	226 048	9 518
32733	Concrete pipe, brick, & block mfg	1	16	6	322	8 097	221	396	4 160	15 423	18 695	35 102	1 861
327331	Concrete block & brick mfg	1	10	2	184	4 475	131	235	2 087	10 165	9 344	19 720	795
327332	Concrete pipe mfg	—	6	4	138	3 622	90	161	2 073	5 258	9 351	15 382	1 066
32739	Other concrete product mfg	—	34	7	866	23 572	620	1 371	13 035	47 565	37 877	82 921	7 034
327390	Other concrete product mfg	—	34	7	866	23 572	620	1 371	13 035	47 565	37 877	82 921	7 034
3274	Lime & gypsum product mfg	—	3	2	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	3	2	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	3	2	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	28	10	576	17 193	427	897	11 315	42 323	95 630	138 012	3 119
32799	All other nonmetallic mineral product mfg	—	25	10	562	16 753	416	876	11 019	40 723	94 327	135 079	3 005
327992	Ground or treated mineral & earth mfg	—	6	2	115	3 998	68	154	2 134	10 155	59 432	69 459	931
327993	Mineral wool mfg	—	4	3	201	5 865	155	324	4 379	16 328	19 171	35 586	1 123
327999	All other miscellaneous nonmetallic mineral product mfg	1	6	4	151	4 364	111	221	2 994	9 975	13 529	23 594	849
331	Primary metal mfg	—	32	23	3 504	128 350	2 708	5 844	84 730	369 517	630 436	1 000 185	38 569
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	6	6	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	477	20 554	349	820	14 213	36 920	144 375	179 832	7 095
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	477	20 554	349	820	14 213	36 920	144 375	179 832	7 095
33122	Rolling & drawing of purchased steel	1	2	2	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	1	1	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	5	5	1 293	50 299	978	2 093	31 400	149 621	272 583	422 801	12 926
33131	Alumina & aluminum production & processing	—	5	5	1 293	50 299	978	2 093	31 400	149 621	272 583	422 801	12 926
331311	Alumina refining	—	2	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	3	e	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	1	1	c	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	c	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	1	1	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LOUISIANA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	17	8	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	14	6	595	16 498	499	1 045	11 779	33 158	22 542	56 295	3 615
331511	Iron foundries	-	7	3	301	8 016	262	553	5 700	14 948	10 573	26 200	1 040
331513	Steel foundries (except investment)	-	7	3	294	8 482	237	492	6 079	18 210	11 969	30 095	2 575
332	Fabricated metal product mfg	-	671	197	19 753	594 840	15 622	32 356	414 834	1 334 359	1 192 490	2 477 691	77 424
3321	Forging & stamping	-	15	5	343	9 623	252	537	5 632	23 873	38 062	61 024	839
33211	Forging & stamping	-	15	5	343	9 623	252	537	5 632	23 873	38 062	61 024	839
332114	Custom roll forming	-	4	2	114	3 431	75	145	1 879	6 479	18 570	25 049	259
332116	Metal stamping	-	6	3	192	5 315	148	344	3 137	15 605	15 354	29 988	395
3323	Architectural & structural metals mfg	-	157	57	7 808	229 009	6 352	13 429	165 881	543 060	554 776	1 065 137	17 154
33231	Plate work & fabricated structural product mfg ..	-	92	39	6 443	192 487	5 423	11 599	145 029	467 324	484 856	919 264	14 323
332311	Prefabricated metal building & component mfg	-	17	3	581	13 350	375	824	7 446	45 188	52 966	97 032	388
332312	Fabricated structural metal mfg	-	57	31	5 159	161 339	4 441	9 804	126 778	366 829	406 616	745 403	11 702
332313	Plate work mfg	-	18	5	703	17 798	607	971	10 805	55 307	25 274	76 829	2 233
33232	Ornamental & architectural metal products mfg	2	65	18	1 365	36 522	929	1 830	20 852	75 736	69 920	145 873	2 831
332321	Metal window & door mfg	1	16	4	318	7 113	239	494	4 088	12 774	17 328	30 094	343
332322	Sheet metal work mfg ..	2	31	10	863	23 497	566	1 096	13 565	46 199	45 230	91 181	2 158
332323	Ornamental & architectural metal work mfg	1	18	4	184	5 912	124	240	3 199	16 763	7 362	24 598	330
3324	Boiler, tank, & shipping container mfg	-	38	21	1 644	50 720	1 315	2 787	35 176	123 831	133 862	254 517	5 844
33241	Power boiler & heat exchanger mfg	-	12	7	674	20 442	530	1 108	13 796	41 909	31 322	72 790	1 470
332410	Power boiler & heat exchanger mfg	-	12	7	674	20 442	530	1 108	13 796	41 909	31 322	72 790	1 470
33242	Metal tank (heavy gauge) mfg	-	15	8	573	18 714	454	1 022	12 435	47 693	21 157	68 709	1 522
332420	Metal tank (heavy gauge) mfg	-	15	8	573	18 714	454	1 022	12 435	47 693	21 157	68 709	1 522
33243	Metal can, box, & other metal container (light gauge) mfg	-	11	6	397	11 564	331	657	8 945	34 229	81 383	113 018	2 852
332431	Metal can mfg	-	2	1	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	-	9	5	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	3	13	2	132	3 979	82	160	2 446	10 701	11 674	22 609	425
33261	Spring & wire product mfg	3	13	2	132	3 979	82	160	2 446	10 701	11 674	22 609	425
332618	Other fabricated wire product mfg	4	11	2	c	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	305	60	4 333	137 373	3 408	6 772	94 906	256 188	129 720	383 351	22 716
33271	Machine shops	1	289	52	3 879	121 614	3 037	5 996	84 774	216 199	110 893	325 021	20 518
332710	Machine shops	1	289	52	3 879	121 614	3 037	5 996	84 774	216 199	110 893	325 021	20 518
33272	Turned product & screw, nut, & bolt mfg	-	16	8	454	15 759	371	776	10 132	39 989	18 827	58 330	2 198
332721	Precision turned product mfg	-	13	7	384	13 812	312	663	8 673	25 736	14 816	40 434	D
3328	Coating, engraving, heat treating, & allied activities .	1	49	20	1 344	34 710	1 151	2 468	26 882	85 539	61 948	145 849	6 576
33281	Coating, engraving, heat treating, & allied activities	1	49	20	1 344	34 710	1 151	2 468	26 882	85 539	61 948	145 849	6 576
332811	Metal heat treating	1	10	6	335	9 623	281	522	7 252	15 844	7 912	23 811	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	23	13	897	22 249	783	1 775	17 755	63 738	50 323	112 157	4 636
332813	Electroplating, plating, polishing, anodizing, & coloring	4	16	1	112	2 838	87	171	1 875	5 957	3 713	9 881	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISIANA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	86	31	4 075	127 838	3 014	6 135	83 122	287 814	258 701	538 169	23 708
33291	Metal valve mfg	—	20	8	1 443	48 636	965	2 004	26 888	118 654	80 179	195 751	5 949
332911	Industrial valve mfg	—	16	7	f	D	D	D	D	D	D	D	4 807
332919	Other metal valve & pipe fitting mfg	—	4	1	e	D	D	D	D	D	D	D	1 142
33299	All other fabricated metal product mfg	—	66	23	2 632	79 202	2 049	4 131	56 234	169 160	178 522	342 418	17 759
332996	Fabricated pipe & pipe fitting mfg	—	25	12	1 780	55 923	1 394	2 860	41 549	119 015	141 974	255 219	14 984
332998	Enameled iron & metal sanitary ware mfg	—	1	1	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	37	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	226	88	8 037	278 739	5 666	11 368	170 865	652 916	676 128	1 301 156	51 489
3331	Agriculture, construction, & mining machinery mfg	1	90	44	3 822	141 011	2 734	5 619	92 155	314 268	377 125	669 621	31 917
33311	Agricultural implement mfg	2	17	6	863	27 497	640	1 270	21 400	41 805	71 522	114 624	D
333111	Farm machinery & equipment mfg	2	16	6	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	1	12	7	545	15 001	398	765	10 247	29 881	41 460	68 896	D
333120	Construction machinery mfg	1	12	7	545	15 001	398	765	10 247	29 881	41 460	68 896	D
33313	Mining & oil & gas field machinery mfg	—	61	31	2 414	98 513	1 696	3 584	60 508	242 582	264 143	486 101	18 046
333132	Oil & gas field machinery & equipment mfg	—	61	31	2 414	98 513	1 696	3 584	60 508	242 582	264 143	486 101	18 046
3332	Industrial machinery mfg	2	28	12	847	30 083	563	1 074	16 605	61 902	74 162	136 965	3 265
33329	Other industrial machinery mfg	2	26	11	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	8	5	291	10 417	206	455	6 889	30 952	46 756	78 167	1 916
333294	Food product machinery mfg	3	5	1	139	4 247	77	115	1 619	3 621	2 808	6 418	D
333298	All other industrial machinery mfg	5	11	4	316	13 231	205	368	6 749	24 491	20 897	45 781	1 214
3333	Commercial & service industry machinery mfg	—	22	4	1 477	45 410	1 025	2 000	26 996	144 694	92 322	236 138	8 165
33331	Commercial & service industry machinery mfg	—	22	4	1 477	45 410	1 025	2 000	26 996	144 694	92 322	236 138	8 165
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	17	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	8	4	450	10 952	392	833	8 509	18 228	46 621	58 999	1 000
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	8	4	450	10 952	392	833	8 509	18 228	46 621	58 999	1 000
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	3	6	4	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	60	22	1 332	47 856	877	1 706	24 393	103 709	83 190	186 794	6 816
33391	Pump & compressor mfg	3	20	11	509	18 677	301	582	8 842	45 336	42 389	87 968	4 543
333911	Pump & pumping equipment mfg	1	14	8	306	10 883	191	369	5 393	25 881	24 024	50 055	1 653
333912	Air & gas compressor mfg	5	6	3	203	7 794	110	213	3 449	19 455	18 365	37 913	2 890
33392	Material handling equipment mfg	1	12	4	324	12 630	231	466	6 593	28 808	14 295	42 956	452
333922	Conveyor & conveying equipment mfg	—	2	2	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	5	28	7	499	16 549	345	658	8 958	29 565	26 506	55 870	1 821
333993	Packaging machinery mfg	9	4	3	171	6 303	110	223	3 711	14 340	8 020	22 432	D
333999	All other miscellaneous general-purpose machinery mfg	2	16	3	247	8 320	172	307	4 054	11 485	11 878	22 960	1 341

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOUISIANA—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	67	19	2 203	93 794	1 413	2 391	47 828	214 673	291 930	503 239	36 192
3342	Communications equipment mfg	-	12	5	1 165	51 540	915	1 415	35 585	105 155	237 677	343 197	D
33421	Telephone apparatus mfg	-	4	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	4	2	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	3	2	c	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	3	2	c	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	7	2	c	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	2	c	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	2	1	c	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	36	11	714	33 890	312	604	8 557	88 474	42 697	127 696	3 786
33451	Navigational, measuring, medical, & control instruments mfg	1	36	11	714	33 890	312	604	8 557	88 474	42 697	127 696	3 786
334513	Industrial process control instrument mfg	-	15	5	393	20 097	141	260	3 626	49 958	18 392	67 436	1 345
334519	Other measuring & controlling device mfg	-	5	2	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	46	22	2 412	80 097	1 679	3 409	54 599	207 283	198 148	408 645	6 966
3351	Electric lighting equipment mfg	8	7	1	c	D	D	D	D	D	D	D	209
33512	Lighting fixture mfg	8	7	1	c	D	D	D	D	D	D	D	209
335121	Residential electric lighting fixture mfg	9	4	1	c	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	4	3	e	D	D	D	D	D	D	D	1 102
33521	Small electrical appliance mfg	-	2	2	c	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	1	c	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	2	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	2	24	9	939	36 551	711	1 502	25 351	74 411	77 033	151 896	3 879
33531	Electrical equipment mfg	2	24	9	939	36 551	711	1 502	25 351	74 411	77 033	151 896	3 879
335311	Power, distribution, & specialty transformer mfg	-	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	9	7	3	153	4 410	123	246	3 127	10 851	10 773	21 677	637
335313	Switchgear & switchboard apparatus mfg	1	5	3	213	6 948	127	226	3 304	8 863	6 417	15 347	682
3359	Other electrical equipment & component mfg	-	11	9	936	34 050	658	1 232	23 061	116 531	98 716	215 859	1 776
33591	Battery mfg	-	2	2	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	8	6	e	D	D	D	D	D	D	D	1 289
335991	Carbon & graphite product mfg	-	1	1	c	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	7	5	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	181	86	22 256	790 650	18 459	41 387	631 235	2 065 921	2 783 237	4 828 774	73 798
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	14	4	e	D	D	D	D	D	D	D	1 021
33621	Motor vehicle body & trailer mfg	1	14	4	e	D	D	D	D	D	D	D	1 021
336212	Truck trailer mfg	-	3	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	LOUISIANA—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3363	Motor vehicle parts mfg . . .	-	23	5	g	D	D	D	D	D	D	D	22 692	
33632	Motor vehicle electrical & electronic equipment mfg	-	6	3	g	D	D	D	D	D	D	D	D	
336321	Vehicular lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	9	4	h	D	D	D	D	D	D	D	8 507	
33641	Aerospace product & parts mfg	-	9	4	h	D	D	D	D	D	D	D	8 507	
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	-	5	2	c	D	D	D	D	D	D	D	D	
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	-	1	1	h	D	D	D	D	D	D	D	D	
3365	Railroad rolling stock mfg	-	1	1	c	D	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg	-	1	1	c	D	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg	-	1	1	c	D	D	D	D	D	D	D	D	
3366	Ship & boat building	1	128	69		14 002	422 393	11 322	25 032	328 627	852 523	826 250	1 677 134	35 230
33661	Ship & boat building	1	128	69		14 002	422 393	11 322	25 032	328 627	852 523	826 250	1 677 134	35 230
336611	Ship building & repairing	1	92	59		13 276	408 756	10 750	24 006	319 766	816 915	787 930	1 604 845	34 330
336612	Boat building	3	36	10		726	13 637	572	1 026	8 861	35 608	38 320	72 289	900
3369	Other transportation equipment mfg	-	5	2	c	D	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	5	2	c	D	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	3	2	c	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	123	15		1 332	24 714	1 050	1 639	16 920	53 285	49 949	103 412	3 613
3371	Household & institutional furniture & kitchen cabinet mfg	3	107	8		903	14 871	739	1 074	10 974	27 654	24 100	51 755	1 617
33711	Wood kitchen cabinet & counter top mfg	2	67	4		466	8 531	380	609	6 599	16 000	13 678	29 678	878
337110	Wood kitchen cabinet & counter top mfg	2	67	4		466	8 531	380	609	6 599	16 000	13 678	29 678	878
33712	Household & institutional furniture mfg	4	40	4		437	6 340	359	465	4 375	11 654	10 422	22 077	739
337122	Nonupholstered wood household furniture mfg	5	25	2		151	2 229	136	217	1 709	3 971	3 630	7 600	261
337127	Institutional furniture mfg	1	5	2		224	3 070	171	176	1 924	5 821	4 935	10 758	357
3372	Office furniture (including fixtures) mfg	8	10	4		292	6 994	216	360	4 330	17 517	14 947	32 675	1 024
33721	Office furniture (including fixtures) mfg	8	10	4		292	6 994	216	360	4 330	17 517	14 947	32 675	1 024
337214	Office furniture (except wood) mfg	9	1	1	c	D	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	2	6	3		137	2 849	95	205	1 616	8 114	10 902	18 982	972
33791	Mattress mfg	1	5	2	c	D	D	D	D	D	D	D	D	D
337910	Mattress mfg	1	5	2	c	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	269	32		3 721	85 765	2 744	4 481	49 377	248 948	205 040	450 537	8 190
3391	Medical equipment & supplies mfg	5	130	7		755	18 646	564	931	10 878	38 922	18 244	57 762	1 314
33911	Medical equipment & supplies mfg	5	130	7		755	18 646	564	931	10 878	38 922	18 244	57 762	1 314
339113	Surgical appliance & supplies mfg	2	13	1		107	3 788	83	150	2 165	6 365	3 702	10 131	359
339116	Dental laboratories	5	92	3		490	11 557	378	616	7 062	25 780	9 991	36 200	647
3399	Other miscellaneous mfg	1	139	25		2 966	67 119	2 180	3 550	38 499	210 026	186 796	392 775	6 876
33991	Jewelry & silverware mfg	-	18	2	g	D	D	D	D	D	D	D	D	2 392
339911	Jewelry (except costume) mfg	-	12	2	g	D	D	D	D	D	D	D	D	2 380
33992	Sporting & athletic goods mfg	2	25	7		628	12 735	487	813	7 945	31 045	16 689	47 769	1 347
339920	Sporting & athletic goods mfg	2	25	7		628	12 735	487	813	7 945	31 045	16 689	47 769	1 347
33995	Sign mfg	2	49	7		532	12 964	341	609	6 592	24 627	17 420	41 724	1 190
339950	Sign mfg	2	49	7		532	12 964	341	609	6 592	24 627	17 420	41 724	1 190

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LOUISIANA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	4	35	8	502	13 048	367	679	7 735	37 879	21 143	58 453	1 866
339991	Gasket, packing, & sealing device mfg ...	4	11	4	210	7 332	141	316	4 152	22 864	10 817	33 778	840
339994	Broom, brush, & mop mfg	2	7	2	146	3 129	117	208	1 929	9 879	6 923	16 161	426
339999	All other miscellaneous mfg	2	12	1	102	1 753	74	97	1 020	2 860	1 983	4 847	225

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALEXANDRIA, LA MSA												
	Manufacturing	-	73	24	3 179	102 994	2 201	4 177	59 878	722 200	452 127	1 165 869	43 644
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	2	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	3	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	1	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	6	837	30 220	532	1 066	15 775	73 143	33 189	105 317	4 755
3329	Other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BATON ROUGE, LA MSA												
31-33	Manufacturing	-	533	164	21 530	993 645	14 305	31 380	564 931	7 342 085	10 987 251	18 448 560	778 417
311	Food mfg.....	2	34	13	1 165	33 835	783	1 427	16 287	119 478	208 476	321 364	10 503
3115	Dairy product mfg.....	4	3	3	336	9 996	171	337	4 086	18 287	76 327	94 721	D
31151	Dairy product (except frozen) mfg.....	4	3	3	336	9 996	171	337	4 086	18 287	76 327	94 721	D
311511	Fluid milk mfg.....	4	3	3	336	9 996	171	337	4 086	18 287	76 327	94 721	D
3118	Bakeries & tortilla mfg.....	-	15	3	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	15	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
3121	Beverage mfg.....	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
31211	Soft drink & ice mfg.....	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
312111	Soft drink mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	11	5	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	28	10	547	13 653	467	875	10 419	37 502	51 610	89 081	3 272
3219	Other wood product mfg....	3	22	8	381	8 950	317	575	6 567	15 921	17 944	33 898	1 668
32191	Millwork.....	5	13	4	255	5 550	213	391	4 099	9 428	10 998	20 478	612
322	Paper mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	60	11	623	15 787	452	695	9 407	30 432	16 647	47 072	1 699
3231	Printing & related support activities.....	2	60	11	623	15 787	452	695	9 407	30 432	16 647	47 072	1 699
32311	Printing.....	2	57	11	612	15 564	444	686	9 256	29 997	16 539	46 531	1 673
323110	Commercial lithographic printing..	1	24	9	406	11 651	286	452	6 593	21 296	12 311	33 600	1 236
324	Petroleum & coal products mfg.....	-	11	5	1 859	128 666	1 265	3 393	72 583	598 408	4 726 270	5 453 831	49 736
3241	Petroleum & coal products mfg.....	-	11	5	1 859	128 666	1 265	3 393	72 583	598 408	4 726 270	5 453 831	49 736
32411	Petroleum refineries.....	-	4	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	-	4	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	63	33	8 629	510 473	4 935	11 639	272 571	5 916 502	5 041 777	10 951 322	644 525
3251	Basic chemical mfg.....	-	29	14	4 431	271 719	2 443	6 068	145 489	2 190 045	2 442 786	4 614 642	206 421
32511	Petrochemical mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg....	-	1	1	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg.....	-	12	2	e	D	D	D	D	D	D	D	D
325120	Industrial gas mfg....	-	12	2	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	-	10	5	f	D	D	D	D	D	D	D	24 015
325188	All other basic inorganic chemical mfg.....	-	9	4	550	23 603	369	682	14 260	102 295	151 791	253 736	D
32519	Other basic organic chemical mfg.....	-	6	6	3 083	199 841	1 520	4 098	99 343	1 880 145	1 888 764	3 759 596	158 502
325199	All other basic organic chemical mfg.....	-	5	5	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	9	9	2 649	151 836	1 726	3 646	88 148	1 147 126	1 581 290	2 740 071	D
32521	Resin & synthetic rubber mfg.....	-	9	9	2 649	151 836	1 726	3 646	88 148	1 147 126	1 581 290	2 740 071	D
325211	Plastics material & resin mfg.....	-	6	6	g	D	D	D	D	D	D	D	42 306
325212	Synthetic rubber mfg..	-	3	3	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg..	-	6	5	f	D	D	D	D	D	D	D	319 881
32531	Fertilizer mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg..	-	3	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	18	4	283	9 330	218	505	5 449	28 259	26 663	53 911	1 379
3261	Plastics product mfg.....	1	18	4	283	9 330	218	505	5 449	28 259	26 663	53 911	1 379

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BATON ROUGE, LA MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	3	37	12	631	15 489	468	930	10 267	35 563	46 979	83 302	3 538
3273	Cement & concrete product mfg	4	25	9	483	11 672	358	704	8 236	29 705	35 782	66 091	2 982
32732	Ready-mix concrete mfg.	5	9	4	269	6 618	223	441	5 334	17 996	26 344	44 430	1 344
327320	Ready-mix concrete mfg	5	9	4	269	6 618	223	441	5 334	17 996	26 344	44 430	1 344
331	Primary metal mfg	—	7	5	959	34 809	768	1 761	24 689	76 673	203 090	279 911	D
3312	Steel product mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331311	Alumina refining	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	110	36	3 579	111 383	2 885	5 848	84 100	222 608	207 141	423 820	13 789
3323	Architectural & structural metals mfg	1	26	8	1 082	29 621	879	1 782	21 794	76 607	59 967	129 843	3 385
33231	Plate work & fabricated structural product mfg ..	1	15	6	811	24 409	703	1 597	18 740	64 986	53 692	111 654	2 841
332312	Fabricated structural metal mfg	1	11	6	795	24 009	690	1 579	18 485	64 229	52 978	110 183	2 801
33232	Ornamental & architectural metal products mfg	4	11	2	271	5 212	176	185	3 054	11 621	6 275	18 189	544
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	48	12	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	47	12	738	26 087	577	1 161	18 313	43 312	25 369	69 177	1 485
332710	Machine shops	1	47	12	738	26 087	577	1 161	18 313	43 312	25 369	69 177	1 485
3328	Coating, engraving, heat treating, & allied activities.	—	8	5	353	8 751	325	709	7 607	22 260	13 896	35 901	837
33281	Coating, engraving, heat treating, & allied activities	—	8	5	353	8 751	325	709	7 607	22 260	13 896	35 901	837
3329	Other fabricated metal product mfg	—	21	7	1 170	39 226	926	1 821	31 857	66 497	88 174	155 320	7 743
33299	All other fabricated metal product mfg	—	18	6	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	9	5	983	31 196	791	1 555	25 892	50 801	75 496	127 029	D
333	Machinery mfg	2	27	9	347	12 414	209	390	5 851	31 675	28 848	60 996	1 434
334	Computer & electronic product mfg	2	18	3	251	8 383	143	223	2 882	24 680	11 616	36 184	D
339	Miscellaneous mfg	3	45	6	435	12 635	299	578	7 137	37 350	19 566	56 660	1 407
3399	Other miscellaneous mfg ..	3	26	5	299	8 633	205	427	4 909	28 914	14 292	42 659	1 024
	HOUMA, LA MSA												
31-33	Manufacturing	1	185	52	6 454	202 256	5 144	10 852	145 583	436 914	526 273	963 629	37 334
311	Food mfg	3	37	13	952	16 994	737	1 433	11 542	92 917	116 848	208 895	D
3113	Sugar & confectionery product mfg	6	7	5	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	6	4	4	274	7 309	188	459	4 945	31 950	55 673	84 606	D
311311	Sugarcane mills	6	4	4	274	7 309	188	459	4 945	31 950	55 673	84 606	D
3117	Seafood product preparation & packaging ..	2	15	7	336	4 396	285	581	3 368	13 437	38 450	51 893	D
31171	Seafood product preparation & packaging	2	15	7	336	4 396	285	581	3 368	13 437	38 450	51 893	D
311712	Fresh & frozen seafood processing ..	2	15	7	336	4 396	285	581	3 368	13 437	38 450	51 893	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOUMA, LA MSA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	49	12	1 593	58 978	1 260	2 981	39 656	107 047	92 166	196 704	10 223
3323	Architectural & structural metals mfg	-	7	3	767	27 778	678	1 630	21 715	46 181	57 733	102 743	1 843
33231	Plate work & fabricated structural product mfg ...	-	6	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	30	7	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	29	6	443	15 188	331	714	9 957	24 665	14 702	38 196	5 100
332710	Machine shops	-	29	6	443	15 188	331	714	9 957	24 665	14 702	38 196	5 100
333	Machinery mfg	-	18	5	982	36 922	685	1 337	25 053	61 910	90 112	154 471	9 464
3331	Agriculture, construction, & mining machinery mfg....	-	13	5	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	9	3	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	9	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	27	18	2 480	76 486	2 129	4 485	60 893	132 181	173 095	306 126	D
3366	Ship & boat building	1	26	17	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	26	17	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	23	14	2 288	73 588	1 979	4 237	58 944	122 870	159 566	282 436	D
LAFAYETTE, LA MSA													
31-33	Manufacturing	2	363	104	13 086	309 100	10 418	18 922	210 133	1 490 415	1 849 172	3 316 839	68 751
311	Food mfg	1	62	21	1 673	40 298	1 133	1 892	21 288	95 792	341 096	441 738	6 007
3112	Grain & oilseed milling	-	8	5	376	10 357	301	524	5 925	32 527	202 124	239 531	1 185
3116	Meat product mfg	5	17	4	255	4 580	180	283	2 509	9 071	24 031	32 989	479
31161	Animal slaughtering & processing.....	5	17	4	255	4 580	180	283	2 509	9 071	24 031	32 989	479
3118	Bakeries & tortilla mfg	-	9	3	293	9 227	142	280	3 490	7 536	18 321	25 844	984
31181	Bread & bakery product mfg	-	9	3	293	9 227	142	280	3 490	7 536	18 321	25 844	984
311812	Commercial bakeries ..	-	5	3	284	9 050	136	269	3 407	7 083	18 095	25 165	959
312	Beverage & tobacco product mfg	8	4	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	8	4	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	3	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	8	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	7	5	e	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	6	5	e	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	1	4	4	e	D	D	D	D	D	D	D	D
314911	Textile bag mills	1	4	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	9	5	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	2	2	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	2	2	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	2	2	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	7	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	2	516	12 419	482	1 012	11 413	25 604	42 944	67 690	D
3212	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	2	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	9	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	9	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LAFAYETTE, LA MSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	34	7	365	7 117	248	418	4 101	12 846	7 345	20 226	534
3231	Printing & related support activities.....	2	34	7	365	7 117	248	418	4 101	12 846	7 345	20 226	534
32311	Printing	1	32	7	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	9	5	3	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	9	5	3	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries	9	3	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	9	3	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	19	6	413	12 316	251	457	6 963	79 449	49 406	126 873	11 386
326	Plastics & rubber products mfg	5	15	5	437	9 850	353	660	6 321	19 845	21 831	41 766	935
3261	Plastics product mfg	5	10	5	401	9 130	333	630	6 006	18 067	18 495	36 621	821
332	Fabricated metal product mfg	1	85	18	1 926	45 564	1 514	3 038	31 735	113 652	106 798	219 395	5 961
3323	Architectural & structural metals mfg	1	12	4	462	10 299	310	744	6 451	38 008	33 680	71 682	992
33231	Plate work & fabricated structural product mfg ..	—	4	1	e	D	D	D	D	D	D	D	129
332311	Prefabricated metal building & component mfg	—	4	1	e	D	D	D	D	D	D	D	129
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	48	8	549	15 909	445	802	11 762	29 853	23 095	53 078	1 749
33271	Machine shops	1	48	8	549	15 909	445	802	11 762	29 853	23 095	53 078	1 749
332710	Machine shops	1	48	8	549	15 909	445	802	11 762	29 853	23 095	53 078	1 749
3329	Other fabricated metal product mfg	—	12	3	664	12 644	567	1 161	8 960	31 872	38 968	69 745	1 694
33291	Metal valve mfg	—	4	1	484	8 021	435	888	6 769	19 119	26 647	45 056	1 014
332919	Other metal valve & pipe fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	44	20	1 007	39 932	729	1 523	22 277	114 855	83 610	196 322	6 891
3331	Agriculture, construction, & mining machinery mfg	—	35	17	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	32	16	852	34 822	622	1 333	19 529	106 281	74 079	178 012	5 566
333132	Oil & gas field machinery & equipment mfg	—	32	16	852	34 822	622	1 333	19 529	106 281	74 079	178 012	5 566
339	Miscellaneous mfg	—	21	2	g	D	D	D	D	D	D	D	2 177
3399	Other miscellaneous mfg ..	—	13	2	g	D	D	D	D	D	D	D	2 112
33991	Jewelry & silverware mfg	—	1	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	—	1	1	g	D	D	D	D	D	D	D	D
	LAKE CHARLES, LA MSA												
31-33	Manufacturing	—	134	50	11 274	542 360	8 113	18 366	344 355	3 018 376	7 164 018	10 153 537	644 988
324	Petroleum & coal products mfg	—	8	6	h	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	8	6	h	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	4	4	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	28	19	5 350	285 709	3 472	7 726	177 891	1 970 243	2 230 726	4 176 982	D
3251	Basic chemical mfg	—	17	10	3 833	211 480	2 456	5 455	131 018	1 708 528	1 374 110	3 064 341	D
32511	Petrochemical mfg	—	2	2	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	—	2	2	e	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	1	1	e	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	1	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	5	3	494	24 847	366	916	17 361	106 226	106 858	210 461	12 453
325188	All other basic inorganic chemical mfg	—	5	3	494	24 847	366	916	17 361	106 226	106 858	210 461	12 453
32519	Other basic organic chemical mfg	—	3	3	h	D	D	D	D	D	D	D	108 415
325192	Cyclic crude & intermediate mfg	—	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAKE CHARLES, LA MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	7	6	1 312	69 980	868	2 010	44 061	252 578	848 799	1 096 498	85 487
32521	Resin & synthetic rubber mfg	—	7	6	1 312	69 980	868	2 010	44 061	252 578	848 799	1 096 498	85 487
325211	Plastics material & resin mfg	—	4	3	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	7	12	6	410	7 426	326	370	4 940	16 910	22 080	38 548	D
3273	Cement & concrete product mfg	8	10	5	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.	9	7	4	308	4 487	262	251	3 603	11 213	16 883	28 045	D
327320	Ready-mix concrete mfg	9	7	4	308	4 487	262	251	3 603	11 213	16 883	28 045	D
332	Fabricated metal product mfg	1	24	8	523	16 616	392	792	11 043	33 713	20 903	54 598	D
336	Transportation equipment mfg	—	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
	MONROE, LA MSA												
31-33	Manufacturing	—	152	62	8 235	287 644	6 176	12 754	198 198	861 203	1 124 179	1 983 365	108 114
311	Food mfg	—	11	3	475	12 997	184	321	4 005	24 826	42 610	67 660	1 617
312	Beverage & tobacco product mfg	—	4	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	4	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	13	12	2 687	104 390	2 159	4 750	76 576	312 065	502 719	826 828	47 141
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	12	11	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	8	7	1 143	35 643	958	2 003	28 601	96 010	224 239	329 469	D
322211	Corrugated & solid fiber box mfg	1	3	3	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	3	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	16	6	601	26 150	405	837	17 119	193 901	159 057	338 105	21 207
3251	Basic chemical mfg	—	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	12	6	780	23 803	553	1 122	14 999	67 547	92 592	159 317	D
3261	Plastics product mfg	1	10	6	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	4	3	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	24	6	667	16 643	530	1 065	10 369	44 162	41 502	84 934	2 103
333	Machinery mfg	5	10	8	478	17 746	290	577	9 284	38 358	29 666	68 326	2 176
3339	Other general-purpose machinery mfg	6	6	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	5	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW ORLEANS, LA MSA												
31-33	Manufacturing	-	1 022	304	43 738	1 673 090	30 474	64 537	1 069 488	8 452 175	17 973 803	26 355 910	676 082
311	Food mfg.....	-	129	45	4 898	139 239	3 181	6 172	79 990	667 946	1 702 864	2 357 574	44 824
3113	Sugar & confectionery product mfg.....	-	16	6	984	34 247	787	1 738	23 989	63 154	549 489	618 383	7 854
31131	Sugar mfg.....	-	5	4	817	31 045	652	1 510	21 709	51 117	539 200	595 314	D
311312	Cane sugar refining...	-	2	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	-	4	2	279	5 587	95	112	1 561	9 439	36 166	45 652	821
311511	Fluid milk mfg.....	-	4	2	279	5 587	95	112	1 561	9 439	36 166	45 652	821
3116	Meat product mfg.....	3	17	3	354	9 712	270	450	5 638	30 834	77 080	107 685	1 467
31161	Animal slaughtering & processing.....	3	17	3	354	9 712	270	450	5 638	30 834	77 080	107 685	1 467
311612	Meat processed from carcasses.....	2	16	3	e	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	1	11	4	342	12 896	260	607	10 064	32 239	45 365	77 430	3 439
31171	Seafood product preparation & packaging.....	1	11	4	342	12 896	260	607	10 064	32 239	45 365	77 430	3 439
311712	Fresh & frozen seafood processing ..	1	9	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	41	10	1 178	24 807	483	871	7 836	60 838	23 754	84 644	D
31181	Bread & bakery product mfg.....	-	38	10	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	11	7	916	21 616	332	652	5 944	54 387	19 505	73 893	D
3119	Other food mfg.....	-	33	16	1 599	47 701	1 167	2 132	28 171	440 515	670 145	1 090 219	23 563
31192	Coffee & tea mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	1	10	5	e	D	D	D	D	D	D	D	2 441
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	1	6	3	301	7 519	194	277	3 638	32 112	20 927	53 627	D
31199	All other food mfg.....	3	12	5	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	3	8	4	314	8 098	250	442	4 254	41 037	32 213	73 259	2 248
312	Beverage & tobacco product mfg.....	-	15	7	1 137	32 392	430	706	10 381	128 378	232 568	360 826	2 300
3121	Beverage mfg.....	-	14	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	4	4	f	D	D	D	D	D	D	D	862
314	Textile product mills.....	8	22	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	8	29	7	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	9	15	3	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	9	15	3	f	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg.....	9	4	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	23	3	292	8 227	236	496	6 134	20 940	26 209	46 388	1 367
322	Paper mfg.....	3	12	9	642	20 277	459	1 090	11 353	40 763	50 088	91 360	7 528
3222	Converted paper product mfg.....	3	12	9	642	20 277	459	1 090	11 353	40 763	50 088	91 360	7 528
32221	Paperboard container mfg.....	4	6	6	464	15 256	325	785	8 135	26 956	35 824	62 966	D
322211	Corrugated & solid fiber box mfg.....	6	3	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	167	21	1 762	46 298	1 241	2 222	27 618	95 672	69 710	163 765	11 780
3231	Printing & related support activities.....	2	167	21	1 762	46 298	1 241	2 222	27 618	95 672	69 710	163 765	11 780
32311	Printing.....	2	151	21	1 690	44 500	1 184	2 141	26 455	92 161	68 843	159 389	11 618
323110	Commercial lithographic printing ..	1	67	14	1 093	31 118	761	1 429	18 277	64 191	51 823	114 207	10 048
324	Petroleum & coal products mfg.....	-	20	15	4 888	296 125	3 061	7 168	173 638	3 392 286	10 899 634	14 269 873	257 999
3241	Petroleum & coal products mfg.....	-	20	15	4 888	296 125	3 061	7 168	173 638	3 392 286	10 899 634	14 269 873	257 999
32411	Petroleum refineries	-	9	9	4 582	282 871	2 858	6 719	166 052	3 259 596	10 738 162	13 969 003	255 086
324110	Petroleum refineries ..	-	9	9	4 582	282 871	2 858	6 719	166 052	3 259 596	10 738 162	13 969 003	255 086

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW ORLEANS, LA MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	-	65	30	6 146	351 119	4 095	9 425	224 764	2 356 723	3 306 458	5 646 927	265 035
3251	Basic chemical mfg	1	24	14	3 567	213 672	2 370	5 718	136 617	848 853	1 823 765	2 667 407	197 365
32511	Petrochemical mfg	-	2	2	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg,	-	2	2	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	-	10	4	415	19 792	274	576	12 543	91 998	50 720	141 568	3 651
325120	Industrial gas mfg	-	10	4	415	19 792	274	576	12 543	91 998	50 720	141 568	3 651
32518	Other basic inorganic chemical mfg	-	5	3	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	-	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	2	6	5	2 372	148 006	1 557	3 875	93 229	451 085	1 198 732	1 652 826	120 548
325199	All other basic organic chemical mfg	2	6	5	2 372	148 006	1 557	3 875	93 229	451 085	1 198 732	1 652 826	120 548
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	3	497	29 943	368	801	20 809	366 266	453 275	821 105	D
32521	Resin & synthetic rubber mfg	-	3	3	e	D	D	D	D	D	D	D	12 149
325212	Synthetic rubber mfg..	-	1	1	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	6	3	g	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	4	2	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	3	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	7	3	253	7 851	127	159	2 937	43 739	34 162	76 698	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	14	6	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	1	12	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	29	10	1 363	35 160	977	2 153	21 513	128 289	64 072	190 904	15 909
3261	Plastics product mfg	-	18	8	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	4	2	263	4 755	225	441	3 582	11 363	13 551	25 107	422
326111	Unsupported plastics bag mfg	1	4	2	263	4 755	225	441	3 582	11 363	13 551	25 107	422
3262	Rubber product mfg	-	11	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	48	15	1 020	30 414	749	1 644	19 816	97 237	151 094	249 556	7 328
3273	Cement & concrete product mfg	2	22	9	495	14 208	338	773	7 978	31 925	45 980	78 708	3 743
32732	Ready-mix concrete mfg.	4	17	7	348	10 212	259	589	6 011	22 332	33 384	55 797	2 870
327320	Ready-mix concrete mfg	4	17	7	348	10 212	259	589	6 011	22 332	33 384	55 797	2 870
331	Primary metal mfg	-	8	8	1 428	59 870	1 060	2 311	37 274	199 409	306 343	510 250	17 001
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331311	Alumina refining	-	1	1	f	D	D	D	D	D	D	D	D

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31-33	NEW ORLEANS, LA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	157	42	3 096	92 680	2 392	5 080	62 449	221 849	212 674	426 358	8 857
3323	Architectural & structural metals mfg	—	41	17	1 210	34 869	923	2 085	23 184	88 965	74 599	159 822	1 902
33231	Plate work & fabricated structural product mfg ..	—	22	11	931	25 529	750	1 702	18 071	69 090	61 515	127 438	1 180
332312	Fabricated structural metal mfg	—	15	9	747	20 481	622	1 436	15 109	51 492	52 381	101 971	1 100
33232	Ornamental & architectural metal products mfg	2	19	6	279	9 340	173	383	5 113	19 875	13 084	32 384	722
3324	Boiler, tank, & shipping container mfg	—	9	6	440	13 213	371	733	10 091	39 553	78 325	116 164	731
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	64	9	750	23 228	524	935	14 410	41 571	17 328	58 203	3 248
33271	Machine shops	1	61	8	699	21 929	478	875	13 582	39 244	15 290	53 734	3 248
332710	Machine shops	1	61	8	699	21 929	478	875	13 582	39 244	15 290	53 734	3 248
3328	Coating, engraving, heat treating, & allied activities ..	1	16	5	398	11 363	351	874	8 914	27 615	21 481	48 205	2 154
33281	Coating, engraving, heat treating, & allied activities	1	16	5	398	11 363	351	874	8 914	27 615	21 481	48 205	2 154
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	8	5	368	10 445	328	824	8 322	25 417	20 597	45 107	2 074
333	Machinery mfg	1	49	17	1 955	66 498	1 351	2 584	39 560	144 591	136 687	276 227	7 576
3331	Agriculture, construction, & mining machinery mfg	—	13	10	592	20 869	362	729	12 489	62 768	63 887	124 404	D
33313	Mining & oil & gas field machinery mfg	—	6	5	369	14 212	229	468	8 650	47 863	40 681	88 562	2 491
333132	Oil & gas field machinery & equipment mfg	—	6	5	369	14 212	229	468	8 650	47 863	40 681	88 562	2 491
3332	Industrial machinery mfg ..	6	5	3	293	13 356	171	339	6 240	20 941	18 032	39 049	D
33329	Other industrial machinery mfg	6	5	3	293	13 356	171	339	6 240	20 941	18 032	39 049	D
3333	Commercial & service industry machinery mfg ..	—	6	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	6	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	29	12	824	36 705	352	751	9 318	90 843	44 813	132 309	D
3345	Navigational, measuring, medical, & control instruments mfg	—	15	7	e	D	D	D	D	D	D	D	2 282
33451	Navigational, measuring, medical, & control instruments mfg	—	15	7	e	D	D	D	D	D	D	D	2 282
335	Electrical equipment, appliance, & component mfg	3	19	10	636	19 839	424	686	11 007	25 882	37 990	64 335	2 327
3353	Electrical equipment mfg ..	6	11	6	350	11 199	218	405	5 345	18 662	15 420	34 272	D
33531	Electrical equipment mfg	6	11	6	350	11 199	218	405	5 345	18 662	15 420	34 272	D
336	Transportation equipment mfg	—	63	28	j	D	D	D	D	D	D	D	17 435
3364	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	—	1	1	h	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	52	27	8 083	244 358	6 189	14 399	191 490	463 449	465 813	926 456	D
33661	Ship & boat building	1	52	27	8 083	244 358	6 189	14 399	191 490	463 449	465 813	926 456	D
336611	Ship building & repairing	1	39	24	7 907	239 340	6 043	14 092	188 105	452 230	455 081	907 311	15 968
337	Furniture & related product mfg	3	35	6	e	D	D	D	D	D	D	D	826
3371	Household & institutional furniture & kitchen cabinet mfg	3	30	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW ORLEANS, LA MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	4	96	12	847	19 825	585	1 010	10 705	35 215	25 167	60 202	2 380
3391	Medical equipment & supplies mfg.....	6	52	4	300	6 645	212	346	3 583	14 171	6 939	21 241	474
33911	Medical equipment & supplies mfg.....	6	52	4	300	6 645	212	346	3 583	14 171	6 939	21 241	474
3399	Other miscellaneous mfg..	3	44	8	547	13 180	373	664	7 122	21 044	18 228	38 961	1 906
33995	Sign mfg.....	2	16	4	e	D	D	D	D	D	D	D	541
339950	Sign mfg.....	2	16	4	e	D	D	D	D	D	D	D	541
	SHREVEPORT-BOSSIER CITY, LA MSA												
31-33	Manufacturing	—	337	125	16 911	578 313	13 121	26 821	407 673	1 948 872	3 494 038	5 396 652	193 360
311	Food mfg.....	1	13	5	414	11 847	260	505	5 298	30 418	71 461	101 907	2 027
321	Wood product mfg.....	—	17	5	865	22 636	738	1 531	17 693	48 130	116 085	164 653	6 185
3212	Veneer, plywood, & engineered wood product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	8	6	509	15 782	411	914	11 475	88 237	103 948	195 065	2 602
3222	Converted paper product mfg.....	—	7	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	45	10	688	17 061	477	882	10 603	36 305	30 421	66 167	1 240
3231	Printing & related support activities.....	1	45	10	688	17 061	477	882	10 603	36 305	30 421	66 167	1 240
32311	Printing.....	1	43	10	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	4	19	5	265	6 521	181	334	3 890	13 069	6 708	19 408	546
324	Petroleum & coal products mfg.....	—	7	5	830	36 229	520	1 358	23 509	72 325	722 282	801 152	D
3241	Petroleum & coal products mfg.....	—	7	5	830	36 229	520	1 358	23 509	72 325	722 282	801 152	D
32411	Petroleum refineries ..	—	4	4	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	4	f	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	16	7	976	42 275	579	1 125	22 554	200 290	127 581	316 976	15 403
3251	Basic chemical mfg.....	—	7	3	393	19 318	286	705	13 232	124 328	51 179	165 211	11 606
32518	Other basic inorganic chemical mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	2	4	3	f	D	D	D	D	D	D	D	3 754
32541	Pharmaceutical & medicine mfg.....	2	4	3	f	D	D	D	D	D	D	D	3 754
325412	Pharmaceutical preparation mfg.....	2	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	20	12	1 160	29 618	992	2 072	21 895	74 587	78 713	152 452	10 684
3261	Plastics product mfg.....	1	16	10	1 062	26 208	929	1 902	20 191	68 414	74 128	141 660	9 876
32611	Unsupported plastics film, sheet, & bag mfg..	2	3	3	376	8 568	312	527	6 199	24 442	28 243	52 043	D
32619	Other plastics product mfg.....	—	10	5	571	14 485	515	1 176	11 391	30 336	33 453	63 692	6 851
326199	All other plastics product mfg.....	—	9	5	f	D	D	D	D	D	D	D	D

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31-33	SHREVEPORT-BOSSIER CITY, LA MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	15	9	1 802	53 934	1 507	3 005	38 637	126 154	84 252	205 022	9 442
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	11	6	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	4	3	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	81	27	2 333	66 096	1 805	3 557	40 710	162 498	126 068	278 759	11 609
3323	Architectural & structural metals mfg	—	19	10	1 058	27 406	840	1 563	16 423	68 455	55 874	121 539	2 422
33231	Plate work & fabricated structural product mfg	—	10	4	616	15 949	534	866	9 847	46 669	28 722	72 081	D
332313	Plate work mfg	—	2	1	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	9	6	442	11 457	306	697	6 576	21 786	27 152	49 458	D
332322	Sheet metal work mfg	—	4	2	305	8 210	210	499	4 798	14 142	21 831	36 192	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	38	7	440	12 732	345	676	8 199	32 212	11 619	42 905	1 468
33271	Machine shops	2	33	6	355	10 570	278	546	6 569	17 662	7 866	24 930	1 131
332710	Machine shops	2	33	6	355	10 570	278	546	6 569	17 662	7 866	24 930	1 131
3329	Other fabricated metal product mfg	—	10	5	571	18 952	425	899	11 267	46 578	46 914	88 329	5 941
33299	All other fabricated metal product mfg	—	10	5	571	18 952	425	899	11 267	46 578	46 914	88 329	5 941
332996	Fabricated pipe & pipe fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	22	11	1 314	40 737	937	1 971	23 850	145 793	112 594	250 200	8 197
3333	Commercial & service industry machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	2	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	2	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	3	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	8	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	3	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	4	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	—	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	1	1	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SHREVEPORT-BOSSIER CITY, LA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	11	8	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	38	5	435	10 419	340	576	6 179	24 799	13 295	38 316	1 016
3399	Other miscellaneous mfg ..	2	20	4	258	5 160	195	293	2 795	15 042	10 496	25 682	829

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees; k–2,500 to 4,999 employees; m–5,000 to 9,999 employees; o–10,000 to 24,999 employees; q–25,000 to 49,999 employees; s–50,000 to 99,999 employees; u–100,000 employees or more.

Table 3. Industry Statistics for Parishes: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ACADIA PARISH, LA												
	Manufacturing	1	47	17	2 247	38 456	1 940	3 533	27 732	91 651	186 830	283 881	D
332	Fabricated metal product mfg	—	8	2	534	8 532	476	928	7 222	19 130	27 949	46 532	D
31-33	ALLEN PARISH, LA												
	Manufacturing	1	11	6	658	16 731	577	1 141	13 708	29 279	70 033	97 468	D
31-33	ASCENSION PARISH, LA												
	Manufacturing	—	86	30	5 577	300 016	3 528	7 763	173 462	4 095 597	2 893 929	7 012 901	576 809
325	Chemical mfg	—	22	13	3 969	251 171	2 280	5 371	140 435	3 983 655	2 726 516	6 738 902	568 480
3251	Basic chemical mfg	—	11	5	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	2	2	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	2	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	3	3	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	2	2	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	4	4	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	—	4	4	f	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	—	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	2	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	2	1	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	24	7	626	21 420	494	967	15 724	34 125	37 937	72 502	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AVOUELLES PARISH, LA												
	Manufacturing	1	20	8	622	11 382	560	1 159	9 359	45 662	48 063	92 792	2 881
	BEAUREGARD PARISH, LA												
31-33	Manufacturing	-	26	7	1 413	63 043	1 036	2 104	43 008	250 748	377 972	627 114	29 870
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	f	D	D	D	D	D	D	D	D
	BIENVILLE PARISH, LA												
31-33	Manufacturing	-	14	8	1 052	32 954	698	1 557	25 042	67 329	165 875	226 282	10 571
	BOSSIER PARISH, LA												
31-33	Manufacturing	-	76	28	2 578	65 415	2 087	4 185	45 597	140 348	242 839	376 475	22 955
326	Plastics & rubber products mfg	-	8	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
	CADDO PARISH, LA												
31-33	Manufacturing	-	216	79	11 997	445 690	9 108	18 439	315 108	1 606 853	2 948 671	4 515 601	150 956
324	Petroleum & coal products mfg	-	5	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	11	5	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	2	4	3	f	D	D	D	D	D	D	D	3 754
32541	Pharmaceutical & medicine mfg	2	4	3	f	D	D	D	D	D	D	D	3 754
325412	Pharmaceutical preparation mfg	2	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	5	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	53	20	1 659	49 168	1 318	2 493	30 000	130 578	87 351	207 590	9 627
3323	Architectural & structural metals mfg	-	12	6	641	17 157	548	910	10 252	50 663	26 462	73 707	D
33231	Plate work & fabricated structural product mfg ..	-	7	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	8	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	8	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	7	862	30 560	540	1 137	15 742	127 640	67 465	192 693	D
334	Computer & electronic product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CALCASIEU PARISH, LA													
31-33	Manufacturing	-	134	50	11 274	542 360	8 113	18 366	344 355	3 018 376	7 164 018	10 153 537	644 988
324	Petroleum & coal products mfg	-	8	6	h	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	8	6	h	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	4	4	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	4	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	28	19	5 350	285 709	3 472	7 726	177 891	1 970 243	2 230 726	4 176 982	D
3251	Basic chemical mfg	-	17	10	3 833	211 480	2 456	5 455	131 018	1 708 528	1 374 110	3 064 341	D
32519	Other basic organic chemical mfg	-	3	3	h	D	D	D	D	D	D	D	108 415
325199	All other basic organic chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	7	6	1 312	69 980	868	2 010	44 061	252 578	848 799	1 096 498	85 487
32521	Resin & synthetic rubber mfg	-	7	6	1 312	69 980	868	2 010	44 061	252 578	848 799	1 096 498	85 487
325211	Plastics material & resin mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	24	8	523	16 616	392	792	11 043	33 713	20 903	54 598	D
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
CLAIBORNE PARISH, LA													
31-33	Manufacturing	-	10	5	507	11 500	434	895	9 573	34 754	75 478	109 481	5 238
DE SOTO PARISH, LA													
31-33	Manufacturing	-	16	5	1 166	43 943	952	2 034	32 999	284 953	211 332	493 349	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
EAST BATON ROUGE PARISH, LA													
31-33	Manufacturing	-	354	98	12 159	570 110	7 833	17 606	299 771	2 707 713	7 025 876	9 831 608	160 547
311	Food mfg	2	21	9	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
3121	Beverage mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
31211	Soft drink & ice mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	54	10	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	54	10	f	D	D	D	D	D	D	D	D
32311	Printing	1	51	10	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	6	3	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	6	3	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	3	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EAST BATON ROUGE PARISH, LA—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	-	25	13	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	12	6	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	4	4	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	1 543	87 298	1 063	2 112	47 304	613 168	685 048	1 295 180	D
32521	Resin & synthetic rubber mfg	-	4	4	1 543	87 298	1 063	2 112	47 304	613 168	685 048	1 295 180	D
325211	Plastics material & resin mfg	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	63	20	g	D	D	D	D	D	D	D	2 530
EVANGELINE PARISH, LA													
31-33	Manufacturing	-	18	4	944	36 006	736	1 506	25 407	75 379	134 587	190 963	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
FRANKLIN PARISH, LA													
31-33	Manufacturing	3	13	5	506	6 890	374	605	3 610	11 502	23 663	36 058	478
IBERIA PARISH, LA													
31-33	Manufacturing	2	100	36	4 962	141 762	4 234	8 541	104 280	575 496	355 756	910 996	25 668
311	Food mfg	3	19	10	948	27 208	699	1 488	14 502	121 010	151 602	267 873	9 028
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	35	14	1 577	53 632	1 333	3 001	40 918	105 016	72 349	177 354	7 541
3323	Architectural & structural metals mfg	-	9	5	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	7	5	f	D	D	D	D	D	D	D	3 457
332312	Fabricated structural metal mfg	-	7	5	f	D	D	D	D	D	D	D	3 457
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	17	4	632	17 927	571	1 195	14 898	36 771	11 529	48 275	3 308
33271	Machine shops	-	17	4	632	17 927	571	1 195	14 898	36 771	11 529	48 275	3 308
332710	Machine shops	-	17	4	632	17 927	571	1 195	14 898	36 771	11 529	48 275	3 308
336	Transportation equipment mfg	-	10	5	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	8	5	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	8	5	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	5	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
IBERVILLE PARISH, LA													
31-33	Manufacturing	-	39	22	4 360	269 981	2 822	6 636	158 006	891 065	3 331 292	4 176 130	541 017
325	Chemical mfg	-	15	12	3 674	249 642	2 305	5 520	143 486	845 881	3 274 097	4 080 310	534 579
3251	Basic chemical mfg	-	6	6	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	3	695	31 835	496	1 641	26 256	117 844	634 530	738 033	D
325199	All other basic organic chemical mfg	-	3	3	695	31 835	496	1 641	26 256	117 844	634 530	738 033	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	4	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	5	4	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	5	4	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
JACKSON PARISH, LA													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON PARISH, LA													
31-33	Manufacturing	2	444	117	16 356	508 587	11 560	25 835	335 929	1 346 390	1 565 580	2 893 179	113 478
311	Food mfg	1	49	12	945	21 548	619	1 207	11 035	102 289	125 953	228 035	4 936
323	Printing & related support activities.....	2	87	14	1 104	30 350	754	1 435	17 003	64 904	50 003	113 534	8 245
3231	Printing & related support activities.....	2	87	14	1 104	30 350	754	1 435	17 003	64 904	50 003	113 534	8 245
32311	Printing	2	81	14	1 086	29 814	739	1 408	16 628	63 859	49 751	112 240	8 184
323110	Commercial lithographic printing ..	1	37	9	734	22 261	501	1 029	12 465	48 547	39 511	86 520	7 170
325	Chemical mfg	6	17	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	9	3	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	15	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	7	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	74	21	1 811	55 195	1 446	3 276	37 932	140 203	143 363	276 007	5 309
3323	Architectural & structural metals mfg	-	19	7	790	23 019	589	1 435	15 124	60 919	33 618	90 967	1 069
33231	Plate work & fabricated structural product mfg ..	-	7	3	585	16 487	475	1 197	11 869	45 906	24 411	67 318	D
333	Machinery mfg	-	24	9	1 430	47 937	1 016	1 918	29 179	107 618	92 207	196 891	D
3333	Commercial & service industry machinery mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	25	10	5 885	173 948	4 412	10 987	144 904	338 352	297 975	636 243	12 664
3366	Ship & boat building	-	19	10	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	19	10	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	13	8	5 731	169 743	4 286	10 761	142 166	332 713	290 524	623 237	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JEFFERSON DAVIS PARISH, LA												
	Manufacturing	1	21	5	598	13 867	516	1 058	10 244	46 912	56 632	110 211	D
	LAFAYETTE PARISH, LA												
31-33	Manufacturing	1	215	56	5 419	150 081	3 698	6 834	83 461	437 051	438 845	868 470	D
332	Fabricated metal product mfg	-	56	13	1 205	31 321	906	1 866	20 631	80 143	68 767	148 836	D
333	Machinery mfg	-	36	18	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	30	16	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	30	16	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	30	16	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	16	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	9	1	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	1	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	1	1	g	D	D	D	D	D	D	D	D
	LAFOURCHE PARISH, LA												
31-33	Manufacturing	2	66	20	2 464	72 913	1 927	4 078	53 561	147 283	277 706	424 172	D
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	12	8	1 139	33 680	950	1 985	24 554	50 007	115 590	166 383	D
3366	Ship & boat building	1	11	7	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	11	7	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	10	6	g	D	D	D	D	D	D	D	D
	LA SALLE PARISH, LA												
31-33	Manufacturing	-	8	4	f	D	D	D	D	D	D	D	D
	LINCOLN PARISH, LA												
31-33	Manufacturing	2	35	14	1 788	53 011	1 465	3 103	38 834	185 233	159 774	345 953	D
321	Wood product mfg	2	12	7	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	4	4	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	4	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
	LIVINGSTON PARISH, LA												
31-33	Manufacturing	1	54	14	1 342	39 561	1 002	1 943	28 197	106 014	119 936	227 354	10 016
	MOREHOUSE PARISH, LA												
31-33	Manufacturing	-	14	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Parishes: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NATCHITOCHE PARISH, LA													
31-33	Manufacturing	—	18	5	1 664	42 453	1 461	2 836	33 551	205 798	333 016	537 868	11 013
311	Food mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	—	1	1	f	D	D	D	D	D	D	D	D
ORLEANS PARISH, LA													
31-33	Manufacturing	1	261	77	10 453	362 151	7 022	13 336	226 493	1 064 555	1 263 780	2 304 957	42 933
311	Food mfg.....	—	52	23	2 653	70 506	1 528	2 706	34 489	460 506	708 002	1 148 675	22 828
3118	Bakeries & tortilla mfg.....	—	18	8	1 000	22 592	379	706	6 508	56 163	21 367	77 583	D
31181	Bread & bakery product mfg.....	—	17	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	—	10	7	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	—	13	8	1 040	32 510	778	1 387	20 510	353 933	583 843	917 609	19 148
31192	Coffee & tea mfg.....	—	6	4	f	D	D	D	D	D	D	D	16 764
311920	Coffee & tea mfg.....	—	6	4	f	D	D	D	D	D	D	D	16 764
312	Beverage & tobacco product mfg.....	2	5	3	567	16 801	104	199	2 240	20 220	34 705	54 738	388
3121	Beverage mfg.....	2	5	3	567	16 801	104	199	2 240	20 220	34 705	54 738	388
31211	Soft drink & ice mfg.....	1	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	1	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	8	11	3	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	9	5	2	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	9	5	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	55	7	550	13 663	404	690	9 029	25 871	16 896	42 486	1 463
3231	Printing & related support activities.....	3	55	7	550	13 663	404	690	9 029	25 871	16 896	42 486	1 463
32311	Printing.....	3	47	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	18	10	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg....	—	1	1	h	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	3	16	9	g	D	D	D	D	D	D	D	D
33661	Ship & boat building....	3	16	9	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	3	13	8	g	D	D	D	D	D	D	D	D
OUACHITA PARISH, LA													
31-33	Manufacturing	—	152	62	8 235	287 644	6 176	12 754	198 198	861 203	1 124 179	1 983 365	108 114
322	Paper mfg.....	—	13	12	2 687	104 390	2 159	4 750	76 576	312 065	502 719	826 828	47 141
3221	Pulp, paper, & paperboard mills.....	—	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	—	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	—	12	11	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	8	7	1 143	35 643	958	2 003	28 601	96 010	224 239	329 469	D
322212	Folding paperboard box mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	16	6	601	26 150	405	837	17 119	193 901	159 057	338 105	21 207
326	Plastics & rubber products mfg.....	1	12	6	780	23 803	553	1 122	14 999	67 547	92 592	159 317	D
3261	Plastics product mfg.....	1	10	6	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	1	4	3	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg.....	1	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	24	6	667	16 643	530	1 065	10 369	44 162	41 502	84 934	2 103

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OUACHITA PARISH, LA —Con.												
31-33	Manufacturing— Con.												
336	Transportation equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	5	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
	PLAQUEMINES PARISH, LA												
31-33	Manufacturing	—	44	19	2 231	102 059	1 544	3 137	58 749	451 213	2 325 328	2 779 197	51 616
	POINTE COUPEE PARISH, LA												
31-33	Manufacturing	—	11	5	539	12 875	468	857	9 859	76 630	74 031	146 061	D
	RAPIDES PARISH, LA												
31-33	Manufacturing	—	73	24	3 179	102 994	2 201	4 177	59 878	722 200	452 127	1 165 869	43 644
311	Food mfg	—	5	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	2	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	18	6	837	30 220	532	1 066	15 775	73 143	33 189	105 317	4 755
3329	Other fabricated metal product mfg	—	4	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
	RICHLAND PARISH, LA												
31-33	Manufacturing	—	14	4	600	16 602	475	976	11 619	38 421	88 261	132 128	2 898
	SABINE PARISH, LA												
31-33	Manufacturing	—	19	7	1 121	28 813	1 017	2 299	25 335	65 709	187 170	253 065	D
321	Wood product mfg	—	12	4	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	2	2	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	2	2	f	D	D	D	D	D	D	D	D
	ST. BERNARD PARISH, LA												
31-33	Manufacturing	—	54	10	1 769	83 088	1 269	2 901	54 558	325 220	2 269 338	2 603 557	45 765
324	Petroleum & coal products mfg	—	3	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	3	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. CHARLES PARISH, LA													
31-33	Manufacturing	-	37	15	5 068	302 219	3 383	7 969	193 295	3 734 370	4 802 703	8 501 526	259 472
324	Petroleum & coal products mfg	-	6	4	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	6	4	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	3	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	11	7	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	4	g	D	D	D	D	D	D	D	103 272
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	1	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
ST. JAMES PARISH, LA													
31-33	Manufacturing	-	26	19	2 858	149 532	1 919	4 259	92 105	745 645	3 089 032	3 842 282	86 831
324	Petroleum & coal products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	4	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	6	1 070	60 946	726	1 635	40 598	345 916	958 321	1 286 603	40 195
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	2	2	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331311	Alumina refining	-	1	1	f	D	D	D	D	D	D	D	D
ST. JOHN THE BAPTIST PARISH, LA													
31-33	Manufacturing	-	29	13	2 304	104 158	1 604	3 373	66 876	630 722	2 436 492	3 057 470	62 664
325	Chemical mfg	1	5	4	f	D	D	D	D	D	D	D	17 187
ST. LANDRY PARISH, LA													
31-33	Manufacturing	6	57	18	1 919	50 841	1 537	2 991	36 660	154 541	753 209	904 687	D
ST. MARTIN PARISH, LA													
31-33	Manufacturing	-	44	13	3 501	69 722	3 243	5 564	62 280	807 172	470 288	1 259 801	D
311	Food mfg	5	19	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	h	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. MARY PARISH, LA													
31-33	Manufacturing	1	67	33	5 098	163 575	4 201	8 817	119 985	500 439	465 855	944 421	62 429
332	Fabricated metal product mfg	-	16	9	2 231	64 538	1 954	3 989	53 558	165 504	182 825	329 620	5 478
3323	Architectural & structural metals mfg	-	5	2	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	19	9	1 767	58 263	1 520	3 186	42 954	134 014	118 256	252 271	D
3366	Ship & boat building	2	18	9	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	18	9	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	2	14	9	g	D	D	D	D	D	D	D	D
ST. TAMMANY PARISH, LA													
31-33	Manufacturing	2	127	34	2 699	61 296	2 173	3 727	41 483	154 060	221 550	373 742	13 323
336	Transportation equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	1	f	D	D	D	D	D	D	D	D
TANGIPAHOA PARISH, LA													
31-33	Manufacturing	1	74	28	2 933	59 530	2 488	4 819	42 474	184 911	239 059	420 389	11 269
311	Food mfg	1	12	9	1 538	26 025	1 384	2 604	19 203	90 185	143 596	232 046	5 712
3116	Meat product mfg	2	3	3	869	14 314	788	1 516	11 336	31 403	66 942	98 199	D
31161	Animal slaughtering & processing	2	3	3	869	14 314	788	1 516	11 336	31 403	66 942	98 199	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
TERREBONNE PARISH, LA													
31-33	Manufacturing	-	119	32	3 990	129 343	3 217	6 774	92 022	289 631	248 567	539 457	D
311	Food mfg	1	19	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	42	12	1 569	58 248	1 240	2 953	39 170	105 525	91 718	194 733	10 152
3323	Architectural & structural metals mfg	-	6	3	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	25	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	10	1 341	42 806	1 179	2 500	36 339	82 174	57 505	139 743	D
3366	Ship & boat building	-	15	10	1 341	42 806	1 179	2 500	36 339	82 174	57 505	139 743	D
33661	Ship & boat building	-	15	10	1 341	42 806	1 179	2 500	36 339	82 174	57 505	139 743	D
336611	Ship building & repairing	-	13	8	g	D	D	D	D	D	D	D	D
VERMILION PARISH, LA													
31-33	Manufacturing	-	27	8	1 348	28 584	1 208	2 599	23 698	86 483	116 431	203 887	D
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON PARISH, LA													
31-33	Manufacturing	-	28	12	1 536	54 727	1 266	2 459	38 848	171 210	294 385	466 280	13 774
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Parishes: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEBSTER PARISH, LA													
31-33	Manufacturing	2	45	18	2 336	67 208	1 926	4 197	46 968	201 671	302 528	504 576	19 449
321	Wood product mfg	-	4	1	f	D	D	D	D	D	D	D	D
WEST BATON ROUGE PARISH, LA													
31-33	Manufacturing	-	39	22	2 452	83 958	1 942	4 068	63 501	432 761	947 510	1 376 697	31 045
325	Chemical mfg	-	11	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	8	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	4	3	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
WEST FELICIANA PARISH, LA													
31-33	Manufacturing	-	6	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
WINN PARISH, LA													
31-33	Manufacturing	-	24	11	1 252	37 836	1 083	2 563	28 245	74 347	224 285	299 992	12 147
321	Wood product mfg	-	13	9	g	D	D	D	D	D	D	D	D
3211	Sawmills & wood preservation	-	10	6	f	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	10	6	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABBEVILLE, LA													
31-33	Manufacturing	-	9	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALEXANDRIA, LA													
31-33	Manufacturing	1	32	10	g	D	D	D	D	D	D	5 437	
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	-	2	1	f	D	D	D	D	D	D	D	
311812	Commercial bakeries ..	-	1	1	f	D	D	D	D	D	D	D	
ARCADIA, LA													
31-33	Manufacturing	-	5	4	f	D	D	D	D	D	D	D	
BASTROP, LA													
31-33	Manufacturing	-	12	3	g	D	D	D	D	D	D	D	
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	
BATON ROUGE, LA													
31-33	Manufacturing	1	265	70	5 598	201 208	3 751	7 221	104 680	547 351	904 808	1 444 588	42 201
311	Food mfg	4	16	7	715	21 350	505	902	9 344	29 002	80 525	110 177	D
312	Beverage & tobacco product mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
3121	Beverage mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
31211	Soft drink & ice mfg	-	4	2	510	23 982	130	297	4 117	S	S	64 180	D
323	Printing & related support activities	2	47	9	503	12 710	369	553	7 651	24 399	13 099	37 490	D
3231	Printing & related support activities	2	47	9	503	12 710	369	553	7 651	24 399	13 099	37 490	D
325	Chemical mfg	-	17	8	g	D	D	D	D	D	D	D	23 560
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	44	13	f	D	D	D	D	D	D	D	1 869
BOGALUSA, LA													
31-33	Manufacturing	-	16	6	g	D	D	D	D	D	D	D	
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	
BOSSIER CITY, LA													
31-33	Manufacturing	-	57	22	1 915	45 447	1 545	3 074	31 208	87 128	130 523	211 374	4 471
CROWLEY, LA													
31-33	Manufacturing	1	19	10	1 679	26 054	1 482	2 700	19 727	52 343	130 641	186 329	D
DE RIDDER, LA *													
31-33	Manufacturing	-	15	4	f	D	D	D	D	D	D	D	
GRETNA, LA													
31-33	Manufacturing	1	37	4	621	17 406	394	741	8 451	45 832	79 642	125 049	2 216
HAMMOND, LA													
31-33	Manufacturing	-	19	5	957	17 125	844	1 659	13 006	63 528	92 746	154 075	2 883
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARAHAN, LA													
31-33	Manufacturing	2	50	19	938	29 500	626	1 236	15 349	60 242	51 335	111 221	2 701
HOUMA, LA													
31-33	Manufacturing	-	57	16	2 086	74 466	1 673	3 688	52 665	157 888	111 393	269 467	D
332	Fabricated metal product mfg	-	21	6	590	22 482	456	1 133	13 832	51 093	26 461	76 211	7 409
336	Transportation equipment mfg	1	9	6	1 059	34 484	932	2 005	29 299	65 380	43 450	108 838	D
3366	Ship & boat building	1	9	6	1 059	34 484	932	2 005	29 299	65 380	43 450	108 838	D
33661	Ship & boat building	1	9	6	1 059	34 484	932	2 005	29 299	65 380	43 450	108 838	D
336611	Ship building & repairing	1	8	5	g	D	D	D	D	D	D	D	D
JEANERETTE, LA													
31-33	Manufacturing	-	6	3	1 393	26 601	1 309	2 315	23 883	255 990	82 550	321 040	D
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	g	D	D	D	D	D	D	D	D
KENNER, LA													
31-33	Manufacturing	1	68	11	1 693	45 567	1 264	2 481	29 626	88 945	75 100	161 221	3 491
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAFAYETTE, LA													
31-33	Manufacturing	1	125	28	3 434	89 104	2 250	3 752	47 261	258 729	285 684	538 367	18 007
339	Miscellaneous mfg	-	12	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	6	1	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	1	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	1	1	g	D	D	D	D	D	D	D	D
LAKE CHARLES, LA													
31-33	Manufacturing	-	66	19	h	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	4	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	3	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	5	f	D	D	D	D	D	D	D	12 410
LOCKPORT, LA													
31-33	Manufacturing	1	6	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	2	2	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	2	2	f	D	D	D	D	D	D	D	D
MANSFIELD, LA													
31-33	Manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MINDEN, LA													
31-33	Manufacturing	-	21	10	1 103	32 727	870	1 933	20 371	64 798	77 426	139 476	9 363
MONROE, LA													
31-33	Manufacturing	-	58	28	3 061	76 129	2 079	3 923	41 764	182 363	227 932	407 956	14 723
326	Plastics & rubber products mfg	-	6	4	f	D	D	D	D	D	D	D	6 101
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	6 101
MORGAN CITY, LA													
31-33	Manufacturing	1	22	12	1 346	44 259	1 122	2 277	31 173	102 469	99 934	202 404	D
336	Transportation equipment mfg	1	7	5	1 124	39 457	974	2 041	28 100	93 112	93 059	186 171	D
3366	Ship & boat building	1	7	5	1 124	39 457	974	2 041	28 100	93 112	93 059	186 171	D
33661	Ship & boat building	1	7	5	1 124	39 457	974	2 041	28 100	93 112	93 059	186 171	D
336611	Ship building & repairing	1	7	5	1 124	39 457	974	2 041	28 100	93 112	93 059	186 171	D
NATCHITOCHE, LA													
31-33	Manufacturing	-	12	3	g	D	D	D	D	D	D	D	D
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
NEW IBERIA, LA													
31-33	Manufacturing	3	51	16	1 427	46 763	1 098	2 365	32 783	100 458	108 728	208 966	7 313
332	Fabricated metal product mfg	-	22	9	826	29 371	673	1 558	22 099	51 922	37 763	90 018	2 915
NEW ORLEANS, LA													
31-33	Manufacturing	1	261	77	10 453	362 151	7 022	13 336	226 493	1 064 555	1 263 780	2 304 957	42 933
311	Food mfg	-	52	23	2 653	70 506	1 528	2 706	34 489	460 506	708 002	1 148 675	22 828
3118	Bakeries & tortilla mfg	-	18	8	1 000	22 592	379	706	6 508	56 163	21 367	77 583	D
31181	Bread & bakery product mfg	-	17	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	10	7	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	13	8	1 040	32 510	778	1 387	20 510	353 933	583 843	917 609	19 148
31192	Coffee & tea mfg	-	6	4	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	6	4	f	D	D	D	D	D	D	D	16 764
312	Beverage & tobacco product mfg	2	5	3	567	16 801	104	199	2 240	20 220	34 705	54 738	388
3121	Beverage mfg	2	5	3	567	16 801	104	199	2 240	20 220	34 705	54 738	388
31211	Soft drink & ice mfg	1	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	8	11	3	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	9	5	2	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	9	5	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	55	7	550	13 663	404	690	9 029	25 871	16 896	42 486	1 463
3231	Printing & related support activities	3	55	7	550	13 663	404	690	9 029	25 871	16 896	42 486	1 463
32311	Printing	3	47	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	10	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	-	1	1	h	D	D	D	D	D	D	D	D
3366	Ship & boat building	3	16	9	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	3	16	9	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	3	13	8	g	D	D	D	D	D	D	D	D
OPELOUSAS, LA													
31-33	Manufacturing	-	19	8	507	12 633	357	619	6 569	38 738	122 961	161 360	1 899

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PINEVILLE, LA													
31-33	Manufacturing	-	16	7	f	D	D	D	D	D	D	D	D
PLAQUEMINE, LA													
31-33	Manufacturing	-	14	5	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	2	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	3	2	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	3	2	g	D	D	D	D	D	D	D	D
PONCHATOULA, LA													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	3 026
RUSTON, LA													
31-33	Manufacturing	-	17	7	1 232	37 016	1 041	2 186	28 891	103 768	87 188	191 528	7 009
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
ST. GABRIEL, LA *													
31-33	Manufacturing	-	8	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
ST. MARTINVILLE, LA													
31-33	Manufacturing	-	11	5	h	D	D	D	D	D	D	D	5 840
315	Apparel mfg	-	1	1	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	h	D	D	D	D	D	D	D	D
SHREVEPORT, LA *													
31-33	Manufacturing	-	177	57	i	D	D	D	D	D	D	D	144 307
324	Petroleum & coal products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	4	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	10	4	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	2	4	3	f	D	D	D	D	D	D	D	3 754
32541	Pharmaceutical & medicine mfg	2	4	3	f	D	D	D	D	D	D	D	3 754
325412	Pharmaceutical preparation mfg	2	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	7	7	703	17 541	617	1 207	14 202	51 473	57 248	107 783	7 460
3261	Plastics product mfg	1	6	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	3	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SHREVEPORT, LA *— Con.													
	Manufacturing— Con.													
332	Fabricated metal product mfg	-	42	12	g	D	D	D	D	D	D	D	D	
3323	Architectural & structural metals mfg	-	11	6	f	D	D	D	D	D	D	D	D	
33231	Plate work & fabricated structural product mfg ..	-	5	2	f	D	D	D	D	D	D	D	D	
3329	Other fabricated metal product mfg	-	8	4	f	D	D	D	D	D	D	D	D	
33299	All other fabricated metal product mfg	-	8	4	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	-	9	2	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	-	6	2	f	D	D	D	D	D	D	D	D	
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33421	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D	
334210	Telephone apparatus mfg	-	2	1	f	D	D	D	D	D	D	D	D	
	SLIDELL, LA													
31-33	Manufacturing	-	31	7		611	11 050	541	988	8 602	27 179	46 592	73 027	3 305
	SULPHUR, LA													
31-33	Manufacturing	-	21	6	f	D	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	4	f	D	D	D	D	D	D	D	D	D
	THIBODAUX, LA													
31-33	Manufacturing	1	24	5		789	25 113	588	1 163	19 404	38 585	71 279	111 651	8 942
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
	VILLE PLATTE, LA													
31-33	Manufacturing	-	12	2	f	D	D	D	D	D	D	D	D	D
	WESTLAKE, LA													
31-33	Manufacturing	-	13	8	g	D	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	5	g	D	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	7	4	1 021	55 862	639	1 398	33 637	593 007	566 151	1 150 920	84 866	
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
	WEST MONROE, LA													
31-33	Manufacturing	3	47	12		769	24 375	579	1 162	14 647	61 912	80 175	142 528	3 638
	WESTWEGO, LA													
31-33	Manufacturing	8	11	4	f	D	D	D	D	D	D	D	D	D
325	Chemical mfg	9	3	2	f	D	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
LOUISIANA		LOUISIANA—Con.	
Companies ¹	number.. 3 265	Quantity of electricity purchased for heat and power	1,000 kWh.. 30 914 254
All establishments	number.. 3 545	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 15 101 553
Establishments with 1 to 19 employees	number.. 2 375	Total value of shipments	\$1,000.. 80 423 978
Establishments with 20 to 99 employees	number.. 820	Value of resales	\$1,000.. 1 271 431
Establishments with 100 employees or more	number.. 350	Value added	\$1,000.. 29 066 923
All employees	number.. 165 777	Total inventories, beginning of year	\$1,000.. 6 234 451
Total compensation ²	\$1,000.. 7 721 863	Finished goods inventories, beginning of year	\$1,000.. 2 869 842
Annual payroll	\$1,000.. 6 054 513	Work-in-process inventories, beginning of year	\$1,000.. 1 373 049
Total fringe benefits	\$1,000.. 1 667 350	Materials and supplies inventories, beginning of year	\$1,000.. 1 991 560
Production workers, average for year	number.. 123 566	Total inventories, end of year	\$1,000.. 6 494 088
Production workers on March 12	number.. 123 371	Finished goods inventories, end of year	\$1,000.. 3 066 947
Production workers on May 12	number.. 123 189	Work-in-process inventories, end of year	\$1,000.. 1 319 561
Production workers on August 12	number.. 123 467	Materials and supplies inventories, end of year	\$1,000.. 2 107 580
Production workers on November 12	number.. 124 237	Gross book value of total assets at beginning of year	\$1,000.. 39 804 038
Production-worker hours	1,000.. 258 014	Total capital expenditures (new and used)	\$1,000.. 3 434 538
Production-worker wages	\$1,000.. 3 967 652	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 256 338
Total cost of materials	\$1,000.. 51 529 435	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 3 178 200
Cost of materials, parts, containers, etc., consumed	\$1,000.. 46 478 169	Total retirements ²	\$1,000.. 639 642
Cost of resales	\$1,000.. 960 498	Gross book value of total assets at end of year	\$1,000.. 42 598 934
Cost of fuels	\$1,000.. 1 735 601	Total depreciation during year ²	\$1,000.. 2 272 232
Cost of purchased electricity	\$1,000.. 1 267 347	Total rental payments ²	\$1,000.. 320 612
Cost of contract work	\$1,000.. 1 087 820	Buildings and other structures rental payments ²	\$1,000.. 103 951
		Machinery and equipment rental payments ²	\$1,000.. 216 661

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

LOUISIANA

De Ridder is in Beauregard and Vernon Parishes.

Eunice is in Acadia and St. Landry Parishes.

New Llano is a spelling correction from Newllano.

Shreveport is in Bossier and Caddo Parishes.

St. Gabriel was incorporated in August 1994.

Appendix E. Metropolitan Areas

LOUISIANA

Alexandria, LA MSA

Rapides Parish, LA

Baton Rouge, LA MSA

Ascension Parish, LA

East Baton Rouge Parish, LA

Livingston Parish, LA

West Baton Rouge Parish, LA

Houma, LA MSA

Lafourche Parish, LA

Terrebonne Parish, LA

Lafayette, LA MSA

Acadia Parish, LA

Lafayette Parish, LA

St. Landry Parish, LA

St. Martin Parish, LA

Lake Charles, LA MSA

Calcasieu Parish, LA

Monroe, LA MSA

Ouachita Parish, LA

New Orleans, LA MSA

Jefferson Parish, LA

Orleans Parish, LA

Plaquemines Parish, LA

St. Bernard Parish, LA

St. Charles Parish, LA

St. James Parish, LA

St. John the Baptist Parish, LA

St. Tammany Parish, LA

Shreveport—Bossier City, LA MSA

Bossier Parish, LA

Caddo Parish, LA

Webster Parish, LA

Massachusetts

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MASSACHUSETTS													
31-33	Manufacturing	1	9 554	3 313	417 135	16 378 989	257 050	520 770	7 734 767	44 337 768	33 635 803	77 876 576	3 483 886
311	Food mfg.....	1	755	193	21 074	586 147	13 476	25 312	313 546	1 996 830	2 577 356	4 581 149	128 966
3111	Animal food mfg.....	-	9	3	292	9 762	161	331	3 828	29 005	52 825	81 363	1 605
31111	Animal food mfg.....	-	9	3	292	9 762	161	331	3 828	29 005	52 825	81 363	1 605
311111	Dog & cat food mfg...	-	3	2	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg.....	-	6	1	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	2	12	3	306	12 512	239	599	9 420	42 441	85 322	128 719	7 455
31123	Breakfast cereal mfg....	1	5	1	c	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	1	5	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	61	16	1 594	34 807	1 268	2 147	24 568	148 717	128 953	279 126	10 245
31132	Chocolate & confectionery mfg from cacao beans.....	-	6	1	c	D	D	D	D	D	D	D	1 376
311320	Chocolate & confectionery mfg from cacao beans ...	-	6	1	c	D	D	D	D	D	D	D	1 376
31133	Confectionery mfg from purchased chocolate...	-	37	10	915	18 216	760	1 151	13 657	106 847	60 234	164 198	1 274
311330	Confectionery mfg from purchased chocolate.....	-	37	10	915	18 216	760	1 151	13 657	106 847	60 234	164 198	1 274
31134	Nonchocolate confectionery mfg.....	2	17	5	492	11 376	395	716	7 050	28 216	22 633	55 386	7 595
311340	Nonchocolate confectionery mfg ...	2	17	5	492	11 376	395	716	7 050	28 216	22 633	55 386	7 595
3114	Fruit & vegetable preserving & specialty food mfg.....	5	32	12	743	17 422	639	1 135	12 413	51 632	66 163	117 842	4 505
31141	Frozen food mfg.....	6	18	8	442	9 495	389	644	6 434	23 881	25 807	49 715	2 290
311412	Frozen specialty food mfg.....	5	15	8	422	9 213	372	623	6 214	22 891	24 565	47 441	2 185
31142	Fruit & vegetable canning, pickling, & drying.....	5	14	4	301	7 927	250	491	5 979	27 751	40 356	68 127	2 215
311421	Fruit & vegetable canning.....	4	11	3	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	51	19	4 063	158 905	2 178	4 731	72 477	410 972	825 030	1 234 565	32 495
31151	Dairy product (except frozen) mfg.....	-	22	10	2 434	85 311	1 397	3 131	49 902	218 638	559 392	776 963	23 756
311511	Fluid milk mfg.....	-	18	9	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	-	29	9	1 629	73 594	781	1 600	22 575	192 334	265 638	457 602	8 739
311520	Ice cream & frozen dessert mfg.....	-	29	9	1 629	73 594	781	1 600	22 575	192 334	265 638	457 602	8 739
3116	Meat product mfg.....	1	45	22	2 098	54 636	1 449	3 267	29 935	157 416	337 694	497 325	10 660
31161	Animal slaughtering & processing.....	1	45	22	2 098	54 636	1 449	3 267	29 935	157 416	337 694	497 325	10 660
311611	Animal (except poultry) slaughtering.....	7	11	5	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	-	26	10	1 192	31 061	779	1 813	15 836	113 164	199 489	314 713	7 033
311613	Rendering & meat byproduct processing.....	2	3	2	c	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	5	5	439	10 222	381	848	8 046	17 970	68 534	86 412	1 452
3117	Seafood product preparation & packaging..	1	43	14	2 116	59 445	1 354	2 491	31 649	218 967	421 370	639 641	10 224
31171	Seafood product preparation & packaging.....	1	43	14	2 116	59 445	1 354	2 491	31 649	218 967	421 370	639 641	10 224
311712	Fresh & frozen seafood processing..	1	37	14	2 102	58 885	1 348	2 477	31 447	217 480	418 111	634 893	10 121
3118	Bakeries & tortilla mfg.....	1	436	74	7 400	162 971	4 615	7 723	92 309	581 674	292 418	883 970	30 615
31181	Bread & bakery product mfg.....	1	413	68	6 741	142 720	4 185	7 000	83 285	527 592	244 942	772 776	29 025
311811	Retail bakeries.....	4	278	19	2 002	24 254	1 168	1 363	12 112	52 078	28 416	80 660	2 417
311812	Commercial bakeries .	1	121	44	4 371	109 652	2 757	5 120	65 695	453 649	199 441	652 957	25 413
311813	Frozen cakes, pies, & other pastries mfg ...	1	14	5	368	8 814	260	517	5 478	21 865	17 085	39 159	1 195
31182	Cookie, cracker, & pasta mfg.....	-	21	6	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	1	7	2	c	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	-	4	2	247	8 773	140	292	3 694	12 056	19 799	31 522	513
311823	Dry pasta mfg.....	1	10	2	280	8 349	208	326	3 931	34 558	21 400	66 032	773

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MASSACHUSETTS—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	66	30	2 462	75 687	1 573	2 888	36 947	356 006	367 581	718 598	21 162
31191	Snack food mfg	1	17	11	613	19 709	413	764	10 238	78 318	75 818	150 663	4 944
311911	Roasted nuts & peanut butter mfg	—	5	3	206	6 310	117	244	2 656	21 305	44 822	62 828	2 305
311919	Other snack food mfg	2	12	8	407	13 399	296	520	7 582	57 013	30 996	87 835	2 639
31192	Coffee & tea mfg	1	9	4	436	16 040	143	293	4 443	70 523	101 925	171 015	4 096
311920	Coffee & tea mfg	1	9	4	436	16 040	143	293	4 443	70 523	101 925	171 015	4 096
31194	Seasoning & dressing mfg	—	12	5	607	19 924	426	871	10 429	123 749	122 962	246 676	5 939
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	8	3	479	16 357	346	739	8 429	116 407	112 022	228 430	D
311942	Spice & extract mfg	7	4	2	128	3 567	80	132	2 000	7 342	10 940	18 246	D
31199	All other food mfg	—	24	10	784	19 431	578	942	11 472	80 984	64 456	145 346	5 978
311991	Perishable prepared food mfg	—	10	5	322	8 394	221	406	4 378	19 152	21 460	40 528	4 368
311999	All other miscellaneous food mfg	—	14	5	462	11 037	357	536	7 094	61 832	42 996	104 818	1 610
312	Beverage & tobacco product mfg	1	51	13	2 715	101 996	1 314	3 034	50 607	566 395	631 836	1 201 173	35 619
3121	Beverage mfg	1	51	13	2 715	101 996	1 314	3 034	50 607	566 395	631 836	1 201 173	35 619
31211	Soft drink & ice mfg	—	26	9	2 069	70 040	850	1 906	28 983	358 664	465 522	824 363	22 834
312111	Soft drink mfg	—	16	8	1 885	63 721	792	1 782	27 331	338 495	460 431	799 100	D
312112	Bottled water mfg	—	2	1	c	D	D	D	D	D	D	D	D
31212	Breweries	—	20	3	e	D	D	D	D	D	D	D	D
312120	Breweries	—	20	3	e	D	D	D	D	D	D	D	D
31214	Distilleries	9	2	1	c	D	D	D	D	D	D	D	D
312140	Distilleries	9	2	1	c	D	D	D	D	D	D	D	D
313	Textile mills	1	151	83	12 509	420 072	9 722	22 221	263 862	958 873	888 066	1 843 194	226 988
3131	Fiber, yarn, & thread mills	1	17	7	673	19 124	592	1 270	15 349	41 361	63 074	104 977	5 409
31311	Fiber, yarn, & thread mills	1	17	7	673	19 124	592	1 270	15 349	41 361	63 074	104 977	5 409
313111	Yarn spinning mills	1	11	4	465	12 622	429	891	11 639	27 484	46 026	73 756	4 584
313112	Yarn texturing, throwing, & twisting mills	2	2	1	c	D	D	D	D	D	D	D	D
3132	Fabric mills	2	62	34	5 194	159 163	4 150	9 594	107 776	287 150	309 770	600 948	40 565
31321	Broadwoven fabric mills	1	22	11	3 274	101 729	2 697	6 458	73 280	175 142	186 680	368 300	29 135
313210	Broadwoven fabric mills	1	22	11	3 274	101 729	2 697	6 458	73 280	175 142	186 680	368 300	29 135
31322	Narrow fabric mills & schiffli machine embroidery	4	21	9	484	10 769	387	794	6 663	22 406	12 361	32 951	962
313221	Narrow fabric mills	3	18	9	469	10 453	373	768	6 428	21 859	12 020	32 063	892
31323	Nonwoven fabric mills	3	13	10	923	30 235	654	1 505	16 556	57 704	81 544	138 914	7 055
313230	Nonwoven fabric mills	3	13	10	923	30 235	654	1 505	16 556	57 704	81 544	138 914	7 055
31324	Knit fabric mills	2	6	4	513	16 430	412	837	11 277	31 898	29 185	60 783	3 413
313241	Weft knit fabric mills	—	3	2	e	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	4	3	2	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	72	42	6 642	241 785	4 980	11 357	140 737	630 362	515 222	1 137 269	181 014
31331	Textile & fabric finishing mills	1	48	25	5 220	184 409	3 993	9 112	108 782	499 133	322 442	813 823	174 343
313311	Broadwoven fabric finishing mills	1	37	19	2 991	104 611	2 144	5 036	64 850	286 022	197 514	485 418	D
313312	Textile & fabric finishing mills	—	11	6	2 229	79 798	1 849	4 076	43 932	213 111	124 928	328 405	D
31332	Fabric coating mills	—	24	17	1 422	57 376	987	2 245	31 955	131 229	192 780	323 446	6 671
313320	Fabric coating mills	—	24	17	1 422	57 376	987	2 245	31 955	131 229	192 780	323 446	6 671
314	Textile product mills	2	216	54	4 907	118 473	3 844	7 242	71 437	260 880	287 352	542 103	16 144
3141	Textile furnishings mills	4	86	23	2 273	44 019	1 842	3 498	28 195	114 142	117 618	228 887	1 986
31411	Carpet & rug mills	1	9	3	167	4 595	105	216	2 727	11 025	16 480	27 381	114
314110	Carpet & rug mills	1	9	3	167	4 595	105	216	2 727	11 025	16 480	27 381	114
31412	Curtain & linen mills	4	77	20	2 106	39 424	1 737	3 282	25 468	103 117	101 138	201 506	1 872
314121	Curtain & drapery mills	6	64	14	1 713	30 829	1 405	2 742	20 843	70 099	72 719	141 753	1 583
314129	Other household textile product mills	—	13	6	393	8 595	332	540	4 625	33 018	28 419	59 753	289
3149	Other textile product mills	—	130	31	2 634	74 454	2 002	3 744	43 242	146 738	169 734	313 216	14 158
31491	Textile bag & canvas mills	1	48	6	440	10 960	333	613	6 734	20 139	23 931	44 604	1 258
314912	Canvas & related product mills	1	44	6	426	10 741	322	598	6 610	19 743	23 524	43 801	1 243
31499	All other textile product mills	—	82	25	2 194	63 494	1 669	3 131	36 508	126 599	145 803	268 612	12 900
314991	Rope, cordage, & twine mills	—	7	1	161	4 501	130	250	2 816	11 528	9 965	22 297	225
314999	All other miscellaneous textile product mills	—	75	24	2 033	58 993	1 539	2 881	33 692	115 071	135 838	246 315	12 675

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
315	Apparel mfg	3	238	104	10 369	221 238	8 636	16 047	145 999	432 105	497 950	912 367	9 017
3152	Cut & sew apparel mfg	3	187	91	9 655	205 797	8 053	15 043	136 722	398 881	460 919	839 871	8 483
31521	Cut & sew apparel contractors	4	95	40	2 795	43 066	2 612	4 450	36 453	63 223	11 262	74 482	1 474
315211	Men's & boys' cut & sew apparel contractors	—	5	4	316	5 704	295	466	4 767	7 763	895	8 642	171
315212	Women's, girls', & infants' cut & sew apparel contractors	5	90	36	2 479	37 362	2 317	3 984	31 686	55 460	10 367	65 840	1 303
31522	Men's & boys' cut & sew apparel mfg	4	28	18	3 758	80 807	3 216	6 611	61 442	156 168	177 391	330 544	3 189
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	16	12	2 918	68 452	2 434	5 350	51 264	125 225	157 848	279 951	2 393
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	5	5	3	339	6 012	305	523	4 230	14 090	8 432	22 319	398
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	9	2	2	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	2	4	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	46	29	2 793	76 858	1 963	3 502	35 375	168 473	261 586	413 269	3 417
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	8	3	3	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	1	7	1	c	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	5	8	5	331	7 615	242	439	4 127	13 594	14 242	27 302	266
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	14	13	1 502	49 402	998	1 724	19 877	96 450	163 681	251 584	2 315
315239	Women's & girls' cut & sew other outerwear mfg	—	14	7	473	13 195	317	609	6 392	44 899	71 562	108 761	606
31529	Other cut & sew apparel mfg	7	18	4	309	5 066	262	480	3 452	11 017	10 680	21 576	403
315299	All other cut & sew apparel mfg	8	13	2	234	3 848	207	368	2 620	7 611	6 759	14 324	251
3159	Apparel accessories & other apparel mfg	1	47	12	631	14 108	505	853	8 109	31 061	36 550	70 038	511
31599	Apparel accessories & other apparel mfg	1	47	12	631	14 108	505	853	8 109	31 061	36 550	70 038	511
315991	Hat, cap, & millinery mfg	1	8	4	153	2 686	137	236	2 161	3 551	2 959	6 233	D
315999	Other apparel accessories & other apparel mfg	1	35	7	432	10 693	329	566	5 497	26 790	32 867	62 355	322
316	Leather & allied product mfg	1	112	38	3 800	86 345	2 969	5 840	56 028	303 315	221 441	520 296	10 480
3161	Leather & hide tanning & finishing	3	33	6	450	14 260	366	793	9 402	46 377	44 688	89 273	1 046
31611	Leather & hide tanning & finishing	3	33	6	450	14 260	366	793	9 402	46 377	44 688	89 273	1 046
316110	Leather & hide tanning & finishing	3	33	6	450	14 260	366	793	9 402	46 377	44 688	89 273	1 046
3162	Footwear mfg	—	18	9	1 676	34 702	1 233	2 361	22 730	162 569	117 250	277 425	5 840
31621	Footwear mfg	—	18	9	1 676	34 702	1 233	2 361	22 730	162 569	117 250	277 425	5 840
316211	Rubber & plastics footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	1	4	1	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	—	5	2	e	D	D	D	D	D	D	D	D
316219	Other footwear mfg	1	5	4	604	11 674	533	936	8 651	18 081	23 870	45 168	1 719
3169	Other leather & allied product mfg	1	61	23	1 674	37 383	1 370	2 686	23 896	94 369	59 503	153 598	3 594
31699	Other leather & allied product mfg	1	61	23	1 674	37 383	1 370	2 686	23 896	94 369	59 503	153 598	3 594
316991	Luggage mfg	—	6	3	166	3 566	145	275	2 360	5 245	4 087	9 331	D
316992	Women's handbag & purse mfg	4	10	3	280	7 625	229	487	5 174	22 144	9 046	31 017	D
316993	Personal leather good (except women's handbag & purse) mfg	—	12	6	539	10 141	423	829	6 302	26 507	19 424	45 944	819
316999	All other leather good mfg	1	33	11	689	16 051	573	1 095	10 060	40 473	26 946	67 306	1 997

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
321	Wood product mfg	2	230	39	2 874	75 478	2 123	4 164	47 805	161 462	237 147	398 248	9 896
3211	Sawmills & wood preservation	1	43	10	504	11 431	386	710	8 242	27 521	97 590	125 084	2 437
32111	Sawmills & wood preservation	1	43	10	504	11 431	386	710	8 242	27 521	97 590	125 084	2 437
321113	Sawmills	3	37	8	415	9 363	317	587	6 931	21 539	25 118	45 903	2 018
3212	Veneer, plywood, & engineered wood product mfg	1	12	2	144	3 910	98	197	2 284	10 289	9 689	19 974	857
32121	Veneer, plywood, & engineered wood product mfg	1	12	2	144	3 910	98	197	2 284	10 289	9 689	19 974	857
321214	Truss mfg	1	7	2	112	2 960	81	161	1 812	7 689	7 431	15 059	653
3219	Other wood product mfg	3	175	27	2 226	60 137	1 639	3 257	37 279	123 652	129 868	253 190	6 602
32191	Millwork	2	65	7	644	18 802	459	874	11 072	33 854	42 213	76 219	1 743
321911	Wood window & door mfg	2	35	4	399	11 680	279	551	6 877	20 772	30 569	51 422	861
321918	Other millwork (including flooring)	4	20	2	175	5 775	116	236	3 043	10 281	9 520	19 930	783
32192	Wood container & pallet mfg	3	51	7	608	15 635	478	948	10 696	35 096	33 294	68 358	1 734
321920	Wood container & pallet mfg	3	51	7	608	15 635	478	948	10 696	35 096	33 294	68 358	1 734
32199	All other wood product mfg	4	59	13	974	25 700	702	1 435	15 511	54 702	54 361	108 613	3 125
321992	Prefabricated wood building mfg	9	7	2	173	6 697	130	248	4 045	13 477	19 791	33 430	683
321999	All other miscellaneous wood product mfg	1	52	11	801	19 003	572	1 187	11 466	41 225	34 570	75 183	2 442
322	Paper mfg	—	233	166	19 292	711 589	13 828	30 457	427 301	1 955 643	2 129 235	4 041 584	151 892
3221	Pulp, paper, & paperboard mills	—	28	26	4 209	177 207	2 916	6 581	112 561	576 966	519 324	1 099 731	57 129
32212	Paper mills	—	22	20	3 513	147 787	2 382	5 369	90 806	479 922	427 152	909 768	51 112
322121	Paper (except newsprint) mills	—	22	20	3 513	147 787	2 382	5 369	90 806	479 922	427 152	909 768	51 112
32213	Paperboard mills	—	6	6	696	29 420	534	1 212	21 755	97 044	92 172	189 963	6 017
322130	Paperboard mills	—	6	6	696	29 420	534	1 212	21 755	97 044	92 172	189 963	6 017
3222	Converted paper product mfg	—	205	140	15 083	534 382	10 912	23 876	314 740	1 378 677	1 609 911	2 941 853	94 763
32221	Paperboard container mfg	—	92	71	6 092	206 668	4 626	9 759	125 957	438 670	542 286	976 710	41 602
322211	Corrugated & solid fiber box mfg	—	39	29	2 971	108 855	2 147	4 526	60 738	216 615	319 022	533 580	18 395
322212	Folding paperboard box mfg	1	23	17	1 782	61 697	1 406	3 069	41 277	137 591	129 734	265 889	14 964
322213	Setup paperboard box mfg	—	16	12	732	18 456	569	1 155	11 236	41 827	38 041	78 791	D
322214	Fiber can, tube, drum, & similar products mfg	—	12	11	f	D	D	D	D	D	D	D	4 064
322215	Nonfolding sanitary food container mfg	—	2	2	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	44	30	4 253	176 622	2 793	6 520	94 935	453 138	630 837	1 086 838	39 296
322221	Coated & laminated packaging paper & plastics film mfg	—	3	3	315	14 613	232	641	8 406	60 097	123 767	183 346	13 103
322222	Coated & laminated paper mfg	—	37	23	3 674	154 798	2 349	5 416	81 099	374 504	481 385	859 891	25 728
322224	Uncoated paper & multiwall bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	39	22	3 303	103 262	2 348	5 112	65 014	337 652	333 182	623 755	7 664
322231	Die-cut paper & paperboard office supplies mfg	—	11	5	978	33 397	756	1 873	20 669	85 249	113 986	175 429	848
322232	Envelope mfg	1	15	11	1 502	47 603	1 134	2 346	34 060	106 676	124 935	231 175	4 560
322233	Stationery, tablet, & related product mfg	—	13	6	823	22 262	458	893	10 285	145 727	94 261	217 151	2 256
32229	Other converted paper product mfg	1	30	17	1 435	47 830	1 145	2 485	28 834	149 217	103 606	254 550	6 201
322299	All other converted paper product mfg	1	28	16	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
323	Printing & related support activities.....	2	1 164	254	23 145	800 735	16 829	33 423	503 302	1 686 929	1 037 187	2 729 867	122 120
3231	Printing & related support activities.....	2	1 164	254	23 145	800 735	16 829	33 423	503 302	1 686 929	1 037 187	2 729 867	122 120
32311	Printing.....	2	1 013	221	20 919	725 539	15 122	30 022	450 241	1 553 463	993 320	2 550 203	108 599
323110	Commercial lithographic printing ..	2	490	128	11 486	425 727	8 063	16 078	257 883	824 940	540 877	1 367 422	70 454
323112	Commercial flexographic printing .	3	18	8	420	14 842	281	558	7 225	28 564	21 415	50 048	1 304
323113	Commercial screen printing.....	5	111	28	2 239	70 383	1 641	3 101	44 601	131 215	94 597	225 921	8 745
323114	Quick printing.....	2	232	11	1 474	39 882	1 039	1 833	24 697	85 865	49 582	135 309	4 993
323115	Digital printing.....	3	17	3	e	D	D	D	D	D	D	D	D
323116	Manifold business form printing.....	—	19	9	912	33 241	681	1 370	22 481	135 239	66 891	203 023	2 350
323117	Book printing.....	3	25	18	2 225	75 601	1 759	3 612	51 397	155 611	94 606	250 849	8 789
323118	Blankbook, looseleaf binder, & device mfg .	—	9	6	712	20 459	576	1 393	14 463	82 188	46 133	128 639	3 911
323119	Other commercial printing.....	3	88	9	1 116	35 562	844	1 584	21 326	71 841	54 366	126 299	5 012
32312	Support activities for printing.....	1	151	33	2 226	75 196	1 707	3 401	53 061	133 466	43 867	179 664	13 521
323121	Tradebinding & related work.....	1	43	13	1 027	28 015	831	1 636	21 421	52 528	15 499	67 970	4 406
323122	Prepress services.....	1	108	20	1 199	47 181	876	1 765	31 640	80 938	28 368	111 694	9 115
324	Petroleum & coal products mfg.....	1	54	12	1 260	50 950	824	1 840	32 407	137 145	227 927	363 204	14 144
3241	Petroleum & coal products mfg.....	1	54	12	1 260	50 950	824	1 840	32 407	137 145	227 927	363 204	14 144
32412	Asphalt paving, roofing, & saturated materials mfg.....	1	47	9	1 114	44 346	735	1 659	29 640	116 322	206 923	321 579	13 448
324121	Asphalt paving mixture & block mfg.....	1	41	5	715	30 669	445	1 045	21 444	87 294	162 487	249 566	10 031
324122	Asphalt shingle & coating materials mfg.....	—	6	4	399	13 677	290	614	8 196	29 028	44 436	72 013	3 417
32419	Other petroleum & coal products mfg.....	—	5	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	358	160	21 978	1 030 984	11 783	24 578	436 919	3 540 236	2 887 666	6 436 910	396 201
3251	Basic chemical mfg.....	2	38	16	1 350	65 347	750	1 368	32 961	230 277	141 158	372 078	23 602
32518	Other basic inorganic chemical mfg.....	3	12	5	346	15 854	238	501	9 627	73 782	45 052	118 538	9 167
325188	All other basic inorganic chemical mfg.....	3	12	5	346	15 854	238	501	9 627	73 782	45 052	118 538	9 167
32519	Other basic organic chemical mfg.....	1	14	9	861	44 671	420	676	20 222	129 646	81 394	212 339	12 805
325193	Ethyl alcohol mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	2	9	7	e	D	D	D	D	D	D	D	11 843
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	1	27	20	1 892	82 646	1 116	2 388	41 196	177 195	362 874	545 795	D
32521	Resin & synthetic rubber mfg.....	1	24	19	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	1	21	18	1 251	58 062	645	1 373	26 777	162 052	294 279	462 928	25 658
32522	Artificial & synthetic fibers & filaments mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	1	13	2	107	3 934	71	160	2 167	14 028	25 195	39 082	D
32531	Fertilizer mfg.....	1	9	2	101	3 739	67	152	2 060	12 825	24 218	36 891	D
3254	Pharmaceutical & medicine mfg.....	—	71	39	7 102	338 151	3 400	7 175	129 085	1 502 155	642 854	2 124 000	191 814
32541	Pharmaceutical & medicine mfg.....	—	71	39	7 102	338 151	3 400	7 175	129 085	1 502 155	642 854	2 124 000	191 814
325411	Medicinal & botanical mfg.....	6	11	4	311	15 213	110	220	3 467	31 107	28 513	57 773	5 473
325412	Pharmaceutical preparation mfg.....	—	33	16	4 423	228 430	2 060	4 679	85 691	1 012 777	384 559	1 375 834	137 716
325413	In-vitro diagnostic substance mfg.....	—	14	12	1 490	68 478	550	1 026	22 825	209 583	103 731	315 428	24 910
325414	Biological product (except diagnostic) mfg.....	—	13	7	878	26 030	680	1 250	17 102	248 688	126 051	374 965	23 715
3255	Paint, coating, & adhesive mfg.....	1	69	24	1 793	73 305	840	1 736	27 576	272 832	224 497	495 785	8 575
32551	Paint & coating mfg.....	1	39	14	878	38 185	474	935	15 460	161 587	121 374	283 806	4 310
325510	Paint & coating mfg...	1	39	14	878	38 185	474	935	15 460	161 587	121 374	283 806	4 310
32552	Adhesive mfg.....	2	30	10	915	35 120	366	801	12 116	111 245	103 123	211 979	4 265
325520	Adhesive mfg.....	2	30	10	915	35 120	366	801	12 116	111 245	103 123	211 979	4 265

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31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	49	13	1 666	71 468	990	1 998	34 734	570 987	393 105	949 949	23 302
32561	Soap & cleaning compound mfg	3	42	10	f	D	D	D	D	D	D	D	5 498
325611	Soap & other detergent mfg	2	16	3	c	D	D	D	D	D	D	D	883
325612	Polish & other sanitation good mfg ..	5	17	4	315	12 114	158	327	4 477	72 644	47 657	120 713	2 402
325613	Surface active agent mfg	1	9	3	258	12 034	84	188	4 071	30 751	63 603	93 478	2 213
32562	Toilet preparation mfg ...	—	7	3	f	D	D	D	D	D	D	D	17 804
325620	Toilet preparation mfg .	—	7	3	f	D	D	D	D	D	D	D	17 804
3259	Other chemical product mfg	—	91	46	8 068	396 133	4 616	9 753	169 200	772 762	1 097 983	1 910 221	108 174
32591	Printing ink mfg	1	17	6	399	15 046	225	434	6 859	27 061	51 311	78 353	1 816
325910	Printing ink mfg	1	17	6	399	15 046	225	434	6 859	27 061	51 311	78 353	1 816
32599	All other chemical product & preparation mfg	—	74	40	7 669	381 087	4 391	9 319	162 341	745 701	1 046 672	1 831 868	106 358
325991	Custom compounding of purchased resin ...	2	41	23	1 713	60 795	1 016	2 074	27 958	148 757	284 437	432 409	D
325992	Photographic film, paper, plate, & chemical mfg	—	10	6	3 868	214 434	2 219	4 839	92 502	307 358	496 860	843 221	D
325998	All other miscellaneous chemical product & preparation mfg	—	23	11	2 088	105 858	1 156	2 406	41 881	289 586	265 375	556 238	32 237
326	Plastics & rubber products mfg	1	455	236	23 190	785 806	17 643	35 798	479 282	1 952 740	1 715 496	3 664 226	163 937
3261	Plastics product mfg	1	400	215	20 398	695 547	15 490	31 795	426 505	1 708 102	1 531 398	3 237 634	154 842
32611	Unsupported plastics film, sheet, & bag mfg ..	1	49	37	4 431	186 144	3 092	6 242	108 356	491 306	532 170	1 012 503	44 026
326111	Unsupported plastics bag mfg	—	13	10	781	21 498	611	1 093	12 529	52 348	51 921	106 616	D
326112	Unsupported plastics packaging film & sheet mfg	—	4	3	214	10 782	123	274	5 250	59 739	31 346	90 572	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	32	24	3 436	153 864	2 358	4 875	90 577	379 219	448 903	815 315	34 205
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	24	9	1 266	40 957	1 025	2 107	28 720	85 417	58 433	146 094	7 709
326121	Unsupported plastics profile shape mfg	1	18	7	1 148	37 287	950	1 942	27 005	75 256	36 753	113 584	4 091
326122	Plastics pipe & pipe fitting mfg	—	6	2	118	3 670	75	165	1 715	10 161	21 680	32 510	3 618
32613	Laminated plastics plate, sheet, & shape mfg	2	15	1	298	8 113	261	585	6 912	27 057	37 702	65 068	4 659
326130	Laminated plastics plate, sheet, & shape mfg	2	15	1	298	8 113	261	585	6 912	27 057	37 702	65 068	4 659
32614	Polystyrene foam product mfg	1	8	5	554	14 678	426	864	8 954	34 450	25 447	59 761	2 051
326140	Polystyrene foam product mfg	1	8	5	554	14 678	426	864	8 954	34 450	25 447	59 761	2 051
32615	Urethane & other foam product (except polystyrene) mfg	2	14	8	602	23 639	414	911	10 665	57 717	65 919	123 034	4 113
326150	Urethane & other foam product (except polystyrene) mfg	2	14	8	602	23 639	414	911	10 665	57 717	65 919	123 034	4 113
32616	Plastics bottle mfg	—	10	6	472	14 594	432	918	12 580	44 638	55 751	100 159	3 433
326160	Plastics bottle mfg	—	10	6	472	14 594	432	918	12 580	44 638	55 751	100 159	3 433
32619	Other plastics product mfg	2	280	149	12 775	407 422	9 840	20 168	250 318	967 517	755 976	1 731 015	88 851
326199	All other plastics product mfg	2	275	148	12 728	405 861	9 805	20 094	249 381	964 438	754 850	1 726 819	88 774
3262	Rubber product mfg	—	55	21	2 792	90 259	2 153	4 003	52 777	244 638	184 098	426 592	9 095
32622	Rubber & plastics hoses & belting mfg	—	3	2	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	—	3	2	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	49	19	2 644	85 085	2 060	3 830	50 311	235 553	175 088	408 479	8 868
326291	Rubber product mfg for mechanical use	—	16	4	1 325	38 693	1 086	1 987	25 318	83 515	46 204	128 359	2 110
326299	All other rubber product mfg	—	33	15	1 319	46 392	974	1 843	24 993	152 038	128 884	280 120	6 758

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	1	276	79	8 498	327 046	5 844	11 676	171 528	723 600	526 404	1 246 852	93 259
3271	Clay product & refractory mfg	1	42	14	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	1	32	11	683	16 946	517	921	9 707	42 650	15 660	58 069	2 524
327112	Vitreous china, fine earthenware, & other pottery product mfg	3	23	6	390	8 464	308	480	4 917	16 220	4 800	20 887	652
327113	Porcelain electrical supply mfg	—	9	5	293	8 482	209	441	4 790	26 430	10 860	37 182	1 872
32712	Clay building material & refractories mfg	—	10	3	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	2	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	1	54	8	1 165	41 173	830	1 670	25 180	105 856	70 774	173 263	35 917
32721	Glass & glass product mfg	1	54	8	1 165	41 173	830	1 670	25 180	105 856	70 774	173 263	35 917
327212	Other pressed & blown glass & glassware mfg	6	19	—	c	D	D	D	D	D	D	D	760
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	34	7	787	27 107	505	1 052	14 005	60 896	43 236	102 281	D
3273	Cement & concrete product mfg	2	104	32	2 111	75 690	1 546	3 233	50 122	179 279	182 404	361 062	21 797
32732	Ready-mix concrete mfg	2	47	17	1 029	42 234	771	1 678	29 147	110 846	117 624	226 809	16 246
327320	Ready-mix concrete mfg	2	47	17	1 029	42 234	771	1 678	29 147	110 846	117 624	226 809	16 246
32733	Concrete pipe, brick, & block mfg	1	22	5	259	8 411	161	331	4 710	17 456	19 044	36 205	D
327331	Concrete block & brick mfg	1	15	4	162	5 456	79	173	2 390	13 379	14 166	27 352	922
32739	Other concrete product mfg	1	32	10	800	24 326	595	1 177	15 653	48 659	41 061	91 046	4 214
327390	Other concrete product mfg	1	32	10	800	24 326	595	1 177	15 653	48 659	41 061	91 046	4 214
3274	Lime & gypsum product mfg	—	5	1	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	4	1	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	4	1	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	71	24	4 040	173 364	2 591	5 090	73 852	341 796	221 412	563 460	31 081
32791	Abrasive product mfg	—	23	14	3 183	143 173	1 981	4 027	59 415	278 498	174 668	454 974	27 435
327910	Abrasive product mfg	—	23	14	3 183	143 173	1 981	4 027	59 415	278 498	174 668	454 974	27 435
32799	All other nonmetallic mineral product mfg	1	48	10	857	30 191	610	1 063	14 437	63 298	46 744	108 486	3 646
327991	Cut stone & stone product mfg	2	29	3	328	10 381	268	491	6 764	25 832	12 756	36 523	1 198
327993	Mineral wool mfg	1	5	3	277	12 146	147	229	2 979	18 045	18 519	37 930	1 393
327999	All other miscellaneous nonmetallic mineral product mfg	1	8	3	170	5 634	131	268	3 468	15 099	13 141	27 815	855
331	Primary metal mfg	—	124	64	6 296	218 140	4 650	10 037	140 008	532 948	1 330 846	1 848 792	58 974
3312	Steel product mfg from purchased steel	2	20	15	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	2	18	13	992	38 365	706	1 423	24 205	117 632	139 871	252 770	6 476
331221	Cold-rolled steel shape mfg	3	5	4	495	22 163	310	616	12 603	77 994	82 271	156 447	1 816
331222	Steel wire drawing	1	13	9	497	16 202	396	807	11 602	39 638	57 600	96 323	4 660
3313	Alumina & aluminum production & processing	6	4	3	333	11 231	268	552	7 595	29 948	42 745	73 192	4 411
33131	Alumina & aluminum production & processing	6	4	3	333	11 231	268	552	7 595	29 948	42 745	73 192	4 411
331319	Other aluminum rolling & drawing	7	3	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	30	24	2 760	98 233	1 933	4 196	59 647	223 855	1 066 881	1 280 254	38 661
33141	Nonferrous metal (except aluminum) smelting & refining	—	4	2	c	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	4	2	c	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	13	10	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	4	2	f	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	8	8	f	D	D	D	D	D	D	D	8 728

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing—Con.												
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	13	12	1 376	49 793	952	2 074	29 147	117 541	847 116	957 264	19 664
331491	Other nonferrous metal rolling, drawing, & extruding	-	7	6	698	20 263	552	1 191	13 736	38 273	111 552	168 984	D
331492	Other nonferrous metal secondary smelting, refining, & alloying...	-	6	6	678	29 530	400	883	15 411	79 268	735 564	788 280	D
3315	Foundries	1	68	22	2 124	66 835	1 663	3 723	46 549	153 087	71 204	224 116	8 862
33151	Ferrous metal foundries ..	1	25	13	903	31 316	698	1 580	22 670	56 806	32 449	90 119	3 444
331511	Iron foundries	1	21	10	669	23 936	502	1 128	16 714	40 281	25 175	66 269	3 249
331513	Steel foundries (except investment)	-	3	2	c	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	43	9	1 221	35 519	965	2 143	23 879	96 281	38 755	133 997	5 418
331521	Aluminum die-casting foundries	-	7	2	605	16 966	478	1 137	11 610	60 296	18 345	77 550	3 921
331522	Nonferrous (except aluminum) die-casting foundries	-	4	1	155	4 035	126	270	2 484	8 236	4 562	13 122	D
331524	Aluminum foundries (except die-casting) ..	1	15	3	238	8 059	191	405	5 533	15 044	7 873	22 622	411
331525	Copper foundries (except die-casting) ..	1	12	1	109	3 289	84	177	2 207	5 846	4 610	10 474	D
331528	Other nonferrous foundries (except die-casting)	8	5	2	114	3 170	86	154	2 045	6 859	3 365	10 229	225
332	Fabricated metal product mfg	1	1 762	526	47 342	1 759 127	33 684	68 600	1 031 702	4 272 403	2 131 744	6 372 322	392 325
3321	Forging & stamping	2	100	45	4 638	176 596	3 657	7 603	108 845	346 942	242 941	582 020	21 214
33211	Forging & stamping	2	100	45	4 638	176 596	3 657	7 603	108 845	346 942	242 941	582 020	21 214
332111	Iron & steel forging	7	6	3	1 182	57 419	971	2 138	31 341	99 491	78 515	171 816	7 139
332114	Custom roll forming	1	9	2	c	D	D	D	D	D	D	D	D
332116	Metal stamping	-	77	37	2 769	94 281	2 161	4 382	59 723	199 454	124 554	320 953	10 474
332117	Powder metallurgy part mfg	1	6	3	569	21 040	441	907	15 366	34 059	20 548	56 102	3 197
3322	Cutlery & handtool mfg	-	62	28	6 350	250 690	4 607	10 535	159 909	1 168 500	286 126	1 428 762	181 920
33221	Cutlery & handtool mfg ..	-	62	28	6 350	250 690	4 607	10 535	159 909	1 168 500	286 126	1 428 762	181 920
332211	Cutlery & flatware (except precious) mfg	-	4	3	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	52	21	h	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	6	4	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	302	110	6 845	243 007	4 839	9 411	144 402	456 180	326 376	783 751	27 294
33231	Plate work & fabricated structural product mfg ..	1	69	26	1 552	56 895	1 028	2 217	32 769	117 623	99 665	219 844	3 717
332312	Fabricated structural metal mfg	2	47	14	799	27 894	540	1 150	16 520	66 175	59 701	125 961	2 004
332313	Plate work mfg	1	19	10	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	233	84	5 293	186 112	3 811	7 194	111 633	338 557	226 711	563 907	23 577
332321	Metal window & door mfg	1	22	8	441	12 604	282	545	6 601	24 783	26 604	51 375	486
332322	Sheet metal work mfg ..	1	161	66	4 056	149 512	3 032	5 632	91 452	265 046	166 495	430 788	20 650
332323	Ornamental & architectural metal work mfg	-	50	10	796	23 996	497	1 017	13 580	48 728	33 612	81 744	2 441
3324	Boiler, tank, & shipping container mfg	1	34	12	835	29 425	630	1 338	18 351	72 045	109 796	184 914	4 114
33241	Power boiler & heat exchanger mfg	2	9	2	176	6 943	112	242	3 443	17 008	10 291	27 310	936
332410	Power boiler & heat exchanger mfg	2	9	2	176	6 943	112	242	3 443	17 008	10 291	27 310	936
33242	Metal tank (heavy gauge) mfg	-	6	2	130	4 474	103	198	2 162	10 436	16 041	26 816	493
332420	Metal tank (heavy gauge) mfg	-	6	2	130	4 474	103	198	2 162	10 436	16 041	26 816	493
33243	Metal can, box, & other metal container (light gauge) mfg	1	19	8	529	18 008	415	898	12 746	44 601	83 464	130 788	2 685
332431	Metal can mfg	-	2	1	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	2	17	7	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	28	12	1 366	39 636	1 038	1 714	21 071	95 953	60 537	156 718	2 883
33251	Hardware mfg	-	28	12	1 366	39 636	1 038	1 714	21 071	95 953	60 537	156 718	2 883
332510	Hardware mfg	-	28	12	1 366	39 636	1 038	1 714	21 071	95 953	60 537	156 718	2 883

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	1	46	20	1 586	43 568	1 072	2 148	26 231	99 413	90 604	189 323	8 958
33261	Spring & wire product mfg	1	46	20	1 586	43 568	1 072	2 148	26 231	99 413	90 604	189 323	8 958
332612	Spring (light gauge) mfg	1	8	6	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	36	13	985	25 993	632	1 235	14 675	60 110	54 386	114 437	6 038
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	823	164	12 213	456 928	9 006	18 212	289 090	844 259	394 771	1 235 727	80 232
33271	Machine shops	2	701	113	8 992	339 278	6 583	13 127	215 720	623 359	286 956	909 669	57 008
332710	Machine shops	2	701	113	8 992	339 278	6 583	13 127	215 720	623 359	286 956	909 669	57 008
33272	Turned product & screw, nut, & bolt mfg	2	122	51	3 221	117 650	2 423	5 085	73 370	220 900	107 815	326 058	23 224
332721	Precision turned product mfg	1	89	36	2 146	77 141	1 643	3 431	50 245	153 814	56 282	206 725	17 406
332722	Bolt, nut, screw, rivet, & washer mfg	2	33	15	1 075	40 509	780	1 654	23 125	67 086	51 533	119 333	5 818
3328	Coating, engraving, heat treating, & allied activities.	1	216	83	4 799	154 345	3 633	7 879	96 920	301 917	104 021	406 856	22 722
33281	Coating, engraving, heat treating, & allied activities	1	216	83	4 799	154 345	3 633	7 879	96 920	301 917	104 021	406 856	22 722
332811	Metal heat treating	1	22	9	550	21 478	420	954	14 731	50 873	13 464	406 856	7 234
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	85	34	1 555	48 422	1 196	2 578	29 656	95 642	33 351	129 318	4 623
332813	Electroplating, plating, polishing, anodizing, & coloring	1	109	40	2 694	84 445	2 017	4 347	52 533	155 402	57 206	212 811	10 865
3329	Other fabricated metal product mfg	—	151	52	8 710	364 932	5 202	9 760	166 883	887 194	516 572	1 404 251	42 988
33291	Metal valve mfg	—	29	14	3 061	132 922	1 874	3 732	66 166	335 285	192 272	525 005	15 357
332911	Industrial valve mfg	—	15	10	2 091	97 686	1 199	2 300	45 227	225 567	150 643	376 653	10 863
332912	Fluid power valve & hose fitting mfg	—	5	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	4	2	372	13 570	264	516	7 852	47 587	26 488	72 774	D
33299	All other fabricated metal product mfg	—	122	38	5 649	232 010	3 328	6 028	100 717	551 909	324 300	879 246	27 631
332991	Ball & roller bearing mfg	—	3	1	c	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	—	5	5	1 465	79 261	425	667	14 144	214 458	108 976	322 828	D
332994	Small arms mfg	—	5	4	1 299	45 697	883	1 320	26 872	104 032	27 981	136 176	656
332996	Fabricated pipe & pipe fitting mfg	3	12	1	135	4 843	108	213	3 141	10 557	7 766	18 486	783
332999	All other miscellaneous fabricated metal product mfg	—	76	26	2 494	94 856	1 704	3 405	51 527	208 076	167 801	375 099	11 919
333	Machinery mfg	2	833	316	33 238	1 454 359	18 686	37 458	641 113	3 233 548	2 643 704	5 879 368	223 466
3331	Agriculture, construction, & mining machinery mfg	1	24	11	799	30 998	522	1 092	14 226	50 763	69 450	126 573	4 078
33311	Agricultural implement mfg	1	6	1	c	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	1	6	1	c	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	2	15	9	444	18 968	281	557	8 199	35 689	35 998	70 910	1 308
333120	Construction machinery mfg	2	15	9	444	18 968	281	557	8 199	35 689	35 998	70 910	1 308
33313	Mining & oil & gas field machinery mfg	—	3	1	c	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	2	1	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	2	184	83	12 750	602 907	6 296	12 800	226 843	1 448 815	1 175 089	2 623 295	99 352
33322	Plastics & rubber industry machinery mfg	—	28	15	1 576	66 371	787	1 605	28 502	162 539	160 262	325 472	8 078
333220	Plastics & rubber industry machinery mfg	—	28	15	1 576	66 371	787	1 605	28 502	162 539	160 262	325 472	8 078
33329	Other industrial machinery mfg	2	150	67	11 133	535 527	5 476	11 149	197 704	1 284 659	1 013 726	2 295 232	91 219
333291	Paper industry machinery mfg	2	23	12	1 678	73 298	862	1 680	30 434	114 941	135 649	251 377	5 762
333292	Textile machinery mfg	—	21	8	470	16 446	315	642	8 987	30 084	25 150	56 548	1 314
333293	Printing machinery & equipment mfg	2	21	12	1 421	60 380	775	1 674	25 211	129 789	91 304	219 578	4 611
333295	Semiconductor machinery mfg	2	23	17	5 357	282 061	2 560	5 090	95 308	775 179	604 132	1 373 229	42 579
333298	All other industrial machinery mfg	4	53	17	2 117	99 906	919	1 981	36 305	226 970	150 837	379 812	36 331

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
333	Machinery mfg—Con.												
3333	Commercial & service industry machinery mfg . .	1	109	48	4 828	200 865	2 837	5 632	86 868	380 689	302 140	678 115	40 306
33331	Commercial & service industry machinery mfg	1	109	48	4 828	200 865	2 837	5 632	86 868	380 689	302 140	678 115	40 306
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	3	3	306	9 290	204	373	5 271	21 755	20 195	42 223	D
333313	Office machinery mfg	4	6	4	204	8 462	114	221	3 409	1 663	20 970	22 788	D
333314	Optical instrument & lens mfg	1	48	22	2 215	83 735	1 342	2 623	40 537	198 870	89 821	286 219	13 360
333315	Photographic & photocopying equipment mfg	1	15	7	1 356	73 771	727	1 545	25 822	100 311	115 919	214 928	23 153
333319	Other commercial & service industry machinery mfg	2	34	12	720	25 021	430	835	11 486	56 481	54 020	109 112	2 345
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	41	19	1 850	73 839	1 115	2 263	36 015	141 905	136 657	280 741	9 038
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	41	19	1 850	73 839	1 115	2 263	36 015	141 905	136 657	280 741	9 038
333411	Air purification equipment mfg	5	11	5	355	13 751	274	500	8 532	24 403	28 257	55 811	3 228
333412	Industrial & commercial fan & blower mfg	8	5	2	118	7 082	90	182	4 271	16 699	15 866	32 798	773
333414	Heating equipment (except warm air furnaces) mfg	1	12	7	784	26 188	408	862	10 947	52 583	45 979	99 482	2 527
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	13	5	593	26 818	343	719	12 265	48 220	46 555	92 650	2 510
3335	Metalworking machinery mfg	4	274	70	5 219	208 712	3 549	7 219	125 156	410 230	229 224	634 420	25 406
33351	Metalworking machinery mfg	4	274	70	5 219	208 712	3 549	7 219	125 156	410 230	229 224	634 420	25 406
333511	Industrial mold mfg	2	70	17	1 198	50 923	935	2 069	36 194	87 297	30 438	116 799	7 057
333512	Machine tool (metal cutting types) mfg	1	14	10	461	19 057	272	549	8 989	34 195	28 839	64 234	1 408
333513	Machine tool (metal forming types) mfg	2	5	3	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg	3	107	11	898	32 561	695	1 291	22 273	58 651	21 182	79 495	5 253
333515	Cutting tool & machine tool accessory mfg	1	59	19	1 361	51 338	983	1 925	35 140	101 607	46 716	147 125	7 199
333516	Rolling mill machinery & equipment mfg	9	5	2	f	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg	6	14	8	415	15 544	266	494	8 224	30 691	23 990	54 420	1 380
3336	Engine, turbine, & power transmission equipment mfg	—	32	15	1 834	83 057	1 138	2 253	41 435	207 346	116 578	320 866	7 963
33361	Engine, turbine, & power transmission equipment mfg	—	32	15	1 834	83 057	1 138	2 253	41 435	207 346	116 578	320 866	7 963
333611	Turbine & turbine generator set unit mfg	—	9	6	1 097	55 164	630	1 282	25 393	120 723	68 420	185 727	3 358
333612	Speed changer, industrial high-speed drive, & gear mfg	2	10	5	274	11 237	182	390	6 164	19 902	7 837	29 075	750
333613	Mechanical power transmission equipment mfg	—	8	3	378	13 733	260	460	8 214	60 009	36 935	95 894	3 449
3339	Other general-purpose machinery mfg	1	169	70	5 958	253 981	3 229	6 199	110 570	593 800	614 566	1 215 358	37 323
33391	Pump & compressor mfg	1	16	11	1 615	69 675	715	1 395	24 562	189 186	263 453	449 952	9 808
333911	Pump & pumping equipment mfg	—	9	6	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	5	4	860	35 327	358	690	12 398	94 865	186 262	278 125	6 084
333913	Measuring & dispensing pump mfg	—	2	1	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	2	25	13	478	17 043	298	654	9 573	31 528	44 494	75 797	2 405
333922	Conveyor & conveying equipment mfg	2	14	7	262	9 085	157	362	4 646	16 044	29 618	46 209	833
333923	Overhead traveling crane, hoist, & monorail system mfg	—	4	4	132	4 915	85	177	3 143	8 481	9 974	18 403	333

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	MASSACHUSETTS—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	1	128	46	3 865	167 263	2 216	4 150	76 435	373 086	306 619	689 609	25 110
333991	Power-driven handtool mfg	1	10	2	227	9 706	169	325	5 764	33 489	20 681	55 360	1 612
333992	Welding & soldering equipment mfg	1	6	3	119	4 468	74	121	2 099	10 112	9 200	18 603	D
333993	Packaging machinery mfg	4	17	6	555	24 630	359	661	11 520	52 356	32 540	83 972	1 955
333994	Industrial process furnace & oven mfg ..	2	13	5	556	20 945	323	661	9 580	27 991	52 268	83 463	2 973
333996	Fluid power pump & motor mfg	—	3	1	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	76	28	2 186	96 745	1 189	2 199	44 182	229 839	176 532	413 023	16 118
334	Computer & electronic product mfg	1	926	477	105 506	5 073 299	47 868	96 801	1 724 038	15 014 844	8 381 144	23 336 824	1 033 663
3341	Computer & peripheral equipment mfg	—	103	47	8 060	434 732	2 555	5 262	118 418	1 374 943	1 229 717	2 590 910	89 678
33411	Computer & peripheral equipment mfg	—	103	47	8 060	434 732	2 555	5 262	118 418	1 374 943	1 229 717	2 590 910	89 678
334111	Electronic computer mfg	—	18	8	2 070	97 571	373	646	12 619	653 023	416 751	1 054 857	19 827
334112	Computer storage device mfg	—	11	3	1 368	85 384	164	253	4 275	64 898	127 914	190 917	D
334113	Computer terminal mfg	—	11	4	764	40 548	93	232	3 251	54 505	99 627	158 958	D
334119	Other computer peripheral equipment mfg	1	63	32	3 858	211 229	1 925	4 131	98 273	602 517	585 425	1 186 178	35 578
3342	Communications equipment mfg	1	106	63	22 734	1 098 201	12 141	22 599	530 469	4 424 500	2 307 050	6 742 230	255 349
33421	Telephone apparatus mfg	—	29	19	10 951	549 116	5 260	8 903	222 185	2 842 355	1 605 966	4 460 542	161 361
334210	Telephone apparatus mfg	—	29	19	10 951	549 116	5 260	8 903	222 185	2 842 355	1 605 966	4 460 542	161 361
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	54	35	9 765	462 621	6 133	11 987	287 928	1 038 413	581 714	1 606 925	69 700
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	54	35	9 765	462 621	6 133	11 987	287 928	1 038 413	581 714	1 606 925	69 700
33429	Other communications equipment mfg	9	23	9	2 018	86 464	748	1 709	20 356	543 732	119 370	674 763	24 288
334290	Other communications equipment mfg	9	23	9	2 018	86 464	748	1 709	20 356	543 732	119 370	674 763	24 288
3343	Audio & video equipment mfg	—	19	7	1 271	44 878	882	1 972	26 604	308 615	201 964	516 129	10 779
33431	Audio & video equipment mfg	—	19	7	1 271	44 878	882	1 972	26 604	308 615	201 964	516 129	10 779
334310	Audio & video equipment mfg	—	19	7	1 271	44 878	882	1 972	26 604	308 615	201 964	516 129	10 779
3344	Semiconductor & other electronic component mfg	1	360	194	29 274	1 185 252	17 156	35 144	462 049	3 246 375	1 776 703	4 997 345	388 791
33441	Semiconductor & other electronic component mfg	1	360	194	29 274	1 185 252	17 156	35 144	462 049	3 246 375	1 776 703	4 997 345	388 791
334411	Electron tube mfg	—	10	4	692	28 175	488	951	15 633	60 613	20 309	80 094	1 558
334412	Bare printed circuit board mfg	1	64	30	3 362	117 011	2 245	4 739	57 653	278 743	162 583	435 089	21 479
334413	Semiconductor & related device mfg ...	—	73	41	9 517	418 002	5 073	9 561	156 922	1 366 266	591 717	1 941 028	261 125
334414	Electronic capacitor mfg	3	9	3	160	5 000	109	217	2 632	8 334	6 051	14 245	462
334415	Electronic resistor mfg	—	6	6	382	9 504	296	682	5 691	30 375	5 566	37 552	1 175
334416	Electronic coil, transformer, & other inductor mfg	4	20	9	453	10 744	353	695	6 218	23 213	11 647	34 897	536
334417	Electronic connector mfg	2	23	14	1 271	46 164	892	1 944	25 627	121 613	54 775	168 077	6 620
334418	Printed circuit assembly (electronic assembly) mfg	—	60	47	7 751	363 600	4 100	8 832	104 922	986 899	636 784	1 624 923	60 582
334419	Other electronic component mfg	1	95	40	5 686	187 052	3 600	7 523	86 751	370 319	287 271	661 440	35 254

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	MASSACHUSETTS—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	308	159	43 143	2 265 961	14 437	30 239	561 178	5 534 979	2 731 225	8 229 775	261 758
33451	Navigational, measuring, medical, & control instruments mfg	-	308	159	43 143	2 265 961	14 437	30 239	561 178	5 534 979	2 731 225	8 229 775	261 758
334510	Electromedical & electrotherapeutic apparatus mfg	-	31	16	4 746	306 748	2 258	5 004	80 628	892 520	531 300	1 424 215	55 208
334511	Search, detection, navigation, & guidance instrument mfg	-	41	16	18 040	1 007 048	4 819	10 819	245 917	2 114 180	920 131	2 984 101	68 798
334512	Automatic environmental control mfg	1	11	6	474	15 782	294	611	6 908	35 528	19 182	55 337	3 274
334513	Industrial process control instrument mfg	-	51	31	5 312	243 046	2 041	3 950	60 184	694 609	305 629	1 003 314	24 884
334514	Totalizing fluid meter & counting device mfg .	1	6	4	c	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	1	42	26	5 109	238 597	1 667	3 147	56 896	755 493	339 725	1 096 688	50 512
334516	Analytical laboratory instrument mfg	-	61	27	4 818	239 029	1 447	2 950	49 296	524 196	328 665	852 557	30 913
334517	Irradiation apparatus mfg	-	9	5	1 901	93 032	637	1 315	16 351	199 585	114 401	312 178	9 793
334518	Watch, clock, & part mfg	-	4	3	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	52	25	2 336	109 454	1 145	2 179	42 125	228 551	136 605	375 798	9 028
3346	Mfg & reproducing magnetic & optical media .	1	30	7	1 024	44 275	697	1 585	25 320	125 432	134 485	260 435	27 308
33461	Mfg & reproducing magnetic & optical media	1	30	7	1 024	44 275	697	1 585	25 320	125 432	134 485	260 435	27 308
334612	Prerecorded CD (except software), tape, & record reproducing	1	12	1	c	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	1	16	5	864	39 345	583	1 346	22 284	105 472	126 211	232 131	25 180
335	Electrical equipment, appliance, & component mfg	1	229	123	16 921	602 859	10 691	22 292	289 093	1 668 757	1 370 419	3 035 097	99 427
3351	Electric lighting equipment mfg	-	36	14	2 654	74 445	1 858	3 595	49 018	263 196	187 707	446 710	14 205
33511	Electric lamp bulb & part mfg	-	2	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	2	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	34	13	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	16	4	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	1	10	6	1 259	31 360	747	1 434	20 276	127 641	108 847	233 785	3 217
335129	Other lighting equipment mfg	2	8	3	318	11 143	228	515	5 928	17 952	19 016	36 410	D
3352	Household appliance mfg..	-	10	6	649	18 627	522	1 178	12 342	44 720	46 785	90 978	1 775
33522	Major appliance mfg	-	6	5	584	16 412	478	1 088	11 166	39 450	42 836	81 794	D
335222	Household refrigerator & home freezer mfg..	-	1	1	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	1	5	4	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	75	35	4 733	186 875	2 379	4 927	63 113	565 538	293 109	860 534	27 329
33531	Electrical equipment mfg	-	75	35	4 733	186 875	2 379	4 927	63 113	565 538	293 109	860 534	27 329
335311	Power, distribution, & specialty transformer mfg	4	8	3	203	5 987	129	226	2 760	14 932	8 203	22 333	707
335312	Motor & generator mfg	1	14	4	394	11 626	270	558	6 257	33 932	26 217	60 040	1 293
335313	Switchgear & apparatus mfg	-	14	10	1 618	63 527	939	2 403	27 551	255 305	67 119	322 668	5 144
335314	Relay & industrial control mfg	1	39	18	2 518	105 735	1 041	1 740	26 545	261 369	191 570	455 493	20 185

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31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	2	108	68	8 885	322 912	5 932	12 592	164 620	795 303	842 818	1 636 875	56 118
33591	Battery mfg	1	4	1	105	3 206	75	110	1 554	9 323	4 757	14 061	D
335912	Primary battery mfg	1	2	1	c	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	2	30	30	3 380	139 791	2 335	4 964	72 526	357 361	470 592	823 595	28 752
335921	Fiber optic cable mfg	—	4	4	324	15 598	167	243	4 660	38 183	35 429	71 122	3 743
335929	Other communication & energy wire mfg	3	26	26	3 056	124 193	2 168	4 721	67 866	319 178	435 163	752 473	25 009
33593	Wiring device mfg	—	28	14	2 470	83 133	1 673	3 551	46 328	210 863	146 328	354 517	D
335931	Current-carrying wiring device mfg	—	24	11	1 790	61 305	1 141	2 441	32 546	181 012	130 341	306 319	9 602
335932	Noncurrent-carrying wiring device mfg	—	4	3	680	21 828	532	1 110	13 782	29 851	15 987	48 198	D
33599	All other electrical equipment & component mfg	3	46	23	2 930	96 782	1 849	3 967	44 212	217 756	221 141	444 702	12 793
335999	All other miscellaneous electrical equipment & component mfg	3	42	23	2 909	96 172	1 834	3 937	43 826	216 155	219 912	441 824	12 617
336	Transportation equipment mfg	—	181	63	13 341	590 221	8 270	15 579	281 199	1 284 881	1 629 638	2 950 306	99 552
3361	Motor vehicle mfg	—	2	2	c	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	c	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	16	6	321	12 176	245	536	7 224	20 257	29 977	50 443	1 327
33621	Motor vehicle body & trailer mfg	2	16	6	321	12 176	245	536	7 224	20 257	29 977	50 443	1 327
336211	Motor vehicle body mfg	2	7	3	191	7 779	139	306	4 184	14 955	17 636	32 418	1 113
3363	Motor vehicle parts mfg ...	1	83	27	6 100	238 721	3 530	6 665	81 219	483 670	442 248	932 125	38 439
33631	Motor vehicle gasoline engine & engine parts mfg	2	13	1	c	D	D	D	D	D	D	D	610
33632	Motor vehicle electrical & electronic equipment mfg	4	36	12	869	30 203	521	1 006	12 984	71 195	96 391	166 653	5 059
336322	Other motor vehicle electrical & electronic equipment mfg	4	36	12	869	30 203	521	1 006	12 984	71 195	96 391	166 653	5 059
33634	Motor vehicle brake system mfg	—	5	4	316	7 813	267	534	5 561	16 981	16 954	34 448	D
336340	Motor vehicle brake system mfg	—	5	4	316	7 813	267	534	5 561	16 981	16 954	34 448	D
33635	Motor vehicle transmission & power train parts mfg	1	5	1	c	D	D	D	D	D	D	D	778
336350	Motor vehicle transmission & power train parts mfg	1	5	1	c	D	D	D	D	D	D	D	778
33637	Motor vehicle metal stamping	—	9	5	472	19 085	288	745	9 830	33 835	25 200	59 856	2 297
336370	Motor vehicle metal stamping	—	9	5	472	19 085	288	745	9 830	33 835	25 200	59 856	2 297
33639	Other motor vehicle parts mfg	—	11	4	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	11	4	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	23	14	5 972	313 736	3 806	7 177	176 390	733 207	1 102 804	1 864 728	57 989
33641	Aerospace product & parts mfg	—	23	14	5 972	313 736	3 806	7 177	176 390	733 207	1 102 804	1 864 728	57 989
336412	Aircraft engine & engine parts mfg	—	15	14	5 900	311 045	3 757	7 091	174 770	727 187	1 099 928	1 855 626	57 653
3366	Ship & boat building	5	46	8	f	D	D	D	D	D	D	D	1 065
33661	Ship & boat building	5	46	8	f	D	D	D	D	D	D	D	1 065
336611	Ship building & repairing	5	20	5	e	D	D	D	D	D	D	D	369
336612	Boat building	4	26	3	e	D	D	D	D	D	D	D	696
3369	Other transportation equipment mfg	2	10	6	244	6 962	158	324	3 599	11 145	11 355	22 752	D
33699	Other transportation equipment mfg	2	10	6	244	6 962	158	324	3 599	11 145	11 355	22 752	D
336999	All other transportation equipment mfg	2	6	4	c	D	D	D	D	D	D	D	218

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31-33	MASSACHUSETTS— Con. Manufacturing— Con.												
337	Furniture & related product mfg	1	356	75	6 775	200 125	5 091	9 897	125 095	426 651	385 715	814 168	23 910
3371	Household & institutional furniture & kitchen cabinet mfg	2	257	44	4 084	113 682	3 114	6 034	75 364	222 634	183 039	405 790	10 587
33711	Wood kitchen cabinet & counter top mfg	3	111	10	797	23 590	620	1 287	16 643	45 124	34 282	79 782	1 095
337110	Wood kitchen cabinet & counter top mfg ...	3	111	10	797	23 590	620	1 287	16 643	45 124	34 282	79 782	1 095
33712	Household & institutional furniture mfg	2	146	34	3 287	90 092	2 494	4 747	58 721	177 510	148 757	326 008	9 492
337121	Upholstered household furniture mfg	4	25	3	303	7 039	247	424	5 487	9 954	10 874	20 766	566
337122	Nonupholstered wood household furniture mfg	1	85	16	1 392	34 677	1 090	2 104	23 876	69 525	68 026	137 184	2 326
337127	Institutional furniture mfg	2	23	13	1 410	42 993	1 017	1 914	26 047	88 616	62 592	151 377	5 885
337129	Wood television, radio, & sewing machine cabinet mfg	-	2	1	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	67	22	1 803	60 223	1 320	2 508	33 332	117 423	119 395	237 407	7 019
33721	Office furniture (including fixtures) mfg	1	67	22	1 803	60 223	1 320	2 508	33 332	117 423	119 395	237 407	7 019
337211	Wood office furniture mfg	-	5	1	c	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	29	10	623	21 526	437	879	11 875	37 658	24 542	62 545	915
337214	Office furniture (except wood) mfg	-	3	2	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	30	9	644	20 591	486	1 024	13 058	41 163	27 939	68 589	1 641
3379	Other furniture related product mfg	1	32	9	888	26 220	657	1 355	16 399	86 594	83 281	170 971	6 304
33791	Mattress mfg	1	18	9	791	23 996	588	1 216	15 049	82 283	78 347	161 564	6 187
337910	Mattress mfg	1	18	9	791	23 996	588	1 216	15 049	82 283	78 347	161 564	6 187
339	Miscellaneous mfg	1	850	238	32 105	1 164 000	19 275	38 474	502 496	3 227 583	1 897 530	5 158 526	173 906
3391	Medical equipment & supplies mfg	1	361	107	13 388	541 272	7 156	13 800	178 547	1 358 669	640 150	2 008 850	82 557
33911	Medical equipment & supplies mfg	1	361	107	13 388	541 272	7 156	13 800	178 547	1 358 669	640 150	2 008 850	82 557
339111	Laboratory apparatus & furniture mfg	-	26	11	910	37 917	360	688	10 531	70 483	61 831	133 988	4 534
339112	Surgical & medical instrument mfg	1	110	52	7 486	332 990	3 911	7 697	96 215	838 183	407 288	1 256 804	53 473
339113	Surgical appliance & supplies mfg	1	45	24	2 341	93 793	1 241	2 416	36 490	273 620	94 474	359 253	15 621
339115	Ophthalmic goods mfg	1	29	13	1 882	56 520	1 079	2 092	22 520	132 557	57 789	194 390	7 607
339116	Dental laboratories ...	6	131	7	684	17 826	509	813	11 513	38 400	15 352	54 300	1 092
3399	Other miscellaneous mfg ...	-	489	131	18 717	622 728	12 119	24 674	323 949	1 868 914	1 257 380	3 149 676	91 349
33991	Jewelry & silverware mfg	-	126	38	4 747	144 089	3 185	6 462	69 526	343 569	390 841	738 354	12 582
339911	Jewelry (except costume) mfg	1	59	17	1 574	46 384	1 163	2 236	25 432	156 331	123 803	280 038	3 108
339912	Silverware & plated ware mfg	-	12	7	1 060	45 390	454	936	12 093	94 257	158 312	244 629	3 696
339913	Jewelers' material & lapidary work mfg ...	-	18	5	891	27 815	558	1 233	13 269	45 059	81 767	126 243	D
339914	Costume jewelry & novelty mfg	1	37	9	1 222	24 500	1 010	2 057	18 732	47 922	26 959	87 444	D
33992	Sporting & athletic goods mfg	-	38	8	2 493	109 520	1 855	4 160	72 499	509 145	236 389	761 974	41 726
339920	Sporting & athletic goods mfg	-	38	8	2 493	109 520	1 855	4 160	72 499	509 145	236 389	761 974	41 726
33993	Doll, toy, & game mfg ...	-	34	11	3 304	108 273	2 414	4 965	59 525	411 591	186 745	596 107	11 383
339932	Game, toy, & children's vehicle mfg	-	31	11	h	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	4	36	7	594	16 149	365	676	8 460	35 585	21 577	57 008	2 093
339941	Pen & mechanical pencil mfg	7	7	3	219	6 528	167	323	4 637	16 472	8 317	24 657	1 015
339942	Lead pencil & art good mfg	2	11	1	127	3 312	68	133	1 262	8 430	6 342	14 523	735
339943	Marking device mfg ...	-	16	2	c	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	-	2	1	c	D	D	D	D	D	D	D	D
33995	Sign mfg	1	125	18	1 347	42 559	833	1 626	21 988	78 675	57 324	136 902	2 140
339950	Sign mfg	1	125	18	1 347	42 559	833	1 626	21 988	78 675	57 324	136 902	2 140

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MASSACHUSETTS—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	1	130	49	6 232	202 138	3 467	6 785	91 951	490 349	364 504	859 331	21 425
339991	Gasket, packing, & sealing device mfg ...	1	24	12	1 682	63 157	911	1 782	27 258	185 203	107 704	295 014	8 140
339992	Musical instrument mfg	1	22	8	517	15 733	352	705	8 375	40 619	13 458	53 010	2 444
339993	Fastener, button, mesdle, & pin mfg	6	5	2	282	7 096	93	182	2 645	13 714	14 370	27 901	245
339994	mfg, brush, & mop	—	14	9	749	19 269	492	1 024	9 426	47 154	40 701	91 489	2 779
339995	Burial casket mfg	—	4	3	187	4 325	157	295	3 135	7 250	5 133	12 268	116
339999	All other miscellaneous mfg	1	61	15	2 815	92 558	1 462	2 797	41 112	196 409	183 138	379 649	7 701

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BARNSTABLE—YARMOUTH, MA MSA												
	Manufacturing	2	152	13	1 667	52 061	998	1 624	22 655	163 118	81 102	242 017	9 920
334	Computer & electronic product mfg	—	9	1	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	23	2	289	5 560	203	273	4 411	13 849	13 279	26 882	D
31-33	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA												
	Manufacturing	1	8 844	3 074	395 322	15 798 742	241 095	484 982	7 435 157	45 718 100	33 681 939	79 309 730	3 482 539
	Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA (CT Part)	—	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA (ME Part)	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA (MA Part)	1	7 448	2 622	332 006	13 505 530	198 540	401 940	6 174 666	37 417 970	27 017 210	64 365 196	2 975 800
	Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA (NH Part)	1	1 336	437	61 381	2 229 004	41 436	80 545	1 230 147	8 395 120	6 376 277	14 748 569	499 261
311	Food mfg	1	664	187	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	48	16	h	D	D	D	D	D	D	D	D
313	Textile mills	1	128	69	i	D	D	D	D	D	D	D	D
314	Textile product mills	1	180	42	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.													
	Manufacturing—Con.													
315	Apparel mfg	3	194	73	i	D	D	D	D	D	D	D	D	
316	Leather & allied product mfg .	—	116	40	i	D	D	D	D	D	D	D	D	
321	Wood product mfg	3	198	38	h	D	D	D	D	D	D	D	D	
322	Paper mfg	—	166	118	j	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	3	1 077	234	j	D	D	D	D	D	D	D	107 053	
324	Petroleum & coal products mfg	1	45	10	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	1	351	152	j	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	421	218		21 622	706 201	16 689	33 833	442 348	1 757 409	1 510 618	3 269 053	141 171
327	Nonmetallic mineral product mfg	1	245	76	i	D	D	D	D	D	D	D	D	
331	Primary metal mfg	—	98	49	i	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	1 634	476		40 901	1 517 003	29 397	59 553	880 171	3 702 019	1 916 028	5 599 963	357 939
333	Machinery mfg	2	769	294		33 456	1 463 248	18 414	37 238	634 513	3 253 851	2 673 862	5 937 448	227 624
334	Computer & electronic product mfg.....	—	1 039	537	m	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	228	124	j	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	167	61	j	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	339	71	i	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	1	737	189		24 304	919 994	13 974	27 807	372 702	2 449 330	1 422 551	3 902 291	D
	Boston, MA-NH PMSA													
31-33	Manufacturing	1	4 865	1 645		207 661	8 725 408	119 591	242 987	3 838 597	23 000 994	16 453 372	39 379 994	1 715 295
	Boston, MA-NH PMSA (MA Part)	1	4 829	1 630		206 345	8 676 512	118 686	241 497	3 806 656	22 908 566	16 350 156	39 183 910	1 707 820
	Boston, MA-NH PMSA (NH Part)	4	36	15		1 316	48 896	905	1 490	31 941	92 428	103 216	196 084	7 475
311	Food mfg.....	1	439	123		13 043	356 463	8 605	16 272	211 441	1 325 624	1 729 383	3 054 476	80 780
3113	Sugar & confectionery product mfg.....	—	34	11		1 171	26 892	915	1 678	19 056	129 107	113 801	244 202	9 334
31133	Confectionery mfg from purchased chocolate...	—	17	7	f	D	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	—	17	7	f	D	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	1	13	3	e	D	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	1	13	3	e	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	7	16	6	e	D	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	29	12		2 461	87 313	1 525	3 364	53 143	298 508	540 517	837 990	16 923
31151	Dairy product (except frozen) mfg	—	9	5	g	D	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	7	5	g	D	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	1	20	7	f	D	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	1	20	7	f	D	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	22	12		1 162	32 424	789	1 691	18 591	77 977	201 779	281 083	5 905
31161	Animal slaughtering & processing.....	1	22	12		1 162	32 424	789	1 691	18 591	77 977	201 779	281 083	5 905
311612	Meat processed from carcasses	1	11	4		633	17 877	344	692	7 945	48 605	116 263	165 030	D
311615	Poultry processing....	—	4	4	e	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3117	Seafood product preparation & packaging..	1	31	9	1 641	47 793	996	1 906	26 081	162 198	344 698	506 199	7 451
31171	Seafood product preparation & packaging	1	31	9	1 641	47 793	996	1 906	26 081	162 198	344 698	506 199	7 451
311712	Fresh & frozen seafood processing ..	—	26	9	1 616	46 993	981	1 883	25 784	160 490	340 689	500 484	D
3118	Bakeries & tortilla mfg	1	259	50	4 454	100 140	2 971	5 048	63 237	360 512	160 792	521 187	24 627
31181	Bread & bakery product mfg	1	242	46	4 063	90 293	2 678	4 600	57 016	343 936	147 258	491 280	23 527
311811	Retail bakeries	4	167	14	1 292	16 295	764	939	8 329	34 205	19 096	53 427	D
311812	Commercial bakeries ..	1	64	28	2 457	66 354	1 701	3 232	44 094	291 451	113 254	404 497	20 813
311813	Frozen cakes, pies, & other pastries mfg ...	1	11	4	314	7 644	213	429	4 593	18 280	14 908	33 356	D
31182	Cookie, cracker, & pasta mfg	2	16	4	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	38	20	1 693	49 656	1 022	1 856	22 650	261 705	282 998	542 853	11 784
31191	Snack food mfg	2	9	7	353	9 894	229	418	5 121	48 875	41 028	89 545	2 172
31192	Coffee & tea mfg	1	6	3	389	12 877	114	224	2 605	67 020	96 529	162 113	D
311920	Coffee & tea mfg	1	6	3	389	12 877	114	224	2 605	67 020	96 529	162 113	D
31194	Seasoning & dressing mfg	—	7	4	f	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	4	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg	—	14	6	390	8 329	293	426	5 230	27 397	26 473	53 837	D
312	Beverage & tobacco product mfg	2	22	8	1 253	53 912	691	1 627	29 903	344 312	409 785	756 853	21 848
3121	Beverage mfg	2	22	8	1 253	53 912	691	1 627	29 903	344 312	409 785	756 853	21 848
31211	Soft drink & ice mfg	—	9	5	653	22 741	264	548	8 898	141 250	247 450	388 664	D
312111	Soft drink mfg	—	4	4	e	D	D	D	D	D	D	D	D
31212	Breweries	—	10	2	e	D	D	D	D	D	D	D	9 381
312120	Breweries	—	10	2	e	D	D	D	D	D	D	D	9 381
313	Textile mills	3	53	28	2 287	80 496	1 603	3 562	45 280	182 371	179 988	360 737	12 191
3132	Fabric mills	6	24	13	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	8	6	4	402	13 524	282	690	7 761	25 946	39 464	65 024	D
313230	Nonwoven fabric mills.	8	6	4	402	13 524	282	690	7 761	25 946	39 464	65 024	D
3133	Textile & fabric finishing & fabric coating mills	2	26	15	1 385	53 033	923	2 134	29 307	130 903	120 082	251 740	D
31331	Textile & fabric finishing mills	3	16	9	818	27 429	550	1 182	15 479	71 971	64 982	138 043	D
313311	Broadwoven fabric finishing mills	3	13	8	677	23 706	434	935	12 851	66 469	62 370	130 038	D
31332	Fabric coating mills	—	10	6	567	25 604	373	952	13 828	58 932	55 100	113 697	D
313320	Fabric coating mills ...	—	10	6	567	25 604	373	952	13 828	58 932	55 100	113 697	D
314	Textile product mills	1	105	22	1 587	36 128	1 225	2 396	20 596	93 224	91 238	182 282	4 073
3141	Textile furnishings mills....	2	45	11	938	19 591	755	1 489	11 496	56 497	54 700	109 899	D
31412	Curtain & linen mills.....	2	42	10	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	3	35	6	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	1	60	11	649	16 537	470	907	9 100	36 727	36 538	72 383	D
31491	Textile bag & canvas mills	1	23	5	274	6 803	208	395	4 296	12 969	12 603	26 090	D
314912	Canvas & related product mills	1	21	5	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	37	6	375	9 734	262	512	4 804	23 758	23 935	46 293	2 561
314999	All other miscellaneous textile product mills ..	1	35	6	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	2	118	39	3 200	79 589	2 380	4 426	37 774	164 035	191 778	344 002	4 225
3152	Cut & sew apparel mfg	2	84	33	h	D	D	D	D	D	D	D	3 787
31521	Cut & sew apparel contractors	7	42	14	896	13 071	852	1 425	11 448	19 254	4 305	23 573	537
315212	Women's, girls', & infants' cut & sew apparel contractors ..	8	40	13	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	11	5	510	10 038	322	766	6 239	24 326	32 489	56 824	508
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	7	4	e	D	D	D	D	D	D	D	487
31523	Women's & girls' cut & sew apparel mfg	1	22	13	1 316	45 332	814	1 523	13 463	99 430	129 597	215 000	2 593
315233	Women's & girls' cut & sew dress mfg	6	5	4	290	6 895	212	390	3 663	12 499	13 172	25 136	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	4	4	495	24 477	217	362	2 743	38 961	41 327	74 089	D
315239	Women's & girls' cut & sew other outerwear mfg	—	7	3	268	10 032	157	337	4 080	39 267	66 945	98 926	D
3159	Apparel accessories & other apparel mfg	1	33	6	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	33	6	e	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	29	5	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	2	61	18	1 532	34 455	1 276	2 553	23 871	85 558	80 505	164 428	D
3161	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
31611	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
316110	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
3162	Footwear mfg	2	8	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	2	8	4	f	D	D	D	D	D	D	D	D
316219	Other footwear mfg ...	2	3	3	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	26	9	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	26	9	f	D	D	D	D	D	D	D	D
321	Wood product mfg	5	72	9	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	4	59	9	970	28 281	724	1 555	18 259	53 564	67 944	121 290	2 880
32191	Millwork	2	27	3	287	8 704	209	433	5 331	14 805	24 679	39 638	548
32199	All other wood product mfg	5	22	4	503	13 978	372	830	8 932	28 821	34 171	62 550	1 760
321999	All other miscellaneous wood product mfg ...	1	20	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	82	57	i	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	79	54	i	D	D	D	D	D	D	D	34 456
32221	Paperboard container mfg	1	34	29	2 187	78 230	1 622	3 539	46 296	172 238	228 004	400 821	17 801
322211	Corrugated & solid fiber box mfg	1	15	13	1 099	39 819	761	1 589	21 667	89 222	133 403	222 003	8 861
322212	Folding paperboard box mfg	1	11	9	785	29 911	626	1 448	18 785	61 782	64 986	128 025	8 058
32222	Paper bag & coated & treated paper mfg	—	17	11	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	15	10	g	D	D	D	D	D	D	D	13 666
32223	Stationery product mfg ..	—	17	8	f	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	—	6	3	f	D	D	D	D	D	D	D	563
32229	Other converted paper product mfg	2	11	6	522	17 364	396	984	10 606	90 360	51 023	142 153	1 853
322299	All other converted paper product mfg ...	2	10	6	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	696	156	13 955	523 487	10 060	20 534	329 122	1 056 500	618 669	1 680 590	69 873
3231	Printing & related support activities.....	2	696	156	13 955	523 487	10 060	20 534	329 122	1 056 500	618 669	1 680 590	69 873
32311	Printing.....	2	604	131	12 485	470 720	8 915	18 106	290 682	961 383	588 120	1 552 401	60 202
323110	Commercial lithographic printing ..	2	296	74	6 785	279 192	4 672	9 625	167 288	536 631	322 115	860 463	36 648
323113	Commercial screen printing.....	5	62	18	1 480	48 625	1 091	2 137	32 254	85 905	72 210	158 574	6 963
323114	Quick printing.....	1	143	7	960	27 681	679	1 253	17 163	58 401	34 364	92 587	3 340
323116	Manifold business form printing.....	—	11	4	400	18 885	281	628	12 861	78 205	30 035	108 468	1 067
323117	Book printing.....	3	18	15	1 931	66 693	1 520	3 166	45 379	135 705	84 788	221 147	7 538
323119	Other commercial printing.....	3	47	4	417	15 049	301	597	7 739	29 438	25 952	55 345	3 240
32312	Support activities for printing.....	1	92	25	1 470	52 767	1 145	2 428	38 440	95 117	30 549	128 189	9 671
323121	Tradebinding & related work.....	1	27	11	718	21 117	576	1 195	16 406	38 440	13 227	51 770	2 188
323122	Prepress services.....	2	65	14	752	31 650	569	1 233	22 034	56 677	17 322	76 419	7 483
324	Petroleum & coal products mfg.....	—	22	6	619	26 524	454	1 079	18 551	65 014	125 443	188 433	7 704
3241	Petroleum & coal products mfg.....	—	22	6	619	26 524	454	1 079	18 551	65 014	125 443	188 433	7 704
32412	Asphalt paving, roofing, & saturated materials mfg.....	—	19	6	597	25 822	440	1 054	18 241	63 715	122 700	184 416	D
324121	Asphalt paving mixture & block mfg.....	1	16	3	295	13 897	236	587	11 067	38 579	80 376	118 322	D
324122	Asphalt shingle & coating materials mfg.....	—	3	3	302	11 925	204	467	7 174	25 136	42 324	66 094	D
325	Chemical mfg.....	1	230	96	11 746	548 448	5 973	12 157	222 773	1 577 644	1 458 388	3 059 376	156 325
3251	Basic chemical mfg.....	1	25	11	903	47 810	450	758	22 142	143 153	83 015	227 313	13 130
32519	Other basic organic chemical mfg.....	—	12	7	f	D	D	D	D	D	D	D	D
325193	Ethyl alcohol mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	—	8	6	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	1	15	10	f	D	D	D	D	D	D	D	14 473
32521	Resin & synthetic rubber mfg.....	1	13	10	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	1	11	10	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	1	49	26	3 360	128 336	1 739	3 562	58 462	560 862	352 559	912 350	56 000
32541	Pharmaceutical & medicine mfg.....	1	49	26	3 360	128 336	1 739	3 562	58 462	560 862	352 559	912 350	56 000
325412	Pharmaceutical preparation mfg.....	2	20	7	1 078	36 841	567	1 362	19 843	100 484	104 665	202 964	D
325413	In-vitro diagnostic substance mfg.....	—	10	9	1 193	55 646	415	791	19 196	185 331	96 151	283 999	D
325414	Biological product (except diagnostic) mfg.....	—	11	7	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	1	53	21	1 507	61 714	744	1 540	25 624	233 935	188 201	421 067	6 334
32551	Paint & coating mfg.....	1	29	12	f	D	D	D	D	D	D	D	3 075
325510	Paint & coating mfg.....	1	29	12	f	D	D	D	D	D	D	D	3 075
32552	Adhesive mfg.....	2	24	9	f	D	D	D	D	D	D	D	3 259
325520	Adhesive mfg.....	2	24	9	f	D	D	D	D	D	D	D	3 259
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	32	8	836	31 829	440	933	12 629	125 288	124 192	248 346	D
32561	Soap & cleaning compound mfg.....	3	28	7	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg.....	1	8	3	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg....	9	4	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg....	9	4	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	—	44	19	4 269	238 748	2 201	4 492	87 881	421 061	563 268	1 008 391	58 635
32591	Printing ink mfg	1	13	5	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	13	5	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	31	14	h	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ...	1	13	6	e	D	D	D	D	D	D	D	2 178
325992	Photographic film, paper, plate, & chemical mfg	—	5	2	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	13	6	1 339	78 097	605	1 145	26 438	239 510	181 592	425 934	D
326	Plastics & rubber products mfg	1	170	87	7 359	244 164	5 569	10 745	145 260	634 789	541 925	1 188 352	47 837
3261	Plastics product mfg	2	142	75	6 494	211 938	4 953	9 604	130 254	522 442	442 506	976 692	43 128
32611	Unsupported plastics film, sheet, & bag mfg ..	—	15	10	897	28 468	691	1 190	15 999	95 389	70 159	168 506	5 399
326111	Unsupported plastics bag mfg	—	6	4	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	2	8	5	366	12 325	292	500	7 674	22 295	29 754	52 808	1 268
32614	Polystyrene foam product mfg	2	2	2	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	2	2	2	e	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	7	5	254	10 127	184	381	5 142	19 749	24 604	44 346	1 055
326150	Urethane & other foam product (except polystyrene) mfg	—	7	5	254	10 127	184	381	5 142	19 749	24 604	44 346	1 055
32616	Plastics bottle mfg	—	4	3	277	8 044	261	543	7 230	26 383	27 825	54 212	2 420
326160	Plastics bottle mfg	—	4	3	277	8 044	261	543	7 230	26 383	27 825	54 212	2 420
32619	Other plastics product mfg	2	100	52	4 299	144 838	3 203	6 173	87 973	332 660	264 354	603 934	26 720
326199	All other plastics product mfg	2	98	52	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	28	12	865	32 226	616	1 141	15 006	112 347	99 419	211 660	4 709
32629	Other rubber product mfg	—	25	11	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	19	10	739	26 719	539	983	12 580	99 230	88 791	187 878	4 437
327	Nonmetallic mineral product mfg	2	123	32	2 584	89 795	1 928	3 684	55 309	219 256	184 011	402 443	22 867
3271	Clay product & refractory mfg	1	21	7	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	16	6	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	1	21	2	376	14 269	320	622	11 241	44 151	28 788	71 481	D
32721	Glass & glass product mfg	1	21	2	376	14 269	320	622	11 241	44 151	28 788	71 481	D
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	45	18	1 024	36 437	768	1 487	24 345	89 360	93 877	183 624	13 393
32732	Ready-mix concrete mfg ..	3	19	10	499	20 861	394	843	15 489	56 242	66 880	123 077	10 281
327320	Ready-mix concrete mfg	3	19	10	499	20 861	394	843	15 489	56 242	66 880	123 077	10 281
32739	Other concrete product mfg	2	14	5	e	D	D	D	D	D	D	D	2 233
327390	Other concrete product mfg	2	14	5	e	D	D	D	D	D	D	D	2 233
3279	Other nonmetallic mineral product mfg	2	31	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	1	26	3	452	17 820	293	539	7 066	30 012	29 018	59 355	2 280

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	2	42	16	1 358	48 410	989	2 067	30 302	142 918	212 911	317 251	9 148
3313	Alumina & aluminum production & processing . .	8	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	8	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	—	2	1	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	2	30	8	558	17 699	459	944	13 197	34 056	19 104	53 382	987
33151	Ferrous metal foundries . .	—	10	4	282	8 887	239	524	7 392	17 925	8 149	26 187	340
33152	Nonferrous metal foundries	4	20	4	276	8 812	220	420	5 805	16 131	10 955	27 195	647
332	Fabricated metal product mfg	—	830	255	21 104	819 229	14 686	30 102	465 925	2 261 396	932 677	3 173 860	262 552
3321	Forging & stamping	—	48	18	1 658	58 274	1 285	2 681	37 762	126 206	74 221	199 822	D
33211	Forging & stamping	—	48	18	1 658	58 274	1 285	2 681	37 762	126 206	74 221	199 822	D
332116	Metal stamping	—	37	16	1 373	48 001	1 098	2 296	31 088	109 766	60 643	168 367	D
3322	Cutlery & handtool mfg	—	17	8	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg . . .	—	17	8	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	—	1	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	1	16	7	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	167	70	4 204	154 446	2 928	5 661	91 666	288 835	199 213	488 421	D
33231	Plate work & fabricated structural product mfg . .	1	38	15	729	26 176	485	1 030	14 722	60 641	41 286	102 252	D
332312	Fabricated structural metal mfg	2	28	9	461	16 494	293	609	8 784	42 020	28 900	70 984	D
33232	Ornamental & architectural metal products mfg	—	129	55	3 475	128 270	2 443	4 631	76 944	228 194	157 927	386 169	D
332322	Sheet metal work mfg	—	90	46	2 732	105 782	1 998	3 742	65 040	186 090	117 737	304 173	D
332323	Ornamental & architectural metal work mfg	—	30	6	f	D	D	D	D	D	D	D	1 491
3324	Boiler, tank, & shipping container mfg	—	18	6	395	13 938	272	586	6 686	33 099	37 358	71 944	D
3325	Hardware mfg	—	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
33251	Hardware mfg	—	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
332510	Hardware mfg	—	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
3326	Spring & wire product mfg . .	—	10	5	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	10	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	382	85	6 300	239 508	4 636	9 393	147 807	437 998	213 765	650 944	44 236
33271	Machine shops	1	321	55	4 412	169 606	3 186	6 315	104 718	310 390	158 268	470 081	33 016
332710	Machine shops	1	321	55	4 412	169 606	3 186	6 315	104 718	310 390	158 268	470 081	33 016
33272	Turned product & screw, nut, & bolt mfg	2	61	30	1 888	69 902	1 450	3 078	43 089	127 608	55 497	180 863	11 220
332721	Precision turned product mfg	2	47	24	1 262	44 827	979	2 052	29 975	90 506	32 003	119 242	8 073
332722	Bolt, nut, screw, rivet, & washer mfg	3	14	6	626	25 075	471	1 026	13 114	37 102	23 494	61 621	3 147
3328	Coating, engraving, heat treating, & allied activities .	1	104	37	1 944	66 512	1 471	3 244	41 279	127 890	36 984	165 493	D
33281	Coating, engraving, heat treating, & allied activities	1	104	37	1 944	66 512	1 471	3 244	41 279	127 890	36 984	165 493	D
332811	Metal heat treating	2	12	5	301	12 330	238	574	8 442	25 439	6 028	31 792	4 419
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	45	19	868	29 038	655	1 521	17 462	56 819	15 760	72 635	2 766
332813	Electroplating, plating, polishing, anodizing, & coloring	1	47	13	775	25 144	578	1 149	15 375	45 632	15 196	61 066	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	75	22	3 470	159 892	1 708	3 185	58 048	411 529	208 980	617 927	24 508
33291	Metal valve mfg.....	-	13	5	888	42 354	494	976	20 571	102 521	55 772	155 991	6 674
332911	Industrial valve mfg...	-	6	3	548	28 466	253	494	12 134	60 217	31 142	90 667	D
332913	Plumbing fixture fitting & trim mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	62	17	2 582	117 538	1 214	2 209	37 477	309 008	153 208	461 936	17 834
332993	Ammunition (except small arms) mfg....	-	5	5	1 465	79 261	425	667	14 144	214 458	108 976	322 828	D
332999	All other miscellaneous fabricated metal product mfg.....	1	42	11	938	32 066	644	1 206	18 657	77 862	35 688	113 838	3 876
333	Machinery mfg.....	1	341	135	15 699	708 297	8 343	16 570	284 937	1 666 844	1 336 032	3 019 286	130 848
3331	Agriculture, construction, & mining machinery mfg....	2	10	4	342	12 892	213	482	6 081	24 504	37 232	61 187	2 457
3332	Industrial machinery mfg ..	1	84	36	7 238	347 267	3 326	6 677	117 309	922 181	696 660	1 623 560	67 627
33322	Plastics & rubber industry machinery mfg.....	-	10	4	785	34 364	368	797	14 792	100 782	92 895	196 933	D
333220	Plastics & rubber industry machinery mfg.....	-	10	4	785	34 364	368	797	14 792	100 782	92 895	196 933	D
33329	Other industrial machinery mfg.....	1	71	31	6 422	312 144	2 933	5 847	102 058	820 377	603 088	1 425 056	63 660
333291	Paper industry machinery mfg.....	9	4	2	e	D	D	D	D	D	D	D	1 300
333293	Printing machinery & equipment mfg.....	5	12	7	906	39 539	496	1 153	16 741	65 801	55 773	121 394	3 108
333295	Semiconductor machinery mfg.....	-	15	11	3 546	181 660	1 550	2 825	50 629	560 410	415 359	975 755	26 155
333298	All other industrial machinery mfg.....	4	32	11	1 607	76 558	657	1 409	26 739	166 523	103 528	270 498	32 919
3333	Commercial & service industry machinery mfg ..	2	47	22	2 283	103 070	1 332	2 749	43 470	164 406	133 700	299 342	26 666
33331	Commercial & service industry machinery mfg.....	2	47	22	2 283	103 070	1 332	2 749	43 470	164 406	133 700	299 342	26 666
333314	Optical instrument & lens mfg.....	1	22	10	877	33 270	472	911	14 925	85 856	36 930	122 633	5 241
333315	Photographic & photocopying equipment mfg.....	2	7	3	973	54 740	582	1 293	21 359	47 603	65 739	114 584	D
333319	Other commercial & service industry machinery mfg.....	-	13	7	355	12 169	224	443	5 921	23 209	26 114	49 417	1 093
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	2	20	7	804	35 996	500	1 013	17 495	70 339	65 178	136 063	4 941
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	20	7	804	35 996	500	1 013	17 495	70 339	65 178	136 063	4 941
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	8	4	535	24 539	305	637	11 009	44 280	40 341	83 249	2 354
3335	Metalworking machinery mfg.....	2	70	15	892	33 162	577	1 077	18 452	64 475	37 463	102 337	3 570
33351	Metalworking machinery mfg.....	2	70	15	892	33 162	577	1 077	18 452	64 475	37 463	102 337	3 570
333512	Machine tool (metal cutting types) mfg ...	1	8	5	280	11 994	152	308	5 337	22 573	16 144	39 921	905
3336	Engine, turbine, & power transmission equipment mfg.....	1	12	4	276	12 727	186	358	5 953	25 655	18 137	42 835	1 280
33361	Engine, turbine, & power transmission equipment mfg.....	1	12	4	276	12 727	186	358	5 953	25 655	18 137	42 835	1 280

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	98	47	3 864	163 183	2 209	4 214	76 177	395 284	347 662	753 962	24 307
33391	Pump & compressor mfg	2	7	6	757	29 634	374	788	12 678	88 008	100 376	189 882	5 617
333912	Air & gas compressor mfg	3	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	2	15	9	330	11 695	201	455	6 468	19 833	34 847	55 140	1 007
33399	All other general-purpose machinery mfg	—	76	32	2 777	121 854	1 634	2 971	57 031	287 443	212 439	508 940	17 683
333993	Packaging machinery mfg	—	9	3	e	D	D	D	D	D	D	D	974
333994	Industrial process furnace & oven mfg ..	5	10	4	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	44	20	1 645	74 838	895	1 615	35 376	184 206	142 144	334 340	12 648
334	Computer & electronic product mfg	1	593	307	71 715	3 560 208	31 529	65 239	1 196 180	9 355 171	4 857 737	14 134 592	653 035
3341	Computer & peripheral equipment mfg	1	73	39	6 295	332 070	2 205	4 592	107 713	1 158 410	891 547	2 039 708	64 003
33411	Computer & peripheral equipment mfg	1	73	39	6 295	332 070	2 205	4 592	107 713	1 158 410	891 547	2 039 708	64 003
334111	Electronic computer mfg	—	15	7	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	8	4	752	39 985	86	216	2 893	53 725	98 246	156 767	D
334119	Other computer peripheral equipment mfg	1	45	26	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	62	40	10 627	558 748	6 358	12 857	310 138	1 324 035	714 951	2 043 614	D
33421	Telephone apparatus mfg	5	20	12	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	5	20	12	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	31	21	7 454	370 795	4 983	10 184	252 881	827 038	467 752	1 290 448	38 496
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	31	21	7 454	370 795	4 983	10 184	252 881	827 038	467 752	1 290 448	38 496
33429	Other communications equipment mfg	4	11	7	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	4	11	7	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	210	105	19 102	823 207	10 650	22 288	301 390	2 424 368	1 059 968	3 451 797	296 371
33441	Semiconductor & other electronic component mfg	—	210	105	19 102	823 207	10 650	22 288	301 390	2 424 368	1 059 968	3 451 797	296 371
334411	Electron tube mfg	—	6	2	f	D	D	D	D	D	D	D	1 339
334412	Bare printed circuit board mfg	—	30	13	1 460	60 317	724	1 668	20 478	174 321	92 602	259 613	10 616
334413	Semiconductor & related device mfg ...	—	47	23	6 679	302 222	3 454	6 599	110 790	1 029 702	330 775	1 342 388	216 745
334417	Electronic connector mfg	1	14	10	905	33 425	646	1 464	19 476	94 427	39 069	125 562	5 091
334418	Printed circuit assembly (electronic assembly) mfg	—	34	27	5 930	285 050	3 302	7 181	85 319	824 524	425 247	1 248 872	45 518
334419	Other electronic component mfg	2	59	24	3 145	108 048	1 842	4 039	46 931	212 990	145 776	359 920	16 297

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	209	113	34 208	1 788 198	11 330	23 490	446 000	4 287 122	1 995 540	6 244 357	197 807
33451	Navigational, measuring, medical, & control instruments mfg	-	209	113	34 208	1 788 198	11 330	23 490	446 000	4 287 122	1 995 540	6 244 357	197 807
334510	Electromedical & electrotherapeutic apparatus mfg	-	24	12	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	27	10	j	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	6	4	354	12 924	212	483	5 418	28 633	14 892	43 902	D
334513	Industrial process control instrument mfg	-	37	21	4 053	187 614	1 656	3 193	48 333	519 852	206 334	731 541	20 502
334515	Electricity measuring & testing instrument mfg	1	30	18	4 495	204 056	1 452	2 682	48 955	659 707	279 305	943 702	41 785
334516	Analytical laboratory instrument mfg	-	40	20	4 247	216 787	1 214	2 496	41 328	479 231	306 994	784 207	28 335
334517	Irradiation apparatus mfg	-	6	4	g	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	33	19	g	D	D	D	D	D	D	D	8 496
3346	Mfg & reproducing magnetic & optical media	1	26	6	f	D	D	D	D	D	D	D	25 320
33461	Mfg & reproducing magnetic & optical media	1	26	6	f	D	D	D	D	D	D	D	25 320
334613	Magnetic & optical recording media mfg	1	14	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	132	68	8 669	309 635	5 605	11 807	150 715	886 037	640 848	1 521 168	47 017
3351	Electric lighting equipment mfg	1	16	8	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	2	15	7	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	-	5	3	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	2	5	3	309	9 246	244	472	7 025	25 149	47 800	73 305	D
3353	Electrical equipment mfg	1	50	21	2 840	110 044	1 610	3 569	42 704	362 646	148 061	510 051	D
33531	Electrical equipment mfg	1	50	21	2 840	110 044	1 610	3 569	42 704	362 646	148 061	510 051	D
335313	Switchgear & switchboard apparatus mfg	-	9	6	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	27	13	1 122	45 425	596	1 076	14 550	103 347	79 863	183 002	D
3359	Other electrical equipment & component mfg	1	62	36	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	11	11	920	35 771	609	1 293	17 135	91 828	142 361	229 745	7 283
335929	Other communication & energy wire mfg	-	10	10	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	20	10	2 018	66 578	1 359	2 806	36 306	158 161	101 775	257 640	D
335931	Current-carrying wiring device mfg	-	16	7	1 338	44 750	827	1 696	22 524	128 310	85 788	209 442	7 611
335932	Noncurrent-carrying wiring device mfg	-	4	3	680	21 828	532	1 110	13 782	29 851	15 987	48 198	D
33599	All other electrical equipment & component mfg	3	27	14	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	3	26	14	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	106	37	7 538	364 140	4 882	9 426	202 821	840 113	1 245 170	2 113 979	66 453
3363	Motor vehicle parts mfg . . .	3	51	14	1 197	44 316	789	1 709	22 193	101 529	121 781	222 468	8 702
33632	Motor vehicle electrical & electronic equipment mfg	4	23	8	487	21 192	220	444	6 971	59 394	78 269	135 847	3 803
336322	Other motor vehicle electrical & electronic equipment mfg	4	23	8	487	21 192	220	444	6 971	59 394	78 269	135 847	3 803
33637	Motor vehicle metal stamping	—	6	4	331	13 421	243	638	8 205	25 525	21 913	48 293	D
336370	Motor vehicle metal stamping	—	6	4	331	13 421	243	638	8 205	25 525	21 913	48 293	D
3364	Aerospace product & parts mfg	—	16	12	5 745	302 800	3 641	6 851	169 693	712 491	1 092 377	1 833 687	56 755
33641	Aerospace product & parts mfg	—	16	12	5 745	302 800	3 641	6 851	169 693	712 491	1 092 377	1 833 687	56 755
336412	Aircraft engine & engine parts mfg	—	12	12	5 722	302 000	3 627	6 826	169 259	710 874	1 091 525	1 831 152	D
337	Furniture & related product mfg	1	179	29	2 756	84 204	2 064	4 214	53 299	188 925	164 706	355 571	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	131	17	1 677	51 200	1 251	2 539	32 954	105 848	71 424	177 661	4 986
33711	Wood kitchen cabinet & counter top mfg	3	70	5	443	13 826	348	733	9 796	26 721	21 044	48 026	657
337110	Wood kitchen cabinet & counter top mfg . . .	3	70	5	443	13 826	348	733	9 796	26 721	21 044	48 026	657
33712	Household & institutional furniture mfg	1	61	12	1 234	37 374	903	1 806	23 158	79 127	50 380	129 635	4 329
337122	Nonupholstered wood household furniture mfg	3	35	5	338	7 564	288	565	5 556	14 483	14 464	28 882	725
337127	Institutional furniture mfg	—	7	4	650	23 177	431	861	13 570	51 098	24 518	75 835	2 613
3372	Office furniture (including fixtures) mfg	1	32	7	522	16 508	385	805	9 575	25 235	32 819	58 815	D
33721	Office furniture (including fixtures) mfg	1	32	7	522	16 508	385	805	9 575	25 235	32 819	58 815	D
3379	Other furniture related product mfg	1	16	5	557	16 496	428	870	10 770	57 842	60 463	119 095	4 326
33791	Mattress mfg	1	8	5	479	14 758	373	762	9 741	54 614	56 854	112 156	4 254
337910	Mattress mfg	1	8	5	479	14 758	373	762	9 741	54 614	56 854	112 156	4 254
339	Miscellaneous mfg	1	449	117	13 147	520 051	7 079	13 937	175 951	1 322 361	879 569	2 197 289	66 910
3391	Medical equipment & supplies mfg	2	219	65	7 381	323 416	3 762	7 535	94 219	839 827	413 803	1 258 461	47 265
33911	Medical equipment & supplies mfg	2	219	65	7 381	323 416	3 762	7 535	94 219	839 827	413 803	1 258 461	47 265
339111	Laboratory apparatus & furniture mfg	—	23	10	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	2	76	36	4 893	236 441	2 414	5 013	59 255	634 748	301 188	937 892	38 456
339113	Surgical appliance & supplies mfg	2	23	11	747	26 140	483	961	13 436	74 572	28 541	104 273	2 936
339115	Ophthalmic goods mfg	—	12	3	452	12 969	185	346	3 443	41 107	16 413	56 406	856
339116	Dental laboratories . . .	6	74	5	e	D	D	D	D	D	D	D	685
3399	Other miscellaneous mfg . .	1	230	52	5 766	196 635	3 317	6 402	81 732	482 534	465 766	938 828	19 645
33991	Jewelry & silverware mfg	—	48	11	1 450	56 868	690	1 387	17 036	131 241	199 234	320 964	4 335
339911	Jewelry (except costume) mfg	2	25	3	380	13 380	225	436	5 603	42 324	40 026	82 137	798
339912	Silverware & plated ware mfg	—	6	4	861	38 124	295	638	8 111	80 427	151 012	222 098	D
33992	Sporting & athletic goods mfg	5	15	4	305	9 604	202	402	3 195	31 885	29 830	63 789	D
339920	Sporting & athletic goods mfg	5	15	4	305	9 604	202	402	3 195	31 885	29 830	63 789	D
33993	Doll, toy, & game mfg . . .	2	16	3	255	6 597	168	294	3 338	19 605	13 631	32 179	D
339932	Game, toy, & children's vehicle mfg	2	14	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg	1	68	9	733	22 357	482	901	12 786	39 214	20 890	59 811	1 213
339950	Sign mfg	1	68	9	733	22 357	482	901	12 786	39 214	20 890	59 811	1 213

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	1	68	22	2 811	95 494	1 629	3 152	42 089	246 135	194 514	439 858	11 458
339991	Gasket, packing, & sealing device mfg...	2	12	7	1 030	38 220	579	1 118	17 615	103 409	59 273	161 363	5 430
339992	Musical instrument mfg	1	15	6	435	13 782	292	578	7 009	35 618	12 036	47 241	2 348
339994	Broom, brush, & mop mfg	—	8	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	29	4	813	30 805	479	906	12 048	79 674	93 205	173 119	D
	Brockton, MA PMSA												
31-33	Manufacturing	1	375	123	11 201	384 240	7 239	14 218	197 546	910 110	659 218	1 559 397	50 442
311	Food mfg	2	21	7	469	13 361	341	620	8 634	32 338	36 907	69 221	2 336
312	Beverage & tobacco product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	1	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	13	3	388	10 636	232	431	5 009	36 641	74 799	112 698	D
3152	Cut & sew apparel mfg	—	12	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	3	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	16	6	646	17 837	552	962	10 563	41 999	36 627	82 660	1 635
3162	Footwear mfg	—	3	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	2	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	11	3	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	11	3	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	11	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	5	3	368	10 416	332	650	6 596	32 835	21 294	52 359	1 224
3222	Converted paper product mfg	1	5	3	368	10 416	332	650	6 596	32 835	21 294	52 359	1 224
323	Printing & related support activities.....	4	51	12	1 067	31 803	765	1 418	19 437	70 401	36 162	106 778	4 068
3231	Printing & related support activities.....	4	51	12	1 067	31 803	765	1 418	19 437	70 401	36 162	106 778	4 068
32311	Printing	4	45	11	1 012	29 712	723	1 320	17 989	64 765	35 452	100 625	D
323110	Commercial lithographic printing ..	3	22	8	820	22 420	582	1 075	13 552	48 902	25 755	74 881	2 435
325	Chemical mfg	6	7	4	405	11 551	245	463	5 877	27 966	19 224	47 015	D
3254	Pharmaceutical & medicine mfg	6	3	3	335	8 899	215	397	4 362	23 769	15 671	39 037	D
32541	Pharmaceutical & medicine mfg	6	3	3	335	8 899	215	397	4 362	23 769	15 671	39 037	D
326	Plastics & rubber products mfg	3	18	8	353	8 354	260	447	4 955	19 973	16 302	36 354	1 377
3261	Plastics product mfg	3	16	8	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	11	7	278	6 296	201	328	3 527	13 604	11 453	25 188	1 101
326199	All other plastics product mfg	3	11	7	278	6 296	201	328	3 527	13 604	11 453	25 188	1 101
327	Nonmetallic mineral product mfg	2	15	3	270	9 020	194	419	6 008	18 234	13 145	31 482	963
331	Primary metal mfg	—	8	5	386	15 497	295	628	10 495	27 676	21 715	49 352	3 170
3315	Foundries	1	7	4	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	4	4	e	D	D	D	D	D	D	D	D
331511	Iron foundries	—	4	4	e	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Brockton, MA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	79	19	1 528	54 842	1 070	2 077	30 590	120 772	65 960	182 268	6 135
3323	Architectural & structural metals mfg	-	18	5	275	7 988	187	373	4 932	20 006	13 532	33 578	692
33232	Ornamental & architectural metal products mfg	-	17	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	39	4	380	12 225	283	531	7 909	26 281	10 740	37 093	D
33271	Machine shops	2	33	3	303	9 338	223	402	5 859	19 452	7 814	27 249	1 500
332710	Machine shops	2	33	3	303	9 338	223	402	5 859	19 452	7 814	27 249	1 500
3329	Other fabricated metal product mfg	-	5	1	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	4	42	13	930	36 550	568	1 149	17 230	64 279	62 096	127 219	3 712
3332	Industrial machinery mfg ..	6	12	7	537	20 700	291	604	8 927	39 870	34 258	75 531	2 503
33329	Other industrial machinery mfg	6	10	6	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	18	11	858	30 758	513	911	12 097	60 318	36 551	96 047	3 951
3344	Semiconductor & other electronic component mfg	1	12	9	572	18 499	420	740	9 425	36 963	22 611	59 015	3 757
33441	Semiconductor & other electronic component mfg	1	12	9	572	18 499	420	740	9 425	36 963	22 611	59 015	3 757
334418	Printed circuit assembly (electronic assembly) mfg	1	6	6	309	8 415	222	351	3 778	21 279	14 446	34 997	3 045
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	10	7	940	22 185	491	1 038	10 863	64 257	32 829	97 135	D
3351	Electric lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	5	4	288	8 370	202	435	4 684	26 626	18 903	45 246	D
33531	Electrical equipment mfg	1	5	4	288	8 370	202	435	4 684	26 626	18 903	45 246	D
335312	Motor & generator mfg	-	3	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	19	6	335	9 946	251	521	6 630	20 454	16 106	36 707	652
339	Miscellaneous mfg	-	31	10	1 559	76 229	618	1 309	24 646	213 961	87 007	292 884	12 381
3391	Medical equipment & supplies mfg	-	16	6	1 272	64 791	474	967	20 336	179 948	56 066	226 797	11 880
33911	Medical equipment & supplies mfg	-	16	6	1 272	64 791	474	967	20 336	179 948	56 066	226 797	11 880
339113	Surgical appliance & supplies mfg	-	3	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	15	4	287	11 438	144	342	4 310	34 013	30 941	66 087	501

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Fitchburg—Leominster, MA PMSA												
31-33	Manufacturing	3	333	120	14 092	502 995	9 744	20 196	278 587	1 601 900	1 330 079	2 937 874	133 995
311	Food mfg	—	16	5	337	8 603	194	324	4 274	48 746	53 568	102 267	1 037
315	Apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	9	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	9	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	15	9	1 273	51 191	928	2 014	28 573	131 336	140 474	268 025	16 844
3221	Pulp, paper, & paperboard mills	—	5	4	428	21 925	274	727	11 637	60 672	78 982	137 090	8 876
32212	Paper mills	—	5	4	428	21 925	274	727	11 637	60 672	78 982	137 090	8 876
322121	Paper (except newsprint) mills	—	5	4	428	21 925	274	727	11 637	60 672	78 982	137 090	8 876
3222	Converted paper product mfg	—	10	5	845	29 266	654	1 287	16 936	70 664	61 492	130 935	7 968
32221	Paperboard container mfg	—	8	5	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	2	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	4	3	505	14 976	394	753	9 981	41 194	28 975	68 780	4 175
323	Printing & related support activities	2	26	5	498	16 302	344	713	10 910	32 618	25 430	58 863	9 346
3231	Printing & related support activities	2	26	5	498	16 302	344	713	10 910	32 618	25 430	58 863	9 346
32311	Printing	2	24	5	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	14	4	341	11 518	235	475	8 093	22 668	18 111	41 584	D
325	Chemical mfg	—	24	13	1 189	44 907	677	1 335	23 666	104 350	254 630	355 712	23 258
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	5	5	294	12 569	192	375	6 917	34 760	53 233	86 519	2 896
32521	Resin & synthetic rubber mfg	—	5	5	294	12 569	192	375	6 917	34 760	53 233	86 519	2 896
3259	Other chemical product mfg	—	14	8	862	31 112	465	925	16 002	65 750	197 085	261 078	19 561
32599	All other chemical product & preparation mfg	—	14	8	862	31 112	465	925	16 002	65 750	197 085	261 078	19 561
325991	Custom compounding of purchased resin ...	—	12	7	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	58	29	3 038	90 640	2 554	5 774	64 966	273 673	288 098	562 094	30 714
3261	Plastics product mfg	1	57	29	h	D	D	D	D	D	D	D	30 714
32619	Other plastics product mfg	1	50	27	2 872	85 598	2 407	5 487	60 933	260 121	262 778	523 430	30 255
326199	All other plastics product mfg	1	49	27	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	3	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	54	10	1 617	53 844	1 193	2 348	31 276	108 610	76 647	186 453	6 193
3322	Cutlery & handtool mfg	—	3	1	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	3	1	e	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	—	1	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	9	3	424	17 732	265	584	9 467	30 349	22 122	54 750	D
33231	Plate work & fabricated structural product mfg ..	—	4	3	370	15 902	226	505	8 312	26 191	19 628	48 109	D
332313	Plate work mfg	—	3	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	2	1	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	1	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	1	e	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
31-33	Fitchburg—Leominster, MA PMSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	—	39	10	1 265	58 134	808	1 601	32 353	134 636	58 489	190 731	4 294
3335	Metalworking machinery mfg	3	28	6	400	17 145	317	664	12 736	27 193	11 029	37 828	1 609
33351	Metalworking machinery mfg	3	28	6	400	17 145	317	664	12 736	27 193	11 029	37 828	1 609
333511	Industrial mold mfg ...	3	17	4	275	12 607	221	476	9 609	19 724	6 803	26 151	1 127
3336	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	6	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	9	5	3	396	19 990	308	610	12 931	53 664	88 586	144 169	D
3359	Other electrical equipment & component mfg	9	5	3	396	19 990	308	610	12 931	53 664	88 586	144 169	D
33592	Communication & energy wire & cable mfg	9	3	3	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	9	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	33	14	931	26 348	693	1 326	18 129	56 100	35 222	91 186	1 966
3371	Household & institutional furniture & kitchen cabinet mfg	2	29	12	862	23 996	651	1 242	16 817	46 208	31 859	77 914	D
33712	Household & institutional furniture mfg	2	25	9	789	22 246	599	1 134	15 828	42 868	29 484	72 144	1 679
337122	Nonupholstered wood household furniture mfg	—	15	6	575	16 218	442	871	11 707	33 736	22 706	55 912	1 069
339	Miscellaneous mfg	2	20	4	324	8 746	246	431	4 973	18 711	15 826	34 720	657
	Lawrence, MA—NH PMSA												
31-33	Manufacturing	—	615	222	32 584	1 302 783	20 926	41 446	670 568	6 674 863	4 091 443	10 755 677	499 323
	Lawrence, MA—NH PMSA (MA Part)	—	389	160	25 972	1 082 081	16 696	33 198	554 503	4 316 177	3 054 611	7 364 993	465 556
	Lawrence, MA—NH PMSA (NH Part)	—	226	62	6 612	220 702	4 230	8 248	116 065	2 358 686	1 036 832	3 390 684	33 767
311	Food mfg	3	46	10	f	D	D	D	D	D	D	D	9 075
3118	Bakeries & tortilla mfg	1	29	5	517	12 383	306	561	5 554	25 639	26 970	52 405	1 233
31181	Bread & bakery product mfg	3	27	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	2	12	3	271	6 184	199	415	4 006	12 519	8 718	21 237	746
313	Textile mills	—	11	5	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	7	4	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	4	2	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	2	19	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	1	12	2	357	8 560	295	583	6 070	9 436	24 115	33 552	D
31499	All other textile product mills	1	7	2	337	7 882	282	559	5 776	8 607	18 262	26 866	D
314999	All other miscellaneous textile product mills ..	1	7	2	337	7 882	282	559	5 776	8 607	18 262	26 866	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.													
	Lawrence, MA—NH PMSA—Con.													
31-33	Manufacturing—Con.													
315	Apparel mfg	3	9	5	f	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg ...	3	6	4	f	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg.....	9	1	1	e	D	D	D	D	D	D	D	D	
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	9	1	1	e	D	D	D	D	D	D	D	D	
316	Leather & allied product mfg .	—	12	2	f	D	D	D	D	D	D	D	D	
3162	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D	
31621	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D	
316211	Rubber & plastics footwear mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	
316214	Women's footwear (except athletic) mfg .	—	1	1	e	D	D	D	D	D	D	D	D	
321	Wood product mfg	1	25	11	e	D	D	D	D	D	D	D	D	
3219	Other wood product mfg ...	2	23	9	e	D	D	D	D	D	D	D	D	
322	Paper mfg	—	17	13		1 086	43 169	855	1 821	28 711	94 759	122 192	216 993	11 665
3221	Pulp, paper, & paperboard mills	—	4	3	e	D	D	D	D	D	D	D	D	
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D	
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	1	13	10	f	D	D	D	D	D	D	D	D	
32221	Paperboard container mfg	1	9	7		452	12 339	375	747	8 934	18 784	32 265	50 297	1 515
323	Printing & related support activities.....	3	53	13		865	28 880	650	1 241	19 050	59 056	26 371	85 128	3 931
3231	Printing & related support activities.....	3	53	13		865	28 880	650	1 241	19 050	59 056	26 371	85 128	3 931
32311	Printing	3	48	11		712	22 568	537	1 017	14 820	48 326	24 109	72 162	2 779
323110	Commercial lithographic printing ..	2	21	7		415	13 937	322	627	9 781	28 689	13 669	42 066	2 014
325	Chemical mfg	—	22	7	g	D	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	7	4	f	D	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	7	4	f	D	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	6	3	f	D	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	4	1	f	D	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	2	1	f	D	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	—	2	1	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	29	17		2 041	75 371	1 342	2 754	41 651	160 780	155 162	310 646	16 920
3261	Plastics product mfg	4	27	17	g	D	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	4	7	7	g	D	D	D	D	D	D	D	D	12 110
326113	Unsupported plastics film & sheet (except packaging) mfg	4	5	5		1 141	43 200	735	1 539	26 439	92 505	102 353	189 173	D
32619	Other plastics product mfg	3	14	6		358	9 931	234	444	5 439	17 351	12 292	30 020	2 022
326199	All other plastics product mfg.....	3	14	6		358	9 931	234	444	5 439	17 351	12 292	30 020	2 022
332	Fabricated metal product mfg	1	129	33		2 531	88 260	1 797	3 576	52 840	191 148	180 630	373 231	15 611
3323	Architectural & structural metals mfg	4	20	5		288	9 667	194	429	5 335	17 325	16 305	33 829	1 388
3324	Boiler, tank, & shipping container mfg	—	5	2	e	D	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	64	12		927	31 263	694	1 305	19 237	58 490	26 773	84 921	7 507
33271	Machine shops	1	55	9		696	21 574	538	959	13 992	36 616	17 009	53 327	4 150
332710	Machine shops	1	55	9		696	21 574	538	959	13 992	36 616	17 009	53 327	4 150
3328	Coating, engraving, heat treating, & allied activities .	1	18	8		524	15 044	372	790	9 234	36 602	14 562	51 307	2 758
33281	Coating, engraving, heat treating, & allied activities.....	1	18	8		524	15 044	372	790	9 234	36 602	14 562	51 307	2 758
332813	Electroplating, plating, polishing, anodizing, & coloring	2	9	5		354	8 826	250	546	5 141	16 431	5 332	21 767	1 161

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lawrence, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	11	4	342	13 945	218	408	6 421	28 770	35 711	64 710	1 192
333	Machinery mfg.....	1	57	24	1 769	69 984	1 062	2 088	34 794	163 574	120 316	283 481	9 537
3332	Industrial machinery mfg ..	-	19	8	519	17 947	313	620	9 357	39 881	32 280	72 640	3 119
33329	Other industrial machinery mfg.....	-	16	8	502	17 485	301	601	9 120	38 754	31 709	70 957	D
3333	Commercial & service industry machinery mfg ..	-	13	5	336	11 858	211	445	6 358	25 964	16 368	42 579	1 778
33331	Commercial & service industry machinery mfg.....	-	13	5	336	11 858	211	445	6 358	25 964	16 368	42 579	1 778
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	7	5	336	13 506	243	495	8 683	27 705	31 659	60 958	1 905
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	4	7	5	336	13 506	243	495	8 683	27 705	31 659	60 958	1 905
3339	Other general-purpose machinery mfg	-	8	4	435	21 350	208	329	7 388	59 649	35 148	92 111	D
33391	Pump & compressor mfg	-	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	101	52	14 121	645 606	8 683	16 937	314 492	4 575 434	2 505 688	7 114 531	142 221
3341	Computer & peripheral equipment mfg	-	9	3	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	9	3	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	5	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	13	7	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	3	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	6	8	5	302	11 391	202	379	6 380	24 909	15 041	40 624	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	6	8	5	302	11 391	202	379	6 380	24 909	15 041	40 624	D
3344	Semiconductor & other electronic component mfg	1	55	30	4 518	152 345	3 001	6 010	79 820	371 207	303 949	679 314	46 065
33441	Semiconductor & other electronic component mfg	1	55	30	4 518	152 345	3 001	6 010	79 820	371 207	303 949	679 314	46 065
334412	Bare printed circuit board mfg	-	19	12	2 221	71 588	1 549	3 146	41 484	188 795	148 994	339 346	18 645
334413	Semiconductor & related device mfg...	8	11	6	451	17 825	289	555	7 705	45 539	21 761	67 470	11 675
334418	Printed circuit assembly (electronic assembly) mfg	-	5	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	12	6	1 378	48 556	861	1 705	23 135	91 879	84 202	178 892	D
3345	Navigational, measuring, medical, & control instruments mfg	-	21	11	3 624	230 042	1 505	3 667	62 313	655 690	483 869	1 152 464	28 730
33451	Navigational, measuring, medical, & control instruments mfg	-	21	11	3 624	230 042	1 505	3 667	62 313	655 690	483 869	1 152 464	28 730
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	2	h	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	3	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lawrence, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	13	6	1 527	61 923	501	781	12 980	173 763	117 922	293 315	D
3353	Electrical equipment mfg ..	-	6	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	6	3	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	3	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	35	12	1 373	44 636	734	1 425	17 775	122 270	92 510	228 945	5 197
3391	Medical equipment & supplies mfg	-	15	4	578	16 718	315	585	6 699	30 571	32 653	74 885	1 880
33911	Medical equipment & supplies mfg	-	15	4	578	16 718	315	585	6 699	30 571	32 653	74 885	1 880
339112	Surgical & medical instrument mfg	-	5	3	495	14 443	252	496	5 552	23 854	27 961	63 352	D
3399	Other miscellaneous mfg ..	-	20	8	795	27 918	419	840	11 076	91 699	59 857	154 060	3 317
33999	All other miscellaneous mfg	-	10	6	634	23 648	320	657	9 424	80 974	42 810	126 525	2 584
339991	Gasket, packing, & sealing device mfg...	-	4	4	f	D	D	D	D	D	D	D	D
	Lowell, MA—NH PMSA												
31-33	Manufacturing	1	460	176	23 531	977 469	11 934	23 747	365 205	3 014 245	2 005 755	5 008 323	243 424
	Lowell, MA—NH PMSA (MA Part)	1	443	175	23 270	970 625	11 710	23 380	360 122	3 000 011	1 990 314	4 979 117	D
	Lowell, MA—NH PMSA (NH Part)	1	17	1	261	6 844	224	367	5 083	14 234	15 441	29 206	D
311	Food mfg	-	20	6	609	19 888	347	668	6 805	70 067	67 815	144 309	4 761
312	Beverage & tobacco product mfg	-	2	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	-	12	7	661	18 645	563	1 154	14 301	48 843	72 881	121 986	5 684
3131	Fiber, yarn, & thread mills ..	-	3	3	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	3	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	9	984	36 141	718	1 589	25 781	91 859	113 747	206 254	4 759
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	5	5	423	13 902	323	709	10 222	20 824	28 955	50 148	648
32222	Paper bag & coated & treated paper mfg	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	34	6	554	19 862	387	754	11 195	36 190	23 003	59 454	1 847
3231	Printing & related support activities.....	3	34	6	554	19 862	387	754	11 195	36 190	23 003	59 454	1 847
32311	Printing	4	31	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	6	1 334	68 505	572	1 199	22 258	342 225	71 108	409 272	18 170
3254	Pharmaceutical & medicine mfg	-	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	6	15	6	488	14 014	363	793	8 959	40 351	30 485	70 323	2 858
3261	Plastics product mfg	6	13	6	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	11	5	437	12 329	331	723	8 020	35 870	24 654	60 069	2 532
326199	All other plastics product mfg.....	7	11	5	437	12 329	331	723	8 020	35 870	24 654	60 069	2 532
327	Nonmetallic mineral product mfg	5	12	5	270	9 910	223	410	6 212	26 694	14 907	40 294	1 713

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lowell, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	8	5	f	D	D	D	D	D	D	D	7 242
3315	Foundries	—	2	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	1	1	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	107	25	1 597	57 986	1 224	2 344	36 069	106 870	56 391	163 424	9 405
3323	Architectural & structural metals mfg	1	16	5	e	D	D	D	D	D	D	D	1 460
33232	Ornamental & architectural metal products mfg	1	14	4	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg .	1	12	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	68	13	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	60	10	665	24 684	515	953	17 340	42 339	18 854	61 315	5 141
332710	Machine shops	2	60	10	665	24 684	515	953	17 340	42 339	18 854	61 315	5 141
333	Machinery mfg	5	47	20	2 614	140 347	1 395	3 044	59 200	274 406	259 117	536 635	20 762
3332	Industrial machinery mfg ..	6	15	7	1 685	99 614	872	1 958	40 247	211 995	190 954	402 046	13 826
33329	Other industrial machinery mfg	6	15	7	1 685	99 614	872	1 958	40 247	211 995	190 954	402 046	13 826
333295	Semiconductor machinery mfg	8	4	4	1 366	83 719	741	1 667	34 943	167 839	160 395	327 606	12 000
3333	Commercial & service industry machinery mfg ..	3	13	7	540	23 650	313	612	10 886	48 334	23 569	71 522	3 841
33331	Commercial & service industry machinery mfg	3	13	7	540	23 650	313	612	10 886	48 334	23 569	71 522	3 841
333314	Optical instrument & lens mfg	—	7	3	280	10 571	181	357	6 104	23 010	7 045	29 820	D
3339	Other general-purpose machinery mfg	—	9	3	257	11 925	115	288	5 154	8 420	39 492	51 170	2 557
334	Computer & electronic product mfg	—	108	59	10 795	456 955	4 053	7 855	120 565	1 627 616	1 030 371	2 640 857	152 343
3341	Computer & peripheral equipment mfg	—	10	4	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	10	4	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	19	9	5 067	216 768	1 510	2 763	52 389	836 145	380 769	1 192 357	D
33421	Telephone apparatus mfg	—	5	4	3 680	161 167	932	1 659	31 754	701 999	317 804	1 003 311	67 443
334210	Telephone apparatus mfg	—	5	4	3 680	161 167	932	1 659	31 754	701 999	317 804	1 003 311	67 443
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	49	27	3 286	126 871	1 635	3 160	37 896	328 076	302 360	647 074	31 739
33441	Semiconductor & other electronic component mfg	1	49	27	3 286	126 871	1 635	3 160	37 896	328 076	302 360	647 074	31 739
334412	Bare printed circuit board mfg	5	13	6	565	13 536	450	966	8 523	26 698	13 105	39 758	1 862
334413	Semiconductor & related device mfg ...	1	9	7	1 113	42 949	511	772	12 081	163 507	86 497	263 159	17 979
334418	Printed circuit assembly (electronic assembly) mfg	—	12	10	1 288	61 205	428	999	12 290	122 001	184 581	309 728	10 703

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.													
	Lowell, MA—NH PMSA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3345	Navigational, measuring, medical, & control instruments mfg	2	29	19	g	D	D	D	D	D	D	D	22 590	
33451	Navigational, measuring, medical, & control instruments mfg	2	29	19	g	D	D	D	D	D	D	D	22 590	
334511	Search, detection, navigation, & guidance instrument mfg	5	3	2	e	D	D	D	D	D	D	D	D	
334513	Industrial process control instrument mfg	1	3	3		308	14 057	66	136	1 966	60 947	17 816	75 417	D
334515	Electricity measuring & testing instrument mfg	3	5	5	e	D	D	D	D	D	D	D	5 479	
334516	Analytical laboratory instrument mfg	—	10	5		478	18 431	188	369	5 849	33 632	17 377	52 949	2 290
335	Electrical equipment, appliance, & component mfg	2	12	7		542	23 801	236	483	7 167	63 557	40 451	103 489	4 678
3359	Other electrical equipment & component mfg	3	8	5	e	D	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	5	3		279	12 080	100	226	3 195	34 054	24 535	57 684	3 354
335999	All other miscellaneous electrical equipment & component mfg	4	5	3		279	12 080	100	226	3 195	34 054	24 535	57 684	3 354
336	Transportation equipment mfg	5	7	3		322	10 425	257	482	7 034	9 882	14 562	24 799	1 432
3363	Motor vehicle parts mfg ...	5	7	3		322	10 425	257	482	7 034	9 882	14 562	24 799	1 432
337	Furniture & related product mfg	1	10	4		359	9 319	268	477	4 767	19 258	26 519	46 371	1 436
339	Miscellaneous mfg	—	27	5		1 141	51 569	525	799	14 180	83 509	40 024	124 184	3 736
3391	Medical equipment & supplies mfg	—	13	5		1 092	50 049	491	719	13 160	82 478	33 495	116 623	3 120
33911	Medical equipment & supplies mfg	—	13	5		1 092	50 049	491	719	13 160	82 478	33 495	116 623	3 120
339112	Surgical & medical instrument mfg	—	6	2	f	D	D	D	D	D	D	D	D	D
	New Bedford, MA PMSA													
31-33	Manufacturing	1	241	84		12 622	373 831	9 793	19 583	248 008	997 383	801 612	1 826 808	81 508
311	Food mfg	2	38	8		1 276	26 669	706	1 064	10 435	90 063	96 001	186 125	4 027
3117	Seafood product preparation & packaging ..	2	15	5		502	12 026	377	604	5 750	57 319	78 185	135 501	D
31171	Seafood product preparation & packaging ..	2	15	5		502	12 026	377	604	5 750	57 319	78 185	135 501	D
311712	Fresh & frozen seafood processing ..	2	13	5	e	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	16	2	f	D	D	D	D	D	D	D	D	707
31181	Bread & bakery product mfg	—	16	2	f	D	D	D	D	D	D	D	D	707
311812	Commercial bakeries ..	—	5	1	f	D	D	D	D	D	D	D	D	573
313	Textile mills	2	13	8		639	18 081	512	1 106	11 372	40 956	29 392	70 124	D
3132	Fabric mills	1	7	4	e	D	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	4	3		324	9 758	261	548	6 145	20 287	12 092	32 673	D
31331	Textile & fabric finishing mills	1	3	2	e	D	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	—	2	2	e	D	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	New Bedford, MA PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	6	22	16	2 353	46 899	2 101	4 338	38 221	83 083	84 170	166 046	1 507
3152	Cut & sew apparel mfg	6	21	16	g	D	D	D	D	D	D	D	1 507
31521	Cut & sew apparel contractors	3	8	6	553	9 457	514	1 025	7 821	13 178	1 663	14 777	226
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	8	6	553	9 457	514	1 025	7 821	13 178	1 663	14 777	226
31522	Men's & boys' cut & sew apparel mfg	7	4	4	1 277	30 921	1 132	2 575	24 933	61 997	61 863	123 807	1 195
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	7	3	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	8	5	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	4	3	298	3 470	265	399	3 086	3 330	16 697	18 956	D
323	Printing & related support activities	—	15	5	281	8 371	221	417	5 268	16 625	8 313	24 902	932
3231	Printing & related support activities	—	15	5	281	8 371	221	417	5 268	16 625	8 313	24 902	932
32311	Printing	—	13	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	5	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	3	2	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	10	4	1 245	33 480	1 040	1 831	22 480	83 644	40 314	121 222	1 824
3262	Rubber product mfg	—	3	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	3	1	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	3	3	530	22 531	323	675	12 460	75 712	98 930	167 167	1 870
3312	Steel product mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	27	6	640	19 153	516	999	13 834	42 472	30 609	72 947	2 434
333	Machinery mfg	1	18	6	441	13 943	282	495	7 331	13 378	35 156	49 479	2 572
334	Computer & electronic product mfg	—	8	5	674	21 865	494	898	12 784	50 376	25 367	72 396	4 220
3344	Semiconductor & other electronic component mfg	—	2	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	5	3	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	5	3	e	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	New Bedford, MA PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	6	3	1 333	35 681	1 021	2 238	21 655	93 392	126 630	222 072	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	6	1 732	69 214	1 494	3 288	57 265	306 264	92 320	421 991	D
3391	Medical equipment & supplies mfg	-	7	3	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	7	3	e	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	2	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	7	3	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	1	1	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	1	1	g	D	D	D	D	D	D	D	D
	Worcester, MA—CT PMSA												
31-33	Manufacturing	1	857	337	39 051	1 535 603	25 057	50 712	739 514	3 727 749	2 859 933	6 584 341	300 448
	Worcester, MA—CT PMSA (CT Part)	-	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Worcester, MA—CT PMSA (MA Part)	1	838	330	38 504	1 515 246	24 672	49 868	729 244	3 683 823	2 831 220	6 513 097	297 798
311	Food mfg	1	42	15	1 144	30 663	760	1 453	18 638	139 064	110 143	249 075	6 542
3118	Bakeries & tortilla mfg	-	29	10	582	13 870	369	681	8 349	97 184	43 826	141 135	D
31181	Bread & bakery product mfg	-	28	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	11	7	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	1	f	D	D	D	D	D	D	D	D
313	Textile mills	3	17	10	1 360	38 756	989	2 131	27 235	126 992	105 243	237 123	6 007
3132	Fabric mills	9	4	3	561	12 351	357	830	8 879	19 397	20 095	44 016	2 601
31321	Broadwoven fabric mills ..	9	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	3	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	1	8	5	f	D	D	D	D	D	D	D	3 014
31331	Textile & fabric finishing mills	1	4	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	1	4	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	24	8	448	13 350	307	542	6 897	25 552	22 859	48 388	1 530
3219	Other wood product mfg ...	2	20	7	415	12 456	280	491	6 187	23 559	20 867	44 402	1 357
322	Paper mfg	-	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
3222	Converted paper product mfg	-	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
32221	Paperboard container mfg	-	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
322211	Corrugated & solid fiber box mfg	-	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
32222	Paper bag & coated & treated paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975
322232	Envelope mfg	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Worcester, MA—CT PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
3231	Printing & related support activities.....	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
32311	Printing.....	1	69	13	1 101	34 073	788	1 380	21 426	57 746	36 317	93 945	3 780
323110	Commercial lithographic printing ..	-	37	9	788	23 394	589	1 014	15 733	38 363	25 915	64 419	2 829
32312	Support activities for printing.....	-	14	3	261	6 867	189	351	4 593	11 185	2 909	14 155	898
325	Chemical mfg.....	1	26	13	2 362	126 708	1 019	2 035	32 379	460 163	277 618	741 405	41 173
3254	Pharmaceutical & medicine mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	4	14	8	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	4	13	8	550	20 643	406	780	10 712	39 353	78 171	118 373	D
325991	Custom compounding of purchased resin...	4	10	8	f	D	D	D	D	D	D	D	3 506
326	Plastics & rubber products mfg.....	1	58	32	3 051	120 581	2 306	4 693	68 698	253 626	172 492	424 547	19 108
3261	Plastics product mfg.....	1	53	30	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	4	3	266	11 203	201	469	6 247	33 321	35 137	68 065	2 176
32619	Other plastics product mfg.....	2	35	22	2 097	84 621	1 589	3 118	47 101	152 272	84 074	236 453	12 709
326199	All other plastics product mfg.....	2	34	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	30	16	3 875	173 034	2 328	4 786	72 500	354 032	223 247	576 227	57 969
3271	Clay product & refractory mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.	-	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
32721	Glass & glass product mfg.....	-	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
327215	Glass product mfg made of purchased glass.....	-	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	12	8	h	D	D	D	D	D	D	D	D
32791	Abrasive product mfg....	-	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
327910	Abrasive product mfg..	-	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
331	Primary metal mfg.....	1	15	7	550	19 512	410	881	13 106	40 004	48 569	87 663	4 259
3312	Steel product mfg from purchased steel.....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
33122	Rolling & drawing of purchased steel.....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
331222	Steel wire drawing....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
332	Fabricated metal product mfg.....	1	205	74	7 254	271 560	5 331	11 104	159 692	572 796	379 319	952 849	34 829
3321	Forging & stamping.....	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
33211	Forging & stamping....	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
332111	Iron & steel forging...	8	2	2	g	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg....	-	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
33221	Cutlery & handtool mfg..	-	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
332211	Cutlery & flatware (except precious) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg.	-	7	5	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	2	23	7	402	13 626	300	607	9 134	23 806	20 898	44 651	1 334

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	Worcester, MA—CT PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	—	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
33261	Spring & wire product mfg	—	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
332612	Spring (light gauge) mfg	—	4	3	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	12	7	f	D	D	D	D	D	D	D	3 854
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	93	21	1 356	50 825	1 012	2 137	32 929	97 453	37 653	135 250	4 793
33271	Machine shops	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
332710	Machine shops	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
33272	Turned product & screw, nut, & bolt mfg	—	12	7	322	11 158	246	505	7 403	20 386	12 197	32 694	1 177
3328	Coating, engraving, heat treating, & allied activities .	—	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652
33281	Coating, engraving, heat treating, & allied activities	—	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652
3329	Other fabricated metal product mfg	—	21	10	1 553	65 649	998	2 118	34 598	158 603	126 225	290 771	7 770
33291	Metal valve mfg	—	9	5	1 102	48 455	681	1 404	24 490	117 722	99 327	222 867	5 291
332911	Industrial valve mfg	—	6	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	12	5	451	17 194	317	714	10 108	40 881	26 898	67 904	2 479
332999	All other miscellaneous fabricated metal product mfg	—	7	3	294	10 924	198	410	6 223	28 853	18 902	47 901	1 659
333	Machinery mfg	3	117	49	4 628	194 380	2 794	5 716	95 090	417 324	287 531	698 313	23 756
3331	Agriculture, construction, & mining machinery mfg	—	4	4	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	3	18	8	858	38 896	461	967	16 456	93 400	73 699	161 339	4 666
33322	Plastics & rubber industry machinery mfg	—	5	4	e	D	D	D	D	D	D	D	450
333220	Plastics & rubber industry machinery mfg	—	5	4	e	D	D	D	D	D	D	D	450
33329	Other industrial machinery mfg	4	12	4	601	29 222	319	695	12 531	74 299	61 350	129 798	4 216
3333	Commercial & service industry machinery mfg	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
33331	Commercial & service industry machinery mfg	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
333314	Optical instrument & lens mfg	1	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
33351	Metalworking machinery mfg	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
333511	Industrial mold mfg	4	15	4	285	16 042	224	526	10 422	28 233	9 332	36 434	2 174
333514	Special die & tool, die set, jig, & fixture mfg	2	23	7	363	15 722	268	551	9 788	28 375	10 543	38 535	2 519
333515	Cutting tool & machine tool accessory mfg	—	7	1	e	D	D	D	D	D	D	D	D
333516	Rolling mill machinery & equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
33361	Engine, turbine, & power transmission equipment mfg	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
3339	Other general-purpose machinery mfg	1	21	10	534	22 423	290	622	8 838	51 694	38 190	87 792	4 475
33399	All other general-purpose machinery mfg	1	16	7	436	18 618	221	480	6 507	42 531	30 092	71 218	3 137
333999	All other miscellaneous general-purpose machinery mfg	1	10	7	386	16 722	187	408	5 345	38 026	27 749	64 404	2 798

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Worcester, MA—CT PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	—	44	20	4 210	196 517	2 090	3 991	61 408	545 761	436 981	976 182	52 067
3341	Computer & peripheral equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	5	3	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
33441	Semiconductor & other electronic component mfg	—	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
334413	Semiconductor & related device mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
33451	Navigational, measuring, medical, & control instruments mfg	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
335	Electrical equipment, appliance, & component mfg	3	24	17	1 883	83 906	1 214	2 446	39 732	202 108	184 922	386 797	13 153
3359	Other electrical equipment & component mfg	3	16	13	1 589	72 061	1 044	2 113	34 990	168 685	166 069	334 876	D
33592	Communication & energy wire & cable mfg	3	10	10	1 336	61 142	904	1 797	30 626	141 144	147 072	286 982	10 659
335929	Other communication & energy wire mfg ...	3	9	9	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	11	5	313	10 911	156	294	4 332	19 567	20 610	41 291	1 359
337	Furniture & related product mfg	—	30	9	1 129	36 757	874	1 549	21 357	69 486	76 317	145 385	5 148
3371	Household & institutional furniture & kitchen cabinet mfg	1	17	3	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	12	3	295	7 999	243	427	5 746	10 900	8 525	19 183	287
3372	Office furniture (including fixtures) mfg	—	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
33721	Office furniture (including fixtures) mfg	—	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
337214	Office furniture (except wood) mfg	—	1	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	6	3	285	8 967	224	483	6 063	15 537	10 420	25 692	D
339	Miscellaneous mfg	1	66	18	2 031	59 600	1 322	2 620	27 933	138 954	74 212	217 713	7 465
3391	Medical equipment & supplies mfg	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
33911	Medical equipment & supplies mfg	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
339115	Ophthalmic goods mfg	—	6	5	1 204	38 235	746	1 514	16 224	78 161	35 703	118 664	5 234
3399	Other miscellaneous mfg ..	3	37	7	566	14 706	381	747	7 768	34 311	28 619	62 882	1 195

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PITTSFIELD, MA MSA													
31-33	Manufacturing	-	125	43	6 975	283 553	3 642	7 521	115 468	660 938	483 093	1 138 706	56 942
322	Paper mfg	-	8	5	g	D	D	D	D	D	D	D	27 231
3221	Pulp, paper, & paperboard mills	-	4	4	1 638	66 970	1 051	2 416	40 115	235 886	181 348	415 963	27 058
32212	Paper mills	-	4	4	1 638	66 970	1 051	2 416	40 115	235 886	181 348	415 963	27 058
322121	Paper (except newsprint) mills	-	4	4	1 638	66 970	1 051	2 416	40 115	235 886	181 348	415 963	27 058
326	Plastics & rubber products mfg	1	9	5	460	15 993	329	703	9 037	35 137	23 182	58 795	D
3261	Plastics product mfg	2	8	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	7	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	7	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	15	7	343	9 722	274	471	6 954	14 308	9 893	23 847	629
333	Machinery mfg	-	19	8	1 163	50 827	665	1 335	23 618	77 186	92 795	167 138	6 613
3332	Industrial machinery mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	14	5	e	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	14	5	e	D	D	D	D	D	D	D	D
333511	Industrial mold mfg ...	-	8	4	270	10 419	212	490	7 369	20 087	6 775	25 810	1 850
334	Computer & electronic product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA													
31-33	Manufacturing	1	2 920	867	97 789	2 926 041	69 941	140 374	1 662 594	6 817 057	6 785 104	13 692 000	521 650
	Providence-Fall River-Warwick, RI-MA MSA (MA Part)	-	506	192	25 911	783 265	19 116	39 006	439 941	1 618 779	2 061 586	3 722 249	137 433
	Providence-Fall River-Warwick, RI-MA MSA (RI Part)	1	2 414	675	71 878	2 142 776	50 825	101 368	1 222 653	5 198 278	4 723 518	9 969 751	384 217
311	Food mfg	2	167	34	2 929	70 436	1 947	4 328	40 225	215 059	234 720	451 474	17 604
3118	Bakeries & tortilla mfg	2	111	17	1 566	32 435	1 036	1 740	18 442	89 566	63 543	153 164	4 055
31181	Bread & bakery product mfg	2	104	17	g	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	73	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	29	12	g	D	D	D	D	D	D	D	D
3119	Other food mfg	4	13	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	14	4	364	13 782	202	420	5 727	34 362	86 417	120 175	D
3121	Beverage mfg	1	14	4	364	13 782	202	420	5 727	34 362	86 417	120 175	D
31211	Soft drink & ice mfg	1	11	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	7	3	e	D	D	D	D	D	D	D	D
313	Textile mills	-	106	60	9 124	276 653	7 182	16 507	179 785	544 322	601 944	1 149 644	50 759
3131	Fiber, yarn, & thread mills ..	3	14	7	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	3	14	7	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	49	29	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	12	8	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	12	8	h	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	23	13	g	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	21	13	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	3	2	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	3	2	e	D	D	D	D	D	D	D	D
31324	Knit fabric mills	1	11	6	e	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	1	11	6	e	D	D	D	D	D	D	D	D

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31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
313	Textile mills—Con.												
3133	Textile & fabric finishing & fabric coating mills	—	43	24	3 124	104 890	2 235	5 155	65 446	251 582	191 207	443 943	D
31331	Textile & fabric finishing mills	—	38	21	2 960	99 939	2 116	4 951	62 602	240 761	176 028	417 957	D
313311	Broadwoven fabric finishing mills	1	27	14	h	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	11	7	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	65	23	h	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	6	25	12	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	2	5	4	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	2	5	4	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	7	20	8	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	8	16	6	863	14 740	714	1 372	11 227	37 997	37 098	73 614	D
3149	Other textile product mills	1	40	11	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	26	9	958	22 753	776	1 380	12 143	57 318	31 651	88 445	D
314999	All other miscellaneous textile product mills	1	20	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	64	38	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	49	32	3 235	61 404	2 901	5 274	47 640	100 289	90 517	187 444	D
31521	Cut & sew apparel contractors	2	27	16	1 148	17 546	1 060	1 658	14 571	25 377	3 291	28 659	572
315212	Women's, girls', & infants' cut & sew apparel contractors	2	25	15	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	9	8	1 448	31 026	1 285	2 560	23 349	53 075	70 358	120 221	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	3	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	4	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	5	8	5	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	8	3	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	13	5	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	13	5	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	2	17	10	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	2	17	10	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	2	17	10	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	9	5	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	50	9	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	38	7	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	49	33	2 167	68 641	1 601	3 125	41 057	159 425	164 325	322 106	D
3222	Converted paper product mfg	2	49	33	2 167	68 641	1 601	3 125	41 057	159 425	164 325	322 106	D
32221	Paperboard container mfg	3	29	19	1 444	43 177	1 093	2 141	27 219	87 831	84 974	171 714	D
322211	Corrugated & solid fiber box mfg	1	9	5	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	2	7	6	538	19 533	412	870	13 564	38 774	28 379	66 340	2 114
322213	Setup paperboard box mfg	6	9	6	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	12	8	544	21 248	376	795	11 718	60 957	74 228	134 380	D
322222	Coated & laminated paper mfg	—	11	7	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities	4	248	44	3 543	108 977	2 432	4 501	65 324	240 950	157 197	399 273	22 305
3231	Printing & related support activities	4	248	44	3 543	108 977	2 432	4 501	65 324	240 950	157 197	399 273	22 305
32311	Printing	4	225	40	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	5	100	22	1 671	54 860	1 150	2 125	31 718	112 258	76 661	189 714	D
323113	Commercial screen printing	1	26	5	355	9 129	258	480	5 490	28 070	27 302	55 412	D
323119	Other commercial printing	7	27	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	77	26	3 661	159 677	2 312	5 021	76 009	348 437	418 793	799 255	D
3251	Basic chemical mfg	1	13	7	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	3	3	382	25 623	158	532	11 254	896	58 992	92 104	D
325132	Synthetic organic dye & pigment mfg	—	3	3	382	25 623	158	532	11 254	896	58 992	92 104	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	3	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	1	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	13	3	253	12 441	117	208	2 931	25 041	29 473	55 858	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	8	11	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	10	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	4	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	25	8	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	24	8	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin...	—	11	5	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	125	59	6 006	179 253	4 390	8 656	113 251	468 149	373 168	838 274	78 013
3261	Plastics product mfg	1	107	53	5 438	163 041	3 940	7 835	101 324	433 839	337 040	766 947	76 615
32611	Unsupported plastics film, sheet, & bag mfg ..	—	15	6	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	10	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	75	42	4 086	113 441	2 971	5 906	70 191	244 296	173 946	418 445	D
326199	All other plastics product mfg	1	75	42	4 086	113 441	2 971	5 906	70 191	244 296	173 946	418 445	D
3262	Rubber product mfg	2	18	6	568	16 212	450	821	11 927	34 310	36 128	71 327	1 398
32629	Other rubber product mfg	2	17	6	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	2	12	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	60	11	1 381	47 076	1 089	2 254	34 684	125 406	71 295	196 019	8 869
3272	Glass & glass product mfg ..	1	17	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	1	17	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	5	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	23	4	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	11	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	99	34	4 103	129 491	3 424	7 588	98 667	218 673	1 064 714	1 321 377	D
3312	Steel product mfg from purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	3	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	35	20	1 945	66 470	1 441	3 082	43 698	97 284	916 324	1 052 092	D
33142	Copper rolling, drawing, extruding, & alloying	—	6	4	272	10 591	193	390	6 101	28 239	39 672	67 027	1 482
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	24	15	1 631	54 493	1 218	2 632	36 787	63 199	866 290	968 879	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	14	9	g	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	10	6	e	D	D	D	D	D	D	D	D
3315	Foundries	2	59	11	696	19 772	559	1 102	13 370	38 688	24 116	62 592	D
33152	Nonferrous metal foundries	2	49	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	513	140	12 452	373 047	9 011	17 463	234 499	676 840	557 146	1 224 555	52 699
3321	Forging & stamping	—	57	22	1 326	45 660	963	2 007	27 645	98 043	81 960	180 203	8 195
33211	Forging & stamping	—	57	22	1 326	45 660	963	2 007	27 645	98 043	81 960	180 203	8 195
332116	Metal stamping	—	51	21	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	1	25	9	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	1	25	9	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	17	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	45	12	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	1	17	6	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	1	16	5	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	28	6	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	—	15	3	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	9	4	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	21	5	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	1	21	5	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	20	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	161	28	g	D	D	D	D	D	D	D	12 490
33271	Machine shops	1	114	13	1 127	35 222	864	1 513	23 179	64 062	29 040	92 237	7 080
332710	Machine shops	1	114	13	1 127	35 222	864	1 513	23 179	64 062	29 040	92 237	7 080
33272	Turned product & screw, nut, & bolt mfg	3	47	15	f	D	D	D	D	D	D	D	5 410
332721	Precision turned product mfg	2	26	4	e	D	D	D	D	D	D	D	1 277
332722	Bolt, nut, screw, rivet, & washer mfg	3	21	11	f	D	D	D	D	D	D	D	4 133
3328	Coating, engraving, heat treating, & allied activities	2	139	37	2 943	72 551	2 335	4 549	48 195	136 412	69 381	205 806	10 125
33281	Coating, engraving, heat treating, & allied activities	2	139	37	2 943	72 551	2 335	4 549	48 195	136 412	69 381	205 806	10 125
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	30	10	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	2	101	27	2 072	52 146	1 647	3 300	35 440	98 320	54 195	152 480	6 275

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	1	46	20	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	—	6	5	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	2	40	15	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	2	25	13	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	207	45	3 965	142 198	2 556	4 819	75 599	305 527	208 598	508 078	14 668
3332	Industrial machinery mfg ..	1	38	10	707	26 245	378	740	12 757	44 319	53 629	98 475	D
33322	Plastics & rubber industry machinery mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	2	34	8	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	12	6	461	14 975	280	521	7 261	35 675	34 407	68 417	1 135
33331	Commercial & service industry machinery mfg.....	—	12	6	461	14 975	280	521	7 261	35 675	34 407	68 417	1 135
333312	Commercial laundry, drycleaning, & pressing machine mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	2	115	17	g	D	D	D	D	D	D	D	5 934
33351	Metalworking machinery mfg.....	2	115	17	g	D	D	D	D	D	D	D	5 934
333514	Special die & tool, die set, jig, & fixture mfg ..	2	56	3	499	14 984	394	666	10 940	28 484	8 778	36 843	D
333515	Cutting tool & machine tool accessory mfg ..	2	28	6	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	28	7	1 042	41 795	587	1 140	17 765	103 631	62 151	161 487	2 740
33391	Pump & compressor mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	1	21	5	513	22 872	264	461	7 624	59 606	16 740	75 923	D
333999	All other miscellaneous general-purpose machinery mfg.....	1	15	3	e	D	D	D	D	D	D	D	868
334	Computer & electronic product mfg.....	1	90	42	6 732	208 830	4 085	7 881	90 730	549 412	448 069	1 009 027	44 685
3341	Computer & peripheral equipment mfg.....	1	7	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	1	7	4	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	5	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	37	20	2 762	78 928	1 916	3 369	35 405	174 806	104 012	280 289	D
33441	Semiconductor & other electronic component mfg.....	—	37	20	2 762	78 928	1 916	3 369	35 405	174 806	104 012	280 289	D
334413	Semiconductor & related device mfg...	—	5	4	g	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg.....	—	5	5	468	13 313	342	779	7 230	27 842	8 680	36 530	1 955
334418	Printed circuit assembly (electronic assembly) mfg.....	—	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	3	12	5	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	40	17	1 772	59 986	885	1 991	26 899	156 266	130 785	290 621	D
33451	Navigational, measuring, medical, & control instruments mfg	1	40	17	1 772	59 986	885	1 991	26 899	156 266	130 785	290 621	D
334512	Automatic environmental control mfg	—	4	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	7	6	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	45	24	5 589	181 544	4 024	8 643	101 460	694 693	598 451	1 299 082	36 045
3351	Electric lighting equipment mfg	—	16	8	1 141	32 817	840	1 745	21 671	121 224	88 157	206 309	D
33512	Lighting fixture mfg	—	14	7	g	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	8	5	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	13	6	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	13	6	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	11	5	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	16	10	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
335929	Other communication & energy wire mfg	—	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
33593	Wiring device mfg	—	8	5	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	8	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	9	5	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	9	4	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	50	14	4 950	195 702	2 776	5 101	62 392	394 176	341 211	739 071	D
3363	Motor vehicle parts mfg	—	16	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	4	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	4	2	h	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	23	9	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	23	9	f	D	D	D	D	D	D	D	D
336612	Boat building	2	18	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	74	22	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	3	39	5	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	3	26	4	275	6 292	226	463	4 282	11 955	7 405	19 347	1 337
3372	Office furniture (including fixtures) mfg	1	32	16	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	32	16	g	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	9	5	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	22	11	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	9	3	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	9	2	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	9	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	796	194	21 452	569 890	15 208	29 733	309 013	1 426 466	1 066 941	2 510 766	D
3391	Medical equipment & supplies mfg	—	65	10	1 800	62 177	1 130	2 217	25 680	190 190	89 796	284 514	D
33911	Medical equipment & supplies mfg	—	65	10	1 800	62 177	1 130	2 217	25 680	190 190	89 796	284 514	D
339112	Surgical & medical instrument mfg	—	6	2	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	12	5	f	D	D	D	D	D	D	D	6 740
339115	Ophthalmic goods mfg	—	8	2	344	9 949	250	449	5 204	64 795	18 137	80 461	D
3399	Other miscellaneous mfg	2	731	184	19 652	507 713	14 078	27 516	283 333	1 236 276	977 145	2 226 252	46 901
33991	Jewelry & silverware mfg	2	594	148	15 568	385 126	11 211	22 148	216 222	941 660	813 674	1 768 692	D
339911	Jewelry (except costume) mfg	2	170	49	4 541	116 235	3 374	6 719	64 985	333 167	299 108	633 654	7 796
339912	Silverware & plated ware mfg	—	10	8	f	D	D	D	D	D	D	D	D
339913	Jewelers' material & lapidary work mfg	1	113	25	2 959	72 765	1 920	3 867	39 842	149 195	211 359	358 292	D
339914	Costume jewelry & novelty mfg	2	301	66	i	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg	—	7	2	257	6 113	167	335	3 212	35 779	20 133	55 125	749
339932	Game, toy, & children's vehicle mfg	—	7	2	257	6 113	167	335	3 212	35 779	20 133	55 125	749
33994	Office supplies (except paper) mfg	1	10	6	g	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	—	6	6	g	D	D	D	D	D	D	D	D
33995	Sign mfg	4	40	12	f	D	D	D	D	D	D	D	D
339950	Sign mfg	4	40	12	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	65	16	1 610	50 808	1 073	2 089	25 649	91 690	56 222	149 101	5 103
339991	Gasket, packing, & sealing device mfg	—	5	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	36	9	f	D	D	D	D	D	D	D	D
	SPRINGFIELD, MA MSA												
31-33	Manufacturing	—	962	345	38 854	1 389 569	26 677	54 711	762 557	3 691 418	3 336 508	6 974 558	232 274
311	Food mfg	—	45	14	2 202	82 090	1 179	2 549	25 887	164 634	330 720	497 156	12 606
3115	Dairy product mfg	—	6	4	1 291	63 342	523	1 095	15 123	90 901	232 077	322 886	8 623
31151	Dairy product (except frozen) mfg	—	4	3	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	—	2	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	7	5	558	13 105	446	1 168	7 848	59 216	87 874	148 919	D
31161	Animal slaughtering & processing	—	7	5	558	13 105	446	1 168	7 848	59 216	87 874	148 919	D
311612	Meat processed from carcasses	—	5	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	23	3	261	3 844	140	181	1 795	7 881	4 680	12 567	243
31181	Bread & bakery product mfg	5	23	3	261	3 844	140	181	1 795	7 881	4 680	12 567	243
313	Textile mills	—	15	8	883	27 350	649	1 470	16 657	69 850	67 813	142 045	D
3132	Fabric mills	—	8	4	578	16 867	435	917	10 888	42 882	38 954	84 218	D
31323	Nonwoven fabric mills	—	3	3	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	3	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	35	8	435	9 928	353	644	7 100	26 728	90 480	117 931	1 485
322	Paper mfg	—	62	44	5 317	181 105	3 804	8 063	109 585	565 477	683 796	1 207 067	39 493
3221	Pulp, paper, & paperboard mills	—	6	6	616	22 217	450	828	13 925	71 962	62 298	142 742	3 428
32212	Paper mills	—	4	4	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	4	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SPRINGFIELD, MA MSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	—	56	38	4 701	158 888	3 354	7 235	95 660	493 515	621 498	1 064 325	36 065
32221	Paperboard container mfg	—	22	17	1 451	49 086	1 062	2 205	29 823	100 605	112 883	211 816	9 888
322211	Corrugated & solid fiber box mfg	—	8	7	777	28 778	529	1 096	14 989	56 100	65 283	120 644	2 650
322212	Folding paperboard box mfg	—	4	2	260	8 790	213	501	6 625	18 976	17 976	35 200	D
32222	Paper bag & coated & treated paper mfg	—	13	9	1 159	49 508	758	1 783	25 367	139 833	262 979	402 705	18 400
322221	Coated & laminated packaging paper & plastics film mfg	—	3	3	315	14 613	232	641	8 406	60 097	123 767	183 346	13 103
322222	Coated & laminated paper mfg	—	10	6	844	34 895	526	1 142	16 961	79 736	139 212	219 359	5 297
32223	Stationery product mfg ..	—	15	8	1 634	45 381	1 157	2 408	30 087	226 090	226 052	403 265	D
322231	Die-cut paper & paperboard office supplies mfg	—	4	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	4	2	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	—	7	4	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	6	4	457	14 913	377	839	10 383	26 987	19 584	46 539	D
322299	All other converted paper product mfg ...	—	5	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	119	34	3 478	103 999	2 675	5 270	66 568	276 602	210 501	486 811	22 310
3231	Printing & related support activities	1	119	34	3 478	103 999	2 675	5 270	66 568	276 602	210 501	486 811	22 310
32311	Printing	1	97	31	3 161	94 759	2 436	4 909	60 665	260 884	205 559	466 236	20 507
323110	Commercial lithographic printing ..	1	42	16	1 544	49 199	1 151	2 272	29 345	104 385	105 800	209 224	14 270
323113	Commercial screen printing	4	11	5	319	9 100	242	398	5 692	15 804	9 822	25 514	941
323116	Manifold business form printing	—	4	4	437	12 138	349	648	8 224	53 127	31 683	85 422	895
323118	Blankbook, looseleaf binder, & device mfg .	—	5	4	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	—	22	3	317	9 240	239	361	5 903	15 718	4 942	20 575	1 803
325	Chemical mfg	1	23	15	1 862	80 903	1 113	2 485	35 702	235 463	290 238	533 533	16 382
3259	Other chemical product mfg	1	10	5	1 338	55 538	855	1 950	25 864	162 639	140 703	304 694	D
32599	All other chemical product & preparation mfg	1	9	5	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	7	4	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	60	33	3 862	143 977	2 854	5 600	85 053	334 684	277 656	607 752	30 339
3261	Plastics product mfg	1	56	32	3 764	141 495	2 793	5 478	83 516	332 851	272 550	600 883	30 101
32611	Unsupported plastics film, sheet, & bag mfg ..	—	11	9	1 194	67 793	731	1 514	35 732	174 095	158 976	328 832	14 154
326113	Unsupported plastics film & sheet (except packaging) mfg	—	6	5	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	4	2	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	2	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	37	20	1 682	45 241	1 321	2 476	26 971	103 112	73 954	176 099	10 794
326199	All other plastics product mfg	3	36	19	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	27	7	420	12 129	327	695	7 992	27 151	22 108	49 512	2 552

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPRINGFIELD, MA MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	2	21	14	1 112	35 406	894	1 921	25 320	77 842	111 674	191 728	12 672
3312	Steel product mfg from purchased steel	6	5	5	335	11 657	277	504	8 361	32 253	52 791	84 739	3 560
33122	Rolling & drawing of purchased steel	6	5	5	335	11 657	277	504	8 361	32 253	52 791	84 739	3 560
3314	Nonferrous metal (except aluminum) production & processing	—	4	4	340	10 784	281	617	8 184	19 172	44 374	65 476	8 019
33142	Copper rolling, drawing, extruding, & alloying	—	3	3	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	3	3	e	D	D	D	D	D	D	D	D
3315	Foundries	—	12	5	437	12 965	336	800	8 775	26 417	14 509	41 513	1 093
33152	Nonferrous metal foundries	—	9	3	274	7 828	222	484	5 330	16 521	8 295	24 743	804
332	Fabricated metal product mfg	—	251	72	7 700	300 778	5 313	10 747	176 050	682 184	355 563	1 034 182	35 919
3321	Forging & stamping	—	10	7	474	14 845	324	611	8 414	32 393	25 461	57 409	D
33211	Forging & stamping	—	10	7	474	14 845	324	611	8 414	32 393	25 461	57 409	D
332116	Metal stamping	—	9	6	e	D	D	D	D	D	D	D	848
3322	Cutlery & handtool mfg	—	10	5	1 128	51 673	731	1 907	31 656	177 174	72 693	249 081	D
33221	Cutlery & handtool mfg	—	10	5	1 128	51 673	731	1 907	31 656	177 174	72 693	249 081	D
332212	Hand & edge tool mfg	—	8	3	e	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	—	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	29	13	767	23 618	606	1 057	15 511	41 563	28 076	68 772	D
33232	Ornamental & architectural metal products mfg	—	27	12	f	D	D	D	D	D	D	D	1 604
332322	Sheet metal work mfg	—	17	7	502	16 040	426	712	11 121	24 532	18 151	42 032	1 204
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	130	21	1 856	74 411	1 306	2 784	47 343	138 105	58 784	194 565	13 717
33271	Machine shops	2	113	18	1 571	65 275	1 108	2 375	41 836	120 993	52 252	170 857	10 850
332710	Machine shops	2	113	18	1 571	65 275	1 108	2 375	41 836	120 993	52 252	170 857	10 850
33272	Turned product & screw, nut, & bolt mfg	1	17	3	285	9 136	198	409	5 507	17 112	6 532	23 708	2 867
332721	Precision turned product mfg	—	12	3	259	8 417	178	374	5 032	16 247	5 673	21 878	2 660
3328	Coating, engraving, heat treating, & allied activities	2	32	13	746	28 609	531	1 128	15 307	48 045	15 146	63 307	D
33281	Coating, engraving, heat treating, & allied activities	2	32	13	746	28 609	531	1 128	15 307	48 045	15 146	63 307	D
332813	Electroplating, plating, polishing, anodizing, & coloring	2	19	8	555	21 845	390	849	11 233	34 951	10 193	45 229	D
3329	Other fabricated metal product mfg	—	24	9	2 346	93 601	1 547	2 716	49 952	214 221	124 142	339 075	7 172
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	23	8	g	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	13	6	f	D	D	D	D	D	D	D	5 160
333	Machinery mfg	1	115	44	3 724	148 945	2 082	4 125	66 214	349 591	328 282	668 924	16 209
3332	Industrial machinery mfg	2	22	10	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	17	8	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	5	4	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	16	7	700	31 266	325	608	10 309	79 628	71 731	147 800	3 847
33331	Commercial & service industry machinery mfg	—	16	7	700	31 266	325	608	10 309	79 628	71 731	147 800	3 847
333314	Optical instrument & lens mfg	—	7	4	335	15 303	178	340	6 414	29 887	21 436	50 055	1 186
333315	Photographic & photocopying equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683
333414	Heating equipment (except warm air furnaces) mfg	—	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPRINGFIELD, MA MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	4	45	15	839	35 071	613	1 283	21 705	56 754	32 236	87 729	4 494
33351	Metalworking machinery mfg	4	45	15	839	35 071	613	1 283	21 705	56 754	32 236	87 729	4 494
3336	Engine, turbine, & power transmission equipment mfg	—	6	4	444	18 200	285	599	9 368	66 490	31 862	96 649	2 385
33361	Engine, turbine, & power transmission equipment mfg	—	6	4	444	18 200	285	599	9 368	66 490	31 862	96 649	2 385
333613	Mechanical power transmission equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	21	5	528	20 768	207	332	6 159	48 641	128 916	173 615	2 457
33391	Pump & compressor mfg	—	2	1	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	30	12	1 012	33 827	597	1 186	14 043	71 725	66 487	138 025	3 539
3344	Semiconductor & other electronic component mfg	—	14	8	642	19 166	446	907	9 401	44 152	39 919	83 528	1 517
33441	Semiconductor & other electronic component mfg	—	14	8	642	19 166	446	907	9 401	44 152	39 919	83 528	1 517
334419	Other electronic component mfg	—	6	4	449	14 947	296	609	6 961	36 019	34 314	69 599	1 227
335	Electrical equipment, appliance, & component mfg	—	9	6	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	12	3	342	13 278	261	490	8 610	23 111	20 475	43 558	1 547
337	Furniture & related product mfg	—	33	6	610	16 956	452	867	9 951	40 280	39 454	79 394	2 766
3371	Household & institutional furniture & kitchen cabinet mfg	—	20	3	362	8 188	287	516	5 191	16 701	20 007	36 304	2 067
33712	Household & institutional furniture mfg	—	11	3	324	7 370	259	470	4 588	15 186	18 908	33 688	D
337127	Institutional furniture mfg	—	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	60	18	4 702	165 579	3 186	6 619	86 985	628 216	319 515	936 095	26 734
3391	Medical equipment & supplies mfg	4	22	3	269	5 684	194	334	3 037	11 289	5 466	16 877	315
33911	Medical equipment & supplies mfg	4	22	3	269	5 684	194	334	3 037	11 289	5 466	16 877	315
3399	Other miscellaneous mfg ..	—	38	15	4 433	159 895	2 992	6 285	83 948	616 927	314 049	919 218	26 419
33992	Sporting & athletic goods mfg	—	5	2	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	—	5	2	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	—	7	4	2 703	94 845	1 974	4 155	51 998	359 302	149 889	507 817	9 896
339932	Game, toy, & children's vehicle mfg	—	6	4	h	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	11	6	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	4	4	399	9 334	252	539	4 634	19 954	13 510	36 382	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BARNSTABLE COUNTY, MA													
31-33	Manufacturing	2	226	23	2 561	82 427	1 540	2 602	35 545	229 549	122 342	349 442	D
334	Computer & electronic product mfg.....	1	24	6	f	D	D	D	D	D	D	D	D
BERKSHIRE COUNTY, MA													
31-33	Manufacturing	-	207	63	9 176	344 731	5 359	10 848	156 526	795 171	632 928	1 422 961	62 574
322	Paper mfg	-	9	6	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	5	5	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	5	5	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	5	5	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	26	6	695	20 133	533	1 021	13 373	53 547	32 500	85 743	D
3231	Printing & related support activities	-	26	6	695	20 133	533	1 021	13 373	53 547	32 500	85 743	D
32311	Printing	-	24	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	15	9	1 000	35 433	750	1 540	21 753	78 188	101 168	179 190	5 292
3261	Plastics product mfg	1	14	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	26	11	595	16 029	482	857	11 442	25 080	15 083	39 908	1 225
333	Machinery mfg	-	22	9	1 249	54 586	723	1 483	25 713	86 420	98 163	181 898	D
3332	Industrial machinery mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	5	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
BRISTOL COUNTY, MA													
31-33	Manufacturing	1	915	363	49 363	1 654 235	35 735	72 224	910 584	3 890 632	3 688 758	7 651 402	280 675
311	Food mfg.....	1	85	15	2 192	49 710	1 333	2 226	24 487	138 942	182 657	322 312	8 993
3117	Seafood product preparation & packaging..	2	15	5	502	12 026	377	604	5 750	57 319	78 185	135 501	D
31171	Seafood product preparation & packaging	2	15	5	502	12 026	377	604	5 750	57 319	78 185	135 501	D
3118	Bakeries & tortilla mfg	-	48	4	1 150	23 304	568	859	9 363	56 695	36 481	93 178	2 604
31181	Bread & bakery product mfg	-	47	4	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	15	3	972	21 348	452	737	8 370	51 708	33 272	84 980	2 313
313	Textile mills	-	39	24	4 773	157 156	3 796	9 426	104 310	290 586	249 021	537 067	32 205
3132	Fabric mills	-	16	9	2 624	85 966	2 219	5 718	59 444	150 919	166 619	316 717	D
31321	Broadwoven fabric mills ..	-	5	4	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	5	4	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	20	14	2 097	69 581	1 534	3 613	43 878	135 959	77 329	211 572	D
31331	Textile & fabric finishing mills	-	19	13	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	14	10	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	5	33	15	1 604	31 723	1 317	2 349	19 817	72 976	61 188	133 321	D
3141	Textile furnishings mills....	8	13	9	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	8	13	9	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	9	11	7	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BRISTOL COUNTY, MA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	4	67	47	5 478	104 481	4 950	9 522	84 922	171 695	165 407	332 135	D
3152	Cut & sew apparel mfg	4	60	44	i	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	33	22	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	2	32	21	1 504	22 968	1 393	2 385	19 213	32 203	4 286	36 497	D
31522	Men's & boys' cut & sew apparel mfg	4	10	10	h	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	6	6	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	14	10	924	14 412	819	1 393	12 237	19 210	25 446	43 598	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	3	6	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	17	12	1 096	36 353	818	1 524	20 146	73 569	94 820	168 399	6 171
3222	Converted paper product mfg	—	17	12	1 096	36 353	818	1 524	20 146	73 569	94 820	168 399	6 171
32221	Paperboard container mfg	—	11	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	71	20	1 605	48 977	1 226	2 368	30 565	104 560	56 052	160 909	D
3231	Printing & related support activities	2	71	20	1 605	48 977	1 226	2 368	30 565	104 560	56 052	160 909	D
32311	Printing	2	65	20	1 570	47 990	1 195	2 317	29 837	102 111	55 310	157 719	D
323110	Commercial lithographic printing	4	28	9	635	22 479	468	1 017	13 495	46 396	27 757	74 295	4 338
325	Chemical mfg	1	21	11	1 768	75 810	1 227	2 737	44 730	121 660	238 454	377 296	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	7	6	875	44 555	579	1 398	25 964	75 763	135 579	227 675	D
32599	All other chemical product & preparation mfg	—	6	5	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	38	16	2 255	59 227	1 786	3 194	38 272	138 538	98 357	237 075	5 190
3261	Plastics product mfg	1	26	11	901	21 093	673	1 197	12 837	51 949	41 308	94 618	3 058
32619	Other plastics product mfg	2	18	8	547	13 447	377	765	8 668	33 408	25 349	57 688	1 967
326199	All other plastics product mfg	2	18	8	547	13 447	377	765	8 668	33 408	25 349	57 688	1 967
3262	Rubber product mfg	1	12	5	1 354	38 134	1 113	1 997	25 435	86 589	57 049	142 457	2 132
32629	Other rubber product mfg	1	12	5	1 354	38 134	1 113	1 997	25 435	86 589	57 049	142 457	2 132
326291	Rubber product mfg for mechanical use	—	5	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	27	9	572	19 406	440	916	13 257	50 032	27 927	78 254	3 493
331	Primary metal mfg	—	23	15	1 704	65 427	1 208	2 634	40 511	145 437	815 861	984 823	18 953
3314	Nonferrous metal (except aluminum) production & processing	—	10	9	1 051	37 767	776	1 721	24 335	61 410	752 062	841 754	16 879
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	7	7	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	145	45	3 315	100 987	2 532	5 151	66 510	202 586	135 518	337 987	17 356
3321	Forging & stamping	—	17	7	613	19 767	457	875	11 963	34 455	30 049	63 908	2 561
33211	Forging & stamping	—	17	7	613	19 767	457	875	11 963	34 455	30 049	63 908	2 561
332116	Metal stamping	—	16	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	54	13	789	26 058	616	1 214	17 825	46 913	28 230	75 770	D
33271	Machine shops	1	45	9	531	17 857	423	817	12 061	31 912	11 647	43 918	D
332710	Machine shops	1	45	9	531	17 857	423	817	12 061	31 912	11 647	43 918	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BRISTOL COUNTY, MA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	-	17	8	565	15 696	415	991	11 476	36 709	19 254	55 619	3 533
33281	Coating, engraving, heat treating, & allied activities.....	-	17	8	565	15 696	415	991	11 476	36 709	19 254	55 619	3 533
332813	Electroplating, plating, polishing, anodizing, & coloring	-	12	7	505	13 950	373	915	10 527	32 852	18 759	51 265	3 314
333	Machinery mfg	1	69	20	1 870	71 089	1 182	1 862	29 719	167 484	141 860	310 937	10 848
3332	Industrial machinery mfg ..	-	13	5	762	34 602	439	500	9 206	100 131	68 154	170 860	4 754
33329	Other industrial machinery mfg	-	12	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	44	24	4 966	272 193	3 253	6 720	126 389	684 023	394 838	1 080 308	24 074
3342	Communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	28	19	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	28	19	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	7	7	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	9	5	669	14 375	532	1 071	7 805	24 055	20 684	45 135	1 029
335	Electrical equipment, appliance, & component mfg	-	24	15	2 700	77 907	2 024	4 378	47 462	240 504	271 200	507 680	13 760
3351	Electric lighting equipment mfg	-	9	6	943	26 139	708	1 448	16 833	100 640	71 851	167 217	D
33512	Lighting fixture mfg	-	8	6	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	7	6	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	3	3	634	19 666	426	978	9 821	77 478	108 464	184 803	D
335929	Other communication & energy wire mfg ...	-	3	3	634	19 666	426	978	9 821	77 478	108 464	184 803	D
33599	All other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	21	7	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	2	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
336399	Other motor vehicle parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	133	55	8 137	277 424	5 519	11 423	152 332	866 469	428 223	1 327 583	62 780
3391	Medical equipment & supplies mfg	-	32	14	2 413	99 017	1 187	2 328	33 714	315 164	100 763	408 455	25 450
33911	Medical equipment & supplies mfg	-	32	14	2 413	99 017	1 187	2 328	33 714	315 164	100 763	408 455	25 450
339112	Surgical & medical instrument mfg	1	11	8	1 281	44 640	836	1 667	20 282	144 980	51 543	197 817	D
339113	Surgical appliance & supplies mfg	-	5	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	101	41	5 724	178 407	4 332	9 095	118 618	551 305	327 460	919 128	37 330

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRISTOL COUNTY, MA—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33991	Jewelry & silverware mfg	—	68	29	3 634	97 835	2 611	5 349	55 675	231 533	218 627	462 870	9 205
339911	Jewelry (except costume) mfg	1	30	15	1 237	34 098	967	1 854	20 411	117 109	87 633	204 854	2 390
339912	Silverware & plated ware mfg	—	7	4	f	D	D	D	D	D	D	D	D
339913	Jewelers' material & lapidary work mfg	—	10	4	818	25 545	505	1 137	12 215	42 494	76 348	118 348	D
339914	Costume jewelry & novelty mfg	—	21	6	g	D	D	D	D	D	D	D	1 426
33992	Sporting & athletic goods mfg	—	4	1	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	—	4	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	6	11	4	531	18 035	373	704	10 427	31 535	17 316	48 844	D
ESSEX COUNTY, MA													
31-33	Manufacturing	—	1 200	419	57 660	2 362 386	36 217	71 302	1 185 625	7 537 492	6 170 272	13 728 137	700 908
311	Food mfg	1	112	31	3 777	100 965	2 134	3 711	48 118	298 636	509 214	805 623	23 202
3115	Dairy product mfg	—	7	4	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	2	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	3	2	g	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	—	10	5	1 010	29 165	650	1 217	17 664	117 593	242 583	359 460	5 054
31171	Seafood product preparation & packaging	—	10	5	1 010	29 165	650	1 217	17 664	117 593	242 583	359 460	5 054
311712	Fresh & frozen seafood processing	—	9	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	61	10	937	19 873	564	969	9 676	42 593	37 154	79 664	1 962
31181	Bread & bakery product mfg	3	59	9	f	D	D	D	D	D	D	D	D
313	Textile mills	—	15	7	2 280	87 448	1 864	4 113	47 374	225 756	159 729	375 432	D
3133	Textile & fabric finishing & fabric coating mills	—	9	6	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	6	4	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	3	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	—	26	6	546	13 605	440	870	9 103	22 910	35 964	58 889	D
315	Apparel mfg	2	17	6	f	D	D	D	D	D	D	D	827
3152	Cut & sew apparel mfg	2	13	5	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	1	45	15	1 857	39 362	1 394	2 782	26 635	198 079	131 593	321 087	4 926
3162	Footwear mfg	—	7	4	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	7	4	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	23	18	1 422	52 981	1 121	2 398	35 687	111 998	145 018	257 319	13 689
3222	Converted paper product mfg	1	19	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	13	12	678	18 893	548	1 097	13 380	33 282	50 941	83 240	2 413
323	Printing & related support activities	5	114	24	2 079	72 843	1 482	2 916	47 389	131 888	92 444	224 534	12 844
3231	Printing & related support activities	5	114	24	2 079	72 843	1 482	2 916	47 389	131 888	92 444	224 534	12 844
32311	Printing	5	104	22	1 890	64 805	1 357	2 624	42 772	117 128	89 279	206 671	D
323110	Commercial lithographic printing	2	44	10	659	22 074	454	865	14 654	43 373	21 597	64 703	D
323113	Commercial screen printing	8	21	6	814	30 323	633	1 255	21 463	49 656	50 836	100 962	5 566
325	Chemical mfg	—	66	24	3 375	167 081	1 918	4 171	86 818	929 514	580 158	1 476 570	130 235
3254	Pharmaceutical & medicine mfg	—	9	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	9	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	6	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	11	5	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	13	5	509	24 849	304	539	12 494	73 952	83 362	159 331	8 443

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ESSEX COUNTY, MA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	3	52	29	2 850	102 965	1 903	4 013	55 240	227 570	213 577	442 282	20 847
3261	Plastics product mfg	3	47	27	2 750	98 992	1 833	3 870	53 062	219 347	209 495	430 029	D
32611	Unsupported plastics film, sheet, & bag mfg ..	4	7	7	1 277	46 634	854	1 777	29 102	104 066	116 167	214 852	10 397
326113	Unsupported plastics film & sheet (except packaging) mfg	4	5	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	29	14	970	32 170	619	1 307	14 699	61 725	47 544	115 333	5 359
326199	All other plastics product mfg	2	29	14	970	32 170	619	1 307	14 699	61 725	47 544	115 333	5 359
327	Nonmetallic mineral product mfg	4	25	9	632	15 681	507	895	10 991	36 685	27 945	63 391	D
332	Fabricated metal product mfg	1	271	76	5 468	197 884	3 819	7 769	118 049	409 992	255 886	666 482	38 179
3323	Architectural & structural metals mfg	1	43	16	766	25 961	531	1 054	15 611	56 881	41 452	98 611	4 226
33232	Ornamental & architectural metal products mfg	1	31	12	560	19 216	391	759	11 760	43 084	28 475	71 778	3 589
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	158	36	2 799	107 042	1 980	3 936	62 664	196 279	92 271	288 929	21 151
33271	Machine shops	1	140	27	2 322	89 853	1 620	3 260	52 658	160 589	76 514	237 299	17 152
332710	Machine shops	1	140	27	2 322	89 853	1 620	3 260	52 658	160 589	76 514	237 299	17 152
3328	Coating, engraving, heat treating, & allied activities.	1	30	11	733	23 231	538	1 209	14 873	52 187	16 171	68 565	5 844
33281	Coating, engraving, heat treating, & allied activities	1	30	11	733	23 231	538	1 209	14 873	52 187	16 171	68 565	5 844
3329	Other fabricated metal product mfg	-	14	5	536	16 972	310	538	8 949	44 627	30 204	73 295	D
333	Machinery mfg	-	94	41	5 581	252 177	2 846	5 696	94 918	701 344	509 353	1 209 955	35 098
3332	Industrial machinery mfg ..	-	31	18	3 802	180 154	1 707	3 571	60 304	535 604	389 713	926 490	26 968
33322	Plastics & rubber industry machinery mfg	-	5	4	740	31 986	347	762	14 271	93 820	71 209	166 428	3 865
333220	Plastics & rubber industry machinery mfg	-	5	4	740	31 986	347	762	14 271	93 820	71 209	166 428	3 865
33329	Other industrial machinery mfg	-	26	14	3 062	148 168	1 360	2 809	46 033	441 784	318 504	760 062	23 103
333295	Semiconductor machinery mfg	-	9	5	2 560	131 891	1 090	2 305	38 872	402 897	285 321	687 587	20 772
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	11	6	528	22 268	352	713	11 976	46 343	45 944	93 817	2 693
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	3	11	6	528	22 268	352	713	11 976	46 343	45 944	93 817	2 693
3339	Other general-purpose machinery mfg	-	19	7	736	27 328	436	720	11 018	74 287	45 734	117 353	2 066
334	Computer & electronic product mfg	-	128	74	15 897	744 630	9 500	18 321	339 091	2 939 162	1 956 705	4 927 389	156 872
3342	Communications equipment mfg	-	16	10	h	D	D	D	D	D	D	D	65 759
33421	Telephone apparatus mfg	-	3	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	71	41	4 959	176 081	3 478	6 986	96 012	371 412	227 195	597 741	46 294
33441	Semiconductor & other electronic component mfg	1	71	41	4 959	176 081	3 478	6 986	96 012	371 412	227 195	597 741	46 294
334411	Electron tube mfg	-	3	2	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	16	10	1 274	41 208	1 027	2 065	27 722	76 142	55 667	133 018	9 272
334413	Semiconductor & related device mfg ...	7	18	8	564	23 363	344	644	9 657	58 508	25 700	84 447	15 751
334419	Other electronic component mfg	-	21	11	1 937	67 811	1 284	2 672	34 945	132 942	106 745	239 307	15 974

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ESSEX COUNTY, MA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	-	28	17	5 502	324 063	2 214	5 130	83 747	837 347	580 137	1 430 643	41 717
33451	Navigational, measuring, medical, & control instruments mfg	-	28	17	5 502	324 063	2 214	5 130	83 747	837 347	580 137	1 430 643	41 717
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	4	h	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	6	4	f	D	D	D	D	D	D	D	2 971
334517	Irradiation apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	34	17	3 048	117 862	1 671	3 217	49 961	355 403	222 908	579 927	28 229
3351	Electric lighting equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	10	4	1 666	72 815	627	1 241	19 661	203 383	124 740	329 820	17 115
33531	Electrical equipment mfg	-	10	4	1 666	72 815	627	1 241	19 661	203 383	124 740	329 820	17 115
335314	Relay & industrial control mfg	-	6	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	17	10	606	18 771	393	769	9 973	41 360	34 736	75 273	D
336	Transportation equipment mfg	-	27	9	i	D	D	D	D	D	D	D	53 174
3364	Aerospace product & parts mfg	-	8	6	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	8	6	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	6	6	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	76	20	2 119	67 528	1 259	2 375	29 348	180 309	124 921	321 095	9 700
3391	Medical equipment & supplies mfg	1	33	9	1 113	34 075	686	1 232	15 041	77 684	66 484	157 511	5 875
33911	Medical equipment & supplies mfg	1	33	9	1 113	34 075	686	1 232	15 041	77 684	66 484	157 511	5 875
339112	Surgical & medical instrument mfg	-	6	4	724	21 112	432	769	8 326	50 613	37 998	100 160	3 705
3399	Other miscellaneous mfg ..	1	43	11	1 006	33 453	573	1 143	14 307	102 625	58 437	163 584	3 825
33999	All other miscellaneous mfg	-	18	9	795	28 033	437	905	11 883	89 743	48 409	141 099	2 818
339991	Gasket, packing, & sealing device mfg ...	-	7	5	611	23 706	293	611	9 025	80 175	43 306	126 915	D
	FRANKLIN COUNTY, MA												
31-33	Manufacturing	1	119	52	5 700	182 168	3 763	7 387	108 672	414 490	345 782	755 966	47 208
326	Plastics & rubber products mfg	1	11	8	860	32 351	679	1 511	23 008	98 456	102 910	199 539	12 432
3261	Plastics product mfg	1	11	8	860	32 351	679	1 511	23 008	98 456	102 910	199 539	12 432
332	Fabricated metal product mfg	-	16	9	940	28 638	742	1 553	19 434	77 817	30 990	107 457	D
3322	Cutlery & handtool mfg	-	4	3	505	14 911	422	908	11 544	41 635	15 115	54 809	D
33221	Cutlery & handtool mfg ..	-	4	3	505	14 911	422	908	11 544	41 635	15 115	54 809	D
339	Miscellaneous mfg	-	9	5	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	9	5	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	2	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	3	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMPDEN COUNTY, MA													
31-33	Manufacturing	-	802	291	33 350	1 204 017	22 875	47 230	659 230	3 213 820	2 793 108	5 953 472	206 894
311	Food mfg	-	38	14	2 145	81 427	1 145	2 512	25 551	163 021	329 207	493 996	12 526
3115	Dairy product mfg	-	5	4	1 283	63 226	518	1 091	15 061	90 574	231 244	321 726	D
31152	Ice cream & frozen dessert mfg	-	2	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	7	5	558	13 105	446	1 168	7 848	59 216	87 874	148 919	3 361
31161	Animal slaughtering & processing	-	7	5	558	13 105	446	1 168	7 848	59 216	87 874	148 919	3 361
313	Textile mills	-	10	5	628	20 546	481	1 108	13 372	57 368	55 778	116 850	D
322	Paper mfg	-	55	40	4 731	158 328	3 466	7 340	98 370	486 506	567 643	1 014 436	35 453
3221	Pulp, paper, & paperboard mills	-	6	6	616	22 217	450	828	13 925	71 962	62 298	142 742	D
3222	Converted paper product mfg	-	49	34	4 115	136 111	3 016	6 512	84 445	414 544	505 345	871 694	D
32221	Paperboard container mfg	-	21	16	1 332	44 551	974	2 012	26 914	85 496	97 977	181 878	9 379
322211	Corrugated & solid fiber box mfg	-	7	6	658	24 243	441	903	12 080	40 991	50 377	90 706	2 141
32222	Paper bag & coated & treated paper mfg	-	11	8	826	36 006	581	1 383	18 587	97 171	179 429	276 433	15 493
322222	Coated & laminated paper mfg	-	8	5	511	21 393	349	742	10 181	37 074	55 662	93 087	2 390
32223	Stationery product mfg	-	14	7	1 541	41 900	1 114	2 314	28 975	207 125	210 466	371 154	D
322232	Envelope mfg	-	4	2	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	-	6	3	645	16 174	366	699	7 852	121 836	73 360	174 802	D
323	Printing & related support activities	1	93	29	3 134	96 413	2 414	4 834	61 503	260 384	195 157	455 175	21 877
3231	Printing & related support activities	1	93	29	3 134	96 413	2 414	4 834	61 503	260 384	195 157	455 175	21 877
32311	Printing	1	74	26	2 827	87 309	2 184	4 483	55 707	244 912	190 270	434 902	20 086
323110	Commercial lithographic printing	1	28	13	1 380	45 360	1 032	2 065	26 801	96 025	101 980	197 064	14 083
323118	Blankbook, looseleaf binder, & device mfg	-	4	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	19	12	1 147	45 182	693	1 549	18 949	136 435	189 287	334 257	11 598
3259	Other chemical product mfg	3	8	4	722	23 422	488	1 135	10 502	71 252	60 503	134 263	2 900
32599	All other chemical product & preparation mfg	3	7	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	50	27	2 580	106 877	1 810	3 621	58 978	258 160	228 880	481 935	25 702
3261	Plastics product mfg	1	47	26	2 483	104 432	1 750	3 501	57 466	256 438	223 875	475 280	D
32611	Unsupported plastics film, sheet, & bag mfg	-	9	7	1 098	65 483	680	1 420	34 720	163 734	140 864	300 739	13 397
326113	Unsupported plastics film & sheet (except packaging) mfg	-	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	31	17	g	D	D	D	D	D	D	D	9 479
326199	All other plastics product mfg	2	30	16	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	3	18	11	891	28 716	704	1 566	20 073	62 521	78 583	143 689	9 708
332	Fabricated metal product mfg	-	224	65	7 327	290 210	5 024	10 213	169 501	663 041	341 433	1 001 240	36 139
3322	Cutlery & handtool mfg	-	10	5	1 128	51 673	731	1 907	31 656	177 174	72 693	249 081	D
33221	Cutlery & handtool mfg	-	10	5	1 128	51 673	731	1 907	31 656	177 174	72 693	249 081	D
332213	Saw blade & handsaw mfg	-	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	24	9	615	19 363	493	848	12 809	34 064	24 501	57 947	D
33232	Ornamental & architectural metal products mfg	-	22	8	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	115	20	1 789	73 338	1 241	2 699	46 892	137 712	58 274	193 589	14 800
33271	Machine shops	2	99	17	1 479	62 619	1 036	2 250	40 011	115 750	49 555	163 120	10 527
332710	Machine shops	2	99	17	1 479	62 619	1 036	2 250	40 011	115 750	49 555	163 120	10 527
3328	Coating, engraving, heat treating, & allied activities	2	31	13	739	28 514	525	1 123	15 246	47 873	15 077	63 066	D
33281	Coating, engraving, heat treating, & allied activities	2	31	13	739	28 514	525	1 123	15 246	47 873	15 077	63 066	D
332813	Electroplating, plating, polishing, anodizing, & coloring	2	18	8	548	21 750	384	844	11 172	34 779	10 124	44 988	2 023

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAMPDEN COUNTY, MA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	23	8	2 301	91 729	1 516	2 653	48 733	210 623	121 576	332 978	D
33291	Metal valve mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	22	7	g	D	D	D	D	D	D	D	5 622
332994	Small arms mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	11	5	f	D	D	D	D	D	D	D	5 057
333	Machinery mfg.....	1	97	36	3 184	125 968	1 771	3 558	55 475	296 233	296 734	585 246	14 045
3332	Industrial machinery mfg ..	2	17	9	579	23 077	333	687	10 618	50 935	32 574	83 848	1 161
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683
333414	Heating equipment (except warm air furnaces) mfg.....	-	3	3	527	18 026	239	523	6 234	30 745	26 625	58 506	1 683
3335	Metalworking machinery mfg.....	5	43	13	755	30 521	546	1 112	18 563	50 133	29 694	78 577	3 649
33351	Metalworking machinery mfg.....	5	43	13	755	30 521	546	1 112	18 563	50 133	29 694	78 577	3 649
334	Computer & electronic product mfg.....	1	24	10	904	29 146	540	1 071	12 289	61 672	62 284	123 928	2 706
3344	Semiconductor & other electronic component mfg.....	-	14	8	f	D	D	D	D	D	D	D	1 517
33441	Semiconductor & other electronic component mfg.....	-	14	8	f	D	D	D	D	D	D	D	1 517
335	Electrical equipment, appliance, & component mfg.....	1	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	51	15	4 367	157 002	3 002	6 209	82 830	609 565	298 414	893 638	25 436
3399	Other miscellaneous mfg ..	-	31	12	h	D	D	D	D	D	D	D	25 130
33992	Sporting & athletic goods mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	7	5	2 722	95 109	1 994	4 193	52 164	359 849	150 398	509 022	D
339932	Game, toy, & children's vehicle mfg.....	-	7	5	2 722	95 109	1 994	4 193	52 164	359 849	150 398	509 022	D
31-33	HAMPSHIRE COUNTY, MA		180	58	5 760	192 286	3 985	7 832	108 144	493 686	554 460	1 048 267	27 634
322	Paper mfg.....	-	8	4	596	23 099	346	741	11 453	79 687	117 059	194 257	4 113
3222	Converted paper product mfg.....	-	8	4	596	23 099	346	741	11 453	79 687	117 059	194 257	4 113
325	Chemical mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	11	6	1 284	37 122	1 045	1 980	26 090	76 590	48 836	125 944	4 641
3261	Plastics product mfg.....	1	9	6	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	19	8	545	23 174	314	573	10 847	53 740	31 936	84 469	2 183

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	MIDDLESEX COUNTY, MA												
31-33	Manufacturing	1	2 437	850	118 002	5 216 534	61 016	125 379	1 998 793	13 888 810	8 793 110	22 587 129	1 029 784
311	Food mfg	—	177	53	5 271	150 817	3 569	6 872	89 336	795 175	618 366	1 418 630	44 700
3113	Sugar & confectionery product mfg	—	12	6	756	19 210	624	1 230	13 622	109 264	65 566	175 560	D
3118	Bakeries & tortilla mfg	—	110	24	2 274	59 719	1 558	2 694	38 933	285 252	112 332	407 386	19 354
31181	Bread & bakery product mfg	—	104	23	2 094	53 257	1 438	2 457	36 492	254 752	92 963	347 450	19 096
311811	Retail bakeries	4	70	7	660	8 574	362	502	4 529	17 783	9 045	26 855	737
311812	Commercial bakeries	—	28	14	1 362	43 425	1 015	1 866	31 100	233 656	81 579	314 933	18 196
3119	Other food mfg	—	21	13	1 147	37 324	717	1 524	16 669	218 883	238 415	452 632	11 178
31194	Seasoning & dressing mfg	—	5	4	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	12	5	999	40 281	467	1 049	17 558	193 194	264 329	463 067	D
3121	Beverage mfg	3	12	5	999	40 281	467	1 049	17 558	193 194	264 329	463 067	D
31211	Soft drink & ice mfg	—	5	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	3	f	D	D	D	D	D	D	D	7 437
313	Textile mills	—	23	14	1 286	44 212	1 022	2 299	29 029	104 652	121 743	226 685	9 708
3133	Textile & fabric finishing & fabric coating mills	—	14	7	781	30 193	567	1 318	17 416	75 456	78 200	153 795	D
31332	Fabric coating mills	—	8	6	633	26 736	441	1 062	14 707	70 712	73 914	144 760	D
313320	Fabric coating mills	—	8	6	633	26 736	441	1 062	14 707	70 712	73 914	144 760	D
314	Textile product mills	2	41	6	516	10 142	415	778	6 784	22 012	22 847	46 340	671
315	Apparel mfg	4	35	8	834	16 155	692	1 262	10 027	28 776	39 483	69 759	705
3152	Cut & sew apparel mfg	5	22	6	685	12 119	592	1 082	8 337	23 000	24 860	47 158	502
322	Paper mfg	—	45	32	3 245	123 117	2 283	5 373	76 864	305 273	303 787	611 733	13 041
3222	Converted paper product mfg	—	42	29	2 874	107 166	2 016	4 769	65 065	240 795	243 728	486 785	8 972
32221	Paperboard container mfg	—	19	15	1 129	40 391	843	1 954	26 856	79 266	120 124	199 840	4 269
322211	Corrugated & solid fiber box mfg	—	8	6	500	18 022	348	745	10 345	33 268	55 684	88 767	1 072
32222	Paper bag & coated & treated paper mfg	—	11	7	895	38 472	566	1 321	20 744	104 026	85 457	190 839	3 222
322222	Coated & laminated paper mfg	—	9	5	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	7	3	618	21 836	429	1 112	13 044	41 526	22 379	63 605	330
322231	Die-cut paper & paperboard office supplies mfg	—	4	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	314	68	6 490	256 771	4 608	9 680	156 107	563 823	310 197	876 019	31 794
3231	Printing & related support activities	2	314	68	6 490	256 771	4 608	9 680	156 107	563 823	310 197	876 019	31 794
32311	Printing	2	280	57	6 036	238 627	4 248	8 915	143 056	534 141	297 292	833 443	29 343
323110	Commercial lithographic printing	2	131	35	3 350	150 556	2 265	4 866	85 811	292 348	174 173	467 868	17 961
323117	Book printing	5	9	7	1 172	37 801	935	1 970	26 706	83 039	134 299	5 768	5 768
325	Chemical mfg	—	110	45	7 023	364 175	3 504	7 144	128 367	1 022 764	742 188	1 786 221	91 380
3254	Pharmaceutical & medicine mfg	—	29	17	2 106	102 170	1 066	2 119	35 388	524 073	136 522	660 723	31 958
32541	Pharmaceutical & medicine mfg	—	29	17	2 106	102 170	1 066	2 119	35 388	524 073	136 522	660 723	31 958
325412	Pharmaceutical preparation mfg	—	11	5	1 154	66 291	458	1 016	20 949	337 747	61 272	395 044	17 932
3255	Paint, coating, & adhesive mfg	2	23	8	603	24 724	271	534	8 923	68 330	66 229	134 784	1 873
3259	Other chemical product mfg	—	23	12	3 763	213 888	1 920	3 997	76 095	343 827	452 466	817 090	51 076
32599	All other chemical product & preparation mfg	—	14	8	3 480	203 997	1 753	3 692	70 934	327 928	422 272	770 854	50 139
325992	Photographic film, paper, plate, & chemical mfg	—	3	1	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	7	4	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	82	34	3 146	100 470	2 453	4 979	64 610	273 850	203 292	477 600	20 497
3261	Plastics product mfg	2	72	33	3 028	96 450	2 370	4 826	62 361	264 312	190 969	455 970	20 155
32611	Unsupported plastics film, sheet, & bag mfg	—	11	7	545	20 920	393	738	11 700	73 280	48 830	122 189	4 426
32619	Other plastics product mfg	2	48	23	1 931	60 013	1 544	3 157	41 289	161 860	116 579	279 084	13 649
326199	All other plastics product mfg	2	46	23	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	52	14	1 027	40 370	706	1 243	19 221	83 670	70 583	154 133	5 901

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MIDDLESEX COUNTY, MA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	24	8	1 035	34 133	729	1 600	19 621	130 690	166 044	257 388	6 879
3315	Foundries	2	18	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	12	3	502	13 493	398	918	8 205	53 592	15 010	68 247	D
332	Fabricated metal product mfg	1	417	120	8 802	337 571	5 854	11 511	172 660	736 141	373 671	1 109 554	48 153
3323	Architectural & structural metals mfg	—	79	34	1 879	65 077	1 382	2 604	38 656	127 507	82 297	209 893	6 737
33232	Ornamental & architectural metal products mfg	—	59	26	1 497	51 338	1 101	1 979	29 569	96 010	58 653	154 781	5 671
332322	Sheet metal work mfg	—	43	22	1 141	40 581	895	1 582	24 460	76 152	43 024	119 296	4 305
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	201	37	2 678	99 095	2 088	4 073	66 093	187 779	71 315	257 761	18 025
33271	Machine shops	2	166	24	1 785	66 294	1 373	2 591	44 768	120 784	48 333	169 301	11 105
332710	Machine shops	2	166	24	1 785	66 294	1 373	2 591	44 768	120 784	48 333	169 301	11 105
33272	Turned product & screw, nut, & bolt mfg	3	35	13	893	32 801	715	1 482	21 325	66 995	22 982	88 460	6 920
332721	Precision turned product mfg	3	30	12	826	30 402	662	1 374	19 697	62 513	20 184	81 149	D
3328	Coating, engraving, heat treating, & allied activities	2	57	22	1 245	41 565	915	2 095	24 757	82 045	23 456	105 858	4 530
33281	Coating, engraving, heat treating, & allied activities	2	57	22	1 245	41 565	915	2 095	24 757	82 045	23 456	105 858	4 530
332812	Metal coating engraving (exc jewelry/silverware)/ allied services	3	30	9	570	18 016	412	1 027	10 103	38 230	9 251	47 644	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	22	12	605	20 793	453	941	12 776	36 557	11 533	48 277	2 186
3329	Other fabricated metal product mfg	—	32	9	1 795	89 119	645	1 037	19 457	236 543	122 385	358 550	14 558
33299	All other fabricated metal product mfg	—	28	7	g	D	D	D	D	D	D	D	14 195
332993	Ammunition (except small arms) mfg	—	5	5	1 465	79 261	425	667	14 144	214 458	108 976	322 828	D
333	Machinery mfg	2	196	76	8 778	408 227	4 658	9 508	174 057	908 096	762 620	1 681 106	80 842
3332	Industrial machinery mfg	4	49	21	4 279	220 450	1 997	4 359	82 802	465 011	407 101	874 043	48 486
33329	Other industrial machinery mfg	4	44	21	h	D	D	D	D	D	D	D	48 406
333293	Printing machinery & equipment mfg	1	6	4	897	40 652	455	1 079	14 993	74 621	60 649	134 663	D
333295	Semiconductor machinery mfg	5	10	9	g	D	D	D	D	D	D	D	15 637
333298	All other industrial machinery mfg	—	22	6	1 013	50 550	332	673	14 833	110 618	50 664	162 082	D
3333	Commercial & service industry machinery mfg	2	40	20	1 649	62 950	946	1 817	28 928	138 136	72 415	210 002	9 524
33331	Commercial & service industry machinery mfg	2	40	20	1 649	62 950	946	1 817	28 928	138 136	72 415	210 002	9 524
333314	Optical instrument & lens mfg	1	21	11	1 064	39 501	611	1 192	19 499	98 272	37 633	135 332	7 819
3339	Other general-purpose machinery mfg	—	57	24	2 170	95 081	1 270	2 455	46 138	260 415	239 710	507 658	19 696
33399	All other general-purpose machinery mfg	—	48	19	1 640	74 643	985	1 814	36 765	200 518	152 232	359 398	15 827
333999	All other miscellaneous general-purpose machinery mfg	—	31	11	845	35 855	513	859	19 589	124 349	68 929	195 689	9 249
334	Computer & electronic product mfg	—	453	243	55 332	2 720 475	21 861	45 781	815 196	7 433 638	3 825 348	11 150 941	594 037
3341	Computer & peripheral equipment mfg	—	57	31	4 997	293 641	1 789	3 932	93 777	1 137 998	775 865	1 902 263	59 333
33411	Computer & peripheral equipment mfg	—	57	31	4 997	293 641	1 789	3 932	93 777	1 137 998	775 865	1 902 263	59 333
334111	Electronic computer mfg	—	12	6	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	6	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	35	20	2 884	169 118	1 470	3 234	81 668	526 926	515 061	1 039 762	30 585

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MIDDLESEX COUNTY, MA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	—	59	33	8 708	419 971	3 320	6 204	125 604	1 205 029	615 819	1 795 763	125 752
33421	Telephone apparatus mfg	—	20	12	5 094	277 854	1 807	3 284	75 926	889 648	442 662	1 318 013	86 149
334210	Telephone apparatus mfg	—	20	12	5 094	277 854	1 807	3 284	75 926	889 648	442 662	1 318 013	86 149
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	26	16	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	26	16	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	163	88	15 744	627 001	8 415	17 622	228 649	1 910 356	946 013	2 843 848	267 143
33441	Semiconductor & other electronic component mfg	1	163	88	15 744	627 001	8 415	17 622	228 649	1 910 356	946 013	2 843 848	267 143
334412	Bare printed circuit board mfg	1	27	13	1 449	47 678	862	1 906	21 195	127 846	63 820	186 604	6 845
334413	Semiconductor & related device mfg ...	—	38	24	7 179	310 069	3 608	6 680	108 878	1 080 292	373 155	1 447 820	203 176
334418	Printed circuit assembly (electronic assembly) mfg	1	37	29	4 215	169 666	2 273	5 390	55 963	489 219	372 889	863 998	43 351
334419	Other electronic component mfg	3	37	12	2 128	73 946	1 100	2 372	27 486	141 559	100 913	245 751	11 666
3345	Navigational, measuring, medical, & control instruments mfg	—	150	84	25 140	1 355 535	7 835	16 933	352 356	3 102 929	1 391 185	4 435 065	127 094
33451	Navigational, measuring, medical, & control instruments mfg	—	150	84	25 140	1 355 535	7 835	16 933	352 356	3 102 929	1 391 185	4 435 065	127 094
334510	Electromedical & electrotherapeutic apparatus mfg	1	15	7	f	D	D	D	D	D	D	D	6 607
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	j	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	24	14	1 725	82 232	440	921	13 527	300 966	82 333	380 130	12 668
334515	Electricity measuring & testing instrument mfg	1	22	16	2 392	117 052	927	1 573	34 655	301 202	151 667	449 619	22 652
334516	Analytical laboratory instrument mfg	—	37	17	2 485	118 883	829	1 717	29 710	176 979	119 971	293 886	10 057
334517	Irradiation apparatus mfg	—	6	4	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	27	14	1 329	60 935	787	1 523	29 796	130 725	68 604	205 573	5 110
3346	Mfg & reproducing magnetic & optical media .	2	17	4	517	17 567	351	787	11 728	63 774	73 656	137 152	13 969
33461	Mfg & reproducing magnetic & optical media	2	17	4	517	17 567	351	787	11 728	63 774	73 656	137 152	13 969
335	Electrical equipment, appliance, & component mfg	3	67	32	3 109	122 092	1 795	3 626	51 004	255 150	262 644	520 527	15 354
3353	Electrical equipment mfg ..	2	27	11	986	41 162	511	941	13 128	85 950	65 198	151 676	3 778
33531	Electrical equipment mfg	2	27	11	986	41 162	511	941	13 128	85 950	65 198	151 676	3 778
335314	Relay & industrial control mfg	2	18	9	834	36 756	412	770	10 916	75 251	55 244	130 760	3 356
3359	Other electrical equipment & component mfg	3	33	17	1 731	69 001	993	2 144	29 802	139 658	150 623	292 139	10 370
33593	Wiring device mfg	—	9	3	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	19	10	966	41 295	433	935	13 203	106 613	107 293	215 790	7 024
335999	All other miscellaneous electrical equipment & component mfg	4	18	10	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	4	47	18	1 689	58 738	1 185	2 523	36 317	109 396	112 559	222 675	7 758
3364	Aerospace product & parts mfg	2	8	6	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	2	8	6	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	2	6	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MIDDLESEX COUNTY, MA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	71	10	1 260	37 726	927	1 810	21 696	74 291	69 212	145 148	4 450
3371	Household & institutional furniture & kitchen cabinet mfg	1	58	6	860	25 966	632	1 202	15 026	57 970	42 882	101 350	2 429
33712	Household & institutional furniture mfg	1	28	6	731	22 558	520	1 008	12 449	46 871	37 599	84 893	2 224
339	Miscellaneous mfg	1	217	55	7 438	329 922	3 732	7 190	95 791	797 704	462 958	1 257 585	40 763
3391	Medical equipment & supplies mfg	1	122	36	4 926	246 300	2 207	4 330	58 378	572 898	278 279	849 410	31 632
33911	Medical equipment & supplies mfg	1	122	36	4 926	246 300	2 207	4 330	58 378	572 898	278 279	849 410	31 632
339112	Surgical & medical instrument mfg	1	51	21	3 731	199 122	1 671	3 406	42 061	457 153	234 716	689 553	27 086
3399	Other miscellaneous mfg ..	1	95	19	2 512	83 622	1 525	2 860	37 413	224 806	184 679	408 175	9 131
33999	All other miscellaneous mfg	1	35	13	1 878	67 222	1 080	2 053	29 286	183 303	150 679	331 682	8 046
339991	Gasket, packing, & sealing device mfg...	1	6	5	794	30 075	420	803	13 006	88 884	51 735	139 405	4 639
339999	All other miscellaneous mfg	—	20	3	699	26 189	396	746	10 932	70 493	78 278	147 878	2 484
NORFOLK COUNTY, MA													
31-33	Manufacturing	1	863	317	36 648	1 515 211	22 383	45 580	747 216	3 662 636	2 876 498	6 528 358	260 845
311	Food mfg	—	50	9	1 425	44 558	1 059	2 171	33 703	104 158	233 363	338 732	7 937
3115	Dairy product mfg	—	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	4	15	9	650	21 299	420	924	11 125	62 146	60 303	121 919	D
3132	Fabric mills	6	9	7	517	17 033	361	797	9 529	34 568	39 940	72 501	D
322	Paper mfg	—	18	14	1 314	54 298	899	2 040	29 001	122 211	135 908	259 426	D
3222	Converted paper product mfg	—	17	13	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	3	3	515	23 067	319	748	12 630	52 404	44 509	99 288	D
322222	Coated & laminated paper mfg	—	3	3	515	23 067	319	748	12 630	52 404	44 509	99 288	D
323	Printing & related support activities	2	129	28	2 381	80 664	1 717	3 217	52 571	147 831	100 315	250 984	9 242
3231	Printing & related support activities	2	129	28	2 381	80 664	1 717	3 217	52 571	147 831	100 315	250 984	9 242
32311	Printing	2	110	24	2 117	71 920	1 514	2 841	45 929	135 763	95 855	231 999	7 514
323110	Commercial lithographic printing ..	3	54	15	1 330	43 636	939	1 725	28 006	83 296	58 325	141 935	4 953
325	Chemical mfg	1	36	18	2 115	90 634	943	2 089	40 004	238 525	251 018	485 962	27 135
3254	Pharmaceutical & medicine mfg	—	8	5	1 460	64 117	618	1 428	29 481	164 957	148 538	309 708	21 836
32541	Pharmaceutical & medicine mfg	—	8	5	1 460	64 117	618	1 428	29 481	164 957	148 538	309 708	21 836
325413	In-vitro diagnostic substance mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	27	17	819	28 958	575	1 162	15 755	87 349	101 885	188 578	D
3261	Plastics product mfg	1	20	12	611	20 748	440	881	11 701	62 025	72 728	134 213	D
331	Primary metal mfg	6	10	6	573	18 167	471	1 021	13 392	41 920	45 576	88 008	3 810
332	Fabricated metal product mfg	—	162	58	4 508	187 257	3 182	6 255	107 295	375 221	235 618	603 153	23 121
3323	Architectural & structural metals mfg	—	44	20	1 207	43 917	836	1 543	25 968	71 859	53 154	124 615	2 442
33232	Ornamental & architectural metal products mfg	—	38	16	1 084	39 794	759	1 384	24 069	62 186	45 675	107 363	2 144
332322	Sheet metal work mfg ..	—	26	12	783	30 988	555	975	19 001	48 447	28 705	76 803	1 844
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	53	13	983	43 137	743	1 537	25 370	74 216	63 026	136 219	D
33271	Machine shops	1	44	7	622	24 944	444	865	15 287	43 947	48 687	93 238	6 111
332710	Machine shops	1	44	7	622	24 944	444	865	15 287	43 947	48 687	93 238	6 111
3329	Other fabricated metal product mfg	—	23	7	1 389	67 743	863	1 655	34 153	164 835	79 320	239 248	7 571
33291	Metal valve mfg	—	6	4	1 002	51 582	571	1 135	24 196	122 961	66 194	183 631	5 587
332911	Industrial valve mfg ...	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORFOLK COUNTY, MA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	3	60	28	3 286	157 592	1 812	3 865	67 220	241 618	264 858	511 527	31 119
3332	Industrial machinery mfg . .	9	15	4	592	27 638	333	734	13 243	61 010	52 069	113 978	4 152
33329	Other industrial machinery mfg	9	13	4	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg . .	—	6	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	6	2	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	2	21	15	1 199	55 607	586	1 169	23 272	91 288	102 563	200 013	4 866
33399	All other general-purpose machinery mfg	1	16	11	942	45 144	464	907	18 486	70 822	81 871	158 177	3 613
333999	All other miscellaneous general-purpose machinery mfg	—	10	8	f	D	D	D	D	D	D	D	3 312
334	Computer & electronic product mfg	1	99	50	11 674	563 503	6 442	12 827	254 351	1 383 071	731 995	2 119 940	97 262
3342	Communications equipment mfg	1	10	6	4 048	212 837	2 852	5 866	152 400	466 620	229 152	696 362	22 701
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	6	4	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	6	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	26	12	1 815	79 156	1 050	2 196	30 590	199 060	100 792	297 479	29 003
33441	Semiconductor & other electronic component mfg	—	26	12	1 815	79 156	1 050	2 196	30 590	199 060	100 792	297 479	29 003
334418	Printed circuit assembly (electronic assembly) mfg	3	5	5	814	27 177	481	899	12 122	34 441	19 291	52 437	680
3345	Navigational, measuring, medical, & control instruments mfg	1	43	27	5 435	250 949	2 437	4 565	66 827	677 949	372 287	1 056 347	43 276
33451	Navigational, measuring, medical, & control instruments mfg	1	43	27	5 435	250 949	2 437	4 565	66 827	677 949	372 287	1 056 347	43 276
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	3	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	6	4	2 067	96 199	911	1 694	27 580	229 325	120 165	355 462	6 581
334515	Electricity measuring & testing instrument mfg	9	7	4	721	29 803	253	577	8 252	57 499	56 693	114 164	5 952
334516	Analytical laboratory instrument mfg	—	7	4	746	30 933	229	467	6 104	86 775	70 602	162 721	D
334519	Other measuring & controlling device mfg	—	7	6	610	28 242	156	274	4 775	57 956	35 335	94 531	1 806
335	Electrical equipment, appliance, & component mfg	—	27	18	2 476	84 043	1 492	3 191	36 378	300 424	172 244	465 507	13 609
3353	Electrical equipment mfg . .	—	14	9	1 198	41 824	714	1 655	16 944	174 912	59 903	233 476	D
33531	Electrical equipment mfg	—	14	9	1 198	41 824	714	1 655	16 944	174 912	59 903	233 476	D
335313	Switchgear & switchboard apparatus mfg	—	5	3	722	24 715	480	1 257	11 481	125 657	15 748	141 519	1 318
3359	Other electrical equipment & component mfg	—	10	8	g	D	D	D	D	D	D	D	9 413
33593	Wiring device mfg	—	3	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	55	11	849	26 725	626	1 263	17 012	74 430	68 493	143 988	3 991
339	Miscellaneous mfg	3	85	31	2 543	92 059	1 388	2 803	34 856	217 387	139 411	357 868	8 415
3391	Medical equipment & supplies mfg	4	41	14	1 304	51 002	719	1 464	18 174	115 418	56 725	171 859	5 439
33911	Medical equipment & supplies mfg	4	41	14	1 304	51 002	719	1 464	18 174	115 418	56 725	171 859	5 439
339112	Surgical & medical instrument mfg	8	11	6	527	27 508	256	501	8 245	63 657	25 660	88 845	4 042
3399	Other miscellaneous mfg . .	2	44	17	1 239	41 057	669	1 339	16 682	101 969	82 686	186 009	2 976

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLYMOUTH COUNTY, MA													
31-33	Manufacturing	1	613	178	16 063	534 365	10 774	21 422	289 814	1 246 522	959 164	2 210 829	76 910
311	Food mfg.....	2	36	9	680	15 531	470	756	9 485	45 520	44 731	90 176	1 948
316	Leather & allied product mfg .	-	17	6	636	17 580	546	946	10 413	41 710	36 673	82 429	1 563
322	Paper mfg.....	-	8	4	533	18 241	439	880	9 940	57 896	39 211	94 690	2 228
3222	Converted paper product mfg.....	-	8	4	533	18 241	439	880	9 940	57 896	39 211	94 690	2 228
323	Printing & related support activities.....	2	96	20	1 660	56 467	1 136	2 377	34 709	112 129	61 863	173 975	7 764
3231	Printing & related support activities.....	2	96	20	1 660	56 467	1 136	2 377	34 709	112 129	61 863	173 975	7 764
32311	Printing.....	2	79	16	1 394	46 761	950	1 886	27 493	89 305	52 673	142 131	D
323110	Commercial lithographic printing ..	1	41	10	845	26 064	583	1 125	16 262	51 986	27 961	79 918	2 991
325	Chemical mfg.....	7	17	6	531	15 670	325	606	7 580	45 901	42 410	87 636	3 455
326	Plastics & rubber products mfg.....	1	32	17	1 167	35 757	873	1 569	20 442	84 877	83 434	169 490	5 658
3261	Plastics product mfg.....	2	26	14	g	D	D	D	D	D	D	D	5 201
32619	Other plastics product mfg.....	2	19	13	985	29 294	748	1 336	17 609	57 697	43 833	101 922	4 490
326199	All other plastics product mfg.....	2	19	13	985	29 294	748	1 336	17 609	57 697	43 833	101 922	4 490
332	Fabricated metal product mfg.....	1	115	28	2 631	84 751	1 920	4 044	52 628	172 401	82 736	256 579	8 844
3321	Forging & stamping.....	-	8	5	834	27 321	671	1 422	18 723	50 155	19 220	70 355	1 839
33211	Forging & stamping.....	-	8	5	834	27 321	671	1 422	18 723	50 155	19 220	70 355	1 839
332116	Metal stamping.....	-	6	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	3	57	7	f	D	D	D	D	D	D	D	D
33271	Machine shops.....	3	49	5	538	17 089	404	783	11 045	36 211	12 375	48 716	2 552
332710	Machine shops.....	3	49	5	538	17 089	404	783	11 045	36 211	12 375	48 716	2 552
333	Machinery mfg.....	5	64	21	1 567	59 469	955	1 905	28 019	111 574	104 571	216 517	7 728
3332	Industrial machinery mfg ..	7	15	8	599	22 845	336	700	10 163	44 754	39 747	84 860	2 831
33329	Other industrial machinery mfg.....	7	12	6	545	20 566	299	628	9 039	40 388	36 042	76 900	D
334	Computer & electronic product mfg.....	-	38	19	1 960	81 985	1 162	2 139	35 944	174 259	124 562	297 479	19 043
3344	Semiconductor & other electronic component mfg.....	1	17	8	633	18 833	449	766	9 526	39 768	27 881	67 700	4 180
33441	Semiconductor & other electronic component mfg.....	1	17	8	633	18 833	449	766	9 526	39 768	27 881	67 700	4 180
3345	Navigational, measuring, medical, & control instruments mfg.....	-	14	7	838	35 573	429	700	14 579	79 102	41 273	118 334	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	14	7	838	35 573	429	700	14 579	79 102	41 273	118 334	D
335	Electrical equipment, appliance, & component mfg.....	-	13	6	1 043	28 659	497	1 107	12 412	97 040	32 139	130 477	1 867
339	Miscellaneous mfg.....	1	49	11	1 211	42 753	710	1 462	19 263	123 498	76 882	202 451	5 494
3391	Medical equipment & supplies mfg.....	-	26	7	910	31 225	542	1 095	15 295	92 665	48 990	142 514	2 935
33911	Medical equipment & supplies mfg.....	-	26	7	910	31 225	542	1 095	15 295	92 665	48 990	142 514	2 935
339112	Surgical & medical instrument mfg.....	-	9	5	628	21 443	342	690	9 251	64 989	29 931	95 904	2 430
SUFFOLK COUNTY, MA													
31-33	Manufacturing	1	624	192	21 366	745 390	14 111	28 962	391 606	2 606 872	1 733 599	4 317 936	283 679
311	Food mfg.....	2	121	37	3 304	86 015	2 239	4 354	49 599	210 854	438 425	649 994	15 665
3116	Meat product mfg.....	2	14	11	982	27 957	666	1 487	16 337	67 230	175 600	244 071	5 082
31161	Animal slaughtering & processing.....	2	14	11	982	27 957	666	1 487	16 337	67 230	175 600	244 071	5 082
3118	Bakeries & tortilla mfg.....	3	66	12	1 195	25 060	818	1 487	15 577	54 303	33 606	88 019	3 134
31181	Bread & bakery product mfg.....	3	59	10	951	19 048	619	1 176	11 313	47 934	28 892	77 035	D
311812	Commercial bakeries .	4	13	7	627	13 501	417	843	8 293	35 133	17 583	52 805	1 442

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SUFFOLK COUNTY, MA —Con.												
31-33	Manufacturing— Con.												
315	Apparel mfg	2	55	26	1 985	51 758	1 458	2 744	23 384	89 218	75 070	158 079	3 303
3152	Cut & sew apparel mfg	2	46	23	g	D	D	D	D	D	D	D	3 077
31521	Cut & sew apparel												
315212	contractors	8	25	11	586	8 368	558	924	7 310	12 947	3 200	16 161	359
	Women's, girls', & infants' cut & sew apparel contractors ..	9	24	10	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	10	8	738	30 591	421	763	6 930	48 048	49 935	91 730	2 198
323	Printing & related support activities	2	121	29	2 463	92 771	1 813	3 597	58 156	173 713	95 168	269 213	13 759
3231	Printing & related support activities	2	121	29	2 463	92 771	1 813	3 597	58 156	173 713	95 168	269 213	13 759
32311	Printing	3	103	24	2 100	80 944	1 505	2 987	49 083	151 805	90 180	242 175	12 364
323110	Commercial lithographic printing ..	2	57	16	1 579	65 037	1 098	2 198	39 190	119 028	67 676	186 943	10 300
325	Chemical mfg	1	21	9	1 241	43 743	701	1 256	24 623	250 136	139 555	391 840	D
3254	Pharmaceutical & medicine mfg	1	5	3	639	15 624	386	771	10 266	169 512	98 969	268 497	D
32541	Pharmaceutical & medicine mfg	1	5	3	639	15 624	386	771	10 266	169 512	98 969	268 497	D
326	Plastics & rubber products mfg	—	11	6	f	D	D	D	D	D	D	D	4 817
332	Fabricated metal product mfg	—	58	15	3 011	129 149	2 299	5 178	85 137	819 392	165 419	967 342	D
3322	Cutlery & handtool mfg	—	1	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	—	1	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	25	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	24	9	2 685	106 319	991	1 910	23 224	416 718	173 236	598 723	21 904
3345	Navigational, measuring, medical, & control instruments mfg	—	8	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	3	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	10	4	1 066	32 052	772	1 747	18 279	78 247	53 394	133 456	5 045
3359	Other electrical equipment & component mfg	1	5	3	996	29 972	724	1 663	17 127	72 204	47 497	121 469	D
33593	Wiring device mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	7	781	26 157	537	1 161	14 412	54 665	79 389	131 804	5 431
3363	Motor vehicle parts mfg	—	8	4	611	21 553	397	926	11 013	48 588	71 204	117 161	D
337	Furniture & related product mfg	2	22	6	526	16 109	390	853	10 891	37 808	32 825	70 527	2 136
339	Miscellaneous mfg	—	62	9	1 115	45 180	563	1 088	14 854	104 970	160 515	255 518	4 493
3399	Other miscellaneous mfg ..	—	42	5	879	38 008	396	814	11 188	91 061	149 913	230 827	3 282
33991	Jewelry & silverware mfg	—	15	2	f	D	D	D	D	D	D	D	D
	WORCESTER COUNTY, MA												
31-33	Manufacturing	2	1 336	507	61 344	2 340 872	39 194	79 832	1 140 128	6 347 543	4 957 057	11 303 351	491 196
311	Food mfg	1	66	20	1 495	39 088	969	1 789	22 886	187 732	164 028	351 578	7 569
3118	Bakeries & tortilla mfg	—	42	11	644	14 258	399	716	8 554	97 183	43 426	140 735	1 505
31181	Bread & bakery product mfg	—	41	11	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	7	2	630	15 292	182	366	4 669	59 731	71 684	130 303	8 659
3121	Beverage mfg	—	7	2	630	15 292	182	366	4 669	59 731	71 684	130 303	8 659
31211	Soft drink & ice mfg	—	4	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WORCESTER COUNTY, MA—Con.												
	Manufacturing—Con.												
313	Textile mills	2	21	14	1 825	56 687	1 347	2 911	38 178	155 584	155 083	315 264	8 917
3132	Fabric mills	6	5	5	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	3	3	522	10 621	325	752	7 611	14 607	12 080	31 206	D
313210	Broadwoven fabric mills	9	3	3	522	10 621	325	752	7 611	14 607	12 080	31 206	D
3133	Textile & fabric finishing & fabric coating mills	1	11	7	905	33 862	676	1 496	20 961	121 150	113 889	235 119	D
31331	Textile & fabric finishing mills	1	5	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	1	5	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	24	6	f	D	D	D	D	D	D	D	1 587
3149	Other textile product mills	—	14	5	747	25 518	520	1 017	13 928	43 338	62 866	103 865	D
31499	All other textile product mills	—	10	4	665	23 252	460	900	12 536	39 079	58 837	95 577	1 099
314999	All other miscellaneous textile product mills	—	10	4	665	23 252	460	900	12 536	39 079	58 837	95 577	1 099
321	Wood product mfg	1	43	11	641	17 815	453	846	10 088	38 808	34 220	71 775	2 129
3219	Other wood product mfg	1	35	9	f	D	D	D	D	D	D	D	1 594
322	Paper mfg	—	36	25	3 644	143 671	2 562	5 902	81 241	390 460	451 041	838 840	27 966
3222	Converted paper product mfg	—	31	21	3 216	121 746	2 288	5 175	69 604	329 788	372 059	701 750	19 090
32221	Paperboard container mfg	—	14	10	1 176	42 763	900	1 874	24 531	98 926	113 562	211 254	9 988
322211	Corrugated & solid fiber box mfg	—	9	7	669	27 756	505	1 119	14 529	57 658	84 526	142 342	5 806
322212	Folding paperboard box mfg	—	4	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	3	2	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	3	2	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg	2	8	6	653	22 436	463	1 007	15 595	51 284	52 345	103 584	2 131
322232	Envelope mfg	2	6	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	121	23	1 935	59 215	1 388	2 552	38 349	105 351	65 914	172 019	14 141
3231	Printing & related support activities	1	121	23	1 935	59 215	1 388	2 552	38 349	105 351	65 914	172 019	14 141
32311	Printing	1	103	19	1 642	51 867	1 170	2 167	33 405	93 328	62 902	156 925	D
323110	Commercial lithographic printing	—	55	13	1 145	35 416	837	1 513	24 148	62 307	44 649	107 901	11 509
325	Chemical mfg	1	54	29	3 730	178 486	1 811	3 623	60 396	633 566	572 220	1 203 955	67 401
3254	Pharmaceutical & medicine mfg	—	10	5	1 773	102 280	575	1 181	20 328	414 177	184 597	600 657	37 376
32541	Pharmaceutical & medicine mfg	—	10	5	1 773	102 280	575	1 181	20 328	414 177	184 597	600 657	37 376
325412	Pharmaceutical preparation mfg	—	4	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	27	16	1 427	52 280	876	1 718	26 851	105 851	276 376	381 265	D
32599	All other chemical product & preparation mfg	2	26	16	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	2	21	15	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	120	65	6 474	221 399	5 196	11 203	142 204	557 008	498 602	1 055 423	54 547
3261	Plastics product mfg	1	114	63	i	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	88	51	5 076	173 413	4 087	8 777	110 301	418 803	352 122	772 330	43 412
326199	All other plastics product mfg	1	86	51	i	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	50	22	4 368	192 390	2 731	5 612	86 920	410 599	265 902	674 038	63 431
3272	Glass & glass product mfg	—	9	5	828	31 007	567	1 171	18 036	81 758	55 025	133 279	D
32721	Glass & glass product mfg	—	9	5	828	31 007	567	1 171	18 036	81 758	55 025	133 279	D
327215	Glass product mfg made of purchased glass	—	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	16	9	2 838	134 347	1 707	3 486	53 507	257 410	160 689	419 992	D
32791	Abrasive product mfg	—	10	8	2 791	132 861	1 678	3 432	52 809	252 488	157 231	411 643	26 049
327910	Abrasive product mfg	—	10	8	2 791	132 861	1 678	3 432	52 809	252 488	157 231	411 643	26 049
331	Primary metal mfg	—	20	11	1 105	38 468	849	1 822	26 658	90 164	142 106	231 821	8 768
3314	Nonferrous metal (except aluminum) production & processing	—	7	4	543	19 196	409	881	12 569	48 602	95 207	144 021	D
33142	Copper rolling, drawing, extruding, & alloying	—	5	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WORCESTER COUNTY, MA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	283	90	10 201	370 661	7 420	15 299	218 629	760 399	475 686	1 233 182	48 410
3321	Forging & stamping	5	18	8	1 671	74 479	1 423	3 043	44 803	132 748	101 598	228 337	10 205
33211	Forging & stamping	5	18	8	1 671	74 479	1 423	3 043	44 803	132 748	101 598	228 337	10 205
332111	Iron & steel forging	8	2	2	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	13	8	2 147	73 029	1 453	3 215	41 078	156 445	64 835	217 282	D
33221	Cutlery & handtool mfg	—	13	8	2 147	73 029	1 453	3 215	41 078	156 445	64 835	217 282	D
332212	Hand & edge tool mfg	—	10	6	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	32	10	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	—	11	6	536	21 528	340	751	12 193	36 911	30 899	69 981	D
3325	Hardware mfg	—	8	5	568	12 741	484	571	7 448	29 541	14 382	43 518	D
33251	Hardware mfg	—	8	5	568	12 741	484	571	7 448	29 541	14 382	43 518	D
332510	Hardware mfg	—	8	5	568	12 741	484	571	7 448	29 541	14 382	43 518	D
3326	Spring & wire product mfg	—	17	10	891	23 269	598	1 178	14 438	56 976	58 976	115 871	4 676
33261	Spring & wire product mfg	—	17	10	891	23 269	598	1 178	14 438	56 976	58 976	115 871	4 676
332618	Other fabricated wire product mfg	1	13	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	133	27	1 804	66 181	1 324	2 766	42 870	124 917	48 923	173 591	6 883
33271	Machine shops	1	114	17	1 303	49 033	962	2 006	31 782	94 061	32 346	126 439	4 658
332710	Machine shops	1	114	17	1 303	49 033	962	2 006	31 782	94 061	32 346	126 439	4 658
33272	Turned product & screw, nut, & bolt mfg	1	19	10	501	17 148	362	760	11 088	30 856	16 577	47 152	2 225
3328	Coating, engraving, heat treating, & allied activities	—	33	10	564	18 164	450	909	11 166	39 220	11 126	50 523	3 075
33281	Coating, engraving, heat treating, & allied activities	—	33	10	564	18 164	450	909	11 166	39 220	11 126	50 523	3 075
3329	Other fabricated metal product mfg	—	27	11	1 668	68 884	1 076	2 298	36 554	161 352	127 867	294 636	7 768
33291	Metal valve mfg	—	9	4	976	45 265	585	1 148	22 303	110 658	89 677	205 734	5 159
332911	Industrial valve mfg	—	7	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	18	7	692	23 619	491	1 150	14 251	50 694	38 190	88 902	2 609
333	Machinery mfg	2	169	62	6 267	264 000	3 845	7 854	135 030	574 872	373 359	946 254	29 589
3332	Industrial machinery mfg	3	24	9	1 000	43 314	544	1 084	18 619	103 428	81 570	179 103	5 301
33329	Other industrial machinery mfg	4	14	4	606	29 550	322	701	12 685	75 005	61 969	131 128	D
3333	Commercial & service industry machinery mfg	1	15	7	777	25 761	540	1 054	13 765	63 464	29 175	91 835	4 133
33331	Commercial & service industry machinery mfg	1	15	7	777	25 761	540	1 054	13 765	63 464	29 175	91 835	4 133
333314	Optical instrument & lens mfg	1	10	5	707	23 704	502	995	12 849	57 860	23 924	80 982	3 903
3335	Metalworking machinery mfg	5	86	24	2 500	106 737	1 581	3 224	61 208	223 941	132 969	354 913	11 151
33351	Metalworking machinery mfg	5	86	24	2 500	106 737	1 581	3 224	61 208	223 941	132 969	354 913	11 151
333511	Industrial mold mfg	4	31	7	511	24 018	408	939	17 844	39 876	13 924	53 951	2 366
333516	Rolling mill machinery & equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	8	5	946	46 310	547	1 123	22 664	104 060	57 185	159 048	2 434
33361	Engine, turbine, & power transmission equipment mfg	—	8	5	946	46 310	547	1 123	22 664	104 060	57 185	159 048	2 434
333611	Turbine & turbine generator set unit mfg	—	4	3	f	D	D	D	D	D	D	D	2 097
3339	Other general-purpose machinery mfg	1	25	11	697	29 574	376	867	12 379	63 251	51 948	115 652	5 779

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WORCESTER COUNTY, MA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	3	70	34	9 166	411 991	3 510	6 909	98 361	1 629 762	998 262	2 633 551	102 597
3341	Computer & peripheral equipment mfg	—	8	3	2 084	95 480	387	553	8 291	155 515	390 505	542 529	D
33411	Computer & peripheral equipment mfg	—	8	3	2 084	95 480	387	553	8 291	155 515	390 505	542 529	D
334111	Electronic computer mfg	—	1	1	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	8	6	2 756	121 626	886	1 549	21 117	771 881	158 429	943 808	D
33421	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	1	1	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	9	2	2	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	9	2	2	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	25	13	g	D	D	D	D	D	D	D	20 373
33441	Semiconductor & other electronic component mfg	—	25	13	g	D	D	D	D	D	D	D	20 373
334413	Semiconductor & related device mfg ...	—	6	4	1 116	50 872	664	1 389	22 100	125 157	136 062	248 595	D
3345	Navigational, measuring, medical, & control instruments mfg	—	24	9	1 918	96 058	650	1 243	17 600	253 892	159 037	412 551	18 348
33451	Navigational, measuring, medical, & control instruments mfg	—	24	9	1 918	96 058	650	1 243	17 600	253 892	159 037	412 551	18 348
334516	Analytical laboratory instrument mfg	—	6	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	33	23	2 504	113 794	1 687	3 370	57 008	282 556	299 775	581 976	19 806
3359	Other electrical equipment & component mfg	4	24	18	2 150	101 209	1 460	2 952	51 716	247 703	280 353	528 055	18 502
33592	Communication & energy wire & cable mfg	4	15	15	1 851	89 102	1 286	2 575	46 615	217 163	259 447	475 151	D
335929	Other communication & energy wire mfg ...	5	13	13	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	68	25	2 311	69 262	1 764	3 274	43 812	136 009	120 297	255 729	7 553
3371	Household & institutional furniture & kitchen cabinet mfg	1	50	17	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	39	14	1 322	35 937	1 028	1 931	25 559	63 414	46 430	109 370	2 385
337122	Nonupholstered wood household furniture mfg	—	20	7	763	19 914	582	1 139	14 563	40 354	29 481	69 221	1 221
3372	Office furniture (including fixtures) mfg	—	15	8	871	30 224	645	1 147	16 283	66 524	69 134	135 472	4 953
33721	Office furniture (including fixtures) mfg	—	15	8	871	30 224	645	1 147	16 283	66 524	69 134	135 472	4 953
339	Miscellaneous mfg	2	103	26	2 816	83 341	1 867	3 608	39 650	195 041	108 348	308 271	10 340
3391	Medical equipment & supplies mfg	2	44	15	1 938	59 867	1 254	2 373	26 578	141 360	62 620	208 880	8 610
33911	Medical equipment & supplies mfg	2	44	15	1 938	59 867	1 254	2 373	26 578	141 360	62 620	208 880	8 610
339115	Ophthalmic goods mfg	—	6	5	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	59	11	878	23 474	613	1 235	13 072	53 681	45 728	99 391	1 730

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ACTON TOWN, MA													
31-33	Manufacturing	2	40	13	1 714	65 048	998	1 918	29 382	144 014	93 636	236 435	8 474
334	Computer & electronic product mfg	1	13	5	750	28 503	337	580	8 932	75 466	25 678	98 919	4 421
3344	Semiconductor & other electronic component mfg	1	5	3	634	23 197	264	478	6 706	65 285	19 273	82 361	D
33441	Semiconductor & other electronic component mfg	1	5	3	634	23 197	264	478	6 706	65 285	19 273	82 361	D
AGAWAM, MA													
31-33	Manufacturing	1	57	25	1 873	70 463	1 214	2 481	34 079	177 802	177 451	348 289	10 519
332	Fabricated metal product mfg	1	23	9	612	27 185	399	903	11 752	56 810	38 823	93 597	3 312
AMESBURY TOWN, MA													
31-33	Manufacturing	2	38	14	1 390	49 997	1 025	2 096	28 468	111 917	60 157	168 985	6 202
ANDOVER TOWN, MA													
31-33	Manufacturing	-	34	21	6 255	353 635	3 116	7 267	132 739	1 585 271	998 668	2 564 746	178 141
325	Chemical mfg	-	5	5	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	3	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	8	4 356	258 997	1 972	4 700	78 286	914 001	659 263	1 587 002	D
3344	Semiconductor & other electronic component mfg	1	5	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	5	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	3	3 115	209 445	1 242	3 209	55 008	603 257	433 912	1 050 727	24 442
33451	Navigational, measuring, medical, & control instruments mfg	-	3	3	3 115	209 445	1 242	3 209	55 008	603 257	433 912	1 050 727	24 442
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	2	h	D	D	D	D	D	D	D	D
ASHLAND TOWN, MA													
31-33	Manufacturing	-	31	11	1 071	42 034	620	1 224	18 492	105 097	99 065	203 429	3 685
339	Miscellaneous mfg	-	5	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
ATHOL TOWN, MA													
31-33	Manufacturing	-	11	6	1 442	44 157	1 004	2 144	28 720	81 248	34 190	112 176	D
332	Fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ATTLEBORO, MA													
31-33	Manufacturing	-	143	54	9 714	333 510	6 375	12 686	147 899	704 774	670 664	1 411 970	57 341
331	Primary metal mfg	-	6	4	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	4	4	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	36	14	924	28 475	692	1 400	18 253	53 408	29 581	82 854	4 555
336	Transportation equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	44	16	2 400	61 504	1 858	3 755	39 236	176 133	110 288	295 197	5 299
3399	Other miscellaneous mfg ..	-	41	15	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	33	13	2 171	55 474	1 691	3 473	35 469	162 441	103 216	274 443	D
339911	Jewelry (except costume) mfg	-	16	8	869	24 266	695	1 274	14 788	96 187	60 857	157 512	D
339914	Costume jewelry & novelty mfg	-	10	3	f	D	D	D	D	D	D	D	D
AUBURN TOWN, MA													
31-33	Manufacturing	4	30	11	1 111	48 122	721	1 472	26 606	118 844	133 074	252 332	9 050
BARNSTABLE, MA													
31-33	Manufacturing	2	49	6	g	D	D	D	D	D	D	D	7 996
BEDFORD TOWN, MA													
31-33	Manufacturing	-	39	21	17 254	959 811	4 495	10 648	212 100	2 096 199	1 187 820	3 252 241	88 082
334	Computer & electronic product mfg	-	20	14	16 318	908 696	4 052	9 674	195 375	1 940 008	1 037 527	2 946 029	76 228
3341	Computer & peripheral equipment mfg	1	6	5	1 161	59 703	203	434	6 730	97 758	168 479	276 870	16 031
33411	Computer & peripheral equipment mfg	1	6	5	1 161	59 703	203	434	6 730	97 758	168 479	276 870	16 031
334113	Computer terminal mfg	-	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	4	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	5	j	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	5	j	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	j	D	D	D	D	D	D	D	D
BEVERLY, MA													
31-33	Manufacturing	-	83	26	3 861	168 130	1 862	3 927	58 334	469 110	261 726	726 116	22 508
332	Fabricated metal product mfg	1	25	4	527	17 117	333	715	10 121	33 419	15 776	49 405	1 413
333	Machinery mfg	-	5	3	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	8	1 097	41 229	660	1 260	18 513	121 171	68 432	190 255	7 185
3344	Semiconductor & other electronic component mfg	-	3	3	611	18 733	444	808	10 885	40 090	19 611	58 981	2 209
33441	Semiconductor & other electronic component mfg	-	3	3	611	18 733	444	808	10 885	40 090	19 611	58 981	2 209

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BILLERICA TOWN, MA													
31-33	Manufacturing	1	114	42	8 071	375 376	3 361	6 892	114 332	1 045 186	610 463	1 650 334	59 057
325	Chemical mfg	-	6	4	952	49 489	441	959	18 106	249 463	55 064	303 458	D
3254	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	6	17	6	1 394	81 440	739	1 591	34 144	143 869	166 300	313 945	D
3332	Industrial machinery mfg ..	7	5	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	7	5	3	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	8	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	31	13	3 427	155 036	857	1 786	28 456	461 320	285 585	741 054	26 584
3342	Communications equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	12	5	727	29 813	257	442	7 890	81 066	41 229	120 676	6 029
33441	Semiconductor & other electronic component mfg	1	12	5	727	29 813	257	442	7 890	81 066	41 229	120 676	6 029
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
BOSTON, MA													
31-33	Manufacturing	1	536	159	18 944	671 464	12 521	25 798	353 140	2 424 545	1 540 748	3 941 523	273 251
311	Food mfg	2	108	33	2 585	68 223	1 801	3 542	40 446	168 023	357 056	525 656	11 967
3116	Meat product mfg	3	12	10	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	12	10	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	4	57	9	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	4	52	8	735	14 157	452	839	7 911	32 129	22 031	54 277	D
315	Apparel mfg	2	52	25	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	43	22	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	24	10	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	9	24	10	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	9	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	108	26	2 322	87 037	1 718	3 405	54 392	162 885	90 603	253 697	13 456
3231	Printing & related support activities	3	108	26	2 322	87 037	1 718	3 405	54 392	162 885	90 603	253 697	13 456
32311	Printing	3	92	22	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	51	14	1 494	61 709	1 043	2 078	37 210	112 707	64 045	176 996	10 037
325	Chemical mfg	1	13	6	1 093	39 113	630	1 136	22 835	237 120	125 480	364 674	D
3254	Pharmaceutical & medicine mfg	-	4	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	9	2 591	114 730	2 006	4 521	77 304	797 280	151 186	930 496	D
3322	Cutlery & handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	1	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	23	4	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON, MA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	20	7	2 622	104 646	946	1 836	22 277	412 288	170 956	591 958	21 127
3345	Navigational, measuring, medical, & control instruments mfg.....	-	7	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	7	2	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	2	8	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	1	5	3	996	29 972	724	1 663	17 127	72 204	47 497	121 469	D
33593	Wiring device mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	13	7	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	-	8	4	611	21 553	397	926	11 013	48 588	71 204	117 161	D
339	Miscellaneous mfg.....	-	53	7	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	-	37	4	f	D	D	D	D	D	D	D	D
	BRAINTREE TOWN, MA												
31-33	Manufacturing	-	54	19	2 180	93 364	1 683	3 032	43 006	333 808	145 139	470 025	30 351
334	Computer & electronic product mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
	BROCKTON, MA												
31-33	Manufacturing	3	121	38	3 009	92 027	2 260	4 328	55 183	217 622	155 595	377 982	11 054
	BURLINGTON TOWN, MA												
31-33	Manufacturing	4	52	18	2 131	97 142	1 141	2 524	36 343	219 369	124 897	345 207	16 917
334	Computer & electronic product mfg.....	3	13	9	1 438	69 248	738	1 685	23 456	162 010	93 550	257 534	12 480
3344	Semiconductor & other electronic component mfg.....	5	6	5	893	32 217	579	1 324	17 106	75 262	47 674	125 131	7 023
33441	Semiconductor & other electronic component mfg.....	5	6	5	893	32 217	579	1 324	17 106	75 262	47 674	125 131	7 023
	CAMBRIDGE, MA												
31-33	Manufacturing	2	106	42	3 050	98 130	1 707	3 413	45 649	356 954	215 606	585 160	19 511
311	Food mfg.....	-	14	10	930	22 265	715	1 394	15 062	117 053	80 411	197 593	7 981
3113	Sugar & confectionery product mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	18	11	596	22 941	333	613	10 548	119 775	75 676	206 970	5 168
334	Computer & electronic product mfg.....	8	21	6	749	26 478	161	340	5 679	42 965	22 939	66 276	2 807

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CANTON TOWN, MA													
31-33	Manufacturing	1	69	40	5 601	219 635	3 132	6 847	99 531	561 663	489 191	1 054 078	33 394
325	Chemical mfg	2	7	5	688	28 991	432	1 051	16 894	73 037	110 142	181 855	D
3254	Pharmaceutical & medicine mfg	1	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	6	5	810	35 249	423	901	15 893	60 422	83 284	146 854	4 498
3339	Other general-purpose machinery mfg	2	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	9	5	873	41 853	291	592	10 505	98 602	45 390	145 292	3 919
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	5	1 151	36 672	739	1 765	17 822	176 613	67 307	239 225	7 391
3359	Other electrical equipment & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHELMSFORD TOWN, MA													
31-33	Manufacturing	1	97	38	4 012	171 776	2 129	4 185	65 883	483 546	323 766	805 425	34 658
334	Computer & electronic product mfg	1	27	14	2 040	98 667	899	1 668	29 752	263 270	150 329	409 893	22 686
3342	Communications equipment mfg	3	8	3	604	25 829	409	693	14 373	55 719	40 776	94 186	D
3345	Navigational, measuring, medical, & control instruments mfg	1	8	6	920	42 480	345	723	12 220	164 513	58 661	218 627	14 521
33451	Navigational, measuring, medical, & control instruments mfg	1	8	6	920	42 480	345	723	12 220	164 513	58 661	218 627	14 521
CHELSEA, MA													
31-33	Manufacturing	1	62	28	2 084	65 953	1 352	2 771	33 716	163 069	177 299	341 448	8 738
311	Food mfg	-	6	3	f	D	D	D	D	D	D	D	3 336
CHICOPEE, MA													
31-33	Manufacturing	-	109	46	4 974	184 556	3 427	7 146	95 806	560 843	445 144	989 974	49 966
322	Paper mfg	-	10	8	576	19 535	463	1 013	13 157	47 960	50 121	97 017	9 235
3222	Converted paper product mfg	-	10	8	576	19 535	463	1 013	13 157	47 960	50 121	97 017	9 235
323	Printing & related support activities	-	10	5	977	31 146	767	1 583	18 453	89 479	81 335	170 298	7 592
3231	Printing & related support activities	-	10	5	977	31 146	767	1 583	18 453	89 479	81 335	170 298	7 592
32311	Printing	-	8	5	f	D	D	D	D	D	D	D	7 592
323110	Commercial lithographic printing ..	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	5	546	25 890	259	516	8 193	64 906	54 711	117 393	3 145
339	Miscellaneous mfg	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	6	3	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON TOWN, MA													
31-33	Manufacturing	1	35	21	2 198	88 046	1 612	3 352	51 252	189 835	121 377	311 830	11 050
326	Plastics & rubber products mfg	-	6	4	855	39 778	676	1 344	22 590	65 710	25 741	89 686	2 156
3261	Plastics product mfg	-	6	4	855	39 778	676	1 344	22 590	65 710	25 741	89 686	2 156
32619	Other plastics product mfg	-	6	4	855	39 778	676	1 344	22 590	65 710	25 741	89 686	2 156
326199	All other plastics product mfg	-	6	4	855	39 778	676	1 344	22 590	65 710	25 741	89 686	2 156

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CONCORD TOWN, MA													
31-33	Manufacturing	1	46	10	1 822	67 960	930	1 422	30 592	156 950	100 572	253 564	14 686
334	Computer & electronic product mfg.....	-	11	5	1 230	50 007	613	787	21 459	118 907	54 385	170 410	9 901
3345	Navigational, measuring, medical, & control instruments mfg.....	-	6	3	1 012	40 788	502	561	18 487	93 754	36 257	127 919	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	6	3	1 012	40 788	502	561	18 487	93 754	36 257	127 919	D
334515	Electricity measuring & testing instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
DANVERS TOWN, MA													
31-33	Manufacturing	-	95	32	3 507	136 954	2 219	4 074	65 501	364 443	262 055	625 643	25 515
332	Fabricated metal product mfg.....	1	30	10	705	29 311	441	903	14 715	48 421	25 931	73 977	3 537
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	25	8	598	25 485	366	729	12 125	42 250	24 465	66 474	D
33271	Machine shops.....	1	21	6	532	22 921	308	608	10 332	37 481	21 537	58 744	2 715
332710	Machine shops.....	1	21	6	532	22 921	308	608	10 332	37 481	21 537	58 744	2 715
335	Electrical equipment, appliance, & component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
DARTMOUTH TOWN, MA													
31-33	Manufacturing	2	23	5	513	10 198	432	781	7 203	17 896	19 554	37 571	1 116
DRACUT TOWN, MA													
31-33	Manufacturing	4	26	7	861	38 296	494	1 073	16 333	101 081	82 691	179 198	6 635
EAST BRIDGEWATER TOWN, MA													
31-33	Manufacturing	1	19	6	609	20 415	341	660	8 230	37 333	27 252	64 148	D
EASTHAMPTON TOWN, MA													
31-33	Manufacturing	-	34	12	1 798	55 732	1 318	2 643	34 634	107 639	79 920	191 734	6 994
326	Plastics & rubber products mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
EAST LONGMEADOW TOWN, MA													
31-33	Manufacturing	-	39	15	3 785	152 292	2 563	5 887	85 080	535 874	240 180	777 320	21 745
332	Fabricated metal product mfg.....	-	13	7	936	45 355	580	1 435	26 301	158 231	63 352	220 077	D
3322	Cutlery & handtool mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	-	3	1	f	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg...	-	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
EASTON TOWN, MA													
31-33	Manufacturing	1	37	17	893	32 668	655	1 354	20 372	61 061	44 014	105 613	6 154

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EVERETT, MA													
31-33	Manufacturing	1	77	27	2 216	82 079	1 574	3 234	43 711	172 010	122 824	297 034	9 295
323	Printing & related support activities.....	-	13	5	664	35 793	443	1 013	18 966	62 431	36 088	98 769	4 953
3231	Printing & related support activities.....	-	13	5	664	35 793	443	1 013	18 966	62 431	36 088	98 769	4 953
32311	Printing	-	12	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	7	4	594	32 819	386	904	17 070	57 386	34 258	91 862	4 491
FALL RIVER, MA													
31-33	Manufacturing	1	199	89	12 366	337 276	9 909	20 638	223 107	720 215	656 256	1 364 536	64 288
313	Textile mills	-	17	10	h	D	D	D	D	D	D	D	D
3132	Fabric mills	-	6	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	10	7	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	10	7	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	8	6	g	D	D	D	D	D	D	D	D
314	Textile product mills	5	17	10	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	8	8	6	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	8	8	6	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	9	6	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	37	28	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	34	26	h	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	21	15	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	20	14	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	6	6	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	3	7	4	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	4	3	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	5	f	D	D	D	D	D	D	D	D
FITCHBURG, MA													
31-33	Manufacturing	1	89	32	3 896	145 294	2 626	5 150	78 055	349 671	308 994	653 587	35 627
322	Paper mfg	-	8	5	604	24 819	426	999	14 518	67 111	60 601	124 827	8 183
333	Machinery mfg	-	11	4	849	39 851	492	934	19 469	105 420	45 293	148 303	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FOXBOROUGH TOWN, MA													
31-33	Manufacturing	-	19	6	2 082	97 703	875	1 598	28 889	224 354	131 582	357 664	6 217
334	Computer & electronic product mfg	-	7	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	2	2	g	D	D	D	D	D	D	D	D
FRAMINGHAM TOWN, MA													
31-33	Manufacturing	1	94	25	2 836	98 822	1 802	3 739	47 382	348 488	226 607	571 913	14 785
322	Paper mfg	1	7	6	558	22 768	371	876	12 159	55 775	50 527	107 753	1 622
3222	Converted paper product mfg	1	7	6	558	22 768	371	876	12 159	55 775	50 527	107 753	1 622
FRANKLIN, MA													
31-33	Manufacturing	2	50	30	3 491	148 314	2 311	5 170	80 721	333 457	480 682	819 470	27 383
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	8	7	3	538	26 442	305	684	12 177	52 531	45 873	98 603	3 778
334	Computer & electronic product mfg	-	5	4	616	24 996	174	369	4 447	57 695	42 747	105 531	3 162
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
GARDNER, MA													
31-33	Manufacturing	8	44	15	2 746	107 524	1 453	3 261	39 491	567 672	161 643	742 390	27 242
334	Computer & electronic product mfg	9	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
GLOUCESTER, MA													
31-33	Manufacturing	1	64	24	3 948	137 205	2 689	5 247	84 094	419 058	421 294	846 761	22 582
311	Food mfg	1	11	5	725	18 093	503	939	14 172	70 910	157 075	227 985	2 788
3117	Seafood product preparation & packaging ..	1	5	4	f	D	D	D	D	D	D	D	2 730
31171	Seafood product preparation & packaging	1	5	4	f	D	D	D	D	D	D	D	2 730
311712	Fresh & frozen seafood processing ..	1	5	4	f	D	D	D	D	D	D	D	2 730
323	Printing & related support activities	9	7	2	631	23 971	492	949	17 437	36 683	46 312	83 466	D
3231	Printing & related support activities	9	7	2	631	23 971	492	949	17 437	36 683	46 312	83 466	D
32311	Printing	9	6	2	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	9	3	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	5	1 584	66 105	891	1 690	33 429	240 384	173 088	418 883	8 991
3332	Industrial machinery mfg ..	-	5	4	g	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAFTON TOWN, MA													
31-33	Manufacturing	6	26	11	1 491	66 986	1 124	2 574	35 014	124 720	102 437	219 952	11 834
332	Fabricated metal product mfg	9	4	2	f	D	D	D	D	D	D	D	D
3321	Forging & stamping	9	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	9	1	1	f	D	D	D	D	D	D	D	D
332111	Iron & steel forging ...	9	1	1	f	D	D	D	D	D	D	D	D
GREENFIELD TOWN, MA													
31-33	Manufacturing	-	31	14	907	28 287	665	1 191	15 806	52 231	25 263	78 212	4 726
HANOVER TOWN, MA													
31-33	Manufacturing	1	24	9	568	20 543	359	648	9 067	58 810	59 063	118 004	2 002
HAVERHILL, MA													
31-33	Manufacturing	2	119	49	3 885	130 841	2 793	5 648	73 126	260 228	273 803	545 908	24 970
333	Machinery mfg	2	10	6	576	26 410	354	618	11 625	56 024	47 192	103 577	D
334	Computer & electronic product mfg	4	20	12	779	23 617	563	1 107	13 066	47 244	28 223	76 285	4 276
3344	Semiconductor & other electronic component mfg	5	11	8	613	17 394	447	887	9 634	35 610	21 745	57 993	D
33441	Semiconductor & other electronic component mfg	5	11	8	613	17 394	447	887	9 634	35 610	21 745	57 993	D
HINGHAM TOWN, MA													
31-33	Manufacturing	2	42	12	1 255	47 736	739	1 661	24 744	125 391	69 726	197 964	3 636
HOLBROOK TOWN, MA													
31-33	Manufacturing	-	28	8	610	20 124	410	857	11 247	44 921	41 882	86 973	3 696
HOLDEN TOWN, MA													
31-33	Manufacturing	-	15	6	773	32 620	541	929	19 660	63 130	56 248	120 280	4 619
HOLLISTON TOWN, MA													
31-33	Manufacturing	-	52	14	1 071	40 858	701	1 434	20 833	97 778	71 761	170 876	5 232
HOLYOKE, MA													
31-33	Manufacturing	-	88	42	4 223	139 038	2 811	5 561	76 892	410 882	486 744	886 844	26 172
322	Paper mfg	-	16	9	1 076	29 578	681	1 327	16 731	147 076	128 315	258 935	8 384
3222	Converted paper product mfg	-	14	7	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	8	3	617	13 564	362	673	7 350	98 857	73 788	155 712	D
322233	Stationery, tablet, & related product mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	8	764	30 149	544	1 206	19 007	54 810	75 502	130 123	3 788
333	Machinery mfg	-	11	7	723	28 380	338	640	10 710	93 961	148 162	236 422	3 638
HOPKINTON TOWN, MA													
31-33	Manufacturing	-	19	8	779	37 184	317	595	11 033	63 390	47 369	108 021	5 401

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HUDSON TOWN, MA													
31-33	Manufacturing	-	97	41	6 277	278 271	3 245	7 211	101 044	822 333	313 024	1 130 261	101 056
332	Fabricated metal product mfg	-	26	11	956	35 920	621	1 390	17 780	69 987	46 468	118 418	2 920
334	Computer & electronic product mfg	-	18	12	4 184	203 830	1 793	4 103	60 969	672 334	185 861	850 381	D
3344	Semiconductor & other electronic component mfg	-	8	6	3 889	188 670	1 618	3 741	54 520	640 613	166 677	799 087	D
33441	Semiconductor & other electronic component mfg	-	8	6	3 889	188 670	1 618	3 741	54 520	640 613	166 677	799 087	D
334413	Semiconductor & related device mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	f	D	D	D	D	D	D	D	D
LAWRENCE, MA													
31-33	Manufacturing	1	120	47	6 252	207 922	4 560	9 533	119 408	607 999	465 941	1 052 447	187 615
313	Textile mills	-	3	1	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	3	6	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	5	4	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	6	524	16 624	391	806	12 131	38 379	65 813	105 525	D
LEOMINSTER, MA													
31-33	Manufacturing	1	135	55	6 003	196 296	4 698	9 638	127 763	547 996	709 072	1 256 030	57 206
325	Chemical mfg	-	14	10	762	25 437	407	819	12 876	79 995	152 056	230 863	5 416
326	Plastics & rubber products mfg	1	41	22	2 317	65 135	2 046	4 591	48 409	184 327	225 153	408 482	24 332
3261	Plastics product mfg	1	41	22	2 317	65 135	2 046	4 591	48 409	184 327	225 153	408 482	24 332
32619	Other plastics product mfg	1	37	21	g	D	D	D	D	D	D	D	24 172
326199	All other plastics product mfg	1	37	21	g	D	D	D	D	D	D	D	24 172
LEXINGTON TOWN, MA													
31-33	Manufacturing	-	17	5	1 598	99 168	770	1 545	49 235	180 585	149 030	335 239	18 034
334	Computer & electronic product mfg	-	5	3	1 192	80 905	586	1 166	42 855	133 786	89 141	228 982	13 690
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOWELL, MA													
31-33	Manufacturing	1	101	50	5 709	193 287	3 540	7 063	95 669	454 856	424 800	888 103	54 891
313	Textile mills	-	6	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	19	15	2 866	99 283	1 466	2 902	40 078	235 097	184 132	417 583	41 443
3342	Communications equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	13	11	1 455	43 555	923	1 876	19 104	115 687	134 131	251 659	D
33441	Semiconductor & other electronic component mfg	1	13	11	1 455	43 555	923	1 876	19 104	115 687	134 131	251 659	D
334413	Semiconductor & related device mfg ...	3	2	2	f	D	D	D	D	D	D	D	D
LUDLOW TOWN, MA													
31-33	Manufacturing	1	43	17	1 139	37 069	800	1 645	21 563	68 634	62 572	130 526	7 528
LYNN, MA													
31-33	Manufacturing	-	67	26	6 870	325 194	4 182	7 496	166 638	788 084	1 285 357	2 101 761	56 595
311	Food mfg	1	10	5	1 181	39 500	490	929	12 705	102 485	177 588	278 461	8 242
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
MALDEN, MA													
31-33	Manufacturing	-	63	24	1 929	63 838	1 198	2 337	31 571	162 999	148 863	309 165	8 234
311	Food mfg	-	8	4	646	19 284	244	512	5 845	77 102	80 460	155 897	3 312
MANSFIELD TOWN, MA													
31-33	Manufacturing	-	33	17	3 849	224 155	1 979	3 729	56 554	636 276	391 869	1 037 894	25 827
322	Paper mfg	-	4	4	612	22 296	447	835	11 984	47 596	55 792	103 543	D
3222	Converted paper product mfg	-	4	4	612	22 296	447	835	11 984	47 596	55 792	103 543	D
32221	Paperboard container mfg	-	4	4	612	22 296	447	835	11 984	47 596	55 792	103 543	D
334	Computer & electronic product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARLBOROUGH, MA													
31-33	Manufacturing	-	90	37	4 959	258 042	2 115	4 419	69 033	1 102 649	499 218	1 592 938	56 129
311	Food mfg.....	-	5	3	586	19 639	448	997	11 844	130 439	103 221	233 688	14 169
325	Chemical mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	22	16	2 310	140 334	614	1 314	21 990	668 848	241 347	897 828	28 353
3341	Computer & peripheral equipment mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
MEDFIELD TOWN, MA													
31-33	Manufacturing	2	19	8	524	21 285	316	643	9 339	56 257	55 712	112 307	3 434
MEDFORD, MA													
31-33	Manufacturing	5	52	8	924	24 852	578	1 123	12 088	66 273	36 387	98 263	2 443
METHUEN, MA													
31-33	Manufacturing	-	37	11	1 490	47 047	1 055	2 042	29 074	88 104	106 653	195 166	13 984
334	Computer & electronic product mfg.....	-	7	5	f	D	D	D	D	D	D	D	5 909
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
MIDDLEBOROUGH TOWN, MA													
31-33	Manufacturing	-	29	13	1 323	45 523	957	1 900	25 347	102 977	78 244	179 589	7 745
MILFORD TOWN, MA													
31-33	Manufacturing	-	42	17	3 116	141 132	1 606	3 330	46 826	467 394	275 241	739 050	25 989
334	Computer & electronic product mfg.....	-	8	6	1 722	88 049	609	1 179	15 398	244 747	158 245	400 578	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
MILLBURY TOWN, MA													
31-33	Manufacturing	2	33	11	820	31 425	575	1 149	18 550	51 140	53 710	104 939	2 862
NATICK TOWN, MA													
31-33	Manufacturing	-	51	16	1 774	80 202	1 044	1 986	38 726	387 534	139 962	531 121	17 599
311	Food mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	12	5	560	29 732	125	241	4 081	124 969	36 855	161 936	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEEDHAM TOWN, MA													
31-33	Manufacturing	-	41	19	4 631	237 618	3 083	6 307	158 158	618 775	383 817	1 003 624	26 678
334	Computer & electronic product mfg	-	8	8	3 944	212 377	2 711	5 560	147 041	473 796	230 704	705 464	23 210
3342	Communications equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
NEW BEDFORD, MA													
31-33	Manufacturing	1	151	64	9 839	273 760	7 526	14 853	172 432	650 558	611 546	1 259 949	47 997
311	Food mfg	2	35	7	g	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	2	15	5	502	12 026	377	604	5 750	57 319	78 185	135 501	D
31171	Seafood product preparation & packaging	2	15	5	502	12 026	377	604	5 750	57 319	78 185	135 501	D
3118	Bakeries & tortilla mfg	-	15	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	15	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	5	1	f	D	D	D	D	D	D	D	573
313	Textile mills	2	10	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg	6	21	16	g	D	D	D	D	D	D	D	1 507
3152	Cut & sew apparel mfg	6	21	16	g	D	D	D	D	D	D	D	1 507
31521	Cut & sew apparel contractors	3	8	6	553	9 457	514	1 025	7 821	13 178	1 663	14 777	226
315212	Women's, girls', & infants' cut & sew apparel contractors	3	8	6	553	9 457	514	1 025	7 821	13 178	1 663	14 777	226
31522	Men's & boys' cut & sew apparel mfg	7	4	4	1 277	30 921	1 132	2 575	24 933	61 997	61 863	123 807	1 195
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	7	3	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	8	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	5	504	14 879	411	810	10 614	33 218	24 118	57 183	D
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	10	5	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWBURYPORT, MA													
31-33	Manufacturing	1	71	32	2 737	105 458	1 714	3 796	53 012	285 634	191 535	474 918	28 671
332	Fabricated metal product mfg	-	15	6	520	18 921	356	758	11 029	46 836	22 498	68 252	8 064
NEWTON, MA													
31-33	Manufacturing	1	87	27	2 999	110 228	1 801	3 786	50 368	282 327	295 680	542 562	17 878
334	Computer & electronic product mfg	1	17	8	1 252	48 947	670	1 574	18 345	125 100	82 088	208 629	9 343
3344	Semiconductor & other electronic component mfg	1	7	3	633	21 264	333	801	6 783	33 859	19 850	53 883	3 528
33441	Semiconductor & other electronic component mfg	1	7	3	633	21 264	333	801	6 783	33 859	19 850	53 883	3 528
334419	Other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
NORTH ADAMS, MA													
31-33	Manufacturing	-	27	9	866	22 732	686	1 333	15 997	45 824	24 726	71 106	1 499
NORTHAMPTON, MA													
31-33	Manufacturing	1	39	17	1 471	46 308	1 020	1 893	24 293	133 498	132 513	264 495	D
NORTH ANDOVER TOWN, MA													
31-33	Manufacturing	-	37	23	7 063	306 877	4 573	7 562	183 157	1 669 908	1 137 030	2 826 057	56 880
326	Plastics & rubber products mfg	5	4	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	5	4	4	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	6	3	3	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	6	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	8	h	D	D	D	D	D	D	D	33 554
3342	Communications equipment mfg	-	4	3	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
NORTH ATTLEBOROUGH TOWN, MA													
31-33	Manufacturing	-	86	35	2 662	80 168	1 926	4 044	47 470	133 917	681 384	831 416	12 204
339	Miscellaneous mfg	1	36	15	1 208	35 777	829	1 730	18 779	54 302	84 802	143 659	4 365
3399	Other miscellaneous mfg ..	1	31	14	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	1	25	12	902	24 898	624	1 303	13 057	37 509	80 041	120 798	D
NORTHBOROUGH TOWN, MA													
31-33	Manufacturing	1	24	10	637	22 359	404	828	10 409	47 362	57 293	104 066	4 112
NORTHBRIDGE TOWN, MA													
31-33	Manufacturing	4	12	6	611	21 041	406	961	11 122	48 433	63 149	111 195	4 752
NORTON TOWN, MA													
31-33	Manufacturing	2	24	11	647	22 815	474	944	13 284	48 843	32 332	80 924	2 539

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORWOOD TOWN, MA													
31-33	Manufacturing	2	74	27	3 100	146 999	1 792	3 727	59 593	300 302	226 235	523 063	50 231
333	Machinery mfg	-	7	4	1 071	59 984	628	1 396	24 124	55 024	69 335	123 386	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	12	9	861	43 258	442	892	15 025	136 842	74 079	209 288	D
OXFORD TOWN, MA													
31-33	Manufacturing	1	27	9	656	19 986	497	1 022	13 723	52 439	65 138	117 095	3 277
PALMER TOWN, MA													
31-33	Manufacturing	2	43	15	1 474	49 642	1 074	2 267	30 785	112 292	123 556	236 114	D
PEABODY, MA													
31-33	Manufacturing	-	98	36	4 028	164 526	2 183	4 125	60 669	370 468	318 243	690 123	32 725
334	Computer & electronic product mfg	-	11	7	1 806	76 570	841	1 602	21 547	156 818	107 525	261 321	9 597
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	g	D	D	D	D	D	D	D	7 804
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	g	D	D	D	D	D	D	D	7 804
334517	Irradiation apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
PEMBROKE TOWN, MA													
31-33	Manufacturing	1	36	8	567	18 747	345	605	8 514	38 481	28 049	65 872	2 530
PEPPERELL TOWN, MA													
31-33	Manufacturing	2	14	6	525	17 195	414	853	11 871	44 581	40 831	85 222	4 147
PITTSFIELD, MA													
31-33	Manufacturing	-	59	22	h	D	D	D	D	D	D	D	17 397
334	Computer & electronic product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
PLYMOUTH TOWN, MA													
31-33	Manufacturing	-	45	14	1 700	64 577	1 316	2 772	37 682	133 330	99 225	232 037	15 712
332	Fabricated metal product mfg	-	9	4	636	18 835	546	1 140	12 625	35 890	12 236	47 655	1 729
3321	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
QUINCY, MA													
31-33	Manufacturing	2	72	12	753	25 901	481	917	14 169	54 217	72 727	127 297	4 571
RANDOLPH TOWN, MA													
31-33	Manufacturing	1	39	25	1 586	52 429	1 154	2 354	30 827	134 611	111 822	246 359	12 381

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RAYNHAM TOWN, MA													
31-33	Manufacturing	-	10	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
ROCKLAND TOWN, MA													
31-33	Manufacturing	2	54	22	1 743	61 805	1 081	2 207	30 824	140 215	96 132	238 224	9 429
SALEM, MA													
31-33	Manufacturing	1	70	18	1 733	54 858	1 074	1 825	26 792	120 791	69 972	190 210	5 826
SAUGUS TOWN, MA													
31-33	Manufacturing	-	31	12	751	26 953	571	1 243	19 134	51 042	64 820	115 281	6 285
SHARON TOWN, MA													
31-33	Manufacturing	1	17	8	704	28 428	488	984	15 274	63 180	49 116	113 508	3 635
SHREWSBURY TOWN, MA													
31-33	Manufacturing	1	39	11	2 094	102 710	734	1 036	16 043	110 480	154 706	261 692	23 322
334	Computer & electronic product mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
SOMERVILLE, MA													
31-33	Manufacturing	4	83	16	2 574	96 183	1 803	3 922	55 714	244 804	179 749	432 982	9 188
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg..	-	1	1	f	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	4	3	714	20 605	585	1 129	15 087	52 011	29 756	82 561	D
3261	Plastics product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
SOUTHBRIDGE TOWN, MA													
31-33	Manufacturing	1	45	19	2 688	94 631	1 825	3 768	46 108	202 394	94 536	299 383	10 449
332	Fabricated metal product mfg.....	-	15	5	790	25 904	555	1 239	14 198	64 659	30 015	94 361	D
3322	Cutlery & handtool mfg....	-	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	9	5	651	21 716	482	959	12 732	53 931	21 060	73 625	3 288
3333	Commercial & service industry machinery mfg..	1	4	3	534	17 085	391	762	9 318	44 881	17 995	61 714	D
33331	Commercial & service industry machinery mfg.....	1	4	3	534	17 085	391	762	9 318	44 881	17 995	61 714	D
333314	Optical instrument & lens mfg.....	1	4	3	534	17 085	391	762	9 318	44 881	17 995	61 714	D
339	Miscellaneous mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg.....	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH HADLEY TOWN, MA													
31-33	Manufacturing	-	21	10	1 158	48 548	722	1 475	24 659	149 989	133 619	280 175	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
SPENCER TOWN, MA													
31-33	Manufacturing	-	16	6	1 207	48 272	811	1 944	26 346	107 299	168 439	274 165	5 991
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
SPRINGFIELD, MA													
31-33	Manufacturing	-	174	56	7 199	258 858	5 075	10 244	153 868	665 713	493 045	1 161 058	33 492
311	Food mfg	-	17	5	635	13 081	482	1 206	8 220	62 220	83 539	147 631	D
322	Paper mfg	-	7	3	517	20 361	376	801	11 595	36 193	48 119	83 966	2 097
3222	Converted paper product mfg	-	7	3	517	20 361	376	801	11 595	36 193	48 119	83 966	2 097
323	Printing & related support activities	-	24	5	674	19 672	539	1 136	14 364	79 866	31 938	112 409	1 606
3231	Printing & related support activities	-	24	5	674	19 672	539	1 136	14 364	79 866	31 938	112 409	1 606
32311	Printing	-	23	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	5	936	56 168	586	1 203	30 891	146 315	108 302	251 072	D
3261	Plastics product mfg	-	7	5	936	56 168	586	1 203	30 891	146 315	108 302	251 072	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	41	13	2 424	88 573	1 701	3 078	54 536	209 290	65 365	276 473	6 802
3329	Other fabricated metal product mfg	-	6	2	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	5	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	f	D	D	D	D	D	D	D	D
STOUGHTON TOWN, MA													
31-33	Manufacturing	-	64	25	1 753	59 133	1 229	2 344	34 362	116 345	69 790	185 840	4 679

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TAUNTON, MA													
31-33	Manufacturing	1	71	38	4 465	174 427	3 421	7 091	125 874	396 091	317 689	708 998	19 125
323	Printing & related support activities.....	4	6	3	579	20 883	489	1 081	14 892	40 183	24 567	64 631	D
3231	Printing & related support activities.....	4	6	3	579	20 883	489	1 081	14 892	40 183	24 567	64 631	D
32311	Printing	4	6	3	579	20 883	489	1 081	14 892	40 183	24 567	64 631	D
334	Computer & electronic product mfg.....	-	7	5	g	D	D	D	D	D	D	D	8 717
3342	Communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	9	6	785	24 292	430	820	11 056	46 811	40 131	86 036	D
3399	Other miscellaneous mfg ..	2	6	4	f	D	D	D	D	D	D	D	D
TEWKSBURY TOWN, MA													
31-33	Manufacturing	-	35	10	1 170	55 995	446	901	15 694	218 291	107 812	337 537	19 524
WAKEFIELD TOWN, MA													
31-33	Manufacturing	2	60	18	2 692	133 538	2 115	3 881	76 885	231 098	208 435	438 420	26 473
334	Computer & electronic product mfg.....	1	13	6	1 253	88 139	1 025	1 877	46 587	137 295	123 966	259 018	20 582
3342	Communications equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WALPOLE TOWN, MA													
31-33	Manufacturing	-	38	9	1 431	54 281	576	1 195	20 787	152 579	90 079	239 777	16 145
325	Chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WALTHAM, MA													
31-33	Manufacturing	1	161	59	7 431	351 531	4 113	8 660	142 851	622 299	570 323	1 217 176	66 828
325	Chemical mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	36	10	520	18 092	422	802	10 307	31 944	15 927	47 805	2 069
333	Machinery mfg.....	4	17	7	708	35 190	428	877	18 376	65 455	54 658	124 174	4 059
334	Computer & electronic product mfg.....	2	31	19	2 238	106 594	904	1 944	30 553	267 175	121 672	388 781	13 802
3345	Navigational, measuring, medical, & control instruments mfg.....	-	11	5	1 463	76 124	476	1 079	19 449	186 914	62 830	248 545	5 409
33451	Navigational, measuring, medical, & control instruments mfg.....	-	11	5	1 463	76 124	476	1 079	19 449	186 914	62 830	248 545	5 409
334513	Industrial process control instrument mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	19	6	506	18 245	349	699	9 307	49 931	16 264	65 232	2 139

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAREHAM TOWN, MA													
31-33	Manufacturing	4	32	9	720	22 495	464	934	10 653	48 194	50 352	101 190	3 794
WATERTOWN, MA													
31-33	Manufacturing	-	70	28	4 562	209 063	2 200	4 754	56 080	436 208	208 882	639 885	54 735
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	12	9	1 330	56 655	579	1 131	14 329	119 784	47 966	162 877	12 039
3345	Navigational, measuring, medical, & control instruments mfg	-	6	5	560	26 536	179	349	4 938	62 506	22 142	82 315	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	5	560	26 536	179	349	4 938	62 506	22 142	82 315	D
339	Miscellaneous mfg	-	7	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	1	g	D	D	D	D	D	D	D	D
WEBSTER TOWN, MA													
31-33	Manufacturing	1	26	8	1 117	35 680	781	1 786	24 611	124 551	105 135	234 613	D
313	Textile mills	1	2	2	f	D	D	D	D	D	D	D	D
WESTBOROUGH TOWN, MA													
31-33	Manufacturing	-	47	20	3 833	181 573	2 070	4 457	71 012	815 969	419 611	1 244 128	54 718
325	Chemical mfg	-	4	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	3	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
WESTFIELD, MA													
31-33	Manufacturing	1	105	36	3 786	132 559	2 748	5 735	82 313	321 101	341 444	634 706	23 809
322	Paper mfg	-	8	7	1 006	31 717	822	1 850	24 412	120 581	214 412	309 006	10 063
3222	Converted paper product mfg	-	8	7	1 006	31 717	822	1 850	24 412	120 581	214 412	309 006	10 063
32223	Stationery product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	6	892	37 196	627	1 255	22 262	73 748	31 741	104 880	6 438
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	26	4	564	27 423	400	853	16 923	50 874	22 939	72 176	5 365
33271	Machine shops	-	21	4	522	26 100	373	804	15 984	48 424	21 886	68 667	5 120
332710	Machine shops	-	21	4	522	26 100	373	804	15 984	48 424	21 886	68 667	5 120
333	Machinery mfg	3	17	7	843	32 715	483	1 041	16 144	53 743	41 902	94 407	3 225
WESTFORD TOWN, MA													
31-33	Manufacturing	-	33	15	2 232	93 531	865	1 515	25 377	600 221	345 493	926 542	56 661
334	Computer & electronic product mfg	-	10	7	1 602	70 285	414	685	11 536	546 692	326 471	855 842	52 427
3342	Communications equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST SPRINGFIELD TOWN, MA													
31-33	Manufacturing	2	87	20	2 666	80 101	2 023	4 030	45 121	190 228	180 481	374 317	12 444
322	Paper mfg	-	6	6	601	22 708	425	882	12 308	35 364	59 477	101 782	2 710
WESTWOOD TOWN, MA													
31-33	Manufacturing	5	16	8	2 147	86 371	1 011	2 018	30 432	130 519	117 755	248 883	12 593
334	Computer & electronic product mfg	7	3	3	1 317	51 244	583	1 167	17 230	77 931	61 505	138 269	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	9	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	9	2	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	9	2	2	f	D	D	D	D	D	D	D	D
WEYMOUTH TOWN, MA													
31-33	Manufacturing	1	49	11	1 137	37 724	754	1 486	18 700	106 560	59 616	168 295	4 812
WILBRAHAM TOWN, MA													
31-33	Manufacturing	-	8	4	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
WILMINGTON TOWN, MA													
31-33	Manufacturing	-	109	63	10 057	417 586	5 744	12 035	183 207	1 303 595	776 434	2 063 742	134 200
323	Printing & related support activities	4	16	7	1 019	44 978	775	1 774	28 825	89 700	62 413	152 786	5 698
3231	Printing & related support activities	4	16	7	1 019	44 978	775	1 774	28 825	89 700	62 413	152 786	5 698
32311	Printing	4	15	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	9	4	520	25 727	386	909	16 962	48 942	32 508	82 180	1 184
332	Fabricated metal product mfg	-	18	7	1 200	69 662	452	775	14 191	208 331	53 300	259 870	D
3329	Other fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	9	1 361	57 710	766	1 462	27 362	145 410	105 988	250 253	9 922
3332	Industrial machinery mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WILMINGTON TOWN, MA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	-	24	21	4 591	171 387	2 770	6 074	84 222	679 122	318 458	984 969	97 009
3341	Computer & peripheral equipment mfg	1	5	4	714	25 596	338	1 058	8 839	119 726	63 793	185 042	7 285
33411	Computer & peripheral equipment mfg	1	5	4	714	25 596	338	1 058	8 839	119 726	63 793	185 042	7 285
334119	Other computer peripheral equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	7	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	6	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	7	6	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	7	1 050	47 251	628	1 310	26 359	107 770	53 563	162 868	D
33451	Navigational, measuring, medical, & control instruments mfg	-	7	7	1 050	47 251	628	1 310	26 359	107 770	53 563	162 868	D
334519	Other measuring & controlling device mfg	-	3	3	706	32 465	485	994	20 687	72 925	38 628	114 049	D
335	Electrical equipment, appliance, & component mfg	-	5	3	599	21 821	339	709	10 538	67 820	110 121	177 721	2 888
	WOBURN, MA												
31-33	Manufacturing	2	195	62	5 778	226 803	3 677	7 166	105 373	526 184	359 588	876 674	45 685
323	Printing & related support activities	5	35	11	763	26 203	565	1 140	14 960	54 620	28 266	82 624	2 738
3231	Printing & related support activities	5	35	11	763	26 203	565	1 140	14 960	54 620	28 266	82 624	2 738
32311	Printing	4	32	9	693	23 621	504	993	12 779	50 453	27 097	77 325	2 291
332	Fabricated metal product mfg	3	32	6	505	19 034	361	721	12 689	40 483	30 140	70 738	1 650
334	Computer & electronic product mfg	1	30	13	1 692	68 601	1 000	1 765	22 861	130 981	59 492	183 703	20 634
3344	Semiconductor & other electronic component mfg	-	13	5	980	33 396	713	1 221	15 245	63 968	29 799	92 283	16 622
33441	Semiconductor & other electronic component mfg	-	13	5	980	33 396	713	1 221	15 245	63 968	29 799	92 283	16 622
334413	Semiconductor & related device mfg	-	4	3	647	22 750	471	650	7 895	49 072	13 911	62 044	13 796
339	Miscellaneous mfg	1	20	11	892	33 526	461	828	12 664	109 339	52 703	162 054	5 455
3399	Other miscellaneous mfg	-	10	5	655	25 226	321	616	9 319	80 731	44 151	123 913	4 131
33999	All other miscellaneous mfg	-	5	4	583	23 053	280	552	8 585	74 663	40 776	114 191	3 947
	WORCESTER, MA												
31-33	Manufacturing	1	278	115	13 475	528 497	8 780	17 113	260 367	1 210 485	930 773	2 139 533	89 179
312	Beverage & tobacco product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	2	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	6	553	22 556	415	925	14 498	47 071	58 321	106 277	2 701
3222	Converted paper product mfg	-	6	6	553	22 556	415	925	14 498	47 071	58 321	106 277	2 701
323	Printing & related support activities	-	32	8	635	21 607	448	853	13 296	35 771	22 028	57 751	2 750
3231	Printing & related support activities	-	32	8	635	21 607	448	853	13 296	35 771	22 028	57 751	2 750
32311	Printing	-	25	6	527	18 135	374	732	10 925	30 253	19 990	50 140	D
327	Nonmetallic mineral product mfg	-	7	6	g	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	-	3	3	g	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	-	3	3	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WORCESTER, MA— Con.												
31-33	Manufacturing— Con.												
332	Fabricated metal product mfg	—	82	33	3 112	117 800	2 323	4 530	71 983	264 708	166 121	435 145	15 362
3321	Forging & stamping	—	6	4	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	6	4	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	13	7	1 268	56 010	799	1 621	29 071	138 288	108 254	251 204	D
33291	Metal valve mfg	—	6	3	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	6	34	12	1 343	55 420	740	1 580	24 329	118 665	96 650	221 417	4 610
3335	Metalworking machinery mfg	8	21	6	974	42 134	486	1 054	17 187	100 545	77 022	175 109	3 367
33351	Metalworking machinery mfg	8	21	6	974	42 134	486	1 054	17 187	100 545	77 022	175 109	3 367
333516	Rolling mill machinery & equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	7	5	1 267	56 598	852	1 355	24 682	140 686	122 781	250 953	D
3344	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	15	5	790	25 961	606	1 063	14 746	55 150	66 324	121 269	4 771
3372	Office furniture (including fixtures) mfg	—	7	4	681	23 300	516	865	12 784	49 854	62 548	112 261	4 509
33721	Office furniture (including fixtures) mfg	—	7	4	681	23 300	516	865	12 784	49 854	62 548	112 261	4 509
	WRENTHAM TOWN, MA												
31-33	Manufacturing	—	11	5	554	28 495	321	718	14 651	60 298	32 057	92 228	3 526

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MASSACHUSETTS		MASSACHUSETTS— Con.	
Companies ¹ number . .	9 129	Quantity of electricity purchased for heat and power 1,000 kWh . .	8 520 611
		Quantity of electricity generated less sold for heat and power 1,000 kWh . .	287 824
All establishments number . .	9 554	Total value of shipments \$1,000 . .	77 876 576
Establishments with 1 to 19 employees number . .	6 241	Value of resales \$1,000 . .	4 031 351
Establishments with 20 to 99 employees number . .	2 456	Value added \$1,000 . .	44 337 768
Establishments with 100 employees or more number . .	857	Total inventories, beginning of year \$1,000 . .	10 229 033
All employees number . .	417 135	Finished goods inventories, beginning of year \$1,000 . .	3 245 493
Total compensation ² \$1,000 . .	20 440 393	Work-in-process inventories, beginning of year \$1,000 . .	3 668 946
Annual payroll \$1,000 . .	16 378 989	Materials and supplies inventories, beginning of year \$1,000 . .	3 314 594
Total fringe benefits \$1,000 . .	4 061 404	Total inventories, end of year \$1,000 . .	10 545 790
Production workers, average for year number . .	257 050	Finished goods inventories, end of year \$1,000 . .	3 360 258
Production workers on March 12 number . .	255 636	Work-in-process inventories, end of year \$1,000 . .	3 662 764
Production workers on May 12 number . .	257 309	Materials and supplies inventories, end of year \$1,000 . .	3 522 768
Production workers on August 12 number . .	256 827	Gross book value of total assets at beginning of year \$1,000 . .	28 252 621
Production workers on November 12 number . .	258 428	Total capital expenditures (new and used) \$1,000 . .	3 483 886
Production-worker hours 1,000 . .	520 770	Capital expenditures for buildings and other structures (new and used) \$1,000 . .	593 226
Production-worker wages \$1,000 . .	7 734 767	Capital expenditures for machinery and equipment (new and used) \$1,000 . .	2 890 660
Total cost of materials \$1,000 . .	33 635 803	Total retirements ² \$1,000 . .	1 381 919
Cost of materials, parts, containers, etc., consumed \$1,000 . .	28 335 765	Gross book value of total assets at end of year \$1,000 . .	30 354 588
Cost of resales \$1,000 . .	2 846 249	Total depreciation during year ² \$1,000 . .	2 180 807
Cost of fuels \$1,000 . .	313 315	Total rental payments ² \$1,000 . .	880 024
Cost of purchased electricity \$1,000 . .	710 321	Buildings and other structures rental payments ² \$1,000 . .	471 602
Cost of contract work \$1,000 . .	1 430 153	Machinery and equipment rental payments ² \$1,000 . .	408 422

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MASSACHUSETTS

There are no geographic notes for the state of Massachusetts.

Appendix E. Metropolitan Areas

MASSACHUSETTS

Barnstable—Yarmouth, MA MSA

Barnstable County, MA
Barnstable city, MA
Dennis town, MA
Harwich town, MA
Sandwich town, MA
Yarmouth town, MA

Boston, MA—NH PMSA

Bristol County, MA (Part)
Mansfield town, MA
Norton town, MA
Taunton city, MA
Essex County, MA (Part)
Amesbury town, MA
Beverly city, MA
Danvers town, MA
Gloucester city, MA
Ipswich town, MA
Lynn city, MA
Lynnfield town, MA
Marblehead town, MA
Newburyport city, MA
Peabody city, MA
Salem city, MA
Saugus town, MA
Swampscott town, MA
Middlesex County, MA (Part)
Acton town, MA
Arlington town, MA
Ashland town, MA
Bedford town, MA

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Belmont town, MA
Burlington town, MA
Cambridge city, MA
Concord town, MA
Everett city, MA
Framingham town, MA
Holliston town, MA
Hopkinton town, MA
Hudson town, MA
Lexington town, MA
Malden city, MA
Marlborough city, MA
Maynard town, MA
Medford city, MA
Melrose city, MA
Natick town, MA
Newton city, MA
North Reading town, MA
Reading town, MA
Somerville city, MA
Stoneham town, MA
Sudbury town, MA
Wakefield town, MA
Waltham city, MA
Watertown city, MA
Wayland town, MA
Weston town, MA
Wilmington town, MA
Winchester town, MA
Woburn city, MA

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Dedham town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Boston, MA—NH PMSA—Con.

Suffolk County, MA (Part)

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (Part)

Harvard town, MA

Milford town, MA

Rockingham County, NH (Part)

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA**

Boston, MA—NH PMSA

Bristol County, MA (Part)

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (Part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Gloucester city, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Marblehead town, MA

Newburyport city, MA

Peabody city, MA

Salem city, MA

Saugus town, MA

Swampscott town, MA

Middlesex County, MA (Part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Bedford town, MA

Belmont town, MA

Burlington town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Cambridge city, MA
Concord town, MA
Everett city, MA
Framingham town, MA
Holliston town, MA
Hopkinton town, MA
Hudson town, MA
Lexington town, MA
Malden city, MA
Marlborough city, MA
Maynard town, MA
Medford city, MA
Melrose city, MA
Natick town, MA
Newton city, MA
North Reading town, MA
Reading town, MA
Somerville city, MA
Stoneham town, MA
Sudbury town, MA
Wakefield town, MA
Waltham city, MA
Watertown city, MA
Wayland town, MA
Weston town, MA
Wilmington town, MA
Winchester town, MA
Woburn city, MA

Norfolk County, MA (Part)

Bellingham town, MA
Braintree town, MA
Brookline town, MA
Canton town, MA
Dedham town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)—Con.

Foxborough town, MA
Franklin city, MA
Holbrook town, MA
Medfield town, MA
Medway town, MA
Milton town, MA
Needham town, MA
Norfolk town, MA
Norwood town, MA
Quincy city, MA
Randolph town, MA
Sharon town, MA
Stoughton town, MA
Walpole town, MA
Wellesley town, MA
Westwood town, MA
Weymouth town, MA
Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA
Duxbury town, MA
Hanover town, MA
Hingham town, MA
Hull town, MA
Kingston town, MA
Marshfield town, MA
Pembroke town, MA
Plymouth town, MA
Rockland town, MA
Scituate town, MA
Wareham town, MA

Suffolk County, MA (Part)

Boston city, MA
Chelsea city, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.
Suffolk County, MA (Part)—Con.
Revere city, MA
Winthrop town, MA
Worcester County, MA (Part)
Harvard town, MA
Milford town, MA
Rockingham County, NH (Part)
Brockton, MA PMSA
Bristol County, MA (Part)
Easton town, MA
Raynham town, MA
Norfolk County, MA (Part)
Plymouth County, MA (Part)
Abington town, MA
Bridgewater town, MA
Brockton city, MA
East Bridgewater town, MA
Middleborough town, MA
Whitman town, MA
Fitchburg—Leominster, MA PMSA
Middlesex County, MA (Part)
Worcester County, MA (Part)
Fitchburg city, MA
Gardner city, MA
Leominster city, MA
Lawrence, MA—NH PMSA
Essex County, MA (Part)
Andover town, MA
Haverhill city, MA
Lawrence city, MA
Methuen city, MA
North Andover town, MA
Rockingham County, NH (Part)
Derry town, NH
Salem town, NH

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Lowell, MA—NH PMSA
Middlesex County, MA (Part)
Billerica town, MA
Chelmsford town, MA
Dracut town, MA
Lowell city, MA
Pepperell town, MA
Tewksbury town, MA
Westford town, MA
Hillsborough County, NH (Part)
Pelham town, NH
Manchester, NH PMSA
Hillsborough County, NH (Part)
Bedford town, NH
Goffstown town, NH
Manchester city, NH
Merrimack County, NH (Part)
Rockingham County, NH (Part)
Londonderry town, NH
Nashua, NH PMSA
Hillsborough County, NH (Part)
Hudson town, NH
Merrimack town, NH
Milford town, NH
Nashua city, NH
New Bedford, MA PMSA
Bristol County, MA (Part)
Dartmouth town, MA
Fairhaven town, MA
New Bedford city, MA
Plymouth County, MA (Part)
Portsmouth—Rochester, NH—ME PMSA
York County, ME (Part)
York town, ME

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Portsmouth—Rochester, NH—ME PMSA—Con.

Rockingham County, NH (Part)

Exeter town, NH

Hampton town, NH

Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH

Durham town, NH

Rochester city, NH

Somersworth city, NH

Worcester, MA—CT PMSA

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

Webster town, MA

Westborough town, MA

Worcester city, MA

Brockton, MA PMSA

Bristol County, MA (Part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (Part)

Brockton, MA PMSA—Con.

Plymouth County, MA (Part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Middleborough town, MA

Whitman town, MA

Fitchburg—Leominster, MA PMSA

Middlesex County, MA (Part)

Worcester County, MA (Part)

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lawrence, MA—NH PMSA

Essex County, MA (Part)

Andover town, MA

Haverhill city, MA

Lawrence city, MA

Methuen city, MA

North Andover town, MA

Rockingham County, NH (Part)

Derry town, NH

Salem town, NH

Lowell, MA—NH PMSA

Middlesex County, MA (Part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Westford town, MA

Hillsborough County, NH (Part)

Pelham town, NH

New Bedford, MA PMSA

Bristol County, MA (Part)
Dartmouth town, MA
Fairhaven town, MA
New Bedford city, MA
Plymouth County, MA (Part)

Pittsfield, MA MSA

Berkshire County, MA (Part)
Pittsfield city, MA

Providence—Fall River—Warwick, RI—MA MSA

Bristol County, MA (Part)
Attleboro city, MA
Fall River city, MA
North Attleborough town, MA
Seekonk town, MA
Somerset town, MA
Swansea town, MA
Westport town, MA
Bristol County, RI
Barrington town, RI
Bristol town, RI
Warren town, RI
Kent County, RI
Coventry town, RI
East Greenwich town, RI
Warwick city, RI
West Warwick town, RI
Newport County, RI (Part)
Tiverton town, RI
Providence County, RI
Burrillville town, RI
Central Falls city, RI
Cranston city, RI
Cumberland town, RI
East Providence city, RI
Johnston town, RI
Lincoln town, RI
North Providence town, RI

Providence—Fall River—Warwick, RI—MA MSA—Con.

Providence County, RI—Con.
North Smithfield town, RI
Pawtucket city, RI
Providence city, RI
Scituate town, RI
Smithfield town, RI
Woonsocket city, RI
Washington County, RI (Part)
Narragansett town, RI
North Kingstown town, RI
South Kingstown town, RI

Springfield, MA MSA

Franklin County, MA (Part)
Hampden County, MA (Part)
Agawam city, MA
Chicopee city, MA
East Longmeadow town, MA
Holyoke city, MA
Longmeadow town, MA
Ludlow town, MA
Palmer town, MA
Springfield city, MA
Westfield city, MA
West Springfield town, MA
Wilbraham town, MA
Hampshire County, MA (Part)
Amherst town, MA
Belchertown town, MA
Easthampton town, MA
Northampton city, MA
South Hadley town, MA

Worcester, MA—CT PMSA

Windham County, CT (Part)
Hampden County, MA (Part)

Worcester, MA—CT PMSA—Con.

Worcester County, MA (Part)
Auburn town, MA
Charlton town, MA
Clinton town, MA
Grafton town, MA
Holden town, MA
Leicester town, MA
Millbury town, MA
Northborough town, MA

Worcester, MA—CT PMSA—Con.

Northbridge town, MA
Oxford town, MA
Shrewsbury town, MA
Southbridge town, MA
Spencer town, MA
Uxbridge town, MA
Webster town, MA
Westborough town, MA
Worcester city, MA

Maryland

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARYLAND													
31-33	Manufacturing	1	3 996	1 213	163 992	5 840 454	109 564	218 886	3 249 181	18 721 618	17 831 494	36 505 948	1 468 368
311	Food mfg	1	361	130	17 479	453 144	13 056	27 275	301 417	2 754 782	3 154 249	5 910 815	99 481
3111	Animal food mfg	1	13	6	326	9 924	197	431	5 363	47 773	231 971	279 718	4 843
31111	Animal food mfg	1	13	6	326	9 924	197	431	5 363	47 773	231 971	279 718	4 843
311119	Other animal food mfg	1	12	5	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	3	7	6	474	16 988	376	758	12 079	66 272	240 650	307 686	6 637
31121	Flour milling & malt mfg	9	3	2	c	D	D	D	D	D	D	D	D
311211	Flour milling	9	3	2	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	4	4	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	3	3	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	24	6	g	D	D	D	D	D	D	D	9 845
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	3	13	4	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	3	13	4	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	1	7	1	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	1	7	1	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	7	19	5	f	D	D	D	D	D	D	D	3 160
31141	Frozen food mfg	7	5	3	e	D	D	D	D	D	D	D	1 821
311411	Frozen fruit, juice, & vegetable mfg	3	3	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	9	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	7	14	2	274	7 710	167	522	4 251	36 815	40 557	77 772	1 339
311421	Fruit & vegetable canning	7	13	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	22	14	2 019	63 444	1 400	3 191	42 420	239 341	555 103	794 644	15 786
31151	Dairy product (except frozen) mfg	-	13	10	1 247	43 261	708	1 646	24 539	125 358	453 639	578 324	11 629
311511	Fluid milk mfg	1	9	8	g	D	D	D	D	D	D	D	8 455
31152	Ice cream & frozen dessert mfg	3	9	4	772	20 183	692	1 545	17 881	113 983	101 464	216 320	4 157
311520	Ice cream & frozen dessert mfg	3	9	4	772	20 183	692	1 545	17 881	113 983	101 464	216 320	4 157
3116	Meat product mfg	-	32	21	4 364	78 334	3 723	7 856	60 134	316 919	396 102	709 467	5 913
31161	Animal slaughtering & processing	-	32	21	4 364	78 334	3 723	7 856	60 134	316 919	396 102	709 467	5 913
311611	Animal (except poultry) slaughtering	-	7	3	c	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	13	8	778	15 438	590	1 212	10 656	58 523	71 208	130 118	885
311613	Rendering & meat byproduct processing	-	3	2	c	D	D	D	D	D	D	D	D
311615	Poultry processing	-	9	8	3 323	54 886	2 967	6 294	45 339	237 300	270 514	503 948	4 173
3117	Seafood product preparation & packaging	1	33	11	1 181	23 733	941	1 641	15 846	64 402	171 917	236 332	3 756
31171	Seafood product preparation & packaging	1	33	11	1 181	23 733	941	1 641	15 846	64 402	171 917	236 332	3 756
311712	Fresh & frozen seafood processing	1	30	10	g	D	D	D	D	D	D	D	3 688
3118	Bakeries & tortilla mfg	3	161	33	3 868	87 659	2 561	5 369	55 526	352 816	164 399	517 709	10 359
31181	Bread & bakery product mfg	3	152	31	3 747	84 897	2 472	5 214	53 775	346 391	157 908	504 786	10 030
311811	Retail bakeries	3	94	6	676	9 192	396	553	5 113	16 796	9 472	26 312	D
311812	Commercial bakeries	3	54	23	2 914	72 776	1 955	4 475	46 671	322 769	141 508	464 748	8 671
311813	Frozen cakes, pies, & other pastries mfg	8	4	2	157	2 929	121	186	1 991	6 826	6 928	13 726	D
3119	Other food mfg	-	50	28	3 487	117 234	2 649	5 336	76 246	1 563 149	926 144	2 491 597	39 182
31191	Snack food mfg	9	4	3	565	18 421	483	738	11 781	91 966	33 650	124 929	6 041
311919	Other snack food mfg	9	3	2	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	4	2	c	D	D	D	D	D	D	D	1 214
311920	Coffee & tea mfg	-	4	2	c	D	D	D	D	D	D	D	1 214
31193	Flavoring syrup & concentrate mfg	-	4	3	c	D	D	D	D	D	D	D	1 872
311930	Flavoring syrup & concentrate mfg	-	4	3	c	D	D	D	D	D	D	D	1 872
31194	Seasoning & dressing mfg	-	17	11	1 846	68 710	1 326	3 120	44 501	499 889	647 026	1 140 856	19 661
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	6	3	464	14 822	385	860	10 398	106 777	212 906	320 333	5 028
311942	Spice & extract mfg	-	11	8	1 382	53 888	941	2 260	34 103	393 112	434 120	820 523	14 633

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARYLAND—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg—Con.												
31199	All other food mfg	1	21	9	744	21 477	593	1 051	13 608	82 675	73 446	155 698	10 394
311991	Perishable prepared food mfg	—	9	4	460	10 618	361	537	5 049	26 702	30 912	57 083	3 968
311999	All other miscellaneous food mfg	1	12	5	284	10 859	232	514	8 559	55 973	42 534	98 615	6 426
312	Beverage & tobacco product mfg	3	32	16	1 888	71 409	891	1 910	31 259	351 567	459 287	814 613	27 017
3121	Beverage mfg	3	32	16	1 888	71 409	891	1 910	31 259	351 567	459 287	814 613	27 017
31211	Soft drink & ice mfg	2	21	11	1 306	43 981	506	1 033	15 307	292 086	400 318	692 902	17 324
312111	Soft drink mfg	2	10	9	1 211	41 561	457	952	14 550	285 516	395 953	681 673	16 989
31214	Distilleries	9	4	3	496	25 068	332	821	14 800	54 895	53 446	111 909	D
312140	Distilleries	9	4	3	496	25 068	332	821	14 800	54 895	53 446	111 909	D
313	Textile mills	5	40	10	1 657	41 379	1 335	2 913	26 353	109 771	103 056	216 771	8 938
3132	Fabric mills	3	20	8	1 254	27 914	1 072	2 299	19 486	81 419	55 855	138 309	6 149
31321	Broadwoven fabric mills	9	10	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	10	2	e	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	2	7	5	764	15 611	665	1 487	11 361	50 112	19 060	71 225	3 134
313221	Narrow fabric mills	—	4	3	f	D	D	D	D	D	D	D	D
313222	Schiffli machine embroidery	9	3	2	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	3	1	c	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	3	1	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	7	20	2	403	13 465	263	614	6 867	28 352	47 201	78 462	2 789
31331	Textile & fabric finishing mills	8	17	1	e	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	8	16	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	108	11	804	17 315	595	997	9 589	30 577	25 237	55 952	D
3141	Textile furnishings mills	4	45	1	259	5 009	200	348	2 931	9 361	8 386	17 693	D
31412	Curtain & linen mills	4	45	1	259	5 009	200	348	2 931	9 361	8 386	17 693	D
314121	Curtain & drapery mills	3	42	1	245	4 776	190	331	2 760	8 625	7 464	16 035	D
3149	Other textile product mills	2	63	10	545	12 306	395	649	6 658	21 216	16 851	38 259	D
31491	Textile bag & canvas mills	2	49	8	386	9 104	260	445	4 925	13 622	10 050	23 902	D
314912	Canvas & related product mills	2	46	6	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	3	14	2	159	3 202	135	204	1 733	7 594	6 801	14 357	473
314999	All other miscellaneous textile product mills	3	14	2	159	3 202	135	204	1 733	7 594	6 801	14 357	473
315	Apparel mfg	2	92	32	3 861	71 702	3 221	5 891	48 837	145 983	125 566	272 526	3 560
3152	Cut & sew apparel mfg	1	57	26	3 431	64 045	2 873	5 309	43 674	131 032	111 972	244 012	2 492
31521	Cut & sew apparel contractors	3	23	5	f	D	D	D	D	D	D	D	378
315211	Men's & boys' cut & sew apparel contractors	4	4	2	e	D	D	D	D	D	D	D	197
315212	Women's, girls', & infants' cut & sew apparel contractors	2	19	3	317	3 865	301	537	3 401	5 879	538	6 439	181
31522	Men's & boys' cut & sew apparel mfg	3	18	13	1 821	30 144	1 525	2 631	22 940	67 713	55 040	119 625	1 261
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	3	8	8	1 287	24 400	1 085	2 241	19 441	51 487	44 723	93 544	918
315228	Men's & boys' cut & sew other outerwear mfg	—	5	2	379	2 639	338	208	1 786	8 268	7 059	15 031	285
31523	Women's & girls' cut & sew apparel mfg	—	10	5	283	7 218	174	285	2 495	17 754	16 626	34 786	240
315232	Women's & girls' cut & sew blouse & shirt mfg	1	3	1	104	1 348	95	126	995	1 632	1 961	3 596	33
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	3	3	c	D	D	D	D	D	D	D	198
31529	Other cut & sew apparel mfg	—	6	3	f	D	D	D	D	D	D	D	613
315291	Infants' cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	5	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MARYLAND—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	2	32	5	375	6 995	309	514	4 827	13 227	12 076	25 278	985
31599	Apparel accessories & other apparel mfg	2	32	5	375	6 995	309	514	4 827	13 227	12 076	25 278	985
315992	Glove & mitten mfg	9	1	1	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	29	3	221	5 298	184	361	3 533	10 124	9 785	19 870	D
316	Leather & allied product mfg	—	12	5	1 321	41 543	1 151	1 996	34 564	172 285	183 785	354 828	D
3161	Leather & hide tanning & finishing	—	2	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	2	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	2	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	2	1	c	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	2	1	c	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	8	3	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	8	3	c	D	D	D	D	D	D	D	D
316999	All other leather goods mfg	—	3	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg	2	150	49	3 908	91 766	3 141	6 291	65 406	203 345	365 750	566 558	12 270
3211	Sawmills & wood preservation	3	48	18	1 052	22 657	830	1 626	17 709	68 980	125 569	190 224	5 795
32111	Sawmills & wood preservation	3	48	18	1 052	22 657	830	1 626	17 709	68 980	125 569	190 224	5 795
321113	Sawmills	3	41	16	939	19 895	738	1 448	15 734	53 365	66 649	119 167	5 089
321114	Wood preservation	2	7	2	113	2 762	92	178	1 975	15 615	58 920	71 057	706
3212	Veneer, plywood, & engineered wood product mfg	—	13	8	571	15 375	437	981	9 742	29 278	36 876	66 303	1 462
32121	Veneer, plywood, & engineered wood product mfg	—	13	8	571	15 375	437	981	9 742	29 278	36 876	66 303	1 462
321214	Truss mfg	—	10	7	496	12 871	368	823	7 382	24 282	29 081	53 469	854
3219	Other wood product mfg	2	89	23	2 285	53 734	1 874	3 684	37 955	105 087	203 305	310 031	5 013
32191	Millwork	5	35	11	1 161	26 796	957	1 995	19 377	45 087	64 465	111 342	2 551
321911	Wood window & door mfg	8	7	4	376	9 872	305	615	7 196	17 762	23 540	41 400	1 071
321912	Cut stock, resawing lumber, & planing	—	10	2	329	6 974	289	683	5 295	10 605	18 257	30 664	788
321918	Other millwork (including flooring)	5	18	5	456	9 950	363	697	6 886	16 720	22 668	39 278	692
32192	Wood container & pallet mfg	2	22	5	318	7 006	266	505	4 915	12 876	23 983	36 745	690
321920	Wood container & pallet mfg	2	22	5	318	7 006	266	505	4 915	12 876	23 983	36 745	690
32199	All other wood product mfg	1	32	7	806	19 932	651	1 184	13 663	47 124	114 857	161 944	1 772
321992	Prefabricated wood building mfg	—	10	5	608	15 678	492	929	10 973	37 512	105 530	143 191	1 177
321999	All other miscellaneous wood product mfg	4	22	2	198	4 254	159	255	2 690	9 612	9 327	18 753	595
322	Paper mfg	1	55	37	7 553	259 278	5 826	11 529	176 656	568 882	581 516	1 166 427	196 127
3221	Pulp, paper, & paperboard mills	—	5	5	2 150	96 535	1 604	3 380	67 899	275 952	195 600	483 183	D
32212	Paper mills	—	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	3	3	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	50	32	5 403	162 743	4 222	8 149	108 757	292 930	385 916	683 244	D
32221	Paperboard container mfg	1	29	18	4 454	133 772	3 492	6 802	90 681	226 036	319 267	549 791	D
322211	Corrugated & solid fiber box mfg	2	22	13	1 434	43 947	1 068	2 171	27 195	88 363	165 923	253 795	D
322212	Folding paperboard box mfg	—	2	2	c	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	—	3	3	h	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	6	6	4	252	7 438	184	291	4 444	21 025	19 646	40 501	D
322222	Coated & laminated paper mfg	6	6	4	252	7 438	184	291	4 444	21 025	19 646	40 501	D
32223	Stationery product mfg	2	7	4	470	14 761	372	686	9 376	29 451	30 393	59 760	D
322232	Envelope mfg	2	3	3	439	13 594	352	636	8 711	27 199	29 434	56 587	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARYLAND—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32229	Other converted paper product mfg.....	4	8	6	227	6 772	174	370	4 256	16 418	16 610	33 192	965
322299	All other converted paper product mfg ...	4	8	6	227	6 772	174	370	4 256	16 418	16 610	33 192	965
323	Printing & related support activities.....	2	806	198	17 529	610 118	13 217	25 612	388 349	1 247 262	794 396	2 040 414	144 533
3231	Printing & related support activities.....	2	806	198	17 529	610 118	13 217	25 612	388 349	1 247 262	794 396	2 040 414	144 533
32311	Printing.....	2	697	169	15 289	528 582	11 494	22 125	336 650	1 079 852	730 141	1 808 915	128 086
323110	Commercial lithographic printing ..	1	353	103	9 529	355 565	7 174	13 833	223 459	675 538	439 516	1 113 552	100 669
323111	Commercial gravure printing.....	5	10	2	183	9 433	143	309	7 242	13 019	11 849	24 843	1 200
323112	Commercial flexographic printing ..	—	9	5	288	10 380	205	392	6 352	26 234	36 895	63 229	2 548
323113	Commercial screen printing.....	1	54	14	900	21 065	639	1 105	12 118	36 690	33 063	70 273	2 899
323114	Quick printing.....	2	147	9	920	26 029	633	1 146	15 877	56 868	24 277	81 693	3 218
323116	Manifold business form printing.....	1	15	9	978	23 728	776	1 605	19 033	105 678	57 543	162 052	5 265
323117	Book printing.....	3	34	16	1 728	63 216	1 362	2 709	41 146	121 610	103 149	225 722	10 218
323118	Blankbook, looseleaf binder, & device mfg .	1	7	5	249	6 174	205	415	3 736	12 386	7 019	18 932	790
323119	Other commercial printing.....	3	64	6	494	12 677	342	596	7 497	31 285	16 448	47 693	1 236
32312	Support activities for printing.....	2	109	29	2 240	81 536	1 723	3 487	51 699	167 410	64 255	231 499	16 447
323121	Tradebinding & related work.....	—	33	13	1 229	42 871	991	2 069	29 371	96 211	44 575	140 388	11 198
323122	Prepress services	4	76	16	1 011	38 665	732	1 418	22 328	71 199	19 680	91 111	5 249
324	Petroleum & coal products mfg.....	2	40	6	1 066	42 838	565	1 267	20 640	131 852	236 378	369 798	11 591
3241	Petroleum & coal products mfg.....	2	40	6	1 066	42 838	565	1 267	20 640	131 852	236 378	369 798	11 591
32412	Asphalt paving, roofing, & saturated materials mfg.....	2	33	5	622	25 057	488	1 125	18 373	78 744	177 269	257 751	7 312
324121	Asphalt paving mixture & block mfg.....	—	29	2	215	8 156	178	406	6 214	37 235	78 647	115 870	3 816
324122	Asphalt shingle & coating materials mfg.....	4	4	3	407	16 901	310	719	12 159	41 509	98 622	141 881	3 496
32419	Other petroleum & coal products mfg.....	1	6	1	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg.....	1	6	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	170	80	13 742	584 311	7 332	15 695	269 350	2 734 386	2 208 941	4 930 437	202 360
3251	Basic chemical mfg.....	3	33	17	2 997	142 920	1 726	3 629	75 103	546 277	702 003	1 253 808	61 645
32513	Dye & pigment mfg.....	—	5	5	1 092	52 822	642	1 277	30 375	161 524	146 999	305 828	10 011
325131	Inorganic dye & pigment mfg.....	—	5	5	1 092	52 822	642	1 277	30 375	161 524	146 999	305 828	10 011
32518	Other basic inorganic chemical mfg.....	—	13	6	1 248	59 421	713	1 547	28 699	113 901	198 903	323 913	28 812
325188	All other basic inorganic chemical mfg.....	—	13	6	1 248	59 421	713	1 547	28 699	113 901	198 903	323 913	28 812
32519	Other basic organic chemical mfg.....	7	8	4	581	28 044	319	709	14 279	225 867	347 514	570 557	17 994
325199	All other basic organic chemical mfg.....	7	8	4	581	28 044	319	709	14 279	225 867	347 514	570 557	17 994
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	4	6	4	e	D	D	D	D	D	D	D	3 927
32521	Resin & synthetic rubber mfg.....	1	5	3	c	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	1	4	3	c	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	9	1	1	c	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	9	1	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	1	39	17	4 208	190 932	1 940	4 583	69 435	549 910	258 664	800 384	71 019
32541	Pharmaceutical & medicine mfg.....	1	39	17	4 208	190 932	1 940	4 583	69 435	549 910	258 664	800 384	71 019
325412	Pharmaceutical preparation mfg.....	1	11	4	789	31 829	494	1 421	18 492	113 490	63 461	170 564	5 280
325413	In-vitro diagnostic substance mfg.....	1	14	8	2 568	113 394	1 093	2 320	36 425	291 385	141 924	432 492	21 026
325414	Biological product (except diagnostic) mfg.....	—	8	4	792	43 281	319	782	13 260	107 668	30 182	136 894	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MARYLAND—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	1	25	14	1 575	64 016	771	1 733	28 834	429 305	302 640	727 327	17 001
32551	Paint & coating mfg	—	18	10	1 102	44 647	506	1 077	17 939	339 319	252 698	587 013	13 567
325510	Paint & coating mfg	—	18	10	1 102	44 647	506	1 077	17 939	339 319	252 698	587 013	13 567
32552	Adhesive mfg	3	7	4	473	19 369	265	656	10 895	89 986	49 942	140 314	3 434
325520	Adhesive mfg	3	7	4	473	19 369	265	656	10 895	89 986	49 942	140 314	3 434
3256	Soap, cleaning compound, & toilet preparation mfg	—	26	10	3 635	140 075	2 054	4 086	72 361	1 014 931	713 058	1 724 024	35 148
32561	Soap & cleaning compound mfg	—	19	7	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	5	1	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	—	12	5	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	9	2	1	c	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	7	3	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	7	3	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	36	17	984	33 076	618	1 209	16 125	148 042	167 433	313 769	12 954
32591	Printing ink mfg	1	11	6	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	11	6	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	24	11	714	22 454	489	938	11 947	107 647	101 560	208 840	D
325991	Custom compounding of purchased resin	2	5	4	317	7 878	230	448	4 938	29 009	38 329	66 737	1 873
325998	All other miscellaneous chemical product & preparation mfg	1	15	6	310	11 080	201	394	5 358	65 360	49 268	115 194	4 269
326	Plastics & rubber products mfg	1	142	68	8 911	249 049	7 046	13 598	164 176	756 001	664 423	1 415 208	86 856
3261	Plastics product mfg	1	114	58	7 831	220 834	6 275	12 075	146 659	694 129	607 886	1 296 297	80 191
32611	Unsupported plastics film, sheet, & bag mfg	—	7	5	481	20 426	355	837	12 927	67 572	68 245	136 152	19 998
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	3	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	2	2	1	c	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	2	2	1	c	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	3	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	3	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	5	968	25 833	879	1 822	21 089	88 150	123 902	211 235	11 809
326160	Plastics bottle mfg	—	6	5	968	25 833	879	1 822	21 089	88 150	123 902	211 235	11 809
32619	Other plastics product mfg	1	81	43	5 098	136 668	4 071	7 490	88 231	423 317	297 148	714 710	30 438
326199	All other plastics product mfg	1	79	43	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	28	10	1 080	28 215	771	1 523	17 517	61 872	56 537	118 911	6 665
32621	Tire mfg	—	11	1	c	D	D	D	D	D	D	D	D
326212	Tire retreading	—	11	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	2	15	8	882	23 503	609	1 178	14 143	50 102	32 583	81 786	5 512
326291	Rubber product mfg for mechanical use	—	6	4	283	8 130	236	491	4 955	11 621	10 434	22 199	D
326299	All other rubber product mfg	3	9	4	599	15 373	373	687	9 188	38 481	22 149	59 587	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MARYLAND—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	187	72	5 654	191 046	4 329	9 099	134 667	517 033	399 243	915 059	38 311
3271	Clay product & refractory mfg	1	19	7	f	D	D	D	D	D	D	D	2 995
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	8	2	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	1	3	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	11	5	386	13 071	326	628	9 857	27 248	8 403	35 044	D
327121	Brick & structural clay tile mfg	-	6	3	248	8 050	209	413	5 620	16 417	6 513	22 490	1 184
327124	Clay refractory mfg ...	-	4	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	19	4	832	22 119	731	1 223	16 024	48 355	18 150	62 151	2 391
32721	Glass & glass product mfg	-	19	4	832	22 119	731	1 223	16 024	48 355	18 150	62 151	2 391
327213	Glass container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	1	14	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	120	53	3 136	106 937	2 268	4 870	73 922	278 777	266 730	550 165	24 695
32731	Cement mfg	-	4	3	443	17 978	361	723	13 340	79 880	55 506	135 381	9 046
327310	Cement mfg	-	4	3	443	17 978	361	723	13 340	79 880	55 506	135 381	9 046
32732	Ready-mix concrete mfg.	-	60	30	1 542	53 326	1 155	2 448	39 075	120 279	139 966	260 530	9 196
327320	Ready-mix concrete mfg	-	60	30	1 542	53 326	1 155	2 448	39 075	120 279	139 966	260 530	9 196
32733	Concrete pipe, brick, & block mfg	-	23	12	650	20 007	413	976	12 291	45 615	46 558	94 064	3 003
327331	Concrete block & brick mfg	1	15	8	299	9 230	124	298	3 610	18 888	28 656	46 793	1 158
327332	Concrete pipe mfg	-	8	4	351	10 777	289	678	8 681	26 727	17 902	47 271	1 845
32739	Other concrete product mfg	1	33	8	501	15 626	339	723	9 216	33 003	24 700	60 190	3 450
327390	Other concrete product mfg	1	33	8	501	15 626	339	723	9 216	33 003	24 700	60 190	3 450
3274	Lime & gypsum product mfg	-	5	2	e	D	D	D	D	D	D	D	1 654
32742	Gypsum product mfg . . .	-	4	2	e	D	D	D	D	D	D	D	1 654
327420	Gypsum product mfg ..	-	4	2	e	D	D	D	D	D	D	D	1 654
3279	Other nonmetallic mineral product mfg	-	24	6	704	24 819	544	1 171	17 527	90 976	33 544	123 858	6 576
32799	All other nonmetallic mineral product mfg ...	-	23	6	f	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg ..	-	10	4	564	20 805	440	976	14 941	82 701	27 665	109 675	6 184
331	Primary metal mfg	-	34	15	7 586	371 785	5 899	13 138	287 424	1 487 263	1 073 096	2 550 164	140 080
3311	Iron & steel mills & ferroalloy mfg	-	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
33111	Iron & steel mills & ferroalloy mfg	-	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
331111	Iron & steel mills	-	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
3312	Steel product mfg from purchased steel	-	9	5	657	20 557	527	1 080	16 328	43 859	77 124	118 269	2 507
33122	Rolling & drawing of purchased steel	-	9	5	657	20 557	527	1 080	16 328	43 859	77 124	118 269	2 507
331221	Cold-rolled steel shape mfg	1	3	1	c	D	D	D	D	D	D	D	429
331222	Steel wire drawing	-	6	4	f	D	D	D	D	D	D	D	2 078
3313	Alumina & aluminum production & processing ..	1	3	3	1 199	52 539	919	1 936	36 281	247 381	193 449	431 803	D
33131	Alumina & aluminum production & processing	1	3	3	1 199	52 539	919	1 936	36 281	247 381	193 449	431 803	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	c	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	9	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	1	13	3	158	4 090	122	248	3 036	12 833	8 948	21 805	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARYLAND—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	510	152	13 894	461 423	9 827	19 273	284 196	1 170 336	995 236	2 152 080	97 251
3321	Forging & stamping	2	12	9	582	21 968	416	864	13 713	42 984	66 847	109 329	2 675
332114	Forging & stamping	2	12	9	582	21 968	416	864	13 713	42 984	66 847	109 329	2 675
332114	Custom roll forming	—	4	3	236	8 585	181	381	5 483	19 833	45 606	65 303	D
332116	Metal stamping	3	6	4	e	D	D	D	D	D	D	D	1 695
3323	Architectural & structural metals mfg	1	137	45	3 446	111 732	2 408	4 688	64 085	220 029	217 897	439 496	18 229
33231	Plate work & fabricated structural product mfg	1	38	15	1 110	35 562	812	1 395	19 689	91 115	95 249	187 557	11 445
332311	Prefabricated metal building & component mfg	—	3	2	144	6 015	100	184	3 163	7 704	7 374	15 553	D
332312	Fabricated structural metal mfg	2	28	12	884	26 656	658	1 086	14 855	77 720	84 663	163 112	11 088
33232	Ornamental & architectural metal products mfg	1	99	30	2 336	76 170	1 596	3 293	44 396	128 914	122 648	251 939	6 784
332321	Metal window & door mfg	2	15	3	255	7 932	164	341	4 483	14 087	11 240	25 290	483
332322	Sheet metal work mfg	1	52	17	1 379	47 463	977	1 971	27 992	75 454	71 374	146 596	4 602
332323	Ornamental & architectural metal work mfg	1	32	10	702	20 775	455	981	11 921	39 373	40 034	80 053	1 699
3324	Boiler, tank, & shipping container mfg	—	19	13	942	37 218	780	1 658	30 033	55 689	172 831	227 545	6 906
33243	Metal can, box, & other metal container (light gauge) mfg	—	11	10	817	33 057	678	1 447	26 801	45 434	165 477	209 866	6 641
332431	Metal can mfg	—	6	6	506	22 499	421	909	18 535	16 904	119 261	134 647	D
332439	Other metal container mfg	—	5	4	311	10 558	257	538	8 266	28 530	46 216	75 219	D
3325	Hardware mfg	4	10	4	282	7 272	235	460	5 066	14 696	16 086	32 729	1 267
33251	Hardware mfg	4	10	4	282	7 272	235	460	5 066	14 696	16 086	32 729	1 267
332510	Hardware mfg	4	10	4	282	7 272	235	460	5 066	14 696	16 086	32 729	1 267
3326	Spring & wire product mfg	1	21	11	1 341	40 585	944	1 588	24 855	101 470	102 728	203 853	12 228
33261	Spring & wire product mfg	1	21	11	1 341	40 585	944	1 588	24 855	101 470	102 728	203 853	12 228
332618	Other fabricated wire product mfg	—	18	10	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	219	42	3 155	103 087	2 435	4 699	69 547	208 446	95 864	303 751	15 497
33271	Machine shops	1	203	35	2 842	93 000	2 208	4 247	63 016	187 206	89 358	276 379	13 825
332710	Machine shops	1	203	35	2 842	93 000	2 208	4 247	63 016	187 206	89 358	276 379	13 825
33272	Turned product & screw, nut, & bolt mfg	—	16	7	313	10 087	227	452	6 531	21 240	6 506	27 372	1 672
332721	Precision turned product mfg	—	13	7	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	2	42	12	726	21 947	561	1 171	15 293	48 243	46 494	93 882	4 813
33281	Coating, engraving, heat treating, & allied activities	2	42	12	726	21 947	561	1 171	15 293	48 243	46 494	93 882	4 813
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	14	6	408	13 521	317	661	9 502	25 583	38 995	64 412	3 597
332813	Electroplating, plating, polishing, anodizing, & coloring	2	25	5	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	43	14	3 348	115 894	1 997	4 080	60 742	474 593	274 285	735 149	35 374
33291	Metal valve mfg	—	5	3	2 145	78 963	1 008	2 120	35 554	352 220	203 474	542 470	24 218
332912	Fluid power valve & hose fitting mfg	—	2	2	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	38	11	1 203	36 931	989	1 960	25 188	122 373	70 811	192 679	11 156
332994	Small arms mfg	—	2	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	25	9	679	22 736	556	1 104	16 745	70 073	29 530	98 992	6 542

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MARYLAND—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	166	55	10 796	433 335	6 369	13 594	225 360	1 155 721	1 192 371	2 331 537	77 137
3331	Agriculture, construction, & mining machinery mfg.	-	8	3	c	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	6	3	123	4 088	103	224	3 060	24 270	8 216	32 940	954
333120	Construction machinery mfg	-	6	3	123	4 088	103	224	3 060	24 270	8 216	32 940	954
3332	Industrial machinery mfg ..	-	32	11	2 059	91 716	1 017	2 329	37 461	167 708	180 497	344 636	14 257
33329	Other industrial machinery mfg	-	30	11	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	5	4	694	37 022	422	978	20 049	59 288	85 660	142 290	4 076
333295	Semiconductor machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	11	5	770	32 594	398	929	12 551	53 249	56 758	107 751	D
3333	Commercial & service industry machinery mfg ..	-	20	5	847	29 527	439	994	11 335	119 596	61 730	176 832	3 471
33331	Commercial & service industry machinery mfg	-	20	5	847	29 527	439	994	11 335	119 596	61 730	176 832	3 471
333311	Automatic vending machine mfg	-	3	2	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	9	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	20	11	1 963	65 439	1 109	2 175	28 373	149 844	109 945	250 296	14 433
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	20	11	1 963	65 439	1 109	2 175	28 373	149 844	109 945	250 296	14 433
333411	Air purification equipment mfg	-	5	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	2	13	9	1 554	57 002	941	1 949	25 750	104 235	77 015	174 434	D
3335	Metalworking machinery mfg	2	31	5	e	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	2	31	5	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	1	17	1	118	3 749	93	173	2 321	7 192	3 100	10 209	D
3336	Engine, turbine, & power transmission equipment mfg	-	6	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	6	2	g	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	49	18	3 854	142 513	2 517	5 312	75 063	522 228	495 110	1 020 922	25 182
33391	Pump & compressor mfg	-	4	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	3	1	c	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	1	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	4	12	1	c	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	4	1	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	33	15	2 813	99 587	1 883	3 956	53 764	441 180	372 795	818 513	21 424
333991	Power-driven handtool mfg	-	3	2	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	5	2	2	c	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	2	7	4	740	35 448	368	963	16 890	49 934	69 941	124 662	4 741
333999	All other miscellaneous general-purpose machinery mfg	-	18	6	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARYLAND—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	261	109	24 525	1 140 088	10 296	20 640	368 432	3 111 828	1 794 813	4 893 233	210 478
3341	Computer & peripheral equipment mfg.....	1	36	13	1 396	58 011	401	821	15 109	162 576	120 471	277 160	10 596
33411	Computer & peripheral equipment mfg.....	1	36	13	1 396	58 011	401	821	15 109	162 576	120 471	277 160	10 596
334111	Electronic computer mfg.....	2	12	4	178	9 143	78	161	3 052	19 864	24 146	44 023	1 169
334119	Other computer peripheral equipment mfg.....	-	20	9	1 200	47 673	315	642	11 590	140 796	94 858	229 733	9 137
3342	Communications equipment mfg.....	1	54	34	7 333	360 840	3 021	6 536	96 588	1 201 185	865 248	2 045 063	86 557
33421	Telephone apparatus mfg.....	1	13	9	1 540	84 792	668	1 235	21 388	306 025	272 703	568 629	D
334210	Telephone apparatus mfg.....	1	13	9	1 540	84 792	668	1 235	21 388	306 025	272 703	568 629	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	32	23	5 361	262 180	2 179	4 877	70 645	851 757	572 491	1 412 087	64 946
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	32	23	5 361	262 180	2 179	4 877	70 645	851 757	572 491	1 412 087	64 946
33429	Other communications equipment mfg.....	-	9	2	432	13 868	174	424	4 555	43 403	20 054	64 347	D
334290	Other communications equipment mfg.....	-	9	2	432	13 868	174	424	4 555	43 403	20 054	64 347	D
3343	Audio & video equipment mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	1	62	29	2 459	79 467	1 542	3 194	35 638	121 698	112 208	235 486	25 888
33441	Semiconductor & other electronic component mfg.....	1	62	29	2 459	79 467	1 542	3 194	35 638	121 698	112 208	235 486	25 888
334412	Bare printed circuit board mfg.....	6	15	8	419	10 497	324	644	6 868	19 558	12 409	31 926	1 875
334413	Semiconductor & related device mfg...	2	9	3	594	28 716	310	841	9 433	42 845	24 974	68 435	18 071
334417	Electronic connector mfg.....	2	6	2	183	3 428	112	95	1 823	1 367	4 434	6 093	68
334418	Printed circuit assembly (electronic assembly) mfg.....	-	10	9	579	18 212	380	815	9 384	26 828	44 162	73 215	2 550
334419	Other electronic component mfg.....	1	18	5	552	15 781	310	598	6 345	24 494	23 530	46 789	3 028
3345	Navigational, measuring, medical, & control instruments mfg.....	-	96	29	13 001	630 461	5 102	9 650	215 615	1 588 979	657 796	2 258 364	85 558
33451	Navigational, measuring, medical, & control instruments mfg.....	-	96	29	13 001	630 461	5 102	9 650	215 615	1 588 979	657 796	2 258 364	85 558
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	7	1	127	5 560	56	130	1 521	19 141	6 280	25 317	256
334511	Search, detection, navigation, & guidance instrument mfg.....	-	18	9	10 527	525 255	3 987	7 308	178 869	1 281 221	523 488	1 815 213	71 071
334512	Automatic environmental control mfg.....	1	4	3	317	8 575	195	367	3 634	22 326	9 218	32 428	811
334513	Industrial process control instrument mfg.....	2	15	2	204	7 458	72	136	1 901	15 939	8 454	24 311	375
334515	Electricity measuring & testing instrument mfg.....	-	13	6	1 009	49 980	416	875	14 916	183 580	66 222	250 466	11 292
334516	Analytical laboratory instrument mfg.....	3	18	4	253	9 420	88	278	4 011	23 955	8 003	32 079	661
334519	Other measuring & controlling device mfg.....	1	14	4	525	23 149	261	515	10 224	39 730	33 833	73 136	944
3346	Mfg & reproducing magnetic & optical media.	1	10	3	c	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	1	10	3	c	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	-	6	2	c	D	D	D	D	D	D	D	253

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARYLAND—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	51	13	2 228	62 765	1 364	2 261	28 555	159 406	115 659	273 676	8 606
3351	Electric lighting equipment mfg	1	11	5	c	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	8	4	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	24	6	1 680	48 307	1 094	1 896	23 684	109 779	66 657	174 882	3 873
33531	Electrical equipment mfg	—	24	6	1 680	48 307	1 094	1 896	23 684	109 779	66 657	174 882	3 873
335312	Motor & generator mfg	1	7	2	175	6 731	116	203	3 617	13 184	6 692	19 854	216
335313	Switchgear & switchboard apparatus mfg	—	9	4	1 448	39 812	947	1 637	19 354	93 441	57 316	149 201	3 535
3359	Other electrical equipment & component mfg	2	15	2	318	6 510	154	162	2 428	38 887	36 319	75 388	D
33599	All other electrical equipment & component mfg	2	10	2	286	5 486	132	120	1 889	36 351	34 349	71 053	2 277
335999	All other miscellaneous electrical equipment & component mfg	2	10	2	286	5 486	132	120	1 889	36 351	34 349	71 053	2 277
336	Transportation equipment mfg	—	108	38	9 458	367 307	6 959	12 838	228 546	1 316 173	2 867 128	4 184 414	53 877
3361	Motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	9	1	1	c	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	10	2	f	D	D	D	D	D	D	D	1 269
33621	Motor vehicle body & trailer mfg	1	10	2	f	D	D	D	D	D	D	D	1 269
336214	Travel trailer & camper mfg	—	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	38	13	g	D	D	D	D	D	D	D	11 572
33632	Motor vehicle electrical & electronic equipment mfg	—	6	3	649	15 091	467	945	10 035	62 742	41 751	98 196	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	6	3	649	15 091	467	945	10 035	62 742	41 751	98 196	D
33636	Motor vehicle seating & interior trim mfg	8	2	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	8	2	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	10	3	e	D	D	D	D	D	D	D	1 201
336399	All other motor vehicle parts mfg	—	9	3	419	15 766	252	508	10 128	21 826	7 453	29 212	D
3364	Aerospace product & parts mfg	—	14	8	1 947	106 835	771	1 566	30 121	131 772	241 028	381 233	16 460
33641	Aerospace product & parts mfg	—	14	8	1 947	106 835	771	1 566	30 121	131 772	241 028	381 233	16 460
336412	Aircraft engine & engine parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	9	5	549	21 978	328	651	12 229	58 611	22 636	86 518	9 587
336414	Guided missile & space vehicle mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	1	1	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	37	8	1 498	42 448	1 204	1 819	28 784	96 025	126 124	221 540	2 359
33661	Ship & boat building	—	37	8	1 498	42 448	1 204	1 819	28 784	96 025	126 124	221 540	2 359
336611	Ship building & repairing	1	18	4	690	21 645	464	790	11 009	31 511	30 407	61 918	1 437
336612	Boat building	—	19	4	808	20 803	740	1 029	17 775	64 514	95 717	159 622	922
3369	Other transportation equipment mfg	6	6	4	c	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	6	6	4	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARYLAND—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg.....	2	247	47	4 306	105 632	3 171	5 697	63 468	233 552	209 040	443 933	8 717
3371	Household & institutional furniture & kitchen cabinet mfg.....	3	172	19	1 961	45 984	1 534	2 879	30 740	84 269	67 739	151 804	3 111
33711	Wood kitchen cabinet & counter top mfg.....	2	95	5	749	18 344	559	1 054	11 942	29 919	21 742	51 776	994
337110	Wood kitchen cabinet & counter top mfg....	2	95	5	749	18 344	559	1 054	11 942	29 919	21 742	51 776	994
33712	Household & institutional furniture mfg.....	4	77	14	1 212	27 640	975	1 825	18 798	54 350	45 997	100 028	2 117
337121	Upholstered household furniture mfg.....	4	5	3	335	8 059	269	503	6 009	15 421	18 863	34 315	264
337122	Nonupholstered wood household furniture mfg.....	2	54	6	581	11 840	478	896	8 250	23 045	16 885	39 779	1 176
337127	Institutional furniture mfg.....	5	10	5	247	6 513	190	349	3 729	13 281	7 942	21 024	519
3372	Office furniture (including fixtures) mfg.....	2	59	19	978	29 396	743	1 312	17 315	51 406	32 161	85 397	3 083
33721	Office furniture (including fixtures) mfg.....	2	59	19	978	29 396	743	1 312	17 315	51 406	32 161	85 397	3 083
337211	Wood office furniture mfg.....	2	13	3	200	4 979	157	236	2 807	10 372	6 547	16 945	730
337212	Custom architectural woodwork & millwork mfg.....	—	18	6	320	10 974	246	442	7 411	17 940	9 261	27 133	1 445
337215	Showcase, partition, shelving, & locker mfg.....	4	24	8	388	11 264	287	533	5 825	19 069	12 924	32 280	889
3379	Other furniture related product mfg.....	—	16	9	1 367	30 252	894	1 506	15 413	97 877	109 140	206 732	2 523
33791	Mattress mfg.....	1	6	5	523	14 619	398	686	8 711	51 561	50 108	100 858	1 595
337910	Mattress mfg.....	1	6	5	523	14 619	398	686	8 711	51 561	50 108	100 858	1 595
33792	Blind & shade mfg.....	—	10	4	844	15 633	496	820	6 702	46 316	59 032	105 874	928
337920	Blind & shade mfg....	—	10	4	844	15 633	496	820	6 702	46 316	59 032	105 874	928
339	Miscellaneous mfg.....	2	424	70	5 826	173 221	3 974	7 372	91 937	363 613	282 324	647 505	28 798
3391	Medical equipment & supplies mfg.....	2	196	32	2 552	86 352	1 600	2 940	40 707	174 936	143 027	320 744	16 893
33911	Medical equipment & supplies mfg.....	2	196	32	2 552	86 352	1 600	2 940	40 707	174 936	143 027	320 744	16 893
339111	Laboratory apparatus & furniture mfg.....	1	15	5	187	8 047	100	192	2 862	17 885	8 997	26 884	819
339112	Surgical & medical instrument mfg.....	2	31	7	818	29 208	567	1 035	14 980	52 920	52 629	102 547	12 180
339113	Surgical appliance & supplies mfg.....	—	23	10	651	24 842	298	615	7 755	64 984	52 130	119 764	1 670
339115	Ophthalmic goods mfg.....	—	10	3	229	7 797	146	258	4 897	2 606	15 865	21 369	1 186
339116	Dental laboratories...	6	106	6	584	14 412	432	742	9 017	31 767	11 170	43 150	965
3399	Other miscellaneous mfg..	2	228	38	3 274	86 869	2 374	4 432	51 230	188 677	139 297	326 761	11 905
33991	Jewelry & silverware mfg.....	2	30	3	248	4 617	178	354	3 129	10 185	7 483	17 269	153
339912	Silverware & plated ware mfg.....	—	5	2	142	2 991	101	241	2 095	5 249	3 429	8 269	D
33992	Sporting & athletic goods mfg.....	1	20	4	279	6 319	192	318	3 237	17 150	14 928	31 698	719
339920	Sporting & athletic goods mfg.....	1	20	4	279	6 319	192	318	3 237	17 150	14 928	31 698	719
33993	Doll, toy, & game mfg...	—	12	3	461	14 423	356	673	9 102	28 672	25 522	54 010	2 437
339932	Game, toy, & children's vehicle mfg.....	—	12	3	461	14 423	356	673	9 102	28 672	25 522	54 010	2 437
33994	Office supplies (except paper) mfg.....	8	11	2	116	2 765	76	118	1 445	7 332	5 753	13 115	575
33995	Sign mfg.....	2	103	13	1 008	31 304	715	1 388	17 882	67 263	42 764	110 160	5 212
339950	Sign mfg.....	2	103	13	1 008	31 304	715	1 388	17 882	67 263	42 764	110 160	5 212
33999	All other miscellaneous mfg.....	2	52	13	1 162	27 441	857	1 581	16 435	58 075	42 847	100 509	2 809
339992	Musical instrument mfg.....	—	9	1	147	4 104	125	252	2 583	8 508	4 399	12 653	D
339994	Broom, brush, & mop mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg.....	2	34	8	660	14 101	463	793	7 883	28 098	19 314	48 324	1 657

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees, h–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CUMBERLAND, MD-WV MSA												
	Manufacturing	-	83	29	5 307	179 632	4 034	7 342	120 354	498 219	409 274	922 229	191 987
	Cumberland, MD-WV MSA (MD Part)	-	67	21	4 169	139 197	3 206	5 708	95 607	396 422	374 661	785 922	D
	Cumberland, MD-WV MSA (WV Part)	-	16	8	1 138	40 435	828	1 634	24 747	101 797	34 613	136 307	D
313	Textile mills	9	2	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	2	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	2	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	2	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	11	5	332	6 329	276	495	4 405	15 660	20 596	36 024	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	e	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	1	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	1	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	1	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	1	1	e	D	D	D	D	D	D	D	D
31-33	PHILADELPHIA-WILMINGTON-ATLANTIC CITY, PA-NJ-DE-MD CMSA												
	Manufacturing	1	7 571	2 521	296 009	11 144 543	198 342	402 245	6 246 279	36 032 591	42 854 609	78 627 684	3 154 094
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (DE Part)	-	458	152	22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (MD Part)	-	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (NJ Part)	1	1 931	643	73 747	2 654 647	51 459	101 322	1 560 504	8 161 513	9 971 460	18 209 340	508 565
	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg	1	658	204	26 743	799 864	18 468	36 623	476 156	2 875 491	4 075 170	6 931 087	163 018
312	Beverage & tobacco product mfg	1	41	15	h	D	D	D	D	D	D	D	D
313	Textile mills	2	111	51	h	D	D	D	D	D	D	D	D
314	Textile product mills	1	150	30	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	300	109	j	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	25	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	151	35	2 393	61 337	1 849	3 513	38 878	144 044	231 714	372 912	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	1	167	111	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 071	237	25 080	873 504	17 864	34 229	537 117	1 962 280	1 237 277	3 197 812	134 832
324	Petroleum & coal products mfg	—	69	33	i	D	D	D	D	D	D	D	D
325	Chemical mfg	—	371	205	k	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	350	178	16 562	555 452	12 154	24 588	328 294	1 685 983	1 375 225	3 062 168	151 712
327	Nonmetallic mineral product mfg	1	300	114	12 188	429 542	9 612	20 003	308 463	1 106 394	734 488	1 834 034	D
331	Primary metal mfg	—	91	52	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 270	376	31 121	1 131 270	22 772	45 939	690 784	2 548 013	1 825 591	4 351 565	D
333	Machinery mfg	1	579	200	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	480	205	29 370	1 229 659	15 453	30 789	532 374	3 098 273	1 937 075	5 006 993	D
335	Electrical equipment, appliance, & component mfg	1	165	66	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	176	72	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	356	70	8 035	246 015	6 057	12 131	155 199	632 178	506 362	1 136 678	D
339	Miscellaneous mfg	2	690	154	j	D	D	D	D	D	D	D	D
31-33	Wilmington–Newark, DE–MD PMSA												
	Manufacturing	—	513	174	25 376	1 101 052	16 681	35 395	635 335	3 432 842	6 044 156	9 413 239	464 082
	Wilmington–Newark, DE–MD PMSA (DE Part)	—	458	152	22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
	Wilmington–Newark, DE–MD PMSA (MD Part)	—	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
311	Food mfg	6	34	7	519	13 312	280	465	5 650	39 038	82 035	118 846	2 003
3118	Bakeries & tortilla mfg	1	18	4	e	D	D	D	D	D	D	D	571
31181	Bread & bakery product mfg	2	16	4	277	5 456	142	227	2 337	12 404	4 818	17 236	D
313	Textile mills	3	7	3	260	6 880	227	399	4 619	13 775	12 683	26 249	D
3133	Textile & fabric finishing & fabric coating mills	3	5	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	7	7	f	D	D	D	D	D	D	D	2 149
3222	Converted paper product mfg	1	5	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	4	4	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	72	11	740	25 031	506	1 011	15 130	44 357	24 054	68 548	4 066
3231	Printing & related support activities	3	72	11	740	25 031	506	1 011	15 130	44 357	24 054	68 548	4 066
32311	Printing	3	66	11	f	D	D	D	D	D	D	D	4 007
323110	Commercial lithographic printing	5	34	6	406	13 872	276	590	8 424	25 183	13 618	39 009	D
324	Petroleum & coal products mfg	—	11	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	11	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Wilmington–Newark, DE–MD PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	—	46	28	4 196	202 704	2 449	5 326	98 515	1 337 862	1 508 441	2 799 444	D
3251	Basic chemical mfg	—	15	12	1 885	104 847	995	2 085	51 786	607 898	330 914	935 627	43 754
32513	Dye & pigment mfg	—	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	1	1	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	1	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	5	5	597	33 695	264	571	13 477	180 305	102 370	283 296	D
325188	All other basic inorganic chemical mfg	—	4	4	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	3	3	344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
325199	All other basic organic chemical mfg	—	3	3	344	18 103	189	421	9 341	123 309	88 632	215 044	5 404
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	5	5	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	5	5	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	5	5	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	8	5	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	8	5	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	5	2	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	6	3	f	D	D	D	D	D	D	D	8 125
3256	Soap, cleaning compound, & toilet preparation mfg	5	5	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	5	5	2	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	9	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	5	9	3	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	5	9	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	51	31	3 468	121 609	2 487	5 094	68 707	485 726	415 889	909 786	56 239
3261	Plastics product mfg	1	38	23	3 015	106 811	2 189	4 415	58 911	393 877	387 177	789 929	52 673
32611	Unsupported plastics film, sheet, & bag mfg	2	11	6	980	35 400	732	1 693	23 978	146 410	156 645	305 248	20 630
326112	Unsupported plastics packaging film & sheet mfg	—	2	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	3	8	4	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	3	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	4	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	17	11	1 544	51 124	1 108	1 998	21 623	154 495	122 167	276 886	16 861
326199	All other plastics product mfg	—	16	11	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	13	8	453	14 798	298	679	9 796	91 849	28 712	119 857	3 566
32629	Other rubber product mfg	—	9	7	e	D	D	D	D	D	D	D	3 447
327	Nonmetallic mineral product mfg	3	28	13	756	25 943	594	1 273	18 314	71 621	88 533	160 082	7 820
3273	Cement & concrete product mfg	2	14	9	372	11 090	302	629	7 785	32 647	27 471	59 682	D
331	Primary metal mfg	—	5	4	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Wilmington–Newark, DE–MD PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	75	25	1 928	69 814	1 432	3 010	43 830	145 240	99 789	245 487	7 449
3323	Architectural & structural metals mfg	1	22	10	839	28 642	644	1 311	19 271	53 504	52 428	107 109	2 184
33231	Plate work & fabricated structural product mfg ..	1	7	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	15	6	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg .	—	9	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	29	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	27	5	357	11 738	251	491	7 192	23 793	12 364	36 074	1 230
332710	Machine shops	1	27	5	357	11 738	251	491	7 192	23 793	12 364	36 074	1 230
3329	Other fabricated metal product mfg	1	5	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	29	6	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	6	3	e	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	11	2	325	11 625	197	424	5 525	29 620	22 852	52 795	D
33399	All other general-purpose machinery mfg	1	8	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	5	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	24	12	1 806	77 371	820	1 656	28 445	255 070	183 701	438 273	6 905
3341	Computer & peripheral equipment mfg	2	3	2	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	2	3	2	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	1	4	3	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
33451	Navigational, measuring, medical, & control instruments mfg	—	15	7	1 117	51 350	451	831	17 621	191 644	156 578	346 180	D
334516	Analytical laboratory instrument mfg	—	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	9	5	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	3	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.													
	Wilmington–Newark, DE–MD PMSA—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	—	12	7	h	D	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D	
33611	Automobile & light duty motor vehicle mfg	—	2	2	h	D	D	D	D	D	D	D	D	
336111	Automobile mfg	—	1	1	g	D	D	D	D	D	D	D	D	
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	—	3	3	e	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	3	3	e	D	D	D	D	D	D	D	D	
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	—	41	4	g	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg	—	24	4	g	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	—	24	4	g	D	D	D	D	D	D	D	D	
339111	Laboratory apparatus & furniture mfg	—	4	1	g	D	D	D	D	D	D	D	D	
339112	Surgical & medical instrument mfg	—	2	1	e	D	D	D	D	D	D	D	D	
	WASHINGTON–BALTIMORE, DC–MD–VA–WV CMSA													
31-33	Manufacturing	1	4 979	1 397		180 692	6 729 603	118 375	237 123	3 628 537	20 589 409	18 635 215	39 149 042	1 520 154
	Washington–Baltimore, DC–MD–VA–WV CMSA (DC Part)	2	200	35		2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington–Baltimore, DC–MD–VA–WV CMSA (MD Part)	1	3 482	1 039		138 522	5 151 313	90 519	181 710	2 812 641	16 384 506	15 133 093	31 458 684	1 141 079
	Washington–Baltimore, DC–MD–VA–WV CMSA (VA Part)	1	1 233	290		34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington–Baltimore, DC–MD–VA–WV CMSA (WV Part)	—	64	33		5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	1	395	119		14 363	402 297	9 987	20 724	254 886	2 475 385	2 408 898	4 889 204	87 187
312	Beverage & tobacco product mfg	2	45	20	g	D	D	D	D	D	D	D	D	D
313	Textile mills	5	42	10	g	D	D	D	D	D	D	D	D	D
314	Textile product mills	3	137	14	g	D	D	D	D	D	D	D	D	D
315	Apparel mfg	2	127	32	h	D	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	11	4	g	D	D	D	D	D	D	D	D	D
321	Wood product mfg	2	162	53	h	D	D	D	D	D	D	D	D	D
322	Paper mfg	1	59	35		6 102	179 331	4 877	9 412	120 612	366 779	450 197	813 474	D
323	Printing & related support activities	2	1 198	271		25 327	887 907	19 037	37 200	575 537	1 710 795	1 209 672	2 916 844	318 361
324	Petroleum & coal products mfg	2	41	8	g	D	D	D	D	D	D	D	D	D
325	Chemical mfg	1	180	77	j	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	145	67		8 893	241 984	7 183	13 703	165 876	719 656	674 514	1 384 491	77 269
327	Nonmetallic mineral product mfg	—	236	93		7 410	254 629	5 744	12 146	178 450	724 602	547 963	1 268 145	47 167
331	Primary metal mfg	—	40	18	i	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	568	160		14 428	483 853	10 372	20 649	297 759	1 210 189	1 005 732	2 206 004	94 908

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Manufacturing—Con.												
333	Machinery mfg	-	188	63	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	370	161	k	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	61	13	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	111	44	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	314	60	6 113	156 809	4 658	8 691	102 649	437 720	287 174	722 749	10 974
339	Miscellaneous mfg	2	549	75	i	D	D	D	D	D	D	D	D
	Baltimore, MD PMSA												
31-33	Manufacturing	1	2 177	674	93 594	3 448 609	62 453	125 204	1 971 480	11 633 259	11 044 140	22 684 873	694 211
311	Food mfg	1	184	66	8 107	249 102	5 568	11 953	154 309	1 856 071	1 667 551	3 529 724	64 855
3112	Grain & oilseed milling	5	3	3	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	16	5	f	D	D	D	D	D	D	D	9 552
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	8	4	760	23 299	484	1 095	14 005	54 886	257 310	313 883	D
31151	Dairy product (except frozen) mfg	-	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	1	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	8	6	2	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	8	6	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	17	8	496	13 192	326	665	7 536	63 996	72 721	136 747	782
31161	Animal slaughtering & processing	-	17	8	496	13 192	326	665	7 536	63 996	72 721	136 747	782
3118	Bakeries & tortilla mfg	6	84	18	2 120	46 470	1 289	2 951	25 070	153 876	84 813	238 701	D
31181	Bread & bakery product mfg	6	78	18	2 065	45 190	1 248	2 885	24 096	149 075	80 987	230 071	D
311811	Retail bakeries	4	44	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	6	31	13	g	D	D	D	D	D	D	D	3 698
3119	Other food mfg	-	39	23	h	D	D	D	D	D	D	D	34 096
31191	Snack food mfg	9	3	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	9	2	2	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	16	10	g	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	5	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	-	11	8	1 382	53 888	941	2 260	34 103	393 112	434 120	820 523	14 633
31199	All other food mfg	-	14	6	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	6	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	18	9	1 317	54 666	641	1 474	25 653	242 443	308 408	554 854	D
3121	Beverage mfg	2	18	9	1 317	54 666	641	1 474	25 653	242 443	308 408	554 854	D
31211	Soft drink & ice mfg	-	10	6	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	5	5	755	27 865	274	608	10 269	182 597	251 637	434 772	D
31214	Distilleries	9	4	3	496	25 068	332	821	14 800	54 895	53 446	111 909	D
312140	Distilleries	9	4	3	496	25 068	332	821	14 800	54 895	53 446	111 909	D
313	Textile mills	8	20	4	530	14 515	410	904	9 417	32 664	48 037	83 670	3 006
3133	Textile & fabric finishing & fabric coating mills	8	11	1	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	8	10	1	284	9 603	175	443	4 866	19 207	39 444	61 783	1 985
313311	Broadwoven fabric finishing mills	8	10	1	284	9 603	175	443	4 866	19 207	39 444	61 783	1 985
314	Textile product mills	3	68	9	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	2	44	9	430	9 135	309	502	5 101	17 847	13 672	31 708	D
31491	Textile bag & canvas mills	2	36	7	e	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	2	34	5	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Baltimore, MD PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	2	61	24	2 509	46 765	2 050	3 687	31 298	103 626	71 466	172 674	2 311
3152	Cut & sew apparel mfg	2	39	19	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	14	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	4	14	11	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, overcoat mfg	5	7	7	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	2	1	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	7	4	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	21	5	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	21	5	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	60	18	1 745	42 913	1 393	2 895	29 619	77 237	108 835	187 354	3 994
3219	Other wood product mfg ...	4	45	13	1 317	31 565	1 068	2 219	22 056	53 241	83 392	137 843	2 504
32191	Millwork	6	21	9	950	22 406	774	1 636	16 115	35 825	52 770	90 019	1 877
321911	Wood window & door mfg	8	6	4	e	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	5	10	4	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	39	26	4 485	143 504	3 463	6 877	95 358	260 069	330 488	592 469	D
3221	Pulp, paper, & paperboard mills	-	3	3	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	36	23	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	23	14	3 582	112 303	2 766	5 377	75 059	189 958	264 228	455 973	D
322211	Corrugated & solid fiber box mfg	3	19	11	g	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	4	3	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	403	99	7 996	253 958	6 016	11 373	156 171	509 666	306 423	814 658	38 714
3231	Printing & related support activities	2	403	99	7 996	253 958	6 016	11 373	156 171	509 666	306 423	814 658	38 714
32311	Printing	1	336	81	i	D	D	D	D	D	D	D	32 254
323110	Commercial lithographic printing ..	1	169	49	3 590	124 656	2 704	4 917	73 159	220 471	144 878	365 067	20 550
323112	Commercial flexographic printing ..	-	7	4	e	D	D	D	D	D	D	D	D
323113	Commercial screen printing	2	26	6	500	12 632	344	643	7 581	20 326	16 545	36 980	D
323114	Quick printing	2	74	5	433	11 273	311	552	7 113	24 539	12 411	37 330	D
323116	Manifold business form printing	2	9	6	658	13 469	559	1 118	10 518	57 949	24 867	81 614	2 077
323117	Book printing	2	9	3	582	18 314	424	850	11 745	39 868	29 127	68 509	2 391
323119	Other commercial printing	2	31	3	279	6 840	200	352	4 148	20 959	9 612	30 482	D
32312	Support activities for printing	2	67	18	g	D	D	D	D	D	D	D	6 460
323121	Tradebinding & related work	2	22	9	f	D	D	D	D	D	D	D	D
323122	Prepress services	3	45	9	679	24 925	482	958	14 338	47 431	14 396	62 076	D
324	Petroleum & coal products mfg	1	21	5	773	32 415	342	769	13 294	93 193	151 958	246 271	8 095
3241	Petroleum & coal products mfg	1	21	5	773	32 415	342	769	13 294	93 193	151 958	246 271	8 095
32412	Asphalt paving, roofing, & saturated materials mfg	-	16	4	e	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	-	4	1	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	-	4	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Baltimore, MD PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	109	52	10 592	442 709	5 819	12 487	220 937	2 118 130	1 787 249	3 905 277	132 311
3251	Basic chemical mfg	4	26	14	2 732	131 554	1 580	3 328	70 781	436 985	599 452	1 039 671	D
32513	Dye & pigment mfg	—	4	4	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	4	4	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	12	5	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	12	5	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	7	5	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	7	5	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	17	7	2 490	102 868	1 161	2 883	41 497	288 520	162 713	450 090	22 652
32541	Pharmaceutical & medicine mfg	—	17	7	2 490	102 868	1 161	2 883	41 497	288 520	162 713	450 090	22 652
325412	Pharmaceutical preparation mfg	—	7	2	669	27 843	423	1 286	16 626	95 982	53 859	143 493	5 047
325413	In-vitro diagnostic substance mfg	—	4	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	19	11	g	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	13	7	621	23 908	374	721	13 602	179 025	147 787	327 298	5 255
325510	Paint & coating mfg	—	13	7	621	23 908	374	721	13 602	179 025	147 787	327 298	5 255
32552	Adhesive mfg	3	6	4	e	D	D	D	D	D	D	D	D
325520	Adhesive mfg	3	6	4	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	18	9	h	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	13	7	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	3	1	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	—	9	5	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	5	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	5	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	22	9	527	18 240	324	618	8 303	90 553	89 914	180 484	4 035
32599	All other chemical product & preparation mfg	1	13	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	86	39	5 926	160 578	4 780	8 825	106 473	436 886	414 083	849 415	45 443
3261	Plastics product mfg	1	68	33	5 327	142 577	4 380	8 030	95 530	393 959	378 140	770 584	40 296
32613	Laminated plastics plate, sheet, & shape mfg	—	4	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	4	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	3	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	3	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	5	968	25 833	879	1 822	21 089	88 150	123 902	211 235	11 809
326160	Plastics bottle mfg	—	6	5	968	25 833	879	1 822	21 089	88 150	123 902	211 235	11 809
32619	Other plastics product mfg	2	46	23	3 162	79 330	2 602	4 443	50 487	191 612	137 441	324 635	18 281
326199	All other plastics product mfg	2	46	23	3 162	79 330	2 602	4 443	50 487	191 612	137 441	324 635	18 281
3262	Rubber product mfg	—	18	6	599	18 001	400	795	10 943	42 927	35 943	78 831	5 147
32629	Other rubber product mfg	—	11	5	494	15 837	308	617	9 307	35 847	20 460	55 255	4 507
326299	All other rubber product mfg	1	6	2	e	D	D	D	D	D	D	D	D

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	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Baltimore, MD PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	81	31	3 297	115 158	2 643	5 690	84 302	328 462	238 768	566 090	19 425
3271	Clay product & refractory mfg	2	10	2	e	D	D	D	D	D	D	D	1 647
3272	Glass & glass product mfg	—	8	2	670	19 037	595	965	13 798	41 531	13 873	50 959	D
32721	Glass & glass product mfg	—	8	2	670	19 037	595	965	13 798	41 531	13 873	50 959	D
327213	Glass container mfg	—	1	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	45	21	1 480	51 914	1 170	2 576	39 225	138 019	123 759	266 415	D
32732	Ready-mix concrete mfg	—	20	12	704	24 680	567	1 276	19 538	52 910	59 602	112 573	3 438
327320	Ready-mix concrete mfg	—	20	12	704	24 680	567	1 276	19 538	52 910	59 602	112 573	3 438
32733	Concrete pipe, brick, & block mfg	—	11	6	402	13 114	288	660	8 796	27 235	27 346	56 804	1 180
327332	Concrete pipe mfg	—	4	3	e	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	—	3	2	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	2	2	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	15	4	550	19 945	418	939	13 813	76 753	29 316	105 098	D
32799	All other nonmetallic mineral product mfg	—	14	4	f	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg	—	7	2	459	17 114	352	809	12 041	71 010	25 162	95 203	D
331	Primary metal mfg	—	27	13	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
33111	Iron & steel mills & ferroalloy mfg	—	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
331111	Iron & steel mills	—	4	3	5 506	292 437	4 294	9 802	230 510	1 176 737	786 149	1 964 341	D
3312	Steel product mfg from purchased steel	—	8	5	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	8	5	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	6	4	f	D	D	D	D	D	D	D	2 078
3313	Alumina & aluminum production & processing	6	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	6	2	2	e	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	9	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	333	103	8 584	298 167	5 955	11 823	180 473	808 723	653 179	1 452 667	61 689
3321	Forging & stamping	2	12	9	582	21 968	416	864	13 713	42 984	66 847	109 329	2 675
33211	Forging & stamping	2	12	9	582	21 968	416	864	13 713	42 984	66 847	109 329	2 675
332116	Metal stamping	3	6	4	e	D	D	D	D	D	D	D	1 695
3323	Architectural & structural metals mfg	2	77	23	1 590	54 682	1 104	2 125	31 099	109 496	110 261	220 393	D
33231	Plate work & fabricated structural product mfg	2	26	10	570	18 592	393	760	10 417	53 945	48 122	102 277	D
332312	Fabricated structural metal mfg	3	19	7	373	10 658	259	496	6 195	42 219	38 918	80 883	D
33232	Ornamental & architectural metal products mfg	1	51	13	1 020	36 090	711	1 365	20 682	55 551	62 139	118 116	3 652
332322	Sheet metal work mfg	1	27	10	740	29 343	515	981	16 167	41 098	43 177	84 395	2 945
3324	Boiler, tank, & shipping container mfg	—	15	11	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	8	8	f	D	D	D	D	D	D	D	6 425
332431	Metal can mfg	—	5	5	e	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	3	3	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	12	8	570	18 483	443	849	11 833	55 678	58 966	113 792	6 753
33261	Spring & wire product mfg	1	12	8	570	18 483	443	849	11 833	55 678	58 966	113 792	6 753
332618	Other fabricated wire product mfg	1	10	7	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	148	32	2 321	78 283	1 800	3 532	52 586	157 804	76 839	235 180	10 460
33271	Machine shops	1	137	27	2 090	70 618	1 624	3 186	47 675	143 748	71 837	216 009	9 187
332710	Machine shops	1	137	27	2 090	70 618	1 624	3 186	47 675	143 748	71 837	216 009	9 187

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	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.													
	Baltimore, MD PMSA—Con.													
31-33	Manufacturing—Con.													
332	Fabricated metal product mfg—Con.													
3328	Coating, engraving, heat treating, & allied activities.	2	32	10	f	D	D	D	D	D	D	D	D	
33281	Coating, engraving, heat treating, & allied activities.....	2	32	10	f	D	D	D	D	D	D	D	D	
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	12	6	e	D	D	D	D	D	D	D	D	
3329	Other fabricated metal product mfg.....	—	26	7		74 431	1 009	1 970	34 030	340 158	173 846	504 455	D	
33291	Metal valve mfg.....	—	3	1	g	D	D	D	D	D	D	D	D	
332912	Fluid power valve & hose fitting mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	
33299	All other fabricated metal product mfg.....	1	23	6	f	D	D	D	D	D	D	D	D	
332999	All other miscellaneous fabricated metal product mfg.....	1	17	6	e	D	D	D	D	D	D	D	D	
333	Machinery mfg.....	—	109	35		5 456	234 159	3 046	6 654	105 206	459 116	430 770	882 356	25 197
3332	Industrial machinery mfg ..	—	20	8		1 104	53 964	624	1 364	25 335	90 687	114 111	201 665	D
33329	Other industrial machinery mfg.....	—	19	8	g	D	D	D	D	D	D	D	D	5 572
333291	Paper industry machinery mfg.....	—	4	4	f	D	D	D	D	D	D	D	D	4 076
333298	All other industrial machinery mfg.....	—	7	3	e	D	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	11	5	f	D	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	11	5	f	D	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	—	4	2	f	D	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	8	4	f	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	8	4	f	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg.....	—	6	4		855	36 303	485	1 019	13 596	54 931	37 302	87 328	D
3336	Engine, turbine, & power transmission equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg.....	—	2	1	e	D	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	1	36	12	g	D	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	2	25	10	g	D	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	2	5	3	f	D	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg.....	—	16	5	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	117	38		12 684	609 485	5 393	9 903	221 781	1 577 360	860 689	2 451 121	87 751
3341	Computer & peripheral equipment mfg.....	2	20	6	e	D	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	2	20	6	e	D	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	1	11	4	e	D	D	D	D	D	D	D	D	D

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	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.													
	Baltimore, MD PMSA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3342	Communications equipment mfg	1	15	8	f	D	D	D	D	D	D	D	D	
33421	Telephone apparatus mfg	1	7	4	f	D	D	D	D	D	D	D	D	
334210	Telephone apparatus mfg	1	7	4	f	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	7	4	e	D	D	D	D	D	D	D	D	
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	7	4	e	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	2	27	8	f	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	2	27	8	f	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	—	48	15		10 429	505 308	4 173	7 688	185 980	1 231 626	543 443	1 783 422	D
33451	Navigational, measuring, medical, & control instruments mfg	—	48	15		10 429	505 308	4 173	7 688	185 980	1 231 626	543 443	1 783 422	D
334511	Search, detection, navigation, & guidance instrument mfg	—	12	7	i		D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	5	1		308	13 399	226	479	9 953	19 740	18 909	39 212	D
335	Electrical equipment, appliance, & component mfg	1	29	5	f	D	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	10	2	f	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	10	2	f	D	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	53	23	i	D	D	D	D	D	D	D	D	36 864
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	24	11	g	D	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	8	2	2	e	D	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	8	2	2	e	D	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	3	2	f	D	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	6	3		405	15 449	240	482	9 893	20 971	6 288	27 181	1 145
336399	All other motor vehicle parts mfg	—	6	3		405	15 449	240	482	9 893	20 971	6 288	27 181	1 145
3364	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	f	D	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	17	4		683	21 819	456	782	11 194	32 356	31 850	64 187	D
33661	Ship & boat building	—	17	4		683	21 819	456	782	11 194	32 356	31 850	64 187	D
336611	Ship building & repairing	—	12	3	f	D	D	D	D	D	D	D	D	D

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	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Baltimore, MD PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	3	128	28	2 038	49 209	1 514	2 634	28 909	97 600	83 460	182 690	4 696
3371	Household & institutional furniture & kitchen cabinet mfg	4	83	10	860	20 418	691	1 294	14 048	36 958	31 036	67 866	1 704
33711	Wood kitchen cabinet & counter top mfg	2	40	3	330	7 591	246	485	4 917	12 599	9 050	21 767	D
337110	Wood kitchen cabinet & counter top mfg	2	40	3	330	7 591	246	485	4 917	12 599	9 050	21 767	D
33712	Household & institutional furniture mfg	5	43	7	530	12 827	445	809	9 131	24 359	21 986	46 099	D
3372	Office furniture (including fixtures) mfg	2	36	12	604	17 707	451	749	9 244	32 342	22 369	56 405	D
33721	Office furniture (including fixtures) mfg	2	36	12	604	17 707	451	749	9 244	32 342	22 369	56 405	D
337215	Showcase, partition, shelving, & locker mfg	4	17	7	319	9 342	236	434	4 715	16 032	10 658	26 774	766
3379	Other furniture related product mfg	2	9	6	574	11 084	372	591	5 617	28 300	30 055	58 419	D
33792	Blind & shade mfg	—	5	3	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	5	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	226	44	3 268	98 114	2 248	4 204	52 984	211 830	160 555	371 987	12 620
3391	Medical equipment & supplies mfg	2	89	17	1 122	39 761	680	1 314	18 496	84 430	58 320	143 512	3 298
33911	Medical equipment & supplies mfg	2	89	17	1 122	39 761	680	1 314	18 496	84 430	58 320	143 512	3 298
339113	Surgical appliance & supplies mfg	—	12	6	394	16 798	179	384	5 173	47 963	35 633	84 205	D
339116	Dental laboratories	5	47	3	290	7 628	216	397	4 884	15 673	4 697	20 564	D
3399	Other miscellaneous mfg	2	137	27	2 146	58 353	1 568	2 890	34 488	127 400	102 235	228 475	9 322
33993	Doll, toy, & game mfg	—	10	3	e	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	10	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg	2	60	10	f	D	D	D	D	D	D	D	D
339950	Sign mfg	2	60	10	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	30	7	567	13 418	426	771	7 833	29 644	22 854	51 727	D
339999	All other miscellaneous mfg	4	20	4	304	5 888	238	398	3 748	13 374	10 650	23 823	D
	Hagerstown, MD PMSA												
31-33	Manufacturing	—	147	55	9 173	294 202	7 154	14 311	217 933	940 891	1 001 979	1 924 487	79 422
311	Food mfg	—	10	5	705	16 668	666	1 384	14 977	98 937	80 465	179 914	4 248
3115	Dairy product mfg	—	2	2	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	—	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	—	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	4	3	3	374	9 856	283	550	6 229	25 735	26 627	51 552	D
3222	Converted paper product mfg	5	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	13	3	628	23 641	460	950	16 633	71 638	53 126	124 524	9 965
3231	Printing & related support activities	—	13	3	628	23 641	460	950	16 633	71 638	53 126	124 524	9 965
32311	Printing	—	12	2	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	—	1	1	e	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Hagerstown, MD PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	-	10	6	876	24 612	731	1 471	19 186	128 917	96 835	221 471	15 974
3261	Plastics product mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	5	3	545	18 679	476	1 047	15 660	113 093	77 584	189 996	D
326199	All other plastics product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	11	6	420	12 872	295	627	8 175	40 849	30 655	71 966	5 103
3273	Cement & concrete product mfg.....	-	9	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	23	9	677	18 167	493	1 063	11 736	35 347	25 664	60 573	2 052
3323	Architectural & structural metals mfg.....	-	12	5	417	12 186	287	670	7 658	19 810	15 052	34 897	1 316
33232	Ornamental & architectural metal products mfg.....	-	10	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	1 178	29 972	926	1 659	21 027	95 254	74 459	171 157	D
3362	Motor vehicle body & trailer mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	13	6	619	15 394	516	928	10 574	43 615	32 623	75 505	556
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	12	5	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	1	8	4	e	D	D	D	D	D	D	D	D
	Washington, DC—MD—VA—WV PMSA												
31-33	Manufacturing	1	2 655	668	77 925	2 986 792	48 768	97 608	1 439 124	8 015 259	6 589 096	14 539 682	746 521
	Washington, DC—MD—VA—WV PMSA (DC Part).....	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington, DC—MD—VA—WV PMSA (MD Part).....	1	1 158	310	35 755	1 408 502	20 912	42 195	623 228	3 810 356	3 086 974	6 849 324	367 446
	Washington, DC—MD—VA—WV PMSA (VA Part).....	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington, DC—MD—VA—WV PMSA (WV Part).....	-	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg.....	2	201	48	5 551	136 527	3 753	7 387	85 600	520 377	660 882	1 179 566	18 084
3114	Fruit & vegetable preserving & specialty food mfg.....	4	10	4	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	6	5	3	e	D	D	D	D	D	D	D	2 016
311412	Frozen specialty food mfg.....	6	5	3	e	D	D	D	D	D	D	D	2 016
3115	Dairy product mfg.....	1	8	7	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	1	7	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	1	6	6	781	30 632	424	991	16 346	109 542	258 954	366 727	4 173

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	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
31161	Animal slaughtering & processing.....	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
311612	Meat processed from carcasses.....	2	6	4	600	12 112	508	1 093	8 024	44 966	37 893	82 709	D
3118	Bakeries & tortilla mfg.....	2	145	27	2 937	69 235	1 853	3 478	43 114	282 674	102 099	385 222	7 189
31181	Bread & bakery product mfg.....	2	138	25	h	D	D	D	D	D	D	D	D
311811	Retail bakeries.....	3	98	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	2	37	17	2 018	54 254	1 311	2 656	34 980	239 127	78 442	317 895	5 645
3119	Other food mfg.....	-	15	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
3121	Beverage mfg.....	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
31211	Soft drink & ice mfg.....	3	10	6	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	3	5	4	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	62	5	510	10 907	346	638	6 093	17 835	14 512	32 266	D
3141	Textile furnishings mills....	3	41	2	319	6 193	205	370	3 328	10 884	9 841	20 665	D
31412	Curtain & linen mills.....	2	40	2	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	2	37	2	305	5 866	193	347	3 088	10 007	8 665	18 612	D
315	Apparel mfg.....	-	63	8	927	16 000	818	1 581	13 482	42 492	50 982	93 368	1 030
3151	Apparel knitting mills.....	-	2	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills.....	-	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills.....	-	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.....	-	30	7	551	10 328	505	1 040	9 014	14 759	27 512	41 910	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	93	33	2 407	58 850	1 949	3 819	42 816	122 209	245 595	367 315	5 823
3211	Sawmills & wood preservation.....	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
32111	Sawmills & wood preservation.....	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
321113	Sawmills.....	2	20	7	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	-	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
32121	Veneer, plywood, & engineered wood product mfg.....	-	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
321214	Truss mfg.....	-	8	7	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg....	1	59	18	1 723	42 645	1 379	2 755	30 883	89 440	165 744	255 169	3 025
32191	Millwork.....	3	35	8	762	21 108	561	1 251	14 782	39 625	51 873	91 621	1 586
321911	Wood window & door mfg.....	-	9	3	404	11 674	305	707	8 661	19 568	22 024	41 468	507
321918	Other millwork (including flooring)...	8	16	4	262	6 849	188	405	4 553	12 826	16 920	30 078	753
32199	All other wood product mfg.....	1	16	7	797	17 991	673	1 201	13 462	42 239	103 626	146 229	1 228
321992	Prefabricated wood building mfg.....	-	8	5	644	15 810	547	1 050	11 911	38 327	100 710	139 270	D
322	Paper mfg.....	1	17	6	1 243	25 971	1 131	1 985	19 025	80 975	93 082	169 453	4 086
3222	Converted paper product mfg.....	1	16	5	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg..	1	7	2	f	D	D	D	D	D	D	D	2 567
322233	Stationery, tablet, & related product mfg..	-	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
3231	Printing & related support activities.....	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
32311	Printing.....	2	699	152	15 622	568 435	11 714	23 124	375 945	1 051 650	831 116	1 880 944	266 133
323110	Commercial lithographic printing..	2	355	100	9 880	386 318	7 275	14 520	253 698	727 071	532 653	1 258 096	183 776
323113	Commercial screen printing.....	1	29	8	389	10 570	281	488	6 286	23 169	22 150	45 964	D
323114	Quick printing.....	1	200	16	1 731	49 482	1 232	2 153	29 819	97 094	47 575	144 901	D
323117	Book printing.....	1	27	17	2 590	88 001	2 126	4 347	61 661	171 887	137 170	308 453	13 462
323119	Other commercial printing.....	2	51	4	478	20 299	357	744	14 826	17 555	48 842	66 534	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32312	Support activities for printing	2	83	17	1 081	41 873	847	1 753	26 788	77 841	19 007	96 718	3 549
323121	Tradebinding & related work	—	21	6	422	13 473	333	726	8 473	25 145	8 371	33 589	D
323122	Prepress services	3	62	11	659	28 400	514	1 027	18 315	52 696	10 636	63 129	D
324	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
3241	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
32412	Asphalt paving, roofing, & saturated materials mfg	5	17	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	67	24	3 431	164 316	1 699	3 574	63 545	636 967	502 431	1 124 729	73 105
3254	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
32541	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
325413	In-vitro diagnostic substance mfg	3	11	7	949	47 149	461	950	15 224	114 295	44 738	154 097	D
325414	Biological product (except diagnostic) mfg	—	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	4	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
325510	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
3259	Other chemical product mfg	1	17	7	535	24 406	319	653	12 810	99 204	67 521	164 377	12 882
32599	All other chemical product & preparation mfg	—	12	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	49	22	2 091	56 794	1 672	3 407	40 217	153 853	163 596	313 605	15 852
3261	Plastics product mfg	2	42	22	2 037	55 500	1 627	3 314	39 250	150 734	159 696	306 589	15 576
32611	Unsupported plastics film, sheet, & bag mfg ..	5	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	9	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	32	17	1 404	36 975	1 132	2 210	26 090	96 831	85 932	182 727	11 383
326191	Plastics plumbing fixture mfg	—	3	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	29	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	144	56	3 693	126 599	2 806	5 829	85 973	355 291	278 540	630 089	22 639
3272	Glass & glass product mfg ..	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
32721	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
327212	Other pressed & blown glass & glassware mfg	—	2	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	102	46	2 814	96 811	2 105	4 532	66 009	263 589	240 559	499 663	20 234
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
327320	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
32733	Concrete pipe, brick, & block mfg	1	12	8	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
327390	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
331	Primary metal mfg	—	11	5	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	212	48	5 167	167 519	3 924	7 763	105 550	366 119	326 889	692 764	31 167
3323	Architectural & structural metals mfg	1	88	30	2 563	82 064	1 854	3 607	48 245	167 260	181 664	349 123	15 869
33231	Plate work & fabricated structural product mfg ..	-	23	11	906	30 029	697	1 238	17 058	59 872	95 137	155 775	11 013
332312	Fabricated structural metal mfg	-	19	10	813	27 274	634	1 108	15 430	57 105	92 146	150 010	10 729
33232	Ornamental & architectural metal products mfg	1	65	19	1 657	52 035	1 157	2 369	31 187	107 388	86 527	193 348	4 856
332321	Metal window & door mfg	-	7	2	487	14 298	366	761	9 288	33 834	24 988	58 247	D
332322	Sheet metal work mfg ..	1	30	9	574	17 523	412	766	10 909	36 843	32 260	68 829	2 378
332323	Ornamental & architectural metal work mfg	2	28	8	596	20 214	379	842	10 990	36 711	29 279	66 272	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	75	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
332710	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
3329	Other fabricated metal product mfg	-	18	6	1 203	39 292	956	2 089	26 623	107 616	72 635	179 288	8 748
33291	Metal valve mfg	-	3	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	15	5	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	2	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	8	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	74	26	4 184	143 646	2 793	5 713	76 304	360 500	328 877	696 692	D
3332	Industrial machinery mfg ..	1	13	4	1 022	38 661	444	1 001	13 695	97 939	66 104	166 040	D
33329	Other industrial machinery mfg	1	11	3	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
33331	Commercial & service industry machinery mfg	-	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
333311	Automatic vending machine mfg	-	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	6	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
333415	AC & warm air heating & commercial/ industrial refig equip mfg	6	5	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	16	7	698	28 592	430	809	14 484	63 758	34 575	99 019	D
33399	All other general-purpose machinery mfg	-	13	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	4	4	355	14 090	226	375	7 034	27 972	14 239	42 396	D
334	Computer & electronic product mfg	1	249	121	20 014	1 034 554	7 538	15 912	275 117	2 752 116	1 545 173	4 280 482	165 972
3341	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
33411	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
334111	Electronic computer mfg	3	19	10	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	17	7	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	1	71	41	8 356	435 364	3 467	7 024	139 955	1 207 276	895 059	2 092 511	84 957
33421	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
33429	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
33441	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
334412	Bare printed circuit board mfg	1	12	7	754	23 933	644	1 434	18 267	52 446	37 115	89 886	D
334413	Semiconductor & related device mfg ...	—	8	4	896	50 015	516	1 329	18 177	59 645	40 744	94 367	13 725
334418	Printed circuit assembly (electronic assembly) mfg	—	9	8	530	17 442	354	766	8 829	21 193	33 331	57 179	D
334419	Other electronic component mfg	4	10	6	434	13 354	228	501	6 489	27 027	12 771	39 806	973
3345	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
33451	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	4 874	328 227	805	1 717	35 137	887 003	201 730	1 087 819	28 191
334513	Industrial process control instrument mfg	—	9	4	364	14 124	143	302	3 782	31 440	20 653	52 381	1 028
334515	Electricity measuring & testing instrument mfg	—	10	6	714	38 077	197	430	5 566	167 153	49 630	217 270	8 595
334516	Analytical laboratory instrument mfg	4	19	8	513	20 813	146	393	5 090	45 661	16 762	62 283	1 451
334519	Other measuring & controlling device mfg	—	10	4	459	20 644	224	458	9 323	34 219	19 778	55 408	D
335	Electrical equipment, appliance, & component mfg	2	29	8	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	12	6	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
335999	All other miscellaneous electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
336	Transportation equipment mfg	2	52	17	2 786	149 654	1 394	2 903	57 794	424 128	656 715	1 066 534	34 707
3361	Motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
336111	Automobile mfg	8	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	7	21	6	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
33641	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
336414	Guided missile & space vehicle mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	173	26	3 456	92 206	2 628	5 129	63 166	296 505	171 091	464 554	5 722
3371	Household & institutional furniture & kitchen cabinet mfg	1	125	9	1 873	47 118	1 539	3 028	34 683	179 040	94 714	273 134	D
33711	Wood kitchen cabinet & counter top mfg	—	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
337110	Wood kitchen cabinet & counter top mfg ...	—	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
33712	Household & institutional furniture mfg	2	39	4	655	15 516	567	1 146	12 013	30 967	22 090	52 957	D
337122	Nonupholstered wood household furniture mfg	2	29	2	378	9 016	337	710	7 435	18 964	10 123	28 800	791
3372	Office furniture (including fixtures) mfg	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
33721	Office furniture (including fixtures) mfg	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
337212	Custom architectural woodwork & millwork mfg	—	20	10	629	21 599	448	813	13 002	49 296	17 870	67 485	D
337215	Showcase, partition, shelving, & locker mfg	—	12	1	503	10 519	315	615	7 650	24 698	18 264	40 019	D
3379	Other furniture related product mfg	—	9	4	368	10 826	259	524	6 264	40 259	37 630	78 077	D
33791	Mattress mfg	—	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
337910	Mattress mfg	—	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
339	Miscellaneous mfg	3	310	30	2 541	78 633	1 631	3 015	37 107	208 214	123 821	334 679	9 163
3391	Medical equipment & supplies mfg	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
33911	Medical equipment & supplies mfg	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
339113	Surgical appliance & supplies mfg	—	19	5	552	16 409	310	672	6 827	85 974	59 909	149 391	D
339116	Dental laboratories ...	6	113	3	468	12 369	345	565	7 404	28 322	9 795	37 180	822
3399	Other miscellaneous mfg ...	3	133	15	1 103	33 130	750	1 380	16 916	58 052	38 584	95 993	2 360
33995	Sign mfg	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D
339950	Sign mfg	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALLEGANY COUNTY, MD													
31-33	Manufacturing	-	67	21	4 169	139 197	3 206	5 708	95 607	396 422	374 661	785 922	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
ANNE ARUNDEL COUNTY, MD													
31-33	Manufacturing	-	339	66	14 878	618 410	8 189	15 187	284 788	1 641 725	1 049 184	2 703 829	98 680
323	Printing & related support activities	1	70	15	1 307	48 407	1 010	1 895	29 095	83 001	43 984	127 197	4 812
3231	Printing & related support activities	1	70	15	1 307	48 407	1 010	1 895	29 095	83 001	43 984	127 197	4 812
32311	Printing	1	56	12	1 050	40 897	800	1 513	24 347	69 611	41 236	110 796	3 512
323110	Commercial lithographic printing ..	1	30	7	652	26 279	495	881	14 337	49 862	27 228	77 027	2 078
326	Plastics & rubber products mfg	1	12	5	1 488	44 281	1 179	2 314	29 105	132 409	132 988	267 837	11 726
3261	Plastics product mfg	1	10	5	g	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	48	11	721	23 818	559	1 131	17 004	56 003	28 841	84 908	3 952
333	Machinery mfg	1	22	2	523	21 835	318	616	11 960	28 960	43 991	72 514	3 275
334	Computer & electronic product mfg	-	21	6	i	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	11	4	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	11	4	i	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	4	3	i	D	D	D	D	D	D	D	D
BALTIMORE COUNTY, MD													
31-33	Manufacturing	-	575	175	31 065	1 235 088	20 081	41 777	712 422	3 918 698	2 993 884	6 883 266	261 259
311	Food mfg	1	43	13	1 871	65 007	1 358	2 858	43 044	438 704	552 515	985 650	15 703
3119	Other food mfg	-	11	7	1 261	49 302	912	2 149	33 965	386 841	435 992	816 970	13 217
31194	Seasoning & dressing mfg	-	8	6	g	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	-	7	5	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	6	10	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	6	10	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	10	7	2 679	84 767	2 089	3 985	57 794	134 942	159 273	294 734	D
3222	Converted paper product mfg	2	9	6	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	3	2	g	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	113	29	2 245	75 029	1 673	3 182	44 585	159 344	91 243	248 857	14 073
3231	Printing & related support activities	1	113	29	2 245	75 029	1 673	3 182	44 585	159 344	91 243	248 857	14 073
32311	Printing	1	98	25	2 038	66 394	1 524	2 855	39 347	141 783	86 070	226 116	13 153
323110	Commercial lithographic printing ..	1	51	19	1 262	43 428	963	1 738	24 719	71 662	48 264	119 857	8 321
325	Chemical mfg	-	23	11	3 997	157 874	1 646	3 394	55 563	698 253	319 906	1 018 933	22 451
3254	Pharmaceutical & medicine mfg	-	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	3	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	3	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BALTIMORE COUNTY, MD—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	20	8	851	26 979	701	1 399	19 328	56 029	51 675	107 434	7 063
3261	Plastics product mfg	1	17	7	719	23 548	594	1 180	17 002	49 609	46 836	96 061	D
32619	Other plastics product mfg	1	11	5	523	16 592	434	836	12 119	31 858	26 939	58 216	2 679
326199	All other plastics product mfg	1	11	5	523	16 592	434	836	12 119	31 858	26 939	58 216	2 679
327	Nonmetallic mineral product mfg	—	20	7	841	30 268	650	1 466	21 689	91 278	49 583	139 939	5 296
3279	Other nonmetallic mineral product mfg	—	10	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	13	7	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	3	2	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	i	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	6	4	606	19 137	489	1 006	15 349	40 380	72 532	110 168	D
33122	Rolling & drawing of purchased steel	—	6	4	606	19 137	489	1 006	15 349	40 380	72 532	110 168	D
332	Fabricated metal product mfg	—	95	35	3 731	131 608	2 265	4 564	72 922	442 457	330 380	762 756	34 166
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	42	12	707	23 341	548	1 050	15 178	42 458	17 366	60 024	3 744
33271	Machine shops	4	37	10	597	19 280	471	897	12 851	34 280	14 770	49 237	2 929
332710	Machine shops	4	37	10	597	19 280	471	897	12 851	34 280	14 770	49 237	2 929
3329	Other fabricated metal product mfg	—	10	5	1 856	70 103	856	1 751	31 051	331 513	170 312	492 206	24 543
33291	Metal valve mfg	—	1	1	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	31	16	2 535	110 305	1 514	3 521	56 448	239 308	242 622	468 281	12 018
3332	Industrial machinery mfg ..	—	8	6	820	42 431	488	1 103	22 014	63 739	97 331	158 536	4 425
33329	Other industrial machinery mfg	—	8	6	820	42 431	488	1 103	22 014	63 739	97 331	158 536	4 425
333291	Paper industry machinery mfg	—	4	4	f	D	D	D	D	D	D	D	4 076
3333	Commercial & service industry machinery mfg ..	—	7	4	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	7	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	8	4	1 084	49 621	602	1 443	23 369	73 525	83 957	152 943	4 969
33399	All other general-purpose machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	34	13	2 475	118 447	960	1 886	30 047	207 840	102 147	310 879	12 969
3345	Navigational, measuring, medical, & control instruments mfg	—	16	5	g	D	D	D	D	D	D	D	10 815
33451	Navigational, measuring, medical, & control instruments mfg	—	16	5	g	D	D	D	D	D	D	D	10 815
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	11	4	694	18 745	502	824	10 276	28 779	26 219	54 855	2 149
339	Miscellaneous mfg	2	71	9	615	19 744	440	847	12 223	34 568	21 500	56 417	1 469
CAROLINE COUNTY, MD													
31-33	Manufacturing	—	31	14	1 533	36 607	1 247	2 677	26 883	81 684	81 913	167 650	4 974
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	1	1	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARROLL COUNTY, MD													
31-33	Manufacturing	1	144	39	4 330	131 083	3 084	6 297	78 038	337 528	382 242	716 924	28 947
321	Wood product mfg	2	14	6	671	16 797	540	1 081	11 337	32 078	47 314	79 177	1 358
333	Machinery mfg	-	11	4	638	26 204	361	731	11 063	52 955	54 945	108 360	2 662
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
CECIL COUNTY, MD													
31-33	Manufacturing	-	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
326	Plastics & rubber products mfg	-	6	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
CHARLES COUNTY, MD													
31-33	Manufacturing	3	58	19	1 100	38 479	745	1 431	22 514	74 032	96 310	170 299	D
DORCHESTER COUNTY, MD													
31-33	Manufacturing	-	48	19	3 580	86 865	2 598	4 664	50 963	323 325	543 056	867 153	15 446
311	Food mfg	1	22	9	1 750	39 960	1 418	2 927	27 297	211 506	461 059	672 047	8 229
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	1	15	4	673	14 169	540	982	10 221	40 231	123 122	163 356	2 458
31171	Seafood product preparation & packaging	1	15	4	673	14 169	540	982	10 221	40 231	123 122	163 356	2 458
311712	Fresh & frozen seafood processing	1	14	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	2	596	17 427	341	469	9 712	37 263	22 928	60 535	4 038
3326	Spring & wire product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
FREDERICK COUNTY, MD													
31-33	Manufacturing	1	162	59	7 795	268 495	5 451	10 873	152 218	832 068	693 603	1 509 113	75 397
311	Food mfg	1	12	6	544	16 089	341	660	9 839	149 301	120 091	267 931	D
323	Printing & related support activities	6	28	5	991	29 137	857	1 522	21 632	79 225	46 122	124 499	5 599
3231	Printing & related support activities	6	28	5	991	29 137	857	1 522	21 632	79 225	46 122	124 499	5 599
32311	Printing	6	24	5	f	D	D	D	D	D	D	D	5 575
323110	Commercial lithographic printing	8	15	4	733	21 665	617	1 236	17 780	66 671	24 105	89 663	D
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	4	791	24 338	586	975	13 742	53 779	52 560	106 998	10 650
3323	Architectural & structural metals mfg	-	5	3	623	19 062	453	732	10 273	43 098	47 840	91 651	8 955

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREDERICK COUNTY, MD—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	4	10	7	f	D	D	D	D	D	D	D	2 381
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	4	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	5	4	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	5	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	24	16	1 607	60 097	931	2 227	24 371	92 853	66 035	161 595	D
3342	Communications equipment mfg	—	8	5	f	D	D	D	D	D	D	D	2 466
3344	Semiconductor & other electronic component mfg	—	8	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	7	f	D	D	D	D	D	D	D	D
GARRETT COUNTY, MD													
31-33	Manufacturing	1	49	14	1 135	22 795	868	1 618	16 702	46 547	54 696	103 452	D
HARFORD COUNTY, MD													
31-33	Manufacturing	2	152	43	5 301	178 773	4 067	8 496	115 393	672 037	596 226	1 274 627	42 854
325	Chemical mfg	1	9	6	861	36 574	574	1 305	20 373	268 793	188 053	456 927	9 329
326	Plastics & rubber products mfg	—	11	4	874	24 927	700	1 464	17 541	83 072	98 481	180 670	14 411
3261	Plastics product mfg	—	8	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	31	7	782	29 161	623	1 189	17 539	65 012	55 878	121 699	5 691
HOWARD COUNTY, MD													
31-33	Manufacturing	2	245	68	6 927	257 168	4 391	8 844	128 938	562 009	615 803	1 177 345	37 551
311	Food mfg	3	20	6	597	16 481	477	1 016	12 319	58 166	185 773	246 018	4 737
323	Printing & related support activities	2	48	7	638	18 826	504	1 044	12 668	47 574	22 495	70 029	2 418
3231	Printing & related support activities	2	48	7	638	18 826	504	1 044	12 668	47 574	22 495	70 029	2 418
332	Fabricated metal product mfg	—	27	13	846	30 253	622	1 210	19 962	57 420	110 410	167 412	5 532
333	Machinery mfg	—	10	3	886	43 141	331	664	9 222	66 815	34 895	100 271	3 314
334	Computer & electronic product mfg	3	39	11	1 337	60 928	735	1 406	25 462	130 738	86 499	215 022	11 320
336	Transportation equipment mfg	—	8	4	599	24 562	340	758	15 361	49 402	19 050	68 673	D
KENT COUNTY, MD													
31-33	Manufacturing	1	27	9	1 031	25 353	713	1 379	13 025	62 103	129 742	189 370	4 848

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTGOMERY COUNTY, MD													
31-33	Manufacturing	1	527	104	15 190	680 463	7 196	14 800	230 144	1 861 839	1 265 928	3 111 854	169 400
311	Food mfg	-	43	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	35	6	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	35	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	9	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	140	24		2 571	98 090	1 891	3 827	61 965	186 533	97 886	284 379
3231	Printing & related support activities	3	140	24		2 571	98 090	1 891	3 827	61 965	186 533	97 886	284 379
32311	Printing	3	126	22		2 420	90 733	1 779	3 592	57 946	171 821	94 055	265 854
323110	Commercial lithographic printing	2	54	12		1 709	64 609	1 274	2 532	42 017	118 028	67 316	185 124
325	Chemical mfg	4	20	8		1 164	60 922	459	1 071	18 398	172 048	58 659	228 806
3254	Pharmaceutical & medicine mfg	3	13	6		1 048	56 928	389	940	16 360	162 775	49 719	210 342
32541	Pharmaceutical & medicine mfg	3	13	6		1 048	56 928	389	940	16 360	162 775	49 719	210 342
325414	Biological product (except diagnostic) mfg	-	3	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	79	36		6 774	345 233	2 320	5 056	81 867	1 119 152	674 749	1 777 331
3342	Communications equipment mfg	-	19	13		4 329	233 631	1 248	2 648	45 543	810 975	546 482	1 329 849
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	13	10		3 630	204 204	972	2 107	38 729	728 779	496 461	1 208 478
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	13	10		3 630	204 204	972	2 107	38 729	728 779	496 461	1 208 478
3344	Semiconductor & other electronic component mfg	3	18	9	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	3	18	9	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	29	10		1 677	84 890	604	1 396	23 621	254 157	95 556	362 116
33451	Navigational, measuring, medical, & control instruments mfg	-	29	10		1 677	84 890	604	1 396	23 621	254 157	95 556	362 116
334511	Search, detection, navigation, & guidance instrument mfg	-	3	1	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	6	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	7	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	1	f	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	98	8		654	22 809	409	756	10 149	48 418	23 537	72 362
PRINCE GEORGE'S COUNTY, MD													
31-33	Manufacturing	1	372	121	11 179	408 545	7 185	14 489	211 814	1 010 428	1 013 630	2 008 136	114 505
311	Food mfg	2	23	12		1 303	28 812	1 080	2 250	22 197	79 298	239 458	317 468
323	Printing & related support activities	-	137	48		3 517	148 762	2 560	5 081	92 329	260 373	191 000	451 120
3231	Printing & related support activities	-	137	48		3 517	148 762	2 560	5 081	92 329	260 373	191 000	451 120
32311	Printing	-	123	41		3 211	135 824	2 320	4 599	84 078	238 646	183 490	421 884
323110	Commercial lithographic printing	-	74	29		2 538	114 905	1 820	3 661	69 772	201 223	157 401	358 211
325	Chemical mfg	-	14	6		802	33 466	284	545	7 117	152 588	141 246	292 963

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PRINCE GEORGE'S COUNTY, MD—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg.....	1	20	11	510	18 395	330	705	11 618	42 235	43 881	85 534	4 698
332	Fabricated metal product mfg.....	—	56	16	1 722	57 809	1 321	2 849	38 543	140 546	112 438	252 715	12 861
3329	Other fabricated metal product mfg.....	—	7	4	f	D	D	D	D	D	D	D	7 517
33299	All other fabricated metal product mfg.....	—	6	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	19	8	1 656	70 045	424	808	11 136	195 069	121 976	303 702	D
3341	Computer & peripheral equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
31-33	QUEEN ANNE'S COUNTY, MD												
	Manufacturing	1	34	10	877	21 846	743	1 613	15 719	48 365	57 057	106 694	2 031
31-33	TALBOT COUNTY, MD												
	Manufacturing	—	54	15	3 035	69 119	2 445	5 022	47 397	431 925	405 188	836 090	19 888
311	Food mfg.....	—	6	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31-33	WASHINGTON COUNTY, MD												
	Manufacturing	—	147	55	9 173	294 202	7 154	14 311	217 933	940 891	1 001 979	1 924 487	79 422
311	Food mfg.....	—	10	5	705	16 668	666	1 384	14 977	98 937	80 465	179 914	4 248
3115	Dairy product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills.....	—	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	—	2	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery.....	—	2	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills.....	—	2	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing.....	—	1	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing.....	—	1	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing.....	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	13	3	628	23 641	460	950	16 633	71 638	53 126	124 524	9 965
3231	Printing & related support activities.....	—	13	3	628	23 641	460	950	16 633	71 638	53 126	124 524	9 965
326	Plastics & rubber products mfg.....	—	10	6	876	24 612	731	1 471	19 186	128 917	96 835	221 471	15 974
3261	Plastics product mfg.....	—	8	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	5	3	545	18 679	476	1 047	15 660	113 093	77 584	189 996	D
326199	All other plastics product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	23	9	677	18 167	493	1 063	11 736	35 347	25 664	60 573	2 052

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON COUNTY, MD—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	1 178	29 972	926	1 659	21 027	95 254	74 459	171 157	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	6	619	15 394	516	928	10 574	43 615	32 623	75 505	556
	WICOMICO COUNTY, MD												
31-33	Manufacturing	1	95	40	5 690	158 122	4 300	9 110	103 079	461 168	582 177	1 041 565	27 538
311	Food mfg	-	6	5	f	D	D	D	D	D	D	D	1 097
3116	Meat product mfg	1	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	7	5	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	4	3	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	3	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	3	3	f	D	D	D	D	D	D	D	D
	WORCESTER COUNTY, MD												
31-33	Manufacturing	1	38	11	1 754	30 902	1 435	2 590	21 470	97 709	178 674	275 397	7 749
311	Food mfg	-	15	7	1 416	23 396	1 158	2 083	16 096	79 060	159 752	237 796	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
	BALTIMORE, MD (IC)												
31-33	Manufacturing	1	688	273	30 216	1 006 241	21 898	42 990	636 182	4 452 897	5 349 744	9 822 188	222 889
311	Food mfg	-	85	37	4 552	136 621	2 961	6 454	79 636	1 237 279	836 912	2 085 446	34 983
3113	Sugar & confectionery product mfg	-	9	5	f	D	D	D	D	D	D	D	9 384
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	7	38	11	1 381	33 284	800	2 189	17 486	115 953	63 424	179 377	4 165
31181	Bread & bakery product mfg	8	35	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	8	19	8	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	19	11	1 187	35 810	911	1 691	22 425	984 527	156 832	1 151 087	11 543
315	Apparel mfg	-	38	20	1 875	32 007	1 581	2 657	22 562	61 804	44 967	106 170	1 690
3152	Cut & sew apparel mfg	-	24	16	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	12	10	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	1	6	6	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BALTIMORE, MD (IC)—Con.												
	Manufacturing—Con.												
322	Paper mfg	—	21	13	1 409	45 163	1 107	2 387	30 160	97 726	130 470	229 526	5 532
3222	Converted paper product mfg	—	20	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	16	10	958	29 282	740	1 513	19 271	66 501	102 366	170 382	D
322211	Corrugated & solid fiber box mfg	1	13	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	123	41	3 029	92 135	2 229	4 064	56 330	176 821	99 063	276 061	15 165
3231	Printing & related support activities	2	123	41	3 029	92 135	2 229	4 064	56 330	176 821	99 063	276 061	15 165
32311	Printing	2	98	32	2 284	70 789	1 678	3 048	43 316	137 977	88 805	227 126	12 158
323110	Commercial lithographic printing ..	1	49	17	1 164	41 068	856	1 541	24 381	73 059	46 169	119 078	8 746
32312	Support activities for printing	—	25	9	745	21 346	551	1 016	13 014	38 844	10 258	48 935	3 007
325	Chemical mfg	2	51	28	5 095	225 780	3 196	6 989	133 233	1 094 105	1 216 481	2 308 939	91 428
3251	Basic chemical mfg	4	16	10	g	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	10	5	g	D	D	D	D	D	D	D	28 776
325188	All other basic inorganic chemical mfg	—	10	5	g	D	D	D	D	D	D	D	28 776
3254	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	8	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	7	600	23 415	361	706	13 392	177 294	145 471	323 190	5 151
325510	Paint & coating mfg	—	8	7	600	23 415	361	706	13 392	177 294	145 471	323 190	5 151
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	11	5	1 089	44 323	844	1 701	33 608	420 071	402 177	821 379	D
32561	Soap & cleaning compound mfg	—	10	5	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	3	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	27	18	2 221	52 002	1 804	2 844	32 569	140 065	106 883	244 065	10 832
3261	Plastics product mfg	2	19	14	1 957	44 500	1 606	2 480	28 801	124 445	89 000	209 487	9 708
32619	Other plastics product mfg	2	14	11	1 604	33 156	1 306	1 858	20 196	92 995	56 993	146 222	7 176
326199	All other plastics product mfg	2	14	11	1 604	33 156	1 306	1 858	20 196	92 995	56 993	146 222	7 176
327	Nonmetallic mineral product mfg	—	17	8	1 245	43 246	1 035	2 219	31 779	116 243	86 656	197 986	4 972
3272	Glass & glass product mfg	—	4	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	100	32	1 954	64 994	1 440	2 866	40 574	152 013	92 127	243 109	10 650
3323	Architectural & structural metals mfg	2	31	9	580	18 763	405	768	10 715	45 422	31 108	76 817	897
333	Machinery mfg	4	26	7	668	25 974	379	811	12 464	52 201	43 055	107 461	3 475
3339	Other general-purpose machinery mfg	6	12	5	508	20 284	311	674	10 565	37 888	29 801	76 605	3 300
336	Transportation equipment mfg	—	12	7	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	50	14	937	21 038	729	1 195	13 184	42 128	36 096	79 765	1 471
339	Miscellaneous mfg	2	55	18	1 288	36 398	945	1 796	21 912	69 065	53 068	121 091	4 395
3399	Other miscellaneous mfg ..	1	39	14	1 029	29 454	761	1 453	17 835	60 628	45 673	105 099	3 191

Table 3. Industry Statistics for Counties: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABERDEEN, MD													
31-33	Manufacturing	7	11	5	642	25 897	537	1 002	14 442	86 631	33 919	120 213	6 177
BALTIMORE, MD (IC)													
31-33	Manufacturing	1	688	273	30 216	1 006 241	21 898	42 990	636 182	4 452 897	5 349 744	9 822 188	222 889
311	Food mfg	—	85	37	4 552	136 621	2 961	6 454	79 636	1 237 279	836 912	2 085 446	34 983
3113	Sugar & confectionery product mfg	—	9	5	f	D	D	D	D	D	D	D	9 384
31131	Sugar mfg	—	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining ...	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	7	38	11	1 381	33 284	800	2 189	17 486	115 953	63 424	179 377	4 165
31181	Bread & bakery product mfg	8	35	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	8	19	8	g	D	D	D	D	D	D	D	D
3119	Other food mfg	—	19	11	1 187	35 810	911	1 691	22 425	984 527	156 832	1 151 087	11 543
315	Apparel mfg	—	38	20	1 875	32 007	1 581	2 657	22 562	61 804	44 967	106 170	1 690
3152	Cut & sew apparel mfg	—	24	16	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	12	10	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	1	6	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	21	13	1 409	45 163	1 107	2 387	30 160	97 726	130 470	229 526	5 532
3222	Converted paper product mfg	—	20	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	16	10	958	29 282	740	1 513	19 271	66 501	102 366	170 382	D
322211	Corrugated & solid fiber box mfg	1	13	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	123	41	3 029	92 135	2 229	4 064	56 330	176 821	99 063	276 061	15 165
3231	Printing & related support activities	2	123	41	3 029	92 135	2 229	4 064	56 330	176 821	99 063	276 061	15 165
32311	Printing	2	98	32	2 284	70 789	1 678	3 048	43 316	137 977	88 805	227 126	12 158
323110	Commercial lithographic printing ..	1	49	17	1 164	41 068	856	1 541	24 381	73 059	46 169	119 078	8 746
32312	Support activities for printing	—	25	9	745	21 346	551	1 016	13 014	38 844	10 258	48 935	3 007
325	Chemical mfg	2	51	28	5 095	225 780	3 196	6 989	133 233	1 094 105	1 216 481	2 308 939	91 428
3251	Basic chemical mfg	4	16	10	g	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	10	5	g	D	D	D	D	D	D	D	28 776
325188	All other basic inorganic chemical mfg	—	10	5	g	D	D	D	D	D	D	D	28 776
3254	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	8	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	7	600	23 415	361	706	13 392	177 294	145 471	323 190	5 151
325510	Paint & coating mfg ...	—	8	7	600	23 415	361	706	13 392	177 294	145 471	323 190	5 151
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	11	5	1 089	44 323	844	1 701	33 608	420 071	402 177	821 379	D
32561	Soap & cleaning compound mfg	—	10	5	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	3	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BALTIMORE, MD (IC)— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	1	27	18	2 221	52 002	1 804	2 844	32 569	140 065	106 883	244 065	10 832
3261	Plastics product mfg	2	19	14	1 957	44 500	1 606	2 480	28 801	124 445	89 000	209 487	9 708
32619	Other plastics product mfg	2	14	11	1 604	33 156	1 306	1 858	20 196	92 995	56 993	146 222	7 176
326199	All other plastics product mfg	2	14	11	1 604	33 156	1 306	1 858	20 196	92 995	56 993	146 222	7 176
327	Nonmetallic mineral product mfg	—	17	8	1 245	43 246	1 035	2 219	31 779	116 243	86 656	197 986	4 972
3272	Glass & glass product mfg	—	4	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	100	32	1 954	64 994	1 440	2 866	40 574	152 013	92 127	243 109	10 650
3323	Architectural & structural metals mfg	2	31	9	580	18 763	405	768	10 715	45 422	31 108	76 817	897
333	Machinery mfg	4	26	7	668	25 974	379	811	12 464	52 201	43 055	107 461	3 475
3339	Other general-purpose machinery mfg	6	12	5	508	20 284	311	674	10 565	37 888	29 801	76 605	3 300
336	Transportation equipment mfg	—	12	7	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	50	14	937	21 038	729	1 195	13 184	42 128	36 096	79 765	1 471
339	Miscellaneous mfg	2	55	18	1 288	36 398	945	1 796	21 912	69 065	53 068	121 091	4 395
3399	Other miscellaneous mfg ..	1	39	14	1 029	29 454	761	1 453	17 835	60 628	45 673	105 099	3 191
31-33	CAMBRIDGE, MD Manufacturing	—	21	8	1 014	24 931	775	1 236	16 596	133 821	214 715	350 364	7 633
31-33	CHESTERTOWN, MD Manufacturing	—	14	4	526	14 966	314	553	6 185	39 301	93 585	131 002	D
31-33	CHEVERLY, MD Manufacturing	6	8	6	593	26 556	358	766	13 699	83 464	103 850	186 816	D
31-33	COLLEGE PARK, MD Manufacturing	—	10	3	f	D	D	D	D	D	D	D	D
31-33	CUMBERLAND, MD Manufacturing	4	27	8	574	14 473	452	849	9 498	35 080	48 385	83 201	D
31-33	EASTON, MD Manufacturing	—	29	11	1 925	48 271	1 519	2 961	31 950	368 001	291 996	660 187	16 757
333	Machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	ELKTON, MD Manufacturing	—	24	11	1 647	63 602	1 012	2 051	31 602	232 175	180 808	407 533	38 051
31-33	FEDERALSBURG, MD Manufacturing	—	7	4	502	11 903	379	871	8 137	34 369	29 769	63 624	1 680

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREDERICK, MD													
31-33	Manufacturing	3	79	33	3 097	100 333	2 078	4 114	50 940	221 392	281 682	505 127	26 507
334	Computer & electronic product mfg.....	1	16	11	1 024	40 154	573	1 402	15 174	53 836	43 176	99 169	14 634
3344	Semiconductor & other electronic component mfg.....	—	6	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	6	6	f	D	D	D	D	D	D	D	D
GAITHERSBURG, MD													
31-33	Manufacturing	5	42	13	1 993	89 779	1 035	2 072	39 788	205 980	113 318	318 035	13 720
334	Computer & electronic product mfg.....	6	16	10	1 492	73 518	781	1 664	32 906	138 685	74 650	211 791	D
3342	Communications equipment mfg.....	6	7	5	1 189	61 876	642	1 277	27 145	110 378	61 790	170 233	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	5	6	4	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	5	6	4	f	D	D	D	D	D	D	D	D
HAGERSTOWN, MD													
31-33	Manufacturing	—	64	23	3 361	96 906	2 604	5 678	64 733	347 549	249 926	593 086	37 278
HAVRE DE GRACE, MD													
31-33	Manufacturing	1	16	6	1 156	42 398	793	1 735	24 492	131 348	145 446	277 423	16 119
325	Chemical mfg.....	3	3	3	f	D	D	D	D	D	D	D	D
ROCKVILLE, MD													
31-33	Manufacturing	2	68	13	1 438	52 872	932	1 874	27 019	102 631	62 161	166 214	5 889
323	Printing & related support activities.....	—	15	2	558	19 855	406	845	12 818	34 501	17 312	51 696	2 180
3231	Printing & related support activities.....	—	15	2	558	19 855	406	845	12 818	34 501	17 312	51 696	2 180
32311	Printing.....	—	14	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	8	2	530	19 046	386	806	12 271	32 807	16 456	49 149	D
SALISBURY, MD													
31-33	Manufacturing	1	62	29	4 701	130 248	3 511	7 523	82 765	419 783	400 551	819 941	24 262
311	Food mfg.....	1	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	1	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	4	7	5	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	4	3	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	4	3	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	4	3	3	f	D	D	D	D	D	D	D	D
TANEYTOWN, MD													
31-33	Manufacturing	1	6	4	774	26 771	520	1 066	13 114	53 325	61 719	115 732	2 955
333	Machinery mfg.....	—	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	WESTMINSTER, MD Manufacturing	2	26	7	604	17 642	430	819	10 277	47 750	53 793	101 879	5 841

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MARYLAND		MARYLAND—Con.	
Companies ¹ number..	3 815	Quantity of electricity purchased for heat and power 1,000 kWh..	8 817 171
All establishments number..	3 996	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	482 436
Establishments with 1 to 19 employees number..	2 783	Total value of shipments \$1,000..	36 505 948
Establishments with 20 to 99 employees number..	860	Value of resales \$1,000..	1 314 688
Establishments with 100 employees or more number..	353	Value added \$1,000..	18 721 618
All employees number..	163 992	Total inventories, beginning of year \$1,000..	3 797 779
Total compensation ² \$1,000..	7 547 347	Finished goods inventories, beginning of year \$1,000..	1 328 248
Annual payroll \$1,000..	5 840 454	Work-in-process inventories, beginning of year \$1,000..	1 180 277
Total fringe benefits \$1,000..	1 706 893	Materials and supplies inventories, beginning of year \$1,000..	1 289 254
Production workers, average for year number..	109 564	Total inventories, end of year \$1,000..	4 131 892
Production workers on March 12 number..	107 897	Finished goods inventories, end of year \$1,000..	1 379 148
Production workers on May 12 number..	109 372	Work-in-process inventories, end of year \$1,000..	1 175 015
Production workers on August 12 number..	110 454	Materials and supplies inventories, end of year \$1,000..	1 577 729
Production workers on November 12 number..	110 533	Gross book value of total assets at beginning of year \$1,000..	12 864 073
Production-worker hours 1,000..	218 886	Total capital expenditures (new and used) \$1,000..	1 468 368
Production-worker wages \$1,000..	3 249 181	Capital expenditures for buildings and other structures (new and used) \$1,000..	239 357
Total cost of materials \$1,000..	17 831 494	Capital expenditures for machinery and equipment (new and used) \$1,000..	1 229 011
Cost of materials, parts, containers, etc., consumed \$1,000..	15 416 286	Total retirements ² \$1,000..	480 606
Cost of resales \$1,000..	938 709	Gross book value of total assets at end of year \$1,000..	13 851 835
Cost of fuels \$1,000..	459 127	Total depreciation during year ² \$1,000..	906 372
Cost of purchased electricity \$1,000..	378 894	Total rental payments ² \$1,000..	310 906
Cost of contract work \$1,000..	638 478	Buildings and other structures rental payments ² \$1,000..	163 910
		Machinery and equipment rental payments ² \$1,000..	146 996

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MARYLAND

Hampstead is in Baltimore and Carroll Counties.

Mount Airy is in Carroll and Frederick Counties.

Takoma Park is in Montgomery and Prince George's Counties.

Appendix E. Metropolitan Areas

MARYLAND

Baltimore, MD PMSA

Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore, MD (IC)

Cumberland, MD—WV MSA

Allegany County, MD
Mineral County, WV

Hagerstown, MD PMSA

Washington County, MD

Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ
Cape May County, NJ

Philadelphia, PA—NJ PMSA

Burlington County, NJ
Camden County, NJ
Gloucester County, NJ
Salem County, NJ
Bucks County, PA
Chester County, PA
Delaware County, PA

Montgomery County, PA
Philadelphia County, PA

Vineland—Millville—Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington—Newark, DE—MD PMSA

New Castle County, DE
Cecil County, MD

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA
Fauquier County, VA
King George County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria, VA (IC)
Fairfax, VA (IC)
Falls Church, VA (IC)
Fredericksburg, VA (IC)
Manassas, VA (IC)
Manassas Park, VA (IC)
Berkeley County, WV
Jefferson County, WV

Washington—Baltimore, DC—MD—VA—WV CMSA

Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD

**Washington—Baltimore, DC—MD—VA—WV
CMSA—Con.**

Baltimore, MD PMSA—Con.

Howard County, MD

Queen Anne's County, MD

Baltimore, MD (IC)

Hagerstown, MD PMSA

Washington County, MD

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC

Calvert County, MD

Charles County, MD

Frederick County, MD

Montgomery County, MD

Prince George's County, MD

Arlington County, VA

Clarke County, VA

Culpeper County, VA

Fairfax County, VA

Fauquier County, VA

**Washington—Baltimore, DC—MD—VA—WV
CMSA—Con.**

Washington, DC—MD—VA—WV PMSA—Con.

King George County, VA

Loudoun County, VA

Prince William County, VA

Spotsylvania County, VA

Stafford County, VA

Warren County, VA

Alexandria, VA (IC)

Fairfax, VA (IC)

Falls Church, VA (IC)

Fredericksburg, VA (IC)

Manassas, VA (IC)

Manassas Park, VA (IC)

Berkeley County, WV

Jefferson County, WV

Wilmington—Newark, DE—MD PMSA

New Castle County, DE

Cecil County, MD

Maine

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Geographic Area Series



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Economics and Statistics Administration
U.S. CENSUS BUREAU



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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
MAINE													
31-33	Manufacturing	1	1 812	513	82 288	2 591 070	62 647	121 734	1 746 004	6 530 588	7 593 130	14 097 609	594 298
311	Food mfg.....	3	182	42	5 995	135 725	4 338	7 924	89 655	518 495	553 181	1 070 711	47 517
3112	Grain & oilseed milling	-	3	2	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	2	2	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	6	20	9	1 504	29 884	1 286	2 203	21 994	153 417	122 154	276 246	4 445
31141	Frozen food mfg.....	7	11	7	1 264	23 295	1 089	1 800	17 456	137 521	105 468	243 662	D
311411	Frozen fruit, juice, & vegetable mfg.....	7	10	7	g	D	D	D	D	D	D	D	3 130
31142	Fruit & vegetable canning, pickling, & drying.....	-	9	2	240	6 589	197	403	4 538	15 896	16 686	32 584	D
311422	Specialty canning.....	-	2	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	1	16	4	485	16 020	250	555	9 907	41 932	116 660	158 997	11 033
31151	Dairy product (except frozen) mfg.....	-	11	3	438	14 379	214	481	8 676	35 194	106 158	141 724	10 428
311511	Fluid milk mfg.....	-	7	3	420	13 848	205	460	8 388	32 955	96 828	130 211	10 371
3116	Meat product mfg.....	4	14	4	1 129	31 074	959	2 072	23 749	103 082	124 673	224 831	4 691
31161	Animal slaughtering & processing.....	4	14	4	1 129	31 074	959	2 072	23 749	103 082	124 673	224 831	4 691
311612	Meat processed from carcasses.....	9	5	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	2	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	2	33	13	1 049	14 524	825	1 311	10 787	30 312	57 760	87 902	2 766
31171	Seafood product preparation & packaging.....	2	33	13	1 049	14 524	825	1 311	10 787	30 312	57 760	87 902	2 766
311711	Seafood canning.....	1	11	9	803	10 736	603	989	7 853	17 857	30 464	48 133	D
311712	Fresh & frozen seafood processing..	3	22	4	246	3 788	222	322	2 934	12 455	27 296	39 769	D
3118	Bakeries & tortilla mfg.....	-	64	7	1 410	32 539	731	1 219	15 581	147 740	66 815	214 712	23 025
31181	Bread & bakery product mfg.....	-	59	7	1 401	32 394	723	1 210	15 476	147 126	66 310	213 590	22 987
311811	Retail bakeries.....	6	37	2	220	2 729	142	160	1 318	5 700	3 814	9 533	D
311812	Commercial bakeries.....	-	16	4	1 025	27 236	467	826	12 553	133 039	58 282	191 318	D
311813	Frozen cakes, pies, & other pastries mfg...	2	6	1	156	2 429	114	224	1 605	8 387	4 214	12 739	D
3119	Other food mfg.....	3	12	2	194	5 305	113	215	2 953	14 844	19 342	34 173	678
31191	Snack food mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
311919	Other snack food mfg..	-	1	1	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	1	18	7	579	17 653	279	463	7 476	56 903	68 671	125 573	18 494
3121	Beverage mfg.....	1	18	7	579	17 653	279	463	7 476	56 903	68 671	125 573	18 494
31211	Soft drink & ice mfg.....	-	6	4	354	11 615	140	269	4 958	29 771	38 122	67 860	D
312111	Soft drink mfg.....	-	3	2	c	D	D	D	D	D	D	D	D
312112	Bottled water mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
31212	Breweries.....	7	9	2	c	D	D	D	D	D	D	D	D
312120	Breweries.....	7	9	2	c	D	D	D	D	D	D	D	D
313	Textile mills.....	2	43	23	4 467	101 035	3 192	6 347	70 641	201 374	283 668	475 708	29 611
3131	Fiber, yarn, & thread mills .	8	9	5	728	11 270	443	916	9 260	29 458	21 619	45 415	4 327
31311	Fiber, yarn, & thread mills.....	8	9	5	728	11 270	443	916	9 260	29 458	21 619	45 415	4 327
313111	Yarn spinning mills ...	8	8	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	1	28	15	3 445	84 350	2 493	5 004	57 162	163 721	253 006	413 202	24 819
31321	Broadwoven fabric mills .	2	16	7	2 255	53 639	1 536	2 911	35 914	106 046	96 801	200 475	17 339
313210	Broadwoven fabric mills.....	2	16	7	2 255	53 639	1 536	2 911	35 914	106 046	96 801	200 475	17 339
31322	Narrow fabric mills & schiffli machine embroidery.....	-	4	2	c	D	D	D	D	D	D	D	D
313221	Narrow fabric mills....	-	4	2	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	-	5	4	584	14 348	484	1 159	10 451	29 883	77 320	106 409	832
313230	Nonwoven fabric mills..	-	5	4	584	14 348	484	1 159	10 451	29 883	77 320	106 409	832
31324	Knit fabric mills.....	-	3	2	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	5	6	3	294	5 415	256	427	4 219	8 195	9 043	17 091	465
31331	Textile & fabric finishing mills.....	5	6	3	294	5 415	256	427	4 219	8 195	9 043	17 091	465
313311	Broadwoven fabric finishing mills.....	5	5	3	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAINE—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	1	58	13	1 889	37 939	1 445	2 945	25 564	108 372	98 207	205 262	9 897
3141	Textile furnishings mills	—	15	2	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	3	1	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	3	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	8	12	1	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	8	4	1	c	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	43	11	g	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	1	29	6	739	12 580	543	1 016	7 384	31 290	26 297	57 654	D
314911	Textile bag mills	—	10	4	599	8 980	434	851	5 524	23 658	23 426	47 131	D
314912	Canvas & related product mills	2	19	2	140	3 600	109	165	1 860	7 632	2 871	10 523	334
31499	All other textile product mills	1	14	5	f	D	D	D	D	D	D	D	5 878
314991	Rope, cordage, & twine mills	1	6	2	416	7 905	297	618	5 408	19 545	20 662	39 074	D
314999	All other miscellaneous textile product mills	3	8	3	c	D	D	D	D	D	D	D	D
315	Apparel mfg	2	20	8	841	13 056	706	1 333	10 641	22 520	28 410	49 436	1 402
3152	Cut & sew apparel mfg	2	14	5	694	10 963	597	1 151	9 212	18 442	23 253	40 107	1 269
31522	Men's & boys' cut & sew apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	1	1	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	2	1	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	4	3	c	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	4	3	c	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	45	26	7 466	166 815	6 121	11 453	107 344	241 857	859 534	1 081 429	12 053
3161	Leather & hide tanning & finishing	—	7	5	g	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	7	5	g	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	7	5	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	28	19	5 943	120 668	5 164	9 347	85 792	372 318	505 862	862 266	7 130
31621	Footwear mfg	—	28	19	5 943	120 668	5 164	9 347	85 792	372 318	505 862	862 266	7 130
316211	Rubber & plastics footwear mfg	—	6	5	g	D	D	D	D	D	D	D	3 247
316212	House slipper mfg	—	1	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	11	11	3 789	79 373	3 242	5 593	54 365	295 102	362 019	633 715	D
316214	Women's footwear (except athletic) mfg	—	7	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	10	2	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	10	2	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	3	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg	1	255	89	7 930	189 469	6 599	13 505	141 625	392 850	541 661	925 361	50 368
3211	Sawmills & wood preservation	1	86	30	2 369	69 228	2 026	4 497	54 652	153 794	277 879	427 044	34 434
32111	Sawmills & wood preservation	1	86	30	2 369	69 228	2 026	4 497	54 652	153 794	277 879	427 044	34 434
321113	Sawmills	1	85	29	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	10	8	904	24 978	748	1 633	19 410	54 901	82 738	136 282	3 370
32121	Veneer, plywood, & engineered wood product mfg	—	10	8	904	24 978	748	1 633	19 410	54 901	82 738	136 282	3 370
321211	Hardwood veneer & plywood mfg	—	3	2	c	D	D	D	D	D	D	D	D
321214	Truss mfg	—	3	2	c	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	—	4	4	479	15 522	384	889	11 890	25 075	54 713	78 836	2 201
3219	Other wood product mfg	1	159	51	4 657	95 263	3 825	7 375	67 563	184 155	181 044	362 035	12 564
32191	Millwork	2	57	13	1 265	25 573	1 021	1 844	18 733	45 875	66 941	111 845	4 185
321911	Wood window & door mfg	4	17	3	422	7 185	336	518	5 127	12 288	15 314	27 677	889
321912	Cut stock, resawing lumber, & planing	2	27	10	784	17 230	636	1 237	12 718	30 877	49 104	78 959	3 157
32192	Wood container & pallet mfg	1	18	6	304	5 657	244	417	3 364	11 245	13 777	24 805	1 378
321920	Wood container & pallet mfg	1	18	6	304	5 657	244	417	3 364	11 245	13 777	24 805	1 378

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MAINE—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	-	84	32	3 088	64 033	2 560	5 114	45 466	127 035	100 326	225 385	7 001
321992	Prefabricated wood building mfg	-	10	5	e	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	-	73	26	2 622	52 990	2 272	4 471	39 483	106 821	74 206	179 300	6 242
322	Paper mfg	-	34	26	13 801	665 786	11 040	25 051	493 718	2 065 768	2 386 378	4 460 440	241 627
3221	Pulp, paper, & paperboard mills	-	16	16	11 822	596 961	9 383	21 486	442 841	1 752 450	2 236 612	3 998 051	232 139
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	14	14	j	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	12	12	i	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	18	10	1 979	68 825	1 657	3 565	50 877	313 318	149 766	462 389	9 488
32221	Paperboard container mfg	-	9	6	558	18 730	436	919	12 373	44 205	61 551	105 605	D
322211	Corrugated & solid fiber box mfg	-	5	4	e	D	D	D	D	D	D	D	2 571
32229	Other converted paper product mfg	-	3	3	1 352	47 872	1 176	2 558	37 679	264 222	81 302	344 947	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	1	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	192	26	2 757	68 356	2 134	3 932	49 109	152 301	132 358	284 361	10 167
3231	Printing & related support activities	1	192	26	2 757	68 356	2 134	3 932	49 109	152 301	132 358	284 361	10 167
32311	Printing	1	180	24	2 667	66 016	2 061	3 800	47 496	147 172	131 285	278 161	10 063
323110	Commercial lithographic printing ..	-	87	16	1 796	46 519	1 443	2 860	35 445	105 223	103 826	209 081	7 919
323113	Commercial screen printing	5	23	3	239	4 992	162	269	2 592	10 146	11 844	22 083	760
323114	Quick printing	4	44	1	206	4 427	148	205	2 716	9 640	4 979	14 603	735
323116	Manifold business form printing	-	3	3	102	2 786	70	132	1 918	6 141	5 258	11 412	422
323119	Other commercial printing	1	17	1	284	6 439	203	272	4 222	13 743	4 004	17 359	96
324	Petroleum & coal products mfg	2	12	4	366	11 447	340	760	9 888	20 693	28 270	47 828	4 073
3241	Petroleum & coal products mfg	2	12	4	366	11 447	340	760	9 888	20 693	28 270	47 828	4 073
32412	Asphalt paving, roofing, & saturated materials mfg	2	11	3	e	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	2	11	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	4	50	13	1 808	68 769	723	1 384	19 693	201 391	153 581	355 868	16 814
3251	Basic chemical mfg	6	8	4	437	17 678	177	393	6 966	99 678	74 683	176 290	10 503
32518	Other basic inorganic chemical mfg	-	4	2	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	16	4	964	39 048	264	430	6 282	54 226	23 095	77 010	3 322
32541	Pharmaceutical & medicine mfg	-	16	4	964	39 048	264	430	6 282	54 226	23 095	77 010	3 322
325413	In-vitro diagnostic substance mfg	-	4	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	11	2	185	5 442	113	133	1 753	19 932	8 321	27 991	1 394
32562	Toilet preparation mfg ...	9	8	2	181	5 362	110	129	1 710	19 660	8 072	27 465	1 384
325620	Toilet preparation mfg .	9	8	2	181	5 362	110	129	1 710	19 660	8 072	27 465	1 384
326	Plastics & rubber products mfg	3	50	25	3 268	94 308	2 433	4 549	60 719	257 915	247 086	501 860	25 602

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MAINE—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg	4	34	18	2 777	79 958	2 068	3 875	53 253	230 675	217 339	444 736	23 896
32611	Unsupported plastics film, sheet, & bag mfg . .	—	2	2	f	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	—	1	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	1	1	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	9	4	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	9	4	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	21	12	1 292	31 448	965	1 668	18 689	94 559	52 946	147 533	10 188
326199	All other plastics product mfg	1	21	12	1 292	31 448	965	1 668	18 689	94 559	52 946	147 533	10 188
3262	Rubber product mfg	—	16	7	491	14 350	365	674	7 466	27 240	29 747	57 124	1 706
32621	Tire mfg	—	8	3	236	7 264	152	303	3 670	15 219	18 546	33 819	1 158
326211	Tire mfg (except retreading)	—	1	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	8	4	255	7 086	213	371	3 796	12 021	11 201	23 305	548
326299	All other rubber product mfg	—	8	4	255	7 086	213	371	3 796	12 021	11 201	23 305	548
327	Nonmetallic mineral product mfg	2	107	22	1 305	35 299	897	1 803	21 631	86 243	76 950	162 017	6 655
3271	Clay product & refractory mfg	3	39	4	228	4 471	183	338	2 813	8 583	5 243	13 631	348
32711	Pottery, ceramics, & plumbing fixture mfg . .	5	33	2	c	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg . .	5	32	2	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	55	16	957	27 259	630	1 309	17 176	70 375	63 842	133 239	6 157
32731	Cement mfg	1	3	2	144	4 422	98	167	3 034	15 953	15 087	31 270	2 380
327310	Cement mfg	1	3	2	144	4 422	98	167	3 034	15 953	15 087	31 270	2 380
32732	Ready-mix concrete mfg .	2	30	5	317	9 027	251	520	7 183	23 005	26 652	49 769	2 708
327320	Ready-mix concrete mfg	2	30	5	317	9 027	251	520	7 183	23 005	26 652	49 769	2 708
32733	Concrete pipe, brick, & block mfg	—	7	3	183	5 705	103	250	2 763	11 426	11 777	22 716	480
327331	Concrete block & brick mfg	—	6	2	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	15	6	313	8 105	178	372	4 196	19 991	10 326	29 484	589
327390	Other concrete product mfg	2	15	6	313	8 105	178	372	4 196	19 991	10 326	29 484	589
331	Primary metal mfg	—	9	4	550	17 508	376	880	11 740	45 061	24 760	69 657	2 337
3312	Steel product mfg from purchased steel	1	2	1	c	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	c	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	—	2	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	241	58	4 818	149 750	3 522	6 480	91 529	357 019	267 349	623 146	28 767
3322	Cutlery & handtool mfg	4	8	5	161	4 337	127	234	2 707	10 084	3 963	14 278	296
33221	Cutlery & handtool mfg . . .	4	8	5	161	4 337	127	234	2 707	10 084	3 963	14 278	296
332212	Hand & edge tool mfg	4	7	5	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MAINE—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	51	18	1 520	41 236	994	2 162	22 022	126 625	123 079	246 841	4 298
33231	Plate work & fabricated structural product mfg . .	2	24	9	580	17 881	365	761	10 091	40 014	46 962	86 931	1 672
332312	Fabricated structural metal mfg	1	19	6	459	14 112	291	621	8 148	32 147	42 070	74 092	1 313
33232	Ornamental & architectural metal products mfg	—	27	9	940	23 355	629	1 401	11 931	86 611	76 117	159 910	2 626
332322	Sheet metal work mfg	—	21	5	739	17 216	496	1 154	8 432	68 311	67 508	135 502	D
332323	Ornamental & architectural metal work mfg	—	4	3	c	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	15	1	152	2 859	128	155	1 606	6 913	8 907	15 739	233
33261	Spring & wire product mfg	1	15	1	152	2 859	128	155	1 606	6 913	8 907	15 739	233
332618	Other fabricated wire product mfg	1	14	1	c	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	118	20	1 682	57 821	1 312	2 261	37 710	122 610	58 914	179 999	17 771
33271	Machine shops	1	110	15	1 361	48 101	1 053	1 775	30 981	103 575	49 097	150 784	12 062
332710	Machine shops	1	110	15	1 361	48 101	1 053	1 775	30 981	103 575	49 097	150 784	12 062
33272	Turned product & screw, nut, & bolt mfg	—	8	5	321	9 720	259	486	6 729	19 035	9 817	29 215	5 709
332721	Precision turned product mfg	—	8	5	321	9 720	259	486	6 729	19 035	9 817	29 215	5 709
3328	Coating, engraving, heat treating, & allied activities .	4	13	4	199	5 721	161	322	3 487	13 281	4 130	17 403	852
33281	Coating, engraving, heat treating, & allied activities	4	13	4	199	5 721	161	322	3 487	13 281	4 130	17 403	852
332813	Electroplating, plating, polishing, anodizing, & coloring	2	8	2	118	3 424	92	195	1 942	7 027	2 494	9 538	353
3329	Other fabricated metal product mfg	—	21	7	924	32 462	671	1 128	21 195	65 785	60 670	129 190	4 753
33299	All other fabricated metal product mfg	—	17	6	842	29 797	627	1 052	19 953	60 889	56 659	120 482	4 653
332994	Small arms mfg	—	2	2	c	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	11	3	401	14 888	354	699	12 277	23 190	27 122	50 736	1 579
333	Machinery mfg	—	96	32	3 201	105 763	2 251	4 877	67 788	301 154	178 260	476 725	14 271
3331	Agriculture, construction, & mining machinery mfg	—	9	2	210	7 297	156	289	4 134	29 391	27 843	56 328	D
33312	Construction machinery mfg	—	3	1	c	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	3	1	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	20	5	361	13 720	194	392	6 703	27 707	29 034	57 206	681
33329	Other industrial machinery mfg	—	17	4	e	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	3	1	c	D	D	D	D	D	D	D	512
333298	All other industrial machinery mfg	—	7	2	118	4 724	60	122	1 765	9 052	5 619	15 225	80
3333	Commercial & service industry machinery mfg	5	5	2	c	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	5	5	2	c	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	6	2	181	4 597	123	203	2 678	9 459	8 619	18 020	404
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	6	2	181	4 597	123	203	2 678	9 459	8 619	18 020	404
3335	Metalworking machinery mfg	—	24	9	565	17 982	430	881	12 493	46 641	18 461	63 809	1 996
33351	Metalworking machinery mfg	—	24	9	565	17 982	430	881	12 493	46 641	18 461	63 809	1 996
333515	Cutting tool & machine tool accessory mfg	—	6	4	311	8 864	248	518	6 455	28 389	9 427	36 122	981
3336	Engine, turbine, & power transmission equipment mfg	—	6	3	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	6	3	e	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	e	D	D	D	D	D	D	D	D

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	MAINE—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	26	9	1 278	39 762	865	2 182	24 685	90 600	54 436	143 908	6 728
33392	Material handling equipment mfg	2	7	3	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	18	6	1 085	32 724	763	1 974	21 756	76 775	41 389	117 497	3 937
333994	Industrial process furnace & oven mfg	—	1	1	c	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	1	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	12	4	462	13 545	264	739	8 242	38 306	21 653	59 529	1 801
334	Computer & electronic product mfg	—	49	25	5 734	200 983	4 409	8 909	117 461	466 529	434 574	940 958	30 261
3342	Communications equipment mfg	—	10	6	1 552	44 091	1 049	2 113	19 662	124 520	179 588	330 613	10 144
33421	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	6	4	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	6	4	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	18	12	3 183	132 287	2 609	5 058	82 012	290 517	212 568	513 606	16 306
33441	Semiconductor & other electronic component mfg	—	18	12	3 183	132 287	2 609	5 058	82 012	290 517	212 568	513 606	16 306
334413	Semiconductor & related device mfg	—	3	2	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	—	2	2	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	6	3	565	12 638	449	914	6 322	27 822	28 215	56 892	D
3345	Navigational, measuring, medical, & control instruments mfg	4	10	3	258	7 622	162	339	4 093	20 021	10 571	31 224	987
33451	Navigational, measuring, medical, & control instruments mfg	4	10	3	258	7 622	162	339	4 093	20 021	10 571	31 224	987
334512	Automatic environmental control mfg	3	3	2	149	5 013	108	242	2 819	14 984	7 508	23 013	D
3346	Mfg & reproducing magnetic & optical media	3	6	4	716	16 396	572	1 371	11 410	30 260	29 761	62 199	2 738
33461	Mfg & reproducing magnetic & optical media	3	6	4	716	16 396	572	1 371	11 410	30 260	29 761	62 199	2 738
334612	Prerecorded CD (except software), tape, & record reproducing	9	2	1	c	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	1	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	20	12	1 116	36 358	779	1 547	21 031	109 620	78 148	188 186	6 724
3351	Electric lighting equipment mfg	—	5	4	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	4	4	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	4	4	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	2	9	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	9	2	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	6	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MAINE—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	—	6	6	387	13 493	243	490	6 655	48 398	36 550	85 944	3 778
33593	Wiring device mfg	—	1	1	c	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	5	5	c	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	3	3	176	7 417	68	117	2 054	18 586	20 896	39 164	D
336	Transportation equipment mfg	—	100	20	11 125	392 372	8 771	13 430	281 570	743 668	1 034 946	1 755 193	27 476
3363	Motor vehicle parts mfg ...	—	15	5	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	7	2	c	D	D	D	D	D	D	D	202
336322	Other motor vehicle electrical & electronic equipment mfg	2	7	2	c	D	D	D	D	D	D	D	202
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	—	1	1	c	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	71	12	8 913	315 076	7 016	9 716	225 052	542 553	399 518	942 653	5 575
33661	Ship & boat building	—	71	12	8 913	315 076	7 016	9 716	225 052	542 553	399 518	942 653	5 575
336611	Ship building & repairing	—	10	5	i	D	D	D	D	D	D	D	D
336612	Boat building	1	61	7	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	100	17	1 699	45 702	1 207	2 307	28 268	102 245	62 648	166 575	4 970
3371	Household & institutional furniture & kitchen cabinet mfg	—	79	11	1 178	30 456	868	1 592	20 131	73 225	46 462	120 005	3 905
33711	Wood kitchen cabinet & counter top mfg	3	32	—	126	2 729	94	168	1 923	5 538	3 846	9 410	146
337110	Wood kitchen cabinet & counter top mfg ...	3	32	—	126	2 729	94	168	1 923	5 538	3 846	9 410	146
33712	Household & institutional furniture mfg	—	47	11	1 052	27 727	774	1 424	18 208	67 687	42 616	110 595	3 759
337122	Nonupholstered wood household furniture mfg	1	37	9	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	2	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	20	6	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	20	6	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	7	3	323	8 685	189	385	4 474	16 839	8 381	25 067	480
337215	Showcase, partition, shelving, & locker mfg	—	11	3	c	D	D	D	D	D	D	D	537
339	Miscellaneous mfg	4	131	21	1 573	36 977	1 085	1 855	18 913	78 610	54 490	131 315	5 212
3391	Medical equipment & supplies mfg	4	28	4	481	13 017	308	495	5 859	24 646	13 447	38 200	1 135
33911	Medical equipment & supplies mfg	4	28	4	481	13 017	308	495	5 859	24 646	13 447	38 200	1 135
339111	Laboratory apparatus & furniture mfg	—	1	1	c	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	9	3	1	c	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	4	20	2	c	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MAINE—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . .	3	103	17	1 092	23 960	777	1 360	13 054	53 964	41 043	93 115	4 077
33991	Jewelry & silverware mfg	5	20	1	103	1 651	60	88	884	4 117	2 447	6 440	86
33993	Doll, toy, & game mfg . . .	6	16	3	126	3 044	93	162	1 641	6 750	4 871	11 629	392
339932	Game, toy, & children's vehicle mfg	6	12	3	122	3 012	89	154	1 616	6 675	4 828	11 507	392
33995	Sign mfg	1	23	3	193	5 535	126	262	2 807	9 346	6 087	15 336	1 196
339950	Sign mfg	1	23	3	193	5 535	126	262	2 807	9 346	6 087	15 336	1 196
33999	All other miscellaneous mfg	4	32	8	582	10 890	438	712	6 387	28 826	19 859	47 187	1 848
339994	Broom, brush, & mop mfg	9	1	1	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	24	6	361	6 690	275	428	3 828	18 121	11 524	28 399	1 091

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BANGOR, ME MSA												
	Manufacturing	1	93	32	4 070	124 820	3 180	6 473	91 398	430 089	398 476	824 665	55 004
311	Food mfg	–	9	2	273	5 606	225	455	4 699	17 608	23 220	41 232	D
316	Leather & allied product mfg	–	2	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	–	2	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	–	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	–	11	4	354	10 843	268	616	7 208	21 875	39 851	60 850	736
322	Paper mfg	3	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	3	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	3	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	3	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	–	4	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	–	1	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	–	1	1	e	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	–	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	–	5	3	e	D	D	D	D	D	D	D	9 488
3363	Motor vehicle parts mfg	–	2	2	e	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	–	2	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	–	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA												
	Manufacturing	1	8 844	3 074	395 322	15 798 742	241 095	484 982	7 435 157	45 718 100	33 681 939	79 309 730	3 482 539
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (CT Part)	-	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (ME Part)	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (MA Part)	1	7 448	2 622	332 006	13 505 530	198 540	401 940	6 174 666	37 417 970	27 017 210	64 365 196	2 975 800
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (NH Part)	1	1 336	437	61 381	2 229 004	41 436	80 545	1 230 147	8 395 120	6 376 277	14 748 569	499 261
311	Food mfg	1	664	187	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	48	16	h	D	D	D	D	D	D	D	D
313	Textile mills	1	128	69	i	D	D	D	D	D	D	D	D
314	Textile product mills	1	180	42	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	194	73	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	116	40	i	D	D	D	D	D	D	D	D
321	Wood product mfg	3	198	38	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	166	118	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	1 077	234	j	D	D	D	D	D	D	D	107 053
324	Petroleum & coal products mfg	1	45	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	351	152	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	421	218	21 622	706 201	16 689	33 833	442 348	1 757 409	1 510 618	3 269 053	141 171
327	Nonmetallic mineral product mfg	1	245	76	i	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	98	49	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 634	476	40 901	1 517 003	29 397	59 553	880 171	3 702 019	1 916 028	5 599 963	357 939
333	Machinery mfg	2	769	294	33 456	1 463 248	18 414	37 238	634 513	3 253 851	2 673 862	5 937 448	227 624
334	Computer & electronic product mfg	-	1 039	537	m	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	228	124	j	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	167	61	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	339	71	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	737	189	24 304	919 994	13 974	27 807	372 702	2 449 330	1 422 551	3 902 291	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Portsmouth—Rochester, NH—ME PMSA												
31-33	Manufacturing	—	345	107	16 866	542 230	10 951	21 342	288 778	2 248 876	2 533 494	4 771 908	109 989
	Portsmouth—Rochester, NH—ME PMSA (ME Part)	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Portsmouth—Rochester, NH—ME PMSA (NH Part)	—	304	99	15 478	498 379	10 217	19 689	268 704	2 387 792	2 273 755	4 647 187	105 161
311	Food mfg	1	19	5	379	10 652	254	449	5 098	42 825	46 900	89 735	D
314	Textile product mills	1	13	5	574	19 747	422	986	14 578	35 418	28 377	61 914	4 393
3149	Other textile product mills	—	10	5	562	19 557	413	972	14 467	34 963	27 906	60 990	D
31499	All other textile product mills	—	4	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	—	4	4	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	9	7	1 657	51 104	1 085	2 104	22 363	25 540	319 289	359 098	D
3161	Leather & hide tanning & finishing	—	2	2	g	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	2	2	g	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	2	2	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	5	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	5	4	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	—	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	15	2	e	D	D	D	D	D	D	D	1 174
3219	Other wood product mfg	—	11	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	39	7	517	14 801	381	684	8 265	41 979	18 576	61 489	1 563
3231	Printing & related support activities	2	39	7	517	14 801	381	684	8 265	41 979	18 576	61 489	1 563
32311	Printing	2	36	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	18	11	1 692	49 025	1 418	2 930	36 823	88 204	88 036	175 889	5 366
3261	Plastics product mfg	1	12	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	8	5	1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
326199	All other plastics product mfg	1	8	5	1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
3262	Rubber product mfg	1	6	4	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	5	3	331	8 731	272	548	6 258	19 423	9 258	28 373	566
326291	Rubber product mfg for mechanical use	—	2	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	22	7	f	D	D	D	D	D	D	D	3 461
3272	Glass & glass product mfg	—	4	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	2	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	3	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	52	11	1 147	35 704	820	1 469	19 126	75 708	46 827	126 504	6 256
3323	Architectural & structural metals mfg	4	11	5	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	10	4	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	9	4	275	9 961	191	518	6 395	18 383	9 630	28 004	1 073
3329	Other fabricated metal product mfg	—	6	3	436	11 817	308	316	3 867	26 236	18 786	48 854	1 347
33299	All other fabricated metal product mfg	—	3	1	e	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Portsmouth—Rochester, NH—ME PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	33	12	2 639	97 130	1 094	2 447	35 622	255 036	207 243	459 355	18 251
3332	Industrial machinery mfg ..	-	9	5	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	8	4	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	9	5	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	5	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	3	538	16 465	290	862	9 705	39 656	23 299	61 722	D
33399	All other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	3	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	26	13	3 325	113 249	2 064	3 835	55 017	1 234 144	1 439 905	2 652 928	43 412
3341	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	2	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	11	4	1 136	39 206	952	1 808	29 608	98 635	62 617	158 563	5 032
33451	Navigational, measuring, medical, & control instruments mfg	-	11	4	1 136	39 206	952	1 808	29 608	98 635	62 617	158 563	5 032
334515	Electricity measuring & testing instrument mfg	-	4	3	g	D	D	D	D	D	D	D	4 947
335	Electrical equipment, appliance, & component mfg	-	10	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	31	6	1 016	27 274	602	1 128	12 409	64 283	35 009	100 417	D
3391	Medical equipment & supplies mfg	1	12	4	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	1	12	4	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LEWISTON—AUBURN, ME MSA												
31-33	Manufacturing	2	167	64	7 787	218 426	5 604	11 167	140 885	688 642	495 225	1 180 982	48 615
311	Food mfg.....	-	15	1	663	18 120	197	358	6 256	60 816	28 260	89 017	D
3118	Bakeries & tortilla mfg.....	-	8	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	8	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
313	Textile mills	-	11	4	301	8 580	218	506	5 416	17 993	23 530	40 896	2 050
314	Textile product mills.....	1	9	3	552	14 459	448	1 030	10 743	50 900	46 219	96 927	2 028
3141	Textile furnishings mills....	-	4	2	e	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	2	1	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	-	9	6	743	16 107	627	1 171	11 501	36 204	35 822	72 304	1 361
3162	Footwear mfg	-	8	5	f	D	D	D	D	D	D	D	1 361
31621	Footwear mfg	-	8	5	f	D	D	D	D	D	D	D	1 361
316213	Men's footwear (except athletic) mfg ..	-	4	4	456	9 886	400	655	7 345	21 287	24 054	45 347	D
321	Wood product mfg	-	14	6	406	9 970	326	655	6 885	16 900	24 457	40 667	1 627
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	18	5	426	12 864	332	765	9 415	32 163	29 717	61 543	2 386
3231	Printing & related support activities.....	-	18	5	426	12 864	332	765	9 415	32 163	29 717	61 543	2 386
32311	Printing	-	17	4	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	7	3	316	10 071	246	616	7 572	27 320	27 209	54 192	2 010
326	Plastics & rubber products mfg.....	7	15	10	1 663	45 926	1 248	2 302	31 791	133 659	118 783	249 777	7 543
3261	Plastics product mfg	7	11	8	1 489	42 062	1 095	2 030	29 139	127 877	113 520	238 638	D
32613	Laminated plastics plate, sheet, & shape mfg	9	2	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	9	2	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	7	5	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	5	7	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	26	6	582	18 762	475	874	15 103	29 946	33 272	63 177	2 303
3329	Other fabricated metal product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PORTLAND, ME MSA													
31-33	Manufacturing	1	344	85	12 873	445 471	9 150	19 404	267 763	1 085 790	929 913	2 011 282	69 123
311	Food mfg.....	2	42	13	2 129	57 262	1 568	3 164	39 800	216 102	243 289	456 694	24 574
3115	Dairy product mfg	1	5	3	347	11 630	126	274	5 947	26 917	84 297	111 397	D
31151	Dairy product (except frozen) mfg	-	4	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	3	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	17	4	445	10 060	343	548	6 978	75 982	35 932	112 003	D
31181	Bread & bakery product mfg	-	16	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	6	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	4	2	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	3	2	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	3	2	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	20	4	e	D	D	D	D	D	D	D	1 354
3219	Other wood product mfg ...	1	15	2	285	7 872	240	456	5 034	15 288	8 886	22 241	837
322	Paper mfg	-	6	4	1 429	74 202	1 143	2 957	50 585	199 351	229 145	414 636	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	3	5	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	52	5	613	15 351	441	753	10 334	29 891	25 685	55 589	2 213
3231	Printing & related support activities	1	52	5	613	15 351	441	753	10 334	29 891	25 685	55 589	2 213
32311	Printing	1	47	5	597	15 014	428	734	10 078	29 229	25 534	54 776	2 175
323110	Commercial lithographic printing ..	-	20	2	372	9 620	279	481	6 919	16 215	14 227	30 434	1 417
325	Chemical mfg	2	20	3	945	38 326	247	391	6 020	56 568	26 649	83 441	D
3254	Pharmaceutical & medicine mfg	-	13	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	13	3	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	45	16	1 367	37 627	984	2 120	21 693	114 684	88 697	202 257	8 019
3323	Architectural & structural metals mfg	1	12	5	655	14 441	489	1 171	8 293	61 293	61 372	122 485	1 485
33232	Ornamental & architectural metal products mfg	-	4	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg .	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	20	4	338	11 346	271	483	7 611	27 260	10 518	37 203	5 686
33271	Machine shops	-	20	4	338	11 346	271	483	7 611	27 260	10 518	37 203	5 686
332710	Machine shops	-	20	4	338	11 346	271	483	7 611	27 260	10 518	37 203	5 686
333	Machinery mfg	1	28	10	1 066	35 107	772	1 806	22 021	84 161	44 380	127 338	4 198
3335	Metalworking machinery mfg	-	7	3	272	8 559	212	461	6 224	27 535	8 877	34 784	D
33351	Metalworking machinery mfg	-	7	3	272	8 559	212	461	6 224	27 535	8 877	34 784	D
3339	Other general-purpose machinery mfg	-	8	4	f	D	D	D	D	D	D	D	2 753
33399	All other general-purpose machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	PORTLAND, ME MSA—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	10	6	g	D	D	D	D	D	D	D	D	
3342	Communications equipment mfg.....	-	5	3	e	D	D	D	D	D	D	D	D	
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	5	3	e	D	D	D	D	D	D	D	D	
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	5	3	e	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg....	-	1	1	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg.....	-	4	3	e	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	1	1	e	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
335314	Relay & industrial control mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	4	40	5		294	7 374	200	361	4 490	13 604	9 113	22 756	801

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	ANDROSCOGGIN COUNTY, ME													
	Manufacturing	2	183	67	8 233	226 587	5 966	11 867	145 812	705 573	515 971	1 218 613	49 483	
311	Food mfg.....	-	18	1	f	681	18 382	208	370	6 390	61 562	28 816	90 320	D
3118	Bakeries & tortilla mfg.....	-	9	1	f	D	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	9	1	f	D	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	1	f	D	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	9	3		552	14 459	448	1 030	10 743	50 900	46 219	96 927	2 028
316	Leather & allied product mfg ..	-	10	7		1 035	20 380	881	1 617	14 538	45 132	48 234	93 661	D
3162	Footwear mfg.....	-	9	6	f	D	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	9	6	f	D	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg ..	-	5	5	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	17	8		514	12 917	404	869	8 278	22 740	31 427	53 386	2 228
322	Paper mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANDROSCOGGIN COUNTY, ME—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	7	15	10	1 663	45 926	1 248	2 302	31 791	133 659	118 783	249 777	D
3261	Plastics product mfg	7	11	8	1 489	42 062	1 095	2 030	29 139	127 877	113 520	238 638	D
32613	Laminated plastics plate, sheet, & shape mfg	9	2	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	9	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	28	6	590	18 985	481	886	15 258	30 393	33 476	63 828	2 342
AROOSTOOK COUNTY, ME													
31-33	Manufacturing	2	89	29	3 906	125 392	3 260	6 675	98 296	355 537	543 277	895 018	65 406
311	Food mfg	7	11	5	964	21 212	809	1 390	15 873	128 337	110 331	239 703	D
3114	Fruit & vegetable preserving & specialty food mfg	9	4	3	803	16 069	681	1 125	11 940	106 584	79 792	186 564	D
31141	Frozen food mfg	9	4	3	803	16 069	681	1 125	11 940	106 584	79 792	186 564	D
311411	Frozen fruit, juice, & vegetable mfg	9	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	28	13	1 210	32 151	1 067	2 478	26 550	87 732	125 542	209 749	9 045
322	Paper mfg	—	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
CUMBERLAND COUNTY, ME													
31-33	Manufacturing	1	382	94	14 304	477 162	10 291	21 622	289 760	1 174 150	1 062 379	2 232 689	79 120
311	Food mfg	2	43	13	2 127	57 260	1 567	3 161	39 805	216 063	243 035	456 403	24 574
3116	Meat product mfg	3	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	13	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	13	4	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	—	9	3	f	D	D	D	D	D	D	D	D
314911	Textile bag mills	—	2	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	4	2	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	3	2	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	2	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	1	1	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	28	8	520	13 744	428	813	8 895	27 648	24 330	50 003	2 386
322	Paper mfg	—	7	4	1 434	74 297	1 147	2 961	50 644	199 626	229 515	415 282	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	56	5	637	15 834	460	776	10 642	30 829	26 019	56 857	D
3231	Printing & related support activities	1	56	5	637	15 834	460	776	10 642	30 829	26 019	56 857	D
32311	Printing	1	51	5	621	15 497	447	757	10 386	30 167	25 868	56 044	D
325	Chemical mfg	2	22	3	947	38 379	249	393	6 038	56 684	26 760	83 669	D
3254	Pharmaceutical & medicine mfg	—	14	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	14	3	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	4	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CUMBERLAND COUNTY, ME—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	51	15	1 368	37 652	990	2 153	21 999	113 656	90 976	203 633	8 011
3323	Architectural & structural metals mfg	1	13	5	657	14 466	490	1 172	8 309	61 342	61 414	122 576	1 488
33232	Ornamental & architectural metal products mfg	—	5	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	—	5	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	31	9	1 061	34 771	762	1 777	21 583	83 378	44 635	126 876	4 097
3339	Other general-purpose machinery mfg	—	9	4	f	D	D	D	D	D	D	D	2 779
33399	All other general-purpose machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	12	7	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	4	513	14 494	345	717	7 656	51 676	25 888	78 986	1 981
	FRANKLIN COUNTY, ME												
31-33	Manufacturing	—	53	21	3 457	110 303	2 920	5 939	86 189	353 771	527 843	867 798	29 981
316	Leather & allied product mfg	—	4	3	f	D	D	D	D	D	D	D	655
3162	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	g	D	D	D	D	D	D	D	D
	HANCOCK COUNTY, ME												
31-33	Manufacturing	—	94	15	2 397	103 827	1 944	3 601	75 873	268 770	265 431	551 013	16 905
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
	KENNEBEC COUNTY, ME												
31-33	Manufacturing	1	129	35	5 488	165 829	4 338	8 435	112 146	345 694	387 886	753 401	31 649
313	Textile mills	—	4	3	965	23 537	856	1 468	15 342	39 771	46 606	84 899	1 519
3132	Fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	5	1 224	54 357	1 036	2 309	44 023	121 182	83 706	205 131	10 010
3221	Pulp, paper, & paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	3	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	20	6	590	23 417	422	693	13 951	49 440	44 665	91 162	2 446

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KENNEBEC COUNTY, ME—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
KNOX COUNTY, ME													
31-33	Manufacturing	4	92	21	1 602	44 308	1 127	1 885	24 163	146 156	121 382	267 702	12 557
LINCOLN COUNTY, ME													
31-33	Manufacturing	2	68	8	f	D	D	D	D	D	D	D	7 092
OXFORD COUNTY, ME													
31-33	Manufacturing	—	84	30	4 038	118 663	3 118	7 109	83 047	383 004	360 266	758 519	39 321
321	Wood product mfg	—	31	19	1 674	34 077	1 312	2 689	24 668	60 985	69 543	128 847	7 544
3219	Other wood product mfg	—	24	15	1 317	24 859	1 017	2 029	17 296	41 916	43 463	85 524	2 127
32199	All other wood product mfg	—	19	12	1 091	20 805	873	1 773	14 862	35 748	32 018	68 072	D
321999	All other miscellaneous wood product mfg	—	16	9	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
PENOBSCOT COUNTY, ME													
31-33	Manufacturing	1	155	50	8 897	285 875	6 871	13 721	203 719	870 930	809 747	1 658 647	95 774
316	Leather & allied product mfg	—	7	3	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	3	3	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	3	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	37	12	884	24 185	727	1 539	17 926	46 365	85 180	129 770	8 126
3211	Sawmills & wood preservation	—	21	8	654	19 578	557	1 215	15 008	36 172	73 808	108 600	7 323
32111	Sawmills & wood preservation	—	21	8	654	19 578	557	1 215	15 008	36 172	73 808	108 600	7 323
321113	Sawmills	—	21	8	654	19 578	557	1 215	15 008	36 172	73 808	108 600	7 323
322	Paper mfg	1	5	4	3 146	143 759	2 452	5 583	104 515	366 729	416 530	785 901	D
3221	Pulp, paper, & paperboard mills	1	4	4	h	D	D	D	D	D	D	D	D
32212	Paper mills	1	4	4	h	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	2	3	3	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
PISCATAQUIS COUNTY, ME													
31-33	Manufacturing	4	26	10	1 905	36 076	1 192	2 397	26 266	71 568	41 219	114 702	5 903
313	Textile mills	9	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	8	4	603	14 200	536	1 151	11 357	26 751	14 651	41 123	D
3219	Other wood product mfg	—	5	2	515	11 793	461	998	9 351	21 610	10 798	32 163	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAGadahoc County, ME													
31-33	Manufacturing	-	29	7	i	D	D	D	D	D	D	D	5 609
336	Transportation equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	1	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	1	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	1	1	i	D	D	D	D	D	D	D	D
SOMERSET County, ME													
31-33	Manufacturing	-	76	20	4 441	143 680	3 543	7 247	98 972	522 618	729 875	1 239 890	47 597
316	Leather & allied product mfg .	-	8	5	g	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	2	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	2	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	2	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	5	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	5	4	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	24	7	1 047	19 442	921	1 615	14 963	41 423	54 657	98 012	8 631
3219	Other wood product mfg ...	1	19	5	887	14 744	784	1 315	11 402	32 031	35 715	69 363	1 775
32199	All other wood product mfg	-	10	3	528	9 674	474	911	7 189	21 043	22 280	44 945	1 174
321999	All other miscellaneous wood product mfg ...	-	10	3	528	9 674	474	911	7 189	21 043	22 280	44 945	1 174
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
WALDO County, ME													
31-33	Manufacturing	1	53	12	1 180	24 836	1 001	1 664	17 318	57 925	61 937	117 793	3 888
WASHINGTON County, ME													
31-33	Manufacturing	-	41	16	1 676	52 619	1 284	2 457	38 843	102 799	262 251	364 817	21 062
311	Food mfg	1	15	8	509	6 555	344	547	4 686	25 492	40 572	65 968	948
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	f	D	D	D	D	D	D	D	D
YORK County, ME													
31-33	Manufacturing	-	258	78	11 649	360 235	8 594	17 171	220 303	632 270	1 482 325	2 093 523	82 951
313	Textile mills	-	10	7	945	26 395	826	1 793	20 272	54 967	81 768	133 833	10 474
3132	Fabric mills	-	7	5	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	5	3	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	19	4	845	20 657	753	1 450	17 852	49 842	52 297	102 269	3 089
3231	Printing & related support activities	-	19	4	845	20 657	753	1 450	17 852	49 842	52 297	102 269	3 089
32311	Printing	-	18	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	10	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	8	920	29 354	693	1 260	18 129	63 278	89 395	152 122	14 693
3261	Plastics product mfg	-	8	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	55	16	1 153	36 742	756	1 261	18 985	92 105	53 164	146 615	4 583
333	Machinery mfg	-	16	6	630	20 125	348	915	12 366	48 290	36 761	84 217	1 711

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YORK COUNTY, ME— Con. Manufacturing— Con.												
334	Computer & electronic product mfg	-	12	8	g	D	D	D	D	D	D	D	18 007
3344	Semiconductor & other electronic component mfg	-	6	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	4	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	2	2	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	3	3	3	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	3	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	20	2	661	20 657	390	698	11 326	49 946	33 718	83 369	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUBURN, ME Manufacturing	2	51	21	3 730	112 665	2 516	5 133	70 351	441 155	263 877	703 787	18 260
311	Food mfg	-	6	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	4	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	4	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	9	6	4	954	30 734	648	1 407	20 857	96 051	86 205	179 952	D
3261	Plastics product mfg	9	3	3	f	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	9	1	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	9	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AUGUSTA, ME													
31-33	Manufacturing	2	24	9	1 303	38 453	997	1 938	22 822	76 394	178 470	280 197	D
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
BANGOR, ME													
31-33	Manufacturing	-	46	12	g	D	D	D	D	D	D	D	15 433
BATH, ME													
31-33	Manufacturing	-	7	4	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	1	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	1	1	i	D	D	D	D	D	D	D	D
BELFAST, ME													
31-33	Manufacturing	2	20	6	745	12 997	664	996	9 580	29 425	32 107	60 033	1 801
BIDDEFORD, ME													
31-33	Manufacturing	-	54	18	1 990	58 478	1 500	3 096	38 419	153 791	143 781	295 578	14 814
313	Textile mills	-	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
BREWER, ME													
31-33	Manufacturing	5	9	4	f	D	D	D	D	D	D	D	D
BRUNSWICK TOWN, ME													
31-33	Manufacturing	1	21	5	946	18 695	744	1 421	12 218	72 496	59 716	132 455	4 064
GORHAM TOWN, ME													
31-33	Manufacturing	3	22	9	f	D	D	D	D	D	D	D	1 614
LEWISTON, ME													
31-33	Manufacturing	1	79	28	h	D	D	D	D	D	D	D	11 354
316	Leather & allied product mfg .	-	6	4	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	6	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	6	4	f	D	D	D	D	D	D	D	D
OLD TOWN, ME													
31-33	Manufacturing	-	10	5	g	D	D	D	D	D	D	D	18 475
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PORTLAND, ME													
31-33	Manufacturing	2	119	28	3 905	107 040	2 729	5 564	69 475	319 168	308 699	624 864	31 116
311	Food mfg.....	1	24	10	1 901	52 751	1 428	2 950	37 196	204 578	225 771	427 673	24 206
3116	Meat product mfg.....	3	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	3	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	32	4	500	12 223	361	613	8 276	22 119	19 899	42 060	1 125
3231	Printing & related support activities.....	-	32	4	500	12 223	361	613	8 276	22 119	19 899	42 060	1 125
333	Machinery mfg.....	-	6	2	f	D	D	D	D	D	D	D	1 809
3339	Other general-purpose machinery mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
ROCKLAND, ME													
31-33	Manufacturing	5	24	10	770	24 246	497	902	11 616	92 626	84 746	178 362	D
SACO, ME													
31-33	Manufacturing	-	19	12	1 739	56 652	1 328	2 073	27 276	146 675	204 476	351 480	16 987
334	Computer & electronic product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
SANFORD TOWN, ME													
31-33	Manufacturing	1	42	20	2 183	62 277	1 597	3 070	35 078	129 092	144 338	272 270	17 017
334	Computer & electronic product mfg.....	2	4	3	f	D	D	D	D	D	D	D	D
SCARBOROUGH TOWN, ME													
31-33	Manufacturing	2	40	10	854	23 701	559	995	12 743	59 737	41 844	100 915	4 741
SOUTH PORTLAND, ME													
31-33	Manufacturing	-	35	9	g	D	D	D	D	D	D	D	1 211
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	1	1	g	D	D	D	D	D	D	D	D
WATERVILLE, ME													
31-33	Manufacturing	-	19	4	1 223	39 307	1 001	2 279	30 621	103 350	49 056	150 654	D
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg....	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	WESTBROOK, ME												
31-33	Manufacturing	-	31	12	3 865	150 240	2 686	6 204	81 649	351 118	360 537	697 310	25 060
316	Leather & allied product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	4	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg .	-	3	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MAINE		MAINE—Con.	
Companies ¹	1 720	Quantity of electricity purchased for heat and power	1,000 kWh.. 4 513 227
All establishments	1 812	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 2 887 974
Establishments with 1 to 19 employees	1 299	Total value of shipments	\$1,000.. 14 097 609
Establishments with 20 to 99 employees	350	Value of resales	\$1,000.. 708 448
Establishments with 100 employees or more	163	Value added	\$1,000.. 6 530 588
All employees	82 288	Total inventories, beginning of year	\$1,000.. 1 776 761
Total compensation ²	3 233 428	Finished goods inventories, beginning of year	\$1,000.. 673 584
Annual payroll	2 591 070	Work-in-process inventories, beginning of year	\$1,000.. 482 977
Total fringe benefits	642 358	Materials and supplies inventories, beginning of year	\$1,000.. 620 200
Production workers, average for year	62 647	Total inventories, end of year	\$1,000.. 1 768 640
Production workers on March 12	61 979	Finished goods inventories, end of year	\$1,000.. 742 030
Production workers on May 12	62 609	Work-in-process inventories, end of year	\$1,000.. 400 846
Production workers on August 12	63 571	Materials and supplies inventories, end of year	\$1,000.. 625 764
Production workers on November 12	62 429	Gross book value of total assets at beginning of year	\$1,000.. 9 145 952
Production-worker hours	121 734	Total capital expenditures (new and used)	\$1,000.. 594 298
Production-worker wages	1 746 004	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 77 810
Total cost of materials	7 593 130	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 516 488
Cost of materials, parts, containers, etc., consumed	5 971 855	Total retirements ²	\$1,000.. 302 381
Cost of resales	579 222	Gross book value of total assets at end of year	\$1,000.. 9 437 869
Cost of fuels	275 164	Total depreciation during year ²	\$1,000.. 499 375
Cost of purchased electricity	306 976	Total rental payments ²	\$1,000.. 104 173
Cost of contract work	459 913	Buildings and other structures rental payments ²	\$1,000.. 47 723
		Machinery and equipment rental payments ²	\$1,000.. 56 450

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MAINE

There are no geographic notes for the state of Maine.

Appendix E. Metropolitan Areas

MAINE

Bangor, ME MSA

Penobscot County, ME (Part)

Bangor city, ME

Brewer city, ME

Old Town city, ME

Orono town, ME

Waldo County, ME (Part)

Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA

Boston, MA—NH PMSA

Bristol County, MA (Part)

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (Part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Gloucester city, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Marblehead town, MA

Newburyport city, MA

Peabody city, MA

Salem city, MA

Saugus town, MA

Swampscott town, MA

Middlesex County, MA (Part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA—Con.

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Bedford town, MA

Belmont town, MA

Burlington town, MA

Cambridge city, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Somerville city, MA

Stoneham town, MA

Sudbury town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Winchester town, MA

Woburn city, MA

Norfolk County, MA (Part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Dedham town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Plymouth County, MA (Part)—Con.

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

Suffolk County, MA (Part)

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (Part)

Harvard town, MA

Milford town, MA

Rockingham County, NH (Part)

Brockton, MA PMSA

Bristol County, MA (Part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (Part)

Plymouth County, MA (Part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Middleborough town, MA

Whitman town, MA

Fitchburg—Leominster, MA PMSA

Middlesex County, MA (Part)

Worcester County, MA (Part)

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Lawrence, MA—NH PMSA

Essex County, MA (Part)

Andover town, MA

Haverhill city, MA

Lawrence city, MA

Methuen city, MA

North Andover town, MA

Rockingham County, NH (Part)

Derry town, NH

Salem town, NH

Lowell, MA—NH PMSA

Middlesex County, MA (Part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Westford town, MA

Hillsborough County, NH (Part)

Pelham town, NH

Manchester, NH PMSA

Hillsborough County, NH (Part)

Bedford town, NH

Goffstown town, NH

Manchester city, NH

Merrimack County, NH (Part)

Rockingham County, NH (Part)

Londonderry town, NH

Nashua, NH PMSA

Hillsborough County, NH (Part)

Hudson town, NH

Merrimack town, NH

Milford town, NH

Nashua city, NH

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

New Bedford, MA PMSA

Bristol County, MA (Part)

Dartmouth town, MA

Fairhaven town, MA

New Bedford city, MA

Plymouth County, MA (Part)

Portsmouth—Rochester, NH—ME PMSA

York County, ME (Part)

York town, ME

Rockingham County, NH (Part)

Exeter town, NH

Hampton town, NH

Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH

Durham town, NH

Rochester city, NH

Somersworth city, NH

Worcester, MA—CT PMSA

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Worcester, MA—CT PMSA—Con.

Worcester County, MA (Part)—Con.

Webster town, MA

Westborough town, MA

Worcester city, MA

Lewiston—Auburn, ME MSA

Androscoggin County, ME

Auburn city, ME

Lewiston city, ME

Portland, ME MSA

Cumberland County, ME (Part)

Gorham town, ME

Portland city, ME

Scarborough town, ME

South Portland city, ME

Portland, ME MSA—Con.

Cumberland County, ME (Part)—Con.

Westbrook city, ME

Windham town, ME

York County, ME (Part)

Portsmouth—Rochester, NH—ME PMSA

York County, ME (Part)

York town, ME

Rockingham County, NH (Part)

Exeter town, NH

Hampton town, NH

Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH

Durham town, NH

Rochester city, NH

Somersworth city, NH

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MICHIGAN													
31-33	Manufacturing	-	16 045	5 753	833 429	34 418 934	630 390	1 305 619	23 485 989	93 809 468	121 029 520	214 900 655	9 240 449
311	Food mfg.....	1	863	237	35 477	1 041 202	26 450	52 814	715 534	5 349 329	5 270 348	10 624 169	265 966
3111	Animal food mfg.....	1	25	4	386	9 175	269	373	6 023	40 636	108 227	148 734	2 256
31111	Animal food mfg.....	1	25	4	386	9 175	269	373	6 023	40 636	108 227	148 734	2 256
311111	Dog & cat food mfg...	1	3	1	155	3 728	138	138	2 903	14 598	18 207	32 858	1 012
311119	Other animal food mfg.....	1	22	3	231	5 447	131	235	3 120	26 038	90 020	115 876	1 244
3112	Grain & oilseed milling...	-	19	12	3 321	180 565	2 784	5 299	145 231	1 206 802	608 852	1 824 542	45 149
31121	Flour milling & malt mfg...	1	12	8	f	D	D	D	D	D	D	D	D
311211	Flour milling.....	-	11	8	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	-	4	4	2 581	156 431	2 240	4 285	130 625	1 147 441	364 636	1 517 679	37 228
311230	Breakfast cereal mfg..	-	4	4	2 581	156 431	2 240	4 285	130 625	1 147 441	364 636	1 517 679	37 228
3113	Sugar & confectionery product mfg.....	3	68	12	2 609	77 105	2 027	3 765	55 785	370 972	278 329	648 730	23 765
31131	Sugar mfg.....	6	5	5	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	6	5	5	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	3	34	4	490	9 289	290	419	3 935	24 715	16 531	41 110	1 138
311330	Confectionery mfg from purchased chocolate.....	3	34	4	490	9 289	290	419	3 935	24 715	16 531	41 110	1 138
31134	Nonchocolate confectionery mfg.....	-	23	2	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	-	23	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	68	39	5 701	135 272	4 873	9 477	101 038	686 936	618 982	1 308 219	46 259
31141	Frozen food mfg.....	-	22	15	1 329	30 538	1 108	2 021	20 310	131 806	121 266	253 437	4 930
311411	Frozen fruit, juice, & vegetable mfg.....	-	12	11	844	18 295	681	1 323	11 941	94 086	82 814	177 224	3 381
311412	Frozen specialty food mfg.....	-	10	4	485	12 243	427	698	8 369	37 720	38 452	76 213	1 549
31142	Fruit & vegetable canning, pickling, & drying.....	1	46	24	4 372	104 734	3 765	7 456	80 728	555 130	497 716	1 054 782	41 329
311421	Fruit & vegetable canning.....	2	37	20	3 452	74 443	2 977	5 756	56 771	302 907	352 023	655 510	35 899
311422	Specialty canning.....	-	6	2	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	3	2	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	1	57	38	4 715	145 048	3 024	6 394	92 128	1 047 920	1 256 765	2 304 126	50 031
31151	Dairy product (except frozen) mfg.....	1	41	29	4 092	132 770	2 693	5 825	84 980	1 007 768	1 189 987	2 197 481	46 539
311511	Fluid milk mfg.....	2	22	16	2 536	79 142	1 514	3 400	48 587	324 934	676 261	999 575	D
311513	Cheese mfg.....	-	9	4	399	12 160	267	526	7 545	64 590	121 965	186 163	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	10	9	1 157	41 468	912	1 899	28 848	618 244	391 761	1 011 743	23 442
31152	Ice cream & frozen dessert mfg.....	2	16	9	623	12 278	331	569	7 148	40 152	66 778	106 645	3 492
311520	Ice cream & frozen dessert mfg.....	2	16	9	623	12 278	331	569	7 148	40 152	66 778	106 645	3 492
3116	Meat product mfg.....	-	88	38	7 659	202 373	6 044	14 127	147 402	882 195	1 588 660	2 466 619	37 236
31161	Animal slaughtering & processing.....	-	88	38	7 659	202 373	6 044	14 127	147 402	882 195	1 588 660	2 466 619	37 236
311611	Animal (except poultry) slaughtering.....	-	42	13	2 725	64 289	2 372	5 013	52 967	368 825	899 149	1 265 669	13 610
311612	Meat processed from carcasses.....	1	36	17	g	D	D	D	D	D	D	D	D
311613	Rendering & meat byproduct processing.....	-	4	3	c	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	6	5	3 272	92 478	2 689	7 007	72 963	388 436	438 203	823 666	16 893
3118	Bakeries & tortilla mfg....	1	451	63	8 626	225 422	5 625	10 081	133 382	856 713	493 913	1 349 169	40 692
31181	Bread & bakery product mfg.....	2	420	53	6 790	164 335	4 268	7 452	92 800	590 386	287 800	876 625	29 830
311811	Retail bakeries.....	4	332	16	1 913	24 054	1 250	1 535	13 254	53 151	31 364	84 030	D
311812	Commercial bakeries..	2	81	32	3 995	113 244	2 214	4 271	55 361	383 210	151 786	534 840	13 501
311813	Frozen cakes, pies, & other pastries mfg...	-	7	5	882	27 037	804	1 646	24 185	154 025	104 650	257 755	D
31182	Cookie, cracker, & pasta mfg.....	1	28	10	1 815	60 848	1 340	2 607	40 413	265 779	205 529	471 401	10 819
311821	Cookie & cracker mfg..	-	8	2	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	6	12	6	620	21 563	327	708	8 539	46 124	73 203	119 210	2 811
311823	Dry pasta mfg.....	-	8	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	81	31	2 435	65 597	1 785	3 258	34 130	255 647	313 422	569 330	20 509
31191	Snack food mfg	—	16	8	922	30 452	655	1 278	15 339	127 978	134 607	263 116	5 428
311911	Roasted nuts & peanut butter mfg	1	5	2	131	4 393	44	84	838	13 596	15 157	29 245	409
311919	Other snack food mfg	—	11	6	791	26 059	611	1 194	14 501	114 382	119 450	233 871	5 019
31194	Seasoning & dressing mfg	3	18	6	303	8 324	228	411	4 764	33 351	41 217	74 663	2 171
311941	Mayonnaise, dressing, & other prepared sauce mfg	3	11	3	190	4 338	155	272	2 877	20 461	30 185	50 757	1 484
311942	Spice & extract mfg	2	7	3	113	3 986	73	139	1 887	12 890	11 032	23 906	687
31199	All other food mfg	4	39	16	1 140	24 857	875	1 518	13 440	85 911	116 904	202 708	12 693
311991	Perishable prepared food mfg	5	11	5	428	7 221	334	586	3 750	17 375	21 698	38 859	1 090
311999	All other miscellaneous food mfg	3	28	11	712	17 636	541	932	9 690	68 536	95 206	163 849	11 603
312	Beverage & tobacco product mfg	1	62	21	3 147	117 784	1 740	3 560	60 055	610 272	928 195	1 533 332	46 776
3121	Beverage mfg	1	62	21	3 147	117 784	1 740	3 560	60 055	610 272	928 195	1 533 332	46 776
31211	Soft drink & ice mfg	1	39	15	2 451	97 726	1 220	2 626	46 167	431 164	776 370	1 203 042	39 928
312111	Soft drink mfg	1	19	13	2 282	93 798	1 122	2 431	43 817	420 758	766 966	1 183 353	38 787
312113	Ice mfg	1	15	2	126	2 934	77	158	1 885	6 811	3 592	10 276	838
31212	Breweries	9	16	4	e	D	D	D	D	D	D	D	D
312120	Breweries	9	16	4	e	D	D	D	D	D	D	D	D
31214	Distilleries	—	1	1	e	D	D	D	D	D	D	D	D
312140	Distilleries	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	4	43	7	542	14 239	452	860	9 982	38 169	60 861	98 935	3 692
3132	Fabric mills	7	23	3	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	7	15	3	233	6 208	212	395	4 920	14 743	19 847	34 596	1 595
313210	Broadwoven fabric mills	7	15	3	233	6 208	212	395	4 920	14 743	19 847	34 596	1 595
3133	Textile & fabric finishing & fabric coating mills	1	19	4	256	6 922	206	399	4 401	20 771	37 584	58 326	1 905
31331	Textile & fabric finishing mills	2	11	2	129	3 355	105	209	2 228	10 252	14 780	25 005	727
313311	Broadwoven fabric finishing mills	2	11	2	129	3 355	105	209	2 228	10 252	14 780	25 005	727
31332	Fabric coating mills	1	8	2	127	3 567	101	190	2 173	10 519	22 804	33 321	1 178
313320	Fabric coating mills	1	8	2	127	3 567	101	190	2 173	10 519	22 804	33 321	1 178
314	Textile product mills	1	205	27	2 519	54 242	2 034	3 783	33 449	100 725	136 363	236 886	6 427
3141	Textile furnishings mills	3	77	2	406	7 241	342	552	4 397	12 156	13 151	25 492	461
31411	Carpet & rug mills	—	5	1	100	3 006	88	168	1 684	3 846	5 139	9 199	133
314110	Carpet & rug mills	—	5	1	100	3 006	88	168	1 684	3 846	5 139	9 199	133
31412	Curtain & linen mills	4	72	1	306	4 235	254	384	2 713	8 310	8 012	16 293	328
314121	Curtain & drapery mills	5	66	—	228	3 210	187	276	1 942	6 088	5 870	11 910	210
3149	Other textile product mills	1	128	25	2 113	47 001	1 692	3 231	29 052	88 569	123 212	211 394	5 966
31491	Textile bag & canvas mills	1	68	10	672	14 721	555	967	8 711	29 765	30 220	60 082	951
314911	Textile bag mills	1	5	3	135	2 693	116	210	1 690	5 009	5 644	10 601	188
314912	Canvas & related product mills	1	63	7	537	12 028	439	757	7 021	24 756	24 576	49 481	763
31499	All other textile product mills	1	60	15	1 441	32 280	1 137	2 264	20 341	58 804	92 992	151 312	5 015
314991	Rope, cordage, & twine mills	4	5	3	111	2 591	79	140	1 299	5 390	4 336	9 303	200
314999	All other miscellaneous textile product mills	—	55	12	1 330	29 689	1 058	2 124	19 042	53 414	88 656	142 009	4 815
315	Apparel mfg	3	118	17	1 573	30 052	1 268	2 445	19 417	89 506	128 277	220 195	17 123
3151	Apparel knitting mills	9	4	2	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	69	10	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	36	2	c	D	D	D	D	D	D	D	290
315212	Women's, girls', & infants' cut & sew apparel contractors	6	31	2	172	2 035	149	267	1 663	3 250	1 228	4 464	247
31522	Men's & boys' cut & sew apparel mfg	—	13	5	325	5 961	256	479	3 665	21 703	61 217	84 651	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	5	2	c	D	D	D	D	D	D	D	51
31523	Women's & girls' cut & sew apparel mfg	2	13	2	160	3 178	123	256	2 134	4 545	5 249	9 623	D
31529	Other cut & sew apparel mfg	—	7	1	111	1 673	86	143	1 030	5 899	3 838	9 762	24

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	6	45	5	657	15 066	523	1 111	9 225	49 799	53 566	104 211	D
31599	Apparel accessories & other apparel mfg	6	45	5	657	15 066	523	1 111	9 225	49 799	53 566	104 211	D
315999	Other apparel accessories & other apparel mfg	6	44	5	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	26	13	3 133	77 304	2 727	5 445	60 183	212 511	442 330	655 941	11 330
3161	Leather & hide tanning & finishing	—	9	6	1 893	56 130	1 622	3 481	43 445	141 524	348 940	491 203	9 189
31611	Leather & hide tanning & finishing	—	9	6	1 893	56 130	1 622	3 481	43 445	141 524	348 940	491 203	9 189
316110	Leather & hide tanning & finishing	—	9	6	1 893	56 130	1 622	3 481	43 445	141 524	348 940	491 203	9 189
3162	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	—	3	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	7	14	5	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	7	14	5	f	D	D	D	D	D	D	D	D
316991	Luggage mfg	1	7	3	c	D	D	D	D	D	D	D	251
316999	All other leather good mfg	8	7	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	627	172	13 729	361 385	11 118	21 510	246 828	832 427	1 206 916	2 033 688	82 597
3211	Sawmills & wood preservation	3	167	37	2 372	57 629	2 010	3 894	43 246	141 899	241 749	380 733	18 929
32111	Sawmills & wood preservation	3	167	37	2 372	57 629	2 010	3 894	43 246	141 899	241 749	380 733	18 929
321113	Sawmills	3	156	34	2 182	52 978	1 866	3 624	40 294	125 278	187 171	311 752	17 565
321114	Wood preservation	1	11	3	190	4 651	144	270	2 952	16 621	54 578	68 981	1 364
3212	Veneer, plywood, & engineered wood product mfg	1	66	41	4 086	126 714	3 257	6 518	82 118	304 642	387 764	690 101	37 358
32121	Veneer, plywood, & engineered wood product mfg	1	66	41	4 086	126 714	3 257	6 518	82 118	304 642	387 764	690 101	37 358
321211	Hardwood veneer & plywood mfg	—	14	10	1 117	30 835	976	2 043	22 148	60 145	91 601	153 168	D
321214	Truss mfg	2	32	19	1 598	45 799	1 171	2 185	24 184	106 405	106 925	211 046	5 029
321219	Reconstituted wood product mfg	—	17	11	1 323	49 183	1 067	2 192	35 092	136 988	186 056	322 030	27 363
3219	Other wood product mfg	2	394	94	7 271	177 042	5 851	11 098	121 464	385 886	577 403	962 854	26 310
32191	Millwork	2	135	34	2 766	70 320	2 234	4 408	49 626	165 972	293 826	457 281	14 285
321911	Wood window & door mfg	1	41	13	891	24 887	699	1 399	17 785	55 314	95 615	150 675	2 551
321912	Cut stock, resawing lumber, & planing	3	47	12	1 017	24 916	832	1 589	17 351	61 634	141 761	201 546	7 493
321918	Other millwork (including flooring)	2	47	9	858	20 517	703	1 420	14 490	49 024	56 450	105 060	4 241
32192	Wood container & pallet mfg	2	144	33	2 069	41 452	1 709	3 170	28 660	82 761	99 052	182 183	6 819
321920	Wood container & pallet mfg	2	144	33	2 069	41 452	1 709	3 170	28 660	82 761	99 052	182 183	6 819
32199	All other wood product mfg	1	115	27	2 436	65 270	1 908	3 520	43 178	137 153	184 525	323 390	5 206
321991	Manufactured home (mobile home) mfg	—	4	2	f	D	D	D	D	D	D	D	193
321992	Prefabricated wood building mfg	2	25	13	858	24 498	593	1 204	13 070	64 795	66 417	131 728	1 992
321999	All other miscellaneous wood product mfg	1	86	12	g	D	D	D	D	D	D	D	3 021
322	Paper mfg	—	224	161	19 660	799 099	14 769	31 977	534 177	2 262 681	2 577 299	4 878 245	209 489
3221	Pulp, paper, & paperboard mills	—	33	33	8 838	443 155	6 743	15 543	313 069	1 368 536	1 446 448	2 859 336	129 790
32211	Pulp mills	—	2	2	c	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	c	D	D	D	D	D	D	D	D
32212	Paper mills	—	19	19	6 179	318 687	4 712	10 671	220 113	984 785	1 048 930	2 073 533	87 741
322121	Paper (except newsprint) mills	—	18	18	i	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	12	12	h	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	12	12	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MICHIGAN—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	1	191	128	10 822	355 944	8 026	16 434	221 108	894 145	1 130 851	2 018 909	79 699
32221	Paperboard container mfg	1	108	85	7 289	242 981	5 423	11 198	148 911	549 972	758 291	1 306 289	57 206
322211	Corrugated & solid fiber box mfg	1	73	62	5 264	177 690	3 816	7 776	104 246	393 845	550 755	944 682	44 570
322212	Folding paperboard box mfg	1	16	12	973	36 195	780	1 945	25 948	87 458	117 158	207 053	7 594
322213	Setup paperboard box mfg	5	6	2	100	3 052	74	141	1 508	6 141	3 998	10 128	110
322214	Fiber can, tube, drum, & similar products mfg	1	9	5	197	6 429	159	295	4 385	13 570	14 672	28 105	515
322215	Nonfolding sanitary food container mfg ..	—	4	4	755	19 615	594	1 041	12 824	48 958	71 708	116 321	4 417
32222	Paper bag & coated & treated paper mfg	3	21	13	1 412	50 202	1 012	2 157	32 225	140 102	171 005	309 686	7 908
322221	Coated & laminated packaging paper & plastics film mfg	1	6	4	404	11 880	306	653	8 061	39 697	65 471	103 818	2 126
322222	Coated & laminated paper mfg	7	9	5	574	21 957	371	786	12 490	68 721	60 594	130 319	3 692
322223	Plastics, foil, & coated paper bag mfg	—	1	1	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	1	c	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	—	2	2	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	2	29	9	859	25 885	640	1 169	15 471	84 925	65 871	148 965	2 073
322231	Die-cut paper & paperboard office supplies mfg	3	12	1	c	D	D	D	D	D	D	D	184
322232	Envelope mfg	3	11	6	422	13 928	307	610	7 758	27 913	30 235	57 598	1 539
322233	Stationery, tablet, & related product mfg ..	—	6	2	e	D	D	D	D	D	D	D	350
32229	Other converted paper product mfg	4	33	21	1 262	36 876	951	1 910	24 501	119 146	135 684	253 969	12 512
322291	Sanitary paper product mfg	9	6	2	177	5 271	146	210	3 741	20 154	40 001	57 999	D
322299	All other converted paper product mfg ...	3	27	19	1 085	31 605	805	1 700	20 760	98 992	95 683	195 970	D
323	Printing & related support activities	1	1 488	261	25 334	789 455	18 112	34 343	474 718	1 818 743	1 187 265	3 002 537	123 789
3231	Printing & related support activities	1	1 488	261	25 334	789 455	18 112	34 343	474 718	1 818 743	1 187 265	3 002 537	123 789
32311	Printing	1	1 321	231	23 168	711 696	16 505	31 210	426 244	1 654 681	1 148 120	2 799 539	112 698
323110	Commercial lithographic printing ..	1	660	131	12 484	399 969	8 916	17 495	242 903	973 409	694 537	1 665 119	68 370
323111	Commercial gravure printing	2	14	2	185	7 260	127	230	3 831	15 352	15 725	31 865	911
323112	Commercial flexographic printing ..	1	26	12	831	31 879	504	1 004	15 634	67 711	48 225	115 879	6 509
323113	Commercial screen printing	4	141	11	1 758	45 472	1 113	2 121	22 595	92 934	66 642	158 577	6 601
323114	Quick printing	3	285	15	1 755	41 203	1 227	1 907	25 273	82 966	44 346	127 334	5 460
323115	Digital printing	1	10	2	113	2 763	68	118	1 333	6 829	4 676	11 511	215
323116	Manifold business form printing	2	38	21	1 472	43 850	1 001	1 684	24 061	115 565	79 143	195 161	3 659
323117	Book printing	—	26	18	2 938	91 547	2 349	4 454	62 108	170 625	128 212	297 258	14 679
323118	Blankbook, looseleaf binder, & device mfg ..	2	11	7	601	20 249	433	786	11 684	69 198	31 813	101 543	2 538
323119	Other commercial printing	6	110	12	1 031	27 504	767	1 411	16 822	60 092	34 801	95 292	3 756
32312	Support activities for printing	1	167	30	2 166	77 759	1 607	3 133	48 474	164 062	39 145	202 998	11 091
323121	Tradebinding & related work	—	27	6	504	11 630	424	830	8 704	22 973	5 515	28 251	2 477
323122	Prepress services	1	140	24	1 662	66 129	1 183	2 303	39 770	141 089	33 630	174 747	8 614
324	Petroleum & coal products mfg	1	68	19	1 785	84 821	986	1 973	38 853	317 557	916 432	1 235 369	26 663
3241	Petroleum & coal products mfg	1	68	19	1 785	84 821	986	1 973	38 853	317 557	916 432	1 235 369	26 663
32411	Petroleum refineries	—	2	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	1	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	33	6	e	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	—	31	4	e	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	4	33	12	1 138	51 096	539	982	18 172	145 446	236 917	383 860	13 467
324191	Petroleum lubricating oil & grease mfg	3	29	10	846	40 713	358	715	12 602	98 718	165 318	265 859	D
324199	All other petroleum & coal products mfg ...	8	4	2	292	10 383	181	267	5 570	46 728	71 599	118 001	D

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	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	-	436	179	33 228	1 587 471	17 887	34 429	715 863	5 970 935	5 475 167	11 477 092	918 530
3251	Basic chemical mfg	-	58	30	6 057	328 824	3 292	6 400	149 220	1 148 605	1 125 241	2 280 908	241 136
32512	Industrial gas mfg	-	12	3	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	-	12	3	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	5	4	587	26 201	328	825	15 183	108 875	158 062	268 609	8 751
325132	Synthetic organic dye & pigment mfg	-	3	3	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	1	15	6	577	28 928	384	652	16 452	119 643	47 112	160 137	21 515
325188	All other basic inorganic chemical mfg	1	14	6	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	25	16	4 636	264 945	2 452	4 639	113 806	865 665	879 111	1 757 190	204 472
325192	Cyclic crude & intermediate mfg	-	3	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	20	13	4 247	246 701	2 191	4 047	102 217	802 794	794 260	1 609 772	190 603
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	26	18	4 796	254 701	2 047	4 360	104 784	928 201	1 053 717	1 945 870	247 733
32521	Resin & synthetic rubber mfg	-	26	18	4 796	254 701	2 047	4 360	104 784	928 201	1 053 717	1 945 870	247 733
325211	Plastics material & resin mfg	-	21	17	h	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	5	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	2	22	6	407	10 975	311	527	7 578	37 371	45 856	84 261	1 825
32531	Fertilizer mfg	-	14	4	297	6 846	240	418	4 827	21 407	22 307	43 972	1 026
325314	Fertilizer (mixing only) mfg	-	13	4	297	6 804	240	418	4 827	21 407	22 307	43 972	D
32532	Pesticide & other agricultural chemical mfg	3	8	2	110	4 129	71	109	2 751	15 964	23 549	40 289	799
325320	Pesticide & other agricultural chemical mfg	3	8	2	110	4 129	71	109	2 751	15 964	23 549	40 289	799
3254	Pharmaceutical & medicine mfg	-	48	23	7 382	336 524	4 904	8 679	200 016	859 841	783 515	1 659 002	167 848
32541	Pharmaceutical & medicine mfg	-	48	23	7 382	336 524	4 904	8 679	200 016	859 841	783 515	1 659 002	167 848
325411	Medicinal & botanical mfg	-	6	3	505	29 965	261	502	13 282	78 784	82 742	157 992	12 852
325412	Pharmaceutical preparation mfg	-	19	8	5 967	277 110	4 197	7 357	174 579	630 561	622 240	1 267 931	D
325413	In-vitro diagnostic substance mfg	-	11	4	448	17 696	201	367	6 886	59 802	44 757	104 283	2 942
325414	Biological product (except diagnostic) mfg	-	12	8	462	11 753	245	453	5 269	90 694	33 776	128 796	D
3255	Paint, coating, & adhesive mfg	-	105	45	4 801	212 622	2 947	5 741	110 121	743 101	939 408	1 701 938	62 075
32551	Paint & coating mfg	-	73	31	3 261	150 973	2 030	3 890	79 700	546 088	667 764	1 232 501	27 328
325510	Paint & coating mfg	-	73	31	3 261	150 973	2 030	3 890	79 700	546 088	667 764	1 232 501	27 328
32552	Adhesive mfg	1	32	14	1 540	61 649	917	1 851	30 421	197 013	271 644	469 437	34 747
325520	Adhesive mfg	1	32	14	1 540	61 649	917	1 851	30 421	197 013	271 644	469 437	34 747
3256	Soap, cleaning compound, & toilet preparation mfg	-	73	17	6 465	303 081	2 669	5 159	85 796	1 757 722	1 043 326	2 820 215	167 087
32561	Soap & cleaning compound mfg	-	65	16	6 404	301 170	2 626	5 102	84 897	1 750 542	1 038 685	2 808 317	D
325611	Soap & other detergent mfg	-	43	10	6 114	291 551	2 452	4 726	79 878	1 713 118	1 009 077	2 740 106	D
325612	Polish & other sanitation good mfg	8	17	4	227	7 240	150	325	4 167	31 229	19 745	52 041	D
3259	Other chemical product mfg	2	104	40	3 320	140 744	1 717	3 563	58 348	496 094	484 104	984 898	30 826
32591	Printing ink mfg	1	9	3	c	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	9	3	c	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	92	36	3 140	133 944	1 625	3 390	55 086	474 151	454 426	933 856	29 895
325991	Custom compounding of purchased resin	1	42	13	1 029	38 912	575	1 129	15 410	138 162	181 692	319 977	8 912
325992	Photographic film, paper, plate, & chemical mfg	-	6	3	164	8 335	70	158	2 062	16 602	25 902	43 066	574
325998	All other miscellaneous chemical product & preparation mfg	2	44	20	1 947	86 697	980	2 103	37 614	319 387	246 832	570 813	20 409

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MICHIGAN—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	943	537	67 666	1 938 441	52 260	104 136	1 240 817	4 867 963	4 664 082	9 546 730	473 528
3261	Plastics product mfg	1	841	493	61 661	1 768 549	47 595	94 111	1 130 286	4 359 937	4 260 947	8 638 315	440 144
32611	Unsupported plastics film, sheet, & bag mfg ..	1	44	27	2 492	101 405	1 637	3 267	60 236	257 321	275 486	537 017	36 861
326111	Unsupported plastics bag mfg	1	6	4	476	25 188	345	742	18 531	48 578	53 459	102 474	6 461
326112	Unsupported plastics packaging film & sheet mfg	1	3	3	259	9 264	173	327	5 422	20 136	26 952	46 066	3 540
326113	Unsupported plastics film & sheet (except packaging) mfg	2	35	20	1 757	66 953	1 119	2 198	36 283	188 607	195 075	388 477	26 860
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	55	19	1 580	47 336	1 097	1 968	25 451	115 872	150 044	270 288	12 436
326121	Unsupported plastics profile shape mfg	2	41	15	1 211	38 439	846	1 502	19 574	86 184	102 874	191 780	5 935
326122	Plastics pipe & pipe fitting mfg	2	14	4	369	8 897	251	466	5 877	29 688	47 170	78 508	6 501
32613	Laminated plastics plate, sheet, & shape mfg	1	8	1	126	3 268	113	215	2 641	14 613	21 351	35 865	1 309
326130	Laminated plastics plate, sheet, & shape mfg	1	8	1	126	3 268	113	215	2 641	14 613	21 351	35 865	1 309
32614	Polystyrene foam product mfg	2	27	13	2 112	69 954	1 514	2 966	38 250	115 646	169 121	285 189	54 602
326140	Polystyrene foam product mfg	2	27	13	2 112	69 954	1 514	2 966	38 250	115 646	169 121	285 189	54 602
32615	Urethane & other foam product (except polystyrene) mfg	1	43	20	2 563	69 831	2 024	4 143	47 106	186 889	243 899	431 716	16 266
326150	Urethane & other foam product (except polystyrene) mfg	1	43	20	2 563	69 831	2 024	4 143	47 106	186 889	243 899	431 716	16 266
32616	Plastics bottle mfg	3	9	5	742	20 295	587	1 156	13 800	57 112	94 707	150 533	8 873
326160	Plastics bottle mfg	3	9	5	742	20 295	587	1 156	13 800	57 112	94 707	150 533	8 873
32619	Other plastics product mfg	1	655	408	52 046	1 456 460	40 623	80 396	942 802	3 612 484	3 306 339	6 927 707	309 797
326191	Plastics plumbing fixture mfg	-	17	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	637	400	51 277	1 434 776	40 000	79 335	928 015	3 538 064	3 262 104	6 808 137	305 356
3262	Rubber product mfg	-	102	44	6 005	169 892	4 665	10 025	110 531	508 026	403 135	908 415	33 384
32621	Tire mfg	3	22	2	193	4 187	167	336	3 396	8 309	11 065	19 662	365
326212	Tire retreading	3	21	2	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	1	8	4	1 258	35 226	906	2 126	22 604	93 404	63 772	157 088	8 279
326220	Rubber & plastics hoses & belting mfg ..	1	8	4	1 258	35 226	906	2 126	22 604	93 404	63 772	157 088	8 279
32629	Other rubber product mfg	-	72	38	4 554	130 479	3 592	7 563	84 531	406 313	328 298	731 665	24 740
326291	Rubber product mfg for mechanical use	-	37	25	3 466	96 619	2 773	5 901	64 224	277 904	267 782	543 055	22 043
326299	All other rubber product mfg	-	35	13	1 088	33 860	819	1 662	20 307	128 409	60 516	188 610	2 697
327	Nonmetallic mineral product mfg	1	569	177	18 012	715 003	13 175	27 845	466 475	2 118 551	1 693 434	3 821 310	213 272
3271	Clay product & refractory mfg	-	47	14	972	32 153	626	1 235	18 366	90 808	57 609	146 106	8 522
32711	Pottery, ceramics, & plumbing fixture mfg ..	-	28	6	418	12 313	254	517	5 935	30 338	17 708	46 281	1 510
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	22	3	c	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	1	5	2	135	6 217	74	141	2 283	8 647	8 080	16 803	463
32712	Clay building material & refractories mfg	-	19	8	554	19 840	372	718	12 431	60 470	39 901	99 825	7 012
327121	Brick & structural clay tile mfg	-	2	1	c	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	9	5	351	13 951	225	466	8 285	44 506	30 421	75 035	6 140
3272	Glass & glass product mfg ..	1	73	29	7 313	323 843	5 577	11 973	216 611	751 469	623 019	1 381 858	107 304
32721	Glass & glass product mfg	1	73	29	7 313	323 843	5 577	11 973	216 611	751 469	623 019	1 381 858	107 304
327211	Flat glass mfg	4	2	2	g	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	65	26	5 998	255 108	4 514	9 507	161 215	554 412	519 204	1 075 412	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MICHIGAN—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	1	346	94	6 238	242 164	4 292	8 869	151 013	839 495	668 245	1 505 166	69 951
32731	Cement mfg	—	18	5	857	40 326	651	1 450	29 052	305 483	191 087	496 078	24 824
327310	Cement mfg	—	18	5	857	40 326	651	1 450	29 052	305 483	191 087	496 078	24 824
32732	Ready-mix concrete mfg.	1	205	56	3 043	117 699	2 094	4 061	76 042	319 713	311 436	631 378	29 914
327320	Ready-mix concrete mfg	1	205	56	3 043	117 699	2 094	4 061	76 042	319 713	311 436	631 378	29 914
32733	Concrete pipe, brick, & block mfg	1	53	21	1 332	50 834	922	2 089	28 341	132 238	115 259	245 453	8 857
327331	Concrete block & brick mfg	2	41	10	641	25 995	373	772	11 498	57 269	62 315	119 027	6 045
327332	Concrete pipe mfg	—	12	11	691	24 839	549	1 317	16 843	74 969	52 944	126 426	2 812
32739	Other concrete product mfg	6	70	12	1 006	33 305	625	1 269	17 578	82 061	50 463	132 257	6 356
327390	Other concrete product mfg	6	70	12	1 006	33 305	625	1 269	17 578	82 061	50 463	132 257	6 356
3274	Lime & gypsum product mfg	—	9	6	512	21 521	410	1 025	16 257	114 742	93 402	207 075	7 602
32741	Lime mfg	—	3	2	102	4 025	78	174	2 975	18 502	16 821	35 348	D
327410	Lime mfg	—	3	2	102	4 025	78	174	2 975	18 502	16 821	35 348	D
32742	Gypsum product mfg	—	6	4	410	17 496	332	851	13 282	96 240	76 581	171 727	D
327420	Gypsum product mfg	—	6	4	410	17 496	332	851	13 282	96 240	76 581	171 727	D
3279	Other nonmetallic mineral product mfg	1	94	34	2 977	95 322	2 270	4 743	64 228	322 037	251 159	581 105	19 893
32791	Abrasive product mfg	2	41	21	1 169	40 409	844	1 758	24 844	123 471	100 794	228 445	7 118
327910	Abrasive product mfg	2	41	21	1 169	40 409	844	1 758	24 844	123 471	100 794	228 445	7 118
32799	All other nonmetallic mineral product mfg	—	53	13	1 808	54 913	1 426	2 985	39 384	198 566	150 365	352 660	12 775
327991	Cut stone & stone product mfg	1	16	2	141	3 954	74	152	2 132	11 877	7 176	18 506	873
327992	Ground or treated mineral & earth mfg	—	13	4	438	18 477	324	711	12 761	82 878	54 763	143 330	5 401
327993	Mineral wool mfg	—	7	4	993	25 171	850	1 749	19 887	85 385	72 318	156 973	4 952
327999	All other miscellaneous nonmetallic mineral product mfg	1	17	3	236	7 311	178	373	4 604	18 426	16 108	33 851	1 549
331	Primary metal mfg	—	331	214	37 692	1 560 419	29 721	64 887	1 163 871	4 016 267	4 978 750	8 984 003	362 244
3311	Iron & steel mills & ferroalloy mfg	—	16	12	8 208	479 778	6 332	15 307	365 791	1 260 122	2 039 919	3 298 567	135 178
33111	Iron & steel mills & ferroalloy mfg	—	16	12	8 208	479 778	6 332	15 307	365 791	1 260 122	2 039 919	3 298 567	135 178
331111	Iron & steel mills	—	14	11	i	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	2	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	35	25	3 209	112 183	2 559	5 154	81 564	307 202	619 653	927 070	19 374
33121	Iron & steel pipes & tubes mfg from purchased steel	—	13	13	1 690	54 833	1 331	2 663	37 378	117 202	195 774	311 303	5 983
331210	Iron & steel pipes & tubes mfg from purchased steel	—	13	13	1 690	54 833	1 331	2 663	37 378	117 202	195 774	311 303	5 983
33122	Rolling & drawing of purchased steel	—	22	12	1 519	57 350	1 228	2 491	44 186	190 000	423 879	615 767	13 391
331221	Cold-rolled steel shape mfg	—	17	7	789	35 522	579	1 253	26 596	115 606	349 094	465 416	9 763
331222	Steel wire drawing	—	5	5	730	21 828	649	1 238	17 590	74 394	74 785	150 351	3 628
3313	Alumina & aluminum production & processing	—	16	14	2 075	72 634	1 501	3 284	47 924	180 241	283 030	471 572	22 968
33131	Alumina & aluminum production & processing	—	16	14	2 075	72 634	1 501	3 284	47 924	180 241	283 030	471 572	22 968
331314	Secondary smelting & alloying of aluminum	—	5	4	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	10	9	1 446	51 381	1 068	2 193	31 636	99 703	137 026	236 108	16 873
3314	Nonferrous metal (except aluminum) production & processing	—	41	24	3 873	120 324	3 029	6 849	88 550	448 857	765 558	1 200 102	51 429
33141	Nonferrous metal (except aluminum) smelting & refining	—	8	5	1 973	55 255	1 536	3 616	43 366	255 691	263 462	510 578	36 289
331411	Primary smelting & refining of copper	—	3	3	g	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	5	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	8	7	1 086	34 776	896	2 007	26 337	115 065	325 078	436 240	7 420
331421	Copper rolling, drawing, & extruding	—	6	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing—Con.												
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	2	25	12	814	30 293	597	1 226	18 847	78 101	177 018	253 284	7 720
331491	Other nonferrous metal rolling, drawing, & extruding	3	11	7	443	16 484	313	640	9 879	48 575	93 630	139 015	4 525
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	14	5	371	13 809	284	586	8 968	29 526	83 388	114 269	3 195
3315	Foundries	—	223	139	20 327	775 500	16 300	34 293	580 042	1 819 845	1 270 590	3 086 692	133 295
33151	Ferrous metal foundries ..	—	101	63	11 743	504 322	9 842	21 269	399 260	1 190 333	700 485	1 885 260	69 332
331511	Iron foundries	—	56	39	8 760	407 992	7 333	16 282	326 897	945 515	579 521	1 523 526	46 937
331512	Steel investment foundries	—	18	10	1 629	57 868	1 391	2 834	46 035	160 648	69 581	224 996	6 961
331513	Steel foundries (except investment)	1	27	14	1 354	38 462	1 118	2 153	26 328	84 170	51 383	136 738	15 434
33152	Nonferrous metal foundries	—	122	76	8 584	271 178	6 458	13 024	180 782	629 512	570 105	1 201 432	63 963
331521	Aluminum die-casting foundries	—	31	20	2 725	83 895	1 949	3 876	52 504	191 232	160 278	350 928	22 533
331522	Nonferrous (except aluminum) die-casting foundries	—	34	26	3 051	94 073	2 294	4 713	62 069	233 480	260 748	497 672	17 031
331524	Aluminum foundries (except die-casting) ..	—	36	22	1 872	63 418	1 495	3 079	44 301	141 400	118 528	260 683	21 543
331525	Copper foundries (except die-casting) ..	—	9	4	459	13 380	358	712	10 523	25 170	16 565	41 739	D
331528	Other nonferrous foundries (except die-casting)	—	12	4	477	16 412	362	644	11 385	38 230	13 986	50 410	D
332	Fabricated metal product mfg	1	3 788	1 272	104 367	3 563 712	79 659	162 994	2 305 242	7 816 637	5 923 647	13 725 285	676 899
3321	Forging & stamping	1	207	97	7 908	277 467	5 875	11 892	175 961	631 472	656 541	1 290 045	63 510
33211	Forging & stamping	1	207	97	7 908	277 467	5 875	11 892	175 961	631 472	656 541	1 290 045	63 510
332111	Iron & steel forging ...	—	39	21	2 027	88 303	1 433	3 083	56 063	248 167	297 705	544 876	28 504
332112	Nonferrous forging ...	1	10	7	494	19 207	401	891	14 693	47 441	48 453	95 556	6 059
332114	Custom roll forming ...	—	24	6	457	14 961	329	702	8 918	32 504	25 629	57 397	D
332116	Metal stamping	1	123	54	4 460	140 219	3 352	6 504	87 586	273 109	262 116	539 304	24 360
332117	Powder metallurgy part mfg	—	10	9	e	D	D	D	D	D	D	D	3 017
3322	Cutlery & handtool mfg	2	126	39	2 927	118 085	2 114	4 503	68 868	246 548	125 989	370 901	16 500
33221	Cutlery & handtool mfg ..	2	126	39	2 927	118 085	2 114	4 503	68 868	246 548	125 989	370 901	16 500
332212	Hand & edge tool mfg .	2	111	39	2 832	115 513	2 040	4 378	67 208	240 146	122 623	361 153	15 971
3323	Architectural & structural metals mfg	1	448	140	11 091	373 688	8 150	16 941	230 630	834 263	734 888	1 569 957	39 501
33231	Plate work & fabricated structural product mfg ..	1	187	64	4 563	151 947	3 313	6 934	95 741	355 100	336 134	695 945	15 998
332311	Prefabricated metal building & component mfg	2	16	6	298	9 525	190	402	5 271	18 827	16 391	34 884	535
332312	Fabricated structural metal mfg	2	117	35	2 797	93 270	1 984	4 045	57 514	223 788	226 539	454 721	9 849
332313	Plate work mfg	—	54	23	1 468	49 152	1 139	2 487	32 956	112 485	93 204	206 340	5 614
33232	Ornamental & architectural metal products mfg	1	261	76	6 528	221 741	4 837	10 007	134 889	479 163	398 754	874 012	23 503
332321	Metal window & door mfg	1	48	22	1 636	50 485	1 158	2 474	28 199	108 666	155 564	264 632	3 218
332322	Sheet metal work mfg .	1	171	47	3 702	131 365	2 781	5 753	82 131	280 420	202 268	478 476	16 399
332323	Ornamental & architectural metal work mfg	—	42	7	1 190	39 891	898	1 780	24 559	90 077	40 922	130 904	3 886
3324	Boiler, tank, & shipping container mfg	2	53	18	1 499	44 804	1 142	2 260	28 563	94 802	81 090	173 906	4 400
33241	Power boiler & heat exchanger mfg	—	10	5	456	14 262	327	675	8 436	24 828	19 015	43 140	994
332410	Power boiler & heat exchanger mfg	—	10	5	456	14 262	327	675	8 436	24 828	19 015	43 140	994
33242	Metal tank (heavy gauge) mfg	1	11	6	353	11 593	268	556	7 735	30 022	18 735	48 553	875
332420	Metal tank (heavy gauge) mfg	1	11	6	353	11 593	268	556	7 735	30 022	18 735	48 553	875
33243	Metal can, box, & other metal container (light gauge) mfg	5	32	7	690	18 949	547	1 029	12 392	39 952	43 340	82 213	2 531
332439	Other metal container mfg	6	26	7	661	18 076	525	982	11 883	34 477	33 615	68 270	1 997
3325	Hardware mfg	—	73	39	5 326	210 605	4 190	8 686	144 466	462 353	462 852	924 215	33 404
33251	Hardware mfg	—	73	39	5 326	210 605	4 190	8 686	144 466	462 353	462 852	924 215	33 404
332510	Hardware mfg	—	73	39	5 326	210 605	4 190	8 686	144 466	462 353	462 852	924 215	33 404

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MICHIGAN—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	1	109	42	4 021	112 428	2 952	5 798	67 994	251 506	197 701	446 760	26 231
33261	Spring & wire product mfg	1	109	42	4 021	112 428	2 952	5 798	67 994	251 506	197 701	446 760	26 231
332611	Spring (heavy gauge) mfg	—	11	5	485	16 421	375	761	9 659	30 554	17 636	47 891	3 643
332612	Spring (light gauge) mfg	2	34	18	1 658	49 788	1 193	2 380	31 212	120 115	96 288	215 067	7 408
332618	Other fabricated wire product mfg	—	64	19	1 878	46 219	1 384	2 657	27 123	100 837	83 777	183 802	15 180
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	1 776	485	36 633	1 310 850	28 350	58 688	867 927	2 826 598	1 965 178	4 792 705	253 662
33271	Machine shops	1	1 375	272	20 441	731 684	15 827	31 785	485 872	1 424 235	835 347	2 261 661	113 061
332710	Machine shops	1	1 375	272	20 441	731 684	15 827	31 785	485 872	1 424 235	835 347	2 261 661	113 061
33272	Turned product & screw, nut, & bolt mfg	—	401	213	16 192	579 166	12 523	26 903	382 055	1 402 363	1 129 831	2 531 044	140 601
332721	Precision turned product mfg	—	278	144	10 276	363 377	8 160	17 698	241 223	792 666	505 409	1 298 701	85 722
332722	Bolt, nut, screw, rivet, & washer mfg	—	123	69	5 916	215 789	4 363	9 205	140 832	609 697	624 422	1 232 343	54 879
3328	Coating, engraving, heat treating, & allied activities.	1	530	232	16 360	490 927	12 733	25 766	317 248	1 117 258	500 015	1 612 495	159 049
33281	Coating, engraving, heat treating, & allied activities	1	530	232	16 360	490 927	12 733	25 766	317 248	1 117 258	500 015	1 612 495	159 049
332811	Metal heat treating	1	123	67	3 936	145 604	2 991	6 104	95 347	343 366	109 758	453 703	39 272
332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	1	155	75	5 097	139 100	3 984	7 783	88 996	332 209	170 295	498 094	86 099
332813	Electroplating, plating, polishing, anodizing, & coloring	—	252	90	7 327	206 223	5 758	11 879	132 905	441 683	219 962	660 698	33 678
3329	Other fabricated metal product mfg	—	466	180	18 602	624 858	14 153	28 460	403 585	1 351 837	1 199 393	2 544 301	80 642
33291	Metal valve mfg	—	84	47	6 851	224 821	5 087	10 398	134 609	492 657	551 101	1 040 839	31 915
332911	Industrial valve mfg	1	18	8	1 015	32 523	724	1 485	18 334	56 759	57 102	114 086	4 624
332912	Fluid power valve & hose fitting mfg	—	48	27	4 809	163 930	3 587	7 466	98 256	345 276	409 295	751 479	23 058
332913	Plumbing fixture fitting & trim mfg	—	6	4	505	13 393	392	662	7 982	57 124	54 389	112 413	D
332919	Other metal valve & pipe fitting mfg	3	12	8	522	14 975	384	785	10 037	33 498	30 405	62 861	D
33299	All other fabricated metal product mfg	—	382	133	11 751	400 037	9 066	18 062	268 976	859 180	648 292	1 503 462	48 727
332991	Ball & roller bearing mfg	—	9	6	1 294	54 228	998	2 013	39 277	139 014	79 661	218 380	D
332996	Fabricated pipe & pipe fitting mfg	—	74	35	2 628	73 640	2 027	3 710	48 018	165 929	152 549	318 596	7 336
332997	Industrial pattern mfg	—	70	26	1 365	64 195	1 131	2 439	48 424	107 926	35 969	144 588	8 128
332999	All other miscellaneous fabricated metal product mfg	—	217	64	6 378	205 669	4 841	9 797	131 873	439 053	377 389	812 230	20 039
333	Machinery mfg	—	2 849	1 145	106 393	4 896 158	71 610	154 963	2 795 466	9 580 475	8 556 568	18 100 390	666 126
3331	Agriculture, construction, & mining machinery mfg	1	75	23	2 109	66 742	1 481	2 942	38 661	172 932	222 627	397 184	9 577
33311	Agricultural implement mfg	2	34	9	967	34 317	676	1 408	18 850	77 148	82 806	158 579	5 502
333111	Farm machinery & equipment mfg	3	31	7	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	31	11	781	22 697	507	999	13 518	65 732	99 299	167 075	2 974
333120	Construction machinery mfg	—	31	11	781	22 697	507	999	13 518	65 732	99 299	167 075	2 974
33313	Mining & oil & gas field machinery mfg	—	10	3	361	9 728	298	535	6 293	30 052	40 522	71 530	1 101
333131	Mining machinery & equipment mfg	—	7	3	341	9 299	286	521	6 060	28 969	39 854	69 800	D
3332	Industrial machinery mfg	1	262	82	7 645	346 401	4 334	9 110	165 563	688 767	804 435	1 533 662	39 450
33321	Sawmill & woodworking machinery mfg	—	15	2	193	5 456	114	224	2 971	15 667	27 852	41 258	146
333210	Sawmill & woodworking machinery mfg	—	15	2	193	5 456	114	224	2 971	15 667	27 852	41 258	146
33322	Plastics & rubber industry machinery mfg	1	53	21	2 271	96 969	1 330	2 824	50 521	226 966	187 869	407 452	11 188
333220	Plastics & rubber industry machinery mfg	1	53	21	2 271	96 969	1 330	2 824	50 521	226 966	187 869	407 452	11 188

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg—Con.												
33329	Other industrial machinery mfg	-	194	59	5 181	243 976	2 890	6 062	112 071	446 134	588 714	1 084 952	28 116
333291	Paper industry machinery mfg	3	10	3	159	5 747	94	224	3 041	10 166	9 476	20 471	2 256
333293	Printing machinery & equipment mfg	-	13	7	497	20 105	280	566	9 202	36 197	36 113	72 534	1 136
333294	Food product machinery mfg	4	14	3	172	5 701	102	200	2 868	11 853	5 721	17 746	1 119
333298	All other industrial machinery mfg	-	150	45	4 250	207 913	2 345	4 909	94 084	380 849	527 722	956 600	23 246
3333	Commercial & service industry machinery mfg ..	-	71	24	2 945	101 526	1 895	3 555	46 775	325 346	242 326	566 046	18 108
33331	Commercial & service industry machinery mfg	-	71	24	2 945	101 526	1 895	3 555	46 775	325 346	242 326	566 046	18 108
333314	Optical instrument & lens mfg	-	9	4	292	12 885	173	313	5 224	31 576	21 119	52 667	D
333315	Photographic & photocopying equipment mfg	-	5	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	51	17	2 120	69 440	1 381	2 561	31 513	244 289	182 568	424 143	11 833
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	87	52	5 763	201 972	4 033	7 772	105 833	374 547	404 498	788 492	19 155
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	87	52	5 763	201 972	4 033	7 772	105 833	374 547	404 498	788 492	19 155
333411	Air purification equipment mfg	3	24	17	838	26 854	532	1 129	15 047	62 679	58 651	118 556	2 471
333412	Industrial & commercial fan & blower mfg	-	8	6	377	12 585	252	490	6 091	28 837	36 137	65 500	1 414
333414	Heating equipment (except warm air furnaces) mfg	-	21	5	607	17 718	323	625	8 190	51 062	34 440	85 880	699
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	34	24	3 941	144 815	2 926	5 528	76 505	231 969	275 270	518 556	14 571
3335	Metalworking machinery mfg	-	1 806	705	53 489	2 550 061	39 441	89 519	1 675 448	4 732 536	2 851 785	7 560 207	363 217
33351	Metalworking machinery mfg	-	1 806	705	53 489	2 550 061	39 441	89 519	1 675 448	4 732 536	2 851 785	7 560 207	363 217
333511	Industrial mold mfg ...	-	337	130	9 968	495 265	7 711	18 029	347 008	899 084	341 364	1 231 969	88 965
333512	Machine tool (metal cutting types) mfg ...	1	89	71	5 761	280 252	3 490	7 915	147 736	471 992	663 576	1 161 897	21 231
333513	Machine tool (metal forming types) mfg ...	1	44	25	1 998	85 139	1 384	2 914	50 811	188 220	132 048	317 711	10 973
333514	Special die & tool, die set, jig, & fixture mfg ..	1	889	303	22 320	1 109 011	17 711	40 109	800 176	1 969 168	783 223	2 700 065	175 872
333515	Cutting tool & machine tool accessory mfg ..	1	349	118	8 582	338 687	6 219	13 085	205 101	690 519	340 899	1 024 452	47 759
333516	Rolling mill machinery & equipment mfg	-	8	3	270	11 232	188	427	7 517	18 265	19 181	40 211	444
333518	Other metalworking machinery mfg	1	90	55	4 590	230 475	2 738	7 040	117 099	495 288	571 494	1 083 902	17 973
3336	Engine, turbine, & power transmission equipment mfg	-	62	40	8 505	437 091	5 541	11 736	237 779	866 197	1 467 293	2 332 025	96 536
33361	Engine, turbine, & power transmission equipment mfg	-	62	40	8 505	437 091	5 541	11 736	237 779	866 197	1 467 293	2 332 025	96 536
333612	Speed changer, industrial high-speed drive, & gear mfg	1	17	13	f	D	D	D	D	D	D	D	9 070
333613	Mechanical power transmission equipment mfg	-	21	11	1 415	56 223	1 018	2 149	36 853	137 231	94 295	230 576	D
333618	Other engine equipment mfg	-	22	15	6 335	350 314	4 040	8 571	185 019	649 234	1 338 554	1 986 455	80 332
3339	Other general-purpose machinery mfg	-	486	219	25 937	1 192 365	14 885	30 329	525 407	2 420 150	2 563 604	4 922 774	120 083
33391	Pump & compressor mfg	1	32	15	3 003	130 634	1 516	2 990	52 492	243 220	222 945	455 585	13 098
333911	Pump & pumping equipment mfg	-	14	6	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	3	16	8	1 397	60 841	769	1 318	24 488	133 866	138 962	257 743	7 279
333913	Measuring & dispensing pump mfg	1	2	1	c	D	D	D	D	D	D	D	D

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31-33	MICHIGAN—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33392	Material handling equipment mfg	—	133	68	7 336	367 829	4 092	8 583	155 792	779 387	872 222	1 644 641	38 178
333922	Conveyor & conveying equipment mfg	—	88	43	5 326	297 379	2 711	6 356	114 955	627 124	713 891	1 333 868	28 980
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	16	9	759	24 476	481	474	14 273	67 102	56 525	123 618	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	26	14	1 155	43 922	861	1 671	25 659	77 717	96 997	174 986	6 016
33399	All other general-purpose machinery mfg	1	321	136	15 598	693 902	9 277	18 756	317 123	1 397 543	1 468 437	2 822 548	68 807
333991	Power-driven handtool mfg	8	12	3	c	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	44	30	4 325	238 516	3 134	6 411	132 593	317 818	462 036	783 700	21 271
333993	Packaging machinery mfg	—	24	10	684	29 900	343	708	10 998	71 698	55 084	122 743	2 349
333994	Industrial process furnace & oven mfg . .	2	44	23	1 678	68 433	1 036	2 276	33 543	161 470	126 671	266 300	6 485
333995	Fluid power cylinder & actuator mfg	—	21	11	1 028	35 966	597	1 250	18 314	106 694	84 115	190 802	7 061
333996	Fluid power pump & motor mfg	—	12	5	1 320	55 467	794	1 649	26 404	81 224	124 179	217 836	6 839
333999	All other miscellaneous general-purpose machinery mfg	—	161	52	6 274	254 696	3 228	6 145	89 424	635 217	604 073	1 206 013	23 092
334	Computer & electronic product mfg	1	439	178	25 430	1 007 360	16 320	34 734	550 142	2 535 494	2 489 346	4 999 303	159 270
3341	Computer & peripheral equipment mfg	4	36	12	1 454	68 349	519	981	16 147	150 080	143 658	293 926	8 204
33411	Computer & peripheral equipment mfg	4	36	12	1 454	68 349	519	981	16 147	150 080	143 658	293 926	8 204
334111	Electronic computer mfg	4	14	7	1 099	56 530	338	637	10 589	124 867	123 274	248 074	5 981
334119	Other computer peripheral equipment mfg	2	15	4	288	9 870	143	254	4 180	21 493	15 993	37 648	1 638
3342	Communications equipment mfg	1	35	19	1 493	55 240	719	1 504	18 289	123 595	92 258	216 309	7 707
33421	Telephone apparatus mfg	—	5	4	240	11 167	53	115	1 844	13 652	9 791	23 803	904
334210	Telephone apparatus mfg	—	5	4	240	11 167	53	115	1 844	13 652	9 791	23 803	904
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	19	10	576	20 349	281	523	6 814	39 119	26 915	67 194	2 827
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	19	10	576	20 349	281	523	6 814	39 119	26 915	67 194	2 827
33429	Other communications equipment mfg	—	11	5	677	23 724	385	866	9 631	70 824	55 552	125 312	3 976
334290	Other communications equipment mfg	—	11	5	677	23 724	385	866	9 631	70 824	55 552	125 312	3 976
3343	Audio & video equipment mfg	3	12	7	1 112	34 095	710	1 433	19 056	131 208	112 499	243 476	5 353
33431	Audio & video equipment mfg	3	12	7	1 112	34 095	710	1 433	19 056	131 208	112 499	243 476	5 353
334310	Audio & video equipment mfg	3	12	7	1 112	34 095	710	1 433	19 056	131 208	112 499	243 476	5 353
3344	Semiconductor & other electronic component mfg	—	146	51	6 577	187 132	4 701	9 456	100 462	476 502	670 503	1 110 651	44 534
33441	Semiconductor & other electronic component mfg	—	146	51	6 577	187 132	4 701	9 456	100 462	476 502	670 503	1 110 651	44 534
334412	Bare printed circuit board mfg	1	35	9	1 099	24 957	925	2 052	16 463	62 468	58 195	118 443	7 172
334413	Semiconductor & related device mfg . . .	5	15	6	331	11 171	188	259	3 709	21 157	15 122	35 905	5 591
334414	Electronic capacitor mfg	—	3	1	c	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	—	2	1	c	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	9	4	301	9 347	230	497	5 127	18 364	15 516	33 947	492
334417	Electronic connector mfg	1	8	2	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	22	15	2 700	75 345	2 108	4 214	47 968	190 631	334 383	528 509	21 751
334419	Other electronic component mfg	1	52	13	1 680	52 015	1 015	1 903	22 754	106 099	80 281	170 626	7 369

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	192	80	13 105	595 691	8 350	18 273	354 104	1 477 750	1 322 775	2 809 959	84 066
33451	Navigational, measuring, medical, & control instruments mfg	—	192	80	13 105	595 691	8 350	18 273	354 104	1 477 750	1 322 775	2 809 959	84 066
334510	Electromedical & electrotherapeutic apparatus mfg	3	8	5	e	D	D	D	D	D	D	D	1 631
334511	Search, detection, navigation, & guidance instrument mfg	—	13	7	1 841	82 049	1 045	3 131	54 231	169 203	86 649	256 842	4 031
334512	Automatic environmental control mfg	—	14	6	772	21 757	506	1 059	11 363	68 359	70 944	140 487	3 533
334513	Industrial process control instrument mfg	2	49	23	1 614	70 553	786	1 613	24 249	111 918	87 509	202 511	4 190
334514	Totalizing fluid meter & counting device mfg	—	13	6	h	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	4	19	7	392	12 983	225	452	5 536	31 311	18 838	50 370	2 652
334516	Analytical laboratory instrument mfg	—	13	4	959	32 569	427	927	11 340	86 106	70 981	152 732	6 610
334518	Watch, clock, & part mfg	—	9	5	800	27 101	606	1 218	15 577	59 171	46 647	107 604	D
334519	Other measuring & controlling device mfg	1	52	16	1 442	63 755	655	1 240	18 144	139 337	78 615	217 545	8 906
3346	Mfg & reproducing magnetic & optical media	—	18	9	1 689	66 853	1 321	3 087	42 084	176 359	147 653	324 982	9 406
33461	Mfg & reproducing magnetic & optical media	—	18	9	1 689	66 853	1 321	3 087	42 084	176 359	147 653	324 982	9 406
334611	Software reproducing	—	5	3	286	12 864	184	360	6 424	24 347	12 001	36 366	3 011
334612	Prerecorded CD (except software), tape, & record reproducing	—	13	6	1 403	53 989	1 137	2 727	35 660	152 012	135 652	288 616	6 395
335	Electrical equipment, appliance, & component mfg	—	246	104	14 242	476 675	10 672	21 575	276 355	1 198 278	1 337 199	2 553 903	63 384
3351	Electric lighting equipment mfg	—	23	9	766	18 947	572	1 171	8 974	80 750	34 291	115 146	1 608
33512	Lighting fixture mfg	—	23	9	766	18 947	572	1 171	8 974	80 750	34 291	115 146	1 608
335121	Residential electric lighting fixture mfg	—	11	2	204	3 392	162	332	2 341	9 122	4 803	14 001	129
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	9	5	447	12 074	335	668	4 747	56 565	15 654	72 162	1 051
335129	Other lighting equipment mfg	—	3	2	115	3 481	75	171	1 886	15 063	13 834	28 983	428
3352	Household appliance mfg	—	16	7	4 409	153 361	3 579	7 657	107 348	500 807	694 216	1 208 748	15 530
33521	Small electrical appliance mfg	—	10	3	1 551	55 985	1 073	2 127	26 697	214 688	321 679	544 562	D
335211	Electric housewares & household fan mfg	1	8	1	c	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	2	2	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	6	4	2 858	97 376	2 506	5 530	80 651	286 119	372 537	664 186	D
335222	Household refrigerator & home freezer mfg	—	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	144	54	4 718	174 284	3 106	6 179	80 808	312 387	299 435	613 093	16 138
33531	Electrical equipment mfg	1	144	54	4 718	174 284	3 106	6 179	80 808	312 387	299 435	613 093	16 138
335311	Power, distribution, & specialty transformer mfg	3	5	3	285	7 928	170	314	3 530	17 959	16 204	35 061	482
335312	Motor & generator mfg	1	26	7	1 140	31 029	983	1 994	23 345	48 065	66 840	114 818	4 963
335313	Switchgear & switchboard apparatus mfg	1	32	14	1 017	43 101	628	1 363	17 443	79 409	71 724	151 462	2 875
335314	Relay & industrial control mfg	1	81	30	2 276	92 226	1 325	2 508	36 490	166 954	144 667	311 752	7 818

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	-	63	34	4 349	130 083	3 415	6 568	79 225	304 334	309 257	616 916	30 108
33592	Communication & energy wire & cable mfg	-	6	6	1 148	32 461	926	1 816	22 680	72 704	74 719	148 315	7 095
335929	Other communication & energy wire mfg ...	-	6	6	1 148	32 461	926	1 816	22 680	72 704	74 719	148 315	7 095
33593	Wiring device mfg	-	20	12	1 888	54 545	1 541	3 070	34 561	140 315	161 357	301 418	17 819
335931	Current-carrying wiring device mfg	-	17	11	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	3	1	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	36	16	g	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	1	4	2	c	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	32	14	1 089	35 474	774	1 376	17 585	71 529	66 868	140 954	4 211
336	Transportation equipment mfg	-	1 100	689	268 015	13 496 505	223 451	468 245	10 760 746	39 044 950	69 839 992	108 942 261	4 602 716
3361	Motor vehicle mfg	-	35	23	61 552	3 686 803	54 044	107 879	3 092 676	19 344 741	36 641 582	55 928 384	1 420 737
33611	Automobile & light duty motor vehicle mfg	-	31	22	61 431	3 682 799	53 967	107 705	3 090 360	19 332 504	36 608 398	55 884 009	1 420 581
336111	Automobile mfg	-	22	16	41 470	2 517 653	35 445	71 892	2 051 375	12 106 013	22 611 799	34 665 392	D
336112	Light truck & utility vehicle mfg	-	9	6	19 961	1 165 146	18 522	35 813	1 038 985	7 226 491	13 996 599	21 218 617	D
33612	Heavy duty truck mfg ...	1	4	1	121	4 004	77	174	2 316	12 237	33 184	44 375	156
336120	Heavy duty truck mfg .	1	4	1	121	4 004	77	174	2 316	12 237	33 184	44 375	156
3362	Motor vehicle body & trailer mfg	2	78	30	3 583	109 216	2 574	5 088	64 030	202 382	385 569	585 133	11 789
33621	Motor vehicle body & trailer mfg	2	78	30	3 583	109 216	2 574	5 088	64 030	202 382	385 569	585 133	11 789
336211	Motor vehicle body mfg	2	32	10	1 488	48 817	885	1 695	25 915	86 457	138 722	224 653	6 907
336212	Truck trailer mfg	4	15	5	290	6 330	241	438	4 652	10 378	23 037	33 138	499
336213	Motor home mfg	-	5	4	928	27 202	782	1 516	17 063	52 112	140 163	189 511	1 627
336214	Travel trailer & camper mfg	3	26	11	877	26 867	666	1 439	16 400	53 435	83 647	137 831	2 756
3363	Motor vehicle parts mfg ...	-	866	587	195 706	9 437 607	162 098	346 070	7 464 961	18 837 214	32 330 263	51 312 366	3 112 845
33631	Motor vehicle gasoline engine & engine parts mfg	-	120	67	30 977	1 685 358	26 229	58 544	1 378 767	3 102 690	7 693 091	10 880 442	763 132
336311	Carburetor, piston, piston ring, & valve mfg	-	13	8	3 847	211 542	3 210	7 752	176 949	537 410	583 256	1 131 574	78 267
336312	Gasoline engine & engine parts mfg	-	107	59	27 130	1 473 816	23 019	50 792	1 201 818	2 565 280	7 109 835	9 748 868	684 865
33632	Motor vehicle electrical & electronic equipment mfg	-	61	29	9 264	311 967	7 511	15 081	237 938	796 514	1 492 701	2 291 403	184 908
336321	Vehicular lighting equipment mfg	-	8	5	1 540	49 229	1 248	2 390	33 438	50 239	304 408	357 371	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	53	24	7 724	262 738	6 263	12 691	204 500	746 275	1 188 293	1 934 032	D
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	32	22	13 670	788 623	10 878	24 097	616 506	1 686 896	1 428 982	3 096 675	115 290
336330	Motor vehicle steering & suspension component (except spring) mfg	-	32	22	13 670	788 623	10 878	24 097	616 506	1 686 896	1 428 982	3 096 675	115 290
33634	Motor vehicle brake system mfg	-	25	17	5 391	262 964	4 497	10 299	204 607	723 681	2 154 796	2 882 332	119 073
336340	Motor vehicle brake system mfg	-	25	17	5 391	262 964	4 497	10 299	204 607	723 681	2 154 796	2 882 332	119 073
33635	Motor vehicle transmission & power train parts mfg	-	59	44	30 730	1 755 816	26 309	61 215	1 464 671	3 403 251	6 387 644	9 826 004	789 376
336350	Motor vehicle transmission & power train parts mfg	-	59	44	30 730	1 755 816	26 309	61 215	1 464 671	3 403 251	6 387 644	9 826 004	789 376
33636	Motor vehicle seating & interior trim mfg	-	51	42	18 600	760 397	14 429	30 189	549 650	1 698 205	2 603 469	4 305 880	148 014
336360	Motor vehicle seating & interior trim mfg ...	-	51	42	18 600	760 397	14 429	30 189	549 650	1 698 205	2 603 469	4 305 880	148 014
33637	Motor vehicle metal stamping	-	316	236	52 964	2 485 764	44 094	92 906	1 943 486	4 506 285	5 365 248	9 908 966	612 542
336370	Motor vehicle metal stamping	-	316	236	52 964	2 485 764	44 094	92 906	1 943 486	4 506 285	5 365 248	9 908 966	612 542

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	—	202	130	34 110	1 386 718	28 151	53 739	1 069 336	2 919 692	5 204 332	8 120 664	380 510
336391	Motor vehicle air-conditioning mfg	—	2	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	200	129	k	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	54	25	3 362	149 492	2 154	4 522	77 914	352 691	199 989	541 058	21 033
33641	Aerospace product & parts mfg	—	54	25	3 362	149 492	2 154	4 522	77 914	352 691	199 989	541 058	21 033
336411	Aircraft mfg	1	5	2	c	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	16	12	1 718	66 575	1 213	2 540	38 345	196 681	92 967	290 028	10 829
336413	Other aircraft part & auxiliary equipment mfg	—	32	10	1 044	43 349	679	1 510	25 397	115 594	59 785	163 679	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	5	3	593	21 534	348	748	12 317	77 713	32 436	99 108	D
33651	Railroad rolling stock mfg	—	5	3	593	21 534	348	748	12 317	77 713	32 436	99 108	D
336510	Railroad rolling stock mfg	—	5	3	593	21 534	348	748	12 317	77 713	32 436	99 108	D
3366	Ship & boat building	—	30	9	1 223	29 552	857	1 364	16 818	62 196	130 976	191 365	D
33661	Ship & boat building	—	30	9	1 223	29 552	857	1 364	16 818	62 196	130 976	191 365	D
336612	Boat building	—	22	8	1 159	28 027	803	1 283	15 629	59 515	128 978	186 686	D
3369	Other transportation equipment mfg	1	32	12	1 996	62 301	1 376	2 574	32 030	168 013	119 177	284 847	6 917
33699	Other transportation equipment mfg	1	32	12	1 996	62 301	1 376	2 574	32 030	168 013	119 177	284 847	6 917
336992	Military armored vehicle, tank, & tank component mfg	—	10	4	352	19 030	177	447	8 807	46 583	26 885	74 564	1 359
336999	All other transportation equipment mfg	1	17	8	1 631	42 989	1 187	2 107	23 013	120 756	91 707	209 024	5 497
337	Furniture & related product mfg	—	603	161	33 502	1 271 692	24 448	50 909	745 958	3 581 872	2 242 517	5 810 657	233 306
3371	Household & institutional furniture & kitchen cabinet mfg	1	378	65	7 720	207 429	6 092	11 491	139 075	497 472	404 259	899 203	18 214
33711	Wood kitchen cabinet & counter top mfg	1	169	11	1 647	40 600	1 334	2 375	29 468	99 429	88 855	188 098	2 884
337110	Wood kitchen cabinet & counter top mfg	1	169	11	1 647	40 600	1 334	2 375	29 468	99 429	88 855	188 098	2 884
33712	Household & institutional furniture mfg	—	209	54	6 073	166 829	4 758	9 116	109 607	398 043	315 404	711 105	15 330
337121	Upholstered household furniture mfg	2	33	3	371	6 569	329	588	5 321	13 744	15 911	29 591	423
337122	Nonupholstered wood household furniture mfg	1	101	23	2 184	54 273	1 770	3 355	38 664	118 345	113 378	231 346	5 369
337124	Metal household furniture mfg	—	16	5	730	15 807	577	1 116	10 422	48 883	31 306	79 436	930
337127	Institutional furniture mfg	—	49	20	2 677	88 164	1 987	3 907	53 872	213 171	150 365	362 296	8 515
3372	Office furniture (including fixtures) mfg	—	193	85	24 685	1 030 002	17 462	37 410	582 139	2 942 194	1 752 567	4 688 596	212 394
33721	Office furniture (including fixtures) mfg	—	193	85	24 685	1 030 002	17 462	37 410	582 139	2 942 194	1 752 567	4 688 596	212 394
337211	Wood office furniture mfg	—	35	16	1 984	58 155	1 528	3 217	40 545	148 497	88 941	237 095	7 789
337212	Custom architectural woodwork & millwork mfg	4	33	9	760	25 006	369	712	9 395	43 646	30 357	70 758	1 500
337214	Office furniture (except wood) mfg	—	26	21	18 858	854 314	13 221	28 780	473 205	2 524 838	1 457 625	3 983 253	192 564
337215	Showcase, partition, shelving, & locker mfg	1	99	39	3 083	92 527	2 344	4 701	58 994	225 213	175 644	397 490	10 541
3379	Other furniture related product mfg	1	32	11	1 097	34 261	894	2 008	24 744	142 206	85 691	222 858	2 698
33791	Mattress mfg	1	21	7	427	11 373	336	654	7 511	39 129	36 849	75 957	956
337910	Mattress mfg	1	21	7	427	11 373	336	654	7 511	39 129	36 849	75 957	956
33792	Blind & shade mfg	—	11	4	670	22 888	558	1 354	17 233	103 077	48 842	146 901	1 742
337920	Blind & shade mfg	—	11	4	670	22 888	558	1 354	17 233	103 077	48 842	146 901	1 742

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MICHIGAN—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	1 017	162	17 983	535 915	11 531	22 192	271 858	1 446 126	974 532	2 420 424	77 322
3391	Medical equipment & supplies mfg.....	1	454	63	7 178	231 621	4 384	8 236	106 747	679 301	374 026	1 056 995	36 070
33911	Medical equipment & supplies mfg.....	1	454	63	7 178	231 621	4 384	8 236	106 747	679 301	374 026	1 056 995	36 070
339111	Laboratory apparatus & furniture mfg.....	—	15	11	823	25 848	485	1 006	12 823	53 512	29 556	82 799	767
339112	Surgical & medical instrument mfg.....	—	37	13	1 555	55 204	902	1 835	21 365	164 823	59 962	224 274	12 839
339113	Surgical appliance & supplies mfg.....	—	62	20	2 465	83 757	1 274	2 422	31 013	259 582	207 335	469 592	16 951
339114	Dental equipment & supplies mfg.....	—	25	3	377	14 248	278	501	8 891	89 936	33 865	124 755	1 606
339115	Ophthalmic goods mfg.....	3	24	4	224	7 940	155	274	3 855	15 740	8 106	23 659	1 014
339116	Dental laboratories ...	5	291	12	1 734	44 624	1 290	2 198	28 800	95 708	35 202	131 916	2 893
3399	Other miscellaneous mfg ..	1	563	99	10 805	304 294	7 147	13 956	165 111	766 825	600 506	1 363 429	41 252
33991	Jewelry & silverware mfg.....	4	45	3	312	8 473	214	423	4 834	28 991	21 870	52 576	538
339911	Jewelry (except costume) mfg.....	7	27	2	214	5 199	137	251	2 762	14 928	16 183	30 637	322
33992	Sporting & athletic goods mfg.....	—	95	12	1 317	41 067	933	1 775	24 397	161 995	190 807	351 214	9 755
339920	Sporting & athletic goods mfg.....	—	95	12	1 317	41 067	933	1 775	24 397	161 995	190 807	351 214	9 755
33993	Doll, toy, & game mfg ...	1	23	5	1 046	25 182	786	1 459	13 151	69 423	54 008	121 202	4 671
339932	Game, toy, & children's vehicle mfg.....	1	22	5	g	D	D	D	D	D	D	D	4 671
33994	Office supplies (except paper) mfg.....	1	30	6	463	12 023	287	588	5 912	30 932	18 243	49 180	1 487
339942	Lead pencil & art good mfg.....	1	5	3	162	4 146	92	196	1 476	9 066	6 863	15 844	264
339943	Marking device mfg...	3	22	1	c	D	D	D	D	D	D	D	693
339944	Carbon paper & inked ribbon mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
33995	Sign mfg.....	1	207	32	4 075	115 128	2 289	4 453	56 254	254 844	153 307	408 260	9 726
339950	Sign mfg.....	1	207	32	4 075	115 128	2 289	4 453	56 254	254 844	153 307	408 260	9 726
33999	All other miscellaneous mfg.....	2	163	41	3 592	102 421	2 638	5 258	60 563	220 640	162 271	380 997	15 075
339991	Gasket, packing, & sealing device mfg...	3	33	22	1 373	40 975	993	1 977	23 138	88 775	69 036	156 454	5 986
339992	Musical instrument mfg.....	1	23	3	446	13 163	381	897	9 679	21 093	19 531	41 028	794
339994	Broom, brush, & mop mfg.....	—	10	3	633	17 164	444	676	9 384	40 279	23 865	62 703	1 392
339999	All other miscellaneous mfg.....	1	84	13	1 060	29 304	760	1 583	17 051	66 309	45 494	112 342	6 277

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BENTON HARBOR, MI MSA												
	Manufacturing	1	397	160	16 996	539 081	12 678	25 259	335 861	1 266 208	1 143 206	2 394 160	106 302
311	Food mfg	6	18	8	681	11 578	490	994	6 911	43 041	49 221	90 998	9 075
322	Paper mfg	-	12	8	425	15 861	291	609	9 059	41 543	37 122	78 840	2 460
3222	Converted paper product mfg	-	10	6	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	30	7	957	29 051	749	1 614	21 378	62 321	65 211	126 995	3 083
3231	Printing & related support activities	1	30	7	957	29 051	749	1 614	21 378	62 321	65 211	126 995	3 083
32311	Printing	1	27	7	943	28 661	737	1 593	21 084	61 532	65 065	126 060	3 002
323110	Commercial lithographic printing ..	-	11	3	658	20 784	534	1 206	16 438	44 547	55 597	99 951	2 421
326	Plastics & rubber products mfg	4	27	16	2 129	52 285	1 765	3 402	35 539	115 708	140 063	254 965	10 808
3261	Plastics product mfg	5	24	13	1 810	42 184	1 514	2 815	29 142	91 915	113 907	204 744	10 263
32619	Other plastics product mfg	4	18	12	1 751	40 428	1 467	2 721	27 929	86 770	106 373	192 041	9 684
326199	All other plastics product mfg	4	17	12	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3	319	10 101	251	587	6 397	23 793	26 156	50 221	545
32629	Other rubber product mfg	-	3	3	319	10 101	251	587	6 397	23 793	26 156	50 221	545
331	Primary metal mfg	-	30	21	1 894	56 720	1 546	3 155	40 094	117 745	128 713	246 848	12 999
3312	Steel product mfg from purchased steel	-	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	1	27	19	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	24	16	1 469	42 623	1 182	2 410	28 991	81 866	88 929	171 447	10 231
331521	Aluminum die-casting foundries	1	15	11	1 006	28 907	803	1 636	19 644	55 035	66 499	121 160	8 706
331522	Nonferrous (except aluminum) die-casting foundries	-	6	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	94	30	1 921	53 291	1 459	2 724	33 969	114 102	71 939	186 576	7 262
3323	Architectural & structural metals mfg	3	16	6	276	8 839	208	420	5 794	17 129	12 095	29 265	1 206
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	39	9	644	17 578	499	901	11 463	39 621	17 268	58 170	2 170
33271	Machine shops	1	32	5	426	11 910	346	627	8 077	29 005	14 138	43 579	1 422
332710	Machine shops	1	32	5	426	11 910	346	627	8 077	29 005	14 138	43 579	1 422
3328	Coating, engraving, heat treating, & allied activities ..	1	18	9	564	12 267	448	791	8 152	24 494	9 130	33 666	2 162
33281	Coating, engraving, heat treating, & allied activities	1	18	9	564	12 267	448	791	8 152	24 494	9 130	33 666	2 162
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	2	7	5	331	6 809	278	439	4 424	14 420	4 508	18 946	992
333	Machinery mfg	2	81	39	3 726	146 840	2 650	5 369	80 625	308 212	226 662	522 314	18 656
3332	Industrial machinery mfg ..	-	9	6	257	10 360	154	330	4 805	20 857	21 338	42 742	D
33329	Other industrial machinery mfg	-	8	6	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	5	860	26 899	641	1 247	17 013	65 548	58 076	124 803	3 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	6	5	860	26 899	641	1 247	17 013	65 548	58 076	124 803	3 683
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	52	18	1 537	66 753	1 091	2 384	38 254	127 118	83 512	207 445	8 423
33351	Metalworking machinery mfg	-	52	18	1 537	66 753	1 091	2 384	38 254	127 118	83 512	207 445	8 423
333511	Industrial mold mfg	-	19	9	593	25 796	496	1 143	18 060	37 804	15 526	53 386	3 781
333514	Special die & tool, die set, jig, & fixture mfg ..	3	27	7	e	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	7	11	7	951	39 436	670	1 198	17 986	82 916	53 086	124 874	5 095
33391	Pump & compressor mfg	9	4	3	655	28 099	455	719	10 186	51 148	33 949	81 936	D
333912	Air & gas compressor mfg	9	4	3	655	28 099	455	719	10 186	51 148	33 949	81 936	D
33399	All other general-purpose machinery mfg	3	5	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BENTON HARBOR, MI MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	11	6	1 270	41 597	574	1 190	13 870	95 188	74 520	165 562	7 112
3343	Audio & video equipment mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	4	3	490	15 596	425	893	12 632	25 715	22 139	48 226	D
3352	Household appliance mfg... ..	-	1	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg.... ..	-	1	1	e	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	19	10	2 379	88 943	1 918	3 927	65 376	256 485	241 191	499 258	25 677
3363	Motor vehicle parts mfg... ..	-	13	8	2 168	81 565	1 745	3 621	60 467	244 436	233 064	477 998	D
33634	Motor vehicle brake system mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	17	7	556	13 206	417	713	8 949	50 392	51 939	103 276	1 836
3372	Office furniture (including fixtures) mfg.....	1	10	6	482	11 487	360	613	7 799	46 578	48 013	95 536	1 753
33721	Office furniture (including fixtures) mfg.....	1	10	6	482	11 487	360	613	7 799	46 578	48 013	95 536	1 753
337215	Showcase, partition, shelving, & locker mfg.....	1	8	5	e	D	D	D	D	D	D	D	D
31-33	DETROIT-ANN ARBOR-FLINT, MI CMSA												
	Manufacturing....	-	8 637	2 983	430 461	19 469 895	329 935	693 002	13 750 158	54 793 924	79 871 678	134 710 061	5 212 492
311	Food mfg.....	1	427	93	10 894	290 005	7 362	13 844	171 739	1 091 534	1 529 668	2 621 625	62 262
312	Beverage & tobacco product mfg.....	1	21	10	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	96	11	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	6	62	8	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg..	3	11	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	140	30	g	D	D	D	D	D	D	D	D
322	Paper mfg.....	2	90	61	i	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	811	127	j	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	1	50	14	g	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	257	99	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	472	258	31 030	920 684	23 757	47 991	586 381	2 282 571	2 274 646	4 560 026	209 566
327	Nonmetallic mineral product mfg.....	1	264	92	i	D	D	D	D	D	D	D	120 550
331	Primary metal mfg.....	-	129	80	15 446	712 813	12 213	28 289	544 402	1 904 316	3 159 401	5 060 580	200 209
332	Fabricated metal product mfg.....	1	2 191	716	55 841	2 059 849	42 179	88 785	1 321 202	4 452 031	3 362 762	7 804 025	412 634

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	—	1 675	668	60 683	3 052 290	40 365	90 071	1 750 428	5 666 853	5 737 154	11 401 569	380 899
334	Computer & electronic product mfg	—	305	115	j	D	D	D	D	D	D	D	120 746
335	Electrical equipment, appliance, & component mfg	1	147	57	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	647	408	m	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	255	49	h	D	D	D	D	D	D	D	8 009
339	Miscellaneous mfg	2	565	80	i	D	D	D	D	D	D	D	31 630
	Ann Arbor, MI PMSA												
31-33	Manufacturing	—	839	320	48 754	2 128 833	37 410	78 214	1 484 701	5 017 142	6 817 242	11 869 184	519 607
311	Food mfg	1	39	8	734	22 010	601	1 079	15 299	81 822	75 488	158 172	7 597
3112	Grain & oilseed milling	—	2	1	e	D	D	D	D	D	D	D	D
31121	Flour milling & malt mfg	—	2	1	e	D	D	D	D	D	D	D	D
311211	Flour milling	—	2	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	1	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	24	7	739	24 788	575	1 204	15 374	42 581	68 275	110 773	3 598
3219	Other wood product mfg	1	18	5	462	11 913	362	724	7 999	14 417	28 690	43 039	D
32191	Millwork	1	11	2	357	9 433	286	597	6 946	10 045	22 427	32 350	1 830
321911	Wood window & door mfg	—	3	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	7	6	540	17 869	357	741	11 015	55 729	74 625	129 094	D
3222	Converted paper product mfg	—	5	4	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	4	3	369	13 591	267	608	8 217	31 517	59 510	90 885	6 227
322211	Corrugated & solid fiber box mfg	—	4	3	369	13 591	267	608	8 217	31 517	59 510	90 885	6 227
323	Printing & related support activities	1	86	24	3 472	98 661	2 660	4 834	65 954	187 507	138 217	326 118	15 188
3231	Printing & related support activities	1	86	24	3 472	98 661	2 660	4 834	65 954	187 507	138 217	326 118	15 188
32311	Printing	1	76	24	3 425	97 299	2 627	4 778	65 188	185 636	137 509	323 501	15 078
323110	Commercial lithographic printing	2	32	12	723	21 280	528	1 021	13 269	40 638	29 027	70 214	1 325
323117	Book printing	—	9	8	2 249	66 995	1 774	3 338	46 161	122 889	91 255	214 010	12 288
325	Chemical mfg	—	34	14	1 675	77 270	749	1 574	28 032	185 021	308 598	491 640	26 221
3251	Basic chemical mfg	—	5	3	299	17 285	126	233	4 578	45 192	37 493	82 947	3 141
32519	Other basic organic chemical mfg	—	4	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	3	3	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	—	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	12	5	421	18 832	229	463	7 945	59 875	82 955	142 898	5 036
32599	All other chemical product & preparation mfg	—	12	5	421	18 832	229	463	7 945	59 875	82 955	142 898	5 036
326	Plastics & rubber products mfg	1	60	28	3 852	149 405	3 094	6 324	111 302	355 902	465 404	822 137	23 983
3261	Plastics product mfg	1	55	26	3 643	144 393	2 925	6 005	108 265	344 705	454 365	799 827	23 662
32619	Other plastics product mfg	1	40	20	3 071	129 770	2 480	5 189	97 877	307 272	415 669	723 263	20 670
326199	All other plastics product mfg	1	38	19	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Ann Arbor, MI PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	36	12	914	34 006	658	1 319	22 647	105 108	97 916	203 512	7 578
3272	Glass & glass product mfg	—	6	2	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	6	2	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	4	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	19	5	290	12 611	195	397	8 100	28 004	21 190	48 815	2 631
331	Primary metal mfg	—	9	8	1 004	41 965	761	1 687	27 282	99 468	94 977	194 292	27 256
3315	Foundries	—	6	5	736	30 312	587	1 259	21 501	69 632	65 815	135 508	18 598
33152	Nonferrous metal foundries	—	5	5	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	—	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	171	57	5 943	208 014	4 625	9 627	139 698	471 809	396 443	870 011	48 084
3326	Spring & wire product mfg	—	14	7	811	24 833	584	1 111	14 871	58 093	53 350	111 524	11 102
33261	Spring & wire product mfg	—	14	7	811	24 833	584	1 111	14 871	58 093	53 350	111 524	11 102
332612	Spring (light gauge) mfg	—	5	3	334	12 223	217	433	7 433	28 711	27 151	55 836	D
332618	Other fabricated wire product mfg	—	8	4	e	D	D	D	D	D	D	D	9 663
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	89	27	2 505	93 830	1 942	4 299	61 708	216 245	167 834	384 236	20 257
33271	Machine shops	—	63	9	906	32 255	729	1 568	22 526	65 161	55 430	120 762	4 844
332710	Machine shops	—	63	9	906	32 255	729	1 568	22 526	65 161	55 430	120 762	4 844
33272	Turned product & screw, nut, & bolt mfg	—	26	18	1 599	61 575	1 213	2 731	39 182	151 084	112 404	263 474	15 413
332721	Precision turned product mfg	—	20	14	1 241	47 511	938	2 110	29 644	106 288	70 806	178 280	10 967
332722	Bolt, nut, screw, rivet, & washer mfg	—	6	4	358	14 064	275	621	9 538	44 796	41 598	85 194	4 446
3328	Coating, engraving, heat treating, & allied activities	—	15	6	307	9 202	220	344	4 414	18 621	5 628	24 388	1 014
33281	Coating, engraving, heat treating, & allied activities	—	15	6	307	9 202	220	344	4 414	18 621	5 628	24 388	1 014
332813	Electroplating, plating, polishing, anodizing, & coloring	—	11	6	291	8 909	206	324	4 206	18 016	5 391	23 547	958
3329	Other fabricated metal product mfg	—	27	11	1 933	66 682	1 591	3 260	50 515	144 039	144 061	290 491	14 219
33291	Metal valve mfg	1	9	4	405	11 182	314	703	7 119	20 671	24 828	45 343	D
33299	All other fabricated metal product mfg	—	18	7	1 528	55 500	1 277	2 557	43 396	123 368	119 233	245 148	D
332991	Ball & roller bearing mfg	—	4	3	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	8	2	452	13 157	406	821	10 773	24 291	45 104	70 516	D
333	Machinery mfg	—	125	53	5 586	245 961	3 951	7 926	135 888	461 619	418 582	872 461	16 048
3332	Industrial machinery mfg	—	16	4	607	31 234	342	837	19 024	83 374	65 306	145 594	3 689
33322	Plastics & rubber industry machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	8	3	370	14 662	188	361	4 160	38 799	30 711	69 766	1 319
33331	Commercial & service industry machinery mfg	—	8	3	370	14 662	188	361	4 160	38 799	30 711	69 766	1 319
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	5	1 244	55 825	1 079	1 856	27 950	56 143	119 734	183 901	1 957
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	8	5	1 244	55 825	1 079	1 856	27 950	56 143	119 734	183 901	1 957
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	5	3	1 114	51 275	988	1 671	25 429	47 499	117 287	172 701	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Ann Arbor, MI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	1	60	24	1 914	81 933	1 462	3 188	58 342	134 882	130 728	252 503	6 234
33351	Metalworking machinery mfg	1	60	24	1 914	81 933	1 462	3 188	58 342	134 882	130 728	252 503	6 234
333512	Machine tool (metal cutting types) mfg ...	1	9	8	958	45 109	744	1 726	34 038	71 391	92 893	148 812	3 049
333514	Special die & tool, die set, jig, & fixture mfg .	1	26	6	459	16 288	348	702	11 520	26 695	11 993	39 062	1 510
3339	Other general-purpose machinery mfg	1	29	15	1 372	59 080	831	1 597	24 847	142 595	67 069	209 486	2 549
33392	Material handling equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	21	10	909	38 844	517	1 021	13 904	111 429	38 236	149 236	1 558
333999	All other miscellaneous general-purpose machinery mfg	-	13	5	722	30 500	405	793	10 187	91 322	26 275	117 429	775
334	Computer & electronic product mfg	-	62	26	4 302	223 226	2 839	5 794	135 240	684 111	807 144	1 498 505	50 179
3341	Computer & peripheral equipment mfg	6	10	7	678	32 505	208	392	5 550	91 672	78 794	169 915	4 797
33411	Computer & peripheral equipment mfg	6	10	7	678	32 505	208	392	5 550	91 672	78 794	169 915	4 797
334111	Electronic computer mfg	6	6	5	613	30 928	172	318	4 798	88 737	75 518	163 687	4 510
3342	Communications equipment mfg	-	5	4	409	12 430	174	412	3 327	26 477	9 116	36 250	1 207
3345	Navigational, measuring, medical, & control instruments mfg	-	25	10	2 817	165 013	2 216	4 562	120 906	538 517	703 689	1 249 132	42 132
33451	Navigational, measuring, medical, & control instruments mfg	-	25	10	2 817	165 013	2 216	4 562	120 906	538 517	703 689	1 249 132	42 132
334514	Totalizing fluid meter & counting device mfg .	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	25	14	667	20 926	436	825	9 900	43 146	33 101	77 039	3 653
3353	Electrical equipment mfg ..	4	19	11	530	17 860	344	653	8 433	37 685	28 659	66 923	3 413
33531	Electrical equipment mfg	4	19	11	530	17 860	344	653	8 433	37 685	28 659	66 923	3 413
336	Transportation equipment mfg	-	60	42	16 989	878 383	14 634	32 667	728 821	2 043 746	3 520 186	5 598 856	258 541
3363	Motor vehicle parts mfg ...	-	49	40	16 837	873 352	14 517	32 431	725 582	2 033 071	3 512 426	5 581 076	258 130
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	5	2 885	172 286	2 641	6 242	155 543	515 806	533 909	1 056 948	D
336311	Carburetor, piston, piston ring, & valve mfg	-	3	3	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	3	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	3	i	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	3	i	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	19	16	2 218	83 697	1 778	3 955	60 471	195 410	359 079	554 786	19 619
336370	Motor vehicle metal stamping	-	19	16	2 218	83 697	1 778	3 955	60 471	195 410	359 079	554 786	19 619

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Ann Arbor, MI PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	-	10	8	3 180	159 557	2 556	5 545	123 623	471 756	706 855	1 181 339	37 123
336399	All other motor vehicle parts mfg	-	10	8	3 180	159 557	2 556	5 545	123 623	471 756	706 855	1 181 339	37 123
337	Furniture & related product mfg	-	23	4	648	20 175	511	913	14 061	70 844	78 707	149 091	838
3371	Household & institutional furniture & kitchen cabinet mfg	-	19	3	585	18 350	480	854	13 378	67 161	74 076	140 777	750
33711	Wood kitchen cabinet & counter top mfg	-	11	1	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	11	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	53	12	1 020	42 849	597	1 017	14 428	111 909	75 028	186 830	6 166
3391	Medical equipment & supplies mfg	-	24	7	807	37 060	455	810	11 898	98 998	65 720	164 542	5 362
33911	Medical equipment & supplies mfg	-	24	7	807	37 060	455	810	11 898	98 998	65 720	164 542	5 362
339112	Surgical & medical instrument mfg	-	3	1	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	3	262	12 087	160	252	3 163	49 442	34 778	83 634	2 108
	Detroit, MI PMSA												
31-33	Manufacturing	-	7 443	2 548	347 293	15 596 435	264 052	557 624	10 876 695	46 184 192	65 356 925	111 600 556	4 512 328
311	Food mfg	-	372	82	9 699	255 157	6 510	12 258	149 812	974 999	1 360 084	2 334 708	52 357
3113	Sugar & confectionery product mfg	1	16	2	310	5 558	138	169	1 394	14 111	9 137	22 416	D
31133	Confectionery mfg from purchased chocolate ...	-	8	2	284	5 308	117	148	1 219	13 319	8 341	20 708	D
311330	Confectionery mfg from purchased chocolate	-	8	2	284	5 308	117	148	1 219	13 319	8 341	20 708	D
3114	Fruit & vegetable preserving & specialty food mfg	-	10	4	662	14 600	596	898	10 384	60 621	70 590	131 194	D
31142	Fruit & vegetable canning, pickling, & drying	-	6	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	4	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	17	10	1 141	31 192	725	1 450	20 809	111 833	259 867	371 790	6 565
31151	Dairy product (except frozen) mfg	-	10	7	796	24 220	560	1 122	16 320	88 062	222 825	311 034	4 331
311511	Fluid milk mfg	-	5	4	650	18 524	453	867	12 930	72 777	191 759	264 378	3 327
31152	Ice cream & frozen dessert mfg	4	7	3	345	6 972	165	328	4 489	23 771	37 042	60 756	2 234
311520	Ice cream & frozen dessert mfg	4	7	3	345	6 972	165	328	4 489	23 771	37 042	60 756	2 234
3116	Meat product mfg	-	39	20	2 824	76 871	2 109	4 863	53 964	430 097	702 385	1 132 686	6 172
31161	Animal slaughtering & processing	-	39	20	2 824	76 871	2 109	4 863	53 964	430 097	702 385	1 132 686	6 172
311611	Animal (except poultry) slaughtering	-	11	6	1 275	32 257	1 087	2 518	28 023	324 235	480 030	803 518	1 879
311612	Meat processed from carcasses	1	24	11	1 023	25 437	575	1 254	11 400	70 556	141 031	212 451	2 541
311615	Poultry processing	-	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	247	33	h	D	D	D	D	D	D	D	10 703
31181	Bread & bakery product mfg	2	235	30	h	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	192	13	1 229	15 837	800	979	8 979	34 745	21 542	56 316	D
311812	Commercial bakeries ..	1	42	17	2 032	66 165	1 057	1 870	30 343	148 449	68 247	216 108	6 691
3119	Other food mfg	-	34	13	1 198	38 682	878	1 688	19 829	152 263	172 132	324 553	D
31191	Snack food mfg	-	7	5	783	27 036	577	1 169	13 850	118 713	125 272	244 207	4 966
311919	Other snack food mfg ..	-	6	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg	4	14	5	264	7 275	196	356	3 704	18 544	20 990	39 547	865
312	Beverage & tobacco product mfg	1	18	8	1 460	62 547	593	1 199	23 328	305 890	417 422	721 186	16 334
3121	Beverage mfg	1	18	8	1 460	62 547	593	1 199	23 328	305 890	417 422	721 186	16 334
31211	Soft drink & ice mfg	2	13	6	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	2	7	5	f	D	D	D	D	D	D	D	11 997
31214	Distilleries	-	1	1	e	D	D	D	D	D	D	D	D
312140	Distilleries	-	1	1	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills.....	1	81	11	1 089	21 690	903	1 752	13 685	52 751	63 440	115 661	2 871
3149	Other textile product mills..	1	43	11	927	19 356	769	1 550	12 223	48 424	59 152	107 078	2 712
31491	Textile bag & canvas mills	1	25	5	344	8 213	276	513	4 672	16 567	17 695	34 063	475
314912	Canvas & related product mills	1	24	5	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	18	6	583	11 143	493	1 037	7 551	31 857	41 457	73 015	2 237
314999	All other miscellaneous textile product mills ..	—	17	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	5	54	7	884	17 606	746	1 457	11 784	48 619	45 801	94 761	D
3159	Apparel accessories & other apparel mfg	5	31	3	567	13 061	476	1 025	8 504	37 246	38 573	76 201	D
31599	Apparel accessories & other apparel mfg	5	31	3	567	13 061	476	1 025	8 504	37 246	38 573	76 201	D
315999	Other apparel accessories & other apparel mfg	5	31	3	567	13 061	476	1 025	8 504	37 246	38 573	76 201	D
316	Leather & allied product mfg .	4	9	3	g	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	4	2	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	4	2	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	4	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	9	5	1	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	9	5	1	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	9	4	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	110	22	1 619	39 928	1 269	2 388	25 833	91 702	100 916	193 286	5 490
3219	Other wood product mfg ...	1	96	18	1 355	31 440	1 077	2 043	20 964	73 345	75 515	150 002	4 304
32191	Millwork	3	32	4	284	7 771	228	461	5 881	18 429	18 874	37 473	1 057
32192	Wood container & pallet mfg	1	43	11	753	15 495	624	1 160	10 946	29 643	45 129	75 148	2 493
321920	Wood container & pallet mfg	1	43	11	753	15 495	624	1 160	10 946	29 643	45 129	75 148	2 493
32199	All other wood product mfg	1	21	3	318	8 174	225	422	4 137	25 273	11 512	37 381	754
322	Paper mfg	2	77	50	4 424	157 965	3 196	6 382	95 798	395 503	505 922	899 631	33 714
3221	Pulp, paper, & paperboard mills	—	6	6	955	45 526	699	1 549	30 276	134 056	186 674	321 359	10 702
32212	Paper mills	—	4	4	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	4	71	44	3 469	112 439	2 497	4 833	65 522	261 447	319 248	578 272	23 012
32221	Paperboard container mfg	2	37	27	2 073	66 723	1 538	2 915	38 818	143 496	182 842	325 783	9 378
322211	Corrugated & solid fiber box mfg	2	25	21	1 669	56 453	1 201	2 357	31 231	120 036	149 678	269 598	5 857
32222	Paper bag & coated & treated paper mfg	8	8	5	583	22 176	348	793	12 118	58 959	59 246	118 712	4 175
322222	Coated & laminated paper mfg	9	4	3	436	17 683	252	553	9 236	50 106	47 847	98 508	D
32223	Stationery product mfg ..	4	16	6	486	15 019	367	711	8 324	30 568	33 043	63 228	1 608
322232	Envelope mfg	4	6	5	336	11 359	248	490	6 222	23 201	25 374	48 073	1 467
32229	Other converted paper product mfg	9	10	6	327	8 521	244	414	6 262	28 424	44 117	70 549	7 851
323	Printing & related support activities.....	1	667	95	9 166	310 819	6 353	12 542	182 886	816 739	458 785	1 272 855	49 070
3231	Printing & related support activities.....	1	667	95	9 166	310 819	6 353	12 542	182 886	816 739	458 785	1 272 855	49 070
32311	Printing	1	588	83	8 306	276 536	5 723	11 292	162 568	749 444	446 913	1 193 557	45 792
323110	Commercial lithographic printing ..	1	287	42	4 306	152 994	3 058	6 024	93 651	467 617	281 624	746 829	32 044
323112	Commercial flexographic printing .	—	16	7	369	17 002	234	454	8 005	30 605	20 136	51 007	1 913
323113	Commercial screen printing.....	4	47	6	1 109	30 823	618	1 377	14 753	61 922	40 497	101 567	4 285
323114	Quick printing.....	4	137	6	792	20 333	543	937	12 715	40 750	23 928	64 750	2 834
323116	Manifold business form printing.....	—	20	10	664	20 254	455	803	12 213	66 855	32 632	99 850	1 093
323117	Book printing.....	—	7	4	292	11 060	239	501	6 896	20 230	16 144	35 961	885
323119	Other commercial printing.....	5	56	3	444	13 159	344	680	8 059	29 899	17 095	47 391	1 530

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32312	Support activities for printing	2	79	12	860	34 283	630	1 250	20 318	67 295	11 872	79 298	3 278
323122	Prepress services	2	68	11	735	31 036	527	1 037	17 910	60 482	11 392	72 001	2 156
324	Petroleum & coal products mfg	1	40	11	1 358	64 274	782	1 599	32 466	260 072	814 176	1 074 612	20 612
3241	Petroleum & coal products mfg	1	40	11	1 358	64 274	782	1 599	32 466	260 072	814 176	1 074 612	20 612
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	e	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	5	21	7	889	37 249	470	857	16 242	111 498	184 026	296 473	10 149
324191	Petroleum lubricating oil & grease mfg	3	18	6	f	D	D	D	D	D	D	D	D
324199	All other petroleum & coal products mfg ...	9	3	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	215	83	8 930	414 084	4 787	9 594	180 918	1 541 011	1 723 976	3 278 786	157 436
3251	Basic chemical mfg	—	21	10	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	8	6	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	7	5	310	15 105	188	419	8 919	85 059	66 999	149 247	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	9	6	1 382	80 873	354	737	17 366	176 880	398 322	562 851	45 368
32521	Resin & synthetic rubber mfg	—	9	6	1 382	80 873	354	737	17 366	176 880	398 322	562 851	45 368
325211	Plastics material & resin mfg	—	7	6	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	23	11	1 382	58 838	753	1 466	21 993	225 306	101 363	329 869	D
32541	Pharmaceutical & medicine mfg	1	23	11	1 382	58 838	753	1 466	21 993	225 306	101 363	329 869	D
325412	Pharmaceutical preparation mfg	2	7	3	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	6	3	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	8	5	348	8 771	175	332	3 386	83 765	28 742	116 894	D
3255	Paint, coating, & adhesive mfg	—	58	25	3 094	146 663	1 915	3 590	79 228	495 554	674 918	1 191 553	42 856
32551	Paint & coating mfg	—	40	17	2 158	112 467	1 375	2 584	63 336	444 890	543 124	1 006 075	19 162
325510	Paint & coating mfg	—	40	17	2 158	112 467	1 375	2 584	63 336	444 890	543 124	1 006 075	19 162
32552	Adhesive mfg	2	18	8	936	34 196	540	1 006	15 892	50 664	131 794	185 478	23 694
325520	Adhesive mfg	2	18	8	936	34 196	540	1 006	15 892	50 664	131 794	185 478	23 694
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	46	11	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	2	40	11	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	2	26	8	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	52	18	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	1	48	18	1 445	64 230	749	1 613	26 530	222 075	210 518	437 663	D
325991	Custom compounding of purchased resin ...	2	20	7	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	24	9	971	44 184	513	1 129	20 064	154 261	128 214	285 876	9 340
326	Plastics & rubber products mfg	1	396	221	25 956	729 667	19 739	39 539	450 767	1 802 344	1 699 535	3 506 272	168 274
3261	Plastics product mfg	1	354	203	24 665	691 031	18 728	37 680	427 046	1 711 427	1 629 297	3 345 952	163 381
32611	Unsupported plastics film, sheet, & bag mfg ..	—	11	3	620	32 712	361	708	19 104	97 417	74 136	173 752	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	9	2	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	21	7	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	14	6	493	17 531	314	559	8 218	37 183	65 381	105 112	D

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	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32614	Polystyrene foam product mfg.....	5	12	5	802	26 803	596	1 184	14 370	47 582	37 726	85 649	D
326140	Polystyrene foam product mfg.....	5	12	5	802	26 803	596	1 184	14 370	47 582	37 726	85 649	D
32615	Urethane & other foam product (except polystyrene) mfg.....	—	18	7	878	27 574	658	1 517	17 901	72 905	109 468	182 336	5 003
326150	Urethane & other foam product (except polystyrene) mfg.....	—	18	7	878	27 574	658	1 517	17 901	72 905	109 468	182 336	5 003
32616	Plastics bottle mfg.....	3	4	2	e	D	D	D	D	D	D	D	6 744
326160	Plastics bottle mfg.....	3	4	2	e	D	D	D	D	D	D	D	6 744
32619	Other plastics product mfg.....	1	286	179	21 246	568 871	16 325	32 779	355 712	1 404 051	1 242 925	2 648 049	121 466
326191	Plastics plumbing fixture mfg.....	1	5	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	280	176	20 977	562 068	16 098	32 426	351 084	1 383 990	1 227 917	2 612 190	119 386
3262	Rubber product mfg.....	1	42	18	1 291	38 636	1 011	1 859	23 721	90 917	70 238	160 320	4 893
32629	Other rubber product mfg.....	1	31	17	1 238	37 232	966	1 772	22 618	87 678	66 468	153 305	4 720
326291	Rubber product mfg for mechanical use.....	—	16	11	1 007	30 596	823	1 491	18 828	72 752	49 807	122 082	3 868
327	Nonmetallic mineral product mfg.....	1	213	72	6 791	305 990	5 186	11 312	220 399	815 917	669 735	1 491 882	110 965
3271	Clay product & refractory mfg.....	1	23	8	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg.....	—	13	5	315	8 020	192	411	4 476	24 312	11 361	33 934	1 159
3272	Glass & glass product mfg.....	2	31	11	2 957	161 156	2 460	5 685	129 508	341 071	225 144	570 583	D
32721	Glass & glass product mfg.....	2	31	11	2 957	161 156	2 460	5 685	129 508	341 071	225 144	570 583	D
327211	Flat glass mfg.....	4	2	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	—	28	9	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	1	103	34	2 058	86 381	1 464	2 960	53 735	271 991	272 217	545 222	19 252
32731	Cement mfg.....	—	10	2	351	14 730	240	502	9 388	77 567	87 064	165 716	9 877
327310	Cement mfg.....	—	10	2	351	14 730	240	502	9 388	77 567	87 064	165 716	9 877
32732	Ready-mix concrete mfg.....	1	57	21	990	43 439	741	1 386	29 984	130 339	134 115	264 109	6 368
327320	Ready-mix concrete mfg.....	1	57	21	990	43 439	741	1 386	29 984	130 339	134 115	264 109	6 368
32733	Concrete pipe, brick, & block mfg.....	1	17	7	346	14 799	236	543	7 654	34 695	39 629	74 644	2 007
32739	Other concrete product mfg.....	6	19	4	371	13 413	247	529	6 709	29 390	11 409	40 753	1 000
327390	Other concrete product mfg.....	6	19	4	371	13 413	247	529	6 709	29 390	11 409	40 753	1 000
3274	Lime & gypsum product mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	2	51	16	1 053	35 978	754	1 589	22 009	104 027	93 821	201 351	7 634
32791	Abrasive product mfg.....	2	29	14	885	30 589	628	1 339	18 263	89 221	74 172	167 080	6 289
327910	Abrasive product mfg.....	2	29	14	885	30 589	628	1 339	18 263	89 221	74 172	167 080	6 289
331	Primary metal mfg.....	—	120	72	14 442	670 848	11 452	26 602	517 120	1 804 848	3 064 424	4 866 288	172 953
3311	Iron & steel mills & ferroalloy mfg.....	—	10	8	7 696	452 648	6 017	14 617	351 433	1 169 760	1 908 985	3 075 632	D
33111	Iron & steel mills & ferroalloy mfg.....	—	10	8	7 696	452 648	6 017	14 617	351 433	1 169 760	1 908 985	3 075 632	D
331111	Iron & steel mills.....	—	9	8	i	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	—	24	18	2 245	84 862	1 750	3 649	61 402	226 156	542 254	767 504	14 686
33121	Iron & steel pipes & tubes mfg from purchased steel.....	—	9	9	1 407	47 654	1 127	2 293	33 424	101 630	176 382	276 514	4 751
331210	Iron & steel pipes & tubes mfg from purchased steel.....	—	9	9	1 407	47 654	1 127	2 293	33 424	101 630	176 382	276 514	4 751
33122	Rolling & drawing of purchased steel.....	—	15	9	838	37 208	623	1 356	27 978	124 526	365 872	490 990	9 935
331221	Cold-rolled steel shape mfg.....	—	13	7	f	D	D	D	D	D	D	D	D

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	DETROIT-ANN ARBOR-FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3313	Alumina & aluminum production & processing ..	-	5	4	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	-	5	4	f	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum .	-	4	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing ..	-	16	8	1 876	48 975	1 514	3 538	41 540	177 105	373 622	543 463	D
33141	Nonferrous metal (except aluminum) smelting & refining ..	-	4	2	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	-	2	2	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	65	34	g	D	D	D	D	D	D	D	7 381
33151	Ferrous metal foundries ..	1	38	19	1 281	40 205	1 123	2 455	30 165	95 251	60 717	155 441	5 163
331511	Iron foundries	-	14	8	683	22 968	635	1 528	18 196	55 981	35 577	91 795	D
331512	Steel investment foundries	-	10	5	318	9 037	257	482	6 249	22 110	11 842	33 321	D
331513	Steel foundries (except investment)	4	14	6	280	8 200	231	445	5 720	17 160	13 298	30 325	D
33152	Nonferrous metal foundries	-	27	15	f	D	D	D	D	D	D	D	2 218
331522	Nonferrous (except aluminum) die-casting foundries	-	10	6	336	9 113	282	546	6 204	21 808	13 366	35 154	224
331524	Aluminum foundries (except die-casting) ..	-	8	6	290	10 656	228	533	7 199	33 406	16 971	49 908	1 886
332	Fabricated metal product mfg	1	1 946	631	47 374	1 739 744	35 506	74 585	1 095 982	3 793 512	2 738 773	6 521 030	348 582
3321	Forging & stamping	1	110	50	3 946	152 002	2 889	6 069	94 897	365 055	408 257	772 859	39 662
33211	Forging & stamping	1	110	50	3 946	152 002	2 889	6 069	94 897	365 055	408 257	772 859	39 662
332111	Iron & steel forging ...	-	27	13	1 297	59 960	865	2 016	36 060	180 591	233 826	412 696	25 756
332112	Nonferrous forging ...	1	8	5	e	D	D	D	D	D	D	D	D
332116	Metal stamping	2	61	28	2 106	71 541	1 604	3 112	44 378	135 394	121 157	258 572	11 289
3322	Cutlery & handtool mfg	1	83	25	1 639	77 904	1 091	2 358	42 884	146 903	72 101	216 712	10 621
33221	Cutlery & handtool mfg ..	1	83	25	1 639	77 904	1 091	2 358	42 884	146 903	72 101	216 712	10 621
332212	Hand & edge tool mfg .	1	74	25	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	226	68	5 131	184 665	3 590	7 487	107 800	438 232	400 274	841 691	17 898
33231	Plate work & fabricated structural product mfg ..	1	90	29	2 500	84 558	1 770	3 777	52 867	224 887	206 685	437 458	10 270
332312	Fabricated structural metal mfg	2	57	14	1 370	44 342	907	1 816	26 429	131 059	128 456	265 025	5 681
332313	Plate work mfg	-	25	13	986	34 905	767	1 752	23 219	83 349	69 319	153 005	4 327
33232	Ornamental & architectural metal products mfg	1	136	39	2 631	100 107	1 820	3 710	54 933	213 345	193 589	404 233	7 628
332321	Metal window & door mfg	1	26	14	868	30 141	553	1 120	14 003	63 064	108 906	172 770	1 503
332322	Sheet metal work mfg .	1	86	23	1 584	64 610	1 145	2 391	38 297	140 961	79 261	216 847	5 865
3324	Boiler, tank, & shipping container mfg	4	28	8	827	24 638	611	1 183	15 180	46 513	44 047	90 213	2 635
33241	Power boiler & heat exchanger mfg	-	6	3	262	8 761	183	340	5 026	13 945	11 713	25 077	588
332410	Power boiler & heat exchanger mfg	-	6	3	262	8 761	183	340	5 026	13 945	11 713	25 077	588
33243	Metal can, box, & other metal container (light gauge) mfg	7	18	3	474	12 194	360	677	7 754	24 237	27 049	51 504	1 740
332439	Other metal container mfg	7	16	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	1	35	15	1 314	48 932	943	2 013	25 632	128 943	129 391	255 704	7 376
33251	Hardware mfg	1	35	15	1 314	48 932	943	2 013	25 632	128 943	129 391	255 704	7 376
332510	Hardware mfg	1	35	15	1 314	48 932	943	2 013	25 632	128 943	129 391	255 704	7 376
3326	Spring & wire product mfg .	1	42	14	880	27 508	683	1 284	16 353	57 171	51 700	108 582	4 449
33261	Spring & wire product mfg	1	42	14	880	27 508	683	1 284	16 353	57 171	51 700	108 582	4 449
332612	Spring (light gauge) mfg	2	15	7	413	12 621	301	625	7 747	30 244	30 407	60 284	1 884
332618	Other fabricated wire product mfg	1	23	5	335	10 043	263	503	6 096	21 796	16 204	38 196	D

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	DETROIT-ANN ARBOR-FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	925	259	19 593	744 791	14 999	31 672	488 467	1 548 644	1 056 348	2 603 018	127 775
33271	Machine shops	1	709	143	10 678	418 948	8 111	16 855	273 559	783 383	394 864	1 176 829	60 426
332710	Machine shops	1	709	143	10 678	418 948	8 111	16 855	273 559	783 383	394 864	1 176 829	60 426
33272	Turned product & screw, nut, & bolt mfg	—	216	116	8 915	325 843	6 888	14 817	214 908	765 261	661 484	1 426 189	67 349
332721	Precision turned product mfg	—	131	69	4 828	174 885	3 957	8 807	120 219	371 187	214 354	582 950	33 430
332722	Bolt, nut, screw, rivet, & washer mfg	—	85	47	4 087	150 958	2 931	6 010	94 689	394 074	447 130	843 239	33 919
3328	Coating, engraving, heat treating, & allied activities	1	281	122	8 610	280 242	6 665	14 257	183 702	658 883	289 079	943 904	115 795
33281	Coating, engraving, heat treating, & allied activities	1	281	122	8 610	280 242	6 665	14 257	183 702	658 883	289 079	943 904	115 795
332811	Metal heat treating	1	81	45	2 534	99 388	1 860	4 122	65 067	237 147	84 664	322 323	26 413
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	78	36	2 562	75 368	1 956	4 108	48 952	189 021	113 454	297 649	71 177
332813	Electroplating, plating, polishing, anodizing, & coloring	—	122	41	3 514	105 486	2 849	6 027	69 683	232 715	90 961	323 932	18 205
3329	Other fabricated metal product mfg	1	216	70	5 434	199 062	4 035	8 262	121 067	403 168	287 576	688 347	22 371
33291	Metal valve mfg	—	30	10	1 866	71 543	1 327	2 824	39 310	149 826	115 017	265 340	8 432
332912	Fluid power valve & hose fitting mfg	1	21	8	1 584	64 021	1 102	2 381	33 559	111 452	75 045	186 893	7 987
33299	All other fabricated metal product mfg	1	186	60	3 568	127 519	2 708	5 438	81 757	253 342	172 559	423 007	13 939
332996	Fabricated pipe & pipe fitting mfg	—	45	16	918	28 321	674	1 279	16 526	60 776	46 418	107 737	3 491
332997	Industrial pattern mfg	1	35	15	669	32 793	542	1 232	24 289	51 676	17 975	69 145	4 307
332999	All other miscellaneous fabricated metal product mfg	1	99	29	1 948	65 240	1 469	2 892	40 447	137 944	106 763	241 812	6 064
333	Machinery mfg	—	1 505	592	53 510	2 730 164	35 344	79 801	1 566 798	5 028 135	5 146 877	10 205 437	355 999
3332	Industrial machinery mfg ..	—	100	30	3 011	157 747	1 571	3 168	73 271	285 171	419 331	756 782	15 083
33322	Plastics & rubber industry machinery mfg	1	17	4	293	14 387	149	282	5 674	31 178	24 501	56 157	1 713
333220	Plastics & rubber industry machinery mfg	1	17	4	293	14 387	149	282	5 674	31 178	24 501	56 157	1 713
33329	Other industrial machinery mfg	—	80	26	2 711	143 187	1 417	2 878	67 492	253 611	394 552	699 963	13 354
333298	All other industrial machinery mfg	—	68	22	2 386	129 785	1 235	2 495	61 408	231 099	359 955	642 300	12 417
3333	Commercial & service industry machinery mfg ..	—	22	8	727	33 747	443	869	15 195	59 235	55 309	116 063	3 538
33331	Commercial & service industry machinery mfg	—	22	8	727	33 747	443	869	15 195	59 235	55 309	116 063	3 538
333319	Other commercial & service industry machinery mfg	—	17	6	622	28 713	378	737	12 470	49 915	49 580	100 683	2 842
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	33	20	2 038	70 924	1 197	2 490	34 515	135 949	133 593	269 526	10 047
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	33	20	2 038	70 924	1 197	2 490	34 515	135 949	133 593	269 526	10 047
333411	Air purification equipment mfg	6	10	7	e	D	D	D	D	D	D	D	1 267
333414	Heating equipment (except warm air furnaces) mfg	—	8	3	394	12 865	173	342	5 509	36 823	28 707	66 002	D
333415	AC & warm air heating & commercial industrial refrig equip mfg	—	13	8	1 176	42 981	689	1 456	19 291	60 780	65 836	129 005	8 347

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	-	1 064	409	30 559	1 572 684	22 284	52 212	1 026 047	2 797 007	1 758 394	4 586 267	221 286
33351	Metalworking machinery mfg	-	1 064	409	30 559	1 572 684	22 284	52 212	1 026 047	2 797 007	1 758 394	4 586 267	221 286
333511	Industrial mold mfg ...	-	181	61	5 079	272 146	3 899	9 232	194 216	482 957	183 770	662 105	40 735
333512	Machine tool (metal cutting types) mfg ...	-	47	34	2 499	137 877	1 432	3 395	65 338	216 678	358 426	624 515	11 974
333513	Machine tool (metal forming types) mfg ...	-	19	8	e	D	D	D	D	D	D	D	2 422
333514	Special die & tool, die set, jig, & fixture mfg .	1	528	192	14 226	759 470	11 189	25 949	541 669	1 256 722	499 029	1 733 749	124 046
333515	Cutting tool & machine tool accessory mfg ..	1	226	72	4 985	213 534	3 485	7 670	126 159	439 557	230 251	668 523	28 105
333518	Other metalworking machinery mfg	-	58	41	3 297	168 220	1 978	5 393	87 888	359 530	457 885	826 935	13 877
3336	Engine, turbine, & power transmission equipment mfg	-	30	19	4 552	266 167	2 880	6 592	147 973	528 522	1 254 338	1 774 460	50 496
33361	Engine, turbine, & power transmission equipment mfg	-	30	19	4 552	266 167	2 880	6 592	147 973	528 522	1 254 338	1 774 460	50 496
333612	Speed changer, industrial high-speed drive, & gear mfg	1	10	8	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	1	11	4	406	15 446	267	537	8 763	38 731	43 720	82 235	D
333618	Other engine equipment mfg	-	8	6	3 869	237 860	2 428	5 652	132 763	463 245	1 196 464	1 651 641	D
3339	Other general-purpose machinery mfg	-	243	105	12 395	619 159	6 844	14 213	265 735	1 189 783	1 504 959	2 650 848	54 764
33391	Pump & compressor mfg	-	9	5	742	34 599	278	552	12 992	86 431	99 937	175 101	2 806
333912	Air & gas compressor mfg	-	4	3	f	D	D	D	D	D	D	D	2 105
33392	Material handling equipment mfg	-	57	30	2 440	135 294	1 295	3 053	52 229	297 880	393 261	691 499	10 110
333922	Conveyor & conveying equipment mfg	-	39	20	1 978	119 903	1 022	2 450	43 782	263 749	354 469	617 839	7 994
33399	All other general-purpose machinery mfg	-	177	70	9 213	449 266	5 271	10 608	200 514	805 472	1 011 761	1 784 248	41 848
333992	Welding & soldering equipment mfg	-	31	20	3 722	213 259	2 751	5 499	118 183	259 520	410 067	673 409	18 458
333993	Packaging machinery mfg	-	7	4	359	18 028	142	262	4 920	47 823	35 908	80 059	D
333994	Industrial process furnace & oven mfg ..	3	32	13	1 095	49 922	646	1 483	24 922	102 745	90 617	186 511	4 458
333995	Fluid power cylinder & actuator mfg	-	14	8	578	19 616	281	609	8 925	54 342	32 484	86 372	2 924
333999	All other miscellaneous general-purpose machinery mfg	-	77	20	3 200	134 198	1 280	2 394	35 085	314 137	424 200	712 603	11 197
334	Computer & electronic product mfg	-	231	85	9 269	359 642	5 714	12 105	158 457	842 348	944 077	1 747 163	56 632
3341	Computer & peripheral equipment mfg	1	16	3	534	27 581	215	377	7 080	38 087	47 247	85 793	1 785
33411	Computer & peripheral equipment mfg	1	16	3	534	27 581	215	377	7 080	38 087	47 247	85 793	1 785
334111	Electronic computer mfg	-	7	1	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	18	6	539	21 669	251	524	6 858	55 300	52 747	107 487	3 887
33429	Other communications equipment mfg	-	7	3	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	7	3	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	84	27	3 658	119 469	2 608	5 475	63 478	334 684	522 444	814 758	26 874
33441	Semiconductor & other electronic component mfg	-	84	27	3 658	119 469	2 608	5 475	63 478	334 684	522 444	814 758	26 874
334412	Bare printed circuit board mfg	2	21	6	496	13 756	373	745	8 344	33 285	20 660	52 120	2 356
334418	Printed circuit assembly (electronic assembly) mfg	-	14	9	1 747	53 410	1 507	3 182	37 188	153 209	272 274	424 617	17 431
334419	Other electronic component mfg	-	32	6	876	34 185	464	1 026	13 325	73 355	55 258	111 262	4 349

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	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	96	41	3 010	129 745	1 388	2 769	40 392	251 146	179 455	432 889	15 350
33451	Navigational, measuring, medical, & control instruments mfg	1	96	41	3 010	129 745	1 388	2 769	40 392	251 146	179 455	432 889	15 350
334513	Industrial process control instrument mfg	2	32	19	1 346	58 424	633	1 305	18 440	91 431	75 178	169 556	3 023
334519	Other measuring & controlling device mfg	—	28	9	907	41 310	375	730	11 024	91 062	47 707	138 273	7 427
3346	Mfg & reproducing magnetic & optical media	—	14	7	1 504	60 311	1 232	2 925	40 338	162 035	141 371	304 359	8 729
33461	Mfg & reproducing magnetic & optical media	—	14	7	1 504	60 311	1 232	2 925	40 338	162 035	141 371	304 359	8 729
334612	Prerecorded CD (except software), tape, & record reproducing	—	10	5	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	118	43	3 652	154 059	2 268	4 622	62 216	306 058	278 842	586 178	18 086
3353	Electrical equipment mfg	1	78	26	2 249	100 298	1 328	2 706	40 415	179 970	156 123	335 899	7 962
33531	Electrical equipment mfg	1	78	26	2 249	100 298	1 328	2 706	40 415	179 970	156 123	335 899	7 962
335313	Switchgear & apparatus mfg	1	19	9	647	30 872	368	787	11 462	52 145	55 934	107 836	1 826
335314	Relay & industrial control mfg	1	46	16	1 416	63 347	859	1 701	26 242	111 344	91 914	202 610	5 844
3359	Other electrical equipment & component mfg	—	27	14	1 175	44 444	781	1 590	18 835	101 986	108 989	212 102	9 720
33593	Wiring device mfg	—	7	4	505	21 148	331	729	8 915	46 531	60 127	107 099	D
335931	Current-carrying wiring device mfg	—	5	3	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	19	9	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	18	9	f	D	D	D	D	D	D	D	2 973
336	Transportation equipment mfg	—	560	351	135 046	7 202 235	114 917	242 641	5 879 702	26 485 979	44 775 826	71 326 906	2 902 418
3361	Motor vehicle mfg	—	23	18	k	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	21	18	k	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	16	13	j	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	5	5	j	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	4	26	7	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	4	26	7	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	8	13	2	e	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	461	304	90 882	4 721 843	75 682	165 826	3 753 482	9 775 809	16 213 235	26 062 776	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	59	27	12 426	782 916	10 544	24 323	643 667	1 595 478	4 145 178	5 754 472	378 174
336312	Gasoline engine & engine parts mfg	—	56	25	12 346	780 569	10 488	24 218	642 493	1 586 924	4 143 723	5 744 225	D
33632	Motor vehicle electrical & electronic equipment mfg	2	22	8	744	21 118	617	1 199	14 504	59 826	70 599	130 018	D
336322	Other motor vehicle electrical & electronic equipment mfg	3	19	7	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	13	8	2 872	130 901	2 289	4 644	96 204	236 789	359 156	595 373	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	13	8	2 872	130 901	2 289	4 644	96 204	236 789	359 156	595 373	D
33634	Motor vehicle brake system mfg	—	13	7	739	30 845	595	1 396	20 746	61 947	95 691	156 150	26 444
336340	Motor vehicle brake system mfg	—	13	7	739	30 845	595	1 396	20 746	61 947	95 691	156 150	26 444

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	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33635	Motor vehicle transmission & power train parts mfg	-	37	28	21 312	1 292 071	18 143	43 511	1 076 462	2 790 478	4 967 600	7 779 056	693 788
336350	Motor vehicle transmission & power train parts mfg	-	37	28	21 312	1 292 071	18 143	43 511	1 076 462	2 790 478	4 967 600	7 779 056	693 788
33636	Motor vehicle seating & interior trim mfg	-	31	27	10 750	460 298	8 895	18 255	361 128	999 127	1 755 472	2 754 113	100 634
336360	Motor vehicle seating & interior trim mfg ...	-	31	27	10 750	460 298	8 895	18 255	361 128	999 127	1 755 472	2 754 113	100 634
33637	Motor vehicle metal stamping	-	181	134	28 248	1 419 213	23 494	49 709	1 099 274	2 509 814	2 817 553	5 359 803	461 909
336370	Motor vehicle metal stamping	-	181	134	28 248	1 419 213	23 494	49 709	1 099 274	2 509 814	2 817 553	5 359 803	461 909
33639	Other motor vehicle parts mfg	-	105	65	13 791	584 481	11 105	22 789	441 497	1 522 350	2 001 986	3 533 791	198 519
336399	All other motor vehicle parts mfg	-	104	65	j	D	D	D	D	D	D	D	198 519
3364	Aerospace product & parts mfg	1	25	13	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	1	25	13	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	3	10	6	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	13	6	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	1	17	8	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	1	17	8	g	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	9	4	e	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	2	7	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	216	41	3 319	99 969	2 489	4 909	64 406	194 352	158 582	353 832	6 766
3371	Household & institutional furniture & kitchen cabinet mfg	2	135	15	1 451	39 726	1 120	2 171	26 225	72 107	57 628	130 620	3 026
33711	Wood kitchen cabinet & counter top mfg	3	83	7	741	18 832	564	1 050	12 848	32 877	27 001	60 226	1 633
337110	Wood kitchen cabinet & counter top mfg ...	3	83	7	741	18 832	564	1 050	12 848	32 877	27 001	60 226	1 633
33712	Household & institutional furniture mfg	1	52	8	710	20 894	556	1 121	13 377	39 230	30 627	70 394	1 393
337127	Institutional furniture mfg	-	12	2	364	12 628	254	568	7 016	25 986	16 491	43 053	970
3372	Office furniture (including fixtures) mfg	2	67	20	1 419	48 537	1 025	2 029	30 399	83 389	59 874	143 116	2 890
33721	Office furniture (including fixtures) mfg	2	67	20	1 419	48 537	1 025	2 029	30 399	83 389	59 874	143 116	2 890
337212	Custom architectural woodwork & millwork mfg	2	18	3	262	9 103	163	346	5 057	14 208	9 797	24 181	D
337215	Showcase, partition, shelving, & locker mfg	2	41	15	1 017	34 906	756	1 478	22 372	60 437	44 450	104 552	2 332
3379	Other furniture related product mfg	2	14	6	449	11 706	344	709	7 782	38 856	41 080	80 096	850
33791	Mattress mfg	-	5	4	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	5	4	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	476	65	7 828	227 390	5 007	9 622	120 534	557 134	334 235	887 933	25 097
3391	Medical equipment & supplies mfg	2	216	19	1 784	58 141	1 280	2 288	33 479	182 275	76 002	259 222	5 733
33911	Medical equipment & supplies mfg	2	216	19	1 784	58 141	1 280	2 288	33 479	182 275	76 002	259 222	5 733
339113	Surgical appliance & supplies mfg	5	22	5	300	11 300	191	328	4 642	22 271	13 289	35 329	1 332
339114	Dental equipment & supplies mfg	-	15	2	296	12 120	222	421	7 847	84 486	31 477	116 802	D
339116	Dental laboratories ...	4	148	6	889	24 240	664	1 195	16 039	53 628	20 357	74 294	1 602

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	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Detroit, MI PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ..	1	260	46	6 044	169 249	3 727	7 334	87 055	374 859	258 233	628 711	19 364
33993	Doll, toy, & game mfg ...	—	8	2	709	17 955	509	949	8 519	53 674	36 161	87 730	D
339932	Game, toy, & children's vehicle mfg	—	8	2	709	17 955	509	949	8 519	53 674	36 161	87 730	D
33995	Sign mfg	—	109	15	2 883	81 029	1 516	2 908	38 665	173 058	95 716	269 224	5 098
339950	Sign mfg	—	109	15	2 883	81 029	1 516	2 908	38 665	173 058	95 716	269 224	5 098
33999	All other miscellaneous mfg	2	78	23	1 925	56 980	1 375	2 805	32 986	117 812	98 234	214 967	9 173
339991	Gasket, packing, & sealing device mfg ...	3	24	16	1 116	34 044	783	1 575	19 698	74 648	59 003	132 479	5 456
339999	All other miscellaneous mfg	2	37	5	551	17 698	399	908	10 283	31 369	26 322	57 714	3 025
	Flint, MI PMSA												
31-33	Manufacturing	—	355	115	34 414	1 744 627	28 473	57 164	1 388 762	3 592 590	7 697 511	11 240 321	180 557
311	Food mfg	7	16	3	461	12 838	251	507	6 628	34 713	94 096	128 745	2 308
3115	Dairy product mfg	8	2	1	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	8	2	1	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	8	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	6	5	e	D	D	D	D	D	D	D	1 358
3222	Converted paper product mfg	2	6	5	e	D	D	D	D	D	D	D	1 358
32221	Paperboard container mfg	2	5	5	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	2	5	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	58	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	58	8	f	D	D	D	D	D	D	D	D
32311	Printing	1	54	7	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	26	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	16	9	1 222	41 612	924	2 128	24 312	124 325	109 707	231 617	17 309
3261	Plastics product mfg	1	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	11	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	11	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	15	8	e	D	D	D	D	D	D	D	2 007
332	Fabricated metal product mfg	—	74	28	2 524	112 091	2 048	4 573	85 522	186 710	227 546	412 984	15 968
3325	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	31	8	599	21 962	495	1 076	16 998	63 803	51 549	112 924	3 459
33272	Turned product & screw, nut, & bolt mfg	—	11	6	413	14 994	357	812	12 732	53 242	44 455	95 345	2 753
332722	Bolt, nut, screw, rivet, & washer mfg	—	5	3	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	10	6	292	9 346	241	405	3 950	13 322	5 370	18 832	539
33281	Coating, engraving, heat treating, & allied activities	1	10	6	292	9 346	241	405	3 950	13 322	5 370	18 832	539
3329	Other fabricated metal product mfg	—	8	5	330	8 692	285	498	5 868	11 287	18 011	28 455	1 227

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT—ANN ARBOR—FLINT, MI CMSA—Con.												
	Flint, MI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	—	45	23	1 587	76 165	1 070	2 344	47 742	177 099	171 695	323 671	8 852
3335	Metalworking machinery mfg	—	25	12	583	25 844	444	988	17 516	73 459	66 410	119 246	3 289
33351	Metalworking machinery mfg	—	25	12	583	25 844	444	988	17 516	73 459	66 410	119 246	3 289
333514	Special die & tool, die set, jig, & fixture mfg	—	12	4	256	12 211	205	486	8 981	24 008	11 929	33 844	1 665
3339	Other general-purpose machinery mfg	—	12	8	872	45 358	557	1 214	27 265	95 576	99 009	190 402	5 066
33392	Material handling equipment mfg	—	5	4	630	37 245	436	952	22 542	78 816	87 918	162 823	D
333922	Conveyor & conveying equipment mfg	—	4	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	12	4	h	D	D	D	D	D	D	D	13 935
3344	Semiconductor & other electronic component mfg	—	4	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	4	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	5	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	2	g	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	27	15	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	19	12	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	1	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	7	4	i	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	7	4	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	6	4	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	6	4	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	16	4	e	D	D	D	D	D	D	D	405
339	Miscellaneous mfg	3	36	3	e	D	D	D	D	D	D	D	367

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	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA												
31-33	Manufacturing	-	2 334	948	150 646	5 648 694	107 443	219 863	3 386 455	15 248 819	13 246 529	28 465 754	1 367 606
311	Food mfg.	1	111	50	10 572	303 097	7 965	16 713	209 148	1 473 377	1 431 052	2 906 495	67 985
3113	Sugar & confectionery product mfg.	-	7	2	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.	-	4	1	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg.	-	4	1	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.	1	10	7	1 241	30 009	1 076	2 209	22 241	192 061	156 120	345 791	7 366
31141	Frozen food mfg.	-	6	4	578	15 444	487	891	10 321	79 414	69 883	149 360	1 953
311411	Frozen fruit, juice, & vegetable mfg.	-	3	3	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.	-	3	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	3	4	3	663	14 565	589	1 318	11 920	112 647	86 237	196 431	5 413
311421	Fruit & vegetable canning	3	4	3	663	14 565	589	1 318	11 920	112 647	86 237	196 431	5 413
3115	Dairy product mfg.	-	11	10	1 377	47 809	801	1 637	28 302	176 833	396 058	579 535	13 558
31151	Dairy product (except frozen) mfg.	-	10	9	g	D	D	D	D	D	D	D	13 558
311511	Fluid milk mfg.	-	5	5	757	25 058	363	862	12 837	60 141	198 530	257 394	6 617
311514	Dry, condensed, & evaporated dairy product mfg.	2	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.	-	15	8	3 137	85 710	2 481	6 277	63 608	389 321	441 025	828 278	17 470
31161	Animal slaughtering & processing	-	15	8	3 137	85 710	2 481	6 277	63 608	389 321	441 025	828 278	17 470
311611	Animal (except poultry) slaughtering	7	8	3	312	5 726	279	444	4 765	17 647	60 769	78 481	D
311615	Poultry processing	-	2	2	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.	2	43	11	2 741	78 252	1 881	3 787	49 548	350 778	207 021	557 231	11 686
31181	Bread & bakery product mfg.	5	35	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	6	10	4	g	D	D	D	D	D	D	D	3 333
31182	Cookie, cracker, & pasta mfg.	1	7	4	1 197	42 226	1 047	2 064	33 953	235 791	139 151	374 374	7 635
311821	Cookie & cracker mfg.	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg.	6	15	8	597	13 194	441	694	7 757	44 575	52 443	97 440	3 380
31199	All other food mfg.	9	6	3	345	6 905	276	400	4 463	23 737	23 738	47 496	1 837
311999	All other miscellaneous food mfg.	9	5	3	e	D	D	D	D	D	D	D	D
313	Textile mills	4	13	4	e	D	D	D	D	D	D	D	1 603
314	Textile product mills	-	33	6	600	15 764	447	796	9 025	14 183	43 888	58 680	2 321
3149	Other textile product mills	-	22	5	487	12 592	350	614	7 263	9 912	38 390	48 700	2 178
31499	All other textile product mills	-	14	3	391	10 572	272	486	6 075	6 518	34 968	41 816	2 045
314999	All other miscellaneous textile product mills	-	13	3	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.	-	6	5	g	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	3	3	880	30 776	693	1 376	22 834	96 880	333 603	432 289	D
31611	Leather & hide tanning & finishing	-	3	3	880	30 776	693	1 376	22 834	96 880	333 603	432 289	D
316110	Leather & hide tanning & finishing	-	3	3	880	30 776	693	1 376	22 834	96 880	333 603	432 289	D
321	Wood product mfg.	2	100	31	2 752	72 874	2 143	4 209	47 673	188 429	239 766	426 791	12 132
3212	Veneer, plywood, & engineered wood product mfg.	3	19	11	1 061	28 469	819	1 533	17 780	78 397	85 837	164 238	4 675
32121	Veneer, plywood, & engineered wood product mfg.	3	19	11	1 061	28 469	819	1 533	17 780	78 397	85 837	164 238	4 675
321214	Truss mfg.	4	8	6	577	12 490	447	785	7 825	32 039	33 075	65 222	1 766
3219	Other wood product mfg.	2	67	19	1 530	39 972	1 187	2 379	26 456	94 692	132 087	226 548	6 385
32191	Millwork	3	28	8	805	21 537	666	1 339	15 729	54 866	95 400	150 042	3 008
321912	Cut stock, resawing lumber, & planing	8	11	4	425	10 458	371	766	8 538	23 329	38 817	62 418	2 025
32192	Wood container & pallet mfg.	1	19	5	317	7 742	237	492	4 811	16 744	15 450	32 081	2 135
321920	Wood container & pallet mfg.	1	19	5	317	7 742	237	492	4 811	16 744	15 450	32 081	2 135
32199	All other wood product mfg.	-	20	6	408	10 693	284	548	5 916	23 082	21 237	44 425	1 242
321999	All other miscellaneous wood product mfg.	-	17	5	e	D	D	D	D	D	D	D	D

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31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con. Manufacturing—Con.												
322	Paper mfg	—	38	29	3 784	144 570	2 943	6 563	97 471	343 138	397 592	742 320	24 174
3221	Pulp, paper, & paperboard mills	—	5	5	1 586	71 947	1 249	2 888	52 514	164 554	203 057	370 888	12 715
32212	Paper mills	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	33	24	2 198	72 623	1 694	3 675	44 957	178 584	194 535	371 432	11 459
32221	Paperboard container mfg	—	18	17	1 565	50 932	1 200	2 609	30 289	111 886	130 167	241 388	7 533
322211	Corrugated & solid fiber box mfg	—	13	13	1 136	37 377	844	1 761	21 184	80 422	92 867	172 952	3 898
322212	Folding paperboard box mfg	—	4	4	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	5	4	e	D	D	D	D	D	D	D	1 852
32229	Other converted paper product mfg	7	4	3	261	9 493	190	446	5 537	24 890	23 170	48 250	1 978
322299	All other converted paper product mfg	7	4	3	261	9 493	190	446	5 537	24 890	23 170	48 250	1 978
323	Printing & related support activities	1	208	53	4 091	127 967	2 900	5 592	76 025	294 727	179 646	472 790	22 015
3231	Printing & related support activities	1	208	53	4 091	127 967	2 900	5 592	76 025	294 727	179 646	472 790	22 015
32311	Printing	1	175	43	3 464	108 865	2 434	4 682	63 547	255 746	165 171	419 524	19 476
323110	Commercial lithographic printing	2	85	28	2 155	68 528	1 513	3 005	39 347	158 724	97 501	256 314	10 803
323112	Commercial flexographic printing	—	4	2	260	7 892	132	273	4 364	23 131	20 329	43 112	3 858
323114	Quick printing	1	41	3	252	6 649	177	265	3 790	14 249	4 999	19 224	604
32312	Support activities for printing	1	33	10	627	19 102	466	910	12 478	38 981	14 475	53 266	2 539
323121	Tradebinding & related work	—	9	4	261	6 249	221	431	4 795	11 761	4 263	15 787	1 132
323122	Prepress services	2	24	6	366	12 853	245	479	7 683	27 220	10 212	37 479	1 407
325	Chemical mfg	—	64	28	10 655	484 005	5 179	10 250	171 495	2 211 452	1 562 528	3 791 645	218 270
3251	Basic chemical mfg	—	10	7	1 102	47 011	661	1 565	27 206	191 314	238 567	430 418	D
32513	Dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	5	4	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	—	2	2	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	8	5	3 019	124 705	1 896	3 632	60 693	402 760	327 695	725 239	D
32541	Pharmaceutical & medicine mfg	—	8	5	3 019	124 705	1 896	3 632	60 693	402 760	327 695	725 239	D
325412	Pharmaceutical preparation mfg	—	7	4	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	16	7	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	12	6	580	21 227	360	774	9 438	53 109	78 258	132 194	D
325510	Paint & coating mfg	—	12	6	580	21 227	360	774	9 438	53 109	78 258	132 194	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	13	3	i	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	13	3	i	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	10	1	i	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	10	5	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	8	5	e	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	—	5	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	148	93	11 544	338 326	8 858	17 363	213 818	861 888	784 587	1 647 051	76 456
3261	Plastics product mfg	1	132	86	10 352	300 729	7 961	15 311	191 686	711 939	686 230	1 400 344	67 947
32611	Unsupported plastics film, sheet, & bag mfg ..	3	8	7	493	15 128	345	682	7 895	38 199	55 186	94 177	3 022
326113	Unsupported plastics film & sheet (except packaging) mfg	3	6	5	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	6	9	4	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	6	8	4	e	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	6	4	391	17 661	265	546	9 299	31 404	44 958	76 744	9 611
326140	Polystyrene foam product mfg	-	6	4	391	17 661	265	546	9 299	31 404	44 958	76 744	9 611
32615	Urethane & other foam product (except polystyrene) mfg	5	7	4	393	10 620	313	616	7 418	21 109	36 312	57 619	2 263
326150	Urethane & other foam product (except polystyrene) mfg	5	7	4	393	10 620	313	616	7 418	21 109	36 312	57 619	2 263
32619	Other plastics product mfg	1	100	67	8 739	248 727	6 769	12 995	161 349	599 053	529 988	1 129 770	51 197
326199	All other plastics product mfg	1	97	65	8 666	246 672	6 715	12 895	160 210	594 251	525 152	1 120 077	D
3262	Rubber product mfg	-	16	7	1 192	37 597	897	2 052	22 132	149 949	98 357	246 707	8 509
32629	Other rubber product mfg	-	9	5	962	30 245	720	1 669	17 875	124 894	83 617	206 674	D
326291	Rubber product mfg for mechanical use	-	2	1	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	7	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	80	30	4 529	177 522	3 020	6 237	91 385	450 317	423 173	871 431	39 123
3272	Glass & glass product mfg ..	-	14	10	3 272	130 130	2 196	4 403	62 928	309 860	309 482	618 320	24 951
32721	Glass & glass product mfg	-	14	10	3 272	130 130	2 196	4 403	62 928	309 860	309 482	618 320	24 951
327215	Glass product mfg made of purchased glass	-	14	10	3 272	130 130	2 196	4 403	62 928	309 860	309 482	618 320	24 951
3273	Cement & concrete product mfg	2	47	16	904	32 609	560	1 181	18 446	97 188	79 495	176 213	9 275
32732	Ready-mix concrete mfg	-	30	11	523	20 456	294	632	10 773	52 416	43 819	96 378	6 156
327320	Ready-mix concrete mfg	-	30	11	523	20 456	294	632	10 773	52 416	43 819	96 378	6 156
331	Primary metal mfg	-	70	51	7 575	266 875	5 751	11 518	181 983	634 663	522 492	1 152 159	59 531
3313	Alumina & aluminum production & processing ..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	56	43	6 565	224 784	5 009	9 995	155 724	544 773	348 925	889 085	39 069
33151	Ferrous metal foundries ..	-	19	16	2 892	108 951	2 390	4 931	84 127	259 734	134 056	389 749	14 481
331511	Iron foundries	-	12	9	1 237	50 586	979	1 965	37 279	102 155	62 604	164 685	7 003
331512	Steel investment foundries	-	4	4	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	3	3	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	37	27	3 673	115 833	2 619	5 064	71 597	285 039	214 869	499 336	24 588
331521	Aluminum die-casting foundries	-	11	8	1 508	49 455	982	1 841	29 023	122 880	75 039	197 718	12 622
331522	Nonferrous (except aluminum) die-casting foundries	-	11	10	1 376	42 219	1 010	1 997	25 725	104 267	107 454	212 814	6 804
331524	Aluminum foundries (except die-casting) ..	2	10	5	312	8 662	264	568	6 157	20 298	15 609	35 958	2 817
331525	Copper foundries (except die-casting) ..	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	533	186	17 764	567 731	13 586	26 781	368 728	1 255 506	928 769	2 182 310	111 286
3321	Forging & stamping	—	23	15	1 375	41 297	1 046	1 896	27 456	78 438	89 887	170 882	9 607
33211	Forging & stamping	—	23	15	1 375	41 297	1 046	1 896	27 456	78 438	89 887	170 882	9 607
332116	Metal stamping	—	16	11	1 073	31 879	836	1 438	21 723	56 519	72 681	131 606	7 086
3322	Cutlery & handtool mfg	7	14	6	548	17 470	437	910	12 343	34 388	19 196	53 858	1 945
33221	Cutlery & handtool mfg	7	14	6	548	17 470	437	910	12 343	34 388	19 196	53 858	1 945
332212	Hand & edge tool mfg	7	11	6	524	16 929	417	881	11 968	33 106	18 364	51 748	D
3323	Architectural & structural metals mfg	—	59	20	2 263	77 268	1 718	3 588	49 066	166 363	119 087	285 510	9 448
33231	Plate work & fabricated structural product mfg	1	22	9	559	20 935	392	855	12 746	42 871	48 166	90 977	2 237
332312	Fabricated structural metal mfg	2	14	6	425	16 818	300	672	10 331	33 687	38 049	71 765	1 824
33232	Ornamental & architectural metal products mfg	—	37	11	1 704	56 333	1 326	2 733	36 320	123 492	70 921	194 533	7 211
332322	Sheet metal work mfg	—	27	8	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	—	8	3	892	31 688	688	1 432	20 043	75 008	30 448	105 520	D
3325	Hardware mfg	—	11	9	1 598	58 443	1 286	2 366	38 645	138 672	90 612	229 218	9 665
33251	Hardware mfg	—	11	9	1 598	58 443	1 286	2 366	38 645	138 672	90 612	229 218	9 665
332510	Hardware mfg	—	11	9	1 598	58 443	1 286	2 366	38 645	138 672	90 612	229 218	9 665
3326	Spring & wire product mfg	2	19	9	947	26 946	676	1 411	16 205	61 392	38 023	99 023	4 927
33261	Spring & wire product mfg	2	19	9	947	26 946	676	1 411	16 205	61 392	38 023	99 023	4 927
332611	Spring (heavy gauge) mfg	—	3	3	329	10 799	238	566	6 594	23 805	11 041	34 664	1 941
332612	Spring (light gauge) mfg	5	7	4	511	13 576	372	711	8 325	32 140	21 544	53 614	2 371
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	218	51	4 053	133 088	3 144	6 178	89 762	316 858	236 154	553 203	36 088
33271	Machine shops	1	176	32	2 591	82 631	2 075	3 914	58 274	177 695	147 056	325 517	12 587
332710	Machine shops	1	176	32	2 591	82 631	2 075	3 914	58 274	177 695	147 056	325 517	12 587
33272	Turned product & screw, nut, & bolt mfg	—	42	19	1 462	50 457	1 069	2 264	31 488	139 163	89 098	227 686	23 501
332721	Precision turned product mfg	—	36	16	1 271	44 068	946	2 027	27 944	122 411	72 631	194 875	21 361
3328	Coating, engraving, heat treating, & allied activities	1	109	47	3 933	109 364	2 995	5 880	69 708	247 878	134 037	381 098	29 240
33281	Coating, engraving, heat treating, & allied activities	1	109	47	3 933	109 364	2 995	5 880	69 708	247 878	134 037	381 098	29 240
332811	Metal heat treating	2	16	8	451	16 036	351	618	9 592	42 216	10 680	52 850	7 152
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	35	20	1 439	36 338	1 127	2 196	24 810	87 330	34 035	121 687	12 389
332813	Electroplating, plating, polishing, anodizing, & coloring	—	58	19	2 043	56 990	1 517	3 066	35 306	118 332	89 322	206 561	9 699
3329	Other fabricated metal product mfg	—	74	27	2 890	98 192	2 173	4 335	62 239	200 480	194 081	390 943	10 093
33291	Metal valve mfg	—	7	5	1 254	37 017	963	1 931	23 560	62 642	133 397	194 245	3 464
332912	Fluid power valve & hose fitting mfg	—	4	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	67	22	1 636	61 175	1 210	2 404	38 679	137 838	60 684	196 698	6 629
332991	Ball & roller bearing mfg	—	3	2	e	D	D	D	D	D	D	D	D
332997	Industrial pattern mfg	—	18	7	482	20 755	417	854	16 324	38 156	12 440	51 179	2 438
332999	All other miscellaneous fabricated metal product mfg	1	39	9	691	21 791	493	961	12 177	44 785	34 661	78 876	3 026
333	Machinery mfg	—	396	164	16 748	772 975	11 167	23 703	428 011	1 619 655	1 072 433	2 668 328	139 306
3332	Industrial machinery mfg	1	53	10	800	30 256	389	779	12 631	61 908	51 242	114 153	3 319
33329	Other industrial machinery mfg	1	33	6	494	19 395	257	514	8 608	37 198	27 577	64 794	2 715
333298	All other industrial machinery mfg	1	24	4	280	11 558	140	290	4 860	21 625	16 779	38 358	1 434
3333	Commercial & service industry machinery mfg	—	20	7	1 035	34 820	644	1 215	16 005	107 618	92 226	198 145	6 845
33331	Commercial & service industry machinery mfg	—	20	7	1 035	34 820	644	1 215	16 005	107 618	92 226	198 145	6 845
333315	Photographic & photocopying equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	14	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	13	5	377	12 181	270	552	7 056	27 105	22 066	49 553	1 303
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	13	5	377	12 181	270	552	7 056	27 105	22 066	49 553	1 303
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	4	3	254	8 458	178	375	4 606	18 897	17 267	36 522	1 138
3335	Metalworking machinery mfg	—	221	100	7 658	360 523	5 915	13 495	252 137	751 374	347 535	1 077 087	64 218
33351	Metalworking machinery mfg	—	221	100	7 658	360 523	5 915	13 495	252 137	751 374	347 535	1 077 087	64 218
333511	Industrial mold mfg	—	56	32	2 484	120 531	1 930	4 675	82 326	238 474	100 449	335 928	32 049
333512	Machine tool (metal cutting types) mfg	1	6	5	329	13 677	167	336	6 019	25 465	23 740	53 227	1 087
333513	Machine tool (metal forming types) mfg	—	6	3	354	12 975	184	374	5 681	32 475	31 874	64 849	1 572
333514	Special die & tool, die set, jig, & fixture mfg	—	120	54	3 963	195 930	3 245	7 423	147 761	418 347	177 624	572 417	26 597
333515	Cutting tool & machine tool accessory mfg	2	22	2	334	10 463	250	436	6 545	23 585	7 291	30 701	2 374
3336	Engine, turbine, & power transmission equipment mfg	—	12	6	2 021	100 796	1 270	2 420	47 589	143 453	112 137	260 869	29 855
33361	Engine, turbine, & power transmission equipment mfg	—	12	6	2 021	100 796	1 270	2 420	47 589	143 453	112 137	260 869	29 855
333618	Other engine equipment mfg	—	8	4	1 871	95 740	1 149	2 161	43 797	131 644	105 811	242 695	28 880
3339	Other general-purpose machinery mfg	—	69	32	4 674	227 534	2 547	4 970	88 368	515 114	433 734	941 836	32 051
33391	Pump & compressor mfg	—	6	2	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	23	9	2 366	128 643	1 075	1 953	42 743	268 864	247 300	513 267	20 098
333922	Conveyor & conveying equipment mfg	—	16	7	1 832	111 077	707	1 778	31 884	219 221	207 708	424 024	D
333923	Overhead traveling crane, hoist, & monorail system mfg	—	3	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	40	21	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	2	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	23	8	665	34 088	383	756	11 641	99 368	54 139	146 489	3 689
334	Computer & electronic product mfg	2	51	23	4 686	164 587	3 069	7 297	102 533	420 831	279 025	704 696	12 856
3343	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	5	13	7	754	17 187	512	970	9 381	48 820	37 905	89 855	2 685
33441	Semiconductor & other electronic component mfg	5	13	7	754	17 187	512	970	9 381	48 820	37 905	89 855	2 685
334418	Printed circuit assembly (electronic assembly) mfg	7	3	3	332	5 641	214	344	3 069	19 782	24 235	47 604	D
3345	Navigational, measuring, medical, & control instruments mfg	—	28	11	3 042	118 678	1 958	5 103	75 687	279 110	174 906	455 412	6 899
33451	Navigational, measuring, medical, & control instruments mfg	—	28	11	3 042	118 678	1 958	5 103	75 687	279 110	174 906	455 412	6 899
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	g	D	D	D	D	D	D	D	2 853
334512	Automatic environmental control mfg	—	2	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	—	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	32	15	2 249	63 796	1 671	2 951	37 594	188 855	331 533	519 139	7 520
3352	Household appliance mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	3	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	12	4	355	8 712	230	404	3 708	17 234	33 000	50 659	531
33531	Electrical equipment mfg	-	12	4	355	8 712	230	404	3 708	17 234	33 000	50 659	531
335314	Relay & industrial control mfg	-	8	2	258	6 085	171	264	2 648	12 092	21 978	33 989	336
3359	Other electrical equipment & component mfg	-	11	7	f	D	D	D	D	D	D	D	3 416
33592	Communication & energy wire & cable mfg	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	5	3	359	10 979	256	350	6 691	12 910	14 267	28 864	1 153
335999	All other miscellaneous electrical equipment & component mfg	1	5	3	359	10 979	256	350	6 691	12 910	14 267	28 864	1 153
336	Transportation equipment mfg	-	132	79	23 927	970 937	18 203	36 637	682 511	1 856 856	2 557 389	4 394 438	346 979
3362	Motor vehicle body & trailer mfg	-	14	3	473	16 806	294	563	7 390	30 279	51 212	80 677	1 667
33621	Motor vehicle body & trailer mfg	-	14	3	473	16 806	294	563	7 390	30 279	51 212	80 677	1 667
336211	Motor vehicle body mfg	-	4	2	e	D	D	D	D	D	D	D	1 481
3363	Motor vehicle parts mfg ...	-	98	66	21 452	890 420	16 484	33 262	640 403	1 641 489	2 387 195	4 023 737	335 500
33631	Motor vehicle gasoline engine & engine parts mfg	-	13	10	4 134	187 607	3 560	6 858	156 016	285 671	692 355	978 040	D
336312	Gasoline engine & engine parts mfg	-	12	10	h	D	D	D	D	D	D	D	205 157
33632	Motor vehicle electrical & electronic equipment mfg	-	15	6	1 628	44 333	1 295	2 473	29 800	110 312	173 937	285 288	4 606
336321	Vehicular lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	13	4	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	4	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	4	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	6	5	6 135	255 497	4 095	8 670	155 400	542 166	598 823	1 144 976	D
336360	Motor vehicle seating & interior trim mfg ...	-	6	5	6 135	255 497	4 095	8 670	155 400	542 166	598 823	1 144 976	D
33637	Motor vehicle metal stamping	-	42	32	7 946	345 668	6 522	13 234	270 617	562 002	774 890	1 334 687	65 570
336370	Motor vehicle metal stamping	-	42	32	7 946	345 668	6 522	13 234	270 617	562 002	774 890	1 334 687	65 570
33639	Other motor vehicle parts mfg	-	15	10	1 013	34 142	687	1 341	16 597	92 061	98 880	187 643	5 069
336399	All other motor vehicle parts mfg	-	15	10	1 013	34 142	687	1 341	16 597	92 061	98 880	187 643	5 069
3364	Aerospace product & parts mfg	-	7	4	1 130	43 666	748	1 504	22 151	131 931	63 610	189 287	D
33641	Aerospace product & parts mfg	-	7	4	1 130	43 666	748	1 504	22 151	131 931	63 610	189 287	D
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	5	2	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	5	4	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	5	4	e	D	D	D	D	D	D	D	D
336612	Boat building	-	5	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	GRAND RAPIDS—MUSKEGON—HOLLAND, MI MSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3369	Other transportation equipment mfg	-	5	1	e	D	D	D	D	D	D	D	245	
33699	Other transportation equipment mfg	-	5	1	e	D	D	D	D	D	D	D	245	
336999	All other transportation equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	-	147	64		23 902	1 010 652	16 886	36 128	569 201	2 847 468	1 702 194	4 546 439	200 755
3371	Household & institutional furniture & kitchen cabinet mfg	1	70	19		2 561	78 122	1 973	3 817	50 481	174 897	109 749	285 583	7 407
33712	Household & institutional furniture mfg	1	51	18		2 450	75 602	1 884	3 669	48 724	170 373	106 735	277 987	7 179
337122	Nonupholstered wood household furniture mfg	2	25	11		992	26 201	807	1 595	18 287	50 187	29 166	79 748	2 629
337127	Institutional furniture mfg	-	18	6		1 392	47 105	1 043	2 007	29 622	110 925	68 194	179 742	4 439
3372	Office furniture (including fixtures) mfg	-	70	44		21 285	931 239	14 865	32 214	517 785	2 668 135	1 588 057	4 252 017	193 141
33721	Office furniture (including fixtures) mfg	-	70	44		21 285	931 239	14 865	32 214	517 785	2 668 135	1 588 057	4 252 017	193 141
337211	Wood office furniture mfg	-	19	12		1 755	51 764	1 355	2 891	36 316	135 026	78 333	213 105	7 354
337212	Custom architectural woodwork & millwork mfg	8	3	3	e	D	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	22	19	j	D	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	26	10		631	20 302	455	900	11 097	63 336	47 327	108 099	D
339	Miscellaneous mfg	-	153	33		3 667	114 815	2 354	4 595	60 181	359 117	271 269	632 146	17 496
3391	Medical equipment & supplies mfg	-	64	14		1 705	48 898	1 014	1 889	23 005	142 745	53 544	196 098	4 874
33911	Medical equipment & supplies mfg	-	64	14		1 705	48 898	1 014	1 889	23 005	142 745	53 544	196 098	4 874
339111	Laboratory apparatus & furniture mfg	-	6	5		657	20 641	370	776	9 611	39 158	21 954	61 161	621
339112	Surgical & medical instrument mfg	-	8	4		436	13 227	227	458	4 801	69 487	14 502	83 441	2 644
339113	Surgical appliance & supplies mfg	-	7	3		318	7 603	210	299	4 068	17 709	10 945	28 806	1 116
3399	Other miscellaneous mfg ..	-	89	19		1 962	65 917	1 340	2 706	37 176	216 372	217 725	436 048	12 622
33992	Sporting & athletic goods mfg	-	12	2	e	D	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	12	2	e	D	D	D	D	D	D	D	D	D
33995	Sign mfg	1	36	8		479	15 534	277	543	6 818	38 529	22 954	61 210	2 026
339950	Sign mfg	1	36	8		479	15 534	277	543	6 818	38 529	22 954	61 210	2 026
33999	All other miscellaneous mfg	-	27	6	f	D	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
	JACKSON, MI MSA													
31-33	Manufacturing	-	351	140		12 248	421 991	8 735	17 652	246 134	1 082 930	1 175 838	2 271 824	89 924
311	Food mfg	-	19	5		465	15 371	201	362	4 878	88 757	50 352	139 251	2 407
3118	Bakeries & tortilla mfg	-	14	4		406	14 218	180	324	4 420	85 820	44 340	130 272	2 302
31182	Cookie, cracker, & pasta mfg	1	4	2	e	D	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	1	4	2	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	21	5		258	6 574	177	328	3 710	13 938	7 034	20 935	982
3231	Printing & related support activities.....	2	21	5		258	6 574	177	328	3 710	13 938	7 034	20 935	982
325	Chemical mfg	-	4	1	e	D	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	2	1	e	D	D	D	D	D	D	D	D	D
32552	Adhesive mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
325520	Adhesive mfg	-	1	1	e	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSON, MI MSA— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	-	17	9	921	29 839	668	1 444	18 316	100 714	81 375	184 201	14 680
3261	Plastics product mfg	-	14	8	880	28 339	633	1 387	17 418	97 826	80 092	180 050	14 563
32619	Other plastics product mfg	-	10	6	772	24 709	552	1 215	15 190	88 764	72 548	163 384	14 058
326199	All other plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	5	592	27 303	408	999	16 076	79 299	98 063	179 532	6 506
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	7	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	132	61	4 263	140 073	3 376	6 679	90 608	285 898	254 503	539 239	20 784
3325	Hardware mfg	-	5	4	431	12 362	352	613	8 935	34 969	28 198	62 908	2 274
33251	Hardware mfg	-	5	4	431	12 362	352	613	8 935	34 969	28 198	62 908	2 274
332510	Hardware mfg	-	5	4	431	12 362	352	613	8 935	34 969	28 198	62 908	2 274
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	74	31	1 973	64 497	1 627	3 213	41 294	122 907	99 798	223 048	9 954
33271	Machine shops	-	45	12	1 041	30 823	827	1 585	19 990	56 784	32 799	89 118	4 055
332710	Machine shops	-	45	12	1 041	30 823	827	1 585	19 990	56 784	32 799	89 118	4 055
33272	Turned product & screw, nut, & bolt mfg	-	29	19	932	33 674	800	1 628	21 304	66 123	66 999	133 930	5 899
332721	Precision turned product mfg	-	24	16	829	31 385	715	1 503	19 789	59 594	61 686	122 189	5 406
3328	Coating, engraving, heat treating, & allied activities	-	15	7	399	12 703	321	647	8 368	32 159	7 432	39 626	2 882
33281	Coating, engraving, heat treating, & allied activities	-	15	7	399	12 703	321	647	8 368	32 159	7 432	39 626	2 882
3329	Other fabricated metal product mfg	-	17	12	1 010	37 058	734	1 433	23 137	66 927	98 695	164 343	4 391
33291	Metal valve mfg	-	8	7	571	21 760	390	754	13 597	41 087	74 976	115 027	3 047
332912	Fluid power valve & hose fitting mfg	-	6	5	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	9	5	439	15 298	344	679	9 540	25 840	23 719	49 316	1 344
332999	All other miscellaneous fabricated metal product mfg	-	9	5	439	15 298	344	679	9 540	25 840	23 719	49 316	1 344
333	Machinery mfg	-	59	22	1 676	63 323	1 214	2 444	37 438	121 510	89 720	215 829	6 912
3331	Agriculture, construction, & mining machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	39	12	718	29 549	535	1 041	18 092	61 615	28 137	91 294	3 227
33351	Metalworking machinery mfg	1	39	12	718	29 549	535	1 041	18 092	61 615	28 137	91 294	3 227
333514	Special die & tool, die set, jig, & fixture mfg	1	19	4	302	12 732	233	403	8 148	30 238	8 680	39 176	1 559
3339	Other general-purpose machinery mfg	-	11	6	493	18 890	324	703	10 657	32 913	34 963	69 919	2 151
33399	All other general-purpose machinery mfg	-	8	5	454	17 871	305	679	10 312	30 171	33 728	66 042	2 092
335	Electrical equipment, appliance, & component mfg	-	5	2	267	7 114	175	344	3 425	16 917	11 627	28 967	622
336	Transportation equipment mfg	-	30	19	2 736	91 452	1 897	3 899	55 603	285 280	465 280	751 002	25 846
3363	Motor vehicle parts mfg ...	-	27	19	2 719	90 864	1 886	3 878	55 259	284 083	464 520	748 992	25 756
33631	Motor vehicle gasoline engine & engine parts mfg	-	7	5	842	29 203	576	1 123	17 596	81 585	81 636	161 390	4 875
336312	Gasoline engine & engine parts mfg	-	7	5	842	29 203	576	1 123	17 596	81 585	81 636	161 390	4 875
33634	Motor vehicle brake system mfg	-	1	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	JACKSON, MI MSA—													
	Con.													
31-33	Manufacturing—													
	Con.													
336	Transportation equipment mfg—Con.													
3363	Motor vehicle parts mfg—Con.													
33635	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D	
336350	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	D	
33637	Motor vehicle metal stamping	-	6	4		8 665	200	374	5 026	21 740	24 345	46 126	D	
336370	Motor vehicle metal stamping	-	6	4		8 665	200	374	5 026	21 740	24 345	46 126	D	
33639	Other motor vehicle parts mfg	-	8	5	f	D	D	D	D	D	D	D	D	
336391	Motor vehicle air-conditioning mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	KALAMAZOO—BATTLE CREEK, MI MSA													
31-33	Manufacturing	-	748	287		43 859	1 586 793	32 602	66 073	1 058 717	4 683 631	4 902 583	9 631 184	506 613
311	Food mfg	-	44	16		4 456	200 626	3 842	7 700	162 668	1 246 878	803 820	2 052 320	49 875
3112	Grain & oilseed milling	-	4	4	g	D	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	3	3	g	D	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	3	3	g	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	11	6		597	13 448	485	937	9 410	78 768	66 134	143 977	1 946
31142	Fruit & vegetable canning, pickling, & drying	-	10	5	f	D	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	7	4	e	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	8	2	g	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	8	2	g	D	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	6	1	f	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	9	5		824	27 706	651	1 476	21 765	227 922	200 711	426 148	22 548
3121	Beverage mfg	-	9	5		824	27 706	651	1 476	21 765	227 922	200 711	426 148	22 548
31211	Soft drink & ice mfg	-	5	3		735	26 312	586	1 356	20 846	222 162	197 234	416 886	D
312111	Soft drink mfg	-	4	3	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	-	35	28		4 159	171 020	3 229	7 314	118 889	478 711	604 949	1 094 381	51 606
3221	Pulp, paper, & paperboard mills	-	6	6		1 792	89 235	1 438	3 521	66 005	241 035	312 187	566 717	25 705
32212	Paper mills	-	3	3		993	49 499	816	1 942	35 797	87 299	187 661	288 459	D
322121	Paper (except newsprint) mills	-	3	3		993	49 499	816	1 942	35 797	87 299	187 661	288 459	D
32213	Paperboard mills	-	3	3		799	39 736	622	1 579	30 208	153 736	124 526	278 258	D
322130	Paperboard mills	-	3	3		799	39 736	622	1 579	30 208	153 736	124 526	278 258	D
3222	Converted paper product mfg	1	29	22		2 367	81 785	1 791	3 793	52 884	237 676	292 762	527 664	25 901
32221	Paperboard container mfg	1	18	13		1 510	54 867	1 114	2 541	35 109	135 713	189 465	324 472	22 623
322211	Corrugated & solid fiber box mfg	1	9	7		631	23 788	437	999	14 137	54 907	78 649	133 528	D
322212	Folding paperboard box mfg	2	6	4	e	D	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
32223	Stationery product mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	96	18		1 841	56 735	1 280	2 264	31 981	133 973	80 552	214 561	9 003
3231	Printing & related support activities	-	96	18		1 841	56 735	1 280	2 264	31 981	133 973	80 552	214 561	9 003
32311	Printing	1	86	15		1 552	42 535	1 056	1 806	22 653	94 925	73 545	168 701	5 362
323110	Commercial lithographic printing	1	42	9		836	22 329	546	998	11 661	41 379	39 903	80 366	3 587
32312	Support activities for printing	-	10	3		289	14 200	224	458	9 328	39 048	7 007	45 860	3 641
323122	Prepress services	-	9	3	e	D	D	D	D	D	D	D	D	3 641

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KALAMAZOO-BATTLE CREEK, MI MSA—Con. Manufacturing—Con.												
325	Chemical mfg	1	32	16	3 652	182 130	2 569	4 288	129 094	365 654	550 503	940 074	120 286
3254	Pharmaceutical & medicine mfg	—	7	4	2 816	148 441	2 158	3 422	114 803	220 408	347 091	585 259	D
32541	Pharmaceutical & medicine mfg	—	7	4	2 816	148 441	2 158	3 422	114 803	220 408	347 091	585 259	D
325412	Pharmaceutical preparation mfg	—	2	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	4	12	8	640	26 026	291	658	11 171	123 753	111 742	230 675	D
32599	All other chemical product & preparation mfg	5	8	5	554	22 799	251	576	9 644	113 367	97 782	206 529	D
325998	All other miscellaneous chemical product & preparation mfg	6	4	3	399	17 814	149	358	6 406	98 348	71 896	165 762	D
326	Plastics & rubber products mfg	1	51	31	4 242	114 062	3 420	6 874	73 281	312 060	237 131	553 900	39 542
3261	Plastics product mfg	1	46	29	3 972	109 531	3 181	6 408	69 639	286 516	218 926	510 169	38 894
32611	Unsupported plastics film, sheet, & bag mfg	—	3	3	289	11 400	167	323	5 161	22 818	27 267	49 504	D
32615	Urethane & other foam product (except polystyrene) mfg	9	4	1	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	9	4	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	36	24	3 318	90 570	2 715	5 456	58 771	246 792	172 318	424 419	29 104
326199	All other plastics product mfg	—	36	24	3 318	90 570	2 715	5 456	58 771	246 792	172 318	424 419	29 104
3262	Rubber product mfg	—	5	2	270	4 531	239	466	3 642	25 544	18 205	43 731	648
32629	Other rubber product mfg	—	5	2	270	4 531	239	466	3 642	25 544	18 205	43 731	648
326291	Rubber product mfg for mechanical use	—	3	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	28	5	595	19 062	448	973	12 596	79 114	55 276	132 677	5 250
3273	Cement & concrete product mfg	3	19	4	325	11 739	200	444	5 889	25 973	24 662	50 312	2 971
331	Primary metal mfg	—	17	11	1 616	53 565	1 191	2 620	37 508	130 779	100 323	230 957	7 941
3315	Foundries	—	14	8	1 321	45 337	958	2 105	31 684	110 954	73 950	184 972	D
33151	Ferrous metal foundries	—	6	4	758	25 042	484	1 106	13 998	68 398	45 182	113 720	D
331511	Iron foundries	—	5	4	f	D	D	D	D	D	D	D	1 125
33152	Nonferrous metal foundries	—	8	4	563	20 295	474	999	17 686	42 556	28 768	71 252	5 177
331522	Nonferrous (except aluminum) die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	163	58	5 313	160 212	4 000	8 075	99 469	376 731	325 553	699 677	31 113
3323	Architectural & structural metals mfg	1	23	8	484	15 834	342	646	9 290	37 837	36 642	74 278	1 588
33232	Ornamental & architectural metal products mfg	1	15	7	390	12 500	270	502	7 453	30 573	28 891	59 443	1 333
3325	Hardware mfg	4	3	3	363	11 645	264	528	6 726	30 415	30 734	60 733	2 864
33251	Hardware mfg	4	3	3	363	11 645	264	528	6 726	30 415	30 734	60 733	2 864
332510	Hardware mfg	4	3	3	363	11 645	264	528	6 726	30 415	30 734	60 733	2 864
3326	Spring & wire product mfg	—	5	2	347	7 564	269	495	5 244	22 442	9 999	31 395	1 185
33261	Spring & wire product mfg	—	5	2	347	7 564	269	495	5 244	22 442	9 999	31 395	1 185
332618	Other fabricated wire product mfg	—	4	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	67	15	1 291	39 377	1 047	2 130	28 408	104 260	89 438	192 951	11 518
33271	Machine shops	—	52	7	772	23 378	624	1 259	16 707	62 176	59 261	120 347	5 655
332710	Machine shops	—	52	7	772	23 378	624	1 259	16 707	62 176	59 261	120 347	5 655
33272	Turned product & screw, nut, & bolt mfg	—	15	8	519	15 999	423	871	11 701	42 084	30 177	72 604	5 863
332721	Precision turned product mfg	—	11	6	e	D	D	D	D	D	D	D	5 016
3328	Coating, engraving, heat treating, & allied activities	—	26	12	803	20 317	662	1 318	12 810	42 706	24 728	67 001	2 951
33281	Coating, engraving, heat treating, & allied activities	—	26	12	803	20 317	662	1 318	12 810	42 706	24 728	67 001	2 951
332813	Electroplating, plating, polishing, anodizing, & coloring	1	15	8	539	13 060	443	971	8 671	27 409	17 755	44 754	2 376

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KALAMAZOO—BATTLE CREEK, MI MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	24	13	1 776	58 014	1 234	2 598	32 275	125 107	127 446	252 861	10 240
33291	Metal valve mfg.....	1	10	8	1 080	34 161	760	1 455	18 035	77 352	69 133	147 570	8 066
332912	Fluid power valve & hose fitting mfg.....	-	4	4	784	25 256	553	1 081	13 338	59 857	53 488	114 682	6 446
33299	All other fabricated metal product mfg.....	-	14	5	696	23 853	474	1 143	14 240	47 755	58 313	105 291	2 174
332999	All other miscellaneous fabricated metal product mfg.....	-	8	3	577	20 938	405	1 018	12 283	42 091	54 269	95 527	1 565
333	Machinery mfg.....	1	108	41	4 134	158 186	2 480	5 277	79 446	275 667	235 438	526 097	17 642
3332	Industrial machinery mfg ..	4	8	5	439	15 136	263	485	7 586	34 329	25 306	61 076	1 813
3335	Metalworking machinery mfg.....	1	49	19	1 064	46 270	728	1 574	27 852	75 558	31 075	105 838	7 353
33351	Metalworking machinery mfg.....	1	49	19	1 064	46 270	728	1 574	27 852	75 558	31 075	105 838	7 353
333511	Industrial mold mfg ...	-	22	10	530	27 888	378	891	17 433	43 920	12 354	56 153	5 835
3339	Other general-purpose machinery mfg.....	-	35	9	2 279	86 084	1 240	2 731	38 257	139 806	151 840	305 233	6 652
33391	Pump & compressor mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	11	3	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg.....	-	10	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	19	4	997	35 921	538	1 102	13 775	52 260	85 413	148 657	2 217
333996	Fluid power pump & motor mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	5	11	3	265	8 636	179	399	4 067	19 034	13 519	32 843	2 304
335	Electrical equipment, appliance, & component mfg.....	-	13	5	670	19 554	506	1 057	12 415	33 741	39 027	73 827	5 332
3359	Other electrical equipment & component mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg...	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	37	25	8 752	312 134	6 879	13 495	227 562	719 405	1 399 421	2 113 799	127 233
3363	Motor vehicle parts mfg ...	-	33	23	8 678	309 739	6 835	13 394	226 399	713 388	1 389 682	2 097 842	127 093
33631	Motor vehicle gasoline engine & engine parts mfg.....	1	6	1	374	12 085	286	528	7 349	8 707	12 146	20 932	D
336312	Gasoline engine & engine parts mfg.....	1	4	1	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	-	6	6	3 719	127 435	2 878	5 877	96 846	291 063	915 088	1 206 899	84 200
336321	Vehicular lighting equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	-	4	4	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg....	-	2	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	10	8	2 664	111 252	2 145	4 339	85 119	195 715	238 882	434 307	12 310
336370	Motor vehicle metal stamping.....	-	10	8	2 664	111 252	2 145	4 339	85 119	195 715	238 882	434 307	12 310
33639	Other motor vehicle parts mfg.....	-	5	4	984	21 930	802	988	10 537	88 246	125 140	211 258	D
336399	All other motor vehicle parts mfg.....	-	5	4	984	21 930	802	988	10 537	88 246	125 140	211 258	D

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31-33	KALAMAZOO—BATTLE CREEK, MI MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	19	5	659	21 566	458	1 082	12 705	45 786	43 088	88 017	1 751
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	3	254	7 904	170	330	4 244	20 986	18 626	39 548	575
3372	Office furniture (including fixtures) mfg	-	6	2	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	6	2	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	3	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	57	13	2 258	72 134	1 183	2 576	30 275	212 378	156 578	368 014	14 745
3391	Medical equipment & supplies mfg	-	24	6	1 666	56 087	743	1 650	19 876	176 166	136 743	311 923	13 356
33911	Medical equipment & supplies mfg	-	24	6	1 666	56 087	743	1 650	19 876	176 166	136 743	311 923	13 356
339112	Surgical & medical instrument mfg	-	5	3	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	8	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	33	7	592	16 047	440	926	10 399	36 212	19 835	56 091	1 389
33999	All other miscellaneous mfg	1	9	3	297	7 834	241	486	5 536	17 788	8 001	25 994	469
	LANSING—EAST LANSING, MI MSA												
31-33	Manufacturing	-	428	144	29 104	1 470 820	22 747	47 126	1 075 704	2 369 459	6 492 102	8 892 841	515 690
311	Food mfg	1	29	10	666	17 064	485	954	12 289	45 982	174 480	216 673	D
3115	Dairy product mfg	-	5	5	392	11 481	301	644	9 429	26 350	139 887	162 517	D
31151	Dairy product (except frozen) mfg	-	4	4	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	1	3	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	21	9	521	14 982	344	725	7 659	30 129	47 875	77 541	D
3219	Other wood product mfg ...	2	18	7	369	8 512	239	511	4 861	15 733	18 951	34 876	D
323	Printing & related support activities	1	81	15	1 490	48 156	1 058	1 910	28 205	75 165	80 101	154 901	D
3231	Printing & related support activities	1	81	15	1 490	48 156	1 058	1 910	28 205	75 165	80 101	154 901	D
32311	Printing	1	68	13	1 332	44 599	929	1 676	25 771	68 688	78 056	146 389	D
323110	Commercial lithographic printing ..	-	39	9	1 122	39 220	763	1 428	22 573	58 105	69 241	127 071	D
325	Chemical mfg	8	13	6	371	15 018	171	328	6 047	51 121	52 695	100 199	D
326	Plastics & rubber products mfg	-	19	11	2 058	55 789	1 556	3 113	35 753	99 655	167 060	267 530	40 967
3261	Plastics product mfg	-	17	11	g	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	8	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	12	8	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	22	6	497	18 906	384	771	14 224	57 411	32 220	92 183	3 672
3273	Cement & concrete product mfg	1	17	5	e	D	D	D	D	D	D	D	3 604
331	Primary metal mfg	-	4	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	70	20	1 852	66 762	1 485	3 077	46 481	140 316	98 500	241 155	10 534
3321	Forging & stamping	-	4	2	379	16 830	313	638	12 569	31 088	30 082	64 193	D
33211	Forging & stamping	-	4	2	379	16 830	313	638	12 569	31 088	30 082	64 193	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	23	5	585	22 368	454	1 043	14 859	48 178	18 381	66 340	3 032
33272	Turned product & screw, nut, & bolt mfg	1	6	3	338	12 646	262	627	7 874	25 353	8 175	33 559	2 520
332721	Precision turned product mfg	1	6	3	338	12 646	262	627	7 874	25 353	8 175	33 559	2 520
3328	Coating, engraving, heat treating, & allied activities ..	-	13	5	392	11 910	322	592	8 546	23 815	5 912	29 945	887
33281	Coating, engraving, heat treating, & allied activities	-	13	5	392	11 910	322	592	8 546	23 815	5 912	29 945	887
332811	Metal heat treating	-	6	4	305	10 305	251	469	7 372	19 645	4 762	24 615	765

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LANSING—EAST LANSING, MI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	44	24	2 182	88 017	1 629	3 671	59 828	176 980	137 195	315 886	6 135
3335	Metalworking machinery mfg	-	23	14	984	42 941	700	1 656	27 836	71 615	50 351	122 432	2 415
33351	Metalworking machinery mfg	-	23	14	984	42 941	700	1 656	27 836	71 615	50 351	122 432	2 415
333512	Machine tool (metal cutting types) mfg	-	2	2	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg	-	15	9	326	13 057	250	555	8 939	22 773	7 968	30 944	1 095
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	5	14	5	263	10 220	145	294	4 020	17 290	12 136	29 493	641
336	Transportation equipment mfg	-	35	22	17 833	1 098 383	14 498	30 374	839 512	1 572 918	5 550 232	7 152 442	D
3361	Motor vehicle mfg	-	4	2	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	2	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	3	2	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	24	15	h	D	D	D	D	D	D	D	42 347
33631	Motor vehicle gasoline engine & engine parts mfg	-	4	3	2 403	121 298	1 923	4 098	86 712	98 456	467 319	595 510	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	3	2	352	12 337	261	618	8 223	28 673	10 862	39 053	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	3	2	352	12 337	261	618	8 223	28 673	10 862	39 053	D
33637	Motor vehicle metal stamping	-	7	4	e	D	D	D	D	D	D	D	4 362
336370	Motor vehicle metal stamping	-	7	4	e	D	D	D	D	D	D	D	4 362
33639	Other motor vehicle parts mfg	3	8	5	f	D	D	D	D	D	D	D	2 474
336399	All other motor vehicle parts mfg	3	8	5	f	D	D	D	D	D	D	D	2 474
3364	Aerospace product & parts mfg	-	4	3	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	30	5	313	8 153	241	457	5 850	15 790	7 422	23 443	857
	SAGINAW—BAY CITY—MIDLAND, MI MSA												
31-33	Manufacturing	-	462	147	33 753	1 780 987	25 283	55 691	1 270 068	4 306 649	4 495 290	8 791 510	597 094
311	Food mfg	1	38	7	1 093	29 453	809	1 644	20 263	91 461	118 304	210 616	4 673
3113	Sugar & confectionery product mfg	2	5	2	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	2	2	2	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	2	2	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	3	1	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	21	6	461	10 720	332	659	6 813	28 487	35 415	62 149	1 490

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAGINAW-BAY CITY-MIDLAND, MI MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	-	53	7	1 190	35 921	874	1 753	21 355	75 782	62 217	137 613	7 241
3231	Printing & related support activities.....	-	53	7	1 190	35 921	874	1 753	21 355	75 782	62 217	137 613	7 241
32311	Printing.....	-	48	7	1 148	34 702	846	1 706	20 673	73 214	61 763	134 594	7 137
323110	Commercial lithographic printing ..	-	19	3	713	22 482	555	1 257	15 192	51 524	45 072	96 234	5 672
325	Chemical mfg.....	-	18	9	i	D	D	D	D	D	D	D	D
3251	Basic chemical mfg.....	-	6	2	h	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	20	12	1 479	53 319	1 163	2 455	36 459	123 659	123 869	249 356	9 456
3261	Plastics product mfg.....	-	18	11	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	3	3	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	10	5	847	24 593	691	1 473	15 170	48 788	48 097	97 720	1 525
326199	All other plastics product mfg.....	-	10	5	847	24 593	691	1 473	15 170	48 788	48 097	97 720	1 525
327	Nonmetallic mineral product mfg.....	1	27	10	534	19 353	341	711	10 768	68 256	61 476	129 946	3 252
3273	Cement & concrete product mfg.....	1	18	8	460	16 963	302	630	9 669	60 825	55 770	117 092	2 776
331	Primary metal mfg.....	-	13	5	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining.....	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining.....	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	12	4	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	-	9	3	h	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	5	2	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	101	37	2 553	92 211	2 033	4 205	62 758	183 864	102 227	287 467	8 618
3323	Architectural & structural metals mfg.....	1	15	5	599	18 249	530	1 084	14 035	35 560	27 455	63 446	2 052
33232	Ornamental & architectural metal products mfg.....	1	8	3	418	12 916	373	814	10 629	21 690	19 393	41 137	1 555
332322	Sheet metal work mfg..	-	4	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	60	23	1 314	48 854	1 032	2 158	32 858	95 795	42 419	137 919	4 063
33271	Machine shops.....	-	56	22	1 237	46 704	967	2 012	31 298	92 397	41 215	133 279	3 953
332710	Machine shops.....	-	56	22	1 237	46 704	967	2 012	31 298	92 397	41 215	133 279	3 953
3329	Other fabricated metal product mfg.....	3	11	5	360	16 022	256	527	10 403	36 560	22 576	60 540	1 444
33299	All other fabricated metal product mfg.....	2	10	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	67	29	2 831	123 159	1 800	3 937	69 096	244 227	210 151	463 501	11 482
3332	Industrial machinery mfg..	2	9	3	349	21 295	182	449	9 852	57 360	49 216	102 111	2 860
3335	Metalworking machinery mfg.....	2	41	21	2 099	87 421	1 401	3 017	52 235	146 259	126 680	286 535	7 753
33351	Metalworking machinery mfg.....	2	41	21	2 099	87 421	1 401	3 017	52 235	146 259	126 680	286 535	7 753
333512	Machine tool (metal cutting types) mfg... ..	3	4	4	666	32 067	338	792	15 037	45 447	73 405	124 673	2 086
333514	Special die & tool, die set, jig, & fixture mfg..	-	19	5	303	11 863	244	490	8 809	20 422	6 141	26 644	1 544
333515	Cutting tool & machine tool accessory mfg..	-	9	6	688	23 888	533	1 059	16 251	40 756	21 945	62 773	2 753
333518	Other metalworking machinery mfg.....	4	3	2	e	D	D	D	D	D	D	D	D

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31-33	SAGINAW-BAY CITY-MIDLAND, MI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	10	4	318	12 118	174	390	6 165	36 697	28 598	65 335	789
335	Electrical equipment, appliance, & component mfg	2	10	2	254	8 421	197	341	4 865	22 012	8 577	30 711	1 016
336	Transportation equipment mfg	-	16	10	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	12	9	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	4	3	2 133	123 370	1 889	4 616	106 108	150 987	315 512	470 318	D
336312	Gasoline engine & engine parts mfg	-	4	3	2 133	123 370	1 889	4 616	106 108	150 987	315 512	470 318	D
33633	Motor vehicle steering & suspension component (except spring) mfg, ...	-	2	2	i	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	i	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	30	5	441	12 752	333	682	7 995	45 575	22 902	67 586	3 841

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALGER COUNTY, MI													
31-33	Manufacturing	-	13	5	873	29 712	693	1 378	22 225	82 376	112 650	195 810	4 863
ALLEGAN COUNTY, MI													
31-33	Manufacturing	-	203	84	15 984	585 855	11 317	22 562	321 149	1 742 807	1 379 104	3 108 862	104 032
311	Food mfg	1	15	7	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	1	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	11	3	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	55	24	2 318	69 800	1 805	3 588	46 544	102 199	156 915	256 451	5 929
3329	Other fabricated metal product mfg	-	9	4	1 052	31 922	824	1 706	21 509	36 819	103 965	138 031	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	36	14	1 107	37 909	696	1 371	18 209	110 393	70 357	182 831	4 461
336	Transportation equipment mfg	2	13	9	1 054	35 184	887	1 961	26 566	84 040	97 601	173 725	D
3363	Motor vehicle parts mfg ...	2	9	7	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	2	5	5	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	2	5	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	12	6	h	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	7	5	h	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	7	5	h	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	4	4	h	D	D	D	D	D	D	D	D
ALPENA COUNTY, MI													
31-33	Manufacturing	-	58	21	2 445	90 799	1 823	3 694	52 520	257 607	225 501	480 083	25 513
321	Wood product mfg	-	14	5	581	18 295	476	842	12 964	33 108	28 060	61 328	7 438
333	Machinery mfg	-	11	6	835	33 299	539	1 119	11 025	47 703	91 300	140 185	6 511
3332	Industrial machinery mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
ANTRIM COUNTY, MI													
31-33	Manufacturing	-	56	14	1 323	38 732	1 025	1 958	26 173	90 007	78 463	164 926	7 922
ARENAC COUNTY, MI													
31-33	Manufacturing	1	37	12	732	18 923	571	1 096	11 470	47 820	43 421	91 750	2 247
BARAGA COUNTY, MI													
31-33	Manufacturing	-	26	8	715	21 596	566	1 216	16 165	49 540	65 724	115 228	2 740

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BARRY COUNTY, MI													
31-33	Manufacturing	—	71	18	3 145	102 057	2 351	5 072	67 230	274 871	259 042	525 212	16 336
326	Plastics & rubber products mfg	—	6	3	691	21 528	526	1 060	13 947	64 812	28 690	92 825	3 294
333	Machinery mfg	2	10	3	523	18 907	348	636	10 592	50 531	48 761	94 488	D
335	Electrical equipment, appliance, & component mfg	—	2	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	f	D	D	D	D	D	D	D	3 778
3363	Motor vehicle parts mfg	—	4	4	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
BAY COUNTY, MI													
31-33	Manufacturing	—	152	52	7 459	346 971	5 607	11 707	225 447	1 067 023	860 259	1 928 580	D
325	Chemical mfg	—	4	3	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	2	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	2	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	7	5	783	32 332	607	1 287	23 377	63 093	69 867	134 536	D
3261	Plastics product mfg	—	7	5	783	32 332	607	1 287	23 377	63 093	69 867	134 536	D
332	Fabricated metal product mfg	2	37	16	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	18	7	743	35 324	432	1 020	18 535	74 561	86 443	167 260	D
336	Transportation equipment mfg	—	7	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	5	4	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
BENZIE COUNTY, MI													
31-33	Manufacturing	—	23	8	657	12 283	537	1 023	9 096	35 004	33 308	70 142	2 050
BERRIEN COUNTY, MI													
31-33	Manufacturing	1	397	160	16 996	539 081	12 678	25 259	335 861	1 266 208	1 143 206	2 394 160	106 302
311	Food mfg	6	18	8	681	11 578	490	994	6 911	43 041	49 221	90 998	9 075
323	Printing & related support activities	1	30	7	957	29 051	749	1 614	21 378	62 321	65 211	126 995	3 083
3231	Printing & related support activities	1	30	7	957	29 051	749	1 614	21 378	62 321	65 211	126 995	3 083
32311	Printing	1	27	7	943	28 661	737	1 593	21 084	61 532	65 065	126 060	3 002
323110	Commercial lithographic printing	—	11	3	658	20 784	534	1 206	16 438	44 547	55 597	99 951	2 421
326	Plastics & rubber products mfg	4	27	16	2 129	52 285	1 765	3 402	35 539	115 708	140 063	254 965	10 808
3261	Plastics product mfg	5	24	13	1 810	42 184	1 514	2 815	29 142	91 915	113 907	204 744	10 263
32619	Other plastics product mfg	4	18	12	1 751	40 428	1 467	2 721	27 929	86 770	106 373	192 041	9 684
326199	All other plastics product mfg	4	17	12	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	30	21	1 894	56 720	1 546	3 155	40 094	117 745	128 713	246 848	12 999
3315	Foundries	1	27	19	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	24	16	1 469	42 623	1 182	2 410	28 991	81 866	88 929	171 447	10 231
331521	Aluminum die-casting foundries	1	15	11	1 006	28 907	803	1 636	19 644	55 035	66 499	121 160	8 706

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BERRIEN COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	94	30	1 921	53 291	1 459	2 724	33 969	114 102	71 939	186 576	7 262
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	39	9	644	17 578	499	901	11 463	39 621	17 268	58 170	2 170
3328	Coating, engraving, heat treating, & allied activities	1	18	9	564	12 267	448	791	8 152	24 494	9 130	33 666	2 162
33281	Coating, engraving, heat treating, & allied activities	1	18	9	564	12 267	448	791	8 152	24 494	9 130	33 666	2 162
333	Machinery mfg	2	81	39	3 726	146 840	2 650	5 369	80 625	308 212	226 662	522 314	18 656
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	5	860	26 899	641	1 247	17 013	65 548	58 076	124 803	3 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	5	860	26 899	641	1 247	17 013	65 548	58 076	124 803	3 683
333415	AC & warm air heating & commercial/ industrial refrigeration equip mfg	—	3	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	52	18	1 537	66 753	1 091	2 384	38 254	127 118	83 512	207 445	8 423
33351	Metalworking machinery mfg	—	52	18	1 537	66 753	1 091	2 384	38 254	127 118	83 512	207 445	8 423
333511	Industrial mold mfg	—	19	9	593	25 796	496	1 143	18 060	37 804	15 526	53 386	3 781
3339	Other general-purpose machinery mfg	7	11	7	951	39 436	670	1 198	17 986	82 916	53 086	124 874	5 095
33391	Pump & compressor mfg	9	4	3	655	28 099	455	719	10 186	51 148	33 949	81 936	D
333912	Air & gas compressor mfg	9	4	3	655	28 099	455	719	10 186	51 148	33 949	81 936	D
334	Computer & electronic product mfg	1	11	6	1 270	41 597	574	1 190	13 870	95 188	74 520	165 562	7 112
3345	Navigational, measuring, medical, & control instruments mfg	—	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	3	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	19	10	2 379	88 943	1 918	3 927	65 376	256 485	241 191	499 258	25 677
3363	Motor vehicle parts mfg ...	—	13	8	2 168	81 565	1 745	3 621	60 467	244 436	233 064	477 998	D
33634	Motor vehicle brake system mfg	—	3	3	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	17	7	556	13 206	417	713	8 949	50 392	51 939	103 276	1 836
	BRANCH COUNTY, MI												
31-33	Manufacturing	—	90	38	3 572	102 430	2 749	5 481	68 617	269 609	250 647	516 542	41 821
332	Fabricated metal product mfg	—	34	14	1 432	37 927	1 136	2 309	26 340	89 824	69 217	156 493	6 206
336	Transportation equipment mfg	—	9	6	586	19 441	419	820	10 815	52 466	52 885	104 382	28 033

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CALHOUN COUNTY, MI												
31-33	Manufacturing	-	222	90	16 973	613 772	13 210	26 630	437 721	2 376 250	2 136 864	4 514 774	208 767
311	Food mfg.....	-	18	6	h	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	g	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	3	3	g	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	8	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	27	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	1	27	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	13	8	1 079	25 816	885	1 778	18 093	74 941	64 985	139 120	D
3261	Plastics product mfg	3	11	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	6	f	D	D	D	D	D	D	D	2 309
3315	Foundries	-	7	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	6	4	758	25 042	484	1 106	13 998	68 398	45 182	113 720	D
331511	Iron foundries	-	5	4	f	D	D	D	D	D	D	D	1 125
332	Fabricated metal product mfg	1	59	23	2 279	66 853	1 787	3 453	43 584	170 999	176 692	345 358	17 156
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	21	6	751	23 016	644	1 317	17 145	74 414	74 311	147 168	7 757
3329	Other fabricated metal product mfg.....	2	15	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	9	900	33 805	566	1 372	17 485	65 171	49 984	118 316	3 915
3339	Other general-purpose machinery mfg	-	7	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	17	13	6 116	200 233	4 739	9 156	142 420	529 319	1 160 818	1 685 051	D
3363	Motor vehicle parts mfg ...	-	16	12	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	5	5	h	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	4	4	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
	CASS COUNTY, MI												
31-33	Manufacturing	-	87	28	3 384	95 914	2 678	4 895	62 875	204 414	367 257	570 808	14 547
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	5	4	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	4	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	1	4	3	f	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHARLEVOIX COUNTY, MI													
31-33	Manufacturing	-	69	28	3 624	116 853	2 743	5 610	75 523	392 612	337 067	724 096	31 138
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	4	4	3	609	14 940	479	979	9 419	21 065	68 829	90 981	3 702
3363	Motor vehicle parts mfg ...	4	4	3	609	14 940	479	979	9 419	21 065	68 829	90 981	3 702
33639	Other motor vehicle parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
CHEBOYGAN COUNTY, MI													
31-33	Manufacturing	2	37	9	711	17 890	587	1 005	12 401	48 657	29 167	76 649	4 779
CHIPPEWA COUNTY, MI													
31-33	Manufacturing	3	31	13	818	15 031	694	1 128	10 979	32 890	32 340	63 175	4 217
CLARE COUNTY, MI													
31-33	Manufacturing	-	28	12	924	23 880	769	1 527	16 703	52 962	68 125	120 894	4 017
CLINTON COUNTY, MI													
31-33	Manufacturing	-	62	16	2 586	100 274	2 019	4 335	68 375	202 870	252 273	450 254	D
323	Printing & related support activities.....	-	10	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	10	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	4	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	8	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
CRAWFORD COUNTY, MI													
31-33	Manufacturing	1	17	8	503	15 847	396	820	10 074	32 767	71 714	104 280	4 376
DELTA COUNTY, MI													
31-33	Manufacturing	-	59	20	2 834	124 322	2 099	4 559	80 265	355 422	319 124	702 422	39 999
322	Paper mfg	-	2	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	5	540	16 233	384	824	9 581	26 719	56 044	85 814	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DICKINSON COUNTY, MI													
31-33	Manufacturing	-	50	19	2 478	100 636	1 912	3 943	70 884	338 089	313 415	655 313	25 046
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
EATON COUNTY, MI													
31-33	Manufacturing	-	94	35	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	7	4	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
EMMET COUNTY, MI													
31-33	Manufacturing	-	57	13	1 377	39 065	973	1 875	21 957	81 621	84 760	168 232	5 085
GENESEE COUNTY, MI													
31-33	Manufacturing	-	355	115	34 414	1 744 627	28 473	57 164	1 388 762	3 592 590	7 697 511	11 240 321	180 557
323	Printing & related support activities	1	58	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	58	8	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	16	9	1 222	41 612	924	2 128	24 312	124 325	109 707	231 617	17 309
3261	Plastics product mfg	1	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	11	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	11	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	74	28	2 524	112 091	2 048	4 573	85 522	186 710	227 546	412 984	15 968
3325	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	31	8	599	21 962	495	1 076	16 998	63 803	51 549	112 924	3 459
333	Machinery mfg	-	45	23	1 587	76 165	1 070	2 344	47 742	177 099	171 695	323 671	8 852
3335	Metalworking machinery mfg	-	25	12	583	25 844	444	988	17 516	73 459	66 410	119 246	3 289
33351	Metalworking machinery mfg	-	25	12	583	25 844	444	988	17 516	73 459	66 410	119 246	3 289
3339	Other general-purpose machinery mfg	-	12	8	872	45 358	557	1 214	27 265	95 576	99 009	190 402	5 066
33392	Material handling equipment mfg	-	5	4	630	37 245	436	952	22 542	78 816	87 918	162 823	D
334	Computer & electronic product mfg	-	12	4	h	D	D	D	D	D	D	D	13 935
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	g	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GENESEE COUNTY, MI—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	27	15	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	19	12	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	7	4	i	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	7	4	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	6	4	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	6	4	i	D	D	D	D	D	D	D	D
GLADWIN COUNTY, MI													
31-33	Manufacturing	3	46	16	1 406	42 085	1 123	2 459	29 995	113 922	96 662	206 799	8 790
333	Machinery mfg	1	12	5	519	18 494	380	852	12 082	35 518	23 960	56 130	1 834
GOGEBIC COUNTY, MI													
31-33	Manufacturing	2	27	10	709	14 843	617	1 171	11 698	27 987	34 193	62 518	2 574
GRAND TRAVERSE COUNTY, MI													
31-33	Manufacturing	-	190	59	5 867	177 144	4 542	9 096	117 981	487 607	392 393	875 907	D
311	Food mfg	-	9	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	1	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	27	13	598	19 354	446	868	11 736	41 538	26 939	69 018	4 989
333	Machinery mfg	1	33	12	1 089	42 532	704	1 430	24 022	101 184	61 477	162 533	9 819
335	Electrical equipment, appliance, & component mfg	-	5	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	7	845	24 173	717	1 438	17 545	57 112	82 475	136 896	D
3363	Motor vehicle parts mfg ...	-	12	7	f	D	D	D	D	D	D	D	D
GRATIOT COUNTY, MI													
31-33	Manufacturing	-	51	19	2 282	77 028	1 827	3 440	40 494	141 935	125 023	265 702	14 402
336	Transportation equipment mfg	-	7	4	1 310	40 627	1 089	2 101	24 493	66 162	72 069	137 465	5 623
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HILLSDALE COUNTY, MI													
31-33	Manufacturing	1	104	46	6 510	176 126	5 276	10 763	128 084	493 542	642 445	1 134 532	57 829
326	Plastics & rubber products mfg	3	7	5	f	D	D	D	D	D	D	D	4 185
3261	Plastics product mfg	3	6	4	514	10 675	421	791	7 019	22 425	20 464	42 881	D
32619	Other plastics product mfg	3	6	4	514	10 675	421	791	7 019	22 425	20 464	42 881	D
326199	All other plastics product mfg	3	6	4	514	10 675	421	791	7 019	22 425	20 464	42 881	D
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	27	13	1 034	28 911	797	1 588	19 303	82 510	50 588	132 075	5 228
336	Transportation equipment mfg	1	12	9	2 831	83 042	2 411	5 280	65 600	167 182	274 635	442 526	32 145
3363	Motor vehicle parts mfg ...	1	12	9	2 831	83 042	2 411	5 280	65 600	167 182	274 635	442 526	32 145
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	3	4	4	1 311	34 366	1 154	2 640	27 375	49 617	158 138	208 228	14 009
336399	All other motor vehicle parts mfg	3	4	4	1 311	34 366	1 154	2 640	27 375	49 617	158 138	208 228	14 009
HOUGHTON COUNTY, MI													
31-33	Manufacturing	1	43	9	698	16 260	540	1 028	10 376	36 555	36 619	72 121	4 180
HURON COUNTY, MI													
31-33	Manufacturing	1	67	34	4 216	126 909	3 417	6 853	94 781	326 189	289 905	612 783	31 395
331	Primary metal mfg	-	6	4	536	13 114	450	760	9 582	33 544	18 373	52 754	D
333	Machinery mfg	-	16	10	816	26 050	612	1 362	17 740	60 624	25 120	79 213	3 497
3335	Metalworking machinery mfg	-	9	6	633	19 897	498	1 139	14 424	42 827	15 351	58 652	2 797
33351	Metalworking machinery mfg	-	9	6	633	19 897	498	1 139	14 424	42 827	15 351	58 652	2 797
336	Transportation equipment mfg	-	8	7	1 759	59 005	1 531	3 049	49 231	160 540	164 979	326 672	3 727
3363	Motor vehicle parts mfg ...	-	6	6	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	g	D	D	D	D	D	D	D	D
INGHAM COUNTY, MI													
31-33	Manufacturing	-	272	93	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	62	13	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	62	13	f	D	D	D	D	D	D	D	D
32311	Printing	2	50	11	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	30	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	8	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	12	8	g	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	46	16	1 586	59 550	1 270	2 681	42 016	125 824	87 749	215 968	D
333	Machinery mfg	-	24	11	944	40 311	607	1 397	23 181	75 900	79 578	157 374	D
3335	Metalworking machinery mfg	-	13	7	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	13	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	INGHAM COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	22	14	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	1	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	15	9	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
	IONIA COUNTY, MI												
31-33	Manufacturing	-	80	34	4 308	137 958	3 333	7 524	89 497	375 352	485 998	852 755	22 897
326	Plastics & rubber products mfg	7	11	7	610	21 828	439	954	12 248	42 296	35 810	77 989	3 423
3261	Plastics product mfg	7	11	7	610	21 828	439	954	12 248	42 296	35 810	77 989	3 423
32619	Other plastics product mfg	7	10	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	7	10	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	4	2 009	66 211	1 591	3 755	45 415	173 764	220 788	393 480	11 282
3363	Motor vehicle parts mfg ...	-	8	4	2 009	66 211	1 591	3 755	45 415	173 764	220 788	393 480	11 282
33639	Other motor vehicle parts mfg	-	4	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	1	g	D	D	D	D	D	D	D	D
	IOSCO COUNTY, MI												
31-33	Manufacturing	-	34	11	1 299	31 457	962	1 712	21 796	83 092	80 227	164 721	6 015
336	Transportation equipment mfg	-	5	4	756	16 879	551	961	12 188	35 247	51 867	88 993	D
3363	Motor vehicle parts mfg ...	-	4	4	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D
	ISABELLA COUNTY, MI												
31-33	Manufacturing	-	58	13	2 221	61 248	1 650	2 841	38 440	165 175	238 780	402 465	8 133
332	Fabricated metal product mfg	-	10	2	846	27 028	670	1 181	17 741	49 526	37 580	89 174	1 940
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	7	753	19 590	496	888	11 896	65 589	60 945	125 184	1 766
	JACKSON COUNTY, MI												
31-33	Manufacturing	-	351	140	12 248	421 991	8 735	17 652	246 134	1 082 930	1 175 838	2 271 824	89 924
326	Plastics & rubber products mfg	-	17	9	921	29 839	668	1 444	18 316	100 714	81 375	184 201	14 680
3261	Plastics product mfg	-	14	8	880	28 339	633	1 387	17 418	97 826	80 092	180 050	14 563
32619	Other plastics product mfg	-	10	6	772	24 709	552	1 215	15 190	88 764	72 548	163 384	14 058
326199	All other plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	5	592	27 303	408	999	16 076	79 299	98 063	179 532	6 506

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JACKSON COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg.....	-	132	61	4 263	140 073	3 376	6 679	90 608	285 898	254 503	539 239	20 784
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	74	31	1 973	64 497	1 627	3 213	41 294	122 907	99 798	223 048	9 954
33271	Machine shops.....	-	45	12	1 041	30 823	827	1 585	19 990	56 784	32 799	89 118	4 055
332710	Machine shops.....	-	45	12	1 041	30 823	827	1 585	19 990	56 784	32 799	89 118	4 055
33272	Turned product & screw, nut, & bolt mfg.....	-	29	19	932	33 674	800	1 628	21 304	66 123	66 999	133 930	5 899
332721	Precision turned product mfg.....	-	24	16	829	31 385	715	1 503	19 789	59 594	61 686	122 189	5 406
3329	Other fabricated metal product mfg.....	-	17	12	1 010	37 058	734	1 433	23 137	66 927	98 695	164 343	4 391
33291	Metal valve mfg.....	-	8	7	571	21 760	390	754	13 597	41 087	74 976	115 027	3 047
332912	Fluid power valve & hose fitting mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	59	22	1 676	63 323	1 214	2 444	37 438	121 510	89 720	215 829	6 912
3335	Metalworking machinery mfg.....	1	39	12	718	29 549	535	1 041	18 092	61 615	28 137	91 294	3 227
33351	Metalworking machinery mfg.....	1	39	12	718	29 549	535	1 041	18 092	61 615	28 137	91 294	3 227
336	Transportation equipment mfg.....	-	30	19	2 736	91 452	1 897	3 899	55 603	285 280	465 280	751 002	25 846
3363	Motor vehicle parts mfg....	-	27	19	2 719	90 864	1 886	3 878	55 259	284 083	464 520	748 992	25 756
33631	Motor vehicle gasoline engine & engine parts mfg.....	-	7	5	842	29 203	576	1 123	17 596	81 585	81 636	161 390	4 875
336312	Gasoline engine & engine parts mfg....	-	7	5	842	29 203	576	1 123	17 596	81 585	81 636	161 390	4 875
33639	Other motor vehicle parts mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
	KALAMAZOO COUNTY, MI												
31-33	Manufacturing	-	399	153	22 007	820 949	15 620	31 770	520 900	1 744 180	2 317 816	4 108 588	237 922
311	Food mfg.....	-	14	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	4	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	26	21	3 368	134 469	2 615	5 744	92 248	371 954	516 497	896 266	D
3221	Pulp, paper, & paperboard mills.....	-	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	3	3	993	49 499	816	1 942	35 797	87 299	187 661	288 459	D
322121	Paper (except newsprint) mills.....	-	3	3	993	49 499	816	1 942	35 797	87 299	187 661	288 459	D
3222	Converted paper product mfg.....	-	22	17	g	D	D	D	D	D	D	D	22 531
32221	Paperboard container mfg.....	-	12	9	g	D	D	D	D	D	D	D	19 253
322211	Corrugated & solid fiber box mfg.....	1	6	5	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg....	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	62	13	1 101	36 683	755	1 390	20 945	80 585	38 906	118 878	6 074
3231	Printing & related support activities.....	-	62	13	1 101	36 683	755	1 390	20 945	80 585	38 906	118 878	6 074
32311	Printing.....	1	54	11	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	23	13	3 349	169 803	2 395	3 930	122 977	324 969	505 030	855 619	D
3254	Pharmaceutical & medicine mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	4	9	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	29	17	1 966	54 529	1 579	3 193	34 678	114 997	101 642	222 536	11 869
3261	Plastics product mfg.....	-	28	17	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	23	15	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	23	15	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KALAMAZOO COUNTY, MI—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	70	23	2 312	73 295	1 654	3 518	42 678	166 118	125 929	291 011	11 353
3329	Other fabricated metal product mfg	-	8	7	1 227	41 846	852	1 857	22 770	95 674	84 334	179 646	D
33291	Metal valve mfg	-	4	4	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	3	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	71	26	2 879	106 493	1 673	3 379	53 192	176 841	162 991	351 188	12 212
3335	Metalworking machinery mfg	1	36	15	829	31 654	566	1 213	20 438	50 695	23 451	73 518	6 202
33351	Metalworking machinery mfg	1	36	15	829	31 654	566	1 213	20 438	50 695	23 451	73 518	6 202
3339	Other general-purpose machinery mfg	-	21	5	1 563	59 732	822	1 690	25 774	91 504	107 441	209 563	4 612
33399	All other general-purpose machinery mfg	-	11	2	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	14	10	2 523	108 795	2 045	4 136	82 763	183 105	230 631	413 594	D
3363	Motor vehicle parts mfg . . .	1	13	10	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	6	6	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	6	6	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	9	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	35	9	1 930	63 115	932	2 066	24 264	192 478	146 010	336 952	14 485
3391	Medical equipment & supplies mfg	-	17	5	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	17	5	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	6	2	g	D	D	D	D	D	D	D	D
31-33	KALKASKA COUNTY, MI	1	19	9	1 187	34 461	946	2 016	22 561	83 270	95 657	178 168	17 115
31-33	KENT COUNTY, MI	-	1 205	509	80 020	3 189 899	57 080	117 498	1 912 209	8 338 399	6 455 057	14 765 533	743 972
311	Food mfg	3	61	30	4 802	133 294	3 437	6 944	84 572	516 930	585 297	1 101 617	27 397
3116	Meat product mfg	3	7	5	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	7	5	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	25	8	2 136	65 947	1 521	3 162	43 227	310 841	182 586	493 225	D
31181	Bread & bakery product mfg	5	18	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	5	5	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	1	6	4	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	6	12	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	42	17	1 651	45 826	1 322	2 603	31 494	122 325	155 006	276 232	8 073
3212	Veneer, plywood, & engineered wood product mfg	4	7	6	656	18 777	517	957	12 101	50 674	43 926	95 008	3 461
32121	Veneer, plywood, & engineered wood product mfg	4	7	6	656	18 777	517	957	12 101	50 674	43 926	95 008	3 461
3219	Other wood product mfg	3	29	10	889	23 942	712	1 418	16 843	60 089	93 905	153 706	D
32191	Millwork	3	16	7	667	18 343	560	1 131	13 620	48 047	86 530	134 287	D
322	Paper mfg	-	26	18	1 646	52 641	1 282	2 730	33 121	133 202	143 136	275 991	D
3222	Converted paper product mfg	-	25	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	14	14	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	11	11	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KENT COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	144	40	3 081	102 794	2 203	4 359	61 514	242 908	152 635	394 476	18 323
3231	Printing & related support activities.....	1	144	40	3 081	102 794	2 203	4 359	61 514	242 908	152 635	394 476	18 323
32311	Printing.....	1	117	31	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	55	19	g	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	1	27	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	29	8	5 776	282 106	2 153	4 066	70 120	1 550 984	908 700	2 480 397	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	10	2	i	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	—	10	2	i	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg.....	—	9	1	i	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	91	62	8 162	237 250	6 314	12 720	151 260	612 057	586 759	1 198 633	56 269
3261	Plastics product mfg.....	1	81	55	7 008	200 665	5 442	10 721	129 733	464 375	491 458	957 477	47 846
32619	Other plastics product mfg.....	1	60	42	5 798	160 951	4 548	8 947	106 418	382 446	375 030	757 768	33 821
326199	All other plastics product mfg.....	1	58	41	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	—	10	7	1 154	36 585	872	1 999	21 527	147 682	95 301	241 156	8 423
32629	Other rubber product mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	35	16	874	29 780	617	1 400	19 524	101 183	81 162	181 391	9 643
3273	Cement & concrete product mfg.....	2	21	11	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	26	20	h	D	D	D	D	D	D	D	D
3315	Foundries.....	—	20	17	2 818	100 495	1 954	3 665	61 034	237 476	182 280	421 683	19 566
33151	Ferrous metal foundries ..	—	7	5	541	25 189	388	695	18 334	53 711	27 862	81 919	4 624
331511	Iron foundries.....	—	7	5	541	25 189	388	695	18 334	53 711	27 862	81 919	4 624
33152	Nonferrous metal foundries.....	—	13	12	2 277	75 306	1 566	2 970	42 700	183 765	154 418	339 764	14 942
331521	Aluminum die-casting foundries.....	—	4	4	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries.....	—	7	7	1 272	39 662	936	1 854	23 947	99 355	99 660	200 147	D
332	Fabricated metal product mfg.....	1	236	85	7 654	248 457	5 972	11 611	160 632	558 690	359 214	918 326	53 824
3321	Forging & stamping.....	—	8	7	835	26 548	629	1 086	17 182	55 398	62 593	119 102	6 088
33211	Forging & stamping.....	—	8	7	835	26 548	629	1 086	17 182	55 398	62 593	119 102	6 088
332116	Metal stamping.....	—	6	5	f	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	—	7	6	1 443	54 320	1 148	2 128	35 725	132 413	86 086	218 450	9 520
33251	Hardware mfg.....	—	7	6	1 443	54 320	1 148	2 128	35 725	132 413	86 086	218 450	9 520
332510	Hardware mfg.....	—	7	6	1 443	54 320	1 148	2 128	35 725	132 413	86 086	218 450	9 520
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	—	92	18	1 707	60 798	1 305	2 699	38 945	141 702	80 359	220 950	24 854
33271	Machine shops.....	1	67	9	882	30 135	723	1 464	20 567	58 574	25 973	84 359	4 951
332710	Machine shops.....	1	67	9	882	30 135	723	1 464	20 567	58 574	25 973	84 359	4 951
33272	Turned product & screw, nut, & bolt mfg.....	—	25	9	825	30 663	582	1 235	18 378	83 128	54 386	136 591	19 903
332721	Precision turned product mfg.....	—	20	7	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	1	59	30	2 351	64 371	1 920	3 813	43 573	138 102	57 204	196 377	8 762
33281	Coating, engraving, heat treating, & allied activities.....	1	59	30	2 351	64 371	1 920	3 813	43 573	138 102	57 204	196 377	8 762
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	4	19	10	662	15 556	543	1 062	10 725	36 999	14 790	51 868	2 091
332813	Electroplating, plating, polishing, anodizing, & coloring.....	—	32	15	1 415	38 047	1 153	2 327	26 037	77 359	34 516	112 874	4 286

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KENT COUNTY, MI— Con. Manufacturing— Con.												
333	Machinery mfg	—	230	109	11 981	597 216	8 251	18 576	342 749	1 206 593	748 434	1 924 148	113 845
3333	Commercial & service												
33331	industry machinery mfg ..	1	8	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service												
33331	industry machinery	1	8	3	f	D	D	D	D	D	D	D	D
33331	mfg												
3335	Metalworking machinery												
33351	mfg	—	131	70	5 836	287 694	4 750	11 166	211 183	589 415	257 365	821 544	51 918
33351	Metalworking machinery												
33351	mfg	—	131	70	5 836	287 694	4 750	11 166	211 183	589 415	257 365	821 544	51 918
333511	Industrial mold mfg ...	—	33	24	2 124	105 222	1 699	4 187	73 674	213 718	90 667	300 584	27 295
333514	Special die & tool, die												
333514	set, jig, & fixture mfg .	—	79	40	3 350	170 728	2 785	6 514	130 807	348 905	156 097	483 426	22 391
3336	Engine, turbine, & power												
33361	transmission equipment												
33361	mfg	—	6	4	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power												
33361	transmission equipment	—	6	4	g	D	D	D	D	D	D	D	D
333618	mfg												
333618	Other engine	—	4	2	g	D	D	D	D	D	D	D	D
333618	equipment mfg												
3339	Other general-purpose												
33392	machinery mfg	—	40	23	3 219	171 122	1 675	3 821	66 102	399 326	311 039	703 159	27 708
33392	Material handling												
333922	equipment mfg	—	11	6	1 658	102 965	658	1 667	30 681	201 977	188 583	388 672	D
333922	Conveyor & conveying												
333922	equipment mfg	—	9	5	g	D	D	D	D	D	D	D	D
33399	All other general-purpose												
33399	machinery mfg	—	25	16	g	D	D	D	D	D	D	D	D
334	Computer & electronic												
3343	product mfg	3	29	12	2 785	103 631	1 721	4 535	68 592	278 094	152 080	432 931	D
3343	Audio & video equipment												
33431	mfg	7	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment												
334310	mfg	7	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video												
334310	equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring,												
33451	medical, & control												
33451	instruments mfg	1	17	7	1 819	78 506	1 071	3 284	53 029	182 723	76 330	258 604	D
33451	Navigational, measuring,												
334511	medical, & control	1	17	7	1 819	78 506	1 071	3 284	53 029	182 723	76 330	258 604	D
334511	instruments mfg												
334511	Search, detection,												
334511	navigation, &	—	4	3	g	D	D	D	D	D	D	D	2 853
334511	guidance instrument												
334511	mfg												
335	Electrical equipment,												
3352	appliance, & component												
33521	mfg	—	16	5	1 656	50 689	1 256	2 266	31 495	159 039	283 753	441 509	D
33521	Household appliance mfg .												
335212	Small electrical appliance	—	2	1	f	D	D	D	D	D	D	D	D
335212	mfg												
335212	Household vacuum	—	2	1	f	D	D	D	D	D	D	D	D
335212	cleaner mfg												
3359	Other electrical equipment												
3359	& component mfg	—	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment												
3363	mfg	—	62	35	11 364	497 927	9 314	18 121	384 375	801 801	1 230 707	2 012 340	127 601
3363	Motor vehicle parts mfg ...												
33631	Motor vehicle gasoline	—	46	30	10 382	470 159	8 589	16 734	368 475	719 936	1 171 828	1 885 218	D
33631	engine & engine parts												
336312	mfg	—	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine &												
336312	engine parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical &												
336321	electronic equipment												
336321	mfg	—	10	4	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting												
336322	equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle												
336322	electrical & electronic	—	8	2	f	D	D	D	D	D	D	D	2 105
336322	equipment mfg												
33636	Motor vehicle seating &												
336360	interior trim mfg	—	5	4	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating												
336360	& interior trim mfg ...	—	5	4	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal												
336370	stamping	—	18	11	4 557	231 919	3 982	7 603	195 201	290 547	448 551	742 068	D
336370	Motor vehicle metal												
336370	stamping	—	18	11	4 557	231 919	3 982	7 603	195 201	290 547	448 551	742 068	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KENT COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33639	Other motor vehicle parts mfg	-	11	9	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	11	9	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	67	27	12 625	609 552	8 986	19 517	353 808	1 525 896	653 834	2 180 446	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	33	9	1 641	52 353	1 320	2 601	35 738	117 114	66 760	185 050	D
33712	Household & institutional furniture mfg	-	26	9	1 588	51 287	1 276	2 537	35 008	114 940	65 541	181 631	D
337122	Nonupholstered wood household furniture mfg	1	15	8	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	8	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	30	17	10 938	556 144	7 627	16 833	317 286	1 405 071	583 502	1 988 112	D
33721	Office furniture (including fixtures) mfg	-	30	17	10 938	556 144	7 627	16 833	317 286	1 405 071	583 502	1 988 112	D
337211	Wood office furniture mfg	-	11	6	g	D	D	D	D	D	D	D	6 231
337214	Office furniture (except wood) mfg	-	6	4	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	81	16	1 930	58 364	1 282	2 441	31 492	178 117	68 897	248 064	D
3391	Medical equipment & supplies mfg	1	40	6	913	24 591	562	968	11 818	94 762	21 741	116 187	D
33911	Medical equipment & supplies mfg	1	40	6	913	24 591	562	968	11 818	94 762	21 741	116 187	D
3399	Other miscellaneous mfg ..	-	41	10	1 017	33 773	720	1 473	19 674	83 355	47 156	131 877	D
33999	All other miscellaneous mfg	-	13	3	671	21 620	496	992	13 329	53 139	33 543	85 945	1 968
	LAPEER COUNTY, MI												
31-33	Manufacturing	-	139	44	6 118	155 561	4 380	8 925	96 210	392 178	441 137	837 230	56 566
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	14	11	2 181	53 470	1 392	3 415	33 471	147 617	119 650	269 172	D
3261	Plastics product mfg	-	12	10	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	9	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	8	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	37	10	1 174	31 155	909	1 668	19 224	57 576	47 575	104 818	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	23	5	507	14 249	379	612	8 563	21 618	22 369	44 136	D
336	Transportation equipment mfg	-	15	9	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	11	8	882	23 981	529	937	12 180	48 356	78 211	126 299	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LENAWEE COUNTY, MI													
31-33	Manufacturing	-	163	65	8 940	359 317	6 671	13 581	229 292	774 383	955 833	1 736 147	80 972
325	Chemical mfg	-	11	5	889	40 945	366	879	16 436	80 740	194 017	273 277	19 767
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	5	g	D	D	D	D	D	D	D	4 497
3261	Plastics product mfg	-	12	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	7	4	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	3	3	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	9	1 019	37 360	746	1 565	22 310	91 717	60 067	153 266	12 077
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	13	4	604	25 748	437	990	15 703	66 178	37 094	104 715	D
33272	Turned product & screw, nut, & bolt mfg	-	6	4	562	24 684	405	933	14 980	64 491	36 594	102 498	D
332721	Precision turned product mfg	-	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	33	13	1 576	68 946	1 300	2 308	36 411	85 536	127 632	220 380	4 274
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	3	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	3	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	2	f	D	D	D	D	D	D	D	1 389
336	Transportation equipment mfg	-	9	6	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	7	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	2	f	D	D	D	D	D	D	D	631
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	2	f	D	D	D	D	D	D	D	D
LIVINGSTON COUNTY, MI													
31-33	Manufacturing	-	264	105	10 560	374 061	7 592	15 390	218 492	1 075 181	1 699 810	2 782 795	66 180
325	Chemical mfg	-	10	5	577	28 212	268	523	8 680	80 732	87 533	168 184	5 629
326	Plastics & rubber products mfg	1	24	14	g	D	D	D	D	D	D	D	9 824
3261	Plastics product mfg	1	21	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	16	9	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	15	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	64	25	1 670	57 206	1 269	2 740	35 259	121 352	96 785	217 923	7 236
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	35	14	934	33 630	762	1 768	23 213	63 544	60 463	124 291	D
33271	Machine shops	-	25	6	618	24 057	510	1 198	16 977	47 752	49 856	97 692	D
332710	Machine shops	-	25	6	618	24 057	510	1 198	16 977	47 752	49 856	97 692	D
333	Machinery mfg	1	46	21	1 336	47 769	960	1 867	29 819	84 921	62 882	149 725	3 298
3335	Metalworking machinery mfg	-	22	10	660	22 451	468	983	15 239	35 607	20 140	57 274	1 380
33351	Metalworking machinery mfg	-	22	10	660	22 451	468	983	15 239	35 607	20 140	57 274	1 380

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LIVINGSTON COUNTY, MI—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	23	14	3 369	124 548	2 742	5 962	88 989	553 930	1 026 648	1 587 438	D
3363	Motor vehicle parts mfg ...	-	19	14	h	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	3	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	3	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	8	6	877	36 335	682	1 693	27 745	90 834	238 487	329 377	D
336370	Motor vehicle metal stamping	-	8	6	877	36 335	682	1 693	27 745	90 834	238 487	329 377	D
MACOMB COUNTY, MI													
31-33	Manufacturing	-	2 116	745	93 551	4 321 928	73 377	156 201	3 128 112	9 148 935	14 813 995	23 988 006	1 022 785
311	Food mfg	1	55	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	110	18	2 165	75 529	1 335	2 730	38 314	183 737	102 706	283 561	15 467
3231	Printing & related support activities	2	110	18	2 165	75 529	1 335	2 730	38 314	183 737	102 706	283 561	15 467
32311	Printing	2	98	16	2 056	71 255	1 247	2 556	36 045	169 919	100 283	267 085	14 893
323110	Commercial lithographic printing ..	-	51	9	1 073	40 154	744	1 390	20 954	104 877	54 229	156 469	10 635
323113	Commercial screen printing	9	6	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	27	7	1 554	87 623	1 067	1 875	53 262	417 455	384 771	816 377	32 628
3255	Paint, coating, & adhesive mfg	-	8	4	g	D	D	D	D	D	D	D	27 490
32551	Paint & coating mfg	-	5	1	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	-	5	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	121	74	9 063	261 344	6 984	13 674	154 655	618 968	581 934	1 202 629	42 207
3261	Plastics product mfg	1	113	68	8 669	249 163	6 682	13 105	148 983	593 858	562 583	1 159 051	41 437
32619	Other plastics product mfg	1	99	63	8 204	234 569	6 397	12 604	142 273	558 664	493 626	1 051 524	38 815
326199	All other plastics product mfg	1	96	63	i	D	D	D	D	D	D	D	38 798
327	Nonmetallic mineral product mfg	2	46	12	987	34 629	752	1 623	21 516	82 499	104 363	186 961	5 401
3273	Cement & concrete product mfg	3	31	8	530	22 364	378	799	13 417	61 982	57 398	119 200	2 909
331	Primary metal mfg	-	37	21	1 560	51 547	1 329	2 858	39 407	151 210	173 048	322 447	8 467
3315	Foundries	-	25	13	1 004	31 691	873	1 972	24 567	85 898	56 583	142 124	D
33151	Ferrous metal foundries ..	-	13	7	646	20 921	590	1 386	17 411	54 001	36 768	90 798	D
332	Fabricated metal product mfg	1	656	192	13 418	496 713	10 111	21 402	316 689	1 069 564	716 458	1 792 578	87 104
3321	Forging & stamping	2	39	11	805	31 917	599	1 389	20 850	61 701	67 469	128 672	D
33211	Forging & stamping	2	39	11	805	31 917	599	1 389	20 850	61 701	67 469	128 672	D
332116	Metal stamping	4	20	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	71	19	1 286	48 002	908	1 958	27 765	106 603	71 623	187 083	3 099
33231	Plate work & fabricated structural product mfg ..	-	32	10	736	26 697	550	1 232	17 201	66 123	50 213	126 111	D
33232	Ornamental & architectural metal products mfg	2	39	9	550	21 305	358	726	10 564	40 480	21 410	60 972	D
3325	Hardware mfg	-	10	5	555	18 490	438	1 043	11 300	42 961	49 451	91 920	4 240
33251	Hardware mfg	-	10	5	555	18 490	438	1 043	11 300	42 961	49 451	91 920	4 240
332510	Hardware mfg	-	10	5	555	18 490	438	1 043	11 300	42 961	49 451	91 920	4 240
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	341	81	6 196	241 295	4 697	9 912	157 759	509 032	352 565	859 835	45 708
33271	Machine shops	1	282	51	3 709	146 873	2 766	5 806	92 387	289 120	126 966	414 081	19 672
332710	Machine shops	1	282	51	3 709	146 873	2 766	5 806	92 387	289 120	126 966	414 081	19 672
33272	Turned product & screw, nut, & bolt mfg	-	59	30	2 487	94 422	1 931	4 106	65 372	219 912	225 599	445 754	26 036
332721	Precision turned product mfg	-	35	17	1 308	51 152	1 052	2 443	35 145	106 027	57 214	162 817	15 669
332722	Bolt, nut, screw, rivet, & washer mfg	-	24	13	1 179	43 270	879	1 663	30 227	113 885	168 385	282 937	10 367

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MACOMB COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	—	81	40	2 376	79 438	1 877	3 975	52 437	194 860	64 675	261 518	19 139
33281	Coating, engraving, heat treating, & allied activities	—	81	40	2 376	79 438	1 877	3 975	52 437	194 860	64 675	261 518	19 139
332811	Metal heat treating	—	26	14	737	28 146	577	1 264	20 017	80 268	21 155	102 886	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	26	14	737	28 146	577	1 264	20 017	80 268	21 155	102 886	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	28	15	737	25 162	559	1 182	14 807	49 365	19 655	69 597	D
3329	Other fabricated metal product mfg	—	27	11	902	26 130	741	1 529	17 613	65 227	23 865	89 035	D
33299	All other fabricated metal product mfg	1	73	28	1 699	58 725	1 266	2 457	35 951	112 024	88 489	199 058	6 622
332999	All other miscellaneous fabricated metal product mfg	1	65	27	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	36	15	904	29 744	672	1 282	17 544	58 569	56 612	113 844	D
3335	Metalworking machinery mfg	—	580	228	17 177	842 350	12 265	28 227	530 097	1 577 793	979 573	2 537 015	94 257
33351	Metalworking machinery mfg	—	450	168	12 375	627 312	9 344	21 732	420 067	1 097 435	588 083	1 679 072	76 727
333511	Industrial mold mfg	—	450	168	12 375	627 312	9 344	21 732	420 067	1 097 435	588 083	1 679 072	76 727
333512	Machine tool (metal cutting types) mfg	—	90	25	2 538	134 193	2 035	4 984	103 794	222 328	68 584	290 127	14 976
333514	Special die & tool, die set, jig, & fixture mfg	—	21	13	911	54 435	547	1 282	25 310	67 666	103 775	183 130	5 859
333515	Cutting tool & machine tool accessory mfg	1	222	79	5 329	275 874	4 246	9 753	196 679	474 260	160 392	619 624	36 314
333518	Other metalworking machinery mfg	—	81	27	2 049	88 399	1 469	3 262	53 543	206 910	103 292	309 169	13 147
3339	Other general-purpose machinery mfg	1	24	20	1 307	63 420	881	2 129	35 078	104 111	138 929	241 361	D
33392	Material handling equipment mfg	—	73	37	3 600	163 667	2 158	5 036	83 999	354 235	301 540	642 490	D
333922	Conveyor & conveying equipment mfg	1	21	9	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	14	7	541	28 511	352	874	16 730	60 529	85 092	144 564	D
333992	Welding & soldering equipment mfg	—	51	27	2 842	127 887	1 692	3 923	63 750	279 114	199 668	466 975	7 497
333999	All other miscellaneous general-purpose machinery mfg	—	15	12	1 452	78 838	986	2 573	43 136	148 511	121 715	260 278	D
334	Computer & electronic product mfg	—	19	6	997	32 721	487	861	13 568	96 057	58 886	154 032	2 844
3344	Semiconductor & other electronic component mfg	1	52	16	g	D	D	D	D	D	D	D	8 915
33441	Semiconductor & other electronic component mfg	—	20	6	849	23 910	586	1 351	10 745	76 515	62 889	140 004	5 668
3345	Navigational, measuring, medical, & control instruments mfg	—	20	6	849	23 910	586	1 351	10 745	76 515	62 889	140 004	5 668
33451	Navigational, measuring, medical, & control instruments mfg	2	24	9	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	24	9	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	29	10	984	40 850	721	1 418	20 302	71 636	64 774	135 181	5 462
335314	Relay & industrial control mfg	—	18	8	672	32 207	458	896	14 480	48 630	51 905	98 967	D
336	Transportation equipment mfg	—	18	8	672	32 207	458	896	14 480	48 630	51 905	98 967	D
3361	Motor vehicle mfg	—	11	7	598	29 130	397	759	12 130	42 084	46 301	86 825	D
33611	Automobile & light duty motor vehicle mfg	—	182	118	40 101	2 258 179	34 224	73 818	1 859 409	4 561 431	11 346 630	15 937 232	703 825
336111	Automobile mfg	—	4	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	4	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	3	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MACOMB COUNTY, MI —Con.												
31-33	Manufacturing— Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	—	158	107	k	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	16	5	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	16	5	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	3	3	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	3	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	13	10	9 050	570 885	7 961	19 364	488 986	1 328 389	3 038 438	4 389 857	D
336350	Motor vehicle transmission & power train parts mfg	—	13	10	9 050	570 885	7 961	19 364	488 986	1 328 389	3 038 438	4 389 857	D
33636	Motor vehicle seating & interior trim mfg	—	8	7	5 135	276 209	4 437	9 266	228 648	583 164	725 996	1 313 601	D
336360	Motor vehicle seating & interior trim mfg ...	—	8	7	5 135	276 209	4 437	9 266	228 648	583 164	725 996	1 313 601	D
33637	Motor vehicle metal stamping	—	79	57	13 070	705 712	11 005	23 521	561 851	1 201 927	1 391 929	2 604 506	200 153
336370	Motor vehicle metal stamping	—	79	57	13 070	705 712	11 005	23 521	561 851	1 201 927	1 391 929	2 604 506	200 153
33639	Other motor vehicle parts mfg	1	32	21	2 687	71 436	1 987	3 979	45 459	172 581	216 392	388 267	13 587
336399	All other motor vehicle parts mfg	1	32	21	2 687	71 436	1 987	3 979	45 459	172 581	216 392	388 267	13 587
337	Furniture & related product mfg	4	56	10	709	19 087	576	1 097	14 147	36 704	29 549	66 512	1 866
339	Miscellaneous mfg	1	84	12	2 029	53 658	1 402	2 527	28 609	126 550	82 104	206 755	6 722
3399	Other miscellaneous mfg ..	—	48	8	g	D	D	D	D	D	D	D	D
33995	Sign mfg	—	19	3	917	21 925	593	936	11 386	40 679	39 329	79 914	D
339950	Sign mfg	—	19	3	917	21 925	593	936	11 386	40 679	39 329	79 914	D
	MANISTEE COUNTY, MI												
31-33	Manufacturing	—	31	12	1 300	48 416	993	2 137	35 081	140 554	93 618	244 573	31 546
	MARQUETTE COUNTY, MI												
31-33	Manufacturing	3	39	8	730	16 024	484	851	10 211	38 954	42 042	81 012	4 347
	MASON COUNTY, MI												
31-33	Manufacturing	—	40	18	2 682	84 154	2 092	4 293	55 517	289 393	163 848	435 761	37 730
332	Fabricated metal product mfg	—	7	4	725	16 375	561	1 190	10 957	40 981	36 182	77 285	3 699
	MECOSTA COUNTY, MI												
31-33	Manufacturing	—	41	13	1 837	50 664	1 544	2 928	33 586	178 867	185 488	363 174	26 508
332	Fabricated metal product mfg	—	7	4	611	21 273	485	995	14 301	51 684	62 223	114 042	7 153

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MENOMINEE COUNTY, MI													
31-33	Manufacturing	—	56	27	2 901	78 048	2 319	4 330	56 366	233 056	190 185	425 196	11 659
333	Machinery mfg	—	5	3	613	13 572	503	928	9 373	105 004	41 103	145 105	5 942
3333	Commercial & service industry machinery mfg . .	—	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	5	4	563	11 511	463	893	8 559	26 692	21 150	48 121	407
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	4	563	11 511	463	893	8 559	26 692	21 150	48 121	407
33712	Household & institutional furniture mfg	—	5	4	563	11 511	463	893	8 559	26 692	21 150	48 121	407
MIDLAND COUNTY, MI													
31-33	Manufacturing	—	71	12	5 613	285 424	3 247	6 588	142 722	783 098	916 389	1 690 770	D
323	Printing & related support activities	—	13	2	665	21 034	526	1 194	14 372	44 948	42 208	86 652	D
3231	Printing & related support activities	—	13	2	665	21 034	526	1 194	14 372	44 948	42 208	86 652	D
32311	Printing	—	11	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing . .	—	6	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	9	3	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	3	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	2	2	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	2	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	2	2	g	D	D	D	D	D	D	D	D
MISSAUKEE COUNTY, MI													
31-33	Manufacturing	1	23	7	548	17 533	436	854	11 655	37 655	35 904	73 032	4 064
MONROE COUNTY, MI													
31-33	Manufacturing	—	138	56	9 278	425 645	7 346	15 383	316 877	1 310 274	1 237 804	2 560 101	201 979
322	Paper mfg	—	8	8	773	26 198	585	1 071	15 967	56 011	45 824	102 334	8 525
3222	Converted paper product mfg	1	7	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	5	5	578	19 689	447	759	11 787	40 465	33 742	74 328	D
322211	Corrugated & solid fiber box mfg	—	4	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	5	14	6	928	31 090	702	1 529	21 975	156 612	86 049	242 147	13 042
3272	Glass & glass product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	9	1	1	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	9	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	3	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	40	15	1 181	48 101	902	2 050	28 506	110 058	54 743	163 895	67 887
333	Machinery mfg	—	19	10	674	27 156	358	758	13 808	68 759	45 510	116 394	D
336	Transportation equipment mfg	—	9	5	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	8	5	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTCALM COUNTY, MI													
31-33	Manufacturing	-	77	24	5 456	171 954	4 561	9 432	131 049	464 266	457 048	923 819	17 997
326	Plastics & rubber products mfg	6	11	3	631	20 268	480	1 032	13 353	41 267	36 944	77 959	2 920
3261	Plastics product mfg	6	10	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	8	3	f	D	D	D	D	D	D	D	2 644
326199	All other plastics product mfg	5	8	3	f	D	D	D	D	D	D	D	2 644
332	Fabricated metal product mfg	-	16	4	940	25 496	746	1 538	18 070	65 971	56 337	119 580	2 412
3329	Other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MUSKEGON COUNTY, MI													
31-33	Manufacturing	-	335	138	16 398	562 128	11 708	23 147	355 431	1 521 903	1 393 281	2 903 267	130 785
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	13	9	1 056	41 386	656	1 398	23 276	149 141	201 295	350 936	19 252
3251	Basic chemical mfg	-	5	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	6	9	6	680	14 799	537	816	9 641	37 094	33 941	71 134	3 431
3261	Plastics product mfg	6	8	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	6	4	519	10 238	411	576	6 663	26 129	23 164	49 355	D
326199	All other plastics product mfg	4	6	4	519	10 238	411	576	6 663	26 129	23 164	49 355	D
331	Primary metal mfg	-	31	25	3 680	127 425	2 947	6 104	93 832	330 394	246 576	568 784	25 495
3315	Foundries	-	28	22	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	12	11	2 351	83 762	2 002	4 236	65 793	206 023	106 194	307 830	9 857
331511	Iron foundries	-	5	4	696	25 397	591	1 270	18 945	48 444	34 742	82 766	2 379
331512	Steel investment foundries	-	4	4	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	16	11	g	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	5	4	537	14 890	381	781	10 898	41 048	21 331	61 758	D
332	Fabricated metal product mfg	-	105	37	3 412	112 453	2 397	4 762	69 633	283 135	239 442	519 512	28 145
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	46	14	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	45	14	962	28 766	727	1 370	19 651	73 272	95 978	169 951	5 068
332710	Machine shops	-	45	14	962	28 766	727	1 370	19 651	73 272	95 978	169 951	5 068
3328	Coating, engraving, heat treating, & allied activities	-	17	5	687	22 850	383	811	10 551	54 881	59 913	112 759	13 654
33281	Coating, engraving, heat treating, & allied activities	-	17	5	687	22 850	383	811	10 551	54 881	59 913	112 759	13 654
3329	Other fabricated metal product mfg	-	20	9	915	37 082	657	1 279	23 499	99 245	43 058	140 978	4 198
33299	All other fabricated metal product mfg	-	19	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	42	15	1 769	61 044	1 108	1 539	31 135	140 070	121 974	266 697	9 520
3339	Other general-purpose machinery mfg	-	8	4	824	30 488	484	408	13 254	71 145	71 394	142 120	2 804
33392	Material handling equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MUSKEGON COUNTY, MI—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	20	13	1 881	65 867	1 292	2 731	38 493	149 925	133 300	277 236	D
3363	Motor vehicle parts mfg ...	2	14	10	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	21	8	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	10	7	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	10	7	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	—	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	28	7	660	25 327	456	940	14 750	110 095	151 777	262 543	8 636
3399	Other miscellaneous mfg ...	—	19	5	f	D	D	D	D	D	D	D	D
	NEWAYGO COUNTY, MI												
31-33	Manufacturing	—	46	11	1 727	51 735	1 325	2 678	34 566	277 748	208 185	484 715	11 382
311	Food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	f	D	D	D	D	D	D	D	D
	OAKLAND COUNTY, MI												
31-33	Manufacturing	—	2 366	800	90 481	3 747 478	64 198	133 825	2 271 592	12 724 076	14 452 152	27 172 655	963 569
311	Food mfg	4	84	19	1 197	23 445	639	1 062	11 207	54 482	51 785	106 552	3 496
3118	Bakeries & tortilla mfg	4	62	12	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	4	59	12	f	D	D	D	D	D	D	D	D
315	Apparel mfg	9	24	3	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	3	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	3	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	3	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	271	42	3 351	115 600	2 338	4 573	65 399	237 743	152 996	389 334	15 885
3231	Printing & related support activities	2	271	42	3 351	115 600	2 338	4 573	65 399	237 743	152 996	389 334	15 885
32311	Printing	2	234	37	3 009	102 290	2 101	4 098	57 608	212 722	148 086	359 518	13 959
323110	Commercial lithographic printing ..	1	93	17	1 159	42 617	777	1 474	23 765	88 438	68 273	156 039	7 053
325	Chemical mfg	2	75	32	2 964	124 289	1 500	3 140	43 214	384 822	312 406	704 973	D
3254	Pharmaceutical & medicine mfg	—	10	5	906	38 245	520	1 115	12 970	142 611	50 042	196 541	8 862
32541	Pharmaceutical & medicine mfg	—	10	5	906	38 245	520	1 115	12 970	142 611	50 042	196 541	8 862
325412	Pharmaceutical preparation mfg	—	3	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	19	9	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	12	7	f	D	D	D	D	D	D	D	3 194
325510	Paint & coating mfg ...	—	12	7	f	D	D	D	D	D	D	D	3 194
3259	Other chemical product mfg	2	20	8	528	26 201	186	384	5 312	78 154	47 583	127 107	D
32599	All other chemical product & preparation mfg	2	19	8	f	D	D	D	D	D	D	D	1 998
326	Plastics & rubber products mfg	2	126	60	6 234	169 059	4 936	9 893	110 654	420 673	405 903	827 456	38 783
3261	Plastics product mfg	2	114	55	5 821	153 887	4 606	9 235	99 945	389 208	382 371	772 501	36 633
32619	Other plastics product mfg	2	87	48	5 005	126 570	4 024	7 859	82 959	324 209	284 892	610 810	28 210
326199	All other plastics product mfg	2	85	46	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	63	22	1 151	41 696	823	1 679	25 783	114 206	89 753	204 601	6 772
331	Primary metal mfg	—	24	11	1 142	42 468	776	1 560	26 285	70 896	96 262	166 628	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OAKLAND COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	530	188	14 889	579 439	11 099	23 929	359 247	1 235 543	965 790	2 198 709	91 643
3321	Forging & stamping	—	31	19	1 791	67 782	1 288	2 717	41 610	181 526	227 061	408 053	21 352
33211	Forging & stamping	—	31	19	1 791	67 782	1 288	2 717	41 610	181 526	227 061	408 053	21 352
332111	Iron & steel forging	—	9	6	814	36 374	534	1 307	20 609	131 185	165 630	294 946	17 147
332116	Metal stamping	1	18	10	879	28 050	691	1 295	19 433	43 293	54 683	99 376	D
3322	Cutlery & handtool mfg	1	29	8	573	25 433	350	696	12 016	58 040	36 126	93 774	4 328
33221	Cutlery & handtool mfg	1	29	8	573	25 433	350	696	12 016	58 040	36 126	93 774	4 328
332212	Hand & edge tool mfg	1	26	8	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	53	18	1 343	51 763	986	2 041	31 115	112 945	127 179	239 076	D
33232	Ornamental & architectural metal products mfg	—	40	15	1 037	41 580	747	1 592	24 074	87 201	102 442	188 891	3 780
332322	Sheet metal work mfg	—	26	9	566	23 809	441	938	15 472	55 747	34 475	88 438	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	258	86	6 386	252 493	4 962	10 897	169 313	520 088	347 482	868 993	38 121
33271	Machine shops	1	195	51	3 473	146 676	2 684	5 886	99 179	260 178	138 940	401 420	15 842
332710	Machine shops	1	195	51	3 473	146 676	2 684	5 886	99 179	260 178	138 940	401 420	15 842
33272	Turned product & screw, nut, & bolt mfg	—	63	35	2 913	105 817	2 278	5 011	70 134	259 910	208 542	467 573	22 279
332721	Precision turned product mfg	—	45	25	1 816	65 674	1 525	3 410	46 336	138 971	78 567	215 789	9 586
332722	Bolt, nut, screw, rivet, & washer mfg	1	18	10	1 097	40 143	753	1 601	23 798	120 939	129 975	251 784	12 693
3328	Coating, engraving, heat treating, & allied activities	2	67	25	1 633	58 667	1 232	2 688	36 686	116 695	60 786	176 965	D
33281	Coating, engraving, heat treating, & allied activities	2	67	25	1 633	58 667	1 232	2 688	36 686	116 695	60 786	176 965	D
332811	Metal heat treating	1	20	11	664	27 441	463	1 075	16 075	50 646	28 072	78 633	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	28	9	650	21 372	509	1 111	13 544	38 934	20 834	59 898	3 787
3329	Other fabricated metal product mfg	—	64	22	2 482	96 978	1 817	3 949	56 753	178 955	112 601	290 154	11 001
33291	Metal valve mfg	—	14	5	1 415	56 674	993	2 158	29 516	95 326	64 445	160 001	6 937
332912	Fluid power valve & hose fitting mfg	—	12	5	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	50	17	1 067	40 304	824	1 791	27 237	83 629	48 156	130 153	4 064
332999	All other miscellaneous fabricated metal product mfg	1	24	6	555	19 010	439	941	13 479	39 823	23 146	61 550	2 563
333	Machinery mfg	—	487	199	20 415	1 052 712	12 459	27 885	532 554	1 998 167	2 092 220	4 104 179	114 682
3332	Industrial machinery mfg	—	38	12	1 506	70 885	504	1 156	19 445	185 473	187 708	376 106	D
33329	Other industrial machinery mfg	—	30	10	1 346	62 437	443	1 026	17 215	167 998	175 669	345 921	D
333298	All other industrial machinery mfg	—	25	8	1 137	53 520	334	777	13 338	153 997	147 500	303 251	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	13	6	f	D	D	D	D	D	D	D	7 197
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	13	6	f	D	D	D	D	D	D	D	7 197
3335	Metalworking machinery mfg	—	328	131	10 589	551 838	7 280	17 560	338 585	1 040 597	867 851	1 954 545	60 490
33351	Metalworking machinery mfg	—	328	131	10 589	551 838	7 280	17 560	338 585	1 040 597	867 851	1 954 545	60 490
333511	Industrial mold mfg	—	51	23	1 666	94 616	1 253	2 826	64 487	179 874	87 789	265 427	14 733
333512	Machine tool (metal cutting types) mfg	—	17	13	1 311	71 673	693	1 691	33 323	124 301	236 313	401 817	5 336
333514	Special die & tool, die set, jig, & fixture mfg	1	156	58	4 093	211 646	3 216	7 497	148 518	345 161	182 750	526 353	24 468
333515	Cutting tool & machine tool accessory mfg	2	77	23	1 851	81 770	1 205	2 724	46 567	160 832	85 930	248 649	8 137
333518	Other metalworking machinery mfg	—	19	11	1 516	84 307	825	2 628	41 663	215 992	264 424	487 665	7 328
3336	Engine, turbine, & power transmission equipment mfg	—	4	4	f	D	D	D	D	D	D	D	6 726
33361	Engine, turbine, & power transmission equipment mfg	—	4	4	f	D	D	D	D	D	D	D	6 726

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OAKLAND COUNTY, MI—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	95	41	6 798	363 753	3 561	6 657	139 955	625 152	909 439	1 503 731	33 681
33391	Pump & compressor mfg	-	4	2	f	D	D	D	D	D	D	D	2 072
33392	Material handling equipment mfg	-	18	12	g	D	D	D	D	D	D	D	4 553
333922	Conveyor & conveying equipment mfg	-	13	8	942	61 531	395	899	16 654	147 982	159 447	307 972	3 631
33399	All other general-purpose machinery mfg	-	73	27	5 156	270 901	2 843	5 097	109 225	389 850	648 500	1 017 726	27 056
333992	Welding & soldering equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	2	12	5	595	28 357	354	832	14 442	54 125	56 290	110 378	2 983
333999	All other miscellaneous general-purpose machinery mfg	-	38	12	1 978	93 916	628	1 197	16 426	196 017	347 495	518 465	7 047
334	Computer & electronic product mfg	-	116	50	4 719	180 496	2 899	5 890	79 757	423 947	582 653	984 327	30 519
3342	Communications equipment mfg	-	10	6	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	43	17	2 134	70 146	1 604	3 248	41 508	203 442	417 363	596 827	17 166
33441	Semiconductor & other electronic component mfg	-	43	17	2 134	70 146	1 604	3 248	41 508	203 442	417 363	596 827	17 166
334418	Printed circuit assembly (electronic assembly) mfg	-	9	6	1 423	43 811	1 248	2 646	32 530	120 551	241 194	360 476	D
3345	Navigational, measuring, medical, & control instruments mfg	1	43	21	1 667	73 625	756	1 547	21 636	134 846	95 117	232 211	5 152
33451	Navigational, measuring, medical, & control instruments mfg	1	43	21	1 667	73 625	756	1 547	21 636	134 846	95 117	232 211	5 152
334513	Industrial process control instrument mfg	2	16	11	862	39 132	374	790	10 674	56 004	50 538	107 778	D
335	Electrical equipment, appliance, & component mfg	1	58	22	1 687	66 819	955	1 908	26 143	134 146	135 260	271 757	D
3353	Electrical equipment mfg ..	2	40	13	1 158	46 837	600	1 217	17 493	92 913	68 891	162 907	3 224
33531	Electrical equipment mfg	2	40	13	1 158	46 837	600	1 217	17 493	92 913	68 891	162 907	3 224
335314	Relay & industrial control mfg	1	26	8	702	28 276	383	779	11 384	59 033	36 071	95 751	2 598
3359	Other electrical equipment & component mfg	1	14	9	509	19 593	342	667	8 416	40 188	65 204	106 614	D
336	Transportation equipment mfg	-	143	91	25 993	1 162 737	21 251	43 306	884 945	7 242 797	9 255 696	16 496 869	606 826
3361	Motor vehicle mfg	-	8	7	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	7	7	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	6	6	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	111	74	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	16	8	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	14	6	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	2	6	5	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	2	6	5	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	1	5	3	868	18 134	734	1 188	12 534	42 480	106 071	151 332	D
336360	Motor vehicle seating & interior trim mfg ...	1	5	3	868	18 134	734	1 188	12 534	42 480	106 071	151 332	D
33637	Motor vehicle metal stamping	2	40	33	3 609	137 272	2 558	5 525	73 767	237 431	286 169	525 408	36 447
336370	Motor vehicle metal stamping	2	40	33	3 609	137 272	2 558	5 525	73 767	237 431	286 169	525 408	36 447
33639	Other motor vehicle parts mfg	-	27	18	4 298	197 386	3 485	7 531	150 491	368 431	743 980	1 113 263	57 139
336399	All other motor vehicle parts mfg	-	27	18	4 298	197 386	3 485	7 531	150 491	368 431	743 980	1 113 263	57 139

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	OAKLAND COUNTY, MI—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	-	9	5	f	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	9	5	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	4	75	13		899	24 914	633	1 241	15 546	43 400	37 951	81 715	1 475
339	Miscellaneous mfg	3	201	31		3 407	96 160	1 944	3 725	48 490	217 106	121 061	337 704	8 020
3391	Medical equipment & supplies mfg	6	91	7		616	21 013	451	759	11 689	45 688	19 684	65 790	1 962
33911	Medical equipment & supplies mfg	6	91	7		616	21 013	451	759	11 689	45 688	19 684	65 790	1 962
3399	Other miscellaneous mfg ..	3	110	24		2 791	75 147	1 493	2 966	36 801	171 418	101 377	271 914	6 058
33995	Sign mfg	-	43	8		1 508	44 341	604	1 312	19 950	102 578	37 248	140 547	2 526
339950	Sign mfg	-	43	8		1 508	44 341	604	1 312	19 950	102 578	37 248	140 547	2 526
33999	All other miscellaneous mfg	7	28	10		711	16 810	530	992	10 406	36 843	28 877	64 849	D
339991	Gasket, packing, & sealing device mfg...	8	12	9		508	13 128	363	736	7 999	30 298	21 966	51 403	D
	OCEANA COUNTY, MI													
31-33	Manufacturing	-	51	12		1 385	31 199	1 141	2 128	23 101	103 891	103 324	214 458	6 538
311	Food mfg	-	7	5		625	10 927	558	1 025	8 408	43 877	49 090	100 540	D
3114	Fruit & vegetable preserving & specialty food mfg	-	5	5	f	D	D	D	D	D	D	D	D	D
	OGEMAW COUNTY, MI													
31-33	Manufacturing	1	29	10		872	23 260	660	1 072	15 919	52 601	38 430	85 921	3 391
	OSCEOLA COUNTY, MI													
31-33	Manufacturing	1	36	13		3 582	99 163	3 051	6 168	73 325	350 279	314 178	661 292	17 401
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
	OTSEGO COUNTY, MI													
31-33	Manufacturing	-	39	15		1 870	53 848	1 545	3 359	34 605	125 703	131 448	255 499	10 330

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OTTAWA COUNTY, MI													
31-33	Manufacturing	-	591	217	38 244	1 310 812	27 338	56 656	797 666	3 645 710	4 019 087	7 688 092	388 817
311	Food mfg	-	30	11	3 892	112 701	3 109	7 154	82 896	590 795	674 867	1 270 116	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	4	4	794	29 309	468	829	17 104	134 574	246 907	389 699	D
31151	Dairy product (except frozen) mfg	-	4	4	794	29 309	468	829	17 104	134 574	246 907	389 699	D
3116	Meat product mfg	-	6	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	36	11	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	27	9	574	14 776	423	870	8 680	31 773	34 922	66 710	D
322	Paper mfg	4	7	6	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	4	7	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	15	8	g	D	D	D	D	D	D	D	18 776
326	Plastics & rubber products mfg	-	39	20	2 328	73 520	1 731	3 255	45 418	184 329	129 461	314 303	14 721
3261	Plastics product mfg	-	36	20	g	D	D	D	D	D	D	D	14 673
32619	Other plastics product mfg	-	29	18	2 200	70 584	1 636	3 111	43 585	176 089	120 343	296 888	14 047
326199	All other plastics product mfg	-	28	17	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	24	10	2 574	89 029	1 911	3 771	53 944	274 825	278 729	552 239	25 005
3272	Glass & glass product mfg ..	-	7	5	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg ..	-	7	5	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	7	5	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	12	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	137	40	4 380	137 021	3 412	6 820	91 919	311 482	173 198	488 021	23 388
3323	Architectural & structural metals mfg	-	16	6	1 274	43 844	981	2 005	28 603	98 114	47 167	145 764	4 903
33232	Ornamental & architectural metal products mfg	-	10	3	1 149	40 068	890	1 827	26 196	90 783	43 646	135 027	D
332323	Ornamental & architectural metal work mfg	-	3	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	60	12	1 055	34 109	867	1 624	24 809	86 158	49 652	136 176	5 110
33272	Turned product & screw, nut, & bolt mfg	-	14	9	591	19 154	465	993	12 652	54 797	34 073	89 217	3 446
332721	Precision turned product mfg	-	14	9	591	19 154	465	993	12 652	54 797	34 073	89 217	3 446
3328	Coating, engraving, heat treating, & allied activities ..	1	27	9	630	14 549	484	864	9 647	37 879	12 376	50 409	D
33281	Coating, engraving, heat treating, & allied activities	1	27	9	630	14 549	484	864	9 647	37 879	12 376	50 409	D
333	Machinery mfg	-	88	26	1 891	76 806	1 112	2 217	35 918	162 599	131 668	294 652	11 480
3335	Metalworking machinery mfg	-	49	17	997	39 483	622	1 261	22 156	74 774	47 414	122 580	7 980
33351	Metalworking machinery mfg	-	49	17	997	39 483	622	1 261	22 156	74 774	47 414	122 580	7 980
334	Computer & electronic product mfg	-	18	9	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	9	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	9	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	2	1	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OTTAWA COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	37	22	9 628	371 959	6 710	13 824	233 077	821 090	1 095 781	1 931 137	192 416
3363	Motor vehicle parts mfg ...	-	29	19	8 801	339 400	6 217	12 809	218 882	749 082	1 023 081	1 780 605	188 314
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	4	1 750	80 821	1 550	2 948	69 619	92 219	336 070	429 329	D
336312	Gasoline engine & engine parts mfg	-	5	4	1 750	80 821	1 550	2 948	69 619	92 219	336 070	429 329	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	h	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	15	12	2 290	75 536	1 663	3 652	47 912	199 276	222 447	419 175	8 610
336370	Motor vehicle metal stamping	-	15	12	2 290	75 536	1 663	3 652	47 912	199 276	222 447	419 175	8 610
337	Furniture & related product mfg	-	47	23	i	D	D	D	D	D	D	D	47 439
3371	Household & institutional furniture & kitchen cabinet mfg	2	21	8	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	2	15	7	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	1	8	5	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	23	15	i	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	23	15	i	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	9	8	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	36	6	878	25 575	470	921	11 166	59 681	38 147	97 693	D
3391	Medical equipment & supplies mfg	-	11	3	582	18 232	305	633	8 058	35 103	18 116	53 224	D
33911	Medical equipment & supplies mfg	-	11	3	582	18 232	305	633	8 058	35 103	18 116	53 224	D
339111	Laboratory apparatus & furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
	SAGINAW COUNTY, MI												
31-33	Manufacturing	-	239	83	20 681	1 148 592	16 429	37 396	901 899	2 456 528	2 718 642	5 172 160	181 366
311	Food mfg	2	23	5	746	19 268	553	1 146	14 269	61 705	58 364	120 064	D
331	Primary metal mfg	-	8	3	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	7	2	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	6	2	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	2	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	63	21	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	36	13	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	35	12	790	28 504	624	1 263	19 537	55 107	26 659	82 131	2 598
332710	Machine shops	-	35	12	790	28 504	624	1 263	19 537	55 107	26 659	82 131	2 598
333	Machinery mfg	2	43	22	2 034	86 094	1 326	2 843	49 333	166 071	121 472	290 364	D
3335	Metalworking machinery mfg	3	30	18	1 648	65 650	1 114	2 319	39 229	106 010	71 634	185 749	D
33351	Metalworking machinery mfg	3	30	18	1 648	65 650	1 114	2 319	39 229	106 010	71 634	185 749	D
333515	Cutting tool & machine tool accessory mfg ..	-	9	6	688	23 888	533	1 059	16 251	40 756	21 945	62 773	2 753

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAGINAW COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	9	6	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	7	5	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	i	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	i	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D
	ST. CLAIR COUNTY, MI												
31-33	Manufacturing	-	294	113	14 162	431 533	10 456	20 545	276 406	1 110 762	1 556 273	2 667 597	115 340
322	Paper mfg	2	4	4	994	46 657	663	1 471	28 588	138 640	179 676	320 159	8 878
3221	Pulp, paper, & paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	36	25	3 002	75 094	2 226	3 922	44 599	185 100	221 032	406 544	16 688
3261	Plastics product mfg	-	35	24	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	31	22	2 547	63 486	1 856	3 194	36 560	148 682	170 851	320 025	D
326199	All other plastics product mfg	1	31	22	2 547	63 486	1 856	3 194	36 560	148 682	170 851	320 025	D
331	Primary metal mfg	-	5	5	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	2	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	74	28	1 910	65 330	1 519	3 232	40 937	155 933	137 432	291 504	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	40	12	778	27 379	604	1 320	16 266	55 868	41 559	96 638	D
333	Machinery mfg	2	51	17	1 089	43 683	741	1 550	26 550	79 752	104 438	191 889	D
3335	Metalworking machinery mfg	2	39	14	865	34 965	572	1 170	19 955	56 163	23 430	80 233	D
33351	Metalworking machinery mfg	2	39	14	865	34 965	572	1 170	19 955	56 163	23 430	80 233	D
336	Transportation equipment mfg	-	26	17	3 579	93 832	2 717	4 691	61 399	249 353	411 608	658 636	40 000
3363	Motor vehicle parts mfg ...	-	21	17	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	5	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	5	5	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	6	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	6	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. JOSEPH COUNTY, MI													
31-33	Manufacturing	-	163	79	10 651	371 356	8 359	17 315	263 424	1 390 481	1 021 845	2 402 707	86 167
311	Food mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	8	2	f	D	D	D	D	D	D	D	3 653
3219	Other wood product mfg....	-	6	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	11	9	717	26 294	569	1 253	19 716	68 379	102 916	170 274	8 876
3222	Converted paper product mfg.....	-	9	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	26	15	1 881	55 421	1 474	3 146	36 992	158 734	109 543	268 675	7 190
3261	Plastics product mfg.....	1	23	14	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	21	13	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	19	12	g	D	D	D	D	D	D	D	6 593
332	Fabricated metal product mfg.....	-	32	15	1 391	42 732	1 050	2 113	26 369	88 992	67 043	156 091	9 112
3329	Other fabricated metal product mfg.....	-	5	4	608	19 476	438	863	11 266	32 587	30 592	63 710	2 777
333	Machinery mfg.....	-	28	11	1 125	45 862	789	1 857	30 864	107 008	55 476	160 044	5 924
3335	Metalworking machinery mfg.....	-	19	7	708	31 443	579	1 418	24 868	68 832	31 694	98 185	D
33351	Metalworking machinery mfg.....	-	19	7	708	31 443	579	1 418	24 868	68 832	31 694	98 185	D
336	Transportation equipment mfg.....	1	19	14	3 160	118 432	2 563	4 971	91 819	238 823	322 376	561 816	27 240
3362	Motor vehicle body & trailer mfg.....	1	10	8	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	1	10	8	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	1	8	6	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	1	5	5	1 190	31 506	968	1 500	22 458	81 977	121 010	203 127	5 403
336399	All other motor vehicle parts mfg.....	1	5	5	1 190	31 506	968	1 500	22 458	81 977	121 010	203 127	5 403
SANILAC COUNTY, MI													
31-33	Manufacturing	2	88	40	5 244	123 552	4 166	7 635	82 341	359 256	369 197	726 324	25 136
326	Plastics & rubber products mfg.....	-	12	11	1 728	33 887	1 374	2 277	21 742	86 586	110 447	196 306	6 437
3261	Plastics product mfg.....	1	11	10	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	9	8	1 243	23 116	963	1 338	12 907	61 698	59 959	121 911	2 311
326199	All other plastics product mfg.....	-	9	8	1 243	23 116	963	1 338	12 907	61 698	59 959	121 911	2 311
327	Nonmetallic mineral product mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg....	-	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	27	11	1 165	35 005	922	1 839	23 445	142 553	85 741	227 429	6 627
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	8	3	566	18 963	437	807	12 071	53 496	36 673	89 770	5 174
33272	Turned product & screw, nut, & bolt mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	7	6	626	14 207	522	982	9 523	40 293	45 721	84 972	4 675
3363	Motor vehicle parts mfg....	-	6	5	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
SHIAWASSEE COUNTY, MI													
31-33	Manufacturing	1	86	37	4 139	99 579	3 037	5 471	62 998	207 470	244 817	453 830	14 803
326	Plastics & rubber products mfg	2	15	10	1 108	20 703	760	1 180	11 729	52 090	61 692	113 884	4 741
3261	Plastics product mfg	2	15	10	1 108	20 703	760	1 180	11 729	52 090	61 692	113 884	4 741
32619	Other plastics product mfg	2	13	9	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	13	9	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
3353	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
335312	Motor & generator mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
TUSCOLA COUNTY, MI													
31-33	Manufacturing	2	65	20	2 818	96 917	2 017	4 179	61 354	197 000	285 370	486 438	17 594
336	Transportation equipment mfg	-	9	6	g	D	D	D	D	D	D	D	7 016
3363	Motor vehicle parts mfg	-	7	6	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
VAN BUREN COUNTY, MI													
31-33	Manufacturing	-	127	44	4 879	152 072	3 772	7 673	100 096	563 201	447 903	1 007 822	59 924
312	Beverage & tobacco product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	3	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	4	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	6	1 197	33 717	956	1 903	20 510	122 122	70 504	192 244	D
3261	Plastics product mfg	-	7	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	34	12	722	20 064	559	1 104	13 207	39 614	22 932	63 308	2 604
WASHTENAW COUNTY, MI													
31-33	Manufacturing	-	412	150	29 254	1 395 455	23 147	49 243	1 036 917	3 167 578	4 161 599	7 350 242	372 455
311	Food mfg	-	21	5	562	18 239	465	842	12 905	69 941	59 202	130 006	D
323	Printing & related support activities	-	58	17	2 938	86 763	2 266	4 237	58 323	159 506	118 468	278 397	13 770
3231	Printing & related support activities	-	58	17	2 938	86 763	2 266	4 237	58 323	159 506	118 468	278 397	13 770
32311	Printing	-	51	17	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	20	7	508	15 354	372	708	9 618	29 097	22 779	52 379	D
323117	Book printing	-	9	8	2 249	66 995	1 774	3 338	46 161	122 889	91 255	214 010	12 288
326	Plastics & rubber products mfg	2	23	9	1 116	32 711	906	1 874	23 752	113 462	113 523	226 893	9 662
3261	Plastics product mfg	2	22	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	17	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	4	16	6	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHTENAW COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	78	23	3 254	113 448	2 610	5 322	82 129	258 740	239 591	498 822	28 771
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	41	9	967	34 452	743	1 541	22 792	86 523	70 277	155 230	8 939
33272	Turned product & screw, nut, & bolt mfg	-	10	6	721	27 318	556	1 228	17 966	70 801	65 203	134 377	D
3329	Other fabricated metal product mfg	-	14	5	1 572	56 054	1 328	2 762	45 022	117 171	122 932	242 072	D
33299	All other fabricated metal product mfg	-	9	4	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	46	19	2 674	129 246	1 691	3 751	69 658	291 162	228 068	502 356	8 476
3335	Metalworking machinery mfg	1	19	7	881	46 174	707	1 650	33 552	73 729	100 565	159 863	3 432
33351	Metalworking machinery mfg	1	19	7	881	46 174	707	1 650	33 552	73 729	100 565	159 863	3 432
333512	Machine tool (metal cutting types) mfg	1	4	4	700	36 864	570	1 338	27 945	57 547	85 415	128 370	2 678
3339	Other general-purpose machinery mfg	-	11	6	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	9	4	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	51	23	h	D	D	D	D	D	D	D	49 143
3341	Computer & peripheral equipment mfg	6	8	6	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	6	8	6	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	6	5	5	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	20	9	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	20	9	h	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	28	22	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	23	20	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	3	3	h	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	3	3	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	8	7	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	8	7	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	6	5	2 476	134 057	2 076	4 594	109 208	406 901	608 667	1 018 421	32 914
336399	All other motor vehicle parts mfg	-	6	5	2 476	134 057	2 076	4 594	109 208	406 901	608 667	1 018 421	32 914
339	Miscellaneous mfg	1	33	9	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	14	5	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	14	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WAYNE COUNTY, MI												
31-33	Manufacturing	-	2 390	790	133 703	6 514 290	104 295	222 745	4 787 498	21 497 967	32 855 564	54 374 967	2 152 089
311	Food mfg.....	-	206	50	6 853	197 365	4 758	9 499	119 159	806 401	1 135 779	1 941 782	23 063
3115	Dairy product mfg	-	8	6	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	30	17	2 657	73 119	1 974	4 621	51 347	420 885	681 520	1 102 620	D
31161	Animal slaughtering & processing.....	-	30	17	2 657	73 119	1 974	4 621	51 347	420 885	681 520	1 102 620	D
311611	Animal (except poultry) slaughtering	-	9	6	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	17	8	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	127	14	2 267	66 425	1 322	2 034	32 064	151 341	69 952	220 721	D
31181	Bread & bakery product mfg.....	1	123	13	2 207	65 272	1 282	1 980	31 443	149 529	68 183	217 152	6 906
311811	Retail bakeries	4	102	5	617	7 859	448	484	4 648	19 518	12 018	31 588	990
311812	Commercial bakeries ..	1	21	8	1 590	57 413	834	1 496	26 795	130 011	56 165	185 564	5 916
3119	Other food mfg.....	-	20	9	f	D	D	D	D	D	D	D	5 250
31191	Snack food mfg	-	5	4	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	1	9	5	1 349	58 768	527	1 073	21 317	295 172	396 743	690 887	15 173
3121	Beverage mfg.....	1	9	5	1 349	58 768	527	1 073	21 317	295 172	396 743	690 887	15 173
31211	Soft drink & ice mfg.....	2	8	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	2	5	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	36	8	521	11 390	418	802	8 481	24 264	42 352	66 722	1 728
322	Paper mfg.....	4	42	25	1 846	56 655	1 383	2 661	34 802	139 196	199 398	334 893	11 914
3222	Converted paper product mfg.....	5	41	24	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	3	21	14	1 063	30 652	789	1 519	17 687	70 396	99 936	169 734	5 738
322211	Corrugated & solid fiber box mfg.....	4	13	10	727	22 718	500	1 068	11 467	52 888	70 168	122 880	D
323	Printing & related support activities.....	1	255	33	3 411	114 447	2 511	4 965	76 043	385 879	196 608	584 106	17 269
3231	Printing & related support activities.....	1	255	33	3 411	114 447	2 511	4 965	76 043	385 879	196 608	584 106	17 269
32311	Printing.....	1	225	28	3 002	97 748	2 206	4 364	65 785	357 423	192 069	551 100	16 491
323110	Commercial lithographic printing ..	1	127	15	1 925	67 137	1 415	2 956	46 733	268 653	154 215	423 765	14 113
324	Petroleum & coal products mfg.....	1	24	9	988	45 373	595	1 180	24 379	205 717	723 552	928 722	D
3241	Petroleum & coal products mfg.....	1	24	9	988	45 373	595	1 180	24 379	205 717	723 552	928 722	D
32419	Other petroleum & coal products mfg.....	7	15	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	103	38	3 889	180 243	1 838	3 701	69 383	671 017	946 076	1 608 362	94 099
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	2	28	12	937	39 126	513	998	17 750	100 633	231 304	339 232	D
32551	Paint & coating mfg.....	1	22	9	765	31 029	416	812	15 218	86 834	197 230	290 488	D
325510	Paint & coating mfg....	1	22	9	765	31 029	416	812	15 218	86 834	197 230	290 488	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	28	6	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	1	27	6	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg.....	1	20	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	93	48	5 312	167 265	4 063	8 465	104 968	419 802	358 594	777 893	50 806
3261	Plastics product mfg.....	1	75	43	4 954	157 889	3 784	7 946	98 978	389 895	334 846	724 179	49 194
32611	Unsupported plastics film, sheet, & bag mfg ..	-	6	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	2	55	34	3 254	90 111	2 603	5 668	59 591	220 773	168 795	387 355	19 167
326199	All other plastics product mfg.....	2	55	34	3 254	90 111	2 603	5 668	59 591	220 773	168 795	387 355	19 167

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WAYNE COUNTY, MI—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	77	29	3 513	191 839	2 749	6 151	146 660	449 391	379 133	834 642	85 023
3272	Glass & glass product mfg	—	12	5	1 859	130 355	1 584	3 755	107 398	240 384	135 871	379 583	D
32721	Glass & glass product mfg	—	12	5	1 859	130 355	1 584	3 755	107 398	240 384	135 871	379 583	D
327211	Flat glass mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	11	4	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	34	10	709	29 373	488	965	17 881	75 221	122 720	198 537	D
3279	Other nonmetallic mineral product mfg	1	18	9	558	17 956	386	791	11 221	61 171	57 167	121 572	3 694
32791	Abrasive product mfg	1	11	8	510	16 667	349	726	10 386	57 421	53 429	114 029	3 316
327910	Abrasive product mfg	1	11	8	510	16 667	349	726	10 386	57 421	53 429	114 029	3 316
331	Primary metal mfg	—	50	32	9 281	500 387	7 332	17 704	385 366	1 334 358	2 332 848	3 678 866	141 821
3311	Iron & steel mills & ferroalloy mfg	—	4	3	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	4	3	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	4	3	i	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	12	10	1 297	46 360	1 000	2 121	33 275	141 195	368 251	509 531	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	8	6	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	7	5	f	D	D	D	D	D	D	D	D
3315	Foundries	2	22	12	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	609	198	14 802	519 006	10 966	22 304	331 379	1 164 838	816 775	1 969 526	83 723
3321	Forging & stamping	2	31	15	1 014	40 756	711	1 329	24 610	89 842	81 035	171 858	12 106
33211	Forging & stamping	2	31	15	1 014	40 756	711	1 329	24 610	89 842	81 035	171 858	12 106
332116	Metal stamping	2	16	8	531	17 571	361	585	8 663	43 613	32 663	77 700	D
3322	Cutlery & handtool mfg	1	25	8	608	33 349	422	1 009	19 990	48 635	18 103	63 823	D
33221	Cutlery & handtool mfg	1	25	8	608	33 349	422	1 009	19 990	48 635	18 103	63 823	D
332212	Hand & edge tool mfg	1	21	8	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	85	24	2 001	67 810	1 331	2 656	38 552	181 391	161 322	338 475	7 224
33231	Plate work & fabricated structural product mfg	2	33	11	1 073	34 328	693	1 415	20 020	105 557	101 435	202 927	D
332312	Fabricated structural metal mfg	3	26	9	944	29 491	593	1 190	16 941	96 137	89 707	181 844	D
33232	Ornamental & architectural metal products mfg	1	52	13	928	33 482	638	1 241	18 532	75 834	59 887	135 548	D
3324	Boiler, tank, & shipping container mfg	5	13	6	663	19 361	499	964	12 119	34 416	32 670	66 668	1 734
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	248	71	5 365	189 209	4 082	8 334	125 152	406 124	276 225	681 556	30 277
33271	Machine shops	1	171	32	2 507	90 122	1 898	3 752	59 984	166 999	83 557	250 017	15 262
332710	Machine shops	1	171	32	2 507	90 122	1 898	3 752	59 984	166 999	83 557	250 017	15 262
33272	Turned product & screw, nut, & bolt mfg	—	77	39	2 858	99 087	2 184	4 582	65 168	239 125	192 668	431 539	15 015
332721	Precision turned product mfg	1	40	20	g	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	37	19	g	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	—	116	47	3 449	110 470	2 605	5 541	73 609	265 800	129 441	390 081	21 975
33281	Coating, engraving, heat treating, & allied activities	—	116	47	3 449	110 470	2 605	5 541	73 609	265 800	129 441	390 081	21 975
332811	Metal heat treating	—	30	19	1 063	41 690	768	1 678	27 549	99 910	33 211	132 256	11 407
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	26	12	970	24 180	694	1 405	15 685	65 851	62 142	123 252	3 421
332813	Electroplating, plating, polishing, anodizing, & coloring	1	60	16	1 416	44 600	1 143	2 458	30 375	100 039	34 088	134 573	7 147
3329	Other fabricated metal product mfg	2	66	19	1 159	40 597	880	1 744	26 437	105 832	83 848	190 039	D
33299	All other fabricated metal product mfg	2	59	15	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WAYNE COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	348	135	13 998	759 010	9 409	21 136	460 549	1 293 285	1 918 509	3 237 259	131 780
3332	Industrial machinery mfg ..	-	27	9	1 088	69 888	804	1 522	45 488	76 599	205 723	331 909	D
33329	Other industrial machinery mfg	-	23	8	1 016	66 708	757	1 458	43 765	68 085	196 498	314 028	8 025
333298	All other industrial machinery mfg	-	19	7	932	62 841	703	1 349	41 964	60 900	191 087	301 391	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	10	7	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	10	7	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	3	791	29 881	352	740	10 221	26 686	28 239	57 193	D
3335	Metalworking machinery mfg	-	224	89	6 389	342 973	4 832	11 169	237 725	581 205	269 144	839 287	72 431
33351	Metalworking machinery mfg	-	224	89	6 389	342 973	4 832	11 169	237 725	581 205	269 144	839 287	72 431
333514	Special die & tool, die set, jig, & fixture mfg .	-	124	47	4 326	251 392	3 387	8 048	184 735	403 077	140 625	538 754	58 562
333515	Cutting tool & machine tool accessory mfg . .	1	54	18	850	35 050	652	1 339	20 914	61 671	33 807	93 349	D
3336	Engine, turbine, & power transmission equipment mfg	-	13	8	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	13	8	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	4	3	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	63	21	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	18	9	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	3	42	11	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	55	16	2 855	125 534	1 772	4 003	55 780	286 790	256 101	523 787	16 121
3344	Semiconductor & other electronic component mfg	-	19	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	19	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	24	9	f	D	D	D	D	D	D	D	7 381
33451	Navigational, measuring, medical, & control instruments mfg	1	24	9	f	D	D	D	D	D	D	D	7 381
3346	Mfg & reproducing magnetic & optical media .	-	3	2	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	3	2	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	3	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	26	11	957	45 489	578	1 268	15 404	98 328	77 171	175 596	7 218
336	Transportation equipment mfg	-	185	111	60 092	3 417 394	52 459	111 933	2 861 233	13 605 317	22 859 315	36 487 993	1 445 034
3361	Motor vehicle mfg	-	10	9	21 200	1 245 836	19 328	37 983	1 095 156	9 562 582	15 881 210	25 459 053	D
33611	Automobile & light duty motor vehicle mfg	-	9	9	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	6	6	j	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	3	3	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	152	93	k	D	D	D	D	D	D	D	966 815
33631	Motor vehicle gasoline engine & engine parts mfg	-	22	9	9 204	638 223	7 885	18 578	531 811	1 004 326	2 942 969	3 950 658	288 759
336312	Gasoline engine & engine parts mfg	-	21	9	i	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WAYNE COUNTY, MI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33633	Motor vehicle steering & suspension component (except spring) mfg	2	5	3	1 383	64 957	1 219	2 461	54 228	102 993	149 456	253 034	D
336330	Motor vehicle steering & suspension component (except spring) mfg	2	5	3	1 383	64 957	1 219	2 461	54 228	102 993	149 456	253 034	D
33635	Motor vehicle transmission & power train parts mfg	—	15	10	j	D	D	D	D	D	D	D	412 310
336350	Motor vehicle transmission & power train parts mfg	—	15	10	j	D	D	D	D	D	D	D	412 310
33636	Motor vehicle seating & interior trim mfg	—	14	13	3 784	138 736	3 231	6 874	105 380	308 940	772 249	1 078 099	13 848
336360	Motor vehicle seating & interior trim mfg	—	14	13	3 784	138 736	3 231	6 874	105 380	308 940	772 249	1 078 099	13 848
33637	Motor vehicle metal stamping	—	49	35	10 648	548 320	9 230	19 441	446 043	1 017 243	1 062 197	2 095 861	220 125
336370	Motor vehicle metal stamping	—	49	35	10 648	548 320	9 230	19 441	446 043	1 017 243	1 062 197	2 095 861	220 125
33639	Other motor vehicle parts mfg	1	35	19	g	D	D	D	D	D	D	D	16 325
336399	All other motor vehicle parts mfg	1	34	19	1 820	62 412	1 423	2 784	43 034	152 884	198 444	347 685	16 325
337	Furniture & related product mfg	—	70	16	1 368	44 114	1 010	1 975	27 265	93 548	72 731	166 176	2 486
3372	Office furniture (including fixtures) mfg	1	29	10	f	D	D	D	D	D	D	D	1 912
33721	Office furniture (including fixtures) mfg	1	29	10	f	D	D	D	D	D	D	D	1 912
337215	Showcase, partition, shelving, & locker mfg	1	19	8	650	25 018	499	1 010	15 609	43 729	31 167	74 659	1 813
339	Miscellaneous mfg	1	156	19	1 999	66 700	1 363	2 811	36 464	186 769	106 747	292 696	9 052
3391	Medical equipment & supplies mfg	1	70	7	724	23 018	522	954	14 386	106 355	41 876	148 843	2 512
33911	Medical equipment & supplies mfg	1	70	7	724	23 018	522	954	14 386	106 355	41 876	148 843	2 512
3399	Other miscellaneous mfg	1	86	12	1 275	43 682	841	1 857	22 078	80 414	64 871	143 853	6 540
33999	All other miscellaneous mfg	—	28	7	727	26 642	463	1 070	13 600	46 679	42 300	88 959	D
	WEXFORD COUNTY, MI												
31-33	Manufacturing	—	57	24	4 331	126 712	3 179	6 207	72 394	353 935	352 098	719 103	26 812
326	Plastics & rubber products mfg	—	6	4	1 280	32 043	959	2 271	21 992	86 384	91 298	177 323	D
3262	Rubber product mfg	—	4	4	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	3	3	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	14	7	583	16 855	394	846	9 663	37 592	35 196	74 204	2 057
335	Electrical equipment, appliance, & component mfg	—	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADRIAN, MI													
31-33	Manufacturing	-	37	22	3 559	150 142	2 821	5 743	112 512	353 205	415 902	767 566	23 099
326	Plastics & rubber products mfg	-	7	4	g	D	D	D	D	D	D	D	4 090
3261	Plastics product mfg	-	7	4	g	D	D	D	D	D	D	D	4 090
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	2	f	D	D	D	D	D	D	D	615
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	2	f	D	D	D	D	D	D	D	D
ALBION, MI													
31-33	Manufacturing	-	25	11	1 342	42 922	998	2 185	28 718	148 922	107 355	255 352	6 915
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
ALLEGAN, MI													
31-33	Manufacturing	-	12	4	3 148	113 025	2 116	4 036	57 392	402 996	301 704	701 148	D
325	Chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
ALLEN PARK, MI													
31-33	Manufacturing	-	20	4	g	D	D	D	D	D	D	D	7 434
311	Food mfg	-	6	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
ALMA, MI													
31-33	Manufacturing	-	15	7	1 448	44 286	1 187	2 313	26 695	77 434	79 758	156 387	6 281
336	Transportation equipment mfg	-	4	4	g	D	D	D	D	D	D	D	5 598
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
ALPENA, MI													
31-33	Manufacturing	-	37	16	2 074	78 034	1 547	3 136	44 413	234 813	191 812	423 955	24 319
321	Wood product mfg	-	6	4	516	17 227	423	756	12 162	30 690	24 953	55 910	D
333	Machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
ALPINE TOWNSHIP, MI													
31-33	Manufacturing	-	26	8	938	29 030	752	1 471	19 348	77 270	36 482	111 012	4 015

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANN ARBOR, MI													
31-33	Manufacturing	3	131	35	4 330	160 004	2 826	5 511	78 896	347 274	249 649	599 781	32 340
323	Printing & related support activities.....	1	26	4	685	20 934	468	796	11 319	38 963	25 060	64 104	D
3231	Printing & related support activities.....	1	26	4	685	20 934	468	796	11 319	38 963	25 060	64 104	D
32311	Printing	1	22	4	663	20 181	455	774	11 017	37 924	24 795	62 776	D
332	Fabricated metal product mfg.....	-	12	3	768	26 129	616	1 238	19 203	62 735	39 781	102 830	7 126
3329	Other fabricated metal product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	6	24	10	803	39 749	306	611	9 433	97 838	76 776	175 161	5 614
336	Transportation equipment mfg.....	1	9	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	7	5	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	19	5	563	26 100	299	559	8 565	49 595	32 673	82 744	3 383
AUBURN HILLS, MI													
31-33	Manufacturing	-	83	50	8 548	352 574	4 274	8 898	141 854	944 172	1 337 804	2 215 861	48 980
326	Plastics & rubber products mfg.....	-	12	8	709	24 177	483	1 033	12 863	55 062	44 138	98 828	3 294
3261	Plastics product mfg	-	11	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	30	22	3 879	195 080	1 345	2 673	53 366	484 355	645 821	1 088 517	22 663
3332	Industrial machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	17	13	1 250	68 043	742	1 513	32 818	174 553	176 114	339 424	14 723
33351	Metalworking machinery mfg	-	17	13	1 250	68 043	742	1 513	32 818	174 553	176 114	339 424	14 723
3339	Other general-purpose machinery mfg	-	10	7	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	5	3	1 341	68 787	289	509	5 380	137 155	303 176	416 835	4 557
333999	All other miscellaneous general-purpose machinery mfg	-	4	3	g	D	D	D	D	D	D	D	4 557
334	Computer & electronic product mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	7	6	1 038	36 999	674	1 426	21 606	128 074	228 164	356 320	5 864
3363	Motor vehicle parts mfg ...	-	6	5	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
339950	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
BAD AXE, MI													
31-33	Manufacturing	-	12	8	789	20 735	645	1 291	16 254	75 578	26 606	102 814	6 276

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BATTLE CREEK, MI													
31-33	Manufacturing	-	81	40	10 194	409 425	7 955	15 942	304 348	1 726 943	1 604 079	3 337 702	169 123
311	Food mfg	-	9	4	2 571	156 406	2 225	4 303	129 893	1 121 543	363 721	1 490 074	D
3112	Grain & oilseed milling	-	3	3	g	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	3	3	g	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	3	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	5	5	664	32 470	529	1 417	24 802	97 776	80 181	180 867	D
332	Fabricated metal product mfg	4	13	7	682	19 618	541	1 017	12 883	46 753	27 990	73 271	4 800
336	Transportation equipment mfg	-	9	8	4 305	137 926	3 338	6 405	103 524	338 882	1 004 028	1 340 268	102 293
3363	Motor vehicle parts mfg ...	-	8	7	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	4	4	h	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
BAY CITY, MI													
31-33	Manufacturing	-	79	31	4 174	198 333	3 325	7 342	146 905	317 934	472 712	794 726	53 758
332	Fabricated metal product mfg	3	20	9	632	22 687	490	977	14 630	51 778	27 515	80 285	1 972
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
BEDFORD TOWNSHIP, MI (MONROE COUNTY)													
31-33	Manufacturing	-	29	11	793	30 804	560	1 187	16 930	79 050	60 064	139 773	5 513
BELDING, MI													
31-33	Manufacturing	-	22	12	897	31 178	673	1 457	18 510	91 594	144 936	229 943	4 599
BENTON TOWNSHIP, MI													
31-33	Manufacturing	1	43	20	1 680	46 578	1 221	2 350	29 112	110 196	83 603	196 004	6 709
BENTON HARBOR, MI													
31-33	Manufacturing	2	48	22	2 473	82 120	1 880	3 549	46 904	159 131	141 820	296 968	11 770
333	Machinery mfg	6	8	3	568	26 211	412	691	9 732	49 589	33 190	79 048	D
BIG RAPIDS, MI													
31-33	Manufacturing	-	21	10	g	D	D	D	D	D	D	D	19 459
332	Fabricated metal product mfg	-	4	4	f	D	D	D	D	D	D	D	D
BIRMINGHAM, MI													
31-33	Manufacturing	3	40	6	555	17 566	409	810	11 001	34 681	42 059	79 809	2 743

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BLACKMAN TOWNSHIP, MI													
31-33	Manufacturing	-	58	31	2 777	89 803	2 005	4 111	52 708	225 119	214 077	436 746	13 469
332	Fabricated metal product mfg	-	20	10	718	24 871	573	1 209	15 213	56 316	53 162	109 704	2 676
336	Transportation equipment mfg	-	11	8	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	9	8	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
BOYNE CITY, MI													
31-33	Manufacturing	3	17	7	846	26 582	584	1 015	14 126	42 048	72 024	115 015	3 745
BRIDGEPORT TOWNSHIP, MI													
31-33	Manufacturing	-	22	13	1 096	37 964	839	1 836	24 465	110 306	48 887	154 100	6 209
BRIGHTON, MI													
31-33	Manufacturing	1	36	18	1 153	35 961	810	1 448	20 430	75 946	105 900	182 793	5 070
333	Machinery mfg	1	9	7	527	18 486	403	685	11 770	30 552	26 780	57 897	1 343
BRIGHTON TOWNSHIP, MI													
31-33	Manufacturing	1	26	11	768	26 741	548	1 182	16 661	55 972	73 366	129 391	6 117
BROWNSTOWN TOWNSHIP, MI													
31-33	Manufacturing	-	17	5	656	18 242	546	1 170	12 213	63 956	58 900	124 210	D
BUCHANAN, MI													
31-33	Manufacturing	5	15	5	828	17 615	516	902	8 351	31 619	25 280	56 724	2 149
BUENA VISTA TOWNSHIP, MI													
31-33	Manufacturing	-	18	8	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	i	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	i	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	i	D	D	D	D	D	D	D	D
BURTON, MI													
31-33	Manufacturing	3	41	15	f	D	D	D	D	D	D	D	4 294
BYRON TOWNSHIP, MI													
31-33	Manufacturing	3	32	14	1 122	38 406	843	1 840	23 638	73 871	90 255	163 680	13 593

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CADILLAC, MI													
31-33	Manufacturing	-	37	20	4 082	119 752	2 989	5 842	67 747	336 875	343 285	693 907	D
326	Plastics & rubber products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	4	4	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	6	f	D	D	D	D	D	D	D	2 003
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	f	D	D	D	D	D	D	D	D
CANTON TOWNSHIP, MI													
31-33	Manufacturing	1	66	30	2 258	82 357	1 584	3 269	46 775	201 543	162 116	359 322	34 303
336	Transportation equipment mfg	-	7	5	f	D	D	D	D	D	D	D	11 349
CARO, MI													
31-33	Manufacturing	4	10	4	f	D	D	D	D	D	D	D	6 228
CASCADE TOWNSHIP, MI													
31-33	Manufacturing	-	39	22	2 563	87 604	1 835	3 782	50 346	199 691	162 942	360 156	15 021
326	Plastics & rubber products mfg	-	7	5	705	23 691	439	884	11 349	65 435	66 597	131 583	5 876
3261	Plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
CENTER LINE, MI													
31-33	Manufacturing	-	25	7	2 121	70 185	1 720	3 266	47 806	122 948	165 258	290 808	D
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	2	g	D	D	D	D	D	D	D	D
CHARLEVOIX, MI													
31-33	Manufacturing	1	17	8	676	22 700	514	1 167	15 316	121 585	59 202	185 326	9 306
CHARLOTTE, MI													
31-33	Manufacturing	-	24	10	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
CHELSEA, MI													
31-33	Manufacturing	-	22	9	1 832	60 779	1 482	2 971	45 166	152 706	139 455	280 678	9 728
332	Fabricated metal product mfg	-	9	4	598	17 906	441	819	10 194	38 169	30 980	68 621	5 183

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESTERFIELD TOWNSHIP, MI													
31-33	Manufacturing	-	114	52	6 952	287 465	5 400	11 781	199 903	629 160	642 215	1 280 729	37 809
326	Plastics & rubber products mfg	-	12	8	582	24 161	385	814	10 886	41 279	64 646	109 439	3 376
3261	Plastics product mfg	-	11	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	9	795	28 768	600	1 326	18 488	64 006	66 560	138 813	4 612
333	Machinery mfg	-	36	16	769	34 217	510	1 187	19 863	75 599	50 551	121 775	2 077
3335	Metalworking machinery mfg	-	30	12	629	29 413	419	1 022	17 376	51 431	31 214	79 843	D
33351	Metalworking machinery mfg	-	30	12	629	29 413	419	1 022	17 376	51 431	31 214	79 843	D
336	Transportation equipment mfg	-	19	11	3 251	161 643	2 713	6 071	129 864	328 663	378 235	709 467	18 116
3363	Motor vehicle parts mfg ...	-	18	11	h	D	D	D	D	D	D	D	18 116
33636	Motor vehicle seating & interior trim mfg	-	1	1	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	9	6	634	21 955	448	959	12 753	62 511	75 093	137 277	4 793
336370	Motor vehicle metal stamping	-	9	6	634	21 955	448	959	12 753	62 511	75 093	137 277	4 793
33639	Other motor vehicle parts mfg	1	5	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
CLAWSON, MI													
31-33	Manufacturing	-	27	8	835	32 754	521	1 035	14 712	94 126	53 630	139 938	3 907
CLINTON TOWNSHIP, MI													
31-33	Manufacturing	-	229	69	5 660	211 340	3 956	8 421	120 921	489 177	294 737	779 672	27 050
326	Plastics & rubber products mfg	-	12	9	880	30 611	703	1 633	21 005	71 879	38 188	110 060	2 803
3261	Plastics product mfg	-	12	9	880	30 611	703	1 633	21 005	71 879	38 188	110 060	2 803
32619	Other plastics product mfg	-	11	9	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	11	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	69	16	961	39 709	705	1 456	21 842	74 164	41 807	115 350	3 790
333	Machinery mfg	-	55	23	1 668	65 389	1 103	2 341	40 174	158 702	64 274	220 427	8 030
3335	Metalworking machinery mfg	1	45	18	894	42 923	672	1 665	28 093	75 962	26 311	102 058	5 593
33351	Metalworking machinery mfg	1	45	18	894	42 923	672	1 665	28 093	75 962	26 311	102 058	5 593
333514	Special die & tool, die set, jig, & fixture mfg .	1	27	12	611	28 718	478	1 200	20 662	55 748	16 253	71 290	4 143
3339	Other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	8	978	33 963	702	1 618	18 754	69 624	89 103	161 638	4 599
3363	Motor vehicle parts mfg ...	-	13	8	978	33 963	702	1 618	18 754	69 624	89 103	161 638	4 599
33637	Motor vehicle metal stamping	-	7	5	513	20 860	360	804	11 053	42 424	47 817	92 747	981
336370	Motor vehicle metal stamping	-	7	5	513	20 860	360	804	11 053	42 424	47 817	92 747	981
COLDWATER, MI													
31-33	Manufacturing	-	42	26	2 127	63 010	1 616	3 168	42 100	179 803	177 444	354 905	36 391
332	Fabricated metal product mfg	-	16	8	632	18 590	478	924	11 807	49 418	41 479	88 851	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COMMERCE TOWNSHIP BALANCE, MI *													
31-33	Manufacturing	1	82	22	2 061	95 096	1 357	2 645	46 406	139 482	116 787	257 363	10 216
336	Transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
COMSTOCK TOWNSHIP, MI													
31-33	Manufacturing	-	17	8	2 058	90 039	1 669	3 507	71 441	156 005	195 808	350 372	2 827
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
COOPERSVILLE, MI													
31-33	Manufacturing	-	8	4	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
DEARBORN, MI													
31-33	Manufacturing	-	119	43	13 098	764 407	10 422	24 267	591 735	2 440 365	3 117 535	5 533 805	D
327	Nonmetallic mineral product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	2	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	4	18	8	542	21 347	412	931	15 288	60 202	50 313	108 249	3 688
333	Machinery mfg	-	16	8	1 378	102 431	783	1 808	69 808	116 334	32 003	150 447	D
3335	Metalworking machinery mfg	-	7	4	797	78 251	623	1 490	64 414	82 847	11 984	94 923	D
33351	Metalworking machinery mfg	-	7	4	797	78 251	623	1 490	64 414	82 847	11 984	94 923	D
333514	Special die & tool, die set, jig, & fixture mfg .	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	10	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	14	9	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	6	4	2 544	156 474	2 186	4 593	126 695	276 902	207 584	484 168	D
336370	Motor vehicle metal stamping	-	6	4	2 544	156 474	2 186	4 593	126 695	276 902	207 584	484 168	D
DELHI TOWNSHIP, MI													
31-33	Manufacturing	1	24	7	f	D	D	D	D	D	D	D	3 996

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DETROIT, MI												
31-33	Manufacturing	-	825	259	47 487	2 312 248	37 202	78 582	1 715 363	6 445 938	13 304 725	19 778 457	744 863
311	Food mfg.....	-	92	30	4 126	120 653	2 736	5 916	72 709	548 694	777 322	1 326 812	10 745
3116	Meat product mfg.....	-	18	10	2 088	58 170	1 728	4 179	46 311	382 732	634 438	1 017 551	3 445
31161	Animal slaughtering & processing.....	-	18	10	2 088	58 170	1 728	4 179	46 311	382 732	634 438	1 017 551	3 445
311611	Animal (except poultry) slaughtering.....	-	8	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	2	46	7	g	D	D	D	D	D	D	D	3 035
31181	Bread & bakery product mfg.....	2	43	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	14	6	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	2	7	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	2	7	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	2	7	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	2	5	4	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	4	22	11	962	28 310	750	1 385	19 204	74 113	120 425	191 532	8 384
3222	Converted paper product mfg.....	5	21	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	95	12	1 298	44 921	936	1 860	28 151	110 239	43 699	156 396	6 890
3231	Printing & related support activities.....	2	95	12	1 298	44 921	936	1 860	28 151	110 239	43 699	156 396	6 890
32311	Printing.....	2	79	10	1 100	35 354	785	1 556	22 460	93 882	41 179	137 504	6 371
323110	Commercial lithographic printing ..	2	54	7	861	28 889	612	1 250	18 127	61 942	33 073	97 224	5 733
324	Petroleum & coal products mfg.....	1	15	6	798	36 749	504	1 008	21 193	187 065	691 139	877 631	12 637
3241	Petroleum & coal products mfg.....	1	15	6	798	36 749	504	1 008	21 193	187 065	691 139	877 631	12 637
325	Chemical mfg.....	2	57	18	1 426	59 964	799	1 503	29 310	200 501	316 938	524 054	15 502
3255	Paint, coating, & adhesive mfg.....	1	17	6	591	25 808	352	702	13 328	68 916	189 225	264 035	8 667
326	Plastics & rubber products mfg.....	1	27	9	582	16 198	400	737	8 627	35 249	29 569	64 561	8 572
3261	Plastics product mfg.....	1	19	9	560	15 727	382	709	8 302	33 858	28 284	61 875	8 494
327	Nonmetallic mineral product mfg.....	-	28	10	1 740	104 231	1 439	3 247	83 152	218 846	186 450	410 544	68 615
3272	Glass & glass product mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	5	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	25	17	1 490	50 111	1 151	2 408	34 394	142 843	376 841	517 084	D
3312	Steel product mfg from purchased steel.....	-	7	5	g	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel.....	-	3	3	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel.....	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	209	49	4 267	138 924	3 309	6 517	92 993	298 168	182 138	481 177	20 607
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	62	10	1 107	38 080	889	1 648	26 657	82 840	53 779	137 056	7 741
33271	Machine shops.....	1	43	4	511	17 947	402	759	12 484	32 648	11 220	43 240	4 319
332710	Machine shops.....	1	43	4	511	17 947	402	759	12 484	32 648	11 220	43 240	4 319
33272	Turned product & screw, nut, & bolt mfg.....	-	19	6	596	20 133	487	889	14 173	50 192	42 559	93 816	3 422
3328	Coating, engraving, heat treating, & allied activities.....	1	59	17	1 537	50 444	1 237	2 599	35 242	108 154	50 250	158 355	7 459
33281	Coating, engraving, heat treating, & allied activities.....	1	59	17	1 537	50 444	1 237	2 599	35 242	108 154	50 250	158 355	7 459
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	36	8	763	24 468	648	1 427	17 483	48 443	16 960	65 377	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DETROIT, MI—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	86	36	5 386	322 711	3 395	7 822	180 294	577 722	1 400 963	1 984 048	49 658
3335	Metalworking machinery mfg	-	50	24	1 251	63 667	959	2 163	43 219	109 105	73 020	174 282	4 942
33351	Metalworking machinery mfg	-	50	24	1 251	63 667	959	2 163	43 219	109 105	73 020	174 282	4 942
333514	Special die & tool, die set, jig, & fixture mfg .	-	26	9	644	35 789	525	1 215	26 605	52 765	23 839	71 692	2 471
3336	Engine, turbine, & power transmission equipment mfg	-	4	2	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	4	2	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	56	35	22 700	1 295 549	20 208	42 927	1 105 475	3 799 025	8 806 301	12 619 112	523 615
3361	Motor vehicle mfg	-	5	5	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	5	5	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	3	3	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	2	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	47	30	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	9	3	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	8	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	4	3	6 525	396 852	5 699	13 236	335 363	665 341	867 830	1 534 200	D
336350	Motor vehicle transmission & power train parts mfg	-	4	3	6 525	396 852	5 699	13 236	335 363	665 341	867 830	1 534 200	D
33636	Motor vehicle seating & interior trim mfg	-	4	4	1 164	31 995	1 015	1 745	23 431	112 180	134 002	246 261	D
336360	Motor vehicle seating & interior trim mfg ...	-	4	4	1 164	31 995	1 015	1 745	23 431	112 180	134 002	246 261	D
33637	Motor vehicle metal stamping	-	12	10	2 745	132 057	2 392	5 203	103 515	211 515	249 573	463 068	9 570
336370	Motor vehicle metal stamping	-	12	10	2 745	132 057	2 392	5 203	103 515	211 515	249 573	463 068	9 570
33639	Other motor vehicle parts mfg	1	12	8	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	12	8	f	D	D	D	D	D	D	D	D
	DOWAGIAC, MI												
31-33	Manufacturing	-	26	10	1 441	37 412	1 102	1 834	25 350	86 666	152 720	241 280	5 229
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
	EAST JORDAN, MI												
31-33	Manufacturing	-	11	5	1 091	38 626	905	1 929	28 345	154 038	100 262	244 603	11 708
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
	EATON RAPIDS, MI												
31-33	Manufacturing	-	10	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
	ECORSE, MI												
31-33	Manufacturing	-	13	6	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	1	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ESCANABA, MI													
31-33	Manufacturing	-	33	11	2 311	110 012	1 689	3 755	70 199	331 046	269 956	629 548	37 823
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
FARMINGTON, MI													
31-33	Manufacturing	-	23	7	647	26 660	452	1 089	15 949	55 907	39 146	95 987	2 609
FARMINGTON HILLS, MI													
31-33	Manufacturing	1	155	62	5 109	225 308	2 884	6 794	92 559	476 776	509 277	993 840	22 526
332	Fabricated metal product mfg	1	32	19	1 325	42 861	1 094	2 305	29 749	90 068	54 549	143 774	3 979
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	18	13	949	29 515	816	1 738	21 580	54 673	30 452	84 502	2 454
33272	Turned product & screw, nut, & bolt mfg	-	6	5	671	19 483	578	1 246	14 167	37 162	22 416	58 968	1 629
332721	Precision turned product mfg	-	6	5	671	19 483	578	1 246	14 167	37 162	22 416	58 968	1 629
333	Machinery mfg	-	37	17	1 857	109 872	817	2 559	35 423	251 611	306 054	568 466	6 983
3335	Metalworking machinery mfg	-	24	9	760	44 167	427	1 676	20 454	68 445	103 581	183 154	2 958
33351	Metalworking machinery mfg	-	24	9	760	44 167	427	1 676	20 454	68 445	103 581	183 154	2 958
3339	Other general-purpose machinery mfg	-	9	6	863	52 061	264	586	9 370	138 487	157 321	297 372	D
33392	Material handling equipment mfg	-	3	3	f	D	D	D	D	D	D	D	3 323
333922	Conveyor & conveying equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	9	6	630	30 515	252	574	8 086	46 885	38 385	85 519	2 278
3345	Navigational, measuring, medical, & control instruments mfg	3	4	4	537	26 635	209	485	6 686	37 347	34 543	72 037	1 906
33451	Navigational, measuring, medical, & control instruments mfg	3	4	4	537	26 635	209	485	6 686	37 347	34 543	72 037	1 906
FENTON, MI													
31-33	Manufacturing	-	34	15	1 647	62 499	1 230	2 565	38 177	185 088	313 701	474 179	12 175
333	Machinery mfg	-	9	7	f	D	D	D	D	D	D	D	4 880
FENTON TOWNSHIP, MI													
31-33	Manufacturing	1	22	7	819	23 550	550	959	12 933	39 843	50 095	89 362	3 454
FERNDALE, MI													
31-33	Manufacturing	2	89	30	2 278	85 099	1 430	3 011	44 908	199 487	201 482	403 696	12 339
FLAT ROCK, MI													
31-33	Manufacturing	-	7	3	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D

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FLINT, MI													
31-33	Manufacturing	-	94	33	k	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	10	1 281	72 551	1 058	2 571	57 230	90 947	138 902	232 580	D
3325	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	1	g	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	6	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	4	4	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	i	D	D	D	D	D	D	D	D
FRASER, MI													
31-33	Manufacturing	1	192	80	7 071	269 964	5 248	11 161	164 964	504 273	428 026	934 306	42 150
326	Plastics & rubber products mfg	4	11	10	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	4	10	9	927	25 716	772	1 461	15 934	62 223	51 266	113 693	5 696
32619	Other plastics product mfg	4	10	9	927	25 716	772	1 461	15 934	62 223	51 266	113 693	5 696
326199	All other plastics product mfg	4	10	9	927	25 716	772	1 461	15 934	62 223	51 266	113 693	5 696
332	Fabricated metal product mfg	1	57	20	1 349	53 374	1 083	2 456	34 035	118 511	81 669	200 029	14 934
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	34	10	f	D	D	D	D	D	D	D	10 846
33271	Machine shops	-	32	9	507	21 339	399	843	13 726	42 123	19 124	60 718	D
332710	Machine shops	-	32	9	507	21 339	399	843	13 726	42 123	19 124	60 718	D
333	Machinery mfg	-	80	34	2 756	144 132	1 879	4 457	85 787	220 838	169 721	393 258	16 170
3335	Metalworking machinery mfg	-	62	25	2 001	105 251	1 477	3 459	67 081	158 357	87 251	248 143	12 363
33351	Metalworking machinery mfg	-	62	25	2 001	105 251	1 477	3 459	67 081	158 357	87 251	248 143	12 363
333514	Special die & tool, die set, jig, & fixture mfg	-	31	14	874	41 051	691	1 514	28 688	73 589	26 987	100 600	5 821
3339	Other general-purpose machinery mfg	-	13	8	704	36 367	371	937	17 342	58 744	78 952	137 860	3 673
336	Transportation equipment mfg	1	15	8	754	20 586	559	1 177	12 527	47 162	79 666	127 066	2 129
3363	Motor vehicle parts mfg	1	12	8	726	19 774	536	1 140	11 945	45 155	76 107	121 493	2 009
339	Miscellaneous mfg	-	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	-	2	1	f	D	D	D	D	D	D	D	D
339950	Sign mfg	-	2	1	f	D	D	D	D	D	D	D	D

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FREMONT, MI													
31-33	Manufacturing	-	10	3	f	D	D	D	D	D	D	D	D
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	1	1	f	D	D	D	D	D	D	D	D
GARFIELD TOWNSHIP, MI													
31-33	Manufacturing	-	42	10	1 510	47 557	1 240	2 535	36 868	185 361	151 004	336 226	D
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg....	-	1	1	f	D	D	D	D	D	D	D	D
GAYLORD, MI													
31-33	Manufacturing	-	27	11	1 525	45 519	1 271	2 700	28 580	109 196	108 268	215 834	9 213
GENOA TOWNSHIP, MI													
31-33	Manufacturing	-	23	10	622	27 063	347	659	10 340	62 903	47 087	109 750	3 622
GEORGETOWN TOWNSHIP, MI													
31-33	Manufacturing	2	50	8	557	19 993	373	752	11 634	38 852	40 828	82 009	4 796
GRAND BLANC, MI													
31-33	Manufacturing	-	14	6	g	D	D	D	D	D	D	D	4 772
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	-	1	1	g	D	D	D	D	D	D	D	D
GRAND BLANC TOWNSHIP, MI													
31-33	Manufacturing	-	18	11	1 139	41 976	887	2 009	26 184	138 255	118 167	251 723	15 078
326	Plastics & rubber products mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAND HAVEN, MI													
31-33	Manufacturing	—	99	48	6 500	212 788	4 712	9 646	132 242	518 674	730 528	1 251 640	39 094
316	Leather & allied product mfg .	—	1	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	8	7	523	14 004	380	584	8 552	30 290	24 637	55 642	1 598
3261	Plastics product mfg	1	7	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	26	12	1 132	32 099	857	1 837	21 129	75 870	39 294	116 672	6 533
336	Transportation equipment mfg	—	13	10	2 391	72 806	1 763	3 840	46 676	185 576	239 356	421 725	12 620
3363	Motor vehicle parts mfg . . .	—	11	9	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	6	6	1 604	51 415	1 110	2 420	31 794	127 773	171 944	297 995	5 093
336370	Motor vehicle metal stamping	—	6	6	1 604	51 415	1 110	2 420	31 794	127 773	171 944	297 995	5 093
GRAND RAPIDS, MI													
31-33	Manufacturing	1	459	187	30 971	1 309 114	21 313	44 763	740 040	3 123 985	2 042 971	5 140 094	246 577
311	Food mfg	4	27	11	2 693	69 827	1 838	3 721	40 376	201 484	214 242	416 357	14 775
3116	Meat product mfg	—	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	6	14	5	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	5	10	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	5	2	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	6	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	79	25	1 621	56 896	1 038	2 099	32 777	130 031	79 160	208 390	10 057
3231	Printing & related support activities	—	79	25	1 621	56 896	1 038	2 099	32 777	130 031	79 160	208 390	10 057
32311	Printing	—	63	20	1 365	47 297	863	1 769	26 739	108 239	70 975	178 381	8 934
323110	Commercial lithographic printing	1	31	13	663	24 301	418	954	13 335	49 761	28 663	78 527	3 043
326	Plastics & rubber products mfg	1	30	19	2 089	62 840	1 537	3 163	36 950	177 095	162 032	336 768	15 830
3261	Plastics product mfg	3	24	15	1 378	37 932	1 080	2 028	24 545	80 897	82 207	162 595	7 975
32619	Other plastics product mfg	3	19	12	1 213	31 872	947	1 742	21 011	67 826	68 064	135 382	7 327
326199	All other plastics product mfg	3	19	12	1 213	31 872	947	1 742	21 011	67 826	68 064	135 382	7 327
3262	Rubber product mfg	—	6	4	711	24 908	457	1 135	12 405	96 198	79 825	174 173	7 855
32629	Other rubber product mfg	—	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	5	897	25 290	642	1 297	16 595	64 029	50 672	115 098	D
3315	Foundries	—	5	5	f	D	D	D	D	D	D	D	4 552
33152	Nonferrous metal foundries	—	3	3	745	22 412	559	1 125	14 363	59 371	47 410	107 139	4 552
331522	Nonferrous (except aluminum) die-casting foundries	—	3	3	745	22 412	559	1 125	14 363	59 371	47 410	107 139	4 552
332	Fabricated metal product mfg	1	85	35	3 331	115 243	2 661	5 069	75 477	247 550	156 048	404 936	19 765
3325	Hardware mfg	—	5	5	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	5	5	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	5	5	g	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	1	24	13	1 095	32 141	932	1 859	23 319	64 477	27 508	93 023	4 637
33281	Coating, engraving, heat treating, & allied activities	1	24	13	1 095	32 141	932	1 859	23 319	64 477	27 508	93 023	4 637
332813	Electroplating, plating, polishing, anodizing, & coloring	—	15	9	783	23 804	675	1 379	17 659	43 619	20 260	64 877	3 243

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAND RAPIDS, MI—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	64	34	5 116	263 505	3 217	7 203	134 707	592 090	391 180	954 306	40 233
3335	Metalworking machinery mfg	-	32	19	2 151	104 024	1 753	3 925	77 713	221 040	121 797	320 582	11 602
33351	Metalworking machinery mfg	-	32	19	2 151	104 024	1 753	3 925	77 713	221 040	121 797	320 582	11 602
333511	Industrial mold mfg ...	-	9	7	585	19 767	477	854	13 647	39 582	22 608	61 374	4 419
333514	Special die & tool, die set, jig, & fixture mfg .	-	19	11	1 505	82 098	1 233	3 007	62 792	177 818	97 457	253 503	6 947
3339	Other general-purpose machinery mfg	-	15	9	2 416	142 436	1 107	2 590	48 518	336 287	241 816	571 112	25 550
33392	Material handling equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	12	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	7	9	5	879	26 538	568	1 182	15 064	91 743	60 548	152 704	2 997
3343	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	7	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	24	14	2 269	94 957	1 633	3 136	57 628	182 918	219 104	401 825	9 666
3363	Motor vehicle parts mfg ...	-	19	13	2 206	92 686	1 575	3 041	56 176	178 726	215 230	393 488	9 361
33636	Motor vehicle seating & interior trim mfg	-	3	3	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	4	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	4	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	8	7	701	26 150	451	868	12 162	55 922	57 010	112 316	1 120
336399	All other motor vehicle parts mfg	-	8	7	701	26 150	451	868	12 162	55 922	57 010	112 316	1 120
337	Furniture & related product mfg	-	37	15	i	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	21	6	733	19 737	595	1 173	13 200	34 917	24 483	59 862	D
33712	Household & institutional furniture mfg	1	19	6	f	D	D	D	D	D	D	D	1 604
337122	Nonupholstered wood household furniture mfg	1	11	6	643	17 695	526	1 056	11 849	30 551	20 208	51 204	D
3372	Office furniture (including fixtures) mfg	-	13	8	i	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	13	8	i	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	3	3	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	31	6	622	20 091	350	744	9 235	89 253	19 481	110 292	3 574
GRANDVILLE, MI													
31-33	Manufacturing	-	50	22	2 092	78 172	1 516	3 018	45 380	181 315	169 755	358 716	18 360
333	Machinery mfg	-	12	6	713	31 527	501	1 050	18 729	62 505	49 644	119 156	5 647
GREEN OAK TOWNSHIP, MI													
31-33	Manufacturing	-	48	21	1 574	60 145	994	1 873	28 862	186 079	320 561	504 869	13 540
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENVILLE, MI													
31-33	Manufacturing	-	30	17	4 277	141 364	3 600	7 555	108 781	383 569	380 289	768 386	13 647
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
HAMTRAMCK, MI													
31-33	Manufacturing	1	24	7	581	16 036	289	561	6 770	35 535	32 969	68 346	2 085
HARRISON TOWNSHIP, MI													
31-33	Manufacturing	2	68	19	1 351	47 406	1 057	1 973	31 017	94 537	55 149	148 823	4 155
332	Fabricated metal product mfg	1	34	9	580	21 347	435	1 003	13 673	39 729	16 802	56 668	1 877
HASTINGS, MI													
31-33	Manufacturing	1	23	7	1 186	40 320	847	2 048	24 360	86 058	73 801	154 061	6 621
HAZEL PARK, MI													
31-33	Manufacturing	3	56	12	785	26 315	572	1 139	14 926	50 267	29 588	80 387	3 096
HILLSDALE, MI													
31-33	Manufacturing	-	30	17	2 818	79 468	2 243	4 424	56 567	289 462	323 649	611 183	27 689
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
HOLLAND, MI *													
31-33	Manufacturing	-	117	58	16 130	615 696	10 931	22 396	331 971	1 757 132	1 478 399	3 246 767	114 877
311	Food mfg	-	9	3	1 487	45 320	1 326	2 398	37 609	354 126	155 453	507 998	D
3113	Sugar & confectionery product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	8	4	g	D	D	D	D	D	D	D	4 197
3272	Glass & glass product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	3	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	4	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	22	10	994	31 844	778	1 508	20 966	57 120	48 462	106 176	6 631
333	Machinery mfg	-	16	9	787	37 289	443	922	14 309	96 783	64 598	164 473	4 152
3335	Metalworking machinery mfg	-	9	6	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	9	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HOLLAND, MI *—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	6	5	5 414	210 368	3 493	7 382	118 618	507 069	534 943	1 049 273	52 325
3363	Motor vehicle parts mfg . . .	—	4	4	i	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	h	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg . . .	—	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	13	7	4 336	165 821	3 040	6 128	82 773	483 762	363 743	849 432	D
3372	Office furniture (including fixtures) mfg	—	4	3	h	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	4	3	h	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	—	2	2	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	6	3	595	18 722	343	719	8 809	34 595	25 186	60 042	D
3391	Medical equipment & supplies mfg	—	5	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	5	3	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	—	2	2	f	D	D	D	D	D	D	D	D
	HOLLAND TOWNSHIP, MI												
31-33	Manufacturing	—	85	34	4 968	160 472	3 418	7 082	95 065	481 630	395 101	878 914	22 583
327	Nonmetallic mineral product mfg	—	4	3	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	20	8	1 249	42 504	987	2 001	28 055	107 175	46 012	153 269	5 075
3323	Architectural & structural metals mfg	—	4	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	1	1	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	3	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	10	5	764	25 484	428	982	12 428	75 153	46 947	122 261	2 830
3372	Office furniture (including fixtures) mfg	—	4	3	505	18 014	252	646	8 651	60 122	36 058	96 441	D
33721	Office furniture (including fixtures) mfg	—	4	3	505	18 014	252	646	8 651	60 122	36 058	96 441	D
	HOWELL, MI												
31-33	Manufacturing	—	46	18	2 843	102 202	1 980	3 904	56 481	205 023	509 848	716 399	22 753
326	Plastics & rubber products mfg	—	7	5	748	21 341	548	827	12 227	42 450	61 457	104 794	2 106
3261	Plastics product mfg	—	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D

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HUDSON, MI													
31-33	Manufacturing	-	9	7	926	37 297	721	1 576	25 537	96 793	49 312	148 317	17 026
332	Fabricated metal product mfg	-	4	3	539	24 228	388	896	14 653	63 571	35 866	100 892	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	3	3	f	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	-	3	3	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg	-	2	2	f	D	D	D	D	D	D	D	D
HUDSONVILLE, MI													
31-33	Manufacturing	2	23	5	686	18 439	571	1 057	13 059	41 254	25 611	67 365	4 755
IMLAY CITY, MI													
31-33	Manufacturing	-	14	10	g	D	D	D	D	D	D	D	23 513
IONIA, MI													
31-33	Manufacturing	1	11	6	1 965	60 882	1 556	3 700	40 842	151 118	212 626	363 201	10 791
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
JACKSON, MI													
31-33	Manufacturing	-	143	52	4 453	149 754	3 290	6 450	93 593	425 876	389 323	826 150	33 327
332	Fabricated metal product mfg	-	58	27	2 037	62 238	1 601	2 943	42 501	133 096	110 117	241 807	10 020
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	29	10	612	15 857	508	881	10 603	31 993	15 107	47 101	2 302
3329	Other fabricated metal product mfg	-	7	5	514	17 580	377	684	12 315	24 667	50 985	74 463	2 152
333	Machinery mfg	-	26	10	606	24 356	443	912	15 289	38 731	32 636	75 910	2 023
KALAMAZOO, MI													
31-33	Manufacturing	1	153	61	7 499	253 810	4 770	9 919	139 410	699 046	738 232	1 450 518	49 046
322	Paper mfg	-	13	11	1 782	63 576	1 351	2 884	43 426	232 416	241 868	469 227	12 925
3222	Converted paper product mfg	-	12	10	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	8	6	993	33 011	737	1 584	21 017	85 461	131 704	213 614	D
322215	Nonfolding sanitary food container mfg...	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	32	8	614	18 364	375	709	9 587	33 547	24 955	58 004	2 123
3231	Printing & related support activities	1	32	8	614	18 364	375	709	9 587	33 547	24 955	58 004	2 123
32311	Printing	1	30	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	9	860	31 144	612	1 229	16 524	62 875	42 904	105 245	5 085
3329	Other fabricated metal product mfg	-	3	3	561	22 111	387	822	11 441	44 119	29 831	73 576	D
333	Machinery mfg	-	24	8	1 781	67 525	960	1 945	29 948	94 318	116 290	221 244	5 115
3339	Other general-purpose machinery mfg	-	9	3	1 364	52 291	709	1 465	22 423	70 000	97 882	178 207	D
33399	All other general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	4	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	1	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	1	2	2	f	D	D	D	D	D	D	D	D

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	KALAMAZOO, MI—Con.													
31-33	Manufacturing—Con.													
339	Miscellaneous mfg.....	-	13	2	f	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg.....	-	6	1	f	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg.....	-	6	1	f	D	D	D	D	D	D	D	D	
339113	Surgical appliance & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
	KALAMAZOO TOWNSHIP, MI													
31-33	Manufacturing	-	42	16		2 133	81 333	1 474	3 234	48 684	191 381	193 440	386 441	28 459
	KENTWOOD, MI													
31-33	Manufacturing	1	99	53		9 998	332 089	7 346	14 813	202 700	859 766	707 790	1 550 800	85 252
326	Plastics & rubber products mfg.....	1	16	15	2 280	62 156	1 950	3 950	47 227	154 102	153 894	307 134	13 826	
3261	Plastics product mfg.....	1	16	15	2 280	62 156	1 950	3 950	47 227	154 102	153 894	307 134	13 826	
32619	Other plastics product mfg.....	-	14	13	g	D	D	D	D	D	D	D	D	
326199	All other plastics product mfg.....	-	13	12	2 059	55 865	1 765	3 570	42 584	138 409	132 910	270 310	D	
332	Fabricated metal product mfg.....	-	14	4	636	20 741	447	938	12 967	63 760	31 094	94 076	D	
333	Machinery mfg.....	-	17	8	1 836	86 793	1 185	2 372	41 105	152 772	99 690	247 687	25 583	
3336	Engine, turbine, & power transmission equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D	
33361	Engine, turbine, & power transmission equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D	
333618	Other engine equipment mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg.....	3	6	4	885	24 310	557	1 032	11 272	77 019	41 684	119 870	1 943	
3345	Navigational, measuring, medical, & control instruments mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg.....	-	5	4	1 237	40 196	913	1 875	26 512	116 812	71 523	178 767	8 677	
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D	
33632	Motor vehicle electrical & electronic equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D	
336321	Vehicular lighting equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D	
3372	Office furniture (including fixtures) mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
33721	Office furniture (including fixtures) mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
337211	Wood office furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
337214	Office furniture (except wood) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	-	11	3	624	19 930	459	925	12 520	38 444	28 205	65 859	1 677	
3399	Other miscellaneous mfg ..	-	5	3	603	19 278	444	898	12 118	36 937	27 538	63 662	D	
33999	All other miscellaneous mfg.....	-	3	3	f	D	D	D	D	D	D	D	D	
	KINGSFORD, MI													
31-33	Manufacturing	1	16	8	951	30 679	781	1 530	22 033	60 120	51 159	110 494	2 981	
331	Primary metal mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	
3315	Foundries.....	-	3	2	f	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries ..	-	3	2	f	D	D	D	D	D	D	D	D	
331511	Iron foundries.....	-	2	2	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LANSING, MI *													
31-33	Manufacturing	-	131	52	j	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	35	9	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	1	35	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	10	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	6	2 784	131 475	2 169	4 642	91 731	173 341	508 588	712 801	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
LAPEER, MI													
31-33	Manufacturing	-	34	16	2 742	66 949	1 867	4 330	41 444	188 742	165 481	358 156	17 681
326	Plastics & rubber products mfg	-	6	6	1 569	38 602	896	2 229	22 528	115 940	84 156	202 502	13 788
3261	Plastics product mfg	-	6	6	1 569	38 602	896	2 229	22 528	115 940	84 156	202 502	13 788
32619	Other plastics product mfg	-	5	5	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	3	555	13 632	465	953	9 301	29 416	15 387	44 652	D
LEONI TOWNSHIP, MI													
31-33	Manufacturing	-	37	6	835	31 599	592	1 218	17 475	76 155	77 297	152 549	9 747
LINCOLN TOWNSHIP, MI													
31-33	Manufacturing	-	39	20	2 703	99 864	2 269	4 850	75 353	258 568	246 031	502 971	35 526
333	Machinery mfg	3	15	8	503	21 110	414	926	15 095	35 690	19 414	55 025	4 665
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LIVONIA, MI													
31-33	Manufacturing	-	350	112	17 012	826 716	13 244	29 530	592 804	1 810 408	2 426 090	4 243 020	253 217
311	Food mfg	-	20	5	985	31 519	796	1 544	23 539	97 756	187 330	283 901	4 748
3118	Bakeries & tortilla mfg	-	16	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	16	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	36	6	842	31 832	664	1 352	24 232	200 972	106 933	306 879	6 714
3231	Printing & related support activities	-	36	6	842	31 832	664	1 352	24 232	200 972	106 933	306 879	6 714
32311	Printing	-	31	5	775	30 013	611	1 257	22 957	198 802	106 449	304 224	6 617
326	Plastics & rubber products mfg	6	9	6	1 080	33 289	863	1 881	20 957	72 673	40 200	112 605	8 040
3261	Plastics product mfg	6	8	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	4	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	85	22	1 734	69 729	1 230	2 601	42 112	121 065	73 923	191 452	6 992
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	40	6	575	23 582	422	966	15 990	50 194	22 418	72 375	2 267
333	Machinery mfg	1	80	31	2 339	109 285	1 653	3 867	64 755	186 763	129 549	317 913	16 606
3335	Metalworking machinery mfg	-	61	24	1 645	81 508	1 182	2 854	48 460	151 984	84 337	236 917	14 238
33351	Metalworking machinery mfg	-	61	24	1 645	81 508	1 182	2 854	48 460	151 984	84 337	236 917	14 238
333514	Special die & tool, die set, jig, & fixture mfg	-	31	13	914	46 996	712	1 763	30 092	91 959	44 010	138 013	7 134
334	Computer & electronic product mfg	-	17	7	1 522	61 595	1 190	2 796	38 025	163 581	146 164	307 126	5 016
3346	Mfg & reproducing magnetic & optical media	-	2	2	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	2	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	24	18	7 069	427 838	5 936	13 735	349 341	836 740	1 556 219	2 400 162	191 429
3363	Motor vehicle parts mfg ...	-	22	16	i	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	1	3	3	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	1	3	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	3	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
LOWELL, MI													
31-33	Manufacturing	1	15	11	1 136	37 603	848	1 627	22 659	83 572	108 196	195 168	8 070
LUDINGTON, MI													
31-33	Manufacturing	-	27	13	2 098	74 921	1 565	3 070	47 183	242 742	140 407	365 245	D
332	Fabricated metal product mfg	-	7	4	725	16 375	561	1 190	10 957	40 981	36 182	77 285	3 699
MACOMB TOWNSHIP, MI													
31-33	Manufacturing	-	26	11	675	28 814	421	894	15 941	68 537	29 266	98 029	7 778

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON HEIGHTS, MI													
31-33	Manufacturing	1	227	86	6 683	282 242	4 732	10 492	171 465	586 821	472 214	1 060 191	40 895
332	Fabricated metal product mfg	-	73	28	1 914	80 494	1 430	3 168	52 396	163 812	103 213	266 465	14 498
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	40	11	800	34 941	591	1 325	24 506	83 871	49 525	132 670	6 888
3328	Coating, engraving, heat treating, & allied activities ..	-	12	6	513	19 004	377	874	11 622	34 452	17 218	51 894	4 977
33281	Coating, engraving, heat treating, & allied activities.....	-	12	6	513	19 004	377	874	11 622	34 452	17 218	51 894	4 977
333	Machinery mfg	-	67	32	2 760	136 636	1 940	4 683	85 885	259 677	204 205	464 181	10 250
3335	Metalworking machinery mfg	-	52	25	2 265	114 554	1 625	3 911	74 169	215 536	158 001	371 463	7 161
33351	Metalworking machinery mfg	-	52	25	2 265	114 554	1 625	3 911	74 169	215 536	158 001	371 463	7 161
333511	Industrial mold mfg ...	-	11	6	506	30 872	291	749	17 573	57 822	41 071	98 629	1 944
333515	Cutting tool & machine tool accessory mfg ..	-	18	9	582	25 795	415	1 004	15 746	55 983	29 882	88 028	1 525
MANISTEE, MI													
31-33	Manufacturing	-	16	6	669	23 624	495	1 055	16 124	99 536	30 923	141 020	D
MARINE CITY, MI													
31-33	Manufacturing	1	26	11	944	25 094	752	1 310	15 942	56 493	72 088	129 719	5 491
MARSHALL, MI													
31-33	Manufacturing	-	35	16	2 393	75 467	1 918	3 752	50 050	270 897	212 430	480 660	15 340
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARYSVILLE, MI													
31-33	Manufacturing	1	31	16	2 831	93 675	2 107	3 968	60 618	237 733	381 161	626 453	22 383
336	Transportation equipment mfg	-	4	3	1 431	43 600	1 173	2 060	29 942	119 507	181 633	301 921	13 592
3363	Motor vehicle parts mfg ...	-	4	3	1 431	43 600	1 173	2 060	29 942	119 507	181 633	301 921	13 592
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
MATTAWAN, MI													
31-33	Manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
MELVINDALE, MI													
31-33	Manufacturing	3	25	12	749	25 636	518	1 175	13 834	50 274	53 959	104 528	4 325

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MENOMINEE, MI													
31-33	Manufacturing	-	28	14	2 158	63 273	1 681	3 233	45 267	196 657	155 831	354 798	9 336
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
MIDLAND, MI *													
31-33	Manufacturing	-	49	11	5 289	278 928	2 923	5 937	135 660	760 472	916 394	1 671 071	D
323	Printing & related support activities.....	-	10	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	10	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	7	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	4	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	3	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	3	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	g	D	D	D	D	D	D	D	D
MILAN, MI *													
31-33	Manufacturing	-	13	7	1 687	94 630	1 387	2 919	73 624	213 536	259 224	471 929	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
MONROE, MI													
31-33	Manufacturing	-	43	18	4 429	219 810	3 580	7 684	173 996	756 010	766 749	1 535 383	48 580
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
MOUNT CLEMENS, MI													
31-33	Manufacturing	-	83	22	3 488	145 881	2 596	5 088	89 710	531 194	478 736	1 024 143	22 170
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	1	1	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	1	1	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	4	640	19 592	546	1 223	13 298	48 281	15 151	63 276	6 554
336	Transportation equipment mfg	2	8	5	633	17 568	426	755	9 495	53 256	132 825	187 809	3 090
3363	Motor vehicle parts mfg ...	2	8	5	633	17 568	426	755	9 495	53 256	132 825	187 809	3 090
MOUNT PLEASANT, MI													
31-33	Manufacturing	-	15	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUSKEGON, MI													
31-33	Manufacturing	1	108	47	6 918	236 738	4 757	9 632	145 912	630 574	597 364	1 230 975	58 248
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	12	9	920	29 455	670	1 539	21 454	60 295	47 432	108 385	5 882
3315	Foundries	-	11	8	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	9	6	540	16 059	378	847	11 490	40 511	25 229	64 971	4 337
332	Fabricated metal product mfg	2	27	9	910	28 725	579	1 143	15 850	62 865	74 374	134 812	7 768
333	Machinery mfg	-	12	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	9	7	1 472	52 009	1 004	2 075	30 673	126 043	89 415	209 534	D
3363	Motor vehicle parts mfg ...	3	7	6	f	D	D	D	D	D	D	D	D
MUSKEGON HEIGHTS, MI													
31-33	Manufacturing	-	44	19	1 713	60 200	1 343	2 290	43 088	130 874	81 251	211 311	7 384
NEW BALTIMORE, MI													
31-33	Manufacturing	-	18	6	1 225	33 433	1 019	2 175	23 130	81 011	118 299	201 275	3 331
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
NILES, MI *													
31-33	Manufacturing	-	38	18	1 948	60 435	1 488	2 912	40 171	185 372	176 641	365 429	12 794
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	4	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	f	D	D	D	D	D	D	D	D
NILES TOWNSHIP, MI													
31-33	Manufacturing	5	29	9	988	28 467	784	1 530	19 514	54 145	69 441	121 862	5 331
NORTHVILLE, MI *													
31-33	Manufacturing	2	16	8	825	30 050	400	827	12 296	57 646	48 796	90 389	4 140
NORTON SHORES, MI													
31-33	Manufacturing	-	56	30	2 219	78 251	1 459	2 822	40 587	235 487	191 882	422 990	19 680
332	Fabricated metal product mfg	-	19	12	679	23 026	459	808	12 528	62 224	16 026	76 734	3 822
NOVI, MI													
31-33	Manufacturing	3	87	30	2 448	104 351	1 752	4 182	68 341	204 136	175 594	378 780	12 479
333	Machinery mfg	2	19	8	734	37 235	602	1 589	30 254	67 196	42 269	107 530	1 563
3335	Metalworking machinery mfg	2	16	6	625	32 997	511	1 409	27 280	50 621	23 541	71 547	1 086
33351	Metalworking machinery mfg	2	16	6	625	32 997	511	1 409	27 280	50 621	23 541	71 547	1 086
333514	Special die & tool, die set, jig, & fixture mfg .	2	11	4	511	27 736	453	1 270	25 041	41 467	13 265	52 423	754
OAK PARK, MI													
31-33	Manufacturing	-	78	26	1 632	63 374	961	2 050	33 857	122 025	85 068	208 105	5 668

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORION TOWNSHIP BALANCE, MI *													
31-33	Manufacturing	-	31	14	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
OTSEGO, MI													
31-33	Manufacturing	-	13	8	1 736	63 269	1 349	3 016	44 081	96 673	188 458	284 220	7 608
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
OWOSSO, MI													
31-33	Manufacturing	1	42	22	2 917	65 666	2 216	4 015	43 434	135 157	155 133	290 577	9 369
326	Plastics & rubber products mfg	2	9	8	f	D	D	D	D	D	D	D	3 880
3261	Plastics product mfg	2	9	8	f	D	D	D	D	D	D	D	3 880
32619	Other plastics product mfg	2	8	7	f	D	D	D	D	D	D	D	3 880
326199	All other plastics product mfg	2	8	7	f	D	D	D	D	D	D	D	3 880
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
3353	Electrical equipment mfg ..	-	3	3	f	D	D	D	D	D	D	D	2 157
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
335312	Motor & generator mfg	-	3	3	f	D	D	D	D	D	D	D	2 157
OXFORD TOWNSHIP BALANCE, MI *													
31-33	Manufacturing	-	28	13	828	32 293	631	1 445	19 753	56 497	75 835	131 452	4 435
OXFORD, MI *													
31-33	Manufacturing	1	35	11	1 046	32 574	697	1 320	17 295	66 578	73 047	139 988	3 933
PARK TOWNSHIP, MI													
31-33	Manufacturing	-	24	9	1 741	62 320	1 135	2 116	31 630	231 352	192 456	424 574	29 164
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
PAW PAW, MI													
31-33	Manufacturing	-	15	5	815	24 597	635	1 198	18 096	142 961	133 662	277 416	9 640
PETOSKEY, MI													
31-33	Manufacturing	-	24	5	558	15 272	410	782	8 304	30 212	44 832	74 469	1 615
PITTSFIELD TOWNSHIP, MI													
31-33	Manufacturing	-	32	10	913	40 712	578	1 135	22 919	96 264	72 336	169 993	10 210

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PLAINFIELD TOWNSHIP, MI												
31-33	Manufacturing	-	47	17	1 886	63 675	1 486	2 756	42 407	145 495	103 353	253 138	13 548
332	Fabricated metal product mfg	-	11	4	719	21 654	592	937	15 750	44 682	46 859	92 918	4 803
	PLAINWELL, MI												
31-33	Manufacturing	-	18	4	621	21 434	466	973	14 173	29 516	43 517	71 455	931
	PLYMOUTH, MI												
31-33	Manufacturing	-	64	22	1 872	67 217	1 170	2 327	34 446	169 980	134 221	304 379	10 649
336	Transportation equipment mfg	-	10	5	544	23 267	345	824	13 637	46 751	39 895	87 798	2 689
	PLYMOUTH TOWNSHIP, MI												
31-33	Manufacturing	-	61	35	3 312	153 706	2 125	4 238	81 800	267 545	324 428	618 172	20 832
332	Fabricated metal product mfg	1	12	7	606	21 564	409	820	12 120	48 311	49 364	97 462	3 327
333	Machinery mfg	-	14	10	889	58 289	686	1 318	40 941	75 173	146 150	247 880	4 513
3332	Industrial machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	2 168
33329	Other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	5	759	39 592	275	547	8 788	70 225	72 003	142 720	7 117
	PONTIAC, MI												
31-33	Manufacturing	-	58	20	8 474	378 712	7 434	13 509	314 077	1 526 591	3 038 570	4 570 225	D
336	Transportation equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
	PORTAGE, MI												
31-33	Manufacturing	-	78	33	5 667	239 446	4 137	7 361	162 386	400 741	481 194	902 250	124 916
325	Chemical mfg	-	4	2	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	6	926	23 876	773	1 523	17 684	50 220	39 747	90 147	8 536
3261	Plastics product mfg	-	9	6	926	23 876	773	1 523	17 684	50 220	39 747	90 147	8 536
32619	Other plastics product mfg	-	8	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	4	14	8	584	20 284	356	685	11 050	44 180	21 261	65 789	D
339	Miscellaneous mfg	-	9	2	639	29 564	303	636	7 723	53 824	54 067	108 892	3 684
3391	Medical equipment & supplies mfg	-	5	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PORT HURON, MI													
31-33	Manufacturing	-	74	34	5 789	184 835	4 193	8 725	119 123	519 145	844 452	1 355 617	59 511
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	6	994	24 680	712	1 202	13 621	61 142	87 097	148 396	5 100
3261	Plastics product mfg	-	11	6	994	24 680	712	1 202	13 621	61 142	87 097	148 396	5 100
32619	Other plastics product mfg	-	9	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	2	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	10	752	30 313	583	1 265	16 488	77 076	75 489	151 866	D
336	Transportation equipment mfg	-	6	4	830	23 850	637	1 113	17 330	52 275	136 300	184 195	17 866
3363	Motor vehicle parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
REDFORD TOWNSHIP, MI													
31-33	Manufacturing	1	129	34	2 701	102 649	1 941	4 166	65 270	222 469	159 817	382 711	22 025
332	Fabricated metal product mfg	1	40	14	738	27 209	497	1 007	15 510	66 674	40 779	106 658	12 175
333	Machinery mfg	-	24	6	851	38 474	644	1 507	26 876	70 768	39 230	110 502	3 182
3335	Metalworking machinery mfg	-	19	5	f	D	D	D	D	D	D	D	2 958
33351	Metalworking machinery mfg	-	19	5	f	D	D	D	D	D	D	D	2 958
333514	Special die & tool, die set, jig, & fixture mfg	-	14	4	611	28 051	455	1 037	19 966	52 018	13 488	67 135	D
ROCHESTER, MI													
31-33	Manufacturing	-	44	10	1 759	64 135	1 295	2 454	35 578	194 987	125 598	324 701	11 166
325	Chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
ROCHESTER HILLS, MI													
31-33	Manufacturing	1	140	70	7 936	285 904	5 934	12 623	174 267	638 058	622 804	1 264 013	56 123
316	Leather & allied product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	13	7	759	15 889	609	1 096	10 033	38 753	46 876	85 691	D
3261	Plastics product mfg	5	12	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	12	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	4	11	6	f	D	D	D	D	D	D	D	4 522
333	Machinery mfg	-	32	19	1 224	70 659	876	2 082	43 527	151 441	78 934	229 504	12 123
3335	Metalworking machinery mfg	-	20	12	897	54 469	657	1 625	35 769	119 788	52 303	171 694	6 234
33351	Metalworking machinery mfg	-	20	12	897	54 469	657	1 625	35 769	119 788	52 303	171 694	6 234

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	ROCHESTER HILLS, MI —Con.												
31-33	Manufacturing— Con.												
336	Transportation equipment mfg	1	13	13	3 347	116 546	2 475	5 199	70 871	271 832	380 532	656 184	23 960
3363	Motor vehicle parts mfg ...	1	13	13	3 347	116 546	2 475	5 199	70 871	271 832	380 532	656 184	23 960
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	6	6	6	555	24 079	382	903	11 656	37 665	38 018	76 903	6 717
336370	Motor vehicle metal stamping	6	6	6	555	24 079	382	903	11 656	37 665	38 018	76 903	6 717
33639	Other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	7	14	8	596	15 355	443	932	9 466	36 558	25 800	61 829	1 853
3399	Other miscellaneous mfg ..	7	11	7	564	14 234	414	902	9 146	34 156	24 277	57 809	D
	ROCKFORD, MI												
31-33	Manufacturing	—	21	8	1 507	35 094	1 335	2 514	26 424	148 623	88 669	237 800	5 143
	ROMEO, MI *												
31-33	Manufacturing	—	49	22	2 786	139 301	2 131	4 804	102 086	545 429	1 102 565	1 655 439	84 189
326	Plastics & rubber products mfg	2	10	4	502	11 381	399	784	6 682	25 007	19 040	43 492	1 071
336	Transportation equipment mfg	—	5	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	5	5	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
	ROMULUS, MI												
31-33	Manufacturing	—	97	49	6 269	278 521	4 900	10 846	201 659	538 304	1 118 812	1 635 862	212 257
332	Fabricated metal product mfg	1	37	18	1 387	52 668	990	2 066	32 631	117 128	104 339	221 612	6 557
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	18	9	818	29 733	592	1 163	17 733	66 355	61 423	128 049	5 202
33272	Turned product & screw, nut, & bolt mfg	—	12	6	621	21 720	436	839	12 641	49 183	44 027	93 427	2 333
332722	Bolt, nut, screw, rivet, & washer mfg	—	8	4	507	18 340	343	610	10 337	42 992	40 474	83 689	2 066
333	Machinery mfg	—	20	7	586	21 900	442	994	15 061	52 345	21 738	70 004	1 983
336	Transportation equipment mfg	—	9	8	3 029	159 847	2 556	6 011	128 437	195 008	884 862	1 061 948	197 216
3363	Motor vehicle parts mfg ...	—	7	7	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
	ROOSEVELT PARK, MI												
31-33	Manufacturing	1	5	5	533	18 075	375	759	10 505	42 024	24 297	66 687	3 302

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROSEVILLE, MI													
31-33	Manufacturing	1	202	83	6 582	257 068	5 117	10 773	175 335	551 795	395 590	930 534	33 870
326	Plastics & rubber products mfg	1	11	7	921	22 515	670	1 063	12 051	65 754	67 658	131 412	3 291
3261	Plastics product mfg	1	11	7	921	22 515	670	1 063	12 051	65 754	67 658	131 412	3 291
32619	Other plastics product mfg	1	9	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	8	6	899	21 155	654	1 036	11 431	63 872	66 507	128 372	3 197
332	Fabricated metal product mfg	2	77	25	1 483	50 870	1 164	2 482	34 646	101 956	46 789	147 438	6 555
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	46	11	741	26 645	609	1 343	19 830	51 990	18 128	69 436	4 342
333	Machinery mfg	-	43	22	2 239	120 415	1 821	4 294	89 309	202 665	109 989	297 135	9 885
3335	Metalworking machinery mfg	-	33	15	1 723	93 160	1 410	3 318	69 738	155 969	72 430	211 714	9 396
33351	Metalworking machinery mfg	-	33	15	1 723	93 160	1 410	3 318	69 738	155 969	72 430	211 714	9 396
333511	Industrial mold mfg ...	-	4	1	f	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	-	20	10	756	43 238	605	1 525	30 849	70 231	22 475	79 634	6 581
336	Transportation equipment mfg	-	20	13	868	28 425	681	1 292	17 962	94 597	107 637	204 175	10 031
3363	Motor vehicle parts mfg ...	-	15	11	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	9	7	582	18 072	453	912	11 601	70 037	82 367	152 620	9 204
336370	Motor vehicle metal stamping	-	9	7	582	18 072	453	912	11 601	70 037	82 367	152 620	9 204
ROYAL OAK, MI													
31-33	Manufacturing	1	98	21	2 397	96 337	1 788	3 846	56 405	274 330	258 543	531 392	22 407
332	Fabricated metal product mfg	-	14	5	653	28 016	444	1 029	16 224	122 399	148 719	270 986	13 127
333	Machinery mfg	1	18	5	709	34 100	589	1 372	20 471	64 361	38 852	101 813	2 532
SAGINAW, MI													
31-33	Manufacturing	-	78	35	7 667	420 761	6 118	14 445	337 071	738 336	1 535 412	2 289 485	D
331	Primary metal mfg	-	4	2	h	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	4	2	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	3	2	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	8	604	22 662	464	964	15 023	48 675	23 312	72 133	D
333	Machinery mfg	3	12	8	1 079	46 533	603	1 349	22 912	85 445	85 469	177 790	D
3335	Metalworking machinery mfg	5	7	5	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	5	7	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	g	D	D	D	D	D	D	D	D
SAGINAW TOWNSHIP, MI													
31-33	Manufacturing	1	26	2	512	15 666	442	941	12 652	27 025	19 856	47 269	1 782
ST. CLAIR, MI													
31-33	Manufacturing	-	20	14	1 430	45 012	1 100	2 159	30 321	96 530	75 176	173 078	6 906
326	Plastics & rubber products mfg	-	7	7	942	25 542	736	1 307	16 424	61 009	59 807	120 512	5 514
3261	Plastics product mfg	-	7	7	942	25 542	736	1 307	16 424	61 009	59 807	120 512	5 514
32619	Other plastics product mfg	-	7	7	942	25 542	736	1 307	16 424	61 009	59 807	120 512	5 514
326199	All other plastics product mfg	-	7	7	942	25 542	736	1 307	16 424	61 009	59 807	120 512	5 514

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. CLAIR SHORES, MI													
31-33	Manufacturing	3	68	12	2 756	76 671	1 867	3 795	49 920	158 426	177 520	335 000	9 308
323	Printing & related support activities	7	13	2	622	14 122	270	662	6 841	30 373	27 012	56 886	D
3231	Printing & related support activities	7	13	2	622	14 122	270	662	6 841	30 373	27 012	56 886	D
32311	Printing	7	12	2	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	9	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	7	3	1 103	26 734	848	1 622	20 373	72 732	111 432	184 199	3 950
3363	Motor vehicle parts mfg . . .	3	7	3	1 103	26 734	848	1 622	20 373	72 732	111 432	184 199	3 950
ST. JOHNS, MI													
31-33	Manufacturing	-	19	7	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	6	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
ST. JOSEPH, MI													
31-33	Manufacturing	1	34	12	2 314	78 682	1 539	3 350	43 670	172 813	139 897	308 764	13 376
323	Printing & related support activities	-	7	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	7	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
SALINE, MI													
31-33	Manufacturing	-	14	9	3 549	189 691	2 878	6 128	146 808	570 035	802 478	1 377 090	46 619
334	Computer & electronic product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	1	1	g	D	D	D	D	D	D	D	D
SAULT STE. MARIE, MI													
31-33	Manufacturing	3	13	6	512	8 577	422	665	6 007	17 447	20 217	37 498	3 482
SCIO TOWNSHIP, MI													
31-33	Manufacturing	-	66	31	3 270	123 338	2 144	4 031	58 082	298 382	183 373	480 807	10 812
323	Printing & related support activities	-	9	6	870	28 530	719	1 333	21 343	51 190	40 194	91 273	1 624
3231	Printing & related support activities	-	9	6	870	28 530	719	1 333	21 343	51 190	40 194	91 273	1 624
32311	Printing	-	9	6	870	28 530	719	1 333	21 343	51 190	40 194	91 273	1 624
323117	Book printing	-	3	3	f	D	D	D	D	D	D	D	1 013
333	Machinery mfg	1	10	7	1 087	46 174	579	1 181	15 706	121 710	52 981	173 876	1 983
3339	Other general-purpose machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBY TOWNSHIP, MI													
31-33	Manufacturing	-	101	31	4 856	242 586	3 875	8 393	172 462	517 779	495 511	1 004 810	81 298
326	Plastics & rubber products mfg	-	7	3	512	13 283	444	1 178	10 651	22 531	24 464	46 037	2 839
3261	Plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	14	1 081	61 369	760	1 820	30 914	119 656	75 936	187 892	5 482
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
SOUTHFIELD, MI													
31-33	Manufacturing	1	115	33	4 564	211 748	3 393	6 379	124 069	326 834	426 606	748 752	39 148
326	Plastics & rubber products mfg	5	4	3	645	21 609	491	1 118	14 831	59 387	34 495	94 525	5 071
332	Fabricated metal product mfg	2	22	10	f	D	D	D	D	D	D	D	2 487
333	Machinery mfg	-	18	8	2 305	129 432	1 737	2 790	70 380	112 777	200 554	307 022	15 076
3339	Other general-purpose machinery mfg	1	8	4	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	7	4	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
SOUTH HAVEN, MI *													
31-33	Manufacturing	-	26	12	882	26 075	640	1 418	14 678	60 932	49 379	110 227	8 135
SOUTH LYON, MI													
31-33	Manufacturing	3	10	3	534	23 873	390	935	17 933	54 069	69 681	120 410	1 480
SPARTA, MI													
31-33	Manufacturing	2	25	13	1 390	43 194	1 083	2 045	27 731	139 584	88 678	228 620	8 136
SPRING LAKE, MI													
31-33	Manufacturing	-	24	12	2 349	52 540	1 812	4 033	31 674	271 277	189 602	461 024	15 679
337	Furniture & related product mfg	-	5	3	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	2	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	2	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STERLING HEIGHTS, MI													
31-33	Manufacturing	-	314	111	21 628	1 241 704	17 743	39 228	977 829	2 423 167	4 322 794	6 777 861	380 700
326	Plastics & rubber products mfg	2	27	17	2 232	73 014	1 686	3 407	38 155	154 215	148 697	303 699	17 045
3261	Plastics product mfg	2	26	17	g	D	D	D	D	D	D	D	17 045
32619	Other plastics product mfg	2	25	16	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	25	16	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	92	22	1 560	61 502	1 073	2 325	35 858	131 424	65 891	197 479	7 447
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	46	9	645	26 207	468	985	16 688	47 791	28 858	77 439	2 941
333	Machinery mfg	1	91	41	2 478	121 340	1 709	3 719	73 184	245 649	120 159	369 514	16 143
3335	Metalworking machinery mfg	-	69	30	1 899	96 754	1 392	3 057	62 323	177 692	79 046	261 674	13 835
33351	Metalworking machinery mfg	-	69	30	1 899	96 754	1 392	3 057	62 323	177 692	79 046	261 674	13 835
333511	Industrial mold mfg	-	21	9	593	29 142	465	999	22 034	51 905	16 310	70 104	3 225
333514	Special die & tool, die set, jig, & fixture mfg	2	32	13	746	40 618	599	1 349	28 190	69 519	19 599	88 744	6 074
336	Transportation equipment mfg	-	29	23	14 278	952 431	12 440	28 073	808 780	1 821 827	3 911 810	5 760 396	336 163
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	23	19	j	D	D	D	D	D	D	D	319 030
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	6	5	i	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	6	5	i	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	7	7	3 719	266 255	3 362	7 327	234 006	390 769	387 433	783 346	D
336370	Motor vehicle metal stamping	-	7	7	3 719	266 255	3 362	7 327	234 006	390 769	387 433	783 346	D
STURGIS, MI													
31-33	Manufacturing	-	49	29	4 061	134 955	3 139	7 040	94 094	839 055	329 880	1 159 178	38 801
326	Plastics & rubber products mfg	2	9	5	744	20 121	575	1 332	13 383	46 802	27 429	74 716	2 654
3261	Plastics product mfg	1	8	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	6	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	6	677	28 560	553	1 367	22 740	67 771	29 241	94 663	D
3335	Metalworking machinery mfg	-	6	5	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	6	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	670	21 877	478	862	14 151	34 565	39 448	73 512	6 868
SUMMIT TOWNSHIP, MI													
31-33	Manufacturing	-	22	9	1 366	56 440	866	1 884	28 907	113 098	153 624	270 556	7 982
TAYLOR, MI													
31-33	Manufacturing	-	90	35	2 662	94 150	2 029	4 409	56 716	225 464	427 850	652 409	7 932
332	Fabricated metal product mfg	-	35	14	804	29 864	645	1 371	20 470	67 749	35 601	102 875	2 394
336	Transportation equipment mfg	-	9	4	f	D	D	D	D	D	D	D	1 890
3363	Motor vehicle parts mfg	-	7	2	f	D	D	D	D	D	D	D	D

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TECUMSEH, MI													
31-33	Manufacturing	-	25	11	1 844	75 294	1 458	2 734	38 069	106 367	146 802	261 225	9 621
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	922
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
THOMAS TOWNSHIP, MI													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
THREE RIVERS, MI													
31-33	Manufacturing	-	37	20	2 995	123 244	2 287	4 293	88 911	266 239	251 614	520 540	29 113
332	Fabricated metal product mfg	-	10	7	662	23 522	474	989	13 671	35 521	29 870	66 385	4 716
336	Transportation equipment mfg	1	4	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	3	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
TRAVERSE CITY, MI *													
31-33	Manufacturing	-	114	43	3 659	110 983	2 740	5 621	69 107	254 006	193 545	449 081	25 415
333	Machinery mfg	1	16	9	861	33 997	519	1 127	17 640	86 216	55 186	140 924	8 537
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
TRENTON, MI													
31-33	Manufacturing	-	21	7	h	D	D	D	D	D	D	D	21 299
336	Transportation equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TROY, MI												
31-33	Manufacturing	2	396	146	11 872	470 949	7 968	16 563	251 449	898 252	766 828	1 677 987	65 869
323	Printing & related support activities.....	2	46	14	764	24 704	526	996	14 024	48 963	23 797	72 691	2 619
3231	Printing & related support activities.....	2	46	14	764	24 704	526	996	14 024	48 963	23 797	72 691	2 619
32311	Printing	2	37	11	620	18 121	434	828	10 739	36 666	20 769	57 491	1 991
326	Plastics & rubber products mfg	1	18	8	757	19 074	641	1 279	14 523	48 358	60 616	108 966	6 817
3261	Plastics product mfg	1	18	8	757	19 074	641	1 279	14 523	48 358	60 616	108 966	6 817
32619	Other plastics product mfg	2	14	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	14	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	98	33	2 754	113 214	1 904	4 092	63 801	237 292	222 297	459 330	15 724
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	51	18	1 378	54 803	996	2 194	33 895	128 727	79 313	205 784	8 778
33272	Turned product & screw, nut, & bolt mfg	1	16	9	901	33 115	640	1 363	19 626	89 946	64 672	153 022	6 226
332722	Bolt, nut, screw, rivet, & washer mfg	2	9	5	559	19 195	340	645	9 463	61 238	49 889	109 855	5 125
333	Machinery mfg	1	83	33	2 030	111 243	1 367	3 114	65 322	200 629	110 470	321 385	14 553
3335	Metalworking machinery mfg	1	58	27	1 396	72 613	1 012	2 285	46 220	125 633	51 343	175 347	11 478
33351	Metalworking machinery mfg	1	58	27	1 396	72 613	1 012	2 285	46 220	125 633	51 343	175 347	11 478
333514	Special die & tool, die set, jig, & fixture mfg ..	2	30	18	846	44 506	642	1 481	30 392	82 271	34 165	116 007	7 568
334	Computer & electronic product mfg	1	29	15	933	39 677	489	990	15 037	65 987	48 214	116 111	5 755
335	Electrical equipment, appliance, & component mfg	3	14	8	515	18 070	304	523	6 947	34 686	27 908	62 989	1 803
336	Transportation equipment mfg	3	28	18	2 583	86 644	1 909	3 974	49 600	140 640	180 365	322 906	14 501
3363	Motor vehicle parts mfg ...	2	22	15	2 312	74 409	1 721	3 514	41 676	115 235	151 260	267 510	D
33637	Motor vehicle metal stamping	-	8	7	1 379	48 732	999	2 157	27 049	59 725	95 189	155 150	7 481
336370	Motor vehicle metal stamping	-	8	7	1 379	48 732	999	2 157	27 049	59 725	95 189	155 150	7 481
	UTICA, MI												
31-33	Manufacturing	1	17	11	797	37 677	666	1 790	28 955	62 808	94 474	159 098	7 386
	VAN BUREN TOWNSHIP, MI												
31-33	Manufacturing	-	32	14	2 277	76 775	1 900	4 102	59 542	185 177	274 124	463 954	14 485
336	Transportation equipment mfg	-	4	4	1 108	34 894	1 009	2 071	30 333	74 961	117 417	192 566	D
3363	Motor vehicle parts mfg ...	-	4	4	1 108	34 894	1 009	2 071	30 333	74 961	117 417	192 566	D
33637	Motor vehicle metal stamping	-	4	4	1 108	34 894	1 009	2 071	30 333	74 961	117 417	192 566	D
336370	Motor vehicle metal stamping	-	4	4	1 108	34 894	1 009	2 071	30 333	74 961	117 417	192 566	D
	VASSAR, MI												
31-33	Manufacturing	-	11	6	681	25 579	570	1 107	19 073	63 143	63 425	127 183	3 290

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WALKER, MI													
31-33	Manufacturing	-	91	41	5 776	240 590	4 585	9 791	173 238	574 342	660 238	1 217 542	41 415
333	Machinery mfg	-	30	14	1 322	71 872	1 065	2 773	54 422	148 913	77 579	219 473	17 996
3335	Metalworking machinery mfg	-	20	10	1 050	60 490	899	2 388	47 896	125 219	52 515	171 056	17 384
33351	Metalworking machinery mfg	-	20	10	1 050	60 490	899	2 388	47 896	125 219	52 515	171 056	17 384
333514	Special die & tool, die set, jig, & fixture mfg .	-	16	9	f	D	D	D	D	D	D	D	9 616
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg .	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	5	1 693	68 067	1 449	3 033	52 874	104 627	200 745	297 168	10 307
3363	Motor vehicle parts mfg ...	-	7	5	1 693	68 067	1 449	3 033	52 874	104 627	200 745	297 168	10 307
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
WALLED LAKE, MI													
31-33	Manufacturing	1	31	13	959	33 243	754	1 478	18 454	95 645	65 245	161 010	2 321
WARREN, MI													
31-33	Manufacturing	-	518	186	23 404	1 157 162	18 803	38 848	875 534	2 210 392	5 868 270	8 065 320	240 596
326	Plastics & rubber products mfg	1	14	7	811	16 916	592	985	10 781	51 476	42 652	92 555	1 453
3261	Plastics product mfg	-	12	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	9	5	708	14 115	510	848	8 953	42 956	36 395	77 722	1 104
326199	All other plastics product mfg	-	9	5	708	14 115	510	848	8 953	42 956	36 395	77 722	1 104
331	Primary metal mfg	-	14	10	688	25 113	563	1 104	17 878	69 230	115 564	183 531	4 230
332	Fabricated metal product mfg	-	186	54	3 835	136 171	2 838	5 480	88 721	303 076	207 385	508 248	23 966
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	95	21	1 888	70 629	1 373	2 634	46 779	154 059	112 617	263 927	11 864
33271	Machine shops	1	79	13	922	38 450	671	1 362	24 321	71 128	33 403	104 092	4 940
332710	Machine shops	1	79	13	922	38 450	671	1 362	24 321	71 128	33 403	104 092	4 940
33272	Turned product & screw, nut, & bolt mfg	-	16	8	966	32 179	702	1 272	22 458	82 931	79 214	159 835	6 924
332722	Bolt, nut, screw, rivet, & washer mfg	-	6	3	596	18 226	430	677	13 736	59 749	65 521	122 602	5 674
3328	Coating, engraving, heat treating, & allied activities .	-	35	15	902	29 515	675	1 345	19 122	65 925	22 140	89 234	8 501
33281	Coating, engraving, heat treating, & allied activities	-	35	15	902	29 515	675	1 345	19 122	65 925	22 140	89 234	8 501
333	Machinery mfg	1	142	48	3 859	182 173	2 769	6 334	117 255	369 920	277 446	653 308	20 664
3335	Metalworking machinery mfg	1	112	36	2 946	148 216	2 209	5 015	98 460	294 849	202 741	502 415	16 321
33351	Metalworking machinery mfg	1	112	36	2 946	148 216	2 209	5 015	98 460	294 849	202 741	502 415	16 321
333514	Special die & tool, die set, jig, & fixture mfg .	-	49	11	1 043	57 266	830	1 808	41 553	99 348	28 003	127 010	4 045
333515	Cutting tool & machine tool accessory mfg ..	-	33	8	780	30 591	601	1 299	19 267	102 031	48 426	147 109	6 479
333518	Other metalworking machinery mfg	2	8	7	f	D	D	D	D	D	D	D	2 863
3339	Other general-purpose machinery mfg	2	17	8	633	23 821	393	998	13 621	46 509	55 969	103 292	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN, MI—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	49	33	11 856	708 166	10 544	21 992	598 827	1 187 647	4 979 651	6 150 373	170 705
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	41	28	i	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	23	16	4 311	277 136	3 783	8 269	225 151	446 141	513 108	959 666	101 555
336370	Motor vehicle metal stamping	-	23	16	4 311	277 136	3 783	8 269	225 151	446 141	513 108	959 666	101 555
WATERFORD TOWNSHIP, MI													
31-33	Manufacturing	1	60	14	1 041	33 149	676	1 475	19 780	77 419	65 877	142 610	6 113
WAYNE, MI													
31-33	Manufacturing	-	28	14	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
WESTLAND, MI													
31-33	Manufacturing	-	79	23	2 533	91 506	1 842	3 893	55 886	199 408	203 995	402 629	19 131
326	Plastics & rubber products mfg	-	5	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	2	521	18 268	398	955	11 910	41 763	60 970	102 456	D
3363	Motor vehicle parts mfg ...	-	5	2	f	D	D	D	D	D	D	D	D
WHITEHALL, MI													
31-33	Manufacturing	-	13	9	2 003	77 758	1 549	3 208	55 312	242 963	148 155	379 369	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	1	1	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	g	D	D	D	D	D	D	D	D
WIXOM, MI													
31-33	Manufacturing	-	89	37	6 111	297 832	4 823	10 234	216 927	3 448 538	2 363 823	5 802 092	D
332	Fabricated metal product mfg	1	19	7	975	35 979	837	1 830	25 868	70 578	35 912	106 403	4 757
3329	Other fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	33	12	f	D	D	D	D	D	D	D	5 192
336	Transportation equipment mfg	-	7	4	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WOODHAVEN, MI													
31-33	Manufacturing	-	7	3	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
WYANDOTTE, MI													
31-33	Manufacturing	-	49	18	2 227	95 956	1 101	2 118	32 789	175 763	346 409	511 067	38 111
325	Chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	10	837	26 453	636	1 220	16 893	60 078	41 388	101 458	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	14	8	573	18 336	441	884	11 955	44 644	33 496	78 924	D
WYOMING, MI													
31-33	Manufacturing	-	185	81	11 933	539 220	9 513	20 197	414 765	965 374	1 087 273	2 055 013	130 564
311	Food mfg	-	6	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	15	9	1 017	27 251	777	1 526	17 527	49 042	56 071	104 863	3 144
3261	Plastics product mfg	1	15	9	1 017	27 251	777	1 526	17 527	49 042	56 071	104 863	3 144
32619	Other plastics product mfg	1	9	6	746	19 771	570	1 164	13 296	35 675	40 405	75 436	2 692
326199	All other plastics product mfg	1	9	6	746	19 771	570	1 164	13 296	35 675	40 405	75 436	2 692
331	Primary metal mfg	-	5	2	521	21 257	365	835	12 152	34 270	66 473	101 803	1 541
332	Fabricated metal product mfg	-	49	18	1 178	34 950	883	1 834	20 685	75 839	36 562	111 632	4 841
3328	Coating, engraving, heat treating, & allied activities.	1	21	10	627	16 744	470	971	9 246	39 575	15 438	54 989	2 318
33281	Coating, engraving, heat treating, & allied activities.....	1	21	10	627	16 744	470	971	9 246	39 575	15 438	54 989	2 318
333	Machinery mfg	-	36	19	1 199	68 831	893	2 041	42 390	100 227	52 113	156 232	12 498
3335	Metalworking machinery mfg	-	23	15	909	43 069	697	1 597	29 209	82 719	29 519	111 875	9 679
33351	Metalworking machinery mfg	-	23	15	909	43 069	697	1 597	29 209	82 719	29 519	111 875	9 679
333511	Industrial mold mfg ...	-	9	8	558	25 965	414	971	16 738	51 354	19 287	70 607	7 882
334	Computer & electronic product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	6	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	5	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	3	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	3	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YPSILANTI, MI													
31-33	Manufacturing	-	25	10	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	4	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	4	4	i	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
YPSILANTI TOWNSHIP, MI													
31-33	Manufacturing	-	20	5	716	21 573	553	955	14 205	50 372	40 221	89 760	3 035
ZEELAND, MI													
31-33	Manufacturing	-	52	32	8 078	301 142	6 009	13 315	180 911	947 783	1 003 919	1 961 642	55 430
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	887	35 095	597	1 152	20 119	94 259	60 017	154 197	7 941
3261	Plastics product mfg	-	6	4	887	35 095	597	1 152	20 119	94 259	60 017	154 197	7 941
32619	Other plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	779	30 822	531	1 140	18 310	85 944	61 251	153 372	4 157
337	Furniture & related product mfg	-	7	7	g	D	D	D	D	D	D	D	1 198
3372	Office furniture (including fixtures) mfg	-	5	5	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	5	5	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	2	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; g-500 to 999 employees; h-1,000 to 2,499 employees; i-2,500 to 4,999 employees; j-5,000 to 9,999 employees; k-10,000 to 24,999 employees; l-25,000 to 49,999 employees; m-50,000 to 99,999 employees; n-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MICHIGAN		MICHIGAN—Con.	
Companies ¹	number.. 14 700	Quantity of electricity purchased for heat and power	1,000 kWh.. 32 011 458
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 1 827 546
All establishments	number.. 16 045	Total value of shipments	\$1,000.. 214 900 655
Establishments with 1 to 19 employees	number.. 10 292	Value of resales	\$1,000.. 6 201 203
Establishments with 20 to 99 employees	number.. 4 143	Value added	\$1,000.. 93 809 468
Establishments with 100 employees or more	number.. 1 610	Total inventories, beginning of year	\$1,000.. 15 466 894
All employees	number.. 833 429	Finished goods inventories, beginning of year	\$1,000.. 4 495 065
Total compensation ²	\$1,000.. 44 639 423	Work-in-process inventories, beginning of year	\$1,000.. 5 267 823
Annual payroll	\$1,000.. 34 418 934	Materials and supplies inventories, beginning of year	\$1,000.. 5 704 006
Total fringe benefits	\$1,000.. 10 220 489	Total inventories, end of year	\$1,000.. 15 506 875
Production workers, average for year	number.. 630 390	Finished goods inventories, end of year	\$1,000.. 4 531 793
Production workers on March 12	number.. 626 594	Work-in-process inventories, end of year	\$1,000.. 5 165 973
Production workers on May 12	number.. 630 532	Materials and supplies inventories, end of year	\$1,000.. 5 809 109
Production workers on August 12	number.. 629 921	Gross book value of total assets at beginning of year	\$1,000.. 73 751 060
Production workers on November 12	number.. 634 513	Total capital expenditures (new and used)	\$1,000.. 9 240 449
Production-worker hours	1,000.. 1 305 619	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 1 176 197
Production-worker wages	\$1,000.. 23 485 989	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 8 064 252
Total cost of materials	\$1,000.. 121 029 520	Total retirements ²	\$1,000.. 4 473 276
Cost of materials, parts, containers, etc., consumed	\$1,000.. 110 823 735	Gross book value of total assets at end of year	\$1,000.. 78 518 233
Cost of resales	\$1,000.. 3 918 380	Total depreciation during year ²	\$1,000.. 4 906 157
Cost of fuels	\$1,000.. 1 024 793	Total rental payments ²	\$1,000.. 1 529 432
Cost of purchased electricity	\$1,000.. 1 781 825	Buildings and other structures rental payments ²	\$1,000.. 609 454
Cost of contract work	\$1,000.. 3 480 787	Machinery and equipment rental payments ²	\$1,000.. 919 978

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MICHIGAN

Clare is in Clare and Isabella Counties.

Commerce township balance. The term “balance” after the township refers to the portion of a township excluding an incorporated place recognized for the 1997 Economic Census. Commerce township balance contains all of Commerce township except the incorporated place of Wolverine Lake.

Eastpointe name was changed from East Detroit in July 1992.

Grosse Pointe Shores is in Macomb and Wayne Counties.

Holland is in Allegan and Ottawa Counties.

Lake Orion. See “Orion township balance.”

Lansing is in Eaton and Ingham Counties.

Midland is in Bay and Midland Counties.

Milan is in Monroe and Washtenaw Counties.

Niles is in Berrien and Cass Counties.

Northville is in Oakland and Wayne Counties.

Orion township balance. The term “balance” after the township refers to the portion of a township excluding an incorporated place recognized for the 1997 Economic Census. Orion township balance contains all of Orion township except the incorporated place of Lake Orion.

Oxford. See “Oxford township balance.”

Oxford township balance. The term “balance” after the township refers to the portion of a township excluding an incorporated place recognized for the 1997 Economic Census. Oxford township balance contains all of Oxford township except the incorporated place of Oxford.

Romeo. See “Washington township balance.”

South Haven is in Allegan and Van Buren Counties.

Traverse City is in Grand Traverse and Leelanau Counties.

Washington township balance. The term “balance” after the township refers to the portion of a township excluding an incorporated place recognized for the 1997 Economic Census. Washington township balance contains all of Washington township except the incorporated place of Romeo.

Wolverine Lake. See “Commerce township balance.”

Appendix E. Metropolitan Areas

MICHIGAN

Ann Arbor, MI PMSA

Lenawee County, MI
Livingston County, MI
Washtenaw County, MI

Benton Harbor, MI MSA

Berrien County, MI

Detroit, MI PMSA

Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit—Ann Arbor—Flint, MI CMSA

Ann Arbor, MI PMSA
Lenawee County, MI
Livingston County, MI
Washtenaw County, MI

Detroit, MI PMSA
Lapeer County, MI
Macomb County, MI
Monroe County, MI
Oakland County, MI
St. Clair County, MI
Wayne County, MI

Detroit—Ann Arbor—Flint, MI CMSA—Con.

Flint, MI PMSA
Genesee County, MI

Flint, MI PMSA

Genesee County, MI

Grand Rapids—Muskegon—Holland, MI MSA

Allegan County, MI
Kent County, MI
Muskegon County, MI
Ottawa County, MI

Jackson, MI MSA

Jackson County, MI

Kalamazoo—Battle Creek, MI MSA

Calhoun County, MI
Kalamazoo County, MI
Van Buren County, MI

Lansing—East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Saginaw—Bay City—Midland, MI MSA

Bay County, MI
Midland County, MI
Saginaw County, MI

Minnesota

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
MINNESOTA													
31-33	Manufacturing	-	8 091	2 728	382 530	13 126 112	260 158	519 172	7 250 068	36 629 931	39 696 664	76 244 894	3 171 968
311	Food mfg.	-	657	263	44 042	1 218 753	32 896	66 938	787 358	4 781 890	10 005 764	14 806 612	360 109
3111	Animal food mfg.	1	72	22	1 274	45 754	830	1 740	24 595	174 602	422 302	598 482	12 336
31111	Animal food mfg.	1	72	22	1 274	45 754	830	1 740	24 595	174 602	422 302	598 482	12 336
311111	Dog & cat food mfg.	1	7	2	213	7 470	191	418	5 990	40 592	26 962	67 377	1 041
311119	Other animal food mfg.	1	65	20	1 061	38 284	639	1 322	18 605	134 010	395 340	531 105	11 295
3112	Grain & oilseed milling	-	45	26	2 880	112 702	2 187	5 020	84 827	633 388	1 983 085	2 642 633	57 548
31121	Flour milling & malt mfg. . . .	1	30	16	935	36 045	718	1 597	26 301	153 646	578 971	740 706	16 221
311211	Flour milling	1	18	12	643	24 107	495	1 174	18 380	95 997	435 463	532 316	9 203
311213	Malt mfg.	-	8	4	265	10 967	209	389	7 452	49 171	138 724	195 489	6 887
31122	Starch & vegetable fats & oils mfg.	-	9	7	919	31 056	719	1 652	22 193	168 111	1 231 343	1 402 708	27 167
311221	Wet corn milling	-	3	1	e	D	D	D	D	D	D	D	D
311222	Soybean processing	-	3	3	346	12 283	236	489	7 433	107 120	907 268	1 015 853	15 267
311225	Fats & oils refining & blending	-	2	2	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg.	-	6	3	1 026	45 601	750	1 771	36 333	311 631	172 771	499 219	14 160
311230	Breakfast cereal mfg.	-	6	3	1 026	45 601	750	1 771	36 333	311 631	172 771	499 219	14 160
3113	Sugar & confectionery product mfg.	-	28	12	2 740	87 387	2 208	4 702	64 044	292 423	557 118	826 931	59 412
31131	Sugar mfg.	-	4	4	g	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.	-	4	4	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	12	3	e	D	D	D	D	D	D	D	521
311330	Confectionery mfg from purchased chocolate	-	12	3	e	D	D	D	D	D	D	D	521
31134	Nonchocolate confectionery mfg.	1	11	5	1 116	30 728	795	1 641	17 987	65 709	139 304	206 749	D
311340	Nonchocolate confectionery mfg.	1	11	5	1 116	30 728	795	1 641	17 987	65 709	139 304	206 749	D
3114	Fruit & vegetable preserving & specialty food mfg.	1	47	31	5 124	121 060	3 965	8 073	77 052	353 692	443 101	793 722	30 075
31141	Frozen food mfg.	2	19	14	2 527	61 706	1 676	3 135	31 015	184 377	180 889	362 954	20 244
311411	Frozen fruit, juice, & vegetable mfg.	-	5	4	533	11 564	471	903	9 318	61 257	63 288	124 818	7 004
311412	Frozen specialty food mfg.	3	14	10	1 994	50 142	1 205	2 232	21 697	123 120	117 601	238 136	13 240
31142	Fruit & vegetable canning, pickling, & drying	1	28	17	2 597	59 354	2 289	4 938	46 037	169 315	262 212	430 768	9 831
311421	Fruit & vegetable canning	1	19	12	2 139	46 922	1 985	4 290	40 207	140 112	217 130	356 440	8 090
311422	Specialty canning	-	5	4	391	10 291	251	525	4 471	20 610	35 622	56 225	D
3115	Dairy product mfg.	-	80	49	i	D	D	D	D	D	D	D	75 202
31151	Dairy product (except frozen) mfg.	-	77	48	i	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.	1	32	13	1 260	44 263	635	1 303	22 075	110 164	367 851	477 762	7 354
311512	Creamery butter mfg.	-	3	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg.	-	22	19	3 327	92 260	2 702	5 420	71 663	662 597	1 756 274	2 411 710	41 726
311514	Dry, condensed, & evaporated dairy product mfg.	-	20	13	1 857	69 209	1 111	2 275	29 956	238 842	382 767	627 044	23 328
31152	Ice cream & frozen dessert mfg.	-	3	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.	-	3	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.	-	84	43	14 129	358 629	11 596	23 912	242 943	1 302 967	2 922 529	4 233 772	70 964
31161	Animal slaughtering & processing	-	84	43	14 129	358 629	11 596	23 912	242 943	1 302 967	2 922 529	4 233 772	70 964
311611	Animal (except poultry) slaughtering	-	32	12	5 462	165 269	4 056	8 282	96 800	782 937	1 935 932	2 719 531	34 677
311612	Meat processed from carcasses	3	21	11	2 004	49 999	1 529	3 046	28 309	120 816	329 405	448 403	6 385
311613	Rendering & meat byproduct processing	-	12	5	358	11 846	219	511	6 595	44 521	56 774	101 073	8 688
311615	Poultry processing	-	19	15	6 305	131 515	5 792	12 073	111 239	354 693	600 418	964 765	21 214
3117	Seafood product preparation & packaging	-	5	3	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	5	3	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing	-	5	3	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	1	221	43	5 818	132 008	3 471	6 550	75 540	381 571	336 488	725 683	D
31181	Bread & bakery product mfg	1	199	32	4 187	82 580	2 216	3 926	45 093	227 317	168 534	399 980	12 549
311811	Retail bakeries	2	150	10	1 099	13 673	546	705	6 708	31 734	18 447	50 522	1 083
311812	Commercial bakeries	1	42	18	2 586	57 798	1 243	2 390	29 787	163 644	106 627	270 199	8 913
311813	Frozen cakes, pies, & other pastries mfg	2	7	4	502	11 109	427	831	8 598	31 939	43 460	79 259	2 553
31182	Cookie, cracker, & pasta mfg	2	19	9	g	D	D	D	D	D	D	D	4 647
311822	Flour mixes & dough mfg from purchased flour	2	13	6	g	D	D	D	D	D	D	D	4 446
311823	Dry pasta mfg	—	4	1	e	D	D	D	D	D	D	D	201
31183	Tortilla mfg	—	3	2	c	D	D	D	D	D	D	D	D
311830	Tortilla mfg	—	3	2	c	D	D	D	D	D	D	D	D
3119	Other food mfg	1	75	34	4 576	127 959	3 305	6 061	71 359	512 491	527 872	1 047 310	31 590
31191	Snack food mfg	—	15	8	1 278	32 318	790	1 480	15 725	77 791	132 121	209 997	4 832
311911	Roasted nuts & peanut butter mfg	—	7	4	e	D	D	D	D	D	D	D	2 101
311919	Other snack food mfg	—	8	4	f	D	D	D	D	D	D	D	2 731
31192	Coffee & tea mfg	3	8	2	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	3	8	2	c	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	1	10	2	e	D	D	D	D	D	D	D	2 671
311942	Spice & extract mfg	—	7	1	417	9 685	205	337	3 280	29 803	26 548	57 090	D
31199	All other food mfg	1	41	21	2 674	78 131	2 159	3 959	46 428	237 306	321 122	564 744	22 463
311991	Perishable prepared food mfg	—	12	9	825	20 220	737	1 282	15 074	49 301	46 927	101 282	12 590
311999	All other miscellaneous food mfg	1	29	12	1 849	57 911	1 422	2 677	31 354	188 005	274 195	463 462	9 873
312	Beverage & tobacco product mfg	1	39	14	2 137	73 071	1 344	2 374	36 470	303 927	590 377	898 202	14 470
3121	Beverage mfg	1	39	14	2 137	73 071	1 344	2 374	36 470	303 927	590 377	898 202	14 470
31211	Soft drink & ice mfg	—	23	8	1 263	47 128	695	1 518	19 798	186 979	465 546	651 347	10 612
312111	Soft drink mfg	—	11	7	1 183	44 962	662	1 452	19 233	179 607	463 546	641 951	9 870
31212	Breweries	3	10	4	f	D	D	D	D	D	D	D	D
312120	Breweries	3	10	4	f	D	D	D	D	D	D	D	D
31213	Wineries	9	5	1	c	D	D	D	D	D	D	D	D
312130	Wineries	9	5	1	c	D	D	D	D	D	D	D	D
31214	Distilleries	—	1	1	c	D	D	D	D	D	D	D	D
312140	Distilleries	—	1	1	c	D	D	D	D	D	D	D	D
313	Textile mills	2	39	8	712	23 600	494	997	11 750	45 636	63 027	107 113	3 320
3132	Fabric mills	1	18	6	537	17 850	397	818	9 191	33 688	49 930	83 972	1 962
31321	Broadwoven fabric mills	3	8	3	303	8 849	251	543	5 830	19 702	27 902	47 764	1 071
313210	Broadwoven fabric mills	3	8	3	303	8 849	251	543	5 830	19 702	27 902	47 764	1 071
31323	Nonwoven fabric mills	—	4	1	c	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	4	1	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	6	21	2	175	5 750	97	179	2 559	11 948	13 097	23 141	1 358
31331	Textile & fabric finishing mills	9	20	1	c	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	9	18	1	c	D	D	D	D	D	D	D	D
314	Textile product mills	1	127	18	1 668	30 879	1 294	2 321	19 358	61 363	61 412	122 238	4 035
3141	Textile furnishings mills	3	47	5	699	11 221	564	1 053	8 082	18 842	23 388	42 246	739
31412	Curtain & linen mills	2	43	5	678	10 795	546	1 021	7 774	17 707	21 606	39 329	669
314121	Curtain & drapery mills	3	35	1	184	2 563	140	222	1 500	4 890	3 861	8 657	233
314129	Other household textile product mills	2	8	4	494	8 232	406	799	6 274	12 817	17 745	30 672	436
3149	Other textile product mills	1	80	13	969	19 658	730	1 268	11 276	42 521	38 024	79 992	3 296
31491	Textile bag & canvas mills	2	36	3	255	5 551	186	316	2 790	14 358	10 517	24 446	510
314912	Canvas & related product mills	2	24	2	199	4 145	139	223	2 163	11 083	8 480	19 148	351
31499	All other textile product mills	1	44	10	714	14 107	544	952	8 486	28 163	27 507	55 546	2 786
314999	All other miscellaneous textile product mills	1	41	9	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNESOTA—Con. Manufacturing—Con.												
315	Apparel mfg	1	117	26	2 442	45 691	1 992	4 029	32 497	76 767	68 575	143 317	2 336
3151	Apparel knitting mills	—	6	3	682	15 159	605	1 368	12 954	24 175	22 285	45 595	968
31519	Other apparel knitting mills	—	6	3	682	15 159	605	1 368	12 954	24 175	22 285	45 595	968
315191	Outerwear knitting mills	—	6	3	682	15 159	605	1 368	12 954	24 175	22 285	45 595	968
3152	Cut & sew apparel mfg	2	74	16	1 311	21 785	1 007	1 914	13 989	33 033	25 729	58 614	791
31521	Cut & sew apparel contractors	5	39	6	452	6 085	369	652	4 399	8 866	2 466	11 420	360
315211	Men's & boys' cut & sew apparel contractors	2	6	3	141	1 891	77	131	852	2 466	437	2 933	79
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	33	3	311	4 194	292	521	3 547	6 400	2 029	8 487	281
31522	Men's & boys' cut & sew apparel mfg	2	13	6	287	4 390	194	349	2 553	7 348	6 887	13 781	252
315228	Men's & boys' cut & sew other outerwear mfg	2	9	5	251	3 964	165	305	2 265	6 972	6 235	12 747	238
31523	Women's & girls' cut & sew apparel mfg	1	16	3	516	10 094	396	803	6 217	14 818	15 153	29 568	148
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	4	2	390	7 714	301	656	4 961	9 645	11 186	20 725	D
3159	Apparel accessories & other apparel mfg	2	37	7	449	8 747	380	747	5 554	19 559	20 561	39 108	577
31599	Apparel accessories & other apparel mfg	2	37	7	449	8 747	380	747	5 554	19 559	20 561	39 108	577
315991	Hat, cap, & millinery mfg	—	5	3	218	4 340	187	452	2 747	10 855	11 685	21 499	D
315999	Other apparel accessories & other apparel mfg	5	30	4	c	D	D	D	D	D	D	D	486
316	Leather & allied product mfg .	—	29	8	2 164	74 786	1 724	3 755	47 422	204 101	179 828	376 033	5 566
3161	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	4	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	6	4	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	6	4	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	—	5	3	g	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	19	2	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	19	2	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	11	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	363	110	15 356	500 827	12 346	24 165	360 882	1 053 736	1 442 283	2 499 139	62 828
3211	Sawmills & wood preservation	2	74	14	1 140	27 774	941	1 836	19 661	63 906	120 991	184 118	5 200
32111	Sawmills & wood preservation	2	74	14	1 140	27 774	941	1 836	19 661	63 906	120 991	184 118	5 200
321113	Sawmills	2	60	10	918	21 812	773	1 514	16 270	50 416	66 324	115 588	3 791
321114	Wood preservation ...	1	14	4	222	5 962	168	322	3 391	13 490	54 667	68 530	1 409
3212	Veneer, plywood, & engineered wood product mfg	—	41	25	2 736	86 875	2 132	4 505	62 112	178 256	256 065	432 648	24 400
32121	Veneer, plywood, & engineered wood product mfg	—	41	25	2 736	86 875	2 132	4 505	62 112	178 256	256 065	432 648	24 400
321213	Engineered wood member (except truss) mfg	—	2	2	e	D	D	D	D	D	D	D	D
321214	Truss mfg	—	20	13	1 128	30 517	798	1 609	17 283	55 398	71 855	127 347	D
321219	Reconstituted wood product mfg	—	12	9	1 266	47 148	1 062	2 275	37 812	93 552	152 088	245 151	16 633
3219	Other wood product mfg ...	—	248	71	11 480	386 178	9 273	17 824	279 109	811 574	1 065 227	1 882 373	33 228
32191	Millwork	—	84	25	8 089	314 339	6 628	13 145	231 034	650 355	858 855	1 514 799	23 459
321911	Wood window & door mfg	—	36	14	6 923	282 800	5 647	11 164	206 662	579 724	785 753	1 372 671	21 352
321912	Cut stock, resawing lumber, & planing....	—	28	6	795	22 130	679	1 432	17 981	49 344	49 112	97 673	1 411
321918	Other millwork (including flooring) ...	1	20	5	371	9 409	302	549	6 391	21 287	23 990	44 455	696
32192	Wood container & pallet mfg	3	70	21	1 173	16 807	892	1 365	11 941	36 520	47 166	83 614	2 682
321920	Wood container & pallet mfg	3	70	21	1 173	16 807	892	1 365	11 941	36 520	47 166	83 614	2 682

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	1	94	25	2 218	55 032	1 753	3 314	36 134	124 699	159 206	283 960	7 087
321991	Manufactured home (mobile home) mfg ..	—	4	4	708	17 750	609	1 130	14 289	55 156	59 314	114 743	1 972
321992	Prefabricated wood building mfg	—	18	7	539	15 797	339	643	6 958	26 733	57 715	84 799	2 702
321999	All other miscellaneous wood product mfg ...	4	72	14	971	21 485	805	1 541	14 887	42 810	42 177	84 418	2 413
322	Paper mfg	—	130	82	15 349	619 546	11 875	24 416	432 812	1 926 768	2 099 082	4 049 622	346 997
3221	Pulp, paper, & paperboard mills	—	11	10	5 554	281 422	4 442	8 968	212 856	804 622	972 531	1 788 512	267 025
32212	Paper mills	—	7	7	5 122	265 826	4 081	8 158	201 003	730 102	919 261	1 657 567	249 837
322121	Paper (except newsprint) mills	—	5	5	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	119	72	9 795	338 124	7 433	15 448	219 956	1 122 146	1 126 551	2 261 110	79 972
32221	Paperboard container mfg	—	59	43	4 570	153 869	3 418	6 759	98 116	372 139	537 324	909 363	35 515
322211	Corrugated & solid fiber box mfg	—	37	29	3 229	104 399	2 380	4 650	64 908	261 645	408 799	669 349	23 915
322212	Folding paperboard box mfg	—	15	12	1 210	46 202	931	1 914	30 903	101 058	118 731	220 850	11 205
32222	Paper bag & coated & treated paper mfg	—	25	11	2 781	109 042	2 183	4 889	78 003	615 421	423 091	1 050 014	29 101
322222	Coated & laminated paper mfg	—	18	7	2 232	90 783	1 766	3 981	64 027	568 804	330 976	908 959	22 439
322223	Plastics, foil, & coated paper bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	1	c	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	19	12	1 946	64 436	1 463	3 079	37 313	103 256	127 327	230 113	13 754
322231	Die-cut paper & paperboard office supplies mfg	—	7	4	g	D	D	D	D	D	D	D	7 377
322232	Envelope mfg	—	8	6	672	25 851	533	1 116	15 228	51 882	55 119	106 431	D
322233	Stationery, tablet, & related product mfg ..	—	4	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	16	6	498	10 777	369	721	6 524	31 330	38 809	71 620	1 602
322291	Sanitary paper product mfg	—	3	2	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	—	13	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	1 022	271	35 581	1 153 070	24 636	47 859	688 428	2 605 299	1 703 977	4 308 076	211 723
3231	Printing & related support activities.....	1	1 022	271	35 581	1 153 070	24 636	47 859	688 428	2 605 299	1 703 977	4 308 076	211 723
32311	Printing	1	902	241	32 319	1 027 248	22 412	43 175	614 448	2 329 420	1 649 973	3 977 260	194 083
323110	Commercial lithographic printing ..	1	434	141	22 493	742 967	16 085	31 374	460 631	1 550 683	1 157 927	2 711 007	143 279
323112	Commercial flexographic printing ..	2	24	12	937	33 775	592	1 136	18 461	81 535	77 460	158 899	11 660
323113	Commercial screen printing	—	108	26	2 901	72 935	1 886	3 399	39 323	205 319	107 055	308 312	13 748
323114	Quick printing	2	198	18	1 516	39 887	1 037	1 759	21 783	86 167	47 803	134 101	5 312
323115	Digital printing.....	7	12	1	127	4 005	89	180	2 342	7 983	5 606	13 547	691
323116	Manifold business form printing	—	24	15	1 884	55 633	1 070	2 033	28 627	178 742	105 129	285 953	3 550
323117	Book printing.....	2	15	10	662	23 370	472	952	13 998	48 814	42 154	90 418	3 005
323118	Blankbook, looseleaf binder, & device mfg ..	—	12	7	733	19 870	498	958	10 637	110 884	47 243	156 666	D
323119	Other commercial printing.....	3	69	10	1 013	32 823	652	1 325	17 223	53 627	54 459	107 571	3 170
32312	Support activities for printing	—	120	30	3 262	125 822	2 224	4 684	73 980	275 879	54 004	330 816	17 640
323121	Tradebinding & related work	1	47	9	696	19 033	600	1 157	13 763	33 818	7 184	41 285	1 185
323122	Prepress services	—	73	21	2 566	106 789	1 624	3 527	60 217	242 061	46 820	289 531	16 455

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg.....	-	29	12	2 083	108 260	1 490	3 403	75 375	860 032	2 592 580	3 451 225	41 184
3241	Petroleum & coal products mfg.....	-	29	12	2 083	108 260	1 490	3 403	75 375	860 032	2 592 580	3 451 225	41 184
32411	Petroleum refineries	-	2	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg.....	-	22	8	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg.....	-	16	4	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg.....	-	6	4	620	25 117	527	1 172	20 532	96 494	149 783	240 760	6 260
325	Chemical mfg.....	1	239	84	8 707	351 710	4 970	9 934	160 756	1 657 205	1 169 621	2 826 746	130 293
3251	Basic chemical mfg.....	2	33	12	539	20 594	305	650	10 182	119 259	131 550	250 796	23 416
32519	Other basic organic chemical mfg.....	2	17	10	381	14 284	221	478	7 041	86 896	112 256	198 521	D
325193	Ethyl alcohol mfg.....	1	7	4	135	4 548	90	209	3 115	26 008	68 677	94 334	2 962
325199	All other basic organic chemical mfg.....	3	10	6	246	9 736	131	269	3 926	60 888	43 579	104 187	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	4	3	115	4 413	72	152	2 422	21 559	39 113	60 831	D
32521	Resin & synthetic rubber mfg.....	-	4	3	115	4 413	72	152	2 422	21 559	39 113	60 831	D
325211	Plastics material & resin mfg.....	-	4	3	115	4 413	72	152	2 422	21 559	39 113	60 831	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg.....	2	19	2	154	5 860	111	208	3 130	28 832	50 023	83 045	10 196
32531	Fertilizer mfg.....	5	15	1	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg.....	5	14	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	1	42	17	1 892	75 318	873	1 517	24 613	517 175	195 272	712 764	20 511
32541	Pharmaceutical & medicine mfg.....	1	42	17	1 892	75 318	873	1 517	24 613	517 175	195 272	712 764	20 511
325411	Medicinal & botanical mfg.....	2	9	3	481	21 989	225	456	5 990	48 810	75 002	124 875	9 514
325412	Pharmaceutical preparation mfg.....	-	15	7	640	25 035	291	527	7 681	405 325	90 409	495 788	5 293
325413	In-vitro diagnostic substance mfg.....	2	8	4	538	21 040	223	256	7 107	46 367	21 362	67 019	4 845
325414	Biological product (except diagnostic) mfg.....	2	10	3	233	7 254	134	278	3 835	16 673	8 499	25 082	859
3255	Paint, coating, & adhesive mfg.....	2	25	9	636	25 058	274	516	7 960	72 312	94 262	169 523	D
32551	Paint & coating mfg.....	2	17	6	486	18 443	171	323	4 735	41 609	49 185	93 895	3 692
325510	Paint & coating mfg.....	2	17	6	486	18 443	171	323	4 735	41 609	49 185	93 895	3 692
32552	Adhesive mfg.....	1	8	3	150	6 615	103	193	3 225	30 703	45 077	75 628	D
325520	Adhesive mfg.....	1	8	3	150	6 615	103	193	3 225	30 703	45 077	75 628	D
3256	Soap, cleaning compound, & toilet preparation mfg.....	2	57	20	3 520	145 535	2 267	4 652	78 923	692 516	468 213	1 154 396	55 492
32561	Soap & cleaning compound mfg.....	4	42	12	1 864	84 910	1 147	2 616	45 126	370 519	284 142	655 694	41 815
325611	Soap & other detergent mfg.....	7	15	5	377	13 663	265	504	8 799	122 080	78 933	201 415	5 447
325612	Polish & other sanitation good mfg.....	6	24	6	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg.....	-	15	8	1 656	60 625	1 120	2 036	33 797	321 997	184 071	498 702	13 677
325620	Toilet preparation mfg.....	-	15	8	1 656	60 625	1 120	2 036	33 797	321 997	184 071	498 702	13 677
3259	Other chemical product mfg.....	1	59	21	1 851	74 932	1 068	2 239	33 526	205 552	191 188	395 391	12 923
32591	Printing ink mfg.....	-	13	6	460	19 728	249	543	9 071	49 164	56 356	104 363	2 819
325910	Printing ink mfg.....	-	13	6	460	19 728	249	543	9 071	49 164	56 356	104 363	2 819
32599	All other chemical product & preparation mfg.....	1	41	13	1 298	49 773	756	1 548	21 053	139 033	123 126	262 387	9 582
325991	Custom compounding of purchased resin...	-	18	3	610	25 072	356	726	10 075	59 417	78 408	138 195	6 181
325992	Photographic film, paper, plate, & chemical mfg.....	1	7	5	195	6 102	85	153	2 163	14 763	10 300	24 940	1 101
325998	All other miscellaneous chemical product & preparation mfg.....	2	16	5	493	18 599	315	669	8 815	64 853	34 418	99 252	2 300

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MINNESOTA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	406	186	20 372	618 612	14 869	29 391	360 779	1 555 113	1 302 161	2 846 002	160 472
3261	Plastics product mfg	1	358	167	18 263	555 361	13 344	26 295	321 755	1 367 510	1 200 701	2 555 120	143 956
32611	Unsupported plastics film, sheet, & bag mfg ..	—	44	23	2 675	84 566	1 950	4 276	50 525	240 776	311 087	548 817	21 497
326111	Unsupported plastics bag mfg	1	14	6	496	16 788	305	541	6 809	32 895	36 393	68 883	4 584
326112	Unsupported plastics packaging film & sheet mfg	—	5	5	601	19 397	405	953	12 220	47 232	84 547	132 646	4 219
326113	Unsupported plastics film & sheet (except packaging) mfg	—	25	12	1 578	48 381	1 240	2 782	31 496	160 649	190 147	347 288	12 694
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	24	9	757	22 142	591	1 091	14 302	72 133	80 503	151 885	5 080
326121	Unsupported plastics profile shape mfg	4	17	5	372	11 801	272	497	7 391	30 674	25 904	55 956	2 519
326122	Plastics pipe & pipe fitting mfg	—	7	4	385	10 341	319	594	6 911	41 459	54 599	95 929	2 561
32613	Laminated plastics plate, sheet, & shape mfg	2	23	4	405	11 995	257	424	5 843	29 978	16 619	45 829	8 524
326130	Laminated plastics plate, sheet, & shape mfg	2	23	4	405	11 995	257	424	5 843	29 978	16 619	45 829	8 524
32614	Polystyrene foam product mfg	6	12	6	429	13 708	310	626	7 653	36 396	43 648	79 891	2 827
326140	Polystyrene foam product mfg	6	12	6	429	13 708	310	626	7 653	36 396	43 648	79 891	2 827
32615	Urethane & other foam product (except polystyrene) mfg	2	9	5	188	5 987	148	245	3 666	12 336	21 555	34 642	906
326150	Urethane & other foam product (except polystyrene) mfg	2	9	5	188	5 987	148	245	3 666	12 336	21 555	34 642	906
32616	Plastics bottle mfg	—	4	3	119	2 802	103	183	2 361	7 664	7 679	15 441	670
326160	Plastics bottle mfg	—	4	3	119	2 802	103	183	2 361	7 664	7 679	15 441	670
32619	Other plastics product mfg	1	242	117	13 690	414 161	9 985	19 450	237 405	968 227	719 610	1 678 615	104 452
326191	Plastics plumbing fixture mfg	1	10	3	160	4 253	123	241	2 683	16 187	8 327	24 542	527
326199	All other plastics product mfg	1	232	114	13 530	409 908	9 862	19 209	234 722	952 040	711 283	1 654 073	103 925
3262	Rubber product mfg	1	48	19	2 109	63 251	1 525	3 096	39 024	187 603	101 460	290 882	16 516
32629	Other rubber product mfg	1	38	18	2 015	60 606	1 450	2 947	37 363	182 958	91 799	276 602	16 152
326291	Rubber product mfg for mechanical use	1	16	11	880	25 376	648	1 351	16 349	54 916	34 333	89 663	3 985
326299	All other rubber product mfg	1	22	7	1 135	35 230	802	1 596	21 014	128 042	57 466	186 939	12 167
327	Nonmetallic mineral product mfg	1	324	97	12 991	439 322	9 572	19 373	276 436	1 356 353	926 760	2 271 911	107 010
3271	Clay product & refractory mfg	3	28	3	c	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ..	4	24	2	c	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	2	23	2	105	1 395	85	119	978	3 254	926	4 139	D
3272	Glass & glass product mfg ..	—	30	9	2 769	88 242	2 350	5 660	70 235	235 091	204 775	438 404	22 156
32721	Glass & glass product mfg	—	30	9	2 769	88 242	2 350	5 660	70 235	235 091	204 775	438 404	22 156
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	25	7	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	221	68	4 820	170 540	3 248	6 597	97 600	372 207	339 104	710 790	36 362
32732	Ready-mix concrete mfg ..	3	116	36	2 050	67 370	1 378	2 718	42 350	180 229	184 637	366 246	16 809
327320	Ready-mix concrete mfg	3	116	36	2 050	67 370	1 378	2 718	42 350	180 229	184 637	366 246	16 809
32733	Concrete pipe, brick, & block mfg	1	47	19	1 220	44 800	944	2 012	29 157	103 918	74 077	177 397	8 377
327331	Concrete block & brick mfg	1	32	13	790	29 591	626	1 362	20 438	57 704	54 094	111 002	5 176
327332	Concrete pipe mfg	2	15	6	430	15 209	318	650	8 719	46 214	19 983	66 395	3 201
32739	Other concrete product mfg	1	54	13	1 524	57 489	905	1 834	25 491	84 271	77 553	160 472	10 693
327390	Other concrete product mfg	1	54	13	1 524	57 489	905	1 834	25 491	84 271	77 553	160 472	10 693

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg	—	44	17	5 220	176 972	3 825	6 860	106 084	742 160	378 799	1 112 014	46 613
32791	Abrasive product mfg	—	5	3	h	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	5	3	h	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	39	14	g	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	1	25	9	1 375	39 932	1 236	2 379	33 740	114 946	34 063	153 461	5 597
327993	Mineral wool mfg	—	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	86	56	7 067	256 128	5 557	11 943	173 636	553 024	574 906	1 132 379	58 507
3311	Iron & steel mills & ferroalloy mfg	—	5	3	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	5	3	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	5	3	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	8	3	f	D	D	D	D	D	D	D	1 819
33121	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	535	24 742	435	950	14 078	58 613	34 081	91 693	1 743
331210	Iron & steel pipes & tubes mfg from purchased steel	—	5	3	535	24 742	435	950	14 078	58 613	34 081	91 693	1 743
3313	Alumina & aluminum production & processing	—	3	3	525	17 528	402	794	10 707	38 949	111 374	148 933	D
33131	Alumina & aluminum production & processing	—	3	3	525	17 528	402	794	10 707	38 949	111 374	148 933	D
331314	Secondary smelting & alloying of aluminum	—	1	1	c	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	3	13	6	e	D	D	D	D	D	D	D	4 623
33141	Nonferrous metal (except aluminum) smelting & refining	—	1	1	c	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	6	11	5	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	8	3	3	129	4 076	104	216	2 698	11 571	19 206	31 064	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	3	8	2	c	D	D	D	D	D	D	D	D
3315	Foundries	—	57	41	5 101	175 161	4 000	8 637	119 203	360 669	241 571	602 770	34 435
33151	Ferrous metal foundries	—	23	19	1 717	56 240	1 407	2 893	41 121	133 443	81 540	213 941	10 787
331511	Iron foundries	—	14	12	1 220	40 273	1 001	2 100	29 488	91 118	47 820	138 676	6 632
331512	Steel investment foundries	—	2	2	c	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	7	5	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	34	22	3 384	118 921	2 593	5 744	78 082	227 226	160 031	388 829	23 648
331521	Aluminum die-casting foundries	—	6	5	612	23 822	496	1 052	17 371	57 989	40 847	98 591	6 755
331522	Nonferrous (except aluminum) die-casting foundries	—	5	5	463	16 384	368	785	10 368	30 342	24 508	55 329	D
331524	Aluminum foundries (except die-casting)	—	17	10	2 223	76 225	1 666	3 790	48 753	133 919	91 690	226 967	12 123
332	Fabricated metal product mfg	—	1 536	497	49 259	1 716 916	35 462	72 006	1 054 963	3 788 169	2 904 095	6 708 907	292 360
3321	Forging & stamping	2	95	57	8 265	282 875	6 375	13 117	180 832	529 332	452 496	985 953	44 448
33211	Forging & stamping	2	95	57	8 265	282 875	6 375	13 117	180 832	529 332	452 496	985 953	44 448
332114	Custom roll forming	—	8	5	298	14 666	137	264	3 496	23 909	26 160	49 939	186
332116	Metal stamping	2	83	51	7 875	265 006	6 156	12 720	175 262	497 318	420 947	922 830	44 077
3322	Cutlery & handtool mfg	—	45	21	2 471	85 870	1 567	3 259	42 377	194 748	197 530	385 306	19 297
33221	Cutlery & handtool mfg	—	45	21	2 471	85 870	1 567	3 259	42 377	194 748	197 530	385 306	19 297
332212	Hand & edge tool mfg	—	37	19	2 291	79 265	1 442	3 007	39 344	191 097	180 208	365 091	17 540
332214	Kitchen utensil, pot, & pan mfg	—	2	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	261	100	7 275	230 491	5 139	10 195	138 789	527 168	458 447	981 694	35 588
33231	Plate work & fabricated structural product mfg ..	1	92	27	1 692	56 426	1 172	2 231	32 852	122 673	161 281	282 810	7 252
332311	Prefabricated metal building & component mfg	1	16	3	202	6 201	149	236	3 031	13 109	16 537	29 183	552
332312	Fabricated structural metal mfg	1	52	16	996	33 935	661	1 274	18 862	83 737	117 565	201 043	4 626
332313	Plate work mfg	1	24	8	494	16 290	362	721	10 959	25 827	27 179	52 584	2 074
33232	Ornamental & architectural metal products mfg.	1	169	73	5 583	174 065	3 967	7 964	105 937	404 495	297 166	698 884	28 336
332321	Metal window & door mfg	—	25	14	1 173	31 531	746	1 431	15 142	77 408	77 442	152 921	2 661
332322	Sheet metal work mfg.	—	107	51	3 840	126 846	2 823	5 738	81 571	289 369	188 257	476 611	22 389
332323	Ornamental & architectural metal work mfg	3	37	8	570	15 688	398	795	9 224	37 718	31 467	69 352	3 286
3324	Boiler, tank, & shipping container mfg	—	40	23	3 156	120 904	2 470	5 469	91 208	280 629	519 649	781 800	15 373
33241	Power boiler & heat exchanger mfg	—	14	7	634	24 405	417	859	14 464	61 118	67 655	133 408	1 814
332410	Power boiler & heat exchanger mfg	—	14	7	634	24 405	417	859	14 464	61 118	67 655	133 408	1 814
33242	Metal tank (heavy gauge) mfg	—	14	7	1 442	49 056	1 142	2 617	36 610	83 240	129 609	214 841	10 173
332420	Metal tank (heavy gauge) mfg	—	14	7	1 442	49 056	1 142	2 617	36 610	83 240	129 609	214 841	10 173
33243	Metal can, box, & other metal container (light gauge) mfg	—	12	9	1 080	47 443	911	1 993	40 134	136 271	322 385	433 551	3 386
332431	Metal can mfg.	—	8	7	f	D	D	D	D	D	D	D	3 167
332439	Other metal container mfg	3	4	2	c	D	D	D	D	D	D	D	219
3325	Hardware mfg.	—	17	5	1 083	36 134	793	1 520	20 102	94 308	46 404	140 005	4 725
33251	Hardware mfg.	—	17	5	1 083	36 134	793	1 520	20 102	94 308	46 404	140 005	4 725
332510	Hardware mfg.	—	17	5	1 083	36 134	793	1 520	20 102	94 308	46 404	140 005	4 725
3326	Spring & wire product mfg .	—	42	16	1 313	36 688	954	1 898	23 193	82 760	67 848	148 975	11 567
33261	Spring & wire product mfg	—	42	16	1 313	36 688	954	1 898	23 193	82 760	67 848	148 975	11 567
332612	Spring (light gauge) mfg	—	6	2	114	3 635	87	189	2 582	7 055	3 674	10 547	D
332618	Other fabricated wire product mfg	—	33	13	1 144	31 600	821	1 624	19 469	72 146	60 074	130 781	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.	1	714	167	12 745	453 956	9 942	20 465	310 908	958 950	466 877	1 424 111	100 832
33271	Machine shops	1	610	113	8 966	313 103	6 894	13 695	210 986	672 663	319 758	995 605	70 601
332710	Machine shops	1	610	113	8 966	313 103	6 894	13 695	210 986	672 663	319 758	995 605	70 601
33272	Turned product & screw, nut, & bolt mfg	—	104	54	3 779	140 853	3 048	6 770	99 922	286 287	147 119	428 506	30 231
332721	Precision turned product mfg	—	95	50	3 457	128 428	2 786	6 223	90 928	259 526	136 126	390 753	29 326
332722	Bolt, nut, screw, rivet, & washer mfg	—	9	4	322	12 425	262	547	8 994	26 761	10 993	37 753	905
3328	Coating, engraving, heat treating, & allied activities.	2	173	64	4 524	130 030	3 523	6 972	83 659	264 116	132 209	396 367	25 368
33281	Coating, engraving, heat treating, & allied activities	2	173	64	4 524	130 030	3 523	6 972	83 659	264 116	132 209	396 367	25 368
332811	Metal heat treating	—	12	8	395	14 303	320	637	9 453	32 050	13 962	45 988	6 494
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	77	30	1 912	51 666	1 473	2 856	33 736	111 465	50 749	161 716	9 103
332813	Electroplating, plating, polishing, anodizing, & coloring	4	84	26	2 217	64 061	1 730	3 479	40 470	120 601	67 498	188 663	9 771
3329	Other fabricated metal product mfg	—	149	44	8 427	339 968	4 699	9 111	163 895	856 158	562 635	1 464 696	35 162
33291	Metal valve mfg	—	31	18	2 855	107 027	1 745	3 652	59 453	282 523	150 650	438 738	10 983
332911	Industrial valve mfg ...	—	10	8	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	19	10	1 443	53 798	951	2 159	32 829	158 670	70 122	230 789	6 807

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNESOTA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg—Con.												
33299	All other fabricated metal product mfg.....	-	118	26	5 572	232 941	2 954	5 459	104 442	573 635	411 985	1 025 958	24 179
332992	Small arms ammunition mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	-	13	4	315	10 805	243	504	6 792	23 076	19 495	42 536	1 523
332997	Industrial pattern mfg.....	-	17	2	159	6 752	128	245	4 888	12 754	2 857	15 470	1 138
332999	All other miscellaneous fabricated metal product mfg.....	1	78	17	952	28 923	684	1 245	17 403	75 187	39 333	117 708	3 547
333	Machinery mfg.....	-	904	323	39 285	1 444 057	24 665	49 047	741 432	3 796 346	3 582 092	7 387 437	238 244
3331	Agriculture, construction, & mining machinery mfg.....	-	119	52	7 303	214 004	5 394	10 150	140 453	696 073	1 112 269	1 828 076	55 290
33311	Agricultural implement mfg.....	-	82	32	4 430	119 068	3 456	6 039	83 697	431 336	578 957	1 005 036	33 928
333111	Farm machinery & equipment mfg.....	1	74	29	h	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	31	19	2 815	93 095	1 902	4 049	55 819	260 423	524 439	808 178	21 303
333120	Construction machinery mfg.....	-	31	19	2 815	93 095	1 902	4 049	55 819	260 423	524 439	808 178	21 303
3332	Industrial machinery mfg ..	-	117	43	4 346	174 097	2 232	4 352	64 207	464 653	372 401	823 790	15 258
33321	Sawmill & woodworking machinery mfg.....	-	11	5	685	24 348	395	679	9 644	52 153	39 543	88 739	1 744
333210	Sawmill & woodworking machinery mfg.....	-	11	5	685	24 348	395	679	9 644	52 153	39 543	88 739	1 744
33322	Plastics & rubber industry machinery mfg.....	1	7	1	182	8 138	120	231	3 918	15 973	10 037	27 405	769
333220	Plastics & rubber industry machinery mfg.....	1	7	1	182	8 138	120	231	3 918	15 973	10 037	27 405	769
33329	Other industrial machinery mfg.....	-	99	37	3 479	141 611	1 717	3 442	50 645	396 527	322 821	707 646	12 745
333293	Printing machinery & equipment mfg.....	1	17	5	387	14 837	142	284	4 267	29 305	17 370	45 372	642
333294	Food product machinery mfg.....	-	24	15	936	35 942	557	1 147	17 726	72 645	60 895	131 924	2 765
333295	Semiconductor machinery mfg.....	-	6	5	1 207	59 276	423	892	13 442	219 027	192 336	405 736	D
333298	All other industrial machinery mfg.....	3	46	9	848	27 642	543	1 029	13 684	62 770	43 325	103 174	4 158
3333	Commercial & service industry machinery mfg ..	-	84	36	4 304	171 951	2 465	4 918	74 168	505 718	377 409	881 733	26 045
33331	Commercial & service industry machinery mfg.....	-	84	36	4 304	171 951	2 465	4 918	74 168	505 718	377 409	881 733	26 045
333311	Automatic vending machine mfg.....	-	8	3	467	16 501	348	720	8 876	46 366	25 712	72 250	1 420
333313	Office machinery mfg ..	1	6	3	352	14 873	128	218	3 985	39 993	32 482	72 554	719
333314	Optical instrument & lens mfg.....	4	11	7	335	16 499	175	350	6 905	30 351	17 393	49 885	2 483
333315	Photographic & photocopying equipment mfg.....	-	12	5	e	D	D	D	D	D	D	D	573
333319	Other commercial & service industry machinery mfg.....	-	46	18	2 810	112 025	1 662	3 348	50 143	364 341	285 069	645 624	20 850
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	63	25	4 798	180 430	2 750	5 414	81 782	429 655	469 941	902 354	21 673
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	63	25	4 798	180 430	2 750	5 414	81 782	429 655	469 941	902 354	21 673
333411	Air purification equipment mfg.....	3	11	2	139	4 459	67	112	1 444	9 154	6 161	15 498	399
333412	Industrial & commercial fan & blower mfg.....	2	7	4	392	12 401	255	444	6 337	24 367	23 048	46 598	816
333414	Heating equipment (except warm air furnaces) mfg.....	1	27	7	1 057	35 549	646	1 523	18 605	87 222	64 596	153 711	6 331
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	18	12	3 210	128 021	1 782	3 335	55 396	308 912	376 136	686 547	14 127

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	1	282	75	6 159	244 729	4 495	9 033	159 723	490 719	219 927	713 067	44 454
33351	Metalworking machinery mfg	1	282	75	6 159	244 729	4 495	9 033	159 723	490 719	219 927	713 067	44 454
333512	Industrial mold mfg ...	—	111	28	1 565	67 813	1 257	2 585	49 851	115 175	38 701	156 547	15 033
333513	Machine tool (metal cutting types) mfg ...	1	9	6	753	28 418	515	984	17 481	51 446	51 140	109 293	2 761
333514	Machine tool (metal forming types) mfg ...	—	3	3	c	D	D	D	D	D	D	D	D
333515	Special die & tool, die set, jig, & fixture mfg .	1	111	25	2 607	104 409	1 829	3 768	65 324	238 631	72 871	308 410	20 646
333518	Cutting tool & machine tool accessory mfg ..	2	38	6	814	27 520	626	1 135	17 331	53 536	29 458	82 683	4 780
3336	Other metalworking machinery mfg	2	9	7	288	12 489	168	362	6 989	23 967	20 325	41 215	D
33361	Engine, turbine, & power transmission equipment mfg	2	20	8	824	30 474	569	1 209	18 549	71 683	49 339	119 926	7 762
333612	Engine, turbine, & power transmission equipment mfg	2	20	8	824	30 474	569	1 209	18 549	71 683	49 339	119 926	7 762
333613	Speed changer, industrial high-speed drive, & gear mfg	—	9	4	513	19 685	380	836	12 882	43 683	31 507	74 253	5 730
3339	Mechanical power transmission equipment mfg	7	5	3	209	7 441	119	242	3 494	19 909	11 522	31 305	1 447
33391	Other general-purpose machinery mfg	1	219	84	11 551	428 372	6 760	13 971	202 550	1 137 845	980 806	2 118 491	67 762
333911	Pump & compressor mfg	—	23	9	2 323	98 377	1 301	2 908	44 655	361 073	384 685	739 885	21 621
333912	Pump & pumping equipment mfg	—	10	4	1 492	69 830	865	2 017	33 300	252 556	225 351	473 720	14 315
33392	Air & gas compressor mfg	1	11	4	f	D	D	D	D	D	D	D	D
333921	Material handling equipment mfg	1	73	29	2 639	83 518	1 509	2 959	38 659	160 258	156 284	319 310	8 141
333922	Elevator & moving stairway mfg	5	6	2	237	8 765	150	353	4 904	13 016	15 123	28 585	745
333923	Conveyor & conveying equipment mfg	1	29	13	771	24 608	459	890	10 976	51 410	44 784	95 625	2 517
333924	Overhead traveling crane, hoist, & monorail system mfg .	1	18	5	594	16 836	321	638	7 915	40 076	36 657	78 257	1 463
33399	Industrial truck, tractor, trailer, & stacker machinery mfg	1	20	9	1 037	33 309	579	1 078	14 864	55 756	59 720	116 843	3 416
333991	All other general-purpose machinery mfg	1	123	46	6 589	246 477	3 950	8 104	119 236	616 514	439 837	1 059 296	38 000
333992	Power-driven handtool mfg	4	7	1	c	D	D	D	D	D	D	D	664
333993	Welding & soldering equipment mfg	—	5	1	225	11 981	202	484	5 803	57 441	38 234	91 871	D
333994	Packaging machinery mfg	—	29	14	2 049	77 349	1 258	2 621	40 430	145 614	124 914	276 938	9 213
333995	Industrial process furnace & oven mfg ..	5	9	6	672	27 440	352	742	12 192	80 477	38 191	120 339	1 927
333996	Fluid power cylinder & actuator mfg	—	9	5	833	32 138	512	1 140	15 388	68 628	53 203	122 780	2 998
333997	Fluid power pump & motor mfg	—	5	2	309	10 936	204	441	5 833	40 030	26 047	64 392	761
333999	Scale & balance (except laboratory) mfg	—	4	3	f	D	D	D	D	D	D	D	D
334	All other miscellaneous general-purpose machinery mfg	—	55	14	1 860	65 670	1 038	2 044	30 330	177 130	119 571	296 782	16 449
3341	Computer & electronic product mfg	—	473	244	60 752	2 467 296	32 142	65 502	890 383	6 130 917	4 904 121	10 951 792	790 622
33411	Computer & peripheral equipment mfg	—	64	28	17 323	821 843	7 451	17 131	206 749	1 483 434	2 195 645	3 621 237	411 681
334111	Computer & peripheral equipment mfg	—	64	28	17 323	821 843	7 451	17 131	206 749	1 483 434	2 195 645	3 621 237	411 681
334112	Electronic computer mfg	1	16	5	g	D	D	D	D	D	D	D	D
334119	Computer storage device mfg	—	13	9	8 426	314 008	5 361	11 716	144 004	533 797	488 095	1 017 640	302 757
3342	Other computer peripheral equipment mfg	—	32	13	7 340	425 404	1 837	4 110	53 120	943 440	1 602 839	2 462 090	92 843
33421	Communications equipment mfg	—	46	25	5 443	212 730	2 617	4 772	63 340	776 730	426 979	1 214 789	29 448
334210	Telephone apparatus mfg	—	17	10	2 227	101 196	851	1 584	19 141	338 144	134 815	474 074	17 635
334210	Telephone apparatus mfg	—	17	10	2 227	101 196	851	1 584	19 141	338 144	134 815	474 074	17 635

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	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg—Con.												
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	16	9	1 926	63 824	1 072	1 899	25 194	289 098	203 615	505 933	6 790
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	16	9	1 926	63 824	1 072	1 899	25 194	289 098	203 615	505 933	6 790
33429	Other communications equipment mfg	-	13	6	1 290	47 710	694	1 289	19 005	149 488	88 549	234 782	5 023
334290	Other communications equipment mfg	-	13	6	1 290	47 710	694	1 289	19 005	149 488	88 549	234 782	5 023
3343	Audio & video equipment mfg	-	11	4	191	4 955	134	262	2 326	10 429	8 144	18 615	362
33431	Audio & video equipment mfg	-	11	4	191	4 955	134	262	2 326	10 429	8 144	18 615	362
334310	Audio & video equipment mfg	-	11	4	191	4 955	134	262	2 326	10 429	8 144	18 615	362
3344	Semiconductor & other electronic component mfg	-	170	98	17 047	528 137	11 212	21 493	267 761	1 263 337	1 077 553	2 315 483	209 495
33441	Semiconductor & other electronic component mfg	-	170	98	17 047	528 137	11 212	21 493	267 761	1 263 337	1 077 553	2 315 483	209 495
334412	Bare printed circuit board mfg	1	63	37	6 099	172 475	4 738	8 985	108 830	351 976	253 643	601 787	53 415
334413	Semiconductor & related device mfg	-	15	10	2 036	91 484	1 085	2 438	42 681	264 744	118 073	372 096	106 089
334415	Electronic resistor mfg	-	3	3	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	6	11	5	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	10	7	451	15 025	307	586	7 388	34 729	14 383	48 806	1 824
334418	Printed circuit assembly (electronic assembly) mfg	-	21	18	4 175	130 516	2 296	4 188	44 132	345 385	477 693	812 213	26 731
334419	Other electronic component mfg	-	45	18	3 621	98 662	2 336	4 473	54 813	228 942	197 286	426 087	18 283
3345	Navigational, measuring, medical, & control instruments mfg	-	158	77	19 756	867 862	10 035	20 530	330 958	2 519 683	1 147 009	3 655 190	125 139
33451	Navigational, measuring, medical, & control instruments mfg	-	158	77	19 756	867 862	10 035	20 530	330 958	2 519 683	1 147 009	3 655 190	125 139
334510	Electromedical & electrotherapeutic apparatus mfg	-	44	27	7 839	339 365	3 972	8 363	105 643	1 344 152	428 325	1 759 960	30 961
334511	Search, detection, navigation, & guidance instrument mfg	-	9	4	2 700	128 309	1 241	2 348	49 108	210 448	106 280	316 235	22 000
334512	Automatic environmental control mfg	-	9	3	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	35	14	2 931	120 849	1 137	2 544	41 318	201 679	188 654	389 344	24 763
334514	Totalizing fluid meter & counting device mfg	-	4	3	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	17	8	612	26 471	310	619	8 108	64 127	22 956	84 302	3 441
334516	Analytical laboratory instrument mfg	-	11	5	845	40 430	384	723	15 098	115 511	44 057	158 506	4 541
334518	Watch, clock, & part mfg	3	3	2	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	25	11	1 999	96 546	1 192	2 310	49 920	243 084	130 332	372 374	13 495
3346	Mfg & reproducing magnetic & optical media	3	24	12	992	31 769	693	1 314	19 249	77 304	48 791	126 478	14 497
33461	Mfg & reproducing magnetic & optical media	3	24	12	992	31 769	693	1 314	19 249	77 304	48 791	126 478	14 497
334611	Software reproducing	9	8	2	201	8 809	164	345	6 053	26 648	13 922	40 707	4 789
334612	Pre-recorded CD (except software), tape, & record reproducing	-	9	5	390	10 371	262	487	6 329	32 305	17 993	50 439	4 596
334613	Magnetic & optical recording media mfg	-	7	5	401	12 589	267	482	6 867	18 351	16 876	35 332	5 112

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNESOTA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	154	73	11 374	405 035	7 310	14 095	221 255	879 405	986 712	1 880 431	62 916
3351	Electric lighting equipment mfg	-	13	6	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	13	6	f	D	D	D	D	D	D	D	D
335129	Commercial/industrial/institutional electric lighting fixture mfg ...	1	7	3	178	4 867	110	235	2 372	12 363	4 101	16 138	551
3352	Other lighting equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
33522	Household appliance mfg...	-	5	3	g	D	D	D	D	D	D	D	D
335222	Major appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Household refrigerator & home freezer mfg...	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	91	40	6 001	220 690	3 332	6 003	104 107	357 710	575 146	952 753	30 618
335311	Electrical equipment mfg	-	91	40	6 001	220 690	3 332	6 003	104 107	357 710	575 146	952 753	30 618
335312	Power, distribution, & specialty transformer mfg	4	9	3	105	2 655	75	136	1 556	5 535	3 405	8 872	230
335313	Motor & generator mfg	-	24	13	2 751	124 229	1 653	2 839	61 975	130 934	370 846	497 614	9 777
335314	Switchgear & switchboard apparatus mfg	3	15	5	459	15 946	347	713	10 405	47 552	35 730	84 130	1 894
3359	Relay & industrial control mfg	-	43	19	2 686	77 860	1 257	2 315	30 171	173 689	165 165	362 137	18 717
33592	Other electrical equipment & component mfg	1	45	24	3 100	120 545	2 131	4 477	70 435	390 413	209 786	595 211	19 036
335929	Communication & energy wire & cable mfg	-	4	3	c	D	D	D	D	D	D	D	D
33593	Other communication & energy wire mfg ...	-	3	2	156	2 217	128	255	1 946	12 342	6 595	18 946	163
335931	Wiring device mfg	-	11	5	g	D	D	D	D	D	D	D	D
335932	Current-carrying wiring device mfg	-	8	3	240	5 763	174	266	2 142	17 129	17 174	35 203	D
33599	Noncurrent-carrying wiring device mfg	-	3	2	g	D	D	D	D	D	D	D	D
335999	All other electrical equipment & component mfg	4	27	14	966	28 687	690	1 409	15 399	62 982	65 814	128 193	D
336	All other miscellaneous electrical equipment & component mfg	4	26	14	f	D	D	D	D	D	D	D	D
3361	Transportation equipment mfg	-	203	77	14 629	439 197	11 274	20 948	301 641	2 296 327	2 781 599	5 012 254	117 476
33611	Motor vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D
336112	Automobile & light duty motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
3362	Light truck & utility vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	45	16	1 512	39 559	1 126	2 136	23 432	85 316	120 193	204 624	3 734
336211	Motor vehicle body & trailer mfg	-	45	16	1 512	39 559	1 126	2 136	23 432	85 316	120 193	204 624	3 734
336212	Motor vehicle body mfg	-	19	7	567	15 183	410	798	9 301	36 237	50 424	86 612	1 342
336214	Truck trailer mfg	-	7	3	468	13 604	356	608	7 046	34 112	40 722	74 414	D
3363	Travel trailer & camper mfg	1	17	5	e	D	D	D	D	D	D	D	1 598
33631	Motor vehicle parts mfg ...	1	76	26	3 969	114 762	2 980	5 856	71 891	345 198	276 605	610 045	21 692
336311	Motor vehicle gasoline engine & engine parts mfg	-	24	4	932	30 762	750	1 588	22 684	90 089	64 272	151 607	5 070
336312	Carburetor, piston, piston ring, & valve mfg	-	5	2	f	D	D	D	D	D	D	D	D
33632	Gasoline engine & engine parts mfg	-	19	2	e	D	D	D	D	D	D	D	D
336322	Motor vehicle electrical & electronic equipment mfg	2	17	8	1 276	32 267	968	1 476	17 825	65 038	69 085	132 411	4 739
33634	Other motor vehicle electrical & electronic equipment mfg	2	16	8	g	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	3 042
	Motor vehicle transmission & power train parts mfg	-	3	2	e	D	D	D	D	D	D	D	3 042

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33637	Motor vehicle metal stamping	-	4	2	c	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	4	2	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	20	9		21 439	725	1 570	13 640	95 946	54 595	150 075	6 229
336399	All other motor vehicle parts mfg	1	20	9		21 439	725	1 570	13 640	95 946	54 595	150 075	6 229
3364	Aerospace product & parts mfg	1	18	8	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	1	18	8	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	3	2	2	c	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	15	6	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	1	4	3	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	1	4	3	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	1	4	3	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	20	13	2 119	55 656	1 772	3 325	39 848	121 881	173 536	294 454	4 599
33661	Ship & boat building	-	20	13	2 119	55 656	1 772	3 325	39 848	121 881	173 536	294 454	4 599
336612	Boat building	-	18	13	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	36	10	3 936	78 471	2 854	4 459	48 095	519 204	861 962	1 336 633	15 440
33699	Other transportation equipment mfg	-	36	10	3 936	78 471	2 854	4 459	48 095	519 204	861 962	1 336 633	15 440
336991	Motorcycle, bicycle, & parts mfg	5	11	3	e	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	24	7	3 667	72 085	2 671	4 114	44 288	507 559	850 991	1 314 166	14 605
337	Furniture & related product mfg	1	514	105	11 619	323 667	8 811	16 923	208 685	686 979	593 351	1 280 827	43 767
3371	Household & institutional furniture & kitchen cabinet mfg	1	360	48	6 489	164 250	5 110	9 463	111 393	378 103	267 514	644 206	16 147
33711	Wood kitchen cabinet & counter top mfg	1	241	24	3 829	90 038	3 134	5 912	67 527	222 382	162 350	384 500	6 946
337110	Wood kitchen cabinet & counter top mfg	1	241	24	3 829	90 038	3 134	5 912	67 527	222 382	162 350	384 500	6 946
33712	Household & institutional furniture mfg	1	119	24	2 660	74 212	1 976	3 551	43 866	155 721	105 164	259 706	9 201
337121	Upholstered household furniture mfg	5	21	4	210	3 367	184	285	2 598	5 961	6 662	12 605	D
337122	Nonupholstered wood household furniture mfg	6	69	6	451	7 571	395	580	5 750	14 012	12 386	26 447	675
337124	Metal household furniture mfg	-	5	2	429	11 954	333	707	7 253	29 478	16 443	45 701	807
337127	Institutional furniture mfg	-	20	12	1 547	50 778	1 051	1 950	27 961	105 286	68 251	172 538	7 167
3372	Office furniture (including fixtures) mfg	1	132	51	4 236	135 566	3 001	6 082	81 915	270 629	215 068	486 892	12 460
33721	Office furniture (including fixtures) mfg	1	132	51	4 236	135 566	3 001	6 082	81 915	270 629	215 068	486 892	12 460
337211	Wood office furniture mfg	3	24	9	721	18 616	543	1 186	12 105	36 761	37 745	74 363	1 890
337212	Custom architectural woodwork & millwork mfg	1	35	15	827	25 301	602	1 295	16 296	46 063	35 803	81 951	2 060
337214	Office furniture (except wood) mfg	-	10	6	411	12 980	257	573	6 542	30 639	28 723	59 536	1 279
337215	Showcase, partition, shelving, & locker mfg	-	63	21	2 277	78 669	1 599	3 028	46 972	157 166	112 797	271 042	7 231
3379	Other furniture related product mfg	1	22	6	894	23 851	700	1 378	15 377	38 247	110 769	149 729	15 160
33791	Mattress mfg	2	17	4	f	D	D	D	D	D	D	D	D
337910	Mattress mfg	2	17	4	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	5	2	c	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	5	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNESOTA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	700	174	24 941	815 689	15 435	29 753	367 750	2 010 574	1 164 341	3 184 631	117 733
3391	Medical equipment & supplies mfg.....	1	313	98	15 472	571 725	9 125	17 851	233 085	1 368 273	582 677	1 955 431	82 700
33911	Medical equipment & supplies mfg.....	1	313	98	15 472	571 725	9 125	17 851	233 085	1 368 273	582 677	1 955 431	82 700
339111	Laboratory apparatus & furniture mfg.....	—	8	4	445	17 863	292	684	8 453	52 129	27 641	79 361	282
339112	Surgical & medical instrument mfg.....	1	79	32	9 039	381 812	4 727	9 754	138 236	879 264	340 838	1 227 556	56 190
339113	Surgical appliance & supplies mfg.....	1	61	29	2 771	88 463	1 827	3 414	37 702	258 454	114 317	374 913	14 848
339114	Dental equipment & supplies mfg.....	2	16	2	250	10 575	94	200	2 752	20 165	12 634	31 359	132
339115	Ophthalmic goods mfg.....	—	16	12	1 607	39 192	1 185	2 157	24 106	95 091	66 676	157 697	9 081
339116	Dental laboratories ...	3	133	19	1 360	33 820	1 000	1 642	21 836	63 170	20 571	84 545	2 167
3399	Other miscellaneous mfg ..	1	387	76	9 469	243 964	6 310	11 902	134 665	642 301	581 664	1 229 200	35 033
33991	Jewelry & silverware mfg.....	6	34	4	477	11 296	287	550	5 866	25 870	27 931	52 689	622
339911	Jewelry (except costume) mfg.....	6	21	3	394	9 863	232	481	5 097	23 018	25 645	47 554	517
33992	Sporting & athletic goods mfg.....	1	70	17	2 265	63 544	1 701	3 590	39 989	217 814	317 863	543 826	12 643
339920	Sporting & athletic goods mfg.....	1	70	17	2 265	63 544	1 701	3 590	39 989	217 814	317 863	543 826	12 643
33993	Doll, toy, & game mfg ...	1	27	4	407	10 816	228	360	3 332	37 487	10 935	48 081	2 152
339931	Doll & stuffed toy mfg .	—	8	1	183	3 002	105	194	1 879	6 828	3 599	10 430	236
339932	Game, toy, & children's vehicle mfg.....	1	19	3	224	7 814	123	166	1 453	30 659	7 336	37 651	1 916
33995	Sign mfg.....	—	128	28	2 710	77 629	1 903	3 728	40 623	157 126	111 376	267 487	8 457
339950	Sign mfg.....	—	128	28	2 710	77 629	1 903	3 728	40 623	157 126	111 376	267 487	8 457
33999	All other miscellaneous mfg.....	1	113	23	3 539	79 268	2 140	3 597	43 847	200 219	111 780	311 552	11 026
339991	Gasket, packing, & sealing device mfg...	—	20	10	1 393	41 895	912	1 869	25 173	94 625	46 882	142 196	5 345
339994	Broom, brush, & mop mfg.....	—	4	3	266	7 580	183	444	3 988	18 086	14 818	32 764	610
339999	All other miscellaneous mfg.....	1	61	9	1 783	27 459	975	1 132	12 902	81 946	45 459	126 392	4 755

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DULUTH-SUPERIOR, MN-WI MSA												
	Manufacturing	1	284	71	6 989	201 235	5 067	9 658	127 852	590 225	778 230	1 379 544	152 109
	Duluth-Superior, MN-WI MSA (MN Part)	1	228	57	5 446	155 830	3 851	7 377	95 958	462 154	413 036	879 373	142 396
	Duluth-Superior, MN-WI MSA (WI Part)	-	56	14	1 543	45 405	1 216	2 281	31 894	128 071	365 194	500 171	9 713
311	Food mfg	1	27	7	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	1	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	1	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	25	7	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	5	3	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	3	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	2	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	30	4	298	8 151	217	428	5 221	14 835	10 156	24 992	4 524
3231	Printing & related support activities	2	30	4	298	8 151	217	428	5 221	14 835	10 156	24 992	4 524
32311	Printing	2	28	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	11	6	274	10 414	152	317	5 681	40 389	36 070	76 320	2 612
326	Plastics & rubber products mfg	2	13	3	275	6 862	216	425	4 777	24 603	10 872	36 537	D
327	Nonmetallic mineral product mfg	4	19	5	263	8 233	205	391	6 083	25 394	19 558	45 421	D
331	Primary metal mfg	-	7	4	411	14 251	327	691	10 397	42 849	53 500	97 862	D
3315	Foundries	-	5	3	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	46	11	1 029	32 051	781	1 567	20 143	62 133	69 291	131 729	4 557
3329	Other fabricated metal product mfg	-	6	2	338	10 922	268	489	7 378	22 052	36 214	58 507	1 253
33299	All other fabricated metal product mfg	-	5	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	24	7	687	25 527	468	1 050	15 094	50 862	51 450	102 300	3 056
3331	Agriculture, construction, & mining machinery mfg	-	5	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	3	631	11 049	418	798	4 835	27 337	47 927	74 640	1 471
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	27	1	312	5 387	227	268	3 244	19 048	13 087	32 342	1 529
3399	Other miscellaneous mfg ..	1	15	1	279	4 440	203	238	2 825	16 392	12 075	28 640	1 445
31-33	FARGO-MOORHEAD, ND-MN MSA												
	Manufacturing	1	221	79	7 982	209 204	5 946	11 567	133 915	683 376	1 057 204	1 741 578	57 137
	Fargo-Moorhead, ND-MN MSA (MN Part)	-	38	11	1 225	35 699	999	2 021	27 458	57 541	174 280	229 403	10 969
	Fargo-Moorhead, ND-MN MSA (ND Part)	1	183	68	6 757	173 505	4 947	9 546	106 457	625 835	882 924	1 512 175	46 168

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FARGO-MOORHEAD, ND-MN MSA—Con. Manufacturing—Con.												
311	Food mfg	2	28	16	1 656	45 863	1 235	2 632	31 845	125 340	474 746	602 618	16 727
3113	Sugar & confectionery product mfg	—	2	1	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	—	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	—	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	7	6	5	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	7	6	5	e	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	3	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	8	3	343	8 435	168	347	3 733	23 008	12 367	35 379	1 329
31181	Bread & bakery product mfg	—	4	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	11	3	312	6 486	268	460	5 059	16 843	28 061	45 767	1 694
323	Printing & related support activities	3	30	7	466	11 380	362	650	7 888	26 486	13 746	40 151	1 838
3231	Printing & related support activities	3	30	7	466	11 380	362	650	7 888	26 486	13 746	40 151	1 838
32311	Printing	3	28	7	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	3	14	5	342	8 683	265	483	6 130	22 067	10 548	32 531	1 398
326	Plastics & rubber products mfg	—	15	8	654	14 257	469	912	8 720	37 053	45 478	81 319	8 967
3261	Plastics product mfg	—	13	7	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	3	2	e	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	9	5	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	8	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	5	11	4	e	D	D	D	D	D	D	D	1 268
3273	Cement & concrete product mfg	5	9	4	e	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, & block mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	29	9	674	17 723	505	895	10 737	47 382	51 087	98 101	2 251
3323	Architectural & structural metals mfg	1	12	6	478	12 228	366	655	7 481	23 320	40 482	63 656	D
33231	Plate work & fabricated structural product mfg	1	8	5	378	9 283	284	497	5 511	20 638	30 986	51 615	D
332312	Fabricated structural metal mfg	1	7	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	28	15	g	D	D	D	D	D	D	D	16 254
3331	Agriculture, construction, & mining machinery mfg	—	15	12	1 705	49 039	1 264	2 558	32 288	316 535	332 624	648 416	D
33311	Agricultural implement mfg	—	11	8	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	10	8	g	D	D	D	D	D	D	D	14 222
33312	Construction machinery mfg	2	3	3	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	2	3	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	2	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	12	5	797	16 368	666	1 173	10 486	28 857	33 265	62 397	2 271
3363	Motor vehicle parts mfg	2	5	3	559	9 632	503	864	6 413	15 253	14 807	30 071	D
33632	Motor vehicle electrical & electronic equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FARGO—MOORHEAD, ND—MN MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	18	4	299	6 224	220	381	3 921	12 628	11 481	24 134	672
3371	Household & institutional furniture & kitchen cabinet mfg	1	16	4	e	D	D	D	D	D	D	D	D
31-33	GRAND FORKS, ND—MN MSA												
	Manufacturing	-	92	25	3 087	75 293	2 494	4 626	54 934	275 369	277 675	551 735	17 554
	Grand Forks, ND—MN MSA (MN Part)	-	40	12	1 350	36 299	1 107	2 064	26 606	130 024	168 604	300 278	4 252
	Grand Forks, ND—MN MSA (ND Part)	-	52	13	1 737	38 994	1 387	2 562	28 328	145 345	109 071	251 457	13 302
311	Food mfg	-	14	7	1 358	36 757	1 173	2 391	28 577	191 323	183 174	373 941	11 351
3113	Sugar & confectionery product mfg	-	2	1	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	11	4	e	D	D	D	D	D	D	D	556
337	Furniture & related product mfg	-	6	3	258	5 180	217	438	4 343	9 576	9 878	19 802	D
31-33	LA CROSSE, WI—MN MSA												
	Manufacturing	-	184	62	10 668	324 155	7 568	15 121	189 153	528 541	900 097	1 432 797	52 876
	La Crosse, WI—MN MSA (MN Part)	-	23	6	497	10 459	338	693	6 452	28 870	21 356	50 147	3 062
	La Crosse, WI—MN MSA (WI Part)	-	161	56	10 171	313 696	7 230	14 428	182 701	499 671	878 741	1 382 650	49 814
311	Food mfg	-	13	4	354	8 735	283	537	6 282	32 499	119 048	150 169	6 372
312	Beverage & tobacco product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	6	943	19 317	711	1 272	11 471	39 253	56 259	95 663	2 385
3211	Sawmills & wood preservation	-	3	1	e	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	3	1	e	D	D	D	D	D	D	D	D
321113	Sawmills	-	3	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	9	4	412	9 830	324	733	6 354	21 603	25 998	45 458	1 405
32191	Millwork	-	3	3	299	7 717	266	605	5 163	17 118	21 598	36 749	D
323	Printing & related support activities	-	30	11	1 221	31 789	950	1 842	21 783	60 135	43 079	103 896	5 783
3231	Printing & related support activities	-	30	11	1 221	31 789	950	1 842	21 783	60 135	43 079	103 896	5 783
32311	Printing	-	25	11	1 189	30 995	926	1 801	21 207	58 401	42 676	101 762	5 673
323113	Commercial screen printing	-	9	6	764	18 507	584	1 155	12 406	33 561	17 451	50 748	2 725

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LA CROSSE, WI-MN MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	25	12	1 449	41 622	1 198	2 541	30 295	109 480	106 122	215 002	7 006
3324	Boiler, tank, & shipping container mfg	-	3	2	e	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	3	2	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	3	2	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	20	8	3 076	121 241	1 591	3 154	48 904	42 587	308 309	355 519	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refrig equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	9	4	685	14 262	568	1 220	11 610	42 504	38 186	79 877	D
3363	Motor vehicle parts mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D
	MINNEAPOLIS-ST. PAUL, MN-WI MSA												
31-33	Manufacturing	-	5 348	1 832	234 192	8 760 753	149 754	301 937	4 517 611	22 995 873	21 548 557	44 599 702	1 982 886
	Minneapolis-St. Paul, MN-WI MSA (MN Part)	-	5 158	1 769	227 383	8 561 712	144 652	292 281	4 394 330	22 503 689	20 999 159	43 556 025	1 937 605
	Minneapolis-St. Paul, MN-WI MSA (WI Part)	-	190	63	6 809	199 041	5 102	9 656	123 281	492 184	549 398	1 043 677	45 281
311	Food mfg	1	291	119	14 388	436 039	9 255	18 694	236 016	1 385 688	2 256 152	3 664 125	113 973
3111	Animal food mfg	3	25	12	600	23 809	327	682	11 919	85 356	169 432	257 330	12 443
31111	Animal food mfg	3	25	12	600	23 809	327	682	11 919	85 356	169 432	257 330	12 443
311119	Other animal food mfg	3	21	11	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	18	9	575	23 703	463	1 013	18 192	175 689	365 560	543 757	10 758
31121	Flour milling & malt mfg .	-	14	8	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	9	7	331	13 096	265	630	10 507	45 603	253 244	299 654	D
3113	Sugar & confectionery product mfg	-	14	6	1 110	32 036	739	1 507	16 841	71 865	132 090	207 863	D
31133	Confectionery mfg from purchased chocolate ...	-	7	3	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	7	3	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	6	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	6	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	19	11	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	9	6	1 145	33 215	535	990	11 294	33 559	72 543	106 112	D
311412	Frozen specialty food mfg	-	8	6	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	4	10	5	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	22	15	2 221	92 339	1 183	2 682	40 837	279 867	650 151	929 376	21 321
31151	Dairy product (except frozen) mfg	-	20	15	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	6	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	7	4	e	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	7	5	1 028	48 157	421	863	13 389	155 207	192 486	346 621	7 487

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	4	21	10	1 606	43 477	1 170	2 403	25 275	78 681	285 126	364 604	7 891
31161	Animal slaughtering & processing.....	4	21	10	1 606	43 477	1 170	2 403	25 275	78 681	285 126	364 604	7 891
311612	Meat processed from carcasses	6	13	7	1 305	34 865	923	1 842	18 704	57 856	181 515	239 392	D
3118	Bakeries & tortilla mfg.....	1	126	36	4 328	104 946	2 870	5 593	65 671	290 757	293 278	592 143	17 028
31181	Bread & bakery product mfg.....	1	110	26	2 849	58 522	1 685	3 092	36 788	149 855	135 300	289 231	9 122
311811	Retail bakeries.....	1	68	7	560	7 854	249	346	3 707	19 832	11 586	31 693	485
311812	Commercial bakeries .	1	35	15	1 787	39 559	1 009	1 915	24 483	98 084	80 254	178 279	6 084
311813	Frozen cakes, pies, & other pastries mfg ...	2	7	4	502	11 109	427	831	8 598	31 939	43 460	79 259	2 553
31182	Cookie, cracker, & pasta mfg.....	1	15	9	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	2	10	6	g	D	D	D	D	D	D	D	D
311823	Dry pasta mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	45	20	2 479	73 965	1 702	3 179	40 049	338 214	253 830	597 440	24 088
31191	Snack food mfg.....	—	7	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	—	5	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg.....	2	28	15	1 717	51 885	1 377	2 553	31 180	137 825	166 123	309 461	20 337
311991	Perishable prepared food mfg.....	—	11	8	655	16 476	577	1 054	12 506	42 539	37 951	85 696	12 118
311999	All other miscellaneous food mfg.....	2	17	7	1 062	35 409	800	1 499	18 674	95 286	128 172	223 765	8 219
312	Beverage & tobacco product mfg.....	1	18	8	1 735	61 453	1 069	1 816	29 561	234 876	450 517	688 797	9 682
3121	Beverage mfg.....	1	18	8	1 735	61 453	1 069	1 816	29 561	234 876	450 517	688 797	9 682
31211	Soft drink & ice mfg.....	—	7	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
31212	Breweries.....	3	6	3	f	D	D	D	D	D	D	D	D
312120	Breweries.....	3	6	3	f	D	D	D	D	D	D	D	D
313	Textile mills.....	1	25	6	e	D	D	D	D	D	D	D	D
3132	Fabric mills.....	—	10	4	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	82	9	799	16 706	609	1 162	9 950	37 160	34 955	71 722	1 385
3141	Textile furnishings mills....	4	31	3	311	5 375	252	466	3 740	10 788	12 546	23 384	474
31412	Curtain & linen mills.....	3	28	3	e	D	D	D	D	D	D	D	D
3149	Other textile product mills..	1	51	6	488	11 331	357	696	6 210	26 372	22 409	48 338	911
31499	All other textile product mills.....	1	31	4	348	7 852	263	516	4 752	15 948	14 959	30 861	554
314999	All other miscellaneous textile product mills ..	1	31	4	348	7 852	263	516	4 752	15 948	14 959	30 861	554
315	Apparel mfg.....	3	77	10	727	14 028	578	1 042	8 204	30 313	29 754	58 774	835
3152	Cut & sew apparel mfg.....	3	48	6	408	7 101	316	503	4 125	13 148	10 495	23 362	298
3159	Apparel accessories & other apparel mfg.....	2	26	4	293	6 406	237	493	3 633	15 825	17 839	32 655	487
31599	Apparel accessories & other apparel mfg.....	2	26	4	293	6 406	237	493	3 633	15 825	17 839	32 655	487
316	Leather & allied product mfg .	1	16	5	e	D	D	D	D	D	D	D	838
321	Wood product mfg.....	—	132	36	5 187	234 239	4 033	8 312	164 164	473 047	779 613	1 260 300	19 605
3212	Veneer, plywood, & engineered wood product mfg.....	2	13	7	499	14 348	396	862	9 134	28 368	33 813	62 658	1 583
32121	Veneer, plywood, & engineered wood product mfg.....	2	13	7	499	14 348	396	862	9 134	28 368	33 813	62 658	1 583
321214	Truss mfg.....	1	7	6	427	12 136	338	711	7 399	23 487	27 273	51 121	1 203
3219	Other wood product mfg....	—	107	27	4 542	215 596	3 528	7 266	152 735	435 311	700 081	1 142 030	16 676
32191	Millwork.....	—	41	10	h	D	D	D	D	D	D	D	14 605
321911	Wood window & door mfg.....	—	23	6	h	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg.....	3	30	11	553	7 738	449	665	5 458	15 989	18 089	34 267	1 094
321920	Wood container & pallet mfg.....	3	30	11	553	7 738	449	665	5 458	15 989	18 089	34 267	1 094
32199	All other wood product mfg.....	3	36	6	e	D	D	D	D	D	D	D	977
321999	All other miscellaneous wood product mfg ...	3	31	4	e	D	D	D	D	D	D	D	867

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	97	62	i	D	D	D	D	D	D	D	72 067
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	95	60	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	48	36	3 917	134 287	2 908	5 695	84 246	320 716	460 399	781 498	33 382
322211	Corrugated & solid fiber box mfg	-	28	23	h	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	13	11	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	22	11	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	16	6	527	19 737	349	689	10 272	54 658	66 459	120 960	D
322224	Uncoated paper & multiwall bag mfg	-	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	15	10	g	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	-	6	4	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	8	6	672	25 851	533	1 116	15 228	51 882	55 119	106 431	D
323	Printing & related support activities	1	769	206	24 393	866 411	16 304	32 736	500 858	1 892 044	1 300 376	3 192 946	154 878
3231	Printing & related support activities	1	769	206	24 393	866 411	16 304	32 736	500 858	1 892 044	1 300 376	3 192 946	154 878
32311	Printing	1	659	177	21 194	742 032	14 127	28 125	427 800	1 619 576	1 246 840	2 865 954	137 983
323110	Commercial lithographic printing ..	1	295	98	13 305	500 620	9 118	18 680	298 324	1 001 729	836 905	1 841 287	98 912
323112	Commercial flexographic printing ..	2	23	11	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	85	20	2 371	63 267	1 523	2 785	33 868	180 726	90 670	267 495	12 822
323114	Quick printing	2	156	16	1 291	35 660	884	1 546	19 203	77 229	42 990	120 356	4 560
323116	Manifold business form printing	-	20	13	1 781	53 215	1 015	1 907	27 477	174 035	101 524	277 645	3 419
323117	Book printing	2	11	7	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	3	46	6	757	28 066	471	985	14 413	44 330	47 688	91 532	2 493
32312	Support activities for printing	-	110	29	3 199	124 379	2 177	4 611	73 058	272 468	53 536	326 992	16 895
323121	Tradebinding & related work	-	42	9	678	18 754	585	1 136	13 543	33 312	7 071	40 665	1 161
323122	Prepress services	-	68	20	2 521	105 625	1 592	3 475	59 515	239 156	46 465	286 327	15 734
324	Petroleum & coal products mfg	-	20	11	g	D	D	D	D	D	D	D	40 085
3241	Petroleum & coal products mfg	-	20	11	g	D	D	D	D	D	D	D	40 085
32411	Petroleum refineries ..	-	2	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	-	14	7	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	-	8	3	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	-	6	4	620	25 117	527	1 172	20 532	96 494	149 783	240 760	6 260
325	Chemical mfg	2	168	61	6 800	284 107	3 822	7 468	126 687	1 129 766	847 201	1 975 124	114 972
3254	Pharmaceutical & medicine mfg	2	32	10	1 429	60 564	618	936	16 874	188 889	109 074	296 392	18 089
32541	Pharmaceutical & medicine mfg	2	32	10	1 429	60 564	618	936	16 874	188 889	109 074	296 392	18 089
325411	Medicinal & botanical mfg	2	7	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	1	11	4	406	16 957	162	195	3 048	94 956	40 975	133 894	3 519
325413	In-vitro diagnostic substance mfg	2	8	4	538	21 040	223	256	7 107	46 367	21 362	67 019	4 845
3255	Paint, coating, & adhesive mfg	1	24	9	633	25 032	272	516	7 949	72 221	94 140	169 307	D
32551	Paint & coating mfg	2	16	6	483	18 417	169	323	4 724	41 518	49 063	93 679	3 686
325510	Paint & coating mfg	2	16	6	483	18 417	169	323	4 724	41 518	49 063	93 679	3 686

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	46	19	3 437	143 433	2 222	4 579	77 854	678 913	459 364	1 132 020	54 727
32561	Soap & cleaning compound mfg	4	34	11	1 797	83 131	1 110	2 557	44 244	358 847	275 692	635 531	D
325611	Soap & other detergent mfg	8	12	4	e	D	D	D	D	D	D	D	5 070
325612	Polish & other sanitation good mfg ..	7	18	6	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	—	4	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	12	8	1 640	60 302	1 112	2 022	33 610	320 066	183 672	496 489	D
325620	Toilet preparation mfg .	—	12	8	1 640	60 302	1 112	2 022	33 610	320 066	183 672	496 489	D
3259	Other chemical product mfg	1	42	16	938	39 355	509	1 033	17 149	105 883	107 920	212 675	7 138
32591	Printing ink mfg	—	12	6	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	—	12	6	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	28	9	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	297	134	15 352	489 806	11 103	22 545	284 516	1 167 112	958 064	2 114 733	115 360
3261	Plastics product mfg	1	265	122	14 014	448 101	10 172	20 632	260 080	1 062 037	892 145	1 943 481	110 473
32611	Unsupported plastics film, sheet, & bag mfg ..	—	30	18	2 091	67 483	1 497	3 252	39 678	187 363	231 882	417 086	16 244
326111	Unsupported plastics bag mfg	1	9	5	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	—	4	4	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	17	9	1 224	38 504	939	2 101	24 008	120 144	129 812	247 204	8 949
32614	Polystyrene foam product mfg	7	9	5	e	D	D	D	D	D	D	D	2 730
326140	Polystyrene foam product mfg	7	9	5	e	D	D	D	D	D	D	D	2 730
32619	Other plastics product mfg	1	184	87	11 017	352 301	8 027	16 199	204 264	803 835	579 956	1 375 056	88 779
326199	All other plastics product mfg	1	177	85	10 902	349 085	7 938	16 029	202 370	789 678	572 760	1 353 713	88 334
3262	Rubber product mfg	1	32	12	1 338	41 705	931	1 913	24 436	105 075	65 919	171 252	4 887
32629	Other rubber product mfg	1	26	12	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	2	9	7	e	D	D	D	D	D	D	D	2 020
326299	All other rubber product mfg	1	17	5	893	26 619	622	1 265	15 664	73 718	46 615	120 683	D
327	Nonmetallic mineral product mfg	1	128	44	6 153	229 005	3 943	7 174	115 870	737 988	469 676	1 194 846	D
3272	Glass & glass product mfg .	—	20	5	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	20	5	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	17	4	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	71	32	2 522	97 692	1 565	3 078	49 562	228 316	184 617	411 707	20 483
32732	Ready-mix concrete mfg .	3	34	16	957	33 101	536	1 020	17 845	92 919	91 796	184 937	7 704
327320	Ready-mix concrete mfg	3	34	16	957	33 101	536	1 020	17 845	92 919	91 796	184 937	7 704
32733	Concrete pipe, brick, & block mfg	1	16	9	f	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg	—	11	5	e	D	D	D	D	D	D	D	3 596
327332	Concrete pipe mfg	3	5	4	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	20	7	980	43 029	541	1 142	16 648	67 674	47 772	113 790	D
327390	Other concrete product mfg	2	20	7	980	43 029	541	1 142	16 648	67 674	47 772	113 790	D
3279	Other nonmetallic mineral product mfg	—	19	6	2 773	101 912	1 711	2 784	44 848	435 329	223 261	648 218	D
32791	Abrasive product mfg ...	—	4	1	h	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	—	4	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	55	35	4 476	176 310	3 455	7 628	118 994	387 795	426 967	817 423	41 104
3311	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	7	3	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	3	10	5	e	D	D	D	D	D	D	D	D
3315	Foundries	—	33	23	2 849	105 727	2 140	4 771	70 715	221 949	129 994	352 203	D
33151	Ferrous metal foundries	—	11	8	659	21 104	551	1 149	16 607	53 958	20 963	74 974	D
331511	Iron foundries	1	7	5	506	16 368	425	899	12 680	43 490	16 669	60 330	2 736
33152	Nonferrous metal foundries	—	22	15	2 190	84 623	1 589	3 622	54 108	167 991	109 031	277 229	15 156
331521	Aluminum die-casting foundries	—	5	4	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	—	12	7	1 301	49 877	890	2 155	30 222	92 223	53 902	145 833	7 471
332	Fabricated metal product mfg	1	1 137	395	37 868	1 380 093	26 956	55 084	836 671	2 983 601	2 171 992	5 197 902	231 464
3321	Forging & stamping	2	83	53	6 719	234 542	5 149	10 681	147 763	408 871	354 831	768 433	41 885
33211	Forging & stamping	2	83	53	6 719	234 542	5 149	10 681	147 763	408 871	354 831	768 433	41 885
332114	Custom roll forming	—	5	4	e	D	D	D	D	D	D	D	D
332116	Metal stamping	2	74	48	i	D	D	D	D	D	D	D	41 567
3322	Cutlery & handtool mfg	—	35	17	1 272	49 673	819	1 723	23 782	104 036	89 145	187 812	7 835
33221	Cutlery & handtool mfg	—	35	17	1 272	49 673	819	1 723	23 782	104 036	89 145	187 812	7 835
332212	Hand & edge tool mfg	—	29	15	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	174	69	5 373	179 654	3 705	7 581	106 800	407 017	356 057	757 484	26 979
33231	Plate work & fabricated structural product mfg	1	54	14	916	34 385	603	1 238	19 119	71 302	101 974	172 405	4 488
332312	Fabricated structural metal mfg	1	33	10	615	23 250	391	809	12 374	56 125	76 835	132 365	3 492
33232	Ornamental & architectural metal products mfg	—	120	55	4 457	145 269	3 102	6 343	87 681	335 715	254 083	585 079	22 491
332321	Metal window & door mfg	—	19	10	1 266	34 803	848	1 687	19 437	81 630	105 483	184 544	2 867
332322	Sheet metal work mfg	—	80	40	2 859	99 343	2 036	4 191	61 946	225 707	124 508	347 892	17 066
332323	Ornamental & architectural metal work mfg	4	21	5	332	11 123	218	465	6 298	28 378	24 092	52 643	2 558
3324	Boiler, tank, & shipping container mfg	—	24	13	1 988	77 461	1 577	3 265	60 101	179 837	319 645	503 314	12 601
33241	Power boiler & heat exchanger mfg	1	10	5	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	10	5	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	9	4	1 063	37 480	890	1 836	29 500	62 948	109 657	173 520	9 633
332420	Metal tank (heavy gauge) mfg	—	9	4	1 063	37 480	890	1 836	29 500	62 948	109 657	173 520	9 633
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	4	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	5	4	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	—	34	13	676	18 167	480	886	11 265	41 636	40 450	81 849	6 866
33261	Spring & wire product mfg	—	34	13	676	18 167	480	886	11 265	41 636	40 450	81 849	6 866
332618	Other fabricated wire product mfg	—	27	10	f	D	D	D	D	D	D	D	D

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	514	138	10 305	392 088	7 995	16 681	264 748	818 206	368 480	1 186 670	80 048
33271	Machine shops	1	434	92	7 105	266 932	5 389	10 743	175 497	566 140	247 638	817 280	53 221
332710	Machine shops	1	434	92	7 105	266 932	5 389	10 743	175 497	566 140	247 638	817 280	53 221
33272	Turned product & screw, nut, & bolt mfg	—	80	46	3 200	125 156	2 606	5 938	89 251	252 066	120 842	369 390	26 827
332721	Precision turned product mfg	—	73	42	h	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	7	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	2	143	55	3 957	117 499	3 074	6 196	75 398	237 735	120 563	358 274	22 283
33281	Coating, engraving, heat treating, & allied activities	2	143	55	3 957	117 499	3 074	6 196	75 398	237 735	120 563	358 274	22 283
332811	Metal heat treating	—	11	8	e	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	64	25	g	D	D	D	D	D	D	D	8 069
332813	Electroplating, plating, polishing, anodizing, & coloring	4	68	22	2 004	59 297	1 559	3 162	37 489	111 423	63 724	175 696	D
3329	Other fabricated metal product mfg	—	120	34	7 395	304 891	4 044	7 882	144 341	773 115	512 969	1 331 117	31 871
33291	Metal valve mfg	—	26	15	2 172	81 474	1 349	2 872	45 782	220 457	119 793	344 978	9 225
332911	Industrial valve mfg	—	7	6	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	17	9	1 368	51 462	887	2 028	30 873	143 982	66 286	212 163	D
33299	All other fabricated metal product mfg	—	94	19	5 223	223 417	2 695	5 010	98 559	552 658	393 176	986 139	22 646
332992	Small arms ammunition mfg	—	3	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	—	2	1	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	58	12	726	23 741	518	993	14 200	63 925	29 398	96 646	2 717
333	Machinery mfg	—	593	205	26 451	1 073 842	15 488	31 737	503 940	2 793 148	2 329 123	5 119 372	171 830
3331	Agriculture, construction, & mining machinery mfg	1	35	14	1 936	66 086	1 305	2 627	39 121	188 165	283 511	474 208	25 294
33311	Agricultural implement mfg	3	22	6	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	5	18	5	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	84	30	3 328	141 624	1 564	3 333	50 282	395 177	319 742	702 647	17 137
33321	Sawmill & woodworking machinery mfg	—	6	3	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	6	3	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	71	26	h	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	1	15	4	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	14	8	612	24 122	356	764	11 582	50 056	44 361	92 934	D
333295	Semiconductor machinery mfg	—	5	4	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	4	31	7	612	20 827	359	822	10 692	45 377	34 194	75 240	8 056
3333	Commercial & service industry machinery mfg	—	62	26	3 709	158 073	2 033	4 153	66 558	473 424	352 109	823 249	23 385
33331	Commercial & service industry machinery mfg	—	62	26	3 709	158 073	2 033	4 153	66 558	473 424	352 109	823 249	23 385
333311	Automatic vending machine mfg	—	6	2	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg	1	6	3	352	14 873	128	218	3 985	39 993	32 482	72 554	719
333314	Optical instrument & lens mfg	4	8	5	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	10	5	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	30	11	2 326	100 457	1 310	2 719	43 702	337 586	262 656	595 704	18 654

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	45	20	4 140	164 956	2 454	4 515	69 096	377 045	393 159	776 363	12 525
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	45	20	4 140	164 956	2 454	4 515	69 096	377 045	393 159	776 363	12 525
333411	Air purification equipment mfg	—	11	3	e	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	2	7	4	392	12 401	255	444	6 337	24 367	23 048	46 598	816
333414	Heating equipment (except warm air furnaces) mfg	—	12	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	15	9	2 750	112 733	1 571	2 722	43 505	253 260	315 995	575 211	8 774
3335	Metalworking machinery mfg	1	210	56	5 015	206 548	3 633	7 418	133 772	419 376	173 458	594 830	36 891
33351	Metalworking machinery mfg	1	210	56	5 015	206 548	3 633	7 418	133 772	419 376	173 458	594 830	36 891
333511	Industrial mold mfg ...	—	86	24	1 345	61 248	1 074	2 241	44 864	103 717	34 534	141 254	13 043
333512	Machine tool (metal cutting types) mfg ...	1	6	4	667	25 744	468	923	16 196	46 471	45 461	98 358	D
333514	Special die & tool, die set, jig, & fixture mfg .	—	75	17	2 044	85 257	1 391	2 944	51 365	203 593	54 974	254 729	16 724
333515	Cutting tool & machine tool accessory mfg ..	1	34	5	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	2	16	8	573	21 411	372	726	11 446	51 623	50 147	104 058	5 348
33361	Engine, turbine, & power transmission equipment mfg	2	16	8	573	21 411	372	726	11 446	51 623	50 147	104 058	5 348
3339	Other general-purpose machinery mfg	1	141	51	7 750	315 144	4 127	8 965	133 665	888 338	756 997	1 644 017	51 250
33391	Pump & compressor mfg	—	19	8	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	9	4	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	8	3	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	35	13	g	D	D	D	D	D	D	D	2 710
333922	Conveyor & conveying equipment mfg	1	17	8	455	15 635	243	476	5 654	36 644	28 997	65 467	1 636
333923	Overhead traveling crane, hoist, & monorail system mfg .	1	8	2	350	10 151	191	394	4 588	21 311	16 090	38 119	447
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	87	30	h	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	22	8	1 402	60 581	642	1 320	22 863	109 667	114 830	228 237	7 091
333994	Industrial process furnace & oven mfg ..	5	6	5	598	25 332	308	680	11 087	76 927	34 008	112 619	1 800
333995	Fluid power cylinder & actuator mfg	—	5	2	269	11 121	171	396	5 180	24 251	23 060	48 596	321
333996	Fluid power pump & motor mfg	—	4	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	40	11	1 592	59 378	873	1 826	27 192	163 122	108 418	272 538	15 337
334	Computer & electronic product mfg	—	372	189	39 577	1 694 648	19 867	40 970	608 961	4 081 901	2 508 904	6 585 696	575 369
3341	Computer & peripheral equipment mfg	—	52	23	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	52	23	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	1	13	5	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	9	6	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	27	11	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	—	31	19	3 532	162 015	1 326	2 390	39 467	456 852	272 004	725 001	D
33421	Telephone apparatus mfg	—	13	8	g	D	D	D	D	D	D	D	14 295
334210	Telephone apparatus mfg	—	13	8	g	D	D	D	D	D	D	D	14 295
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	9	6	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	9	6	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	9	5	1 191	44 947	642	1 211	18 039	140 897	83 038	220 780	4 745
334290	Other communications equipment mfg	—	9	5	1 191	44 947	642	1 211	18 039	140 897	83 038	220 780	4 745
3344	Semiconductor & other electronic component mfg	—	124	68	10 687	372 470	6 897	13 244	188 269	924 356	613 265	1 519 856	D
33441	Semiconductor & other electronic component mfg	—	124	68	10 687	372 470	6 897	13 244	188 269	924 356	613 265	1 519 856	D
334412	Bare printed circuit board mfg	—	50	27	4 591	136 419	3 690	6 974	89 084	299 705	199 169	496 241	30 191
334413	Semiconductor & related device mfg ...	—	15	10	2 036	91 484	1 085	2 438	42 681	264 744	118 073	372 096	106 089
334415	Electronic resistor mfg	—	2	2	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	1	10	7	279	9 611	171	343	4 180	19 279	11 238	30 407	D
334418	Printed circuit assembly (electronic assembly) mfg	—	13	11	1 823	73 972	789	1 416	19 127	223 209	213 422	432 738	15 719
334419	Other electronic component mfg	—	26	7	1 460	44 806	835	1 471	25 414	86 720	59 313	145 605	7 747
3345	Navigational, measuring, medical, & control instruments mfg	—	132	63	17 119	790 948	7 992	16 823	282 121	2 082 359	872 633	2 939 480	D
33451	Navigational, measuring, medical, & control instruments mfg	—	132	63	17 119	790 948	7 992	16 823	282 121	2 082 359	872 633	2 939 480	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	38	21	5 835	284 847	2 352	5 469	65 619	960 401	210 072	1 156 000	D
334511	Search, detection, navigation, & guidance instrument mfg	—	7	4	h	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	9	3	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	26	12	h	D	D	D	D	D	D	D	24 182
334515	Electricity measuring & testing instrument mfg	—	17	8	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	9	5	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	23	10	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	3	22	11	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	3	22	11	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	9	5	390	10 371	262	487	6 329	32 305	17 993	50 439	4 596
334613	Magnetic & optical recording media mfg .	—	6	4	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	114	53	8 163	308 499	4 970	9 244	157 924	648 551	762 076	1 430 177	52 028
3351	Electric lighting equipment mfg	—	7	3	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	7	3	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	—	69	27	4 717	173 696	2 657	4 381	80 209	215 386	519 411	759 286	25 576
33531	Electrical equipment mfg	—	69	27	4 717	173 696	2 657	4 381	80 209	215 386	519 411	759 286	25 576
335312	Motor & generator mfg	—	13	7	2 568	108 490	1 714	2 708	55 813	93 711	366 216	460 290	8 488
335314	Relay & industrial control mfg	—	35	14	1 841	55 363	743	1 292	19 224	100 658	136 745	260 733	15 876
3359	Other electrical equipment & component mfg	—	35	21	2 990	120 369	2 044	4 324	70 917	400 638	215 752	611 346	19 619
33593	Wiring device mfg	—	9	6	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	3	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	22	12	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	4	21	12	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	105	39	5 443	217 226	4 262	8 442	157 912	1 417 117	1 605 609	3 006 003	82 046
3361	Motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	20	6	549	14 861	393	801	8 909	35 405	49 487	85 211	D
33621	Motor vehicle body & trailer mfg	—	20	6	549	14 861	393	801	8 909	35 405	49 487	85 211	D
336211	Motor vehicle body mfg	—	13	4	421	11 856	295	607	6 992	31 164	42 247	73 617	D
3363	Motor vehicle parts mfg ...	1	42	17	2 013	61 872	1 439	2 717	35 092	186 866	198 740	375 572	11 172
33631	Motor vehicle gasoline engine & engine parts mfg	—	14	3	399	9 838	305	599	6 451	45 319	43 616	86 054	929
336312	Gasoline engine & engine parts mfg	—	12	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	10	6	1 032	27 221	742	1 206	14 191	57 657	64 759	122 852	4 684
336322	Other motor vehicle electrical & electronic equipment mfg	2	10	6	1 032	27 221	742	1 206	14 191	57 657	64 759	122 852	4 684
33635	Motor vehicle transmission & power train parts mfg	—	4	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	4	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	11	6	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	2	11	6	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	9	4	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	9	4	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	9	4	e	D	D	D	D	D	D	D	D
336612	Boat building	1	8	4	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	348	67	6 831	195 952	5 203	10 181	125 368	417 679	385 936	806 450	27 899
3371	Household & institutional furniture & kitchen cabinet mfg	—	229	25	3 677	93 030	2 942	5 469	66 265	219 362	160 520	380 212	D
33711	Wood kitchen cabinet & counter top mfg	—	155	14	2 633	63 611	2 140	3 987	47 784	164 364	114 154	278 750	4 413
337110	Wood kitchen cabinet & counter top mfg ...	—	155	14	2 633	63 611	2 140	3 987	47 784	164 364	114 154	278 750	4 413
33712	Household & institutional furniture mfg	1	74	11	1 044	29 419	802	1 482	18 481	54 998	46 366	101 462	D
337122	Nonupholstered wood household furniture mfg	6	44	4	252	5 226	218	381	3 918	8 935	7 158	16 112	725
337127	Institutional furniture mfg	—	10	6	651	21 540	471	922	12 884	40 293	32 949	73 326	1 457

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	101	36	2 279	79 423	1 576	3 357	43 944	160 934	116 025	278 760	5 750
33721	Office furniture (including fixtures) mfg	1	101	36	2 279	79 423	1 576	3 357	43 944	160 934	116 025	278 760	5 750
337211	Wood office furniture mfg	1	18	5	276	7 559	209	413	4 949	19 407	12 547	32 042	699
337212	Custom architectural woodwork & millwork mfg	2	26	10	537	17 074	396	873	11 264	31 178	20 816	52 070	990
337214	Office furniture (except wood) mfg	—	6	3	269	9 437	166	389	4 657	16 910	15 295	32 202	623
337215	Showcase, partition, shelving, & locker mfg	1	51	18	1 197	45 353	805	1 682	23 074	93 439	67 367	162 446	3 438
3379	Other furniture related product mfg	1	18	6	875	23 499	685	1 355	15 159	37 383	109 391	147 478	D
33791	Mattress mfg	2	13	4	f	D	D	D	D	D	D	D	14 789
337910	Mattress mfg	2	13	4	f	D	D	D	D	D	D	D	14 789
339	Miscellaneous mfg	1	504	138	19 673	701 659	11 272	21 959	287 313	1 685 927	778 949	2 467 128	93 005
3391	Medical equipment & supplies mfg	1	238	79	13 119	522 025	7 295	14 608	200 171	1 240 141	501 830	1 750 516	73 150
33911	Medical equipment & supplies mfg	1	238	79	13 119	522 025	7 295	14 608	200 171	1 240 141	501 830	1 750 516	73 150
339111	Laboratory apparatus & furniture mfg	—	6	3	e	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	1	74	32	9 012	381 457	4 710	9 740	138 078	878 388	340 419	1 226 251	56 125
339113	Surgical appliance & supplies mfg	1	51	23	2 021	73 282	1 226	2 162	28 187	211 242	91 128	304 858	13 274
339115	Ophthalmic goods mfg	—	6	5	f	D	D	D	D	D	D	D	D
339116	Dental laboratories	3	89	15	954	26 675	702	1 326	17 832	49 001	14 557	64 222	1 801
3399	Other miscellaneous mfg ..	1	266	59	6 554	179 634	3 977	7 351	87 142	445 786	277 119	716 612	19 855
33991	Jewelry & silverware mfg	6	26	5	e	D	D	D	D	D	D	D	707
339911	Jewelry (except costume) mfg	6	17	3	e	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	—	38	8	787	27 361	501	1 062	12 607	100 036	65 153	164 087	3 187
339920	Sporting & athletic goods mfg	—	38	8	787	27 361	501	1 062	12 607	100 036	65 153	164 087	3 187
33995	Sign mfg	—	96	24	2 139	66 656	1 408	2 713	32 145	136 517	97 000	230 347	6 401
339950	Sign mfg	—	96	24	2 139	66 656	1 408	2 713	32 145	136 517	97 000	230 347	6 401
33999	All other miscellaneous mfg	1	79	20	2 929	66 172	1 668	2 870	34 642	152 465	82 083	233 688	D
339991	Gasket, packing, & sealing device mfg ...	1	16	8	g	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	3	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	48	8	1 574	25 674	815	1 046	11 788	68 467	33 984	101 420	D
	ROCHESTER, MN MSA												
31-33	Manufacturing	—	77	30	10 477	482 127	4 949	10 067	126 924	1 040 943	2 133 306	3 085 395	105 658
311	Food mfg	—	12	6	1 496	42 365	1 288	2 687	35 448	114 526	478 607	591 104	5 360
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	1	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	4	4	825	26 682	686	1 405	22 336	89 067	365 560	451 884	4 174
31151	Dairy product (except frozen) mfg	—	3	3	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	—	2	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	—	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	11	6	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	11	6	f	D	D	D	D	D	D	D	D
32311	Printing	—	11	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	9	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCHESTER, MN MSA													
—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	11	5	1 376	44 746	1 136	2 298	30 610	110 104	96 502	207 427	3 667
3321	Forging & stamping	—	1	1	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	1	1	g	D	D	D	D	D	D	D	D
332116	Metal stamping	—	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	6	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	2	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	2	2	i	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	i	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	3	1	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	3	1	e	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
ST. CLOUD, MN MSA													
31-33	Manufacturing	—	272	91	15 406	440 529	12 114	22 877	305 462	1 103 240	1 406 456	2 516 811	80 649
311	Food mfg	—	31	12	2 814	65 145	2 274	4 341	47 203	205 165	510 405	717 436	13 282
3115	Dairy product mfg	—	6	3	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	6	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	—	3	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	9	6	1 839	37 361	1 718	3 207	32 657	95 740	155 258	252 925	3 689
31161	Animal slaughtering & processing	—	9	6	1 839	37 361	1 718	3 207	32 657	95 740	155 258	252 925	3 689
311615	Poultry processing	—	4	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	8	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	8	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	14	6	729	21 087	572	1 196	15 389	46 501	53 143	99 157	1 141
3219	Other wood product mfg ...	2	13	6	f	D	D	D	D	D	D	D	D
32191	Millwork	1	8	6	686	20 302	539	1 135	14 771	44 694	51 190	95 388	1 007
321911	Wood window & door mfg	4	3	3	e	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing	—	4	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	4	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	33	11	2 214	65 906	1 680	2 627	43 777	209 196	124 471	331 535	19 525
3231	Printing & related support activities	—	33	11	2 214	65 906	1 680	2 627	43 777	209 196	124 471	331 535	19 525
32311	Printing	—	30	11	2 200	65 561	1 670	2 610	43 539	208 546	124 348	330 763	D
323110	Commercial lithographic printing ..	—	15	5	1 692	51 811	1 342	2 025	36 770	113 279	81 398	193 779	10 614
323118	Blankbook, looseleaf binder, & device mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	12	6	314	7 158	226	362	4 349	21 662	20 363	42 147	1 710
3261	Plastics product mfg	5	11	6	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	6	8	5	e	D	D	D	D	D	D	D	1 481
327	Nonmetallic mineral product mfg	—	24	6	1 237	37 037	1 129	2 183	32 290	109 798	37 318	152 137	6 141
3279	Other nonmetallic mineral product mfg	—	10	5	1 067	30 373	988	1 836	27 148	93 828	22 903	121 491	4 139
32799	All other nonmetallic mineral product mfg ...	—	10	5	1 067	30 373	988	1 836	27 148	93 828	22 903	121 491	4 139
327991	Cut stone & stone product mfg	—	10	5	1 067	30 373	988	1 836	27 148	93 828	22 903	121 491	4 139

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. CLOUD, MN MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	42	15	1 731	52 452	1 166	2 572	31 192	111 130	78 094	190 828	7 242
3324	Boiler, tank, & shipping container mfg	-	5	3	e	D	D	D	D	D	D	D	677
33242	Metal tank (heavy gauge) mfg	-	4	3	e	D	D	D	D	D	D	D	677
332420	Metal tank (heavy gauge) mfg	-	4	3	e	D	D	D	D	D	D	D	677
3329	Other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	21	6	797	27 220	559	1 015	13 881	64 406	59 325	120 793	6 772
3332	Industrial machinery mfg ..	-	5	2	e	D	D	D	D	D	D	D	1 514
33321	Sawmill & woodworking machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	5	536	14 808	422	667	7 870	31 604	36 521	68 497	767
3362	Motor vehicle body & trailer mfg	-	3	2	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	2	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	35	9	604	14 318	463	844	8 781	22 793	18 933	41 751	1 664
3371	Household & institutional furniture & kitchen cabinet mfg	2	31	7	525	11 891	405	754	7 715	18 473	15 091	33 474	1 331
33711	Wood kitchen cabinet & counter top mfg	1	24	3	375	8 525	293	555	5 749	13 580	10 654	24 193	963
337110	Wood kitchen cabinet & counter top mfg ...	1	24	3	375	8 525	293	555	5 749	13 580	10 654	24 193	963
339	Miscellaneous mfg	-	25	10	1 593	35 936	1 248	2 401	24 662	95 704	61 644	153 023	8 880
3391	Medical equipment & supplies mfg	-	13	9	1 532	34 271	1 206	2 331	23 923	92 486	59 428	147 569	8 605
33911	Medical equipment & supplies mfg	-	13	9	1 532	34 271	1 206	2 331	23 923	92 486	59 428	147 569	8 605
339113	Surgical appliance & supplies mfg	-	2	1	e	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	7	6	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ANOKA COUNTY, MN												
31-33	Manufacturing	1	614	184	24 754	908 706	16 979	33 800	525 336	2 186 242	1 678 782	3 860 658	141 103
322	Paper mfg	-	10	6	533	19 648	390	797	12 780	39 965	77 428	117 172	6 806
3222	Converted paper product mfg	-	10	6	533	19 648	390	797	12 780	39 965	77 428	117 172	6 806
323	Printing & related support activities	1	48	8	976	33 889	687	1 320	20 208	73 572	51 005	123 852	9 813
3231	Printing & related support activities	1	48	8	976	33 889	687	1 320	20 208	73 572	51 005	123 852	9 813
32311	Printing	1	41	6	878	31 602	614	1 228	18 772	69 495	49 740	118 448	9 748
323110	Commercial lithographic printing	1	15	4	534	22 462	391	862	13 615	44 124	38 302	81 815	8 946
326	Plastics & rubber products mfg	3	27	15	1 780	49 784	1 227	2 556	30 069	141 568	107 412	249 205	12 355
3261	Plastics product mfg	4	25	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	22	11	1 226	31 566	853	1 773	19 550	86 779	74 307	161 080	9 223
326199	All other plastics product mfg	3	22	11	1 226	31 566	853	1 773	19 550	86 779	74 307	161 080	9 223
332	Fabricated metal product mfg	1	216	68	9 701	344 997	6 767	13 976	204 804	847 845	407 802	1 261 233	52 221
3321	Forging & stamping	5	14	9	2 894	95 158	2 255	5 032	66 257	193 482	150 344	347 935	11 909
33211	Forging & stamping	5	14	9	2 894	95 158	2 255	5 032	66 257	193 482	150 344	347 935	11 909
332116	Metal stamping	5	13	9	h	D	D	D	D	D	D	D	11 909
3323	Architectural & structural metals mfg	1	30	9	542	21 175	397	802	12 715	43 731	27 214	71 112	3 279
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	117	29	2 480	85 968	2 039	4 445	63 226	187 872	75 128	261 995	19 187
33271	Machine shops	-	98	21	1 715	57 854	1 398	2 822	41 856	127 553	40 911	169 069	10 833
332710	Machine shops	-	98	21	1 715	57 854	1 398	2 822	41 856	127 553	40 911	169 069	10 833
33272	Turned product & screw, nut, & bolt mfg	-	19	8	765	28 114	641	1 623	21 370	60 319	34 217	92 926	8 354
332721	Precision turned product mfg	-	18	8	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	1	26	11	519	16 722	394	806	10 296	33 764	18 431	52 288	2 676
33281	Coating, engraving, heat treating, & allied activities	1	26	11	519	16 722	394	806	10 296	33 764	18 431	52 288	2 676
3329	Other fabricated metal product mfg	-	16	5	h	D	D	D	D	D	D	D	14 448
33299	All other fabricated metal product mfg	-	16	5	h	D	D	D	D	D	D	D	14 448
332992	Small arms ammunition mfg	-	2	1	f	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	97	27	2 884	116 699	1 930	3 813	65 219	307 782	234 359	547 401	13 441
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	2	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	51	11	1 024	43 727	807	1 696	32 286	87 457	26 546	114 893	5 768
33351	Metalworking machinery mfg	1	51	11	1 024	43 727	807	1 696	32 286	87 457	26 546	114 893	5 768
333514	Special die & tool, die set, jig, & fixture mfg	-	24	6	663	26 746	527	1 139	20 373	59 614	15 145	73 905	3 423
334	Computer & electronic product mfg	-	31	14	2 013	62 327	1 298	2 344	35 861	145 984	96 874	241 988	9 041
3344	Semiconductor & other electronic component mfg	-	12	8	1 192	31 748	743	1 243	19 467	67 270	36 445	103 676	5 565
33441	Semiconductor & other electronic component mfg	-	12	8	1 192	31 748	743	1 243	19 467	67 270	36 445	103 676	5 565
334419	Other electronic component mfg	-	5	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANOKA COUNTY, MN—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	7	4	2 834	146 138	1 721	3 005	77 813	281 159	400 546	679 625	D
3353	Electrical equipment mfg ..	-	4	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	46	6	623	18 931	444	853	10 434	37 861	22 516	60 575	1 576
339	Miscellaneous mfg	2	47	14	1 152	43 070	742	1 529	18 928	94 148	51 777	143 878	7 338
3391	Medical equipment & supplies mfg	2	22	10	867	33 238	537	1 064	13 891	72 029	32 420	103 135	5 486
33911	Medical equipment & supplies mfg	2	22	10	867	33 238	537	1 064	13 891	72 029	32 420	103 135	5 486
BECKER COUNTY, MN													
31-33	Manufacturing	-	42	11	1 320	35 712	907	1 791	22 451	96 085	97 237	193 034	10 679
332	Fabricated metal product mfg	-	7	4	641	20 415	425	846	12 644	53 832	43 170	96 560	5 220
BELTRAMI COUNTY, MN													
31-33	Manufacturing	1	43	10	1 112	31 998	882	1 585	23 611	67 774	107 976	175 893	6 288
321	Wood product mfg	-	11	5	628	23 696	532	1 085	18 553	50 817	90 942	141 503	D
BENTON COUNTY, MN													
31-33	Manufacturing	-	53	25	2 797	71 389	1 921	3 713	38 680	184 027	117 787	300 173	8 364
311	Food mfg	-	8	4	816	20 490	456	884	9 252	59 981	29 736	90 392	D
339	Miscellaneous mfg	-	5	4	716	16 383	544	1 181	9 700	47 678	26 388	73 535	1 868
3391	Medical equipment & supplies mfg	-	3	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	3	3	f	D	D	D	D	D	D	D	D
BLUE EARTH COUNTY, MN													
31-33	Manufacturing	-	78	36	4 144	126 747	2 823	5 904	75 792	350 874	813 673	1 160 809	36 357
311	Food mfg	-	10	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	5	657	17 655	359	670	7 987	37 070	33 823	70 529	3 181
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWN COUNTY, MN													
31-33	Manufacturing	-	41	18	4 292	113 017	3 419	6 240	79 634	849 948	733 581	1 580 773	31 413
311	Food mfg	-	7	5	1 367	32 526	1 184	2 049	27 206	419 691	482 528	900 647	16 056
3115	Dairy product mfg	-	5	4	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	5	4	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	2	2	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	9	6	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	9	6	1	f	D	D	D	D	D	D	D	D
32311	Printing	9	6	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	9	4	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
CARLTON COUNTY, MN													
31-33	Manufacturing	-	30	5	2 131	89 787	1 764	3 707	71 125	260 669	168 941	424 973	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
CARVER COUNTY, MN													
31-33	Manufacturing	1	143	69	10 470	391 651	6 484	13 568	193 627	972 717	946 808	1 919 956	81 408
311	Food mfg	-	9	7	1 413	42 623	1 248	3 027	31 777	130 923	260 401	393 645	10 758
3118	Bakeries & tortilla mfg	-	4	4	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	9	3	506	22 375	363	797	13 273	33 412	28 852	61 866	D
3231	Printing & related support activities.....	-	9	3	506	22 375	363	797	13 273	33 412	28 852	61 866	D
32311	Printing	-	9	3	506	22 375	363	797	13 273	33 412	28 852	61 866	D
326	Plastics & rubber products mfg	-	10	6	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	9	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	8	6	1 448	60 361	929	1 963	29 844	141 699	94 081	231 957	D
326199	All other plastics product mfg.....	-	8	6	1 448	60 361	929	1 963	29 844	141 699	94 081	231 957	D
332	Fabricated metal product mfg	1	33	14	762	27 572	566	1 082	16 210	57 829	39 724	97 008	3 238
333	Machinery mfg	-	18	11	1 702	71 732	773	1 504	23 563	214 519	195 683	409 518	2 376
3332	Industrial machinery mfg ..	-	7	4	f	D	D	D	D	D	D	D	1 282
33329	Other industrial machinery mfg	-	6	4	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARVER COUNTY, MN													
—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	16	11	1 966	64 753	1 087	2 329	31 528	128 431	142 909	269 870	14 840
3345	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	16	8	1 695	70 320	771	1 384	27 507	116 791	61 942	179 557	2 441
3391	Medical equipment & supplies mfg.....	-	6	5	1 479	62 174	634	1 095	22 985	96 874	40 717	138 595	2 199
33911	Medical equipment & supplies mfg.....	-	6	5	1 479	62 174	634	1 095	22 985	96 874	40 717	138 595	2 199
339112	Surgical & medical instrument mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
CHIPPEWA COUNTY, MN													
31-33	Manufacturing	-	24	9	1 498	34 540	1 164	2 014	21 975	65 681	52 422	116 267	6 349
334	Computer & electronic product mfg.....	1	3	3	f	D	D	D	D	D	D	D	D
CHISAGO COUNTY, MN													
31-33	Manufacturing	1	101	33	2 462	70 280	1 916	3 485	42 901	138 196	142 177	282 052	14 282
326	Plastics & rubber products mfg.....	-	11	5	830	24 970	662	1 196	13 517	37 526	33 893	70 708	2 776
3261	Plastics product mfg.....	-	11	5	830	24 970	662	1 196	13 517	37 526	33 893	70 708	2 776
32619	Other plastics product mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
CLAY COUNTY, MN													
31-33	Manufacturing	-	38	11	1 225	35 699	999	2 021	27 458	57 541	174 280	229 403	10 969
COTTONWOOD COUNTY, MN													
31-33	Manufacturing	-	16	4	930	20 511	762	1 362	15 083	176 646	320 072	486 880	10 085
333	Machinery mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
CROW WING COUNTY, MN													
31-33	Manufacturing	1	95	28	2 957	91 207	2 184	4 077	63 641	248 201	212 688	458 310	15 770
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DAKOTA COUNTY, MN												
31-33	Manufacturing	-	439	166	17 957	636 258	11 717	23 971	345 910	2 282 478	3 632 998	5 922 374	139 958
311	Food mfg.....	1	37	21	2 698	81 771	1 956	3 935	50 028	363 785	553 753	921 783	27 786
3113	Sugar & confectionery product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg....	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	3	4	4	672	19 519	555	1 204	13 889	53 720	199 133	253 620	5 765
31161	Animal slaughtering & processing.....	3	4	4	672	19 519	555	1 204	13 889	53 720	199 133	253 620	5 765
312	Beverage & tobacco product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	7	5	1 415	47 572	1 040	2 238	28 436	70 967	105 657	176 584	14 144
3222	Converted paper product mfg.....	-	7	5	1 415	47 572	1 040	2 238	28 436	70 967	105 657	176 584	14 144
32223	Stationery product mfg..	-	1	1	f	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	64	16	1 338	43 665	808	1 475	21 357	110 283	81 916	192 311	6 000
3231	Printing & related support activities.....	1	64	16	1 338	43 665	808	1 475	21 357	110 283	81 916	192 311	6 000
32311	Printing.....	1	60	16	1 321	43 342	794	1 459	21 128	109 666	81 768	191 545	5 965
323116	Manifold business form printing.....	-	4	4	502	14 444	257	455	6 713	48 432	39 873	88 762	1 091
324	Petroleum & coal products mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries....	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	37	13	1 442	46 241	1 014	2 069	28 405	121 769	103 153	222 893	8 072
3261	Plastics product mfg.....	-	31	13	1 371	44 148	958	1 961	27 023	116 013	98 334	212 281	7 695
32619	Other plastics product mfg.....	-	18	10	1 034	31 614	752	1 518	20 268	84 725	55 538	137 815	4 831
326199	All other plastics product mfg.....	-	17	10	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	3	17	10	614	18 107	385	781	9 994	52 768	40 301	93 770	4 885
332	Fabricated metal product mfg.....	-	74	24	2 293	81 886	1 745	3 539	54 410	190 027	161 542	352 676	10 177
333	Machinery mfg.....	2	36	9	830	30 171	481	1 024	15 147	64 305	50 562	114 908	3 731
334	Computer & electronic product mfg.....	-	20	12	1 925	84 465	781	1 580	27 344	215 375	93 157	306 595	11 215
3345	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 561	68 267	662	1 340	24 046	198 273	65 503	263 159	8 488
33451	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 561	68 267	662	1 340	24 046	198 273	65 503	263 159	8 488
334511	Search, detection, navigation, & guidance instrument mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	29	10	869	23 795	642	1 303	15 477	85 341	67 473	152 398	1 412
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	24	6	582	15 357	462	876	11 021	64 788	51 359	115 928	989
339	Miscellaneous mfg.....	-	35	13	1 009	31 530	663	1 300	14 819	66 414	49 307	116 254	3 033
3391	Medical equipment & supplies mfg.....	-	19	8	525	16 153	356	638	7 715	29 596	31 747	61 892	1 264
33911	Medical equipment & supplies mfg.....	-	19	8	525	16 153	356	638	7 715	29 596	31 747	61 892	1 264

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DODGE COUNTY, MN													
31-33	Manufacturing	-	29	10	1 322	37 485	1 034	2 171	27 743	119 083	260 178	398 648	3 568
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
DOUGLAS COUNTY, MN													
31-33	Manufacturing	-	72	22	2 806	75 957	2 199	3 906	51 138	276 226	176 795	448 446	12 912
327	Nonmetallic mineral product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	4	858	27 502	667	1 302	18 463	56 770	30 908	86 369	3 186
3339	Other general-purpose machinery mfg	-	6	2	734	23 900	569	1 154	16 338	49 032	26 515	74 071	D
33399	All other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
FARIBAULT COUNTY, MN													
31-33	Manufacturing	-	28	18	1 578	36 487	1 222	2 505	24 103	87 840	165 072	260 614	7 423
311	Food mfg	-	8	5	587	12 995	488	1 163	9 915	35 426	77 001	112 505	4 325
FILLMORE COUNTY, MN													
31-33	Manufacturing	-	42	12	1 122	27 866	917	1 990	18 700	124 178	99 512	224 775	5 036
FREEBORN COUNTY, MN													
31-33	Manufacturing	-	66	24	3 062	86 731	2 380	4 769	61 172	221 138	350 884	564 544	16 017
311	Food mfg	-	7	5	1 009	26 871	841	1 823	18 435	91 671	229 484	314 088	5 653
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
GOODHUE COUNTY, MN													
31-33	Manufacturing	-	81	36	5 522	166 561	4 094	8 466	105 532	403 785	571 218	972 768	27 679
311	Food mfg	-	14	7	637	15 471	462	905	10 095	37 330	290 527	335 259	9 957
316	Leather & allied product mfg .	-	6	4	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	540	13 936	367	701	9 320	30 873	25 253	56 718	2 288
337	Furniture & related product mfg	-	11	3	736	23 253	517	1 009	14 098	46 625	31 565	77 016	3 044

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENNEPIN COUNTY, MN													
31-33	Manufacturing	1	2 404	835	106 772	4 090 149	65 257	134 711	1 954 488	9 754 719	7 524 011	17 291 574	1 037 039
311	Food mfg	1	123	41	5 192	169 283	3 077	6 151	81 590	513 824	717 938	1 243 504	40 986
3114	Fruit & vegetable preserving & specialty food mfg	1	8	3	717	20 412	216	460	4 066	3 990	40 050	44 054	5 767
31141	Frozen food mfg	—	4	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	3	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	6	3	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	4	3	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	61	13	991	21 951	682	1 172	14 708	79 889	44 629	128 230	2 385
31181	Bread & bakery product mfg	5	53	9	f	D	D	D	D	D	D	D	2 179
3119	Other food mfg	2	22	11	1 339	39 643	1 013	2 018	24 918	124 658	125 771	255 764	18 066
31199	All other food mfg	2	15	9	1 132	35 802	931	1 804	22 565	108 333	101 500	215 126	D
311999	All other miscellaneous food mfg	3	11	5	698	24 511	529	1 019	13 116	79 921	77 295	157 289	D
315	Apparel mfg	2	47	8	506	10 447	395	760	5 740	23 518	23 847	46 004	521
322	Paper mfg	—	49	30	3 153	107 020	2 336	4 480	63 970	266 596	361 135	629 042	14 130
3222	Converted paper product mfg	—	49	30	3 153	107 020	2 336	4 480	63 970	266 596	361 135	629 042	14 130
32221	Paperboard container mfg	—	25	17	1 890	60 434	1 369	2 473	34 980	154 082	178 894	332 134	6 546
322211	Corrugated & solid fiber box mfg	—	15	11	1 390	41 303	989	1 726	22 799	106 146	132 618	238 319	4 781
32222	Paper bag & coated & treated paper mfg	—	11	6	f	D	D	D	D	D	D	D	4 043
323	Printing & related support activities	2	421	120	11 900	444 070	8 396	17 206	264 240	918 375	658 824	1 578 914	88 997
3231	Printing & related support activities	2	421	120	11 900	444 070	8 396	17 206	264 240	918 375	658 824	1 578 914	88 997
32311	Printing	2	353	99	10 179	373 297	7 114	14 592	219 988	776 508	631 226	1 409 355	79 539
323110	Commercial lithographic printing	2	156	55	7 024	271 286	4 865	10 332	160 384	556 060	444 714	1 001 620	58 638
323112	Commercial flexographic printing	1	14	8	508	17 080	338	680	10 935	45 992	49 334	95 163	8 757
323113	Commercial screen printing	1	44	10	660	20 862	516	911	10 690	37 699	35 452	73 900	3 615
323114	Quick printing	1	84	10	710	18 653	496	864	11 176	42 147	21 054	63 732	2 472
32312	Support activities for printing	1	68	21	1 721	70 773	1 282	2 614	44 252	141 867	27 598	169 559	9 458
323121	Tradebinding & related work	—	23	7	510	14 411	446	935	10 992	26 043	4 749	31 042	813
323122	Prepress services	1	45	14	1 211	56 362	836	1 679	33 260	115 824	22 849	138 517	8 645
325	Chemical mfg	1	77	27	2 859	104 676	1 469	2 672	35 861	378 981	283 459	665 687	25 900
3254	Pharmaceutical & medicine mfg	—	13	4	917	38 543	330	534	6 736	133 609	67 001	199 489	9 961
32541	Pharmaceutical & medicine mfg	—	13	4	917	38 543	330	534	6 736	133 609	67 001	199 489	9 961
3256	Soap, cleaning compound, & toilet preparation mfg	1	24	10	1 087	31 969	665	1 206	14 477	142 518	89 002	232 072	6 996
32562	Toilet preparation mfg	—	7	5	783	21 009	502	864	9 814	105 596	54 277	159 445	5 341
325620	Toilet preparation mfg	—	7	5	783	21 009	502	864	9 814	105 596	54 277	159 445	5 341
3259	Other chemical product mfg	1	20	9	566	23 535	303	603	9 109	57 848	63 366	121 653	4 019
326	Plastics & rubber products mfg	2	122	55	5 988	192 251	4 420	9 102	117 185	479 265	384 793	856 744	37 253
3261	Plastics product mfg	2	107	48	5 429	174 419	4 035	8 348	106 968	440 589	358 621	791 731	35 293
32611	Unsupported plastics film, sheet, & bag mfg	1	13	10	1 324	44 095	971	2 129	26 104	117 531	133 303	248 089	7 952
326113	Unsupported plastics film & sheet (except packaging) mfg	1	6	4	855	26 760	660	1 445	16 410	84 089	74 988	156 016	D
32619	Other plastics product mfg	2	75	32	3 803	120 273	2 876	5 875	76 177	293 365	194 136	483 410	25 337
326199	All other plastics product mfg	2	73	31	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	2	15	7	559	17 832	385	754	10 217	38 676	26 172	65 013	1 960
32629	Other rubber product mfg	2	13	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	34	10	1 061	39 750	759	1 617	25 586	93 041	96 392	187 935	7 607
3273	Cement & concrete product mfg	—	13	8	719	27 490	484	1 053	17 027	74 037	59 762	133 077	5 696

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HENNEPIN COUNTY, MN—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	21	14	2 335	89 500	1 817	4 196	58 291	211 736	120 999	331 424	11 222
3315	Foundries	—	13	8	1 551	56 435	1 179	2 831	38 818	134 106	61 402	194 732	D
33152	Nonferrous metal foundries	—	9	6	g	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	—	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	446	159	13 402	492 584	9 710	20 078	302 030	995 033	638 076	1 632 992	87 074
3321	Forging & stamping	—	38	25	2 359	89 901	1 665	3 194	47 276	124 367	146 276	272 324	24 875
33211	Forging & stamping	—	38	25	2 359	89 901	1 665	3 194	47 276	124 367	146 276	272 324	24 875
332116	Metal stamping	—	33	22	2 151	77 754	1 595	3 058	45 438	104 539	122 565	228 807	D
3322	Cutlery & handtool mfg	—	18	8	655	26 843	365	735	10 698	44 171	49 585	87 417	D
33221	Cutlery & handtool mfg	—	18	8	655	26 843	365	735	10 698	44 171	49 585	87 417	D
332212	Hand & edge tool mfg	—	16	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	56	19	1 599	51 998	1 082	2 280	32 161	140 287	92 208	231 458	7 828
33232	Ornamental & architectural metal products mfg	—	41	16	1 382	43 803	935	1 928	27 392	119 283	69 090	187 164	7 020
332322	Sheet metal work mfg	—	26	14	1 217	39 173	828	1 697	24 748	104 077	55 706	158 398	6 652
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	212	65	4 630	184 069	3 520	7 612	122 962	358 335	158 549	515 368	29 944
33271	Machine shops	1	171	36	2 674	104 867	1 945	4 097	67 993	207 321	91 062	297 770	18 283
332710	Machine shops	1	171	36	2 674	104 867	1 945	4 097	67 993	207 321	91 062	297 770	18 283
33272	Turned product & screw, nut, & bolt mfg	—	41	29	1 956	79 202	1 575	3 515	54 969	151 014	67 487	217 598	11 661
332721	Precision turned product mfg	—	36	26	g	D	D	D	D	D	D	D	10 920
3328	Coating, engraving, heat treating, & allied activities	3	60	24	2 134	64 868	1 647	3 303	41 382	125 595	69 882	195 728	11 161
33281	Coating, engraving, heat treating, & allied activities	3	60	24	2 134	64 868	1 647	3 303	41 382	125 595	69 882	195 728	11 161
332813	Electroplating, plating, polishing, anodizing, & coloring	5	32	12	1 448	43 130	1 122	2 263	26 998	76 862	52 734	129 894	6 228
3329	Other fabricated metal product mfg	—	42	13	1 443	56 428	1 056	2 312	37 051	148 450	65 861	218 712	7 055
33291	Metal valve mfg	—	10	6	1 038	42 239	733	1 701	27 918	121 582	50 875	174 055	5 492
332912	Fluid power valve & hose fitting mfg	—	10	6	1 038	42 239	733	1 701	27 918	121 582	50 875	174 055	5 492
333	Machinery mfg	—	262	95	13 313	559 376	7 256	15 309	244 073	1 503 220	1 276 779	2 788 707	101 723
3331	Agriculture, construction, & mining machinery mfg	—	15	6	1 134	40 700	690	1 396	22 821	138 198	224 950	364 748	19 049
33312	Construction machinery mfg	—	5	3	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	5	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	33	12	1 318	56 489	680	1 494	23 934	140 827	104 671	242 996	7 116
33329	Other industrial machinery mfg	—	26	8	816	36 531	391	878	14 181	99 264	80 057	176 147	D
3333	Commercial & service industry machinery mfg	—	30	16	2 564	114 186	1 354	2 797	47 458	359 256	243 862	605 595	15 567
33331	Commercial & service industry machinery mfg	—	30	16	2 564	114 186	1 354	2 797	47 458	359 256	243 862	605 595	15 567
333319	Other commercial & service industry machinery mfg	—	16	8	1 767	78 710	1 014	2 136	35 259	282 550	187 003	469 104	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	21	10	1 625	69 673	845	1 547	24 450	107 034	165 193	272 514	5 737
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	21	10	1 625	69 673	845	1 547	24 450	107 034	165 193	272 514	5 737
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	8	5	1 273	56 335	640	1 121	18 583	82 861	144 313	226 168	4 766
3335	Metalworking machinery mfg	1	83	23	1 516	64 951	1 043	2 173	38 060	124 268	50 106	176 511	13 064
33351	Metalworking machinery mfg	1	83	23	1 516	64 951	1 043	2 173	38 060	124 268	50 106	176 511	13 064
333511	Industrial mold mfg	1	32	10	537	24 017	434	894	17 065	38 664	12 937	53 407	5 087

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31-33	HENNEPIN COUNTY, MN—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	70	25	4 879	202 661	2 471	5 571	81 789	608 285	472 938	1 086 075	39 030
33391	Pump & compressor mfg	—	10	4	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	2	14	6	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	46	15	2 671	109 929	1 451	3 172	45 492	308 965	215 655	527 506	21 759
333993	Packaging machinery mfg	—	13	6	751	32 391	340	758	12 813	53 385	70 236	128 569	5 324
333999	All other miscellaneous general-purpose machinery mfg	—	21	3	1 020	37 793	533	1 135	16 794	111 261	57 703	171 598	11 781
334	Computer & electronic product mfg	—	211	111	26 335	1 152 522	13 135	27 742	417 948	2 608 641	1 695 040	4 283 600	493 443
3341	Computer & peripheral equipment mfg	—	33	17	5 817	268 048	2 540	6 343	68 042	567 178	592 320	1 160 109	249 077
33411	Computer & peripheral equipment mfg	—	33	17	5 817	268 048	2 540	6 343	68 042	567 178	592 320	1 160 109	249 077
334111	Electronic computer mfg	1	8	4	577	27 706	68	920	2 654	55 574	25 928	80 975	D
334112	Computer storage device mfg	—	5	4	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	17	8	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	20	13	2 562	126 779	851	1 409	27 196	345 549	203 275	548 506	D
33421	Telephone apparatus mfg	—	10	7	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	10	7	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	6	4	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	6	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	65	33	6 243	232 876	3 890	7 782	113 803	657 100	335 484	979 606	131 458
33441	Semiconductor & other electronic component mfg	—	65	33	6 243	232 876	3 890	7 782	113 803	657 100	335 484	979 606	131 458
334412	Bare printed circuit board mfg	—	25	14	2 769	83 419	2 175	4 117	53 427	220 867	107 396	326 577	16 999
334413	Semiconductor & related device mfg ...	—	9	6	1 808	84 209	968	2 226	40 071	247 560	98 180	335 079	102 697
334418	Printed circuit assembly (electronic assembly) mfg	—	5	4	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	16	3	521	17 076	332	584	9 857	37 924	36 885	75 273	D
3345	Navigational, measuring, medical, & control instruments mfg	—	75	38	11 073	503 142	5 458	11 422	197 216	983 297	527 526	1 503 228	84 912
33451	Navigational, measuring, medical, & control instruments mfg	—	75	38	11 073	503 142	5 458	11 422	197 216	983 297	527 526	1 503 228	84 912
334510	Electromedical & electrotherapeutic apparatus mfg	—	29	17	h	D	D	D	D	D	D	D	20 306
334511	Search, detection, navigation, & guidance instrument mfg	—	3	2	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	5	1	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	12	7	1 088	55 104	318	688	14 889	64 570	51 140	115 328	D
334519	Other measuring & controlling device mfg	—	11	4	1 386	69 769	914	1 746	40 969	182 546	93 800	275 093	11 866
3346	Mfg & reproducing magnetic & optical media	4	14	8	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	4	14	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENNEPIN COUNTY, MN—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	61	31	3 424	111 730	1 808	3 516	49 348	243 483	244 782	507 633	25 220
3353	Electrical equipment mfg ..	1	40	19	2 258	71 819	1 040	1 906	29 737	132 017	159 843	315 154	18 062
33531	Electrical equipment mfg	1	40	19	2 258	71 819	1 040	1 906	29 737	132 017	159 843	315 154	18 062
335314	Relay & industrial control mfg	—	24	12	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	3	18	11	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	7	12	7	501	17 094	344	757	8 767	39 174	35 411	73 500	2 082
336	Transportation equipment mfg	1	39	17	1 605	61 745	1 065	2 466	35 665	161 857	141 816	295 887	6 953
3363	Motor vehicle parts mfg ...	1	19	10	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	146	37	2 825	89 012	2 055	3 935	52 095	161 314	195 583	359 280	17 992
3371	Household & institutional furniture & kitchen cabinet mfg	1	87	12	1 132	32 255	871	1 637	21 134	58 525	47 057	105 667	D
33712	Household & institutional furniture mfg	1	40	8	765	22 884	596	1 104	14 666	41 324	34 839	76 258	1 762
337127	Institutional furniture mfg	—	7	5	564	18 881	420	809	11 641	34 135	28 815	63 033	D
3372	Office furniture (including fixtures) mfg	1	47	21	1 181	42 982	804	1 657	22 899	86 209	63 759	151 557	2 799
33721	Office furniture (including fixtures) mfg	1	47	21	1 181	42 982	804	1 657	22 899	86 209	63 759	151 557	2 799
337215	Showcase, partition, shelving, & locker mfg	1	23	11	693	26 919	459	949	12 956	59 445	44 511	105 508	1 661
3379	Other furniture related product mfg	—	12	4	512	13 775	380	641	8 062	16 580	84 767	102 056	D
339	Miscellaneous mfg	1	236	62	11 335	417 080	6 377	13 059	168 411	1 053 920	476 890	1 531 984	67 799
3391	Medical equipment & supplies mfg	1	105	32	7 699	317 557	4 366	9 083	121 696	804 194	330 469	1 140 269	56 855
33911	Medical equipment & supplies mfg	1	105	32	7 699	317 557	4 366	9 083	121 696	804 194	330 469	1 140 269	56 855
339112	Surgical & medical instrument mfg	1	39	17	6 299	266 561	3 557	7 710	102 903	658 888	271 040	934 612	48 105
339113	Surgical appliance & supplies mfg	1	15	5	590	26 300	281	388	6 668	90 871	27 184	118 890	7 403
3399	Other miscellaneous mfg ..	1	131	30	3 636	99 523	2 011	3 976	46 715	249 726	146 421	391 715	10 944
33995	Sign mfg	1	47	12	1 015	30 525	671	1 326	14 600	64 457	47 653	110 198	2 664
339950	Sign mfg	1	47	12	1 015	30 525	671	1 326	14 600	64 457	47 653	110 198	2 664
33999	All other miscellaneous mfg	—	42	13	1 990	48 563	1 020	2 025	25 154	118 807	57 212	175 442	5 844
339991	Gasket, packing, & sealing device mfg ...	1	6	5	884	25 865	540	1 102	15 410	51 544	17 815	69 882	2 854
339999	All other miscellaneous mfg	1	28	4	f	D	D	D	D	D	D	D	D
HUBBARD COUNTY, MN													
31-33	Manufacturing	—	32	10	940	19 643	770	1 304	13 161	73 677	92 436	166 144	7 370
ISANTI COUNTY, MN													
31-33	Manufacturing	3	59	17	1 330	35 647	953	1 795	22 150	81 337	71 083	153 470	9 146
332	Fabricated metal product mfg	2	20	6	595	19 538	421	920	12 435	41 926	38 111	80 500	5 126
ITASCA COUNTY, MN													
31-33	Manufacturing	—	58	13	2 432	92 028	1 958	3 901	70 361	249 256	283 395	534 347	43 190
321	Wood product mfg	1	11	6	560	18 417	465	1 007	14 451	23 313	59 747	82 197	D
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON COUNTY, MN													
31-33	Manufacturing	-	18	4	f	D	D	D	D	D	D	D	8 749
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	4	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	4	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
KANABEC COUNTY, MN													
31-33	Manufacturing	1	17	5	803	19 365	637	759	7 708	49 860	48 060	96 744	7 694
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
KANDIYOHI COUNTY, MN													
31-33	Manufacturing	-	66	22	3 265	83 993	2 666	5 706	59 977	243 691	387 842	605 532	36 232
311	Food mfg	-	8	5	1 934	46 113	1 794	4 038	40 461	145 156	258 547	383 567	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	5	530	17 537	340	653	8 521	44 507	43 179	81 096	3 052
KOOCHICHING COUNTY, MN													
31-33	Manufacturing	-	11	4	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
LAKE COUNTY, MN													
31-33	Manufacturing	-	12	5	507	18 614	396	874	12 418	45 368	38 963	84 405	8 178
LE SUEUR COUNTY, MN													
31-33	Manufacturing	1	51	20	2 751	79 532	2 229	4 588	53 678	382 717	348 812	728 879	15 405
311	Food mfg	3	9	4	670	18 605	577	1 279	15 710	69 103	206 827	275 922	4 580
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
LYON COUNTY, MN													
31-33	Manufacturing	-	28	11	1 833	40 476	1 487	3 037	31 477	133 250	315 570	455 992	15 457
311	Food mfg	-	7	4	996	24 439	892	1 948	20 623	76 736	259 455	343 578	13 160

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MCLEOD COUNTY, MN													
31-33	Manufacturing	-	67	31	9 080	291 028	7 268	15 122	206 452	1 005 380	659 803	1 670 471	94 194
311	Food mfg	-	9	4	668	13 893	558	1 185	10 814	46 468	115 338	158 909	3 214
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	4	4 687	143 180	3 824	7 719	103 359	293 512	60 757	355 213	D
3341	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
MARTIN COUNTY, MN													
31-33	Manufacturing	-	44	13	2 111	61 555	1 422	2 783	33 593	167 919	125 279	294 146	19 030
333	Machinery mfg	-	7	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
MEEKER COUNTY, MN													
31-33	Manufacturing	-	58	26	1 740	41 122	1 286	2 386	23 789	119 677	239 152	356 765	24 969
334	Computer & electronic product mfg	2	6	4	507	12 197	315	623	5 120	22 476	16 791	38 840	D
MILLE LACS COUNTY, MN													
31-33	Manufacturing	1	38	8	1 029	24 441	883	1 603	18 388	61 202	97 500	158 026	2 521
MORRISON COUNTY, MN													
31-33	Manufacturing	1	44	12	1 883	47 283	1 595	3 081	34 732	104 126	151 510	256 341	6 716
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building	-	2	2	f	D	D	D	D	D	D	D	D
MOWER COUNTY, MN													
31-33	Manufacturing	-	37	11	h	D	D	D	D	D	D	D	25 261
311	Food mfg	-	5	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
NICOLLET COUNTY, MN													
31-33	Manufacturing	-	34	18	3 748	79 936	2 555	5 200	46 945	265 238	602 182	868 223	17 466
323	Printing & related support activities	-	6	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	6	4	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	5	4	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NOBLES COUNTY, MN													
31-33	Manufacturing	-	24	8	2 690	62 883	2 157	4 359	44 388	236 522	588 191	823 776	9 791
311	Food mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	1	1	g	D	D	D	D	D	D	D	D
OLMSTED COUNTY, MN													
31-33	Manufacturing	-	77	30	10 477	482 127	4 949	10 067	126 924	1 040 943	2 133 306	3 085 395	105 658
311	Food mfg.....	-	12	6	1 496	42 365	1 288	2 687	35 448	114 526	478 607	591 104	5 360
3115	Dairy product mfg.....	-	4	4	825	26 682	686	1 405	22 336	89 067	365 560	451 884	4 174
31151	Dairy product (except frozen) mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	11	6	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	11	6	f	D	D	D	D	D	D	D	D
32311	Printing.....	-	11	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	-	9	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	11	5	1 376	44 746	1 136	2 298	30 610	110 104	96 502	207 427	3 667
3321	Forging & stamping.....	-	1	1	g	D	D	D	D	D	D	D	D
33211	Forging & stamping.....	-	1	1	g	D	D	D	D	D	D	D	D
332116	Metal stamping.....	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	6	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	i	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	-	1	1	i	D	D	D	D	D	D	D	D
OTTER TAIL COUNTY, MN													
31-33	Manufacturing	-	91	30	3 732	82 134	2 875	5 389	55 312	260 698	402 782	661 725	9 361
311	Food mfg.....	-	22	11	2 179	44 381	1 688	3 329	31 723	169 463	326 024	495 762	4 828
3116	Meat product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
PENNINGTON COUNTY, MN													
31-33	Manufacturing	-	16	8	2 047	50 899	1 366	2 164	25 258	270 140	334 482	594 747	12 385
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
PIPESTONE COUNTY, MN													
31-33	Manufacturing	-	15	3	652	16 626	534	1 011	12 990	45 091	52 977	96 885	922
POLK COUNTY, MN													
31-33	Manufacturing	-	40	12	1 350	36 299	1 107	2 064	26 606	130 024	168 604	300 278	4 252
311	Food mfg.....	-	7	4	614	21 003	526	1 137	16 306	98 443	143 530	242 359	D
POPE COUNTY, MN													
31-33	Manufacturing	-	29	7	529	13 290	429	841	9 177	34 865	49 334	84 553	1 940

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	RAMSEY COUNTY, MN												
31-33	Manufacturing	-	765	294	41 550	1 581 587	25 442	49 107	784 644	5 009 459	4 227 460	9 294 638	336 391
311	Food mfg	-	47	21	2 400	60 832	1 168	1 851	26 377	185 281	207 103	393 009	9 642
3118	Bakeries & tortilla mfg	-	24	11	1 305	24 977	564	812	11 012	83 712	48 976	132 412	D
31181	Bread & bakery product mfg	-	21	9	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	8	6	995	19 124	382	512	7 747	66 911	38 459	105 341	3 100
3119	Other food mfg	-	7	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	4	4	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	4	4	f	D	D	D	D	D	D	D	D
31212	Breweries	3	3	3	f	D	D	D	D	D	D	D	D
312120	Breweries	3	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	16	8	533	12 229	407	688	7 153	25 453	48 300	74 085	1 505
322	Paper mfg	-	17	14	1 651	56 343	1 294	2 788	38 176	145 121	180 841	331 685	30 994
3222	Converted paper product mfg	-	16	13	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	10	9	1 112	40 335	871	1 856	28 075	93 072	143 650	238 821	D
322211	Corrugated & solid fiber box mfg	-	6	6	f	D	D	D	D	D	D	D	9 864
323	Printing & related support activities	-	170	48	8 103	271 491	4 816	9 617	146 886	621 088	397 028	1 022 402	37 188
3231	Printing & related support activities	-	170	48	8 103	271 491	4 816	9 617	146 886	621 088	397 028	1 022 402	37 188
32311	Printing	1	148	42	6 782	221 260	4 047	7 779	120 388	496 579	372 818	872 870	30 038
323110	Commercial lithographic printing ..	-	75	23	4 063	144 075	2 590	5 030	84 027	282 123	259 255	544 399	22 135
323113	Commercial screen printing	-	19	6	896	18 682	434	751	9 088	60 672	23 338	83 759	3 706
323116	Manifold business form printing	-	7	4	865	24 500	457	875	12 207	93 470	39 749	134 433	1 177
32312	Support activities for printing	-	22	6	1 321	50 231	769	1 838	26 498	124 509	24 210	149 532	7 150
323122	Prepress services	-	14	5	g	D	D	D	D	D	D	D	7 026
325	Chemical mfg	-	24	10	875	39 309	553	1 102	21 869	196 335	131 471	326 631	7 373
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	24	12	1 377	50 461	895	1 905	22 658	99 439	74 673	176 736	15 795
3261	Plastics product mfg	-	21	12	g	D	D	D	D	D	D	D	15 709
32619	Other plastics product mfg	-	13	8	1 144	43 169	713	1 586	18 066	84 276	55 874	141 942	13 731
326199	All other plastics product mfg	-	13	8	1 144	43 169	713	1 586	18 066	84 276	55 874	141 942	13 731
327	Nonmetallic mineral product mfg	-	15	6	h	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	3	2	h	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
327910	Abrasive product mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	12	10	1 313	58 427	953	1 991	39 609	101 267	171 207	275 734	24 399
3315	Foundries	-	11	9	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	7	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	122	58	5 360	215 673	3 370	6 891	117 964	441 643	480 979	966 486	31 161
3323	Architectural & structural metals mfg	-	30	20	1 491	46 423	959	1 849	24 528	97 898	81 270	177 212	5 781
33232	Ornamental & architectural metal products mfg	-	24	16	1 370	42 026	885	1 715	22 271	86 489	69 026	153 739	D
332321	Metal window & door mfg	-	4	3	699	18 080	410	741	7 881	37 172	40 997	76 076	1 817
332322	Sheet metal work mfg ..	1	15	10	547	19 781	397	810	12 169	39 654	20 042	59 765	3 386
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	30	9	716	32 861	562	1 094	21 229	76 914	35 201	118 151	6 332
33271	Machine shops	-	25	6	571	27 806	440	835	17 414	67 585	31 302	104 916	5 944
332710	Machine shops	-	25	6	571	27 806	440	835	17 414	67 585	31 302	104 916	5 944
3328	Coating, engraving, heat treating, & allied activities ..	1	25	14	776	22 607	609	1 286	15 218	54 556	19 666	74 000	5 945
33281	Coating, engraving, heat treating, & allied activities	1	25	14	776	22 607	609	1 286	15 218	54 556	19 666	74 000	5 945
3329	Other fabricated metal product mfg	-	19	5	1 757	89 243	758	1 668	37 780	149 678	249 993	437 441	6 057
33299	All other fabricated metal product mfg	-	14	2	g	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	RAMSEY COUNTY, MN												
	—Con.												
31-33	Manufacturing—												
	Con.												
333	Machinery mfg	1	60	27	2 920	115 257	1 853	3 560	55 472	275 402	245 779	511 784	16 023
3339	Other general-purpose machinery mfg	—	19	9	1 246	49 659	735	1 438	22 520	124 872	161 601	279 684	6 276
33391	Pump & compressor mfg	—	3	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	10	5	502	20 150	298	548	9 759	38 774	36 189	74 965	D
334	Computer & electronic product mfg	—	60	26	6 573	307 952	3 029	5 991	85 165	933 141	451 010	1 403 473	43 966
3341	Computer & peripheral equipment mfg	1	6	1	923	52 382	153	317	6 389	S	S	50 780	D
33411	Computer & peripheral equipment mfg	1	6	1	923	52 382	153	317	6 389	S	S	50 780	D
334111	Electronic computer mfg	—	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	4	3	612	21 267	271	596	5 993	74 812	41 796	113 240	D
33429	Other communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	20	11	2 232	76 943	1 575	2 934	40 825	146 070	193 189	336 023	21 186
33441	Semiconductor & other electronic component mfg	—	20	11	2 232	76 943	1 575	2 934	40 825	146 070	193 189	336 023	21 186
334412	Bare printed circuit board mfg	—	10	4	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	5	5	938	33 612	561	993	12 718	85 986	129 835	212 831	D
3345	Navigational, measuring, medical, & control instruments mfg	—	24	8	2 486	148 788	772	1 688	26 200	754 036	133 053	881 685	6 356
33451	Navigational, measuring, medical, & control instruments mfg	—	24	8	2 486	148 788	772	1 688	26 200	754 036	133 053	881 685	6 356
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	29	3	560	14 766	453	975	10 387	30 632	31 886	62 602	2 807
339	Miscellaneous mfg	—	103	28	3 378	110 853	1 959	3 378	43 051	265 783	99 560	367 726	8 943
3391	Medical equipment & supplies mfg	—	60	17	2 034	79 601	1 031	2 094	26 735	206 677	55 315	265 455	5 882
33911	Medical equipment & supplies mfg	—	60	17	2 034	79 601	1 031	2 094	26 735	206 677	55 315	265 455	5 882
339112	Surgical & medical instrument mfg	—	13	6	1 051	47 039	358	684	9 021	121 962	26 874	149 387	3 297
3399	Other miscellaneous mfg	—	43	11	1 344	31 252	928	1 284	16 316	59 106	44 245	102 271	3 061
33995	Sign mfg	—	18	8	623	20 757	404	714	9 994	36 645	29 147	64 884	1 677
339950	Sign mfg	—	18	8	623	20 757	404	714	9 994	36 645	29 147	64 884	1 677
33999	All other miscellaneous mfg	1	9	2	603	7 945	436	425	4 772	14 530	9 331	23 808	1 090
339999	All other miscellaneous mfg	1	6	2	596	7 763	430	412	4 641	14 131	9 118	23 183	1 072
	REDWOOD COUNTY, MN												
31-33	Manufacturing	—	21	7	1 250	34 863	926	1 980	20 083	75 163	90 505	165 899	4 927
334	Computer & electronic product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RENVILLE COUNTY, MN													
31-33	Manufacturing	1	34	11	884	21 520	648	1 249	13 305	64 379	92 035	155 749	8 196
RICE COUNTY, MN													
31-33	Manufacturing	-	86	30	4 838	161 292	3 518	7 469	112 020	450 083	499 484	954 941	46 570
311	Food mfg.....	-	11	7	1 556	57 307	1 169	2 571	42 145	232 004	240 914	490 567	17 936
3112	Grain & oilseed milling	-	3	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg.	-	2	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg. .	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	11	5	642	20 103	544	1 076	16 424	47 415	75 022	113 492	3 941
333	Machinery mfg.....	-	12	5	762	25 342	438	1 067	16 657	72 488	79 886	148 829	6 264
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
ROSEAU COUNTY, MN													
31-33	Manufacturing	-	18	5	i	D	D	D	D	D	D	D	9 514
321	Wood product mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	-	3	2	h	D	D	D	D	D	D	D	D
32191	Millwork.....	-	2	1	h	D	D	D	D	D	D	D	D
321911	Wood window & door mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	4	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
ST. LOUIS COUNTY, MN													
31-33	Manufacturing	1	228	57	5 446	155 830	3 851	7 377	95 958	462 154	413 036	879 373	142 396
311	Food mfg.....	1	20	5	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	37	9	684	22 892	490	996	13 290	43 346	40 557	84 249	D
334	Computer & electronic product mfg.....	-	8	3	631	11 049	418	798	4 835	27 337	47 927	74 640	1 471
3344	Semiconductor & other electronic component mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SCOTT COUNTY, MN													
31-33	Manufacturing	1	148	34	5 039	180 804	3 626	7 348	116 611	442 581	558 727	989 491	34 913
323	Printing & related support activities.....	-	7	4	585	20 618	466	863	14 550	41 940	45 133	87 081	957
3231	Printing & related support activities.....	-	7	4	585	20 618	466	863	14 550	41 940	45 133	87 081	957
32311	Printing	-	7	4	585	20 618	466	863	14 550	41 940	45 133	87 081	957
323110	Commercial lithographic printing ..	-	5	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	13	4	687	29 869	407	814	15 923	65 688	45 994	110 705	5 377
332	Fabricated metal product mfg	-	39	4	982	34 081	848	1 703	28 318	57 970	132 906	189 449	10 278
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	13	5	955	38 465	654	1 385	21 189	70 230	53 560	122 654	4 437
SHERBURNE COUNTY, MN													
31-33	Manufacturing	-	96	31	3 278	103 183	2 574	4 428	67 594	272 211	189 852	463 200	19 595
332	Fabricated metal product mfg	-	37	12	1 098	40 658	811	1 536	25 419	85 841	46 444	130 935	4 838
337	Furniture & related product mfg	-	4	1	f	D	D	D	D	D	D	D	824
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	2	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
SIBLEY COUNTY, MN													
31-33	Manufacturing	-	25	10	1 054	28 695	834	1 641	16 690	129 154	222 577	352 131	2 810
311	Food mfg	-	5	4	711	22 268	548	1 147	11 791	102 493	193 382	297 268	1 809
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
STEARNS COUNTY, MN													
31-33	Manufacturing	-	219	66	12 609	369 140	10 193	19 164	266 782	919 213	1 288 669	2 216 638	72 285
311	Food mfg	-	23	8	1 998	44 655	1 818	3 457	37 951	145 184	480 669	627 044	D
3116	Meat product mfg	-	6	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	10	5	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	2	10	5	f	D	D	D	D	D	D	D	D
32191	Millwork	2	6	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	29	9	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	29	9	g	D	D	D	D	D	D	D	D
32311	Printing	-	26	9	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	14	5	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	20	4	1 088	31 289	999	1 869	27 718	97 991	25 843	128 445	D
3279	Other nonmetallic mineral product mfg	-	8	4	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	8	4	g	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	-	8	4	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STEARNS COUNTY, MN—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	32	9	1 452	46 039	977	2 189	27 125	90 238	64 984	156 726	D
3329	Other fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	20	6	877	19 553	704	1 220	14 962	48 026	35 256	79 488	7 012
3391	Medical equipment & supplies mfg	-	10	6	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	10	6	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	-	5	4	f	D	D	D	D	D	D	D	D
STEELE COUNTY, MN													
31-33	Manufacturing	-	67	30	6 292	191 701	4 612	10 148	122 251	517 407	494 730	1 006 942	38 089
327	Nonmetallic mineral product mfg	-	5	3	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	5	1 762	56 785	1 165	2 430	30 648	147 917	174 924	317 105	13 912
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	8	1 286	45 373	802	1 761	26 110	101 914	117 444	218 934	4 515
3331	Agriculture, construction, & mining machinery mfg....	-	4	4	f	D	D	D	D	D	D	D	1 683
33312	Construction machinery mfg	-	3	3	506	15 981	361	843	11 749	42 423	77 175	119 812	D
333120	Construction machinery mfg	-	3	3	506	15 981	361	843	11 749	42 423	77 175	119 812	D
3339	Other general-purpose machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
SWIFT COUNTY, MN													
31-33	Manufacturing	-	13	5	829	19 280	667	1 348	15 208	21 774	32 390	56 532	3 551
333	Machinery mfg	-	5	3	548	14 644	418	885	11 762	11 984	23 626	38 098	D
3331	Agriculture, construction, & mining machinery mfg....	-	4	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	4	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
TODD COUNTY, MN													
31-33	Manufacturing	-	47	11	1 519	46 378	1 221	2 531	35 063	104 483	173 423	278 200	10 715
323	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WABASHA COUNTY, MN													
31-33	Manufacturing	-	39	13	1 934	51 298	1 474	3 128	39 574	161 072	207 727	368 535	15 219
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
WADENA COUNTY, MN													
31-33	Manufacturing	-	21	8	784	19 816	623	1 261	12 911	43 010	31 957	74 399	1 712
WASECA COUNTY, MN													
31-33	Manufacturing	1	29	12	3 298	108 575	2 455	4 862	61 531	265 862	196 075	467 128	19 406
323	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	8	4	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	5	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	4	3	f	D	D	D	D	D	D	D	5 021
WASHINGTON COUNTY, MN													
31-33	Manufacturing	-	210	53	9 456	436 048	6 653	14 090	271 435	1 062 659	1 743 404	2 795 049	103 677
321	Wood product mfg	-	13	4	h	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	10	4	h	D	D	D	D	D	D	D	D
32191	Millwork	-	4	1	h	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	h	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	16	4	587	18 046	451	914	11 054	69 553	25 363	90 480	D
3231	Printing & related support activities.....	-	16	4	587	18 046	451	914	11 054	69 553	25 363	90 480	D
32311	Printing	-	15	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	4	1 370	74 242	773	1 689	35 701	213 640	157 318	370 516	37 239
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	1	1	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	34	16	1 010	36 293	747	1 444	21 446	82 728	72 670	153 825	6 031
333	Machinery mfg	-	29	9	1 456	57 619	952	1 994	32 818	142 852	101 588	236 850	12 574
3335	Metalworking machinery mfg	-	17	7	974	39 217	678	1 452	24 839	96 746	29 066	120 750	D
33351	Metalworking machinery mfg	-	17	7	974	39 217	678	1 452	24 839	96 746	29 066	120 750	D
333514	Special die & tool, die set, jig, & fixture mfg .	-	3	2	f	D	D	D	D	D	D	D	D
WATONWAN COUNTY, MN													
31-33	Manufacturing	4	21	7	1 102	22 684	823	1 692	15 242	62 188	78 469	139 256	4 427
311	Food mfg.....	3	6	4	628	14 022	434	1 024	9 108	42 382	56 075	97 350	2 596

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
WINONA COUNTY, MN													
31-33	Manufacturing	1	116	51	7 115	196 089	4 942	9 941	111 595	489 411	589 540	1 071 891	32 219
311	Food mfg.....	4	13	5	837	21 050	542	1 062	12 103	80 386	140 126	220 781	6 238
315	Apparel mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills.....	-	2	2	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills.....	-	2	2	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills.....	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	9	8	539	16 317	451	878	11 082	34 177	15 195	49 164	2 157
3315	Foundries.....	-	8	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	12	4	591	18 606	434	946	11 117	42 455	30 019	71 105	D
333	Machinery mfg.....	2	19	6	534	15 099	332	556	7 836	28 111	30 831	60 994	1 883
334	Computer & electronic product mfg.....	-	5	3	1 618	44 436	1 039	2 159	23 949	105 916	208 770	309 016	9 232
3344	Semiconductor & other electronic component mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	6	4	554	17 454	313	610	7 397	45 763	12 263	57 778	D
WRIGHT COUNTY, MN													
31-33	Manufacturing	1	179	53	4 315	127 399	3 051	5 978	69 634	301 090	283 857	583 563	20 093
311	Food mfg.....	-	12	8	901	28 175	504	974	10 545	45 804	101 839	147 782	3 066
332	Fabricated metal product mfg.....	-	48	15	1 029	36 590	766	1 666	22 023	81 708	58 600	138 586	7 313

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
ALBERT LEA, MN													
31-33	Manufacturing	-	46	20	2 502	71 143	1 969	3 895	49 156	186 785	322 715	501 929	13 431
311	Food mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALEXANDRIA, MN													
31-33	Manufacturing	-	32	17	2 345	62 912	1 885	3 316	43 637	249 758	157 682	406 554	10 837
327	Nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	2 915
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
ANOKA, MN													
31-33	Manufacturing	2	51	23	6 068	220 294	4 258	8 666	131 153	634 854	442 364	1 081 632	36 507
332	Fabricated metal product mfg	5	13	8	2 815	89 083	2 094	4 348	58 392	196 169	159 721	357 217	13 898
3321	Forging & stamping	9	2	2	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	9	2	2	g	D	D	D	D	D	D	D	D
332116	Metal stamping	9	2	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
ARDEN HILLS, MN													
31-33	Manufacturing	-	26	15	3 766	191 253	1 518	2 936	45 413	836 881	229 134	1 060 146	20 690
334	Computer & electronic product mfg	-	4	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AUSTIN, MN													
31-33	Manufacturing	-	20	8	h	D	D	D	D	D	D	D	D
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
BAYPORT, MN													
31-33	Manufacturing	-	3	2	h	D	D	D	D	D	D	D	D
321	Wood product mfg	-	1	1	h	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	h	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	h	D	D	D	D	D	D	D	D
BEMIDJI, MN													
31-33	Manufacturing	2	21	7	793	20 710	625	1 074	15 230	34 085	60 328	94 984	5 472
BENSON, MN													
31-33	Manufacturing	-	7	4	775	18 271	633	1 286	14 623	19 282	26 992	48 694	3 496
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
BLAINE, MN *													
31-33	Manufacturing	1	134	28	3 147	106 242	2 321	4 945	71 933	240 778	122 818	368 290	18 139
326	Plastics & rubber products mfg	-	10	5	752	24 389	535	1 184	15 242	70 324	25 531	95 957	6 155
332	Fabricated metal product mfg	-	56	8	1 266	42 865	976	2 259	31 767	90 163	51 642	146 180	5 656
3321	Forging & stamping	-	4	2	f	D	D	D	D	D	D	D	2 503
33211	Forging & stamping	-	4	2	f	D	D	D	D	D	D	D	2 503
332116	Metal stamping	-	4	2	f	D	D	D	D	D	D	D	2 503
333	Machinery mfg	2	25	8	534	22 466	393	817	15 014	47 741	27 825	75 775	4 096
BLOOMINGTON, MN													
31-33	Manufacturing	-	209	62	10 538	420 770	5 738	11 701	160 153	783 566	885 397	1 655 482	365 528
323	Printing & related support activities	-	38	8	591	21 379	404	826	12 328	45 712	19 682	65 824	6 910
3231	Printing & related support activities	-	38	8	591	21 379	404	826	12 328	45 712	19 682	65 824	6 910
326	Plastics & rubber products mfg	2	14	5	550	17 436	302	623	8 400	44 301	54 533	98 746	2 751
3261	Plastics product mfg	2	12	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	45	17	1 339	47 926	934	1 743	26 287	70 814	73 799	144 583	17 770
3321	Forging & stamping	2	8	4	679	25 488	453	755	11 845	22 473	45 384	67 043	D
33211	Forging & stamping	2	8	4	679	25 488	453	755	11 845	22 473	45 384	67 043	D
332116	Metal stamping	2	7	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	7	1 306	61 467	604	1 322	20 886	110 956	167 795	273 552	7 283
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BLOOMINGTON, MN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	24	11	5 013	223 558	2 577	5 197	68 392	363 665	473 509	831 150	322 268
3341	Computer & peripheral equipment mfg.....	-	6	3	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	6	3	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	7	4	1 183	49 273	572	1 120	18 599	180 514	66 016	239 952	D
33441	Semiconductor & other electronic component mfg.....	-	7	4	1 183	49 273	572	1 120	18 599	180 514	66 016	239 952	D
334413	Semiconductor & related device mfg...	-	3	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	21	2	628	11 855	161	318	3 989	25 421	19 174	43 600	1 846
3399	Other miscellaneous mfg ..	1	16	2	604	10 469	145	285	3 354	22 101	17 662	38 732	1 637
BLUE EARTH, MN													
31-33	Manufacturing	-	9	7	795	18 285	624	1 376	12 644	50 541	58 977	118 479	2 501
BRAINERD, MN													
31-33	Manufacturing	-	40	13	1 562	58 007	1 222	2 334	42 970	158 562	148 556	303 924	6 265
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	f	D	D	D	D	D	D	D	D
BROOKLYN CENTER, MN													
31-33	Manufacturing	-	44	17	1 723	66 629	1 159	2 431	35 448	147 969	95 538	242 335	12 281
BROOKLYN PARK, MN													
31-33	Manufacturing	-	109	39	5 406	226 807	2 782	5 640	88 786	416 075	449 014	860 917	44 807
323	Printing & related support activities.....	-	18	7	1 115	40 883	726	1 485	22 811	76 234	62 694	138 340	6 195
3231	Printing & related support activities.....	-	18	7	1 115	40 883	726	1 485	22 811	76 234	62 694	138 340	6 195
32311	Printing.....	-	16	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	8	5	948	36 102	590	1 257	19 488	69 629	54 769	123 816	5 580
332	Fabricated metal product mfg.....	1	32	13	1 137	49 185	723	1 441	25 014	97 442	69 594	160 228	6 888
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	20	7	609	26 761	423	877	15 560	54 629	37 134	91 757	4 203
333	Machinery mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BURNSVILLE, MN													
31-33	Manufacturing	1	113	36	4 055	148 146	2 170	4 236	53 165	384 578	340 021	723 631	20 539
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	6	1 307	57 120	484	972	15 081	169 979	64 159	234 649	8 253
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	7	678	21 295	481	947	10 777	49 270	40 705	90 621	2 147
CAMBRIDGE, MN													
31-33	Manufacturing	3	15	9	893	25 437	613	1 198	15 416	60 651	58 045	119 690	7 182
CANNON FALLS, MN													
31-33	Manufacturing	-	17	10	1 523	40 481	1 064	2 154	25 784	91 343	76 230	168 052	5 299
CHANHASSEN, MN *													
31-33	Manufacturing	1	38	20	4 207	154 855	2 622	5 873	82 295	363 390	380 557	745 319	33 641
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	6	4	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	6	4	3	f	D	D	D	D	D	D	D	D
32311	Printing	6	3	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	6	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	4	1 481	50 116	769	1 755	24 720	109 588	114 025	222 315	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	3	2	g	D	D	D	D	D	D	D	D
CHASKA, MN													
31-33	Manufacturing	2	66	46	5 954	241 404	3 328	6 502	102 507	629 016	440 038	1 060 240	50 498
326	Plastics & rubber products mfg	-	5	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	13	11	540	21 073	417	790	12 557	44 295	26 332	69 972	2 813
333	Machinery mfg	-	11	8	1 445	61 943	568	1 116	16 516	195 475	172 183	360 283	1 881
3332	Industrial machinery mfg	-	6	4	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	4	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHASKA, MN—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	9	7	1 578	66 429	721	1 304	25 711	107 737	57 350	165 920	2 343
3391	Medical equipment & supplies mfg.....	-	5	4	g	D	D	D	D	D	D	D	2 199
33911	Medical equipment & supplies mfg.....	-	5	4	g	D	D	D	D	D	D	D	2 199
339112	Surgical & medical instrument mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
	CLOQUET, MN												
31-33	Manufacturing....	-	13	4	1 905	85 986	1 560	3 357	68 002	248 697	157 890	401 841	D
322	Paper mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg....	-	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
	COLD SPRING, MN												
31-33	Manufacturing....	-	19	4	1 600	41 320	1 473	2 611	36 132	119 369	93 793	219 225	5 076
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg....	-	4	2	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
	COLUMBIA HEIGHTS, MN												
31-33	Manufacturing....	1	39	10	613	17 332	470	885	11 485	38 784	28 364	67 281	2 998
	COON RAPIDS, MN												
31-33	Manufacturing....	-	61	23	2 613	102 818	1 970	4 479	64 700	220 496	161 609	379 097	24 334
323	Printing & related support activities.....	1	9	4	504	21 856	358	788	13 013	43 381	36 276	79 116	D
3231	Printing & related support activities.....	1	9	4	504	21 856	358	788	13 013	43 381	36 276	79 116	D
332	Fabricated metal product mfg.....	-	21	10	1 149	43 812	963	2 457	32 340	95 185	52 063	145 407	9 501
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	8	4	731	27 372	625	1 659	21 581	62 189	32 452	92 959	7 776
	COTTAGE GROVE, MN												
31-33	Manufacturing....	-	10	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg..	-	1	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
	CROOKSTON, MN												
31-33	Manufacturing....	1	11	4	f	D	D	D	D	D	D	D	2 461
	CRYSTAL, MN												
31-33	Manufacturing....	3	30	4	530	16 881	356	708	9 325	40 639	26 089	66 029	2 503

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DETROIT LAKES, MN													
31-33	Manufacturing	-	21	9	961	26 059	670	1 257	17 094	66 944	69 951	137 379	6 924
DULUTH, MN													
31-33	Manufacturing	-	97	25	2 751	88 937	1 937	3 817	56 347	286 310	244 462	534 173	D
311	Food mfg	-	11	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
EAGAN, MN													
31-33	Manufacturing	-	85	36	4 169	169 496	2 762	5 830	101 121	1 114 607	2 176 682	3 294 111	28 707
324	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	5	631	21 090	496	923	13 657	39 944	30 628	70 967	2 439
334	Computer & electronic product mfg	-	6	5	f	D	D	D	D	D	D	D	D
EAST GRAND FORKS, MN													
31-33	Manufacturing	-	17	5	612	19 669	494	969	14 947	94 221	113 007	207 413	970
EDEN PRAIRIE, MN													
31-33	Manufacturing	1	146	62	9 873	412 613	4 982	10 138	170 213	917 355	601 231	1 528 643	74 013
311	Food mfg	6	8	2	691	22 574	190	388	5 413	20 369	76 293	96 456	4 905
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	27	9	1 045	40 116	730	1 441	23 047	77 902	54 266	132 047	5 415
3231	Printing & related support activities	-	27	9	1 045	40 116	730	1 441	23 047	77 902	54 266	132 047	5 415
32311	Printing	-	26	8	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	12	4	573	21 522	394	735	12 198	39 315	18 115	57 337	2 609
333	Machinery mfg	-	13	6	581	27 322	294	584	9 425	59 242	29 096	86 318	4 267
334	Computer & electronic product mfg	-	32	20	5 080	225 226	2 268	4 613	87 812	527 669	290 722	808 402	40 037
3341	Computer & peripheral equipment mfg	1	7	5	974	40 622	246	523	9 887	121 412	90 326	210 947	D
33411	Computer & peripheral equipment mfg	1	7	5	974	40 622	246	523	9 887	121 412	90 326	210 947	D
3345	Navigational, measuring, medical, & control instruments mfg	-	15	10	3 778	172 692	1 827	3 799	74 121	380 426	180 083	551 376	28 873
33451	Navigational, measuring, medical, & control instruments mfg	-	15	10	3 778	172 692	1 827	3 799	74 121	380 426	180 083	551 376	28 873
334510	Electromedical & electrotherapeutic apparatus mfg	-	7	5	1 549	60 126	689	1 567	20 704	165 049	53 865	212 401	5 105
334513	Industrial process control instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	3	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	9	6	771	29 380	395	796	10 610	53 597	71 252	149 030	5 385
339	Miscellaneous mfg	-	13	5	623	29 345	332	707	10 617	74 661	16 247	90 800	7 087

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EDINA, MN													
31-33	Manufacturing	1	93	20	3 007	109 369	2 038	4 016	58 950	289 215	189 981	479 433	22 050
333	Machinery mfg	-	9	4	592	25 870	351	646	13 110	68 826	41 451	110 052	D
334	Computer & electronic product mfg	1	10	3	504	16 605	340	705	8 884	60 289	23 716	83 789	3 501
339	Miscellaneous mfg	-	16	2	642	21 131	423	800	10 571	45 270	27 683	73 635	241
3391	Medical equipment & supplies mfg	-	10	1	559	18 531	367	684	8 875	38 496	23 085	62 218	149
33911	Medical equipment & supplies mfg	-	10	1	559	18 531	367	684	8 875	38 496	23 085	62 218	149
339112	Surgical & medical instrument mfg	-	4	1	f	D	D	D	D	D	D	D	68
ELK RIVER, MN													
31-33	Manufacturing	1	45	16	1 188	44 393	889	1 661	26 305	83 965	60 712	144 624	7 334
332	Fabricated metal product mfg	-	19	9	780	27 505	543	1 031	16 017	49 913	33 072	82 292	2 816
FAIRMONT, MN													
31-33	Manufacturing	-	28	10	1 774	52 614	1 173	2 261	27 896	151 114	103 170	255 340	16 145
333	Machinery mfg	-	5	3	511	16 025	299	470	7 100	36 491	28 859	65 081	D
FARIBAULT, MN													
31-33	Manufacturing	-	38	21	2 797	82 617	2 206	4 793	61 046	179 436	263 114	436 822	15 225
311	Food mfg	-	8	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
FERGUS FALLS, MN													
31-33	Manufacturing	-	42	16	1 323	29 249	791	1 360	15 285	101 735	109 892	211 406	5 017
FRIDLEY, MN													
31-33	Manufacturing	-	159	69	9 797	382 530	6 127	11 146	195 944	866 141	816 524	1 673 726	47 571
332	Fabricated metal product mfg	-	59	25	3 653	141 427	2 094	3 708	63 896	408 135	112 123	521 941	17 204
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	31	11	911	30 382	746	1 482	22 363	72 241	21 764	94 304	5 568
33271	Machine shops	-	23	9	771	25 423	632	1 243	18 457	62 350	17 995	80 783	4 670
332710	Machine shops	-	23	9	771	25 423	632	1 243	18 457	62 350	17 995	80 783	4 670
3329	Other fabricated metal product mfg	-	7	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	7	2	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	27	11	878	33 605	566	1 160	18 201	75 377	61 266	135 781	3 216
334	Computer & electronic product mfg	-	9	7	1 350	40 527	816	1 506	24 002	96 969	50 942	147 214	6 898
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D
GLENCOE, MN													
31-33	Manufacturing	-	9	7	1 672	35 276	1 535	2 466	30 246	164 957	204 693	369 824	6 684
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GOLDEN VALLEY, MN													
31-33	Manufacturing	-	91	37	6 792	247 426	4 181	7 865	124 025	734 806	443 135	1 187 722	39 537
322	Paper mfg	-	5	4	600	16 439	421	851	9 475	49 982	53 978	104 427	2 920
3222	Converted paper product mfg	-	5	4	600	16 439	421	851	9 475	49 982	53 978	104 427	2 920
323	Printing & related support activities	-	17	7	795	22 695	574	1 007	12 777	57 348	35 562	93 096	2 251
3231	Printing & related support activities	-	17	7	795	22 695	574	1 007	12 777	57 348	35 562	93 096	2 251
32311	Printing	-	13	5	668	17 911	475	778	9 673	49 355	33 828	83 285	2 080
323110	Commercial lithographic printing ..	-	6	4	602	15 799	424	681	8 401	44 781	32 392	77 283	1 997
332	Fabricated metal product mfg	-	12	4	540	14 495	337	516	9 037	40 030	24 446	65 119	1 896
333	Machinery mfg	-	9	4	837	38 466	457	992	15 963	173 303	73 753	250 712	2 880
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	6	3 001	122 908	1 792	3 286	62 373	330 203	191 979	527 060	26 161
3345	Navigational, measuring, medical, & control instruments mfg	-	6	4	2 936	121 099	1 753	3 217	61 546	323 827	187 365	516 078	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	4	2 936	121 099	1 753	3 217	61 546	323 827	187 365	516 078	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	g	D	D	D	D	D	D	D	D
GRAND RAPIDS, MN													
31-33	Manufacturing	-	17	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
HASTINGS, MN *													
31-33	Manufacturing	1	16	10	1 592	52 630	1 159	2 457	33 310	80 669	168 988	250 072	12 664
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
HIBBING, MN													
31-33	Manufacturing	-	22	11	1 357	32 314	939	1 780	16 995	93 067	85 477	179 668	5 211
334	Computer & electronic product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
HOPKINS, MN													
31-33	Manufacturing	1	59	20	2 357	83 945	1 569	3 404	45 520	263 729	146 651	407 795	21 491
334	Computer & electronic product mfg	-	5	4	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HUTCHINSON, MN													
31-33	Manufacturing	-	25	12	6 181	214 480	4 950	10 859	153 741	760 164	311 643	1 080 579	83 683
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	h	D	D	D	D	D	D	D	D
INTERNATIONAL FALLS, MN													
31-33	Manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
JACKSON, MN													
31-33	Manufacturing	-	9	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
LAKE CITY, MN *													
31-33	Manufacturing	-	13	6	1 221	37 050	970	2 124	29 534	115 404	114 520	229 713	11 350
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAKEVILLE, MN													
31-33	Manufacturing	-	63	28	3 186	108 790	2 114	4 496	62 916	285 133	358 609	646 403	26 600
311	Food mfg	-	4	3	974	28 932	650	1 276	15 078	51 222	110 105	163 529	12 257
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	4	538	14 853	417	859	10 374	68 655	54 921	123 148	501
LE SUEUR, MN *													
31-33	Manufacturing	1	10	7	1 448	40 901	1 197	2 438	27 076	284 635	218 472	501 999	9 045
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
LITCHFIELD, MN													
31-33	Manufacturing	-	19	7	801	20 174	558	1 089	10 698	66 128	159 718	224 382	21 566
LITTLE CANADA, MN													
31-33	Manufacturing	3	19	7	619	16 502	530	1 138	12 240	48 172	22 981	72 633	1 724

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LITTLE FALLS, MN													
31-33	Manufacturing	-	22	8	g	D	D	D	D	D	D	D	3 975
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building	-	2	2	f	D	D	D	D	D	D	D	D
LONG PRAIRIE, MN													
31-33	Manufacturing	-	13	4	1 023	31 689	802	1 752	23 506	79 449	159 529	239 145	7 355
323	Printing & related support activities	-	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D
MANKATO, MN *													
31-33	Manufacturing	-	62	32	3 721	116 640	2 577	5 521	70 832	340 281	1 139 147	1 476 411	34 472
311	Food mfg	-	10	7	588	21 521	382	801	11 488	124 308	819 359	945 230	17 040
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D
MAPLE GROVE, MN													
31-33	Manufacturing	-	105	34	5 685	227 757	3 831	8 625	118 475	616 158	410 683	1 028 249	45 902
339	Miscellaneous mfg	-	9	3	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	4	2	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	2	h	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	2	h	D	D	D	D	D	D	D	D
MAPLEWOOD, MN													
31-33	Manufacturing	1	32	9	712	21 639	453	951	13 394	46 245	64 174	110 242	1 727
MARSHALL, MN													
31-33	Manufacturing	-	19	7	1 282	31 274	1 090	2 298	24 306	100 289	286 308	393 816	14 703
311	Food mfg	-	5	4	f	D	D	D	D	D	D	D	D
MEDINA, MN													
31-33	Manufacturing	-	23	5	781	29 288	509	1 064	14 998	65 912	64 349	130 530	2 692
MENDOTA HEIGHTS, MN													
31-33	Manufacturing	5	26	8	1 136	31 042	778	1 517	18 470	90 366	99 069	189 569	4 057

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNEAPOLIS, MN												
31-33	Manufacturing	1	699	239	25 906	951 082	17 446	35 740	512 063	2 106 593	1 821 093	3 953 529	158 044
311	Food mfg	1	56	21	2 098	62 230	1 542	3 124	41 796	230 982	372 015	614 079	22 291
3118	Bakeries & tortilla mfg	1	27	8	621	14 203	431	773	10 183	55 673	24 826	83 799	1 326
322	Paper mfg	-	19	12	1 311	44 674	990	1 772	25 734	92 795	178 410	271 910	3 962
3222	Converted paper product mfg	-	19	12	1 311	44 674	990	1 772	25 734	92 795	178 410	271 910	3 962
32221	Paperboard container mfg	-	11	8	772	22 945	582	881	12 985	55 367	67 514	121 808	1 687
322211	Corrugated & solid fiber box mfg	-	7	5	516	13 771	395	540	7 596	32 237	49 869	81 363	D
323	Printing & related support activities	3	154	47	4 184	165 673	3 031	6 329	102 704	353 956	211 407	564 348	27 805
3231	Printing & related support activities	3	154	47	4 184	165 673	3 031	6 329	102 704	353 956	211 407	564 348	27 805
32311	Printing	3	120	35	3 214	124 589	2 292	4 844	77 037	269 815	193 435	462 199	24 175
323110	Commercial lithographic printing	3	59	23	2 344	97 609	1 687	3 663	61 417	209 942	144 686	353 488	20 161
32312	Support activities for printing	1	34	12	970	41 084	739	1 485	25 667	84 141	17 972	102 149	3 630
323122	Prepress services	2	24	9	760	34 867	551	1 087	20 908	72 179	14 974	87 129	3 405
325	Chemical mfg	2	24	9	820	22 670	492	893	12 037	76 884	96 340	177 745	4 040
3256	Soap, cleaning compound, & toilet preparation mfg	3	10	5	580	13 376	357	603	7 607	45 071	44 967	90 695	1 379
326	Plastics & rubber products mfg	4	26	11	1 356	40 650	989	2 055	24 713	95 784	78 560	173 275	8 180
3261	Plastics product mfg	5	19	8	1 072	32 280	821	1 740	20 864	78 390	67 405	144 949	7 556
32619	Other plastics product mfg	5	14	5	911	26 612	708	1 528	17 403	64 739	52 006	115 776	7 307
326199	All other plastics product mfg	5	14	5	911	26 612	708	1 528	17 403	64 739	52 006	115 776	7 307
331	Primary metal mfg	-	7	6	963	39 198	768	1 689	24 215	105 943	44 560	149 397	3 675
332	Fabricated metal product mfg	1	113	45	4 505	156 892	3 293	6 990	94 236	287 716	201 746	491 409	21 585
3321	Forging & stamping	-	12	8	786	32 586	529	1 057	15 108	36 944	39 500	79 110	3 744
33211	Forging & stamping	-	12	8	786	32 586	529	1 057	15 108	36 944	39 500	79 110	3 744
332116	Metal stamping	-	10	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	18	8	568	17 529	395	884	10 889	61 810	37 310	98 041	3 752
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	47	16	1 201	42 774	948	2 025	29 740	84 507	29 897	114 558	5 093
33271	Machine shops	1	38	10	779	27 215	593	1 185	18 151	56 016	18 381	74 570	3 274
332710	Machine shops	1	38	10	779	27 215	593	1 185	18 151	56 016	18 381	74 570	3 274
3328	Coating, engraving, heat treating, & allied activities	5	21	10	1 328	39 821	1 018	2 104	25 110	72 820	52 771	126 314	5 689
33281	Coating, engraving, heat treating, & allied activities	5	21	10	1 328	39 821	1 018	2 104	25 110	72 820	52 771	126 314	5 689
332813	Electroplating, plating, polishing, anodizing, & coloring	5	16	7	1 104	32 429	836	1 742	20 225	57 633	47 292	105 671	5 208
333	Machinery mfg	1	54	23	2 756	117 973	1 564	3 431	54 353	331 948	233 317	574 547	19 785
3339	Other general-purpose machinery mfg	2	20	9	1 786	82 889	901	2 101	34 728	266 963	189 978	466 421	15 254
33391	Pump & compressor mfg	-	5	3	1 000	48 951	557	1 390	23 018	192 041	124 279	318 681	D
333911	Pump & pumping equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	4	10	3	618	27 917	253	536	9 085	61 485	56 403	124 852	D
334	Computer & electronic product mfg	-	35	13	3 246	156 256	1 483	2 888	50 826	183 333	128 420	310 983	27 725
3344	Semiconductor & other electronic component mfg	-	12	3	581	15 578	465	973	10 651	54 117	28 164	82 621	D
33441	Semiconductor & other electronic component mfg	-	12	3	581	15 578	465	973	10 651	54 117	28 164	82 621	D
3345	Navigational, measuring, medical, & control instruments mfg	-	11	5	2 413	132 775	913	1 722	37 750	115 997	85 661	200 488	19 912
33451	Navigational, measuring, medical, & control instruments mfg	-	11	5	2 413	132 775	913	1 722	37 750	115 997	85 661	200 488	19 912
334510	Electromedical & electrotherapeutic apparatus mfg	-	3	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS, MN— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg	2	11	7	587	20 946	431	901	13 247	39 181	21 939	60 403	1 394
337	Furniture & related product mfg	1	56	13	851	22 714	652	1 261	14 130	38 356	39 014	78 588	1 546
339	Miscellaneous mfg	2	66	12	1 692	55 798	1 116	2 093	26 794	151 494	67 544	219 612	7 116
3391	Medical equipment & supplies mfg	4	24	5	882	33 415	570	1 061	15 134	101 420	31 496	133 084	5 290
33911	Medical equipment & supplies mfg	4	24	5	882	33 415	570	1 061	15 134	101 420	31 496	133 084	5 290
339112	Surgical & medical instrument mfg	4	8	3	737	28 754	478	893	12 918	92 966	27 287	120 425	5 055
3399	Other miscellaneous mfg ..	1	42	7	810	22 383	546	1 032	11 660	50 074	36 048	86 528	1 826
33999	All other miscellaneous mfg	—	14	5	577	14 741	426	800	8 769	29 450	19 355	49 215	1 410
	MINNETONKA, MN												
31-33	Manufacturing	—	118	42	7 462	296 852	4 046	8 167	114 087	971 589	493 141	1 457 788	45 398
326	Plastics & rubber products mfg	—	5	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	5	2	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	10	3	510	22 132	415	937	16 057	86 741	16 347	103 334	4 171
333	Machinery mfg	—	10	3	828	32 901	297	741	9 053	77 859	44 662	123 740	3 816
3339	Other general-purpose machinery mfg	—	5	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	4	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	28	16	3 613	153 117	1 772	3 541	50 149	573 326	292 212	860 480	19 920
3341	Computer & peripheral equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	5	4	f	D	D	D	D	D	D	D	4 770
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	11	6	2 053	72 454	1 165	2 122	29 941	209 103	117 912	325 063	13 733
33441	Semiconductor & other electronic component mfg	—	11	6	2 053	72 454	1 165	2 122	29 941	209 103	117 912	325 063	13 733
334412	Bare printed circuit board mfg	—	5	4	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	18	7	809	32 023	398	634	9 397	96 026	40 438	137 036	7 827
3391	Medical equipment & supplies mfg	—	9	4	622	26 253	286	416	6 578	84 382	29 971	115 200	7 258
33911	Medical equipment & supplies mfg	—	9	4	622	26 253	286	416	6 578	84 382	29 971	115 200	7 258
	MONTEVIDEO, MN												
31-33	Manufacturing	—	12	6	1 273	29 772	993	1 693	18 809	53 125	40 656	92 107	D
334	Computer & electronic product mfg	1	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTGOMERY, MN													
31-33	Manufacturing	-	8	2	509	16 346	438	993	11 704	39 748	33 596	73 117	1 661
MONTICELLO, MN													
31-33	Manufacturing	-	24	12	846	30 416	622	1 302	17 804	57 517	74 804	131 075	5 612
MOORHEAD, MN													
31-33	Manufacturing	-	26	8	926	29 053	786	1 657	23 068	44 584	163 252	205 268	D
MORA, MN													
31-33	Manufacturing	1	11	4	740	18 458	592	696	7 063	48 034	45 909	92 773	7 436
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
MOUNDS VIEW, MN													
31-33	Manufacturing	-	13	7	902	32 489	507	937	11 685	70 217	89 886	159 165	5 167
NEW BRIGHTON, MN													
31-33	Manufacturing	-	44	23	3 122	139 251	1 598	3 396	62 399	248 281	351 642	643 749	16 853
332	Fabricated metal product mfg	-	12	9	1 786	93 286	771	1 675	41 423	151 736	259 477	453 922	9 750
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	g	D	D	D	D	D	D	D	D
NEW HOPE, MN													
31-33	Manufacturing	1	87	49	4 261	146 092	2 968	5 997	87 798	315 806	235 123	548 962	20 540
323	Printing & related support activities	-	20	8	711	20 934	465	813	12 841	38 120	23 427	61 755	1 610
3231	Printing & related support activities	-	20	8	711	20 934	465	813	12 841	38 120	23 427	61 755	1 610
32311	Printing	-	18	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	11	782	29 301	634	1 310	21 315	58 345	25 665	82 989	6 384
NEW PRAGUE, MN *													
31-33	Manufacturing	-	12	3	789	28 753	682	1 399	24 315	54 463	144 655	199 849	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	1	1	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEW ULM, MN													
31-33	Manufacturing	-	24	12	2 929	78 947	2 426	4 494	59 472	734 237	627 740	1 359 409	D
311	Food mfg	-	4	3	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	4	3	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTHFIELD, MN *													
31-33	Manufacturing	-	23	8	1 893	75 448	1 199	2 501	48 967	263 429	229 479	503 876	30 669
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	2	1	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	2	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	2	2	f	D	D	D	D	D	D	D	D
NORTH MANKATO, MN *													
31-33	Manufacturing	-	18	10	2 909	58 473	2 003	4 081	36 095	211 293	184 672	395 209	14 688
323	Printing & related support activities	-	4	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	4	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	4	4	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	4	4	g	D	D	D	D	D	D	D	D
NORTH ST. PAUL, MN													
31-33	Manufacturing	-	17	2	699	25 662	384	836	9 769	95 322	41 557	132 503	3 147
OWATONNA, MN													
31-33	Manufacturing	-	48	25	6 072	185 902	4 450	9 876	119 001	505 543	481 258	981 231	37 404
327	Nonmetallic mineral product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	4	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	8	1 286	45 373	802	1 761	26 110	101 914	117 444	218 934	4 515
3331	Agriculture, construction, & mining machinery mfg	-	4	4	f	D	D	D	D	D	D	D	1 683
33312	Construction machinery mfg	-	3	3	506	15 981	361	843	11 749	42 423	77 175	119 812	D
333120	Construction machinery mfg	-	3	3	506	15 981	361	843	11 749	42 423	77 175	119 812	D
3339	Other general-purpose machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
PARK RAPIDS, MN													
31-33	Manufacturing	-	18	5	f	D	D	D	D	D	D	D	7 013

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLYMOUTH, MN													
31-33	Manufacturing	1	207	101	12 651	498 133	7 163	15 674	229 484	1 138 178	962 773	2 096 541	112 596
323	Printing & related support activities.....	2	34	11	1 000	41 747	671	1 556	22 132	82 666	53 567	137 021	9 928
3231	Printing & related support activities.....	2	34	11	1 000	41 747	671	1 556	22 132	82 666	53 567	137 021	9 928
32311	Printing	2	30	9	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	12	4	608	24 428	443	1 085	14 207	46 038	27 527	73 607	4 010
325	Chemical mfg	-	6	4	764	33 974	313	539	6 625	81 137	53 509	135 020	7 136
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	16	1 167	42 852	849	1 815	28 624	86 742	74 598	166 938	5 500
333	Machinery mfg	-	30	16	2 354	100 733	1 382	2 967	47 538	282 039	250 515	532 321	15 108
3332	Industrial machinery mfg ..	-	5	4	621	29 180	352	790	13 540	85 159	66 637	152 214	5 107
3333	Commercial & service industry machinery mfg ..	1	5	3	735	31 344	480	1 000	17 041	85 246	56 522	143 419	3 369
33331	Commercial & service industry machinery mfg	1	5	3	735	31 344	480	1 000	17 041	85 246	56 522	143 419	3 369
333319	Other commercial & service industry machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	4	567	23 187	259	556	7 776	74 665	103 792	176 976	4 878
334	Computer & electronic product mfg	1	29	20	2 425	107 233	1 265	3 639	49 181	195 484	136 536	329 810	27 548
3344	Semiconductor & other electronic component mfg	1	8	6	1 199	52 494	777	1 858	33 261	91 112	67 626	154 396	D
33441	Semiconductor & other electronic component mfg	1	8	6	1 199	52 494	777	1 858	33 261	91 112	67 626	154 396	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	12	8	703	31 400	264	531	7 237	37 187	30 156	65 906	D
33451	Navigational, measuring, medical, & control instruments mfg	-	12	8	703	31 400	264	531	7 237	37 187	30 156	65 906	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	7	6	648	29 015	227	467	6 070	31 465	24 827	54 860	4 285
335	Electrical equipment, appliance, & component mfg	-	12	8	1 311	30 327	546	858	12 210	69 742	107 033	174 006	D
3353	Electrical equipment mfg ..	-	11	7	g	D	D	D	D	D	D	D	13 008
33531	Electrical equipment mfg	-	11	7	g	D	D	D	D	D	D	D	13 008
335314	Relay & industrial control mfg	-	8	6	1 099	25 656	388	600	9 839	55 353	91 016	143 350	12 852
337	Furniture & related product mfg	-	9	6	640	20 363	478	859	12 658	26 344	85 195	112 184	D
339	Miscellaneous mfg	2	23	11	1 857	75 328	921	1 845	25 147	187 385	75 336	262 965	10 714
3391	Medical equipment & supplies mfg	2	16	8	1 490	65 699	748	1 472	18 702	166 813	58 734	226 689	10 041
33911	Medical equipment & supplies mfg	2	16	8	1 490	65 699	748	1 472	18 702	166 813	58 734	226 689	10 041
339112	Surgical & medical instrument mfg	3	10	4	1 082	52 057	473	955	12 748	132 151	41 750	174 957	9 094
PRINCETON, MN *													
31-33	Manufacturing	-	25	7	1 607	38 207	1 317	2 162	28 105	131 749	114 192	248 841	7 544
337	Furniture & related product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	2	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
RAMSEY, MN													
31-33	Manufacturing	-	40	7	1 005	34 709	789	1 653	22 742	92 530	46 373	137 707	4 163

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RED WING, MN													
31-33	Manufacturing	-	32	17	3 048	102 017	2 333	4 965	64 282	268 571	293 232	555 895	12 610
316	Leather & allied product mfg .	-	5	4	g	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	2	2	g	D	D	D	D	D	D	D	D
REDWOOD FALLS, MN													
31-33	Manufacturing	-	7	4	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
ROCHESTER, MN													
31-33	Manufacturing	-	64	27	i	D	D	D	D	D	D	D	D
311	Food mfg	-	10	6	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	4	4	825	26 682	686	1 405	22 336	89 067	365 560	451 884	4 174
31151	Dairy product (except frozen) mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	g	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
332116	Metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
ROSEAU, MN													
31-33	Manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
ROSEVILLE, MN													
31-33	Manufacturing	1	88	42	5 238	196 006	2 816	5 311	81 057	248 830	330 306	604 904	35 577
311	Food mfg	-	6	3	1 129	27 796	315	476	8 209	83 697	61 156	144 729	3 907
3118	Bakeries & tortilla mfg	-	3	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	23	10	724	29 940	538	976	15 203	60 588	46 662	106 440	4 571
3231	Printing & related support activities.....	3	23	10	724	29 940	538	976	15 203	60 588	46 662	106 440	4 571
32311	Printing	3	20	9	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	4	12	6	503	17 136	387	629	9 955	40 579	22 485	62 662	3 091

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROSEVILLE, MN—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	6	3	1 687	79 837	766	1 523	24 417	S	S	120 145	18 569
3341	Computer & peripheral equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
	ST. CLOUD, MN *												
31-33	Manufacturing	-	75	34	7 189	193 979	5 689	10 608	137 502	499 285	489 073	981 719	38 543
311	Food mfg.....	-	9	4	1 503	35 772	1 131	2 362	23 482	90 110	100 953	191 305	2 800
3116	Meat product mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	19	7	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	19	7	g	D	D	D	D	D	D	D	D
32311	Printing	-	17	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	7	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	9	3	530	14 509	414	847	9 977	24 436	19 526	45 173	D
335	Electrical equipment, appliance, & component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	12	5	821	18 173	659	1 156	14 263	45 067	33 069	74 122	6 916
3391	Medical equipment & supplies mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
	ST. LOUIS PARK, MN												
31-33	Manufacturing	-	113	37	4 241	159 931	2 594	5 927	74 438	388 369	321 208	707 524	28 252
311	Food mfg.....	-	8	3	952	43 606	344	677	11 152	147 106	144 711	290 902	D
3115	Dairy product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	24	11	564	22 576	425	939	13 374	42 215	16 686	58 745	2 414
334	Computer & electronic product mfg.....	-	7	4	728	25 222	485	1 654	13 397	56 315	27 779	84 003	3 132
339	Miscellaneous mfg.....	-	13	4	533	16 307	350	711	8 265	36 875	11 008	47 189	1 885

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. PAUL, MN													
31-33	Manufacturing	-	375	134	20 215	737 545	13 968	26 540	440 472	2 873 925	2 658 651	5 536 555	210 787
311	Food mfg	1	29	11	762	17 622	523	791	9 981	53 932	37 788	92 824	3 997
3118	Bakeries & tortilla mfg	1	14	8	500	10 781	328	493	6 192	32 897	18 333	50 931	3 465
312	Beverage & tobacco product mfg	4	4	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	4	4	f	D	D	D	D	D	D	D	D
31212	Breweries	3	3	3	f	D	D	D	D	D	D	D	D
312120	Breweries	3	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	12	10	1 108	36 915	879	1 873	24 683	97 263	97 845	201 049	21 288
3222	Converted paper product mfg	-	11	9	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	5	5	569	20 907	456	941	14 582	45 214	60 654	108 185	D
323	Printing & related support activities	-	94	23	4 775	173 046	3 009	6 299	99 865	350 552	255 064	609 531	25 932
3231	Printing & related support activities	-	94	23	4 775	173 046	3 009	6 299	99 865	350 552	255 064	609 531	25 932
32311	Printing	-	81	20	3 659	131 550	2 389	4 768	78 933	242 850	235 032	480 890	D
323110	Commercial lithographic printing ..	-	47	12	2 848	105 821	1 894	3 752	64 886	192 502	203 547	399 545	17 365
32312	Support activities for printing	-	13	3	1 116	41 496	620	1 531	20 932	107 702	20 032	128 641	D
323122	Prepress services	-	8	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	3	641	29 166	427	825	16 991	162 458	102 650	265 956	4 773
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	12	5	h	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	2	2	h	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	-	1	1	h	D	D	D	D	D	D	D	D
327910	Abrasive product mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	6	858	38 020	591	1 200	25 400	67 826	136 602	207 105	18 022
332	Fabricated metal product mfg	-	52	29	2 349	80 656	1 714	3 480	50 308	204 190	172 270	377 729	14 850
3323	Architectural & structural metals mfg	-	11	9	768	23 269	586	1 137	13 528	53 206	48 675	100 189	3 299
33232	Ornamental & architectural metal products mfg	-	9	8	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	-	15	8	540	15 352	409	878	10 137	40 009	15 334	55 063	4 641
33281	Coating, engraving, heat treating, & allied activities	-	15	8	540	15 352	409	878	10 137	40 009	15 334	55 063	4 641
333	Machinery mfg	1	21	7	904	34 215	713	1 422	19 546	84 379	45 064	129 127	4 919
334	Computer & electronic product mfg	-	18	7	764	31 022	308	540	7 601	84 171	67 998	151 611	4 475
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	51	12	1 404	33 913	872	1 233	14 775	62 025	38 653	100 946	4 126
3399	Other miscellaneous mfg ..	-	21	7	941	19 187	615	758	8 473	33 411	29 207	61 887	1 749
33999	All other miscellaneous mfg	-	4	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
ST. PETER, MN													
31-33	Manufacturing	-	7	3	559	14 930	413	881	7 512	31 158	61 501	93 424	1 321

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SARTELL, MN *													
31-33	Manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
SAUK RAPIDS, MN													
31-33	Manufacturing	-	18	12	1 582	38 449	1 155	2 182	20 707	108 963	62 777	169 436	3 198
339	Miscellaneous mfg	-	5	4	716	16 383	544	1 181	9 700	47 678	26 388	73 535	1 868
3391	Medical equipment & supplies mfg	-	3	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	3	3	f	D	D	D	D	D	D	D	D
SAVAGE, MN													
31-33	Manufacturing	-	31	6	1 142	47 635	639	1 363	21 093	73 359	96 692	166 928	5 869
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
SHAKOPEE, MN													
31-33	Manufacturing	2	45	19	2 492	89 753	1 889	3 856	63 100	286 137	344 648	622 619	17 699
323	Printing & related support activities	-	5	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	5	4	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	4	4	f	D	D	D	D	D	D	D	D
SHOREVIEW, MN													
31-33	Manufacturing	-	35	9	1 870	71 834	929	1 794	29 146	189 973	80 070	269 115	13 603
323	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	818
3231	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	818
32311	Printing	-	6	3	f	D	D	D	D	D	D	D	818
SLEEPY EYE, MN													
31-33	Manufacturing	5	10	3	929	23 964	693	1 155	13 572	80 497	48 740	129 503	D
323	Printing & related support activities	9	4	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	4	1	f	D	D	D	D	D	D	D	D
32311	Printing	9	4	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	9	3	1	f	D	D	D	D	D	D	D	D
SOUTH ST. PAUL, MN													
31-33	Manufacturing	-	28	9	1 043	33 729	734	1 422	20 590	100 966	162 020	263 343	7 760
STILLWATER, MN													
31-33	Manufacturing	1	33	7	1 143	41 011	766	1 382	22 180	110 632	47 940	153 556	8 360
THIEF RIVER FALLS, MN													
31-33	Manufacturing	-	16	8	2 047	50 899	1 366	2 164	25 258	270 140	334 482	594 747	12 385
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VADNAIS HEIGHTS, MN													
31-33	Manufacturing	-	33	16	1 216	41 977	870	1 680	25 202	78 073	57 638	136 198	9 857
WACONIA, MN													
31-33	Manufacturing	-	16	5	818	24 141	653	1 281	16 517	49 780	55 555	112 088	1 860
WASECA, MN													
31-33	Manufacturing	1	25	12	3 257	107 572	2 426	4 821	61 019	263 046	188 648	456 634	19 338
323	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	8	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	8	4	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	5	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	4	3	f	D	D	D	D	D	D	D	5 021
WEST ST. PAUL, MN													
31-33	Manufacturing	-	22	13	792	28 656	538	1 122	16 933	67 097	53 389	121 096	5 003
WHITE BEAR, MN													
31-33	Manufacturing	-	14	6	579	19 795	374	813	11 156	42 575	45 499	88 473	3 463
WHITE BEAR LAKE, MN *													
31-33	Manufacturing	1	47	18	2 509	80 177	1 448	2 817	40 628	222 682	166 309	387 751	13 622
323	Printing & related support activities.....	-	9	3	730	13 948	279	382	5 183	51 045	16 342	67 406	2 850
3231	Printing & related support activities.....	-	9	3	730	13 948	279	382	5 183	51 045	16 342	67 406	2 850
32311	Printing	-	7	2	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	12	7	1 041	38 745	668	1 375	20 805	106 414	38 763	143 887	5 155
3335	Metalworking machinery mfg	-	5	1	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	5	1	f	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	-	3	1	f	D	D	D	D	D	D	D	D
WILLMAR, MN													
31-33	Manufacturing	-	32	14	2 446	56 069	2 094	4 471	42 653	142 260	245 114	382 796	9 088
311	Food mfg	-	5	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
WINDOM, MN													
31-33	Manufacturing	-	9	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WINONA, MN													
31-33	Manufacturing	1	83	41	5 992	170 653	4 104	8 426	96 261	425 999	501 977	921 492	27 892
311	Food mfg.....	5	8	4	722	17 738	461	904	10 333	67 370	112 654	180 158	D
332	Fabricated metal product mfg.....	-	11	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	6	4	554	17 454	313	610	7 397	45 763	12 263	57 778	D
WOODBURY, MN													
31-33	Manufacturing	-	17	9	1 062	39 436	662	1 361	20 232	96 502	160 811	253 365	10 312
WORTHINGTON, MN													
31-33	Manufacturing	-	17	7	2 644	61 613	2 123	4 288	43 626	233 396	586 321	818 813	D
311	Food mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	1	1	g	D	D	D	D	D	D	D	D
WYOMING, MN													
31-33	Manufacturing	1	19	10	517	15 243	393	771	9 847	28 607	25 228	55 322	1 361

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MINNESOTA		MINNESOTA—Con.	
Companies ¹	7 505	Quantity of electricity purchased for heat and power	14 717 129
All establishments	8 091	Quantity of electricity generated less sold for heat and power	665 727
Establishments with 1 to 19 employees	5 363	Total value of shipments	\$1,000.. 76 244 894
Establishments with 20 to 99 employees	1 875	Value of resales	\$1,000.. 2 983 688
Establishments with 100 employees or more	853	Value added	\$1,000.. 36 629 931
All employees	382 530	Total inventories, beginning of year	\$1,000.. 8 000 605
Total compensation ²	\$1,000.. 16 177 422	Finished goods inventories, beginning of year	\$1,000.. 2 976 912
Annual payroll	\$1,000.. 13 126 112	Work-in-process inventories, beginning of year	\$1,000.. 1 913 147
Total fringe benefits	\$1,000.. 3 051 310	Materials and supplies inventories, beginning of year	\$1,000.. 3 110 546
Production workers, average for year	260 158	Total inventories, end of year	\$1,000.. 8 152 202
Production workers on March 12	255 139	Finished goods inventories, end of year	\$1,000.. 3 063 396
Production workers on May 12	258 632	Work-in-process inventories, end of year	\$1,000.. 1 928 113
Production workers on August 12	265 527	Materials and supplies inventories, end of year	\$1,000.. 3 160 693
Production workers on November 12	261 334	Gross book value of total assets at beginning of year	\$1,000.. 26 538 807
Production-worker hours	\$1,000.. 519 172	Total capital expenditures (new and used)	\$1,000.. 3 171 968
Production-worker wages	\$1,000.. 7 250 068	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 419 325
Total cost of materials	\$1,000.. 39 696 664	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 2 752 643
Cost of materials, parts, containers, etc., consumed	\$1,000.. 35 523 760	Total retirements ²	\$1,000.. 963 249
Cost of resales	\$1,000.. 2 198 732	Gross book value of total assets at end of year	\$1,000.. 28 747 526
Cost of fuels	\$1,000.. 382 644	Total depreciation during year ²	\$1,000.. 1 957 616
Cost of purchased electricity	\$1,000.. 612 424	Total rental payments ²	\$1,000.. 982 756
Cost of contract work	\$1,000.. 979 104	Buildings and other structures rental payments ²	\$1,000.. 349 313
		Machinery and equipment rental payments ²	\$1,000.. 633 443

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

MINNESOTA

Blaine is in Anoka and Ramsey Counties.

Chanhassen is in Carver and Hennepin Counties.

Dayton is in Hennepin and Wright Counties.

Granite Falls is in Chippewa and Yellow Medicine Counties.

Hastings is in Dakota and Washington Counties.

Lake City is in Goodhue and Wabasha Counties.

Le Sueur is in Le Sueur and Sibley Counties; it annexed into Sibley County in October 1990, but this change was not submitted to the Census Bureau until June 1997.

Mankato is in Blue Earth, Le Sueur, and Nicollet Counties.

New Prague is in Le Sueur and Scott Counties.

Northfield is in Dakota and Rice Counties.

North Mankato is in Blue Earth and Nicollet Counties.

Oak Grove was incorporated in December 1993.

Princeton is in Mille Lacs and Sherburne Counties.

Rockford is in Hennepin and Wright Counties.

St. Anthony is in Hennepin and Ramsey Counties.

St. Cloud is in Benton, Sherburne, and Stearns Counties.

Sartell is in Benton and Stearns Counties.

Spring Lake Park is in Anoka and Ramsey Counties.

Staples is in Todd and Wadena Counties.

Wadena is in Otter Tail and Wadena Counties.

White Bear Lake is in Ramsey and Washington Counties.

Appendix E. Metropolitan Areas

MINNESOTA

Duluth—Superior, MN—WI MSA

St. Louis County, MN

Douglas County, WI

Fargo—Moorhead, ND—MN MSA

Clay County, MN

Cass County, ND

Grand Forks, ND—MN MSA

Polk County, MN

Grand Forks County, ND

La Crosse, WI—MN MSA

Houston County, MN

La Crosse County, WI

Minneapolis—St. Paul, MN—WI MSA

Anoka County, MN

Carver County, MN

Chisago County, MN

Dakota County, MN

Hennepin County, MN

Isanti County, MN

Ramsey County, MN

Scott County, MN

Sherburne County, MN

Washington County, MN

Wright County, MN

Pierce County, WI

St. Croix County, WI

Rochester, MN MSA

Olmsted County, MN

St. Cloud, MN MSA

Benton County, MN

Stearns County, MN

Missouri

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSOURI													
31-33	Manufacturing	-	7 497	2 498	371 448	11 647 050	270 297	531 283	7 197 340	43 186 072	47 579 227	93 115 478	2 655 646
311	Food mfg.....	-	496	191	39 886	963 998	30 851	63 961	683 409	5 351 629	7 776 474	13 106 778	290 675
3111	Animal food mfg.....	-	62	25	2 250	67 740	1 537	3 073	38 787	488 881	860 333	1 355 009	33 032
31111	Animal food mfg.....	-	62	25	2 250	67 740	1 537	3 073	38 787	488 881	860 333	1 355 009	33 032
311111	Dog & cat food mfg...	-	10	7	946	30 808	737	1 602	20 723	199 028	320 382	522 385	16 399
311119	Other animal food mfg.....	-	52	18	1 304	36 932	800	1 471	18 064	289 853	539 951	832 624	16 633
3112	Grain & oilseed milling....	-	27	22	2 789	96 758	2 347	5 471	73 244	611 968	1 766 861	2 382 246	55 361
31121	Flour milling & malt mfg..	-	11	8	1 165	49 375	929	2 213	37 853	311 994	595 347	907 399	25 251
311211	Flour milling.....	-	10	8	g	D	D	D	D	D	D	D	25 251
31122	Starch & vegetable fats & oils mfg.....	-	13	11	f	D	D	D	D	D	D	D	D
311221	Wet corn milling.....	-	1	1	c	D	D	D	D	D	D	D	D
311222	Soybean processing....	-	4	3	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing.....	-	1	1	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	1	7	6	335	13 257	284	686	8 524	69 501	495 756	567 680	10 569
31123	Breakfast cereal mfg....	-	3	3	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	-	3	3	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	40	11	1 425	35 566	1 130	2 067	22 403	181 568	112 976	293 489	6 731
31133	Confectionery mfg from purchased chocolate...	-	22	8	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	22	8	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	17	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg....	-	17	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	36	12	2 217	49 085	1 956	3 063	39 313	388 581	269 637	658 497	15 577
31141	Frozen food mfg.....	-	17	7	1 311	25 087	1 168	1 488	19 817	204 287	106 173	310 456	7 015
311411	Frozen fruit, juice, & vegetable mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	14	6	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	19	5	906	23 998	788	1 575	19 496	184 294	163 464	348 041	8 562
311421	Fruit & vegetable canning.....	1	17	4	e	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	2	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	34	20	4 620	142 354	3 779	8 776	111 135	714 106	1 704 179	2 418 863	29 178
31151	Dairy product (except frozen) mfg.....	-	25	18	4 149	129 561	3 340	7 855	99 631	644 711	1 655 564	2 296 122	27 790
311511	Fluid milk mfg.....	-	9	6	998	32 771	608	1 494	18 966	71 638	275 635	347 567	4 063
311513	Cheese mfg.....	-	10	7	2 678	83 947	2 379	5 560	69 886	511 279	1 299 918	1 794 140	19 734
311514	Dry, condensed, & evaporated dairy product mfg.....	1	6	5	473	12 843	353	801	10 779	61 794	80 011	154 415	3 993
31152	Ice cream & frozen dessert mfg.....	-	9	2	471	12 793	439	921	11 504	69 395	48 615	122 741	1 388
311520	Ice cream & frozen dessert mfg.....	-	9	2	471	12 793	439	921	11 504	69 395	48 615	122 741	1 388
3116	Meat product mfg.....	-	103	36	16 460	303 252	13 956	28 920	247 213	1 485 214	1 897 825	3 372 213	82 156
31161	Animal slaughtering & processing.....	-	103	36	16 460	303 252	13 956	28 920	247 213	1 485 214	1 897 825	3 372 213	82 156
311611	Animal (except poultry) slaughtering.....	-	52	5	2 079	40 612	1 828	3 732	34 063	80 073	530 107	609 554	D
311612	Meat processed from carcasses.....	1	23	11	2 014	49 569	1 784	3 958	36 502	322 104	313 159	635 818	10 724
311613	Rendering & meat byproduct processing.....	-	4	1	152	3 680	135	254	2 874	88 522	50 876	138 465	D
311615	Poultry processing....	-	24	19	12 215	209 391	10 209	20 976	173 774	994 515	1 003 683	1 988 376	62 330
3118	Bakeries & tortilla mfg.....	1	133	38	6 400	164 199	3 555	7 394	84 160	524 239	445 343	966 975	33 574
31181	Bread & bakery product mfg.....	-	117	26	4 016	101 727	1 954	3 715	47 310	313 442	117 243	430 841	10 310
311811	Retail bakeries.....	5	77	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	38	16	3 223	90 628	1 475	3 008	40 893	293 291	97 577	390 936	9 337
311813	Frozen cakes, pies, & other pastries mfg....	-	2	2	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	1	16	12	2 384	62 472	1 601	3 679	36 850	210 797	328 100	536 134	23 264
311821	Cookie & cracker mfg..	-	5	4	627	14 301	328	638	7 681	31 217	76 436	107 609	D
311822	Flour mixes & dough mfg from purchased flour.....	2	6	5	986	26 736	743	1 695	17 008	73 872	110 084	184 999	18 573
311823	Dry pasta mfg.....	-	5	3	771	21 435	530	1 346	12 161	105 708	141 580	243 526	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSOURI—Con. Manufacturing— Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	61	27	3 725	105 044	2 591	5 197	67 154	957 072	719 320	1 659 486	35 066
31191	Snack food mfg	—	10	5	1 475	28 761	921	1 895	17 992	152 348	67 407	220 637	10 102
311919	Other snack food mfg	—	9	4	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	7	4	460	20 642	317	639	12 679	251 705	346 957	584 976	10 039
311920	Coffee & tea mfg	—	7	4	460	20 642	317	639	12 679	251 705	346 957	584 976	10 039
31193	Flavoring syrup & concentrate mfg	3	5	2	220	7 297	117	252	3 828	30 112	24 584	55 475	1 007
311930	Flavoring syrup & concentrate mfg	3	5	2	220	7 297	117	252	3 828	30 112	24 584	55 475	1 007
31194	Seasoning & dressing mfg	4	18	6	773	29 361	575	1 098	19 847	428 576	205 478	629 274	7 572
311941	Mayonnaise, dressing, & other prepared sauce mfg	5	9	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	9	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg	—	21	10	797	18 983	661	1 313	12 808	94 331	74 894	169 124	6 346
311999	All other miscellaneous food mfg	—	18	8	712	17 427	598	1 235	11 840	88 795	70 633	159 299	6 170
312	Beverage & tobacco product mfg	—	48	17	3 898	194 588	2 605	5 313	124 482	1 290 444	925 066	2 213 419	169 406
3121	Beverage mfg	—	47	17	h	D	D	D	D	D	D	D	169 406
31211	Soft drink & ice mfg	1	26	10	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	12	9	g	D	D	D	D	D	D	D	D
312112	Bottled water mfg	—	1	1	c	D	D	D	D	D	D	D	D
31212	Breweries	—	5	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	5	2	g	D	D	D	D	D	D	D	D
31213	Wineries	7	14	3	191	3 991	56	76	984	9 736	6 564	15 827	D
312130	Wineries	7	14	3	191	3 991	56	76	984	9 736	6 564	15 827	D
31214	Distilleries	7	2	2	c	D	D	D	D	D	D	D	D
312140	Distilleries	7	2	2	c	D	D	D	D	D	D	D	D
313	Textile mills	5	36	11	661	17 511	513	999	11 012	43 796	53 390	96 910	3 128
3132	Fabric mills	1	9	4	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	5	26	7	485	14 106	370	739	8 614	36 194	41 659	77 071	2 535
31331	Textile & fabric finishing mills	7	21	4	405	10 421	329	644	7 369	24 180	26 473	50 750	D
313311	Broadwoven fabric finishing mills	7	20	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	150	38	3 285	60 379	2 730	5 266	43 532	188 053	158 271	351 448	6 970
3141	Textile furnishings mills	1	66	12	1 043	15 519	822	1 535	11 094	70 095	56 260	133 364	1 577
31412	Curtain & linen mills	1	65	12	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	1	49	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	16	8	677	10 154	540	1 018	7 648	57 435	43 315	106 340	987
3149	Other textile product mills	1	84	26	2 242	44 860	1 908	3 731	32 438	117 958	102 011	218 084	5 393
31491	Textile bag & canvas mills	—	40	13	1 199	23 924	1 045	2 088	17 798	74 833	63 493	135 458	3 072
314911	Textile bag mills	—	11	5	623	12 840	558	1 313	10 403	49 387	41 298	87 820	2 629
314912	Canvas & related product mills	—	29	8	576	11 084	487	775	7 395	25 446	22 195	47 638	443
31499	All other textile product mills	3	44	13	1 043	20 936	863	1 643	14 640	43 125	38 518	82 626	2 321
314999	All other miscellaneous textile product mills	3	44	13	1 043	20 936	863	1 643	14 640	43 125	38 518	82 626	2 321
315	Apparel mfg	1	199	108	12 824	189 557	10 955	18 992	143 839	419 252	298 256	700 100	10 109
3152	Cut & sew apparel mfg	1	113	65	8 514	128 778	7 462	12 895	102 025	266 969	210 748	465 742	7 559
31521	Cut & sew apparel contractors	3	40	8	846	11 436	782	1 085	8 912	17 794	1 807	19 580	649
315211	Men's & boys' cut & sew apparel contractors	2	8	5	548	7 533	506	596	5 852	11 740	870	12 585	182
315212	Women's, girls', & infants' cut & sew apparel contractors	6	32	3	298	3 903	276	489	3 060	6 054	937	6 995	467
31522	Men's & boys' cut & sew apparel mfg	1	49	43	5 728	84 387	5 002	8 929	67 533	172 045	133 554	295 289	4 873
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	5	4	1 096	19 381	926	1 613	15 084	55 271	25 988	69 665	292
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	6	5	316	4 088	300	494	3 630	9 021	3 725	13 069	106
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	13	13	2 119	27 253	1 968	3 618	23 949	44 802	44 021	88 348	2 475
315225	Men's & boys' cut & sew work clothing mfg	—	9	7	954	13 751	752	1 307	10 881	22 514	22 198	45 917	353
315228	Men's & boys' cut & sew other outerwear mfg	5	16	14	1 243	19 914	1 056	1 897	13 989	40 437	37 622	78 290	1 647

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31523	Women's & girls' cut & sew apparel mfg	—	17	12	1 840	31 509	1 593	2 728	24 455	74 653	73 942	146 948	1 987
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	5	2	158	2 723	130	248	2 235	12 859	6 661	19 395	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	2	2	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	8	7	g	D	D	D	D	D	D	D	1 670
31529	Other cut & sew apparel mfg	1	7	2	100	1 446	85	153	1 125	2 477	1 445	3 925	50
3159	Apparel accessories & other apparel mfg	—	80	41	4 236	59 734	3 430	5 978	40 920	149 871	84 452	228 828	2 406
31599	Apparel accessories & other apparel mfg	—	80	41	4 236	59 734	3 430	5 978	40 920	149 871	84 452	228 828	2 406
315991	Hat, cap, & millinery mfg	—	38	29	3 475	46 071	2 787	4 850	31 681	121 765	55 254	171 441	1 591
315992	Glove & mitten mfg	3	6	5	c	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	2	35	6	426	6 398	361	622	4 305	14 872	14 986	30 239	D
316	Leather & allied product mfg	—	64	34	4 000	73 874	3 334	6 337	50 081	137 104	176 215	314 144	7 554
3161	Leather & hide tanning & finishing	—	8	4	494	13 635	399	812	10 355	31 820	22 646	54 604	D
31611	Leather & hide tanning & finishing	—	8	4	494	13 635	399	812	10 355	31 820	22 646	54 604	D
316110	Leather & hide tanning & finishing	—	8	4	494	13 635	399	812	10 355	31 820	22 646	54 604	D
3162	Footwear mfg	—	18	15	2 508	43 466	2 110	3 925	28 465	72 702	122 181	195 328	1 749
31621	Footwear mfg	—	18	15	2 508	43 466	2 110	3 925	28 465	72 702	122 181	195 328	1 749
316211	Rubber & plastics footwear mfg	—	3	3	370	5 346	303	515	3 909	14 647	13 771	29 184	D
316213	Men's footwear (except athletic) mfg	—	5	5	g	D	D	D	D	D	D	D	420
316214	Women's footwear (except athletic) mfg	—	4	3	496	6 856	399	679	5 029	13 571	33 292	48 109	D
316219	Other footwear mfg	—	6	4	f	D	D	D	D	D	D	D	151
3169	Other leather & allied product mfg	1	38	15	998	16 773	825	1 600	11 261	32 582	31 388	64 212	D
31699	Other leather & allied product mfg	1	38	15	998	16 773	825	1 600	11 261	32 582	31 388	64 212	D
316991	Luggage mfg	2	8	4	c	D	D	D	D	D	D	D	764
316993	Personal leather good (except women's handbag & purse) mfg	2	9	5	470	7 780	419	803	5 328	14 442	13 827	28 333	D
316999	All other leather good mfg	1	20	6	309	5 543	247	505	3 654	11 284	10 250	21 877	216
321	Wood product mfg	2	586	124	9 741	196 245	7 994	14 285	138 750	421 784	610 283	1 030 082	26 139
3211	Sawmills & wood preservation	4	248	29	2 205	40 775	1 924	3 022	31 532	107 439	214 597	322 223	11 511
32111	Sawmills & wood preservation	4	248	29	2 205	40 775	1 924	3 022	31 532	107 439	214 597	322 223	11 511
321113	Sawmills	5	232	26	2 010	36 189	1 764	2 728	28 298	93 095	148 512	241 356	9 973
321114	Wood preservation	1	16	3	195	4 586	160	294	3 234	14 344	66 085	80 867	1 538
3212	Veneer, plywood, & engineered wood product mfg	2	30	13	829	20 779	634	1 249	12 953	43 601	54 092	97 556	2 022
32121	Veneer, plywood, & engineered wood product mfg	2	30	13	829	20 779	634	1 249	12 953	43 601	54 092	97 556	2 022
321211	Hardwood veneer & plywood mfg	—	1	1	c	D	D	D	D	D	D	D	D
321214	Truss mfg	1	23	10	561	14 979	399	781	8 573	31 525	40 299	71 749	1 311
321219	Reconstituted wood product mfg	3	6	2	c	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	308	82	6 707	134 691	5 436	10 014	94 265	270 744	341 594	610 303	12 606
32191	Millwork	1	113	26	2 710	57 928	2 287	4 266	45 566	123 625	166 150	288 499	5 534
321911	Wood window & door mfg	2	22	4	384	8 985	275	505	5 377	16 189	25 597	41 325	1 252
321912	Cut stock, resawing lumber, & planing	2	65	14	989	18 673	815	1 472	14 140	38 961	41 100	79 279	2 562
321918	Other millwork (including flooring)	—	26	8	1 337	30 270	1 197	2 289	26 049	68 475	99 453	167 895	1 720
32192	Wood container & pallet mfg	1	110	31	2 096	39 456	1 693	2 955	25 629	77 821	105 928	183 342	3 660
321920	Wood container & pallet mfg	1	110	31	2 096	39 456	1 693	2 955	25 629	77 821	105 928	183 342	3 660

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	MISSOURI—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg—Con.												
32199	All other wood product mfg	2	85	25	1 901	37 307	1 456	2 793	23 070	69 298	69 516	138 462	3 412
321991	Manufactured home (mobile home) mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	1	14	2	c	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	3	69	21	1 465	27 251	1 178	2 278	17 819	48 936	42 606	91 103	2 442
322	Paper mfg	—	136	93	12 788	413 822	10 269	20 845	294 020	1 370 113	1 592 192	2 986 338	90 522
3222	Converted paper product mfg	—	135	92	j	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	72	57	6 005	197 175	4 672	9 568	131 311	408 078	651 941	1 077 368	35 354
322211	Corrugated & solid fiber box mfg	—	45	38	3 013	101 462	2 194	4 461	58 664	193 006	400 562	601 145	15 535
322212	Folding paperboard box mfg	—	15	9	1 353	51 473	1 086	2 490	37 481	111 522	149 038	263 937	16 988
322213	Setup paperboard box mfg	2	3	3	e	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	3	6	4	c	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	3	3	1 165	35 386	1 009	1 876	29 028	82 145	82 394	170 536	722
32222	Paper bag & coated & treated paper mfg	1	26	13	g	D	D	D	D	D	D	D	D
322221	Coated & laminated packaging paper & plastics film mfg	—	3	2	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	5	14	4	494	15 340	344	847	8 722	37 527	59 430	98 457	3 071
322224	Uncoated paper & multiwall bag mfg	—	6	5	916	21 052	782	1 230	14 945	57 146	83 080	139 754	1 256
322226	Surface-coated paperboard mfg	—	2	2	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	26	15	3 029	96 294	2 497	5 200	72 246	271 721	339 420	597 056	13 408
322231	Die-cut paper & paperboard office supplies mfg	—	11	4	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	9	8	g	D	D	D	D	D	D	D	5 972
322233	Stationery, tablet, & related product mfg ..	—	6	3	1 170	33 183	933	1 638	23 382	64 445	136 058	188 398	D
32229	Other converted paper product mfg	—	11	7	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	3	2	g	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	7	8	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	1 011	212	22 011	684 148	16 179	30 571	424 746	1 564 800	1 045 782	2 602 395	105 408
3231	Printing & related support activities	1	1 011	212	22 011	684 148	16 179	30 571	424 746	1 564 800	1 045 782	2 602 395	105 408
32311	Printing	1	884	176	19 496	600 997	14 238	26 824	370 815	1 402 300	1 008 541	2 402 835	96 367
323110	Commercial lithographic printing ..	2	445	96	9 335	316 656	6 658	12 497	190 169	595 128	433 390	1 023 743	43 421
323111	Commercial gravure printing	—	13	4	859	33 694	684	1 417	23 099	83 082	71 584	154 195	8 305
323112	Commercial flexographic printing ..	—	33	12	787	23 059	511	977	11 644	51 359	52 979	104 789	3 928
323113	Commercial screen printing	1	95	17	1 193	25 794	912	1 672	15 943	64 324	46 760	108 345	2 843
323114	Quick printing	1	153	9	1 400	33 856	1 050	1 789	24 652	88 660	38 266	126 653	8 187
323116	Manifold business form printing	1	26	12	1 285	43 723	926	1 919	30 038	217 157	121 815	339 520	7 726
323117	Book printing	—	16	10	2 690	79 799	2 073	4 110	48 981	194 661	176 669	369 028	17 817
323118	Blankbook, looseleaf binder, & device mfg ..	—	10	5	1 160	24 465	895	1 556	16 020	68 696	42 724	112 556	1 735
323119	Other commercial printing	7	87	9	693	16 504	480	778	8 949	33 141	22 306	55 891	2 242
32312	Support activities for printing	1	127	36	2 515	83 151	1 941	3 747	53 931	162 500	37 241	199 560	9 041
323121	Tradebinding & related work	1	34	10	707	16 838	611	1 149	11 496	31 331	5 967	37 197	2 229
323122	Prepress services	1	93	26	1 808	66 313	1 330	2 598	42 435	131 169	31 274	162 363	6 812
324	Petroleum & coal products mfg	2	53	12	1 398	59 854	866	1 903	31 116	192 912	335 934	533 284	11 751

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg—Con.												
3241	Petroleum & coal products mfg	2	53	12	1 398	59 854	866	1 903	31 116	192 912	335 934	533 284	11 751
32412	Asphalt paving, roofing, & saturated materials mfg	2	39	7	995	33 279	671	1 485	20 642	120 582	186 377	308 853	9 249
324121	Asphalt paving mixture & block mfg	2	32	3	315	10 170	219	507	6 897	40 221	69 063	109 934	3 949
324122	Asphalt shingle & coating materials mfg	2	7	4	680	23 109	452	978	13 745	80 361	117 314	198 919	5 300
32419	Other petroleum & coal products mfg	1	12	4	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	1	12	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	366	153	20 919	813 235	12 179	24 945	401 534	7 225 097	3 370 521	10 558 718	300 953
3251	Basic chemical mfg	1	51	22	1 970	82 327	1 323	2 837	49 557	432 762	375 815	801 619	38 630
32512	Industrial gas mfg	5	9	3	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	5	9	3	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	6	3	458	19 741	284	611	10 782	92 423	55 582	142 607	8 856
325131	Inorganic dye & pigment mfg	—	2	2	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	4	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	13	6	509	24 505	344	701	16 034	112 652	106 504	217 192	4 538
325188	All other basic inorganic chemical mfg	—	11	5	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	22	10	850	32 945	624	1 378	20 989	211 340	197 224	409 297	23 962
325191	Gum & wood chemical mfg	—	8	2	245	6 658	218	439	5 303	63 004	31 481	93 156	5 067
325199	All other basic organic chemical mfg	1	14	8	605	26 287	406	939	15 686	148 336	165 743	316 141	18 895
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	4	214	8 191	158	350	6 112	30 204	49 248	79 438	3 296
32521	Resin & synthetic rubber mfg	—	6	4	214	8 191	158	350	6 112	30 204	49 248	79 438	3 296
325211	Plastics material & resin mfg	—	6	4	214	8 191	158	350	6 112	30 204	49 248	79 438	3 296
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	37	14	2 711	128 375	1 184	2 711	47 095	1 681 268	663 313	2 362 820	84 178
32531	Fertilizer mfg	—	20	5	366	12 705	201	400	6 509	34 555	120 788	155 068	6 422
325311	Nitrogenous fertilizer mfg	—	6	3	201	7 014	100	209	4 081	14 352	72 476	86 235	4 874
325314	Fertilizer (mixing only) mfg	1	14	2	165	5 691	101	191	2 428	20 203	48 312	68 833	1 548
32532	Pesticide & other agricultural chemical mfg	—	17	9	2 345	115 670	983	2 311	40 586	1 646 713	542 525	2 207 752	77 756
325320	Pesticide & other agricultural chemical mfg	—	17	9	2 345	115 670	983	2 311	40 586	1 646 713	542 525	2 207 752	77 756
3254	Pharmaceutical & medicine mfg	—	63	29	6 853	271 967	3 436	6 755	119 067	2 658 414	801 817	3 421 104	90 034
32541	Pharmaceutical & medicine mfg	—	63	29	6 853	271 967	3 436	6 755	119 067	2 658 414	801 817	3 421 104	90 034
325411	Medicinal & botanical mfg	—	8	5	3 060	122 371	1 284	2 810	49 327	517 402	254 636	793 027	56 045
325412	Pharmaceutical preparation mfg	—	34	18	3 072	120 022	1 653	3 059	54 207	2 073 576	504 093	2 516 545	23 787
325414	Biological product (except diagnostic) mfg	3	16	6	708	29 167	491	874	15 392	66 345	42 751	110 099	10 091
3255	Paint, coating, & adhesive mfg	2	78	32	3 179	113 673	1 895	3 929	50 108	531 471	448 596	977 775	21 790
32551	Paint & coating mfg	2	60	21	1 716	66 730	837	1 525	23 540	304 785	280 946	585 263	10 407
325510	Paint & coating mfg	2	60	21	1 716	66 730	837	1 525	23 540	304 785	280 946	585 263	10 407
32552	Adhesive mfg	1	18	11	1 463	46 943	1 058	2 404	26 568	226 686	167 650	392 512	11 383
325520	Adhesive mfg	1	18	11	1 463	46 943	1 058	2 404	26 568	226 686	167 650	392 512	11 383
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	69	26	3 642	128 757	2 616	5 349	84 474	1 648 960	776 900	2 421 318	44 091
32561	Soap & cleaning compound mfg	—	57	20	3 131	112 599	2 322	4 732	76 626	1 608 085	705 151	2 309 495	40 721
325611	Soap & other detergent mfg	—	35	11	1 858	69 534	1 370	2 659	46 301	1 197 803	467 353	1 661 062	22 346
325612	Polish & other sanitation good mfg ..	1	21	8	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	2	12	6	511	16 158	294	617	7 848	40 875	71 749	111 823	3 370
325620	Toilet preparation mfg	2	12	6	511	16 158	294	617	7 848	40 875	71 749	111 823	3 370

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	—	62	26	2 350	79 945	1 567	3 014	45 121	242 018	254 832	494 644	18 934
32591	Printing ink mfg	1	17	7	381	14 454	171	358	6 430	32 789	79 178	111 390	D
325910	Printing ink mfg	1	17	7	381	14 454	171	358	6 430	32 789	79 178	111 390	D
32592	Explosives mfg	—	8	3	565	17 829	475	925	14 173	82 408	58 429	143 507	D
325920	Explosives mfg	—	8	3	565	17 829	475	925	14 173	82 408	58 429	143 507	D
32599	All other chemical product & preparation mfg	—	37	16	1 404	47 662	921	1 731	24 518	126 821	117 225	239 747	7 734
325991	Custom compounding of purchased resin	—	11	5	323	11 141	257	493	6 472	26 452	42 062	67 943	2 772
325992	Photographic film, paper, plate, & chemical mfg	—	6	5	723	26 164	440	868	12 632	57 038	33 118	86 427	3 220
325998	All other miscellaneous chemical product & preparation mfg	—	20	6	358	10 357	224	370	5 414	43 331	42 045	85 377	1 742
326	Plastics & rubber products mfg	1	359	191	21 307	549 994	16 882	32 023	360 916	1 755 691	1 481 090	3 236 027	200 939
3261	Plastics product mfg	1	296	162	17 529	452 120	13 900	26 099	293 964	1 450 738	1 202 743	2 640 039	181 012
32611	Unsupported plastics film, sheet, & bag mfg	1	29	18	2 548	85 687	1 981	4 032	54 105	404 626	277 509	674 512	65 814
326111	Unsupported plastics bag mfg	2	7	6	877	29 586	679	1 456	15 896	76 777	76 840	152 236	D
326112	Unsupported plastics packaging film & sheet mfg	4	3	3	221	7 727	151	244	3 685	28 202	19 738	44 312	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	19	9	1 450	48 374	1 151	2 332	34 524	299 647	180 931	477 964	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	5	22	11	635	20 991	497	1 031	14 018	76 326	75 865	152 057	8 020
326121	Unsupported plastics profile shape mfg	7	15	8	488	16 877	383	772	10 896	67 633	45 890	113 625	5 872
326122	Plastics pipe & pipe fitting mfg	—	7	3	147	4 114	114	259	3 122	8 693	29 975	38 432	2 148
32613	Laminated plastics plate, sheet, & shape mfg	4	12	1	139	4 711	112	254	3 033	12 525	9 722	22 057	2 759
326130	Laminated plastics plate, sheet, & shape mfg	4	12	1	139	4 711	112	254	3 033	12 525	9 722	22 057	2 759
32614	Polystyrene foam product mfg	6	15	12	765	21 291	609	1 166	14 435	67 928	82 235	150 323	3 823
326140	Polystyrene foam product mfg	6	15	12	765	21 291	609	1 166	14 435	67 928	82 235	150 323	3 823
32615	Urethane & other foam product (except polystyrene) mfg	—	13	8	772	22 041	552	1 044	13 694	66 258	89 414	155 674	3 477
326150	Urethane & other foam product (except polystyrene) mfg	—	13	8	772	22 041	552	1 044	13 694	66 258	89 414	155 674	3 477
32616	Plastics bottle mfg	—	16	12	975	27 626	852	1 710	21 240	77 303	65 266	143 510	13 015
326160	Plastics bottle mfg	—	16	12	975	27 626	852	1 710	21 240	77 303	65 266	143 510	13 015
32619	Other plastics product mfg	1	189	100	11 695	269 773	9 297	16 862	173 439	745 772	602 732	1 341 906	84 104
326191	Plastics plumbing fixture mfg	6	17	1	132	3 409	101	203	2 486	6 650	5 131	11 802	213
326199	All other plastics product mfg	1	172	99	11 563	266 364	9 196	16 659	170 953	739 122	597 601	1 330 104	83 891
3262	Rubber product mfg	—	63	29	3 778	97 874	2 982	5 924	66 952	304 953	278 347	595 988	19 927
32621	Tire mfg	1	21	10	880	21 840	662	1 301	14 521	58 087	61 401	117 588	1 862
326211	Tire mfg (except retreading)	2	3	3	495	13 062	391	793	9 425	37 802	34 189	70 037	D
326212	Tire retreading	—	18	7	385	8 778	271	508	5 096	20 285	27 212	47 551	D
32622	Rubber & plastics hoses & belting mfg	—	8	5	994	26 147	842	1 711	19 305	95 834	47 295	154 903	5 276
326220	Rubber & plastics hoses & belting mfg	—	8	5	994	26 147	842	1 711	19 305	95 834	47 295	154 903	5 276
32629	Other rubber product mfg	—	34	14	1 904	49 887	1 478	2 912	33 126	151 032	169 651	323 497	12 789
326291	Rubber product mfg for mechanical use	—	12	6	1 043	28 190	862	1 752	20 719	96 091	104 123	202 452	10 094
326299	All other rubber product mfg	2	22	8	861	21 697	616	1 160	12 407	54 941	65 528	121 045	2 695

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSOURI—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	429	134	11 244	346 629	8 642	16 958	245 048	1 029 067	759 611	1 786 330	114 141
3271	Clay product & refractory mfg	—	32	19	1 898	63 549	1 554	2 970	48 424	137 712	116 748	253 922	6 277
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	15	5	320	8 020	278	512	6 006	21 487	9 926	31 550	553
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	c	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	13	4	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	17	14	1 578	55 529	1 276	2 458	42 418	116 225	106 822	222 372	5 724
327121	Brick & structural clay tile mfg	—	3	3	c	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	—	11	10	1 387	49 686	1 138	2 185	38 897	103 678	97 915	200 602	5 263
3272	Glass & glass product mfg .	—	41	7	1 402	44 033	1 131	2 216	32 979	146 557	60 954	204 915	D
32721	Glass & glass product mfg	—	41	7	1 402	44 033	1 131	2 216	32 979	146 557	60 954	204 915	D
327212	Other pressed & blown glass & glassware mfg	—	7	3	811	23 817	663	1 297	18 148	69 984	20 792	89 277	921
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	33	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	302	92	6 088	177 828	4 521	8 821	119 319	557 710	470 655	1 032 722	58 154
32731	Cement mfg	—	15	7	1 068	43 174	733	1 629	26 806	246 602	135 035	385 710	18 841
327310	Cement mfg	—	15	7	1 068	43 174	733	1 629	26 806	246 602	135 035	385 710	18 841
32732	Ready-mix concrete mfg .	3	188	55	3 155	84 904	2 538	4 489	62 583	198 530	249 713	449 592	26 229
327320	Ready-mix concrete mfg	3	188	55	3 155	84 904	2 538	4 489	62 583	198 530	249 713	449 592	26 229
32733	Concrete pipe, brick, & block mfg	3	31	16	705	22 481	408	959	11 653	55 046	50 402	105 110	5 687
327331	Concrete block & brick mfg	3	19	9	412	11 706	194	446	4 743	29 688	32 570	62 011	2 322
327332	Concrete pipe mfg	4	12	7	293	10 775	214	513	6 910	25 358	17 832	43 099	3 365
32739	Other concrete product mfg	1	68	14	1 160	27 269	842	1 744	18 277	57 532	35 505	92 310	7 397
327390	Other concrete product mfg	1	68	14	1 160	27 269	842	1 744	18 277	57 532	35 505	92 310	7 397
3274	Lime & gypsum product mfg	—	7	4	956	32 453	750	1 627	24 692	93 880	46 185	137 179	D
32741	Lime mfg	—	4	2	f	D	D	D	D	D	D	D	D
327410	Lime mfg	—	4	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	47	12	900	28 766	686	1 324	19 634	93 208	65 069	157 592	5 688
32791	Abrasive product mfg ...	—	1	1	c	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	—	1	1	c	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	2	46	11	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	6	20	1	c	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg ..	1	6	4	329	12 644	277	554	9 961	48 657	25 045	72 521	2 805
327993	Mineral wool mfg	4	7	3	123	3 403	84	123	1 649	11 276	11 195	22 747	863
327999	All other miscellaneous nonmetallic mineral product mfg	—	13	3	166	4 470	114	199	2 454	10 715	11 336	22 014	598
331	Primary metal mfg	—	114	67	12 629	413 932	9 923	19 612	297 862	1 171 066	1 449 803	2 609 690	116 155
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	20	14	2 089	64 086	1 558	3 297	44 325	174 639	325 571	496 127	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	3	3	285	8 912	229	378	6 898	27 604	56 296	82 384	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	3	3	285	8 912	229	378	6 898	27 604	56 296	82 384	D
33122	Rolling & drawing of purchased steel	—	17	11	1 804	55 174	1 329	2 919	37 427	147 035	269 275	413 743	14 450
331221	Cold-rolled steel shape mfg	—	5	2	247	7 938	130	307	3 400	17 829	63 735	82 414	1 654
331222	Steel wire drawing	—	12	9	1 557	47 236	1 199	2 612	34 027	129 206	205 540	331 329	12 796

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3313	Alumina & aluminum production & processing . . .	—	7	7	2 181	88 499	1 667	3 578	63 516	301 260	335 085	628 415	26 909
33131	Alumina & aluminum production & processing	—	7	7	2 181	88 499	1 667	3 578	63 516	301 260	335 085	628 415	26 909
331312	Primary aluminum production	—	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	3	3	599	16 065	488	1 166	12 152	47 635	61 446	108 924	1 713
3314	Nonferrous metal (except aluminum) production & processing	—	14	9	g	D	D	D	D	D	D	D	32 717
33141	Nonferrous metal (except aluminum) smelting & refining	—	3	2	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	3	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying . . .	—	3	3	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	3	3	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	—	8	4	814	28 015	644	1 321	20 497	39 279	132 528	174 595	14 192
331491	Other nonferrous metal rolling, drawing, & extruding	—	3	1	c	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	—	5	3	f	D	D	D	D	D	D	D	D
3315	Foundries	—	71	35	5 800	158 508	4 743	8 469	118 551	384 195	238 338	615 502	33 827
33151	Ferrous metal foundries	—	24	12	1 339	36 073	1 098	2 288	26 717	95 154	52 064	145 913	5 930
331511	Iron foundries	—	11	6	772	21 061	644	1 375	15 555	56 904	23 348	80 644	3 805
331513	Steel foundries (except investment)	—	12	5	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	47	23	4 461	122 435	3 645	6 181	91 834	289 041	186 274	469 589	27 897
331521	Aluminum die-casting foundries	1	12	8	1 186	28 721	1 019	2 016	22 958	54 585	49 207	105 833	6 181
331522	Nonferrous (except aluminum) die-casting foundries	—	8	5	1 309	35 329	1 073	1 552	32 248	81 380	48 295	128 207	D
331524	Aluminum foundries (except die-casting) . . .	—	17	6	1 821	54 899	1 433	2 391	34 056	147 427	78 422	219 463	15 586
331525	Copper foundries (except die-casting) . . .	—	9	4	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	1 168	357	39 203	1 242 142	27 458	54 008	729 711	2 825 639	1 999 630	4 832 376	150 917
3321	Forging & stamping	1	61	24	2 044	66 232	1 571	3 215	46 744	166 948	160 137	321 011	12 887
33211	Forging & stamping	1	61	24	2 044	66 232	1 571	3 215	46 744	166 948	160 137	321 011	12 887
332111	Iron & steel forging	6	6	2	166	3 804	112	169	2 665	8 374	9 935	18 256	D
332114	Custom roll forming	—	11	2	197	7 022	146	309	4 189	34 018	53 046	79 567	1 905
332116	Metal stamping	—	40	18	1 601	53 003	1 251	2 600	38 162	120 479	95 037	217 084	10 403
3322	Cutlery & handtool mfg	1	37	15	1 385	41 761	1 027	2 014	26 018	80 395	56 180	142 991	5 550
33221	Cutlery & handtool mfg	1	37	15	1 385	41 761	1 027	2 014	26 018	80 395	56 180	142 991	5 550
332212	Hand & edge tool mfg	2	32	11	1 023	31 327	829	1 703	22 661	55 167	31 689	94 322	2 816
332213	Saw blade & handsaw mfg	—	3	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	258	100	9 457	276 007	6 473	13 371	151 963	615 518	569 969	1 180 896	26 340
33231	Plate work & fabricated structural product mfg . . .	1	99	40	3 296	111 730	2 304	4 744	60 136	253 664	299 503	552 041	11 085
332311	Prefabricated metal building & component mfg	1	21	8	573	19 950	376	793	9 905	46 248	51 202	96 751	1 194
332312	Fabricated structural metal mfg	1	63	24	2 094	68 445	1 493	2 923	37 434	165 766	219 703	385 671	6 935
332313	Plate work mfg	—	15	8	629	23 335	435	1 028	12 797	41 650	28 598	69 619	2 956
33232	Ornamental & architectural metal products mfg	—	159	60	6 161	164 277	4 169	8 627	91 827	361 854	270 466	628 855	15 255
332321	Metal window & door mfg	—	29	14	2 816	69 953	1 811	4 015	34 658	170 373	115 491	282 629	4 821
332322	Sheet metal work mfg	1	86	36	2 313	70 554	1 677	3 280	43 325	142 911	115 941	259 493	8 452
332323	Ornamental & architectural metal work mfg	1	44	10	1 032	23 770	681	1 332	13 844	48 570	39 034	86 733	1 982

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	49	28	3 682	138 873	2 641	5 286	88 740	272 511	415 854	697 870	23 014
33241	Power boiler & heat exchanger mfg	—	10	5	1 002	41 119	699	1 501	25 121	80 087	59 538	143 049	3 811
332410	Power boiler & heat exchanger mfg	—	10	5	1 002	41 119	699	1 501	25 121	80 087	59 538	143 049	3 811
33242	Metal tank (heavy gauge) mfg	—	16	13	1 455	48 691	986	1 952	26 571	73 587	64 323	136 719	7 386
332420	Metal tank (heavy gauge) mfg	—	16	13	1 455	48 691	986	1 952	26 571	73 587	64 323	136 719	7 386
33243	Metal can, box, & other metal container (light gauge) mfg	—	23	10	1 225	49 063	956	1 833	37 048	118 837	291 993	418 102	11 817
332431	Metal can mfg	—	7	6	808	36 625	651	1 384	29 952	86 682	252 514	347 765	9 868
332439	Other metal container mfg	—	16	4	417	12 438	305	449	7 096	32 155	39 479	70 337	1 949
3325	Hardware mfg	2	16	7	443	9 835	359	599	7 007	21 128	20 048	40 190	736
33251	Hardware mfg	2	16	7	443	9 835	359	599	7 007	21 128	20 048	40 190	736
332510	Hardware mfg	2	16	7	443	9 835	359	599	7 007	21 128	20 048	40 190	736
3326	Spring & wire product mfg	—	41	17	4 027	77 180	3 012	6 077	55 493	222 969	197 461	424 191	9 277
33261	Spring & wire product mfg	—	41	17	4 027	77 180	3 012	6 077	55 493	222 969	197 461	424 191	9 277
332611	Spring (heavy gauge) mfg	—	3	1	257	3 421	105	135	2 942	1 294	1 703	4 826	D
332612	Spring (light gauge) mfg	—	8	4	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	30	12	h	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	474	86	5 923	178 862	4 652	8 830	124 470	339 877	183 940	519 233	32 523
33271	Machine shops	1	397	55	3 799	112 347	2 935	5 302	76 941	202 704	91 215	292 369	17 303
332710	Machine shops	1	397	55	3 799	112 347	2 935	5 302	76 941	202 704	91 215	292 369	17 303
33272	Turned product & screw, nut, & bolt mfg	—	77	31	2 124	66 515	1 717	3 528	47 529	137 173	92 725	226 864	15 220
332721	Precision turned product mfg	—	58	21	1 686	51 005	1 383	2 862	37 376	109 300	73 976	180 813	12 058
332722	Bolt, nut, screw, rivet, & washer mfg	1	19	10	438	15 510	334	666	10 153	27 873	18 749	46 051	3 162
3328	Coating, engraving, heat treating, & allied activities	2	119	36	2 514	73 443	1 933	3 789	49 720	174 743	46 932	221 990	14 172
33281	Coating, engraving, heat treating, & allied activities	2	119	36	2 514	73 443	1 933	3 789	49 720	174 743	46 932	221 990	14 172
332811	Metal heat treating	1	8	5	231	6 919	178	388	5 128	22 104	3 424	25 521	1 826
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	40	12	1 062	36 751	788	1 518	25 427	95 050	22 467	117 439	7 110
332813	Electroplating, plating, polishing, anodizing, & coloring	2	71	19	1 221	29 773	967	1 883	19 165	57 589	21 041	79 030	5 236
3329	Other fabricated metal product mfg	—	113	44	9 728	379 949	5 790	10 827	179 556	931 550	349 109	1 284 004	26 418
33291	Metal valve mfg	1	27	18	3 054	90 750	2 306	4 317	50 902	301 194	187 913	497 149	15 387
332911	Industrial valve mfg	—	13	9	1 625	50 206	1 113	2 075	24 756	112 576	67 755	182 678	6 704
332912	Fluid power valve & hose fitting mfg	—	7	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	2	6	5	992	30 581	787	1 493	19 748	128 653	94 569	222 060	7 128
33299	All other fabricated metal product mfg	—	86	26	6 674	289 199	3 484	6 510	128 654	630 356	161 196	786 855	11 031
332991	Ball & roller bearing mfg	—	1	1	e	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	—	4	3	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	h	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	19	4	396	8 500	283	596	5 499	20 277	27 475	46 576	1 612
332997	Industrial pattern mfg	—	15	3	180	6 788	145	299	4 829	9 587	4 671	14 309	1 735
332998	Enameled iron & metal sanitary ware mfg	—	5	3	187	5 964	148	245	4 333	15 324	15 212	29 824	D
332999	All other miscellaneous fabricated metal product mfg	1	37	11	756	20 813	531	987	12 168	45 037	63 832	107 830	2 873

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	579	213	31 512	963 965	22 415	44 249	577 058	2 569 904	2 275 495	4 866 171	188 306
3331	Agriculture, construction, & mining machinery mfg.	-	53	22	2 821	86 208	2 079	4 026	51 638	247 194	317 384	558 396	16 206
33311	Agricultural implement mfg	-	31	10	1 482	49 537	1 053	2 064	29 016	87 822	168 824	252 830	6 782
333111	Farm machinery & equipment mfg	-	27	7	1 229	44 402	835	1 621	25 018	67 548	147 795	215 002	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	4	3	253	5 135	218	443	3 998	20 274	21 029	37 828	D
33312	Construction machinery mfg	-	11	5	896	20 637	737	1 384	14 362	121 225	115 061	234 827	8 421
333120	Construction machinery mfg	-	11	5	896	20 637	737	1 384	14 362	121 225	115 061	234 827	8 421
33313	Mining & oil & gas field machinery mfg	3	11	7	443	16 034	289	578	8 260	38 147	33 499	70 739	1 003
333131	Mining machinery & equipment mfg	4	10	6	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	90	30	2 514	83 028	1 606	3 234	42 415	189 779	125 606	310 884	7 304
33321	Sawmill & woodworking machinery mfg	-	11	2	129	2 750	77	142	1 347	8 000	5 159	13 053	78
333210	Sawmill & woodworking machinery mfg	-	11	2	129	2 750	77	142	1 347	8 000	5 159	13 053	78
33322	Plastics & rubber industry machinery mfg	1	8	3	154	5 480	98	202	2 194	11 618	5 418	17 147	417
333220	Plastics & rubber industry machinery mfg	1	8	3	154	5 480	98	202	2 194	11 618	5 418	17 147	417
33329	Other industrial machinery mfg	1	71	25	2 231	74 798	1 431	2 890	38 874	170 161	115 029	280 684	6 809
333291	Paper industry machinery mfg	-	6	2	166	7 093	117	245	4 310	14 053	8 517	22 621	1 981
333292	Textile machinery mfg.	9	6	1	c	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	18	6	743	28 375	428	927	14 673	66 255	48 918	111 664	1 790
333294	Food product machinery mfg	1	11	4	234	7 295	175	320	4 180	15 925	11 135	25 224	413
333295	Semiconductor machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	28	11	680	19 912	450	850	9 030	47 939	38 796	87 621	1 775
3333	Commercial & service industry machinery mfg ..	-	52	17	2 471	75 062	1 426	2 694	30 883	282 721	218 261	501 453	10 224
33331	Commercial & service industry machinery mfg	-	52	17	2 471	75 062	1 426	2 694	30 883	282 721	218 261	501 453	10 224
333311	Automatic vending machine mfg	-	5	3	g	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	5	2	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	31	10	985	35 474	465	833	9 634	93 723	91 952	183 733	4 009
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	38	25	8 141	214 656	6 409	12 909	149 333	635 160	710 891	1 351 733	62 667
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	38	25	8 141	214 656	6 409	12 909	149 333	635 160	710 891	1 351 733	62 667
333411	Air purification equipment mfg	-	4	3	215	5 174	180	343	3 741	12 761	11 763	25 065	D
333412	Industrial & commercial fan & blower mfg	1	6	6	1 573	39 696	1 259	2 709	26 563	115 633	85 587	201 617	5 489
333414	Heating equipment (except warm air furnaces) mfg	-	12	3	817	15 597	632	734	7 846	46 224	83 793	136 983	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	16	13	5 536	154 189	4 338	9 123	111 183	460 542	529 748	988 068	53 278
3335	Metalworking machinery mfg	1	185	50	4 620	168 340	3 270	6 615	112 808	335 548	184 163	508 157	27 839

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSOURI—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg—Con.												
33351	Metalworking machinery mfg	1	185	50	4 620	168 340	3 270	6 615	112 808	335 548	184 163	508 157	27 839
333511	Industrial mold mfg	—	50	13	1 256	55 176	948	2 015	39 316	105 142	29 709	138 370	7 292
333512	Machine tool (metal cutting types) mfg ...	—	2	1	e	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg ...	1	6	3	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	1	88	21	1 414	43 117	1 136	2 108	30 780	81 863	55 490	136 114	9 959
333515	Cutting tool & machine tool accessory mfg ..	1	33	8	1 262	47 271	832	1 742	28 860	91 958	39 533	128 407	9 312
333518	Other metalworking machinery mfg	—	5	3	228	11 639	149	369	7 589	39 643	46 216	76 205	462
3336	Engine, turbine, & power transmission equipment mfg	—	30	16	3 048	75 944	2 495	4 646	55 242	295 455	284 089	592 125	38 114
33361	Engine, turbine, & power transmission equipment mfg	—	30	16	3 048	75 944	2 495	4 646	55 242	295 455	284 089	592 125	38 114
333612	Speed changer, industrial high-speed drive, & gear mfg	1	12	7	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	6	2	c	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	11	7	2 154	50 611	1 840	3 142	37 326	223 380	210 281	449 163	27 999
3339	Other general-purpose machinery mfg	—	131	53	7 897	260 727	5 130	10 125	134 739	584 047	435 101	1 043 423	25 952
33391	Pump & compressor mfg	—	13	6	711	25 834	513	1 036	16 846	113 857	76 968	196 020	2 739
333911	Pump & pumping equipment mfg	1	8	3	197	7 443	110	216	3 205	24 604	17 439	41 757	553
333912	Air & gas compressor mfg	—	4	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	44	19	2 097	63 692	1 389	2 483	33 335	127 993	143 658	285 351	5 934
333921	Elevator & moving stairway mfg	—	2	1	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	27	15	1 458	47 242	982	1 663	24 809	98 872	113 952	224 624	5 377
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	4	10	3	217	6 185	164	308	3 796	11 809	11 100	23 038	376
33399	All other general-purpose machinery mfg	—	74	28	5 089	171 201	3 228	6 606	84 558	342 197	214 475	562 052	17 279
333992	Welding & soldering equipment mfg	—	4	3	553	19 398	378	837	11 356	40 420	40 988	81 448	553
333993	Packaging machinery mfg	—	8	4	721	32 899	325	734	10 972	84 085	58 230	142 879	3 055
333994	Industrial process furnace & oven mfg ..	—	14	10	1 518	40 648	1 028	2 049	20 461	92 639	31 565	124 066	3 012
333997	Scale & balance (except laboratory) mfg	1	3	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	36	9	1 769	65 095	1 183	2 338	36 160	105 632	66 688	176 564	9 977
334	Computer & electronic product mfg	—	175	73	14 880	461 091	9 131	17 401	208 432	2 166 155	931 856	3 125 987	171 017
3341	Computer & peripheral equipment mfg	4	22	8	605	16 725	355	672	7 416	35 669	57 730	93 935	2 743
33411	Computer & peripheral equipment mfg	4	22	8	605	16 725	355	672	7 416	35 669	57 730	93 935	2 743
334111	Electronic computer mfg	—	9	2	203	4 954	127	281	2 126	15 601	33 662	49 286	463
334119	Other computer peripheral equipment mfg	8	9	5	358	10 490	209	354	4 385	17 703	21 153	39 304	1 918
3342	Communications equipment mfg	1	26	7	1 781	40 964	675	1 091	10 935	173 902	75 172	247 307	15 557
33421	Telephone apparatus mfg	6	8	3	c	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	6	8	3	c	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	10	3	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	10	3	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	6	4	1 600	39 054	1 015	1 945	18 888	67 073	166 621	235 159	1 274
33431	Audio & video equipment mfg	—	6	4	1 600	39 054	1 015	1 945	18 888	67 073	166 621	235 159	1 274
334310	Audio & video equipment mfg	—	6	4	1 600	39 054	1 015	1 945	18 888	67 073	166 621	235 159	1 274

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	50	27	6 145	177 484	4 775	9 197	112 710	1 380 145	340 040	1 710 323	116 427
33441	Semiconductor & other electronic component mfg	—	50	27	6 145	177 484	4 775	9 197	112 710	1 380 145	340 040	1 710 323	116 427
334412	Bare printed circuit board mfg	—	6	3	747	20 228	513	1 139	10 419	86 713	35 272	119 720	D
334413	Semiconductor & related device mfg ...	—	9	4	h	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	5	2	c	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	4	3	f	D	D	D	D	D	D	D	1 295
334418	Printed circuit assembly (electronic assembly) mfg	—	8	6	570	14 328	386	700	6 614	35 328	65 780	100 250	1 062
334419	Other electronic component mfg	1	17	9	903	21 559	660	1 270	10 757	58 728	33 891	93 256	2 633
3345	Navigational, measuring, medical, & control instruments mfg	—	54	22	4 004	163 595	1 872	3 416	45 885	386 951	189 383	611 515	23 340
33451	Navigational, measuring, medical, & control instruments mfg	—	54	22	4 004	163 595	1 872	3 416	45 885	386 951	189 383	611 515	23 340
334510	Electromedical & electrotherapeutic apparatus mfg	—	11	3	787	42 630	154	319	5 408	110 147	47 130	160 395	D
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	7	5	1 225	40 259	732	1 493	15 723	143 552	62 755	216 093	5 181
334513	Industrial process control instrument mfg	1	10	3	293	7 260	209	257	3 324	19 881	8 802	29 662	362
334515	Electricity measuring & testing instrument mfg	—	5	3	231	9 223	101	201	2 738	15 381	10 716	23 623	392
334516	Analytical laboratory instrument mfg	—	8	3	c	D	D	D	D	D	D	D	705
334519	Other measuring & controlling device mfg	9	5	2	247	10 042	128	261	3 414	20 424	13 504	34 714	1 124
3346	Mfg & reproducing magnetic & optical media .	—	17	5	745	23 269	439	1 080	12 598	122 415	102 910	227 748	11 676
33461	Mfg & reproducing magnetic & optical media	—	17	5	745	23 269	439	1 080	12 598	122 415	102 910	227 748	11 676
334611	Software reproducing .	—	4	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	4	10	3	c	D	D	D	D	D	D	D	776
334613	Magnetic & optical recording media mfg .	—	3	1	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	137	83	18 969	503 570	15 244	29 031	346 048	1 554 008	1 556 144	3 109 244	115 650
3351	Electric lighting equipment mfg	—	15	12	1 273	40 363	1 072	2 375	33 287	157 287	89 163	246 341	4 331
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	2	14	11	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	4	5	2	199	3 313	155	271	2 342	6 059	7 521	13 391	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	—	7	7	565	15 567	471	997	11 289	34 431	42 435	77 168	2 570
335129	Other lighting equipment mfg	9	2	2	c	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	11	8	2 965	52 429	2 677	4 780	44 872	173 150	291 171	480 758	23 350
33521	Small electrical appliance mfg	—	6	5	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	—	6	5	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	5	3	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	4	2	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	59	31	7 946	214 012	6 392	11 849	146 737	621 485	565 337	1 180 194	33 825
33531	Electrical equipment mfg	-	59	31	7 946	214 012	6 392	11 849	146 737	621 485	565 337	1 180 194	33 825
335311	Power, distribution, & specialty transformer mfg	-	8	6	1 474	51 168	1 189	1 747	36 820	135 415	175 723	309 507	8 661
335312	Motor & generator mfg	-	19	12	4 972	116 235	4 127	7 996	83 333	339 810	286 066	621 251	20 844
335313	Switchgear & switchboard apparatus mfg	-	15	6	1 160	34 931	917	1 811	23 246	120 946	87 986	208 143	3 213
335314	Relay & industrial control mfg	4	17	7	340	11 678	159	295	3 338	25 314	15 562	41 293	1 107
3359	Other electrical equipment & component mfg	-	52	32	6 785	196 766	5 103	10 027	121 152	602 086	610 473	1 201 951	54 144
33591	Battery mfg	-	8	6	2 885	77 164	2 335	4 383	56 059	277 822	240 876	514 485	D
335911	Storage battery mfg	-	7	5	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	5	5	665	18 796	566	1 127	14 156	99 125	179 048	272 992	4 437
335929	Other communication & energy wire mfg	-	5	5	665	18 796	566	1 127	14 156	99 125	179 048	272 992	4 437
33593	Wiring device mfg	-	24	13	2 678	86 960	1 800	3 763	44 711	186 164	161 551	347 255	14 403
335931	Current-carrying wiring device mfg	-	13	7	988	26 192	650	1 329	12 589	47 287	30 092	78 559	D
335932	Noncurrent-carrying wiring device mfg	-	11	6	1 690	60 768	1 150	2 434	32 122	138 877	131 459	268 696	D
33599	All other electrical equipment & component mfg	1	15	8	557	13 846	402	754	6 226	38 975	28 998	67 219	D
335999	All other miscellaneous electrical equipment & component mfg	2	14	7	e	D	D	D	D	D	D	D	608
336	Transportation equipment mfg	-	345	159	64 779	2 830 579	43 299	88 422	1 680 971	10 275 375	19 587 317	32 218 879	501 658
3361	Motor vehicle mfg	-	16	7	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	14	7	18 465	1 108 344	17 235	36 094	998 174	8 017 970	13 999 583	21 986 385	276 544
336111	Automobile mfg	9	6	2	120	2 255	105	88	1 900	7 582	16 036	23 688	497
336112	Light truck & utility vehicle mfg	-	8	5	18 345	1 106 089	17 130	36 006	996 274	8 010 388	13 983 547	21 962 697	276 047
3362	Motor vehicle body & trailer mfg	1	82	29	1 976	44 350	1 610	2 894	30 064	100 272	156 144	255 900	4 050
33621	Motor vehicle body & trailer mfg	1	82	29	1 976	44 350	1 610	2 894	30 064	100 272	156 144	255 900	4 050
336211	Motor vehicle body mfg	1	21	9	568	13 998	448	843	9 565	26 741	40 973	66 949	1 025
336212	Truck trailer mfg	1	20	7	509	12 309	433	841	9 022	31 817	50 286	80 509	1 604
336213	Motor home mfg	-	4	2	116	3 038	78	166	1 632	5 648	12 329	17 941	31
336214	Travel trailer & camper mfg	1	37	11	783	15 005	651	1 044	9 845	36 066	52 556	90 501	1 390
3363	Motor vehicle parts mfg ...	-	166	80	17 845	462 671	14 332	28 085	322 450	1 460 380	2 023 793	3 470 345	112 413
33631	Motor vehicle gasoline engine & engine parts mfg	1	38	4	797	20 563	602	1 245	14 866	39 662	49 524	87 462	2 435
336311	Carburetor, piston, piston ring, & valve mfg	-	3	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	2	35	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	29	11	1 400	40 559	937	1 883	16 591	85 144	90 011	174 962	6 739
336321	Vehicular lighting equipment mfg	-	5	3	772	24 769	532	1 202	10 394	54 422	62 995	117 101	4 788
336322	Other motor vehicle electrical & electronic equipment mfg	2	24	8	628	15 790	405	681	6 197	30 722	27 016	57 861	1 951
33633	Motor vehicle steering & suspension component (except spring) mfg	-	10	5	959	24 801	855	1 766	19 705	140 770	107 527	247 025	7 486
336330	Motor vehicle steering & suspension component (except spring) mfg	-	10	5	959	24 801	855	1 766	19 705	140 770	107 527	247 025	7 486
33634	Motor vehicle brake system mfg	1	15	11	2 665	56 553	2 134	3 696	39 594	148 977	133 406	281 982	12 450
336340	Motor vehicle brake system mfg	1	15	11	2 665	56 553	2 134	3 696	39 594	148 977	133 406	281 982	12 450

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33635	Motor vehicle transmission & power train parts mfg	—	17	6	2 455	59 309	1 917	3 655	39 396	253 059	402 457	651 785	9 464
336350	Motor vehicle transmission & power train parts mfg	—	17	6	2 455	59 309	1 917	3 655	39 396	253 059	402 457	651 785	9 464
33636	Motor vehicle seating & interior trim mfg	—	13	9	1 718	49 194	1 493	2 318	39 534	230 435	459 118	690 050	2 912
336360	Motor vehicle seating & interior trim mfg	—	13	9	1 718	49 194	1 493	2 318	39 534	230 435	459 118	690 050	2 912
33637	Motor vehicle metal stamping	—	10	10	1 362	49 707	1 139	2 531	36 287	103 643	185 177	288 805	9 665
336370	Motor vehicle metal stamping	—	10	10	1 362	49 707	1 139	2 531	36 287	103 643	185 177	288 805	9 665
33639	Other motor vehicle parts mfg	1	34	24	6 489	161 985	5 255	10 991	116 477	458 690	596 573	1 048 274	61 262
336399	All other motor vehicle parts mfg	1	34	24	6 489	161 985	5 255	10 991	116 477	458 690	596 573	1 048 274	61 262
3364	Aerospace product & parts mfg	—	26	15	j	D	D	D	D	D	D	D	93 355
33641	Aerospace product & parts mfg	—	26	15	j	D	D	D	D	D	D	D	93 355
336411	Aircraft mfg	—	2	2	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	23	12	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	10	7	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	10	7	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	10	7	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	31	14	2 550	55 649	2 095	3 843	37 741	177 270	212 905	388 234	3 661
33661	Ship & boat building	—	31	14	2 550	55 649	2 095	3 843	37 741	177 270	212 905	388 234	3 661
336611	Ship building & repairing	—	8	4	740	16 998	681	1 105	12 618	37 457	59 175	96 632	1 878
336612	Boat building	—	23	10	1 810	38 651	1 414	2 738	25 123	139 813	153 730	291 602	1 783
3369	Other transportation equipment mfg	—	14	7	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	14	7	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	—	12	6	462	11 720	371	719	7 874	30 635	87 885	117 964	D
337	Furniture & related product mfg	1	444	90	11 504	294 538	9 426	18 342	211 204	638 065	577 829	1 225 212	25 672
3371	Household & institutional furniture & kitchen cabinet mfg	1	333	54	8 563	212 554	7 154	13 894	161 598	485 363	435 465	920 528	20 036
33711	Wood kitchen cabinet & counter top mfg	1	220	20	2 156	51 692	1 735	3 214	36 855	87 313	67 095	154 509	4 668
337110	Wood kitchen cabinet & counter top mfg	1	220	20	2 156	51 692	1 735	3 214	36 855	87 313	67 095	154 509	4 668
33712	Household & institutional furniture mfg	1	113	34	6 407	160 862	5 419	10 680	124 743	398 050	368 370	766 019	15 368
337121	Upholstered household furniture mfg	—	20	4	2 101	52 395	1 903	3 881	45 832	125 569	89 048	213 726	2 915
337122	Nonupholstered wood household furniture mfg	2	64	9	2 666	65 259	2 306	4 429	53 360	172 720	190 410	365 179	6 466
337127	Institutional furniture mfg	—	20	18	1 449	39 210	1 050	2 063	23 042	92 942	80 500	172 935	5 328
3372	Office furniture (including fixtures) mfg	1	89	31	2 561	71 548	2 016	3 956	44 603	125 634	114 157	248 981	4 338
33721	Office furniture (including fixtures) mfg	1	89	31	2 561	71 548	2 016	3 956	44 603	125 634	114 157	248 981	4 338
337211	Wood office furniture mfg	—	7	2	106	2 530	83	133	1 460	4 502	2 288	6 778	D
337212	Custom architectural woodwork & millwork mfg	1	26	10	426	13 840	331	652	9 293	23 541	13 316	37 093	682
337214	Office furniture (except wood) mfg	—	5	2	208	6 750	169	280	4 955	3 517	13 148	26 432	D
337215	Showcase, partition, shelving, & locker mfg	1	51	17	1 821	48 428	1 433	2 891	28 895	94 074	85 405	178 678	3 447
3379	Other furniture related product mfg	—	22	5	380	10 436	256	492	5 003	27 068	28 207	55 703	1 298
33791	Mattress mfg	—	16	4	306	8 980	211	418	4 386	24 321	24 226	48 960	D
337910	Mattress mfg	—	16	4	306	8 980	211	418	4 386	24 321	24 226	48 960	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSOURI—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	602	138	14 010	373 399	9 402	17 820	193 569	996 118	618 068	1 611 946	48 576
3391	Medical equipment & supplies mfg.....	1	239	49	5 343	162 853	3 420	6 650	80 358	482 379	245 490	725 876	21 791
33911	Medical equipment & supplies mfg.....	1	239	49	5 343	162 853	3 420	6 650	80 358	482 379	245 490	725 876	21 791
339111	Laboratory apparatus & furniture mfg.....	-	7	1	199	8 153	73	158	2 105	13 766	6 359	19 939	359
339112	Surgical & medical instrument mfg.....	-	32	16	2 544	91 134	1 428	2 981	39 037	290 315	157 455	446 979	12 971
339113	Surgical appliance & supplies mfg.....	1	27	12	1 132	27 268	883	1 717	17 283	83 680	43 298	127 427	5 005
339114	Dental equipment & supplies mfg.....	2	14	4	247	7 846	163	331	3 651	30 955	9 565	39 568	742
339115	Ophthalmic goods mfg.....	1	9	5	318	7 198	225	452	5 084	18 049	12 164	28 948	1 421
339116	Dental laboratories ...	5	150	11	903	21 254	648	1 011	13 198	45 614	16 649	63 015	1 293
3399	Other miscellaneous mfg ..	2	363	89	8 667	210 546	5 982	11 170	113 211	513 739	372 578	886 070	26 785
33991	Jewelry & silverware mfg.....	4	27	2	162	3 266	115	186	1 804	7 269	5 015	12 192	207
33992	Sporting & athletic goods mfg.....	3	74	22	2 398	58 997	1 813	3 645	33 313	194 605	109 773	301 965	10 186
339920	Sporting & athletic goods mfg.....	3	74	22	2 398	58 997	1 813	3 645	33 313	194 605	109 773	301 965	10 186
33993	Doll, toy, & game mfg ...	2	31	5	697	14 657	582	1 058	11 381	50 179	35 790	86 712	3 014
339932	Game, toy, & children's vehicle mfg.....	2	22	5	659	14 137	551	1 004	10 999	48 847	34 951	84 515	2 968
33994	Office supplies (except paper) mfg.....	1	19	5	709	17 961	305	569	6 289	33 351	60 406	94 734	1 442
339942	Lead pencil & art good mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
339943	Marking device mfg...	-	14	2	453	12 261	98	197	2 322	16 590	43 205	60 151	856
33995	Sign mfg.....	2	130	31	2 679	73 294	1 672	3 160	35 759	129 874	85 588	215 644	6 497
339950	Sign mfg.....	2	130	31	2 679	73 294	1 672	3 160	35 759	129 874	85 588	215 644	6 497
33999	All other miscellaneous mfg.....	1	82	24	2 022	42 371	1 495	2 552	24 665	98 461	76 006	174 823	5 439
339991	Gasket, packing, & sealing device mfg...	1	11	3	234	6 311	173	341	3 764	14 421	14 237	28 641	697
339994	Broom, brush, & mop mfg.....	-	7	4	144	3 348	120	207	1 780	7 903	8 273	16 041	123
339995	Burial casket mfg.....	-	5	2	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg.....	1	49	15	1 403	26 200	998	1 613	14 190	55 756	39 256	95 249	3 475

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBIA, MO MSA													
31-33	Manufacturing	-	87	27	5 703	165 292	4 450	9 064	107 852	855 058	741 758	1 595 030	82 455
311	Food mfg	-	9	3	656	17 676	607	1 317	15 522	165 334	86 954	252 721	D
3116	Meat product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	606	15 833	486	957	10 504	47 582	78 427	126 180	3 146
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	3 146
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	7	4	520	13 638	351	694	7 736	31 475	15 680	47 452	740
3332	Industrial machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
3363	Motor vehicle parts mfg	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
33635	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
JOPLIN, MO MSA													
31-33	Manufacturing	-	261	95	16 219	399 621	12 989	28 127	298 731	1 191 996	1 637 492	2 847 446	128 504
311	Food mfg	-	23	14	3 302	77 444	2 799	7 390	64 100	338 667	631 293	967 956	51 723
3111	Animal food mfg	-	4	3	276	7 927	215	496	5 291	27 361	109 904	136 446	D
31111	Animal food mfg	-	4	3	276	7 927	215	496	5 291	27 361	109 904	136 446	D
3112	Grain & oilseed milling	-	3	3	250	5 953	222	586	5 005	51 602	27 393	77 753	5 846
3115	Dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	5	2	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	1	4	3	299	4 531	260	506	3 244	8 362	7 530	17 373	D
3152	Cut & sew apparel mfg	1	4	3	299	4 531	260	506	3 244	8 362	7 530	17 373	D
31522	Men's & boys' cut & sew apparel mfg	1	3	3	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	1	2	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	4	2	e	D	D	D	D	D	D	D	153
3162	Footwear mfg	-	2	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOPLIN, MO MSA—Con. Manufacturing—Con.												
321	Wood product mfg	2	17	5	273	5 133	236	434	4 137	15 152	24 796	40 796	D
324	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	2	5	3	f	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	2	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	11	7	728	23 733	573	1 100	17 154	100 657	101 762	204 675	8 309
3259	Other chemical product mfg	—	5	3	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	4	3	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	4	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	23	8	340	6 515	231	395	4 166	19 201	13 727	32 917	1 007
3273	Cement & concrete product mfg	—	15	6	252	4 593	165	295	2 907	15 031	10 649	25 615	786
331	Primary metal mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	62	16	2 789	69 504	2 201	4 597	55 462	154 793	140 346	297 962	15 587
3323	Architectural & structural metals mfg	—	8	3	277	7 033	206	428	4 875	15 172	14 709	29 833	238
3326	Spring & wire product mfg	—	4	4	g	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	4	4	g	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	—	2	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	35	5	428	12 171	351	734	8 391	24 539	11 219	35 252	3 320
3329	Other fabricated metal product mfg	—	6	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	6	2	e	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	24	5	830	19 292	519	1 078	10 610	28 787	45 294	69 877	4 917
3339	Other general-purpose machinery mfg	1	6	1	e	D	D	D	D	D	D	D	15
33399	All other general-purpose machinery mfg	1	5	1	e	D	D	D	D	D	D	D	15
333997	Scale & balance (except laboratory) mfg	1	2	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	3	3	f	D	D	D	D	D	D	D	1 582
3344	Semiconductor & other electronic component mfg	—	2	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	4	2 149	52 218	1 814	3 779	41 626	162 111	272 796	450 348	D
3351	Electric lighting equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	2	2	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	2	2	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	2	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOPLIN, MO MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg.....	-	9	3	830	18 991	609	1 187	12 666	46 560	33 330	80 164	D
3363	Motor vehicle parts mfg ...	-	5	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	21	11	1 852	47 786	1 625	3 115	39 706	113 191	70 585	182 010	4 026
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	16	10	1 614	41 966	1 442	2 784	35 818	99 248	62 764	161 486	3 596
33712	Household & institutional furniture mfg.....	-	10	7	1 508	40 197	1 355	2 662	34 437	96 475	59 922	155 887	3 392
337121	Upholstered household furniture mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	17	4	481	14 350	390	1 003	9 269	19 252	31 030	53 318	1 823
3399	Other miscellaneous mfg ..	2	10	4	467	14 004	378	988	9 097	18 369	30 582	51 971	1 784
33992	Sporting & athletic goods mfg.....	2	6	4	446	13 644	363	970	8 907	17 560	29 895	50 474	1 745
339920	Sporting & athletic goods mfg.....	2	6	4	446	13 644	363	970	8 907	17 560	29 895	50 474	1 745
	KANSAS CITY, MO-KS MSA												
31-33	Manufacturing	-	2 201	758	95 231	3 328 377	66 271	130 918	2 039 626	14 821 313	16 295 890	31 014 921	776 913
	Kansas City, MO-KS MSA (KS Part).....	-	880	318	37 000	1 337 027	26 441	54 103	844 325	4 757 707	6 747 855	11 457 940	346 700
	Kansas City, MO-KS MSA (MO Part).....	-	1 321	440	58 231	1 991 350	39 830	76 815	1 195 301	10 063 606	9 548 035	19 556 981	430 213
311	Food mfg.....	1	145	60	8 146	239 310	5 583	11 379	145 997	1 394 238	2 057 565	3 422 560	64 557
3111	Animal food mfg.....	1	12	7	486	15 322	339	830	9 230	24 865	86 997	111 841	3 414
31111	Animal food mfg.....	1	12	7	486	15 322	339	830	9 230	24 865	86 997	111 841	3 414
311119	Other animal food mfg.....	-	10	5	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	15	9	1 058	41 098	817	1 841	28 255	258 920	812 394	1 065 798	23 816
31121	Flour milling & malt mfg ..	-	8	4	362	15 544	287	716	11 521	96 381	300 457	396 655	9 625
311211	Flour milling.....	-	8	4	362	15 544	287	716	11 521	96 381	300 457	396 655	9 625
31122	Starch & vegetable fats & oils mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	13	4	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	8	3	294	5 507	226	409	2 990	16 415	12 203	28 476	D
311330	Confectionery mfg from purchased chocolate.....	-	8	3	294	5 507	226	409	2 990	16 415	12 203	28 476	D
3115	Dairy product mfg.....	2	6	3	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	2	4	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	16	5	1 048	24 571	909	1 830	17 430	74 831	288 403	359 760	5 285
31161	Animal slaughtering & processing.....	-	16	5	1 048	24 571	909	1 830	17 430	74 831	288 403	359 760	5 285
311612	Meat processed from carcasses.....	1	4	2	273	5 543	250	491	3 552	12 494	52 600	64 874	D
311615	Poultry processing.....	-	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	51	15	2 154	68 438	1 340	2 693	39 620	321 272	189 756	505 911	4 600
31181	Bread & bakery product mfg.....	-	37	6	f	D	D	D	D	D	D	D	2 706
311812	Commercial bakeries ..	-	13	5	821	26 669	298	675	9 631	65 766	28 309	94 081	2 529
31182	Cookie, cracker, & pasta mfg.....	-	12	9	1 158	39 191	931	1 879	28 757	250 057	158 101	403 015	D
311821	Cookie & cracker mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
311823	Dry pasta mfg.....	-	5	4	438	16 432	307	604	9 777	107 825	68 661	170 739	D
3119	Other food mfg.....	2	22	15	2 559	71 352	1 603	3 173	41 042	656 952	584 941	1 226 684	25 747
31191	Snack food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	6	6	4	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg....	-	4	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	11	8	712	19 923	429	819	8 297	67 161	133 923	200 881	D
311991	Perishable prepared food mfg.....	6	3	3	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	8	5	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	1	14	6	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	1	13	6	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	7	5	347	11 979	203	486	7 125	131 443	245 653	376 593	4 014
312111	Soft drink mfg	1	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	6	37	5	500	11 043	380	663	6 865	23 628	16 463	40 600	1 960
3149	Other textile product mills ..	6	22	5	459	10 443	345	605	6 505	22 282	15 085	37 889	1 927
31499	All other textile product mills	8	14	3	352	8 452	268	489	5 303	15 914	9 619	25 942	1 666
314999	All other miscellaneous textile product mills ..	8	14	3	352	8 452	268	489	5 303	15 914	9 619	25 942	1 666
315	Apparel mfg	2	45	13	g	D	D	D	D	D	D	D	1 647
3152	Cut & sew apparel mfg	2	27	11	f	D	D	D	D	D	D	D	1 328
31522	Men's & boys' cut & sew apparel mfg	2	8	5	f	D	D	D	D	D	D	D	1 044
315228	Men's & boys' cut & sew other outerwear mfg	3	4	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	48	14	911	20 058	763	1 327	12 940	38 801	68 929	107 235	2 045
3219	Other wood product mfg ...	2	43	12	f	D	D	D	D	D	D	D	1 500
32199	All other wood product mfg	1	13	5	267	7 451	203	402	3 686	10 807	6 451	17 481	599
321999	All other miscellaneous wood product mfg ...	1	12	5	e	D	D	D	D	D	D	D	599
322	Paper mfg	-	49	36	5 142	165 157	4 042	8 144	112 532	348 998	579 254	938 692	30 943
3222	Converted paper product mfg	-	48	35	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	25	21	2 242	81 368	1 726	3 710	55 118	148 392	307 708	466 702	D
322211	Corrugated & solid fiber box mfg	-	14	11	1 233	42 310	914	1 927	26 840	63 261	176 538	249 166	7 779
322212	Folding paperboard box mfg	-	5	5	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	2	11	7	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	7	5	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	5	5	840	19 238	698	1 055	12 641	43 617	71 227	114 813	D
32223	Stationery product mfg ..	-	8	5	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	4	4	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	9	4	2	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	9	4	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	396	83	10 685	331 522	7 796	15 160	211 838	681 554	537 312	1 216 030	52 447
3231	Printing & related support activities	1	396	83	10 685	331 522	7 796	15 160	211 838	681 554	537 312	1 216 030	52 447
32311	Printing	2	343	72	10 044	309 545	7 327	14 333	197 562	642 614	527 969	1 167 934	49 898
323110	Commercial lithographic printing ..	1	169	42	4 302	150 443	3 250	6 450	95 850	305 189	232 437	535 143	25 882
323112	Commercial flexographic printing ..	-	16	8	880	25 390	586	1 555	15 694	55 222	91 743	145 487	4 640
323113	Commercial screen printing	4	38	7	1 719	51 658	1 289	2 698	27 291	100 245	79 255	179 924	6 994
323114	Quick printing	1	62	4	840	22 008	634	1 144	17 021	58 869	22 673	81 310	2 995
323116	Manifold business form printing	-	11	4	1 417	34 870	921	1 437	25 814	63 650	73 851	138 662	4 202
323117	Book printing	-	7	3	355	7 513	258	342	5 449	23 739	7 902	31 736	2 985
323119	Other commercial printing	6	30	1	263	7 161	188	329	3 966	14 569	10 177	24 514	1 498
32312	Support activities for printing	-	53	11	641	21 977	469	827	14 276	38 940	9 343	48 096	2 549
323122	Prepress services	-	40	8	485	18 369	330	584	11 482	33 155	8 448	41 443	1 582
324	Petroleum & coal products mfg	3	18	5	367	13 521	202	459	6 792	30 789	67 623	97 947	D
3241	Petroleum & coal products mfg	3	18	5	367	13 521	202	459	6 792	30 789	67 623	97 947	D
325	Chemical mfg	-	114	56	7 623	317 106	3 986	8 579	139 728	2 894 046	1 599 414	4 447 170	105 039
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	8	3	g	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	24	13	2 477	101 052	1 048	2 113	34 614	1 788 903	449 879	2 180 531	17 638
32541	Pharmaceutical & medicine mfg	—	24	13	2 477	101 052	1 048	2 113	34 614	1 788 903	449 879	2 180 531	17 638
325412	Pharmaceutical preparation mfg	—	13	7	1 767	77 723	701	1 419	25 968	1 715 938	414 195	2 073 251	D
325413	In-vitro diagnostic substance mfg	—	2	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	26	11	1 407	44 773	947	2 074	24 239	126 899	117 453	247 135	8 876
32551	Paint & coating mfg	1	13	3	321	11 407	173	343	5 936	38 487	30 232	69 099	1 092
325510	Paint & coating mfg	1	13	3	321	11 407	173	343	5 936	38 487	30 232	69 099	1 092
32552	Adhesive mfg	2	13	8	1 086	33 366	774	1 731	18 303	88 412	87 221	178 036	7 784
325520	Adhesive mfg	2	13	8	1 086	33 366	774	1 731	18 303	88 412	87 221	178 036	7 784
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	22	11	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	20	10	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	11	4	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	—	7	4	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	21	11	937	33 683	502	966	15 883	94 987	94 172	189 403	D
32591	Printing ink mfg	1	13	7	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	13	7	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	8	4	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	119	70	6 502	164 355	4 922	9 691	114 410	528 926	597 153	1 123 827	64 179
3261	Plastics product mfg	4	99	61	5 943	148 593	4 517	8 861	104 740	473 715	557 197	1 030 798	62 902
32611	Unsupported plastics film, sheet, & bag mfg ..	1	8	6	382	13 631	278	587	6 321	50 003	37 786	87 483	1 830
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	9	7	4	616	18 180	515	1 146	14 456	116 613	240 645	353 123	21 602
326121	Unsupported plastics profile shape mfg	9	5	3	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	7	5	624	19 056	540	1 154	14 860	59 961	45 477	104 865	4 236
326160	Plastics bottle mfg	—	7	5	624	19 056	540	1 154	14 860	59 961	45 477	104 865	4 236
32619	Other plastics product mfg	1	66	41	3 887	86 398	2 834	5 286	61 605	211 999	193 251	410 105	32 249
326199	All other plastics product mfg	1	64	41	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	20	9	559	15 762	405	830	9 670	55 211	39 956	93 029	1 277
327	Nonmetallic mineral product mfg	1	111	48	3 452	121 174	2 788	5 685	92 672	414 121	260 561	677 068	106 285
3272	Glass & glass product mfg ..	—	19	3	453	16 045	374	800	12 258	63 606	35 800	99 154	D
32721	Glass & glass product mfg	—	19	3	453	16 045	374	800	12 258	63 606	35 800	99 154	D
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	70	38	1 910	57 619	1 477	3 022	41 351	135 969	149 564	285 294	D
32732	Ready-mix concrete mfg ..	4	42	25	1 147	35 458	904	1 770	26 342	76 826	101 795	178 888	9 182
327320	Ready-mix concrete mfg	4	42	25	1 147	35 458	904	1 770	26 342	76 826	101 795	178 888	9 182
32739	Other concrete product mfg	3	17	7	428	10 623	324	655	7 191	23 443	15 816	39 225	D
327390	Other concrete product mfg	3	17	7	428	10 623	324	655	7 191	23 443	15 816	39 225	D
3279	Other nonmetallic mineral product mfg	—	14	6	1 034	46 645	889	1 808	38 481	212 094	74 109	289 100	D
32799	All other nonmetallic mineral product mfg ..	—	13	5	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	4	3	904	43 289	788	1 614	36 389	203 569	65 711	272 096	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	KANSAS CITY, MO—KS MSA—Con.													
	Manufacturing—Con.													
331	Primary metal mfg	—	35	12	g	D	D	D	D	D	D	D	14 836	
3311	Iron & steel mills & ferroalloy mfg	—	2	1	f	D	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	—	2	1	f	D	D	D	D	D	D	D	D	
331111	Iron & steel mills	—	2	1	f	D	D	D	D	D	D	D	D	
3312	Steel product mfg from purchased steel	—	6	4	e	D	D	D	D	D	D	D	D	
33122	Rolling & drawing of purchased steel	—	4	3	e	D	D	D	D	D	D	D	D	
331222	Steel wire drawing	—	3	3	e	D	D	D	D	D	D	D	D	
3315	Foundries	1	25	6	f	D	D	D	D	D	D	D	2 757	
33151	Ferrous metal foundries	—	10	4	e	D	D	D	D	D	D	D	2 193	
332	Fabricated metal product mfg	1	330	116		14 152	521 741	8 872	16 768	268 053	1 240 895	650 417	1 867 814	49 148
3321	Forging & stamping	1	12	8		403	12 191	269	549	7 473	48 070	72 871	113 389	2 298
33211	Forging & stamping	1	12	8		403	12 191	269	549	7 473	48 070	72 871	113 389	2 298
3322	Cutlery & handtool mfg	1	11	6		468	12 559	335	648	7 971	43 091	29 433	71 961	1 220
33221	Cutlery & handtool mfg	1	11	6		468	12 559	335	648	7 971	43 091	29 433	71 961	1 220
332212	Hand & edge tool mfg	1	10	5	e		D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	75	37		3 406	100 043	2 404	4 648	57 257	239 250	230 144	458 267	12 376
33231	Plate work & fabricated structural product mfg	—	27	15		1 513	46 000	1 047	2 006	24 918	126 695	119 579	235 930	4 758
332312	Fabricated structural metal mfg	—	22	12		1 192	34 244	839	1 610	19 066	101 055	102 939	199 225	3 930
33232	Ornamental & architectural metal products mfg	—	48	22		1 893	54 043	1 357	2 642	32 339	112 555	110 565	222 337	7 618
332321	Metal window & door mfg	—	8	4		374	9 762	275	486	5 503	24 545	37 644	61 222	1 616
332322	Sheet metal work mfg	—	26	11		697	25 004	515	1 033	15 356	49 558	41 855	92 247	4 233
332323	Ornamental & architectural metal work mfg	1	14	7		822	19 277	567	1 123	11 480	38 452	31 066	68 868	1 769
3324	Boiler, tank, & shipping container mfg	2	17	9		999	37 736	713	1 291	23 818	103 457	171 262	274 013	6 723
33242	Metal tank (heavy gauge) mfg	—	4	2	e		D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	2	e		D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	2	10	7		635	24 413	513	917	18 207	77 654	147 105	224 609	5 839
332431	Metal can mfg	2	4	3	e		D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	6	4	e		D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	126	22		1 506	48 395	1 185	2 269	33 487	88 172	37 802	123 553	12 867
33271	Machine shops	2	109	17		1 099	35 733	885	1 673	23 984	63 090	25 401	86 457	4 524
332710	Machine shops	2	109	17		1 099	35 733	885	1 673	23 984	63 090	25 401	86 457	4 524
33272	Turned product & screw, nut, & bolt mfg	1	17	5		407	12 662	300	596	9 503	25 082	12 401	37 096	8 343
332721	Precision turned product mfg	—	11	4		316	9 788	238	484	7 519	21 409	7 868	28 891	7 912
3328	Coating, engraving, heat treating, & allied activities	1	42	13		1 107	30 581	923	1 785	25 057	85 368	17 437	102 889	6 813
33281	Coating, engraving, heat treating, & allied activities	1	42	13		1 107	30 581	923	1 785	25 057	85 368	17 437	102 889	6 813
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	18	5		619	19 112	532	1 003	17 209	58 863	9 258	68 165	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	22	6	e		D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	1	34	17		6 015	273 234	2 866	5 213	108 931	618 716	80 695	698 199	5 944
33291	Metal valve mfg	6	11	4		560	21 348	302	574	8 019	74 611	23 998	98 106	2 429
332919	Other metal valve & pipe fitting mfg	9	3	1	e		D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	23	13		5 455	251 886	2 564	4 639	100 912	544 105	56 697	600 093	3 515
332992	Small arms ammunition mfg	—	1	1	g		D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	h		D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	10	6		424	13 331	298	553	7 490	26 996	23 921	50 609	1 631

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	KANSAS CITY, MO—KS MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	189	73	7 699	273 838	4 865	9 339	135 095	564 329	655 629	1 220 761	37 590
3331	Agriculture, construction, & mining machinery mfg.	—	19	11	1 584	60 007	1 055	2 106	33 746	107 953	213 518	324 697	6 921
33311	Agricultural implement mfg.	—	7	5	1 123	42 286	775	1 594	24 225	67 143	146 965	217 920	D
333111	Farm machinery & equipment mfg.	—	5	4	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.	1	10	6	e	D	D	D	D	D	D	D	1 952
333120	Construction machinery mfg.	1	10	6	e	D	D	D	D	D	D	D	1 952
3332	Industrial machinery mfg. ..	—	39	13	739	26 299	412	785	11 315	48 037	45 323	89 638	D
33329	Other industrial machinery mfg.	—	31	10	600	21 324	341	636	9 317	37 365	39 368	72 777	D
333294	Food product machinery mfg.	—	11	6	401	14 535	216	399	5 391	25 221	31 105	51 981	D
3333	Commercial & service industry machinery mfg. ..	—	17	10	476	15 241	321	637	6 465	27 221	29 590	57 577	1 854
33331	Commercial & service industry machinery mfg.	—	17	10	476	15 241	321	637	6 465	27 221	29 590	57 577	1 854
333319	Other commercial & service industry machinery mfg.	—	10	4	e	D	D	D	D	D	D	D	783
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	12	6	687	17 154	503	852	11 468	78 799	78 315	157 202	3 261
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	12	6	687	17 154	503	852	11 468	78 799	78 315	157 202	3 261
333412	Industrial & commercial fan & blower mfg.	1	4	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	—	5	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.	2	42	11	1 073	42 284	756	1 573	26 340	78 158	29 087	105 176	6 462
33351	Metalworking machinery mfg.	2	42	11	1 073	42 284	756	1 573	26 340	78 158	29 087	105 176	6 462
333511	Industrial mold mfg.	—	15	4	487	21 443	356	793	13 900	38 721	9 222	47 776	3 120
333514	Special die & tool, die set, jig, & fixture mfg.	2	19	4	276	10 232	225	475	7 713	15 262	9 628	24 017	2 205
3336	Engine, turbine, & power transmission equipment mfg.	8	5	2	362	5 547	286	243	3 495	10 999	13 469	24 635	D
33361	Engine, turbine, & power transmission equipment mfg.	8	5	2	362	5 547	286	243	3 495	10 999	13 469	24 635	D
333618	Other engine equipment mfg.	9	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	1	55	20	2 778	107 306	1 532	3 143	42 266	213 162	246 327	461 836	16 254
33391	Pump & compressor mfg.	—	5	2	403	10 776	176	373	4 886	16 557	28 627	44 366	D
333911	Pump & pumping equipment mfg.	—	3	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.	1	23	12	1 663	70 433	952	1 993	26 782	135 775	172 914	311 233	D
333921	Elevator & moving stairway mfg.	—	1	1	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg.	1	17	8	1 010	53 477	530	1 131	18 193	110 293	137 754	246 840	2 967
333924	Industrial truck, tractor, trailer, & stacker machinery mfg.	1	5	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.	3	27	6	712	26 097	404	777	10 598	60 830	44 786	106 237	11 145
334	Computer & electronic product mfg.	—	88	36	6 131	195 807	2 711	5 554	62 251	659 440	344 025	997 544	56 526
3342	Communications equipment mfg.	—	9	3	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg.	—	5	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg.	—	5	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	2	36	16	1 319	32 408	767	1 474	14 351	77 727	41 640	118 768	5 322
33441	Semiconductor & other electronic component mfg	2	36	16	1 319	32 408	767	1 474	14 351	77 727	41 640	118 768	5 322
334413	Semiconductor & related device mfg...	4	6	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	17	6	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	21	11	h	D	D	D	D	D	D	D	24 582
33451	Navigational, measuring, medical, & control instruments mfg	—	21	11	h	D	D	D	D	D	D	D	24 582
334511	Search, detection, navigation, & guidance instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	2	6	4	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	—	9	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	9	2	f	D	D	D	D	D	D	D	D
334611	Software reproducing	—	3	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	40	15	2 321	76 394	1 675	3 254	48 878	214 956	139 313	353 786	10 714
3351	Electric lighting equipment mfg	5	6	4	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	5	6	4	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	7	16	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	7	16	2	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	18	9	1 539	57 250	1 145	2 344	39 942	183 217	87 986	270 962	8 465
33591	Battery mfg	—	4	3	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	4	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	6	3	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	77	28	11 531	596 851	10 208	21 054	506 311	4 987 761	7 913 999	12 903 058	146 831
3361	Motor vehicle mfg	—	3	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	45	14	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	13	3	f	D	D	D	D	D	D	D	3 180
336321	Vehicular lighting equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	9	4	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	9	4	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	5	7	5	600	18 513	486	905	11 678	33 229	46 889	80 429	5 738
336399	All other motor vehicle parts mfg	5	7	5	600	18 513	486	905	11 678	33 229	46 889	80 429	5 738
3365	Railroad rolling stock mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KANSAS CITY, MO—KS MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	139	31	2 657	66 161	2 038	3 658	41 678	126 324	105 624	231 020	7 957
3371	Household & institutional furniture & kitchen cabinet mfg	1	100	17	1 706	41 580	1 324	2 418	27 525	64 778	56 998	121 030	2 682
33711	Wood kitchen cabinet & counter top mfg	1	68	11	1 070	26 325	854	1 578	18 355	40 941	25 599	66 384	1 031
337110	Wood kitchen cabinet & counter top mfg ...	1	68	11	1 070	26 325	854	1 578	18 355	40 941	25 599	66 384	1 031
33712	Household & institutional furniture mfg	1	32	6	636	15 255	470	840	9 170	23 837	31 399	54 646	1 651
337127	Institutional furniture mfg	-	6	5	411	10 723	282	486	5 822	13 825	22 467	35 822	1 093
3372	Office furniture (including fixtures) mfg	2	31	11	655	15 963	484	815	9 053	34 191	24 083	58 305	D
33721	Office furniture (including fixtures) mfg	2	31	11	655	15 963	484	815	9 053	34 191	24 083	58 305	D
337212	Custom architectural woodwork & millwork mfg	-	10	4	254	6 241	201	326	3 741	13 342	10 136	23 602	D
337215	Showcase, partition, shelving, & locker mfg	5	16	5	268	6 274	196	311	3 554	11 102	7 603	18 664	414
3379	Other furniture related product mfg	-	8	3	296	8 618	230	425	5 100	27 355	24 543	51 685	D
339	Miscellaneous mfg	2	184	45	3 708	96 600	2 629	4 654	53 657	213 311	142 948	356 837	D
3391	Medical equipment & supplies mfg	2	77	20	1 483	38 883	1 039	1 737	21 366	102 163	44 466	146 562	D
33911	Medical equipment & supplies mfg	2	77	20	1 483	38 883	1 039	1 737	21 366	102 163	44 466	146 562	D
339113	Surgical appliance & supplies mfg	1	11	6	397	9 010	289	488	4 595	35 371	20 229	55 316	D
339116	Dental laboratories ...	3	47	9	593	14 333	468	731	10 469	34 193	8 070	42 510	D
3399	Other miscellaneous mfg ...	2	107	25	2 225	57 717	1 590	2 917	32 291	111 148	98 482	210 275	D
33995	Sign mfg	-	34	9	747	24 248	467	1 004	11 659	36 112	36 112	77 929	1 953
339950	Sign mfg	-	34	9	747	24 248	467	1 004	11 659	36 112	36 112	77 929	1 953
33999	All other miscellaneous mfg	2	32	10	1 061	24 100	801	1 378	14 576	48 336	46 355	95 166	4 244
339999	All other miscellaneous mfg	3	22	7	831	17 571	620	1 009	10 443	33 781	27 917	61 514	D
	ST. JOSEPH, MO MSA												
31-33	Manufacturing	-	103	49	7 382	235 422	5 701	11 158	159 263	861 057	1 442 985	2 295 288	81 086
311	Food mfg	-	10	8	1 587	60 908	1 251	2 793	42 761	367 621	819 913	1 190 126	35 612
3111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	884	37 738	725	1 711	28 044	230 257	623 042	856 011	D
31121	Flour milling & malt mfg .	-	1	1	f	D	D	D	D	D	D	D	D
311211	Flour milling	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	2	1	e	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	1	1	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	1	1	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
3222	Converted paper product mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
32221	Paperboard container mfg	-	3	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	12	7	781	30 031	503	893	13 383	129 121	130 025	265 903	11 175
3254	Pharmaceutical & medicine mfg	-	6	2	410	18 739	284	437	8 347	46 502	35 174	84 719	D
32541	Pharmaceutical & medicine mfg	-	6	2	410	18 739	284	437	8 347	46 502	35 174	84 719	D
325414	Biological product (except diagnostic) mfg	-	1	1	e	D	D	D	D	D	D	D	D

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ST. JOSEPH, MO MSA														
—Con.														
31-33	Manufacturing—Con.													
331	Primary metal mfg	—	2	2	f	D	D	D	D	D	D	D	D	
3312	Steel product mfg from purchased steel	—	2	2	f	D	D	D	D	D	D	D	D	
33122	Rolling & drawing of purchased steel	—	2	2	f	D	D	D	D	D	D	D	D	
331222	Steel wire drawing	—	2	2	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	—	14	6		519	17 878	388	790	12 703	39 716	71 021	113 225	3 260
333	Machinery mfg	—	8	6		825	19 708	606	1 151	13 010	120 415	93 445	213 074	8 377
3331	Agriculture, construction, & mining machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
ST. LOUIS, MO-IL MSA														
31-33	Manufacturing	—	3 320	1 132		170 766	6 590 408	115 500	235 281	3 823 497	21 018 794	28 104 319	51 488 137	1 429 995
	St. Louis, MO-IL MSA (IL Part)	—	495	146		27 487	1 023 352	20 910	43 836	700 665	3 525 644	6 147 590	9 646 771	265 987
	St. Louis, MO-IL MSA (MO Part)	—	2 825	986		143 279	5 567 056	94 590	191 445	3 122 832	17 493 150	21 956 729	41 841 366	1 164 008
311	Food mfg	1	210	73		9 139	256 713	5 999	12 083	146 624	1 149 597	1 458 904	2 613 825	45 645
3111	Animal food mfg	—	8	2		580	16 620	351	738	9 091	236 013	220 020	461 636	D
31111	Animal food mfg	—	8	2		580	16 620	351	738	9 091	236 013	220 020	461 636	D
311119	Other animal food mfg	—	8	2		580	16 620	351	738	9 091	236 013	220 020	461 636	D
3112	Grain & oilseed milling	1	9	7	e	D	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	19	6		1 050	28 504	838	1 553	18 468	156 796	92 622	248 492	4 776
31134	Nonchocolate confectionery mfg	—	12	3	f	D	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	—	12	3	f	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	3	16	4	e	D	D	D	D	D	D	D	D	1 188
31141	Frozen food mfg	3	10	4	e	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	3	10	4	e	D	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	16	8		917	31 857	658	1 419	19 344	92 524	289 960	386 258	7 062
31151	Dairy product (except frozen) mfg	—	11	7	f	D	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	7	4		551	19 696	357	833	9 927	62 735	198 532	261 355	D
3116	Meat product mfg	1	35	8	f	D	D	D	D	D	D	D	D	3 659
31161	Animal slaughtering & processing	1	35	8	f	D	D	D	D	D	D	D	D	3 659
311612	Meat processed from carcasses	—	14	5		541	14 501	445	858	8 967	47 240	94 709	141 539	2 362
3118	Bakeries & tortilla mfg	1	83	24		3 915	99 088	2 185	4 512	52 537	286 672	248 052	535 698	10 744
31181	Bread & bakery product mfg	1	76	19		2 436	60 053	1 364	2 481	31 902	184 893	76 718	261 757	6 039
311811	Retail bakeries	5	50	8	f	D	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	24	9		1 700	49 427	952	1 811	25 782	167 190	58 229	225 489	D
31182	Cookie, cracker, & pasta mfg	1	7	5		1 479	39 035	821	2 031	20 635	101 779	171 334	273 941	4 705
311821	Cookie & cracker mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	8	3	2	f	D	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	—	2	1	e	D	D	D	D	D	D	D	D	D
3119	Other food mfg	1	24	14		1 190	37 493	771	1 580	18 527	219 516	171 005	386 867	8 504
31194	Seasoning & dressing mfg	—	6	3	e	D	D	D	D	D	D	D	D	D
31199	All other food mfg	—	7	5		378	10 446	287	543	5 737	85 053	47 447	132 112	D
311999	All other miscellaneous food mfg	—	5	3	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	22	10	3 531	185 365	2 574	5 294	126 325	1 217 069	808 218	2 022 998	171 981
3121	Beverage mfg	—	22	10	3 531	185 365	2 574	5 294	126 325	1 217 069	808 218	2 022 998	171 981
31211	Soft drink & ice mfg	1	13	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	7	6	g	D	D	D	D	D	D	D	D
31212	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
313	Textile mills	5	17	7	505	12 947	393	776	8 328	33 333	35 359	68 320	D
3133	Textile & fabric finishing & fabric coating mills	6	13	4	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	9	2	e	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	9	8	2	e	D	D	D	D	D	D	D	1 357
314	Textile product mills	2	76	16	1 466	29 819	1 076	1 980	16 684	55 038	58 636	115 799	D
3141	Textile furnishings mills	3	37	5	641	12 256	400	760	5 608	21 359	30 811	54 111	D
31412	Curtain & linen mills	3	36	5	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	3	9	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	39	11	825	17 563	676	1 220	11 076	33 679	27 825	61 688	D
31491	Textile bag & canvas mills	—	19	5	451	9 710	367	609	5 969	17 073	13 598	30 709	D
314912	Canvas & related product mills	—	16	4	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	20	6	374	7 853	309	611	5 107	16 606	14 227	30 979	D
314999	All other miscellaneous textile product mills	1	20	6	374	7 853	309	611	5 107	16 606	14 227	30 979	D
315	Apparel mfg	3	63	16	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	29	5	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	16	1	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	9	15	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	6	2	326	5 749	294	454	4 808	10 930	10 599	22 294	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	2	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	33	11	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	33	11	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	3	10	7	449	7 069	398	708	4 968	12 158	7 633	20 028	374
316	Leather & allied product mfg	1	21	10	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	4	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	2	e	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	1	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	3	14	6	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	3	14	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	83	16	1 110	27 340	870	1 620	18 454	64 024	85 476	149 006	D
3212	Veneer, plywood, & engineered wood product mfg	1	14	6	448	12 864	338	677	7 830	35 177	39 689	74 790	D
32121	Veneer, plywood, & engineered wood product mfg	1	14	6	448	12 864	338	677	7 830	35 177	39 689	74 790	D
321214	Truss mfg	1	10	5	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	58	7	481	9 917	381	661	7 543	18 914	24 974	43 803	D
322	Paper mfg	—	76	53	4 966	164 444	3 906	8 584	110 941	453 574	639 380	1 093 683	24 513
3221	Pulp, paper, & paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO—IL MSA —Con.												
31-33	Manufacturing— Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	—	75	52	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	41	31	2 271	77 990	1 717	3 620	47 965	163 556	289 855	456 170	15 475
322211	Corrugated & solid fiber box mfg	1	26	24	1 639	55 297	1 200	2 435	31 254	114 291	224 704	338 574	D
322212	Folding paperboard box mfg	—	11	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	14	8	g	D	D	D	D	D	D	D	D
322221	Coated & laminated packaging paper & plastics film mfg	—	3	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	14	9	1 280	41 773	1 064	2 609	31 981	164 457	165 253	328 608	4 227
322231	Die-cut paper & paperboard office supplies mfg	—	5	3	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	7	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	559	123	10 959	371 566	7 718	14 697	221 656	755 774	521 214	1 273 989	57 366
3231	Printing & related support activities	1	559	123	10 959	371 566	7 718	14 697	221 656	755 774	521 214	1 273 989	57 366
32311	Printing	1	486	97	9 291	310 094	6 446	12 209	182 519	634 461	493 724	1 125 040	50 580
323110	Commercial lithographic printing ..	2	229	55	4 885	184 269	3 306	6 255	105 984	333 804	250 036	582 217	24 456
323111	Commercial gravure printing	1	12	3	743	26 950	585	1 236	18 603	69 771	65 990	135 247	7 849
323112	Commercial flexographic printing ..	—	20	7	479	15 073	312	606	7 507	32 777	41 724	74 700	2 559
323113	Commercial screen printing	—	46	8	619	14 979	472	933	9 767	40 697	30 173	67 882	2 061
323114	Quick printing	2	100	6	616	14 168	457	715	8 853	34 749	18 801	53 480	5 328
323116	Manifold business form printing	1	14	7	616	21 722	341	764	11 563	45 909	33 560	80 729	4 154
323118	Blankbook, looseleaf binder, & device mfg ..	—	7	3	824	18 713	637	1 069	12 358	50 046	31 146	81 612	D
323119	Other commercial printing	8	51	5	302	7 046	218	361	4 205	14 092	10 862	25 159	1 080
32312	Support activities for printing	2	73	26	1 668	61 472	1 272	2 488	39 137	121 313	27 490	148 949	6 786
323121	Tradebinding & related work	1	16	5	255	7 563	211	373	4 383	13 270	2 289	15 516	769
323122	Prepress services	2	57	21	1 413	53 909	1 061	2 115	34 754	108 043	25 201	133 433	6 017
324	Petroleum & coal products mfg	—	31	8	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	31	8	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	4	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	3	g	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	1	10	4	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	1	10	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	212	95	12 530	511 735	7 278	14 956	263 162	3 154 044	2 051 132	5 207 282	183 116
3251	Basic chemical mfg	—	36	15	1 925	97 032	1 356	2 944	67 584	383 839	334 704	709 649	42 637
32513	Dye & pigment mfg	—	4	3	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	2	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	10	6	456	22 448	314	656	15 452	87 464	85 095	171 732	D
325188	All other basic inorganic chemical mfg	—	9	5	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	11	4	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	—	1	1	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	3	12	6	674	25 099	331	708	8 556	168 608	178 291	350 326	12 087
32532	Pesticide & other agricultural chemical mfg	3	8	4	513	17 291	233	482	4 871	146 331	143 471	293 490	8 061
325320	Pesticide & other agricultural chemical mfg	3	8	4	513	17 291	233	482	4 871	146 331	143 471	293 490	8 061

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	35	17	4 581	182 056	2 218	4 550	78 235	932 949	369 436	1 316 859	69 354
32541	Pharmaceutical & medicine mfg	—	35	17	4 581	182 056	2 218	4 550	78 235	932 949	369 436	1 316 859	69 354
325411	Medicinal & botanical mfg	—	4	3	h	D	D	D	D	D	D	D	51 711
325412	Pharmaceutical preparation mfg	—	18	11	1 433	57 331	818	1 534	26 529	416 166	120 757	533 742	14 030
325414	Biological product (except diagnostic) mfg	8	9	3	e	D	D	D	D	D	D	D	3 502
3255	Paint, coating, & adhesive mfg	2	44	17	g	D	D	D	D	D	D	D	8 161
32551	Paint & coating mfg	2	38	15	1 111	45 931	535	953	14 264	238 137	212 222	448 804	7 678
325510	Paint & coating mfg ...	2	38	15	1 111	45 931	535	953	14 264	238 137	212 222	448 804	7 678
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	46	20	2 678	96 817	1 918	3 946	63 223	1 199 459	525 217	1 719 157	D
32561	Soap & cleaning compound mfg	—	37	15	2 224	82 188	1 652	3 374	55 876	1 161 820	456 152	1 613 397	32 616
325611	Soap & other detergent mfg	—	21	8	1 119	45 912	823	1 621	30 351	856 616	334 918	1 187 388	15 623
325612	Polish & other sanitation good mfg ..	1	16	7	1 105	36 276	829	1 753	25 525	305 204	121 234	426 009	16 993
32562	Toilet preparation mfg ...	2	9	5	454	14 629	266	572	7 347	37 639	69 065	105 760	D
325620	Toilet preparation mfg .	2	9	5	454	14 629	266	572	7 347	37 639	69 065	105 760	D
3259	Other chemical product mfg	—	35	17	1 296	54 190	757	1 480	25 254	195 762	369 433	564 919	12 562
32599	All other chemical product & preparation mfg	—	25	13	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	3	3	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	16	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	178	92	9 501	268 376	7 507	13 971	162 381	734 942	649 007	1 375 010	73 042
3261	Plastics product mfg	2	141	77	7 540	218 025	6 058	11 188	131 670	617 949	538 788	1 147 562	65 976
32611	Unsupported plastics film, sheet, & bag mfg ..	3	16	8	1 040	38 003	832	1 895	23 773	90 587	92 636	184 899	9 307
326111	Unsupported plastics bag mfg	5	4	3	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	10	4	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	4	9	6	320	12 462	243	506	7 482	29 671	24 851	54 516	2 922
326121	Unsupported plastics profile shape mfg	4	8	5	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	9	8	645	18 375	579	1 100	14 958	54 957	44 541	99 698	9 304
326160	Plastics bottle mfg	—	9	8	645	18 375	579	1 100	14 958	54 957	44 541	99 698	9 304
32619	Other plastics product mfg	—	89	46	4 989	129 964	4 001	6 897	72 764	374 501	279 255	643 022	39 195
326199	All other plastics product mfg	—	78	44	4 877	126 863	3 914	6 698	70 572	368 791	275 332	633 371	39 021
3262	Rubber product mfg	—	37	15	1 961	50 351	1 449	2 783	30 711	116 993	110 219	227 448	7 066
32621	Tire mfg	—	11	6	608	15 046	445	845	9 233	28 576	35 971	64 860	1 147
326211	Tire mfg (except retreading)	—	1	1	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	22	9	1 323	34 260	981	1 901	21 030	86 039	70 857	156 817	5 748
326291	Rubber product mfg for mechanical use	—	6	2	419	10 899	347	635	8 270	29 987	20 916	50 788	D
326299	All other rubber product mfg	—	16	7	904	23 361	634	1 266	12 760	56 052	49 941	106 029	D
327	Nonmetallic mineral product mfg	1	143	54	3 428	114 683	2 541	5 063	76 710	334 303	314 695	649 867	55 899
3272	Glass & glass product mfg .	—	16	4	519	18 228	408	814	13 675	73 895	37 790	110 623	D
32721	Glass & glass product mfg	—	16	4	519	18 228	408	814	13 675	73 895	37 790	110 623	D
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	14	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ST. LOUIS, MO-IL MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	1	94	38	2 145	71 968	1 611	3 224	49 291	197 595	216 565	415 554	22 927
32732	Ready-mix concrete mfg.	1	57	29	1 406	45 494	1 105	2 171	32 554	100 744	132 961	234 390	14 545
327320	Ready-mix concrete mfg	1	57	29	1 406	45 494	1 105	2 171	32 554	100 744	132 961	234 390	14 545
32739	Other concrete product mfg	2	26	4	329	8 928	229	446	6 425	19 381	16 171	35 581	3 768
327390	Other concrete product mfg	2	26	4	329	8 928	229	446	6 425	19 381	16 171	35 581	3 768
3279	Other nonmetallic mineral product mfg	2	20	6	489	15 660	350	707	9 643	47 582	46 684	94 656	D
32799	All other nonmetallic mineral product mfg	3	19	5	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	54	36	12 466	497 822	10 078	21 212	370 373	1 402 763	2 103 348	3 492 037	74 361
3311	Iron & steel mills & ferroalloy mfg	—	2	2	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	5	4	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	11	7	4 124	173 508	3 174	7 162	119 742	494 202	962 640	1 454 640	29 909
33141	Nonferrous metal (except aluminum) smelting & refining	—	4	3	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	4	3	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	3	3	3 014	132 116	2 370	5 549	93 388	388 235	716 109	1 104 168	15 818
331421	Copper rolling, drawing, & extruding	—	2	2	h	D	D	D	D	D	D	D	D
3315	Foundries	—	34	21	3 340	102 992	2 831	5 648	78 970	245 781	139 662	378 493	16 231
33151	Ferrous metal foundries	—	15	9	1 568	49 452	1 338	2 732	39 559	106 224	60 782	165 193	6 828
331511	Iron foundries	2	8	5	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	6	3	1 137	36 932	971	1 930	29 935	84 575	47 985	130 855	4 428
33152	Nonferrous metal foundries	—	19	12	1 772	53 540	1 493	2 916	39 411	139 557	78 880	213 300	9 403
331521	Aluminum die-casting foundries	1	5	5	617	17 209	512	984	12 642	30 984	28 482	59 165	D
331524	Aluminum foundries (except die-casting)	—	7	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	555	176	17 489	585 146	13 168	26 531	375 387	1 364 809	1 085 963	2 458 277	77 909
3321	Forging & stamping	—	36	13	1 021	36 323	759	1 610	23 612	73 551	55 604	129 532	6 296
33211	Forging & stamping	—	36	13	1 021	36 323	759	1 610	23 612	73 551	55 604	129 532	6 296
332116	Metal stamping	—	28	12	921	32 748	675	1 434	21 107	67 234	50 763	118 458	5 830
3322	Cutlery & handtool mfg	—	21	10	1 091	35 620	791	1 631	22 095	64 128	34 877	105 390	4 918
33221	Cutlery & handtool mfg	—	21	10	1 091	35 620	791	1 631	22 095	64 128	34 877	105 390	4 918
332212	Hand & edge tool mfg	1	18	7	f	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	—	3	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	103	38	4 149	132 635	2 959	5 985	75 708	402 710	301 602	704 628	9 412
33231	Plate work & fabricated structural product mfg	—	44	23	2 897	92 483	2 116	4 318	53 368	317 895	231 981	550 914	6 995
332311	Prefabricated metal building & component mfg	—	6	5	394	11 510	266	526	6 050	78 987	30 702	113 916	467
332312	Fabricated structural metal mfg	—	29	12	2 211	70 703	1 624	3 294	40 850	221 173	189 494	407 609	5 028
332313	Plate work mfg	1	9	6	292	10 270	226	498	6 468	17 735	11 785	29 389	1 500
33232	Ornamental & architectural metal products mfg	1	59	15	1 252	40 152	843	1 667	22 340	84 815	69 621	153 714	2 417
332321	Metal window & door mfg	—	12	4	348	10 444	231	458	5 859	24 081	21 497	45 496	470
332322	Sheet metal work mfg	1	31	10	739	24 624	507	1 017	13 755	48 996	37 641	86 363	1 684

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	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	-	21	9	1 393	58 369	990	2 059	37 981	107 745	180 851	296 527	8 346
33241	Power boiler & heat exchanger mfg	-	6	2	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	6	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	11	5	549	23 235	420	886	17 107	43 787	131 358	179 636	D
332431	Metal can mfg	-	3	3	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	1	21	7	383	9 834	298	554	6 588	20 824	23 791	44 469	843
33261	Spring & wire product mfg	1	21	7	383	9 834	298	554	6 588	20 824	23 791	44 469	843
332618	Other fabricated wire product mfg	1	16	6	314	7 854	248	466	5 328	16 186	20 460	36 613	561
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	212	50	3 233	108 040	2 588	5 107	76 400	214 537	126 687	339 452	15 198
33271	Machine shops	1	162	28	1 753	61 311	1 366	2 625	43 256	114 760	52 372	167 187	7 823
332710	Machine shops	1	162	28	1 753	61 311	1 366	2 625	43 256	114 760	52 372	167 187	7 823
33272	Turned product & screw, nut, & bolt mfg	-	50	22	1 480	46 729	1 222	2 482	33 144	99 777	74 315	172 265	7 375
332721	Precision turned product mfg	1	38	13	1 128	33 910	945	1 919	24 849	75 150	59 351	133 248	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	12	9	352	12 819	277	563	8 295	24 627	14 964	39 017	D
3328	Coating, engraving, heat treating, & allied activities.	1	74	23	1 486	50 361	1 115	2 257	31 583	123 631	57 877	179 898	7 441
33281	Coating, engraving, heat treating, & allied activities	1	74	23	1 486	50 361	1 115	2 257	31 583	123 631	57 877	179 898	7 441
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	22	7	578	24 184	415	806	14 216	64 583	42 229	105 060	4 437
332813	Electroplating, plating, polishing, anodizing, & coloring	2	45	11	672	17 509	511	996	10 647	32 493	11 566	44 292	1 897
3329	Other fabricated metal product mfg	-	58	22	4 553	149 093	3 523	7 082	98 273	348 489	297 991	642 489	25 022
33291	Metal valve mfg	-	15	10	2 093	61 200	1 625	2 936	36 612	163 878	133 121	300 117	11 335
332911	Industrial valve mfg ...	-	8	5	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	43	12	2 460	87 893	1 898	4 146	61 661	184 611	164 870	342 372	13 687
332992	Small arms ammunition mfg	-	1	1	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	12	2	e	D	D	D	D	D	D	D	1 359
332999	All other miscellaneous fabricated metal product mfg	-	16	6	430	12 267	326	731	8 245	27 160	45 886	72 743	D
333	Machinery mfg	-	272	110	16 166	571 290	11 000	22 220	327 257	1 585 910	1 188 013	2 767 815	77 021
3331	Agriculture, construction, & mining machinery mfg	2	17	8	f	D	D	D	D	D	D	D	1 744
33313	Mining & oil & gas field machinery mfg	2	7	6	413	16 118	251	544	8 098	37 994	33 869	70 561	D
333131	Mining machinery & equipment mfg	3	6	5	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	35	15	g	D	D	D	D	D	D	D	6 790
33329	Other industrial machinery mfg	-	31	14	1 761	71 545	1 201	2 444	43 688	292 112	192 417	482 648	D
333293	Printing machinery & equipment mfg	-	7	5	637	25 046	362	799	12 416	58 531	38 233	94 319	1 682
333298	All other industrial machinery mfg	-	17	7	952	39 093	719	1 395	26 819	218 820	145 734	365 116	D
3333	Commercial & service industry machinery mfg ..	-	29	11	1 898	61 826	1 062	2 080	25 745	250 342	185 528	435 691	9 029
33331	Commercial & service industry machinery mfg	-	29	11	1 898	61 826	1 062	2 080	25 745	250 342	185 528	435 691	9 029
333311	Automatic vending machine mfg	-	3	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	1	19	8	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	11	4 639	135 868	3 490	6 821	93 351	379 610	374 285	760 516	19 511
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	11	4 639	135 868	3 490	6 821	93 351	379 610	374 285	760 516	19 511
333414	Heating equipment (except warm air furnaces) mfg	—	5	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refig equip mfg	—	9	8	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	102	30	2 807	116 160	2 028	4 289	78 292	247 955	146 285	381 287	20 907
33351	Metalworking machinery mfg	—	102	30	2 807	116 160	2 028	4 289	78 292	247 955	146 285	381 287	20 907
333511	Industrial mold mfg	—	25	9	695	31 967	530	1 148	24 053	65 386	19 261	84 546	3 233
333514	Special die & tool, die set, jig, & fixture mfg	—	48	11	874	31 363	692	1 368	21 845	60 739	48 251	109 839	D
333515	Cutting tool & machine tool accessory mfg	—	20	4	920	38 200	598	1 301	23 088	74 104	27 306	98 288	D
3336	Engine, turbine, & power transmission equipment mfg	1	13	6	612	18 793	473	1 067	12 972	54 194	45 696	100 501	3 215
33361	Engine, turbine, & power transmission equipment mfg	1	13	6	612	18 793	473	1 067	12 972	54 194	45 696	100 501	3 215
333612	Speed changer, industrial high-speed drive, & gear mfg	1	6	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	59	29	3 766	142 983	2 292	4 577	60 635	307 418	196 471	507 488	15 825
33391	Pump & compressor mfg	—	7	4	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	13	6	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	39	19	3 076	120 720	1 843	3 783	49 121	250 452	150 785	404 321	13 691
333993	Packaging machinery mfg	—	8	5	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg	1	7	5	920	26 803	657	1 350	13 236	55 964	19 093	75 328	1 681
333999	All other miscellaneous general-purpose machinery mfg	—	17	7	952	42 203	617	1 247	19 554	66 761	36 253	105 300	6 782
334	Computer & electronic product mfg	—	102	39	6 641	245 384	3 987	7 519	104 645	1 352 382	348 051	1 711 632	79 514
3341	Computer & peripheral equipment mfg	2	16	5	255	8 386	91	199	3 214	22 223	39 502	61 967	1 262
33411	Computer & peripheral equipment mfg	2	16	5	255	8 386	91	199	3 214	22 223	39 502	61 967	1 262
3343	Audio & video equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	29	15	2 870	91 266	2 313	4 356	61 988	1 008 481	149 883	1 152 787	D
33441	Semiconductor & other electronic component mfg	—	29	15	2 870	91 266	2 313	4 356	61 988	1 008 481	149 883	1 152 787	D
334412	Bare printed circuit board mfg	1	5	3	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	7	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	1	6	6	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	8	4	e	D	D	D	D	D	D	D	1 565
3345	Navigational, measuring, medical, & control instruments mfg	—	33	13	2 923	130 253	1 230	2 351	33 799	295 693	126 525	438 849	10 686

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg	-	33	13	2 923	130 253	1 230	2 351	33 799	295 693	126 525	438 849	10 686
334510	Electromedical & electrotherapeutic apparatus mfg	-	5	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	66	37	5 101	168 404	3 754	7 104	97 533	408 635	296 764	706 920	43 359
3351	Electric lighting equipment mfg	-	10	7	647	26 287	553	1 348	22 505	127 246	45 413	172 805	D
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	9	6	e	D	D	D	D	D	D	D	453
3352	Household appliance mfg ..	-	5	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	3	2	e	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	3	2	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	32	20	2 903	91 700	2 020	3 416	44 298	159 476	159 077	320 222	14 883
33531	Electrical equipment mfg	1	32	20	2 903	91 700	2 020	3 416	44 298	159 476	159 077	320 222	14 883
335311	Power, distribution, & specialty transformer mfg	-	5	4	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	4	6	4	g	D	D	D	D	D	D	D	6 510
335313	Switchgear & switchboard apparatus mfg	-	8	4	413	15 024	322	631	10 035	31 344	36 869	68 351	D
335314	Relay & industrial control mfg	1	13	8	960	30 402	520	677	7 087	51 781	29 401	83 305	D
3359	Other electrical equipment & component mfg	-	19	8	g	D	D	D	D	D	D	D	24 778
33593	Wiring device mfg	-	9	6	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	5	3	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	105	50	40 751	2 114 650	23 361	50 328	1 141 660	5 256 567	13 063 607	20 693 642	296 945
3361	Motor vehicle mfg	-	9	4	13 337	831 171	12 458	26 655	750 427	4 485 529	9 484 211	13 939 590	D
33611	Automobile & light duty motor vehicle mfg	-	9	4	13 337	831 171	12 458	26 655	750 427	4 485 529	9 484 211	13 939 590	D
336112	Light truck & utility vehicle mfg	-	6	4	j	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	18	5	394	11 861	305	651	7 917	16 963	31 343	47 941	D
33621	Motor vehicle body & trailer mfg	1	18	5	394	11 861	305	651	7 917	16 963	31 343	47 941	D
3363	Motor vehicle parts mfg ...	-	49	24	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	1	11	1	316	11 473	280	572	9 676	18 831	18 634	36 918	598
336311	Carburetor, piston, piston ring, & valve mfg	-	2	1	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	7	3	e	D	D	D	D	D	D	D	2 488
336321	Vehicular lighting equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	4	4	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	4	4	g	D	D	D	D	D	D	D	D

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	ST. LOUIS, MO-IL MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33637	Motor vehicle metal stamping	-	5	5	f	D	D	D	D	D	D	D	2 598
336370	Motor vehicle metal stamping	-	5	5	f	D	D	D	D	D	D	D	2 598
33639	Other motor vehicle parts mfg	1	12	7	1 413	38 597	1 185	2 683	30 328	88 517	115 878	205 577	D
336399	All other motor vehicle parts mfg	1	12	7	1 413	38 597	1 185	2 683	30 328	88 517	115 878	205 577	D
3364	Aerospace product & parts mfg	-	17	12	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	17	12	j	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	3	2	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	13	9	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	6	1	272	8 332	230	497	6 312	14 832	9 799	24 709	D
33661	Ship & boat building	-	6	1	272	8 332	230	497	6 312	14 832	9 799	24 709	D
336611	Ship building & repairing	-	4	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	145	40	3 867	108 992	3 011	6 114	69 006	237 251	203 514	453 149	8 519
3371	Household & institutional furniture & kitchen cabinet mfg	3	93	19	2 103	58 328	1 623	3 353	38 151	145 744	107 824	254 573	5 498
33711	Wood kitchen cabinet & counter top mfg	1	64	5	522	14 912	406	767	10 924	28 427	19 993	48 428	1 860
337110	Wood kitchen cabinet & counter top mfg ...	1	64	5	522	14 912	406	767	10 924	28 427	19 993	48 428	1 860
33712	Household & institutional furniture mfg	3	29	14	1 581	43 416	1 217	2 586	27 227	117 317	87 831	206 145	3 638
337122	Nonupholstered wood household furniture mfg	9	9	1	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	15	12	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	43	19	1 579	44 727	1 268	2 523	28 166	73 617	80 495	165 329	2 622
33721	Office furniture (including fixtures) mfg	-	43	19	1 579	44 727	1 268	2 523	28 166	73 617	80 495	165 329	2 622
337215	Showcase, partition, shelving, & locker mfg	-	25	10	1 089	28 654	888	1 846	17 274	56 656	59 791	117 705	2 088
339	Miscellaneous mfg	1	330	71	6 681	196 396	3 971	7 619	88 526	490 449	304 260	791 516	23 523
3391	Medical equipment & supplies mfg	1	172	28	3 404	114 133	1 986	4 113	49 659	321 528	163 679	485 015	14 454
33911	Medical equipment & supplies mfg	1	172	28	3 404	114 133	1 986	4 113	49 659	321 528	163 679	485 015	14 454
339112	Surgical & medical instrument mfg	-	24	12	2 017	76 120	994	2 313	27 342	214 734	118 925	333 488	10 039
339113	Surgical appliance & supplies mfg	1	14	4	517	16 206	378	824	9 760	45 103	23 048	68 874	2 302
339116	Dental laboratories ...	6	114	7	588	13 293	442	617	8 610	28 470	11 041	40 238	879
3399	Other miscellaneous mfg ...	1	158	43	3 277	82 263	1 985	3 506	38 867	168 921	140 581	306 501	9 069
33992	Sporting & athletic goods mfg	-	16	7	457	10 844	333	511	6 183	45 023	23 749	66 786	1 682
339920	Sporting & athletic goods mfg	-	16	7	457	10 844	333	511	6 183	45 023	23 749	66 786	1 682
33994	Office supplies (except paper) mfg	-	14	3	467	12 415	96	198	2 193	16 937	43 839	61 135	D
339943	Marking device mfg ...	-	11	2	424	11 749	78	161	1 877	15 520	42 648	58 531	784
33995	Sign mfg	2	72	15	1 449	38 816	896	1 629	19 230	63 374	39 893	102 800	3 411
339950	Sign mfg	2	72	15	1 449	38 816	896	1 629	19 230	63 374	39 893	102 800	3 411
33999	All other miscellaneous mfg	2	37	15	f	D	D	D	D	D	D	D	2 498
339999	All other miscellaneous mfg	2	22	8	431	7 867	332	547	4 855	18 365	10 977	28 533	2 012

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPRINGFIELD, MO MSA													
31-33	Manufacturing	-	516	147	23 359	593 871	17 462	32 348	380 627	1 907 903	2 280 976	4 169 506	97 302
311	Food mfg	-	35	13	4 134	107 270	3 089	4 968	74 589	722 911	1 055 585	1 765 211	26 173
3115	Dairy product mfg	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
31151	Dairy product (except frozen) mfg	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
311513	Cheese mfg	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	7	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	7	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	10	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	6	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	5	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	9	7	910	12 720	842	1 629	10 675	22 630	21 844	42 514	645
3152	Cut & sew apparel mfg	-	8	7	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	28	7	593	10 168	433	723	6 532	24 399	38 125	61 476	D
3219	Other wood product mfg ...	1	23	5	473	7 299	346	562	4 872	14 750	23 425	37 710	679
322	Paper mfg	-	13	5	1 436	44 780	1 158	2 226	32 517	86 903	86 605	178 865	2 973
3222	Converted paper product mfg	-	13	5	1 436	44 780	1 158	2 226	32 517	86 903	86 605	178 865	2 973
32221	Paperboard container mfg	-	5	4	g	D	D	D	D	D	D	D	2 621
322211	Corrugated & solid fiber box mfg	-	4	3	384	13 612	288	599	7 292	25 642	31 191	56 567	D
322215	Nonfolding sanitary food container mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	68	13	934	20 046	642	1 033	10 579	48 428	27 041	76 427	3 353
3231	Printing & related support activities	1	68	13	934	20 046	642	1 033	10 579	48 428	27 041	76 427	3 353
32311	Printing	1	61	13	870	18 850	598	976	9 737	45 477	26 617	73 048	3 142
323110	Commercial lithographic printing ..	1	35	9	437	9 309	331	494	5 365	17 871	10 556	28 506	1 523
325	Chemical mfg	-	19	5	647	22 380	389	813	12 083	183 493	102 681	279 239	7 115
3255	Paint, coating, & adhesive mfg	-	4	2	e	D	D	D	D	D	D	D	D
32552	Adhesive mfg	-	1	1	e	D	D	D	D	D	D	D	D
325520	Adhesive mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	25	6	873	21 974	696	1 391	14 376	49 455	85 448	137 738	6 942
3261	Plastics product mfg	2	21	4	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	4	2	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	1	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	27	12	723	18 758	431	866	9 928	39 006	31 166	70 131	2 484
3273	Cement & concrete product mfg	1	17	8	525	13 915	291	623	6 948	29 884	25 357	54 986	2 121
332	Fabricated metal product mfg	-	82	24	2 604	82 549	1 788	3 598	46 629	151 796	99 791	245 108	10 818
3323	Architectural & structural metals mfg	-	22	8	754	23 436	545	1 217	13 446	44 505	31 421	75 350	3 183
33231	Plate work & fabricated structural product mfg ...	-	7	3	e	D	D	D	D	D	D	D	D
332313	Plate work mfg	-	3	3	e	D	D	D	D	D	D	D	1 548
33232	Ornamental & architectural metal products mfg	-	15	5	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	8	3	254	5 431	213	422	4 083	12 498	8 268	20 617	D
3324	Boiler, tank, & shipping container mfg	-	8	7	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	6	6	1 069	38 421	684	1 352	19 561	54 136	38 576	91 643	6 199
332420	Metal tank (heavy gauge) mfg	-	6	6	1 069	38 421	684	1 352	19 561	54 136	38 576	91 643	6 199
3329	Other fabricated metal product mfg	-	9	4	282	7 365	225	423	4 958	24 023	17 905	37 103	145

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SPRINGFIELD, MO MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	36	13	1 788	47 738	1 358	2 490	30 475	99 422	128 981	227 142	6 953
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
333412	Industrial & commercial fan & blower mfg	1	3	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	13	6	2 623	65 592	1 817	3 624	34 850	136 935	227 971	363 625	D
3343	Audio & video equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	4	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	4	3	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	3	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	39	17	2 921	62 483	2 286	4 229	41 512	146 764	178 526	326 896	8 035
3362	Motor vehicle body & trailer mfg	—	12	7	546	12 321	436	812	8 478	34 783	46 537	82 283	1 024
33621	Motor vehicle body & trailer mfg	—	12	7	546	12 321	436	812	8 478	34 783	46 537	82 283	1 024
336214	Travel trailer & camper mfg	—	3	3	266	6 003	211	412	3 980	19 099	17 595	38 023	771
3363	Motor vehicle parts mfg ...	—	17	6	2 139	45 342	1 660	3 117	29 053	99 555	107 636	207 134	6 182
33633	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	52	5	608	12 334	473	888	8 674	21 038	29 430	51 304	1 436
3371	Household & institutional furniture & kitchen cabinet mfg	1	43	3	501	9 639	402	745	7 303	15 205	22 297	38 099	781
33712	Household & institutional furniture mfg	—	15	2	360	6 547	295	560	5 457	12 129	14 620	27 111	566
339	Miscellaneous mfg	2	45	6	503	12 201	384	667	7 937	33 050	21 534	54 848	2 046
3399	Other miscellaneous mfg ..	1	30	4	376	8 762	298	526	6 257	24 851	17 456	42 445	D
33999	All other miscellaneous mfg	—	8	3	259	6 471	216	388	4 878	20 196	14 433	34 854	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAIR COUNTY, MO													
31-33	Manufacturing	-	10	5	1 619	39 777	1 392	3 010	31 915	221 671	190 406	412 448	5 563
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
AUDRAIN COUNTY, MO													
31-33	Manufacturing	1	38	23	2 721	79 724	2 258	4 302	61 461	208 230	319 419	531 327	19 155
327	Nonmetallic mineral product mfg	-	8	6	1 248	45 947	1 069	2 057	37 507	104 380	83 314	185 306	5 424
3271	Clay product & refractory mfg	-	4	4	g	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	4	4	g	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	-	4	4	g	D	D	D	D	D	D	D	D
BARRY COUNTY, MO													
31-33	Manufacturing	-	61	31	7 537	154 309	5 259	11 884	98 937	486 358	625 910	1 096 248	11 369
311	Food mfg	-	8	7	2 927	40 999	1 867	4 133	33 216	185 376	410 518	581 429	D
3116	Meat product mfg	-	4	3	2 609	31 753	1 589	3 493	25 766	151 798	105 333	256 074	1 555
31161	Animal slaughtering & processing	-	4	3	2 609	31 753	1 589	3 493	25 766	151 798	105 333	256 074	1 555
311615	Poultry processing	-	3	3	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	10	2 007	51 593	1 230	2 987	24 419	123 395	62 573	184 964	3 708
3323	Architectural & structural metals mfg	-	4	4	1 687	44 199	949	2 430	19 224	108 885	54 641	162 929	D
33232	Ornamental & architectural metal products mfg	-	4	4	1 687	44 199	949	2 430	19 224	108 885	54 641	162 929	D
332321	Metal window & door mfg	-	3	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	-	1	1	f	D	D	D	D	D	D	D	D
BARTON COUNTY, MO													
31-33	Manufacturing	-	19	4	2 080	52 015	1 829	3 406	43 202	129 462	140 652	269 600	4 235
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOONE COUNTY, MO													
31-33	Manufacturing	-	87	27	5 703	165 292	4 450	9 064	107 852	855 058	741 758	1 595 030	82 455
311	Food mfg	-	9	3	656	17 676	607	1 317	15 522	165 334	86 954	252 721	D
326	Plastics & rubber products mfg	-	5	3	606	15 833	486	957	10 504	47 582	78 427	126 180	3 146
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	3 146
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	7	4	520	13 638	351	694	7 736	31 475	15 680	47 452	740
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
3363	Motor vehicle parts mfg	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
BUCHANAN COUNTY, MO													
31-33	Manufacturing	-	96	49	7 365	235 098	5 688	11 137	159 051	860 219	1 442 286	2 293 750	D
311	Food mfg	-	10	8	1 587	60 908	1 251	2 793	42 761	367 621	819 913	1 190 126	35 612
3111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	884	37 738	725	1 711	28 044	230 257	623 042	856 011	D
31121	Flour milling & malt mfg	-	1	1	f	D	D	D	D	D	D	D	D
311211	Flour milling	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
3222	Converted paper product mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
32223	Stationery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	11	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	6	825	19 708	606	1 151	13 010	120 415	93 445	213 074	8 377
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BUTLER COUNTY, MO													
31-33	Manufacturing	-	53	13	3 010	66 669	2 673	5 135	53 460	266 372	203 994	494 476	10 200
326	Plastics & rubber products mfg	2	3	3	720	17 259	626	1 283	13 546	44 201	20 066	71 342	2 818
333	Machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	6	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
CALLAWAY COUNTY, MO													
31-33	Manufacturing	-	37	15	1 896	59 582	1 489	2 284	41 866	145 786	176 368	320 550	7 268
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
CAMDEN COUNTY, MO													
31-33	Manufacturing	-	53	12	1 269	32 630	1 010	1 812	20 801	69 401	62 925	132 003	2 302
CAPE GIRARDEAU COUNTY, MO													
31-33	Manufacturing	-	93	32	5 912	163 304	4 486	8 687	113 297	878 139	683 438	1 569 711	63 505
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	1	g	D	D	D	D	D	D	D	1 356
3326	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	3	f	D	D	D	D	D	D	D	5 312
CASS COUNTY, MO													
31-33	Manufacturing	1	71	14	1 057	24 572	790	1 342	16 225	47 671	69 898	116 617	10 397
CEDAR COUNTY, MO													
31-33	Manufacturing	3	15	5	505	9 886	417	744	7 475	37 488	39 970	76 454	1 140

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CHRISTIAN COUNTY, MO													
31-33	Manufacturing	1	101	19	h	D	D	D	D	D	D	8 358	
335	Electrical equipment, appliance, & component mfg	—	3	1	f	D	D	D	D	D	D	D	
3353	Electrical equipment mfg	—	2	1	f	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	—	2	1	f	D	D	D	D	D	D	D	
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	
CLAY COUNTY, MO													
31-33	Manufacturing	—	214	98	14 743	569 637	11 547	22 382	427 091	4 417 931	5 461 820	9 891 738	176 228
311	Food mfg	—	20	8	g	D	D	D	D	D	D	D	
3119	Other food mfg	—	3	2	g	D	D	D	D	D	D	D	
31191	Snack food mfg	—	1	1	g	D	D	D	D	D	D	D	
311919	Other snack food mfg	—	1	1	g	D	D	D	D	D	D	D	
322	Paper mfg	1	12	9	g	D	D	D	D	D	D	D	
3222	Converted paper product mfg	2	11	8	f	D	D	D	D	D	D	D	
32221	Paperboard container mfg	—	5	4	f	D	D	D	D	D	D	D	
323	Printing & related support activities	3	49	14	g	D	D	D	D	D	D	8 210	
3231	Printing & related support activities	3	49	14	g	D	D	D	D	D	D	8 210	
32311	Printing	3	42	13	g	D	D	D	D	D	D	D	
323110	Commercial lithographic printing	3	19	8	g	D	D	D	D	D	D	D	
325	Chemical mfg	—	20	8	f	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	2	17	14	f	D	D	D	D	D	D	10 446	
3261	Plastics product mfg	3	14	12	f	D	D	D	D	D	D	D	
32619	Other plastics product mfg	—	12	10	f	D	D	D	D	D	D	D	
326199	All other plastics product mfg	—	12	10	f	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	—	29	16	g	D	D	D	D	D	D	8 971	
336	Transportation equipment mfg	—	6	5	i	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	
33611	Automobile & light duty motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	
336112	Light truck & utility vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	
COLE COUNTY, MO													
31-33	Manufacturing	—	53	13	h	D	D	D	D	D	D	D	
323	Printing & related support activities	—	11	2	f	D	D	D	D	D	D	D	
3231	Printing & related support activities	—	11	2	f	D	D	D	D	D	D	D	
32311	Printing	—	10	2	f	D	D	D	D	D	D	D	
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	
3256	Soap, cleaning compound, & toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	
32561	Soap & cleaning compound mfg	—	1	1	f	D	D	D	D	D	D	D	
325611	Soap & other detergent mfg	—	1	1	f	D	D	D	D	D	D	D	
COOPER COUNTY, MO													
31-33	Manufacturing	—	16	7	865	19 163	670	1 260	13 164	80 768	58 155	138 610	3 116
CRAWFORD COUNTY, MO *													
31-33	Manufacturing	1	52	16	1 639	33 833	1 214	2 315	20 226	74 734	70 327	142 941	9 563
315	Apparel mfg	—	2	2	f	D	D	D	D	D	D	D	
3159	Apparel accessories & other apparel mfg	—	2	2	f	D	D	D	D	D	D	D	
31599	Apparel accessories & other apparel mfg	—	2	2	f	D	D	D	D	D	D	D	
315991	Hat, cap, & millinery mfg	—	2	2	f	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DALLAS COUNTY, MO													
31-33	Manufacturing	-	11	3	530	8 662	489	945	7 751	18 005	22 134	40 228	1 062
DENT COUNTY, MO													
31-33	Manufacturing	-	27	8	951	17 346	841	1 510	13 119	22 869	59 638	84 297	3 241
DUNKLIN COUNTY, MO													
31-33	Manufacturing	-	26	8	1 281	28 459	1 084	2 211	21 479	135 631	117 943	259 720	3 813
FRANKLIN COUNTY, MO													
31-33	Manufacturing	-	210	84	10 641	284 438	8 557	16 311	201 261	952 798	893 049	1 836 298	47 247
322	Paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	16	4	850	18 491	655	1 101	12 225	49 960	30 736	81 298	925
3231	Printing & related support activities	-	16	4	850	18 491	655	1 101	12 225	49 960	30 736	81 298	925
32311	Printing	-	16	4	850	18 491	655	1 101	12 225	49 960	30 736	81 298	925
323118	Blankbook, looseleaf binder, & device mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	13	8	1 062	25 533	846	1 673	17 568	65 761	53 331	119 605	D
3262	Rubber product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	51	17	1 917	51 788	1 519	2 756	34 919	175 525	117 374	293 361	11 010
3329	Other fabricated metal product mfg	-	6	4	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	10	1 289	40 206	1 035	2 163	28 651	95 174	67 422	158 672	4 014
336	Transportation equipment mfg	-	16	8	g	D	D	D	D	D	D	D	3 400
3363	Motor vehicle parts mfg ...	-	7	4	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	5	608	17 058	431	834	9 079	33 597	28 594	61 138	1 362
339	Miscellaneous mfg	-	22	7	686	14 482	493	814	7 686	21 175	14 558	35 989	1 274
3399	Other miscellaneous mfg ..	-	17	7	667	14 011	477	791	7 476	20 420	14 327	34 893	1 256
GASCONADE COUNTY, MO													
31-33	Manufacturing	1	38	17	1 643	41 927	1 300	2 132	22 349	75 606	83 263	161 804	14 580
323	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	4	2	f	D	D	D	D	D	D	D	D
323117	Book printing	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENE COUNTY, MO													
31-33	Manufacturing	-	371	115	19 475	513 053	14 253	26 210	321 449	1 722 106	2 085 913	3 788 558	84 541
311	Food mfg	-	28	13	h	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
31151	Dairy product (except frozen) mfg	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
311513	Cheese mfg	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	10	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	18	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	12	5	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	12	5	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	4	g	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	56	8	686	14 986	477	762	7 867	36 928	19 675	57 560	2 405
3231	Printing & related support activities	1	56	8	686	14 986	477	762	7 867	36 928	19 675	57 560	2 405
32311	Printing	1	50	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	4	f	D	D	D	D	D	D	D	6 745
326	Plastics & rubber products mfg	-	11	3	529	13 731	408	854	9 166	32 786	69 147	104 593	D
327	Nonmetallic mineral product mfg	1	19	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	62	18	g	D	D	D	D	D	D	D	9 110
3323	Architectural & structural metals mfg	-	15	5	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	7	7	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	6	6	1 069	38 421	684	1 352	19 561	54 136	38 576	91 643	6 199
332420	Metal tank (heavy gauge) mfg	-	6	6	1 069	38 421	684	1 352	19 561	54 136	38 576	91 643	6 199
333	Machinery mfg	1	25	11	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
333412	Industrial & commercial fan & blower mfg	1	3	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	6	h	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENE COUNTY, MO													
—Con.													
31-33	Manufacturing—												
	Con.												
335	Electrical equipment, appliance, & component mfg	—	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	29	12	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	15	5	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	3	1	g	D	D	D	D	D	D	D	D
GRUNDY COUNTY, MO													
31-33	Manufacturing	1	11	4	798	20 724	669	1 262	16 031	173 604	69 244	242 376	5 186
311	Food mfg	—	4	1	f	D	D	D	D	D	D	D	D
HENRY COUNTY, MO													
31-33	Manufacturing	—	32	10	1 780	32 974	1 430	2 598	22 955	103 829	280 461	390 130	6 290
333	Machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	1	1	f	D	D	D	D	D	D	D	D
HOWELL COUNTY, MO													
31-33	Manufacturing	—	70	25	3 690	72 524	2 888	5 637	52 585	238 056	241 262	485 616	9 719
321	Wood product mfg	1	22	9	851	17 796	746	1 438	14 241	55 461	61 142	115 682	1 785
3219	Other wood product mfg ...	—	12	6	711	15 391	625	1 232	12 413	47 963	50 781	97 823	1 120
32191	Millwork	—	6	4	544	12 836	486	952	10 608	37 398	42 822	79 739	D
333	Machinery mfg	—	8	3	884	20 338	611	950	11 028	56 007	59 037	125 517	D
3339	Other general-purpose machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	JACKSON COUNTY, MO												
31-33	Manufacturing	1	907	287	38 785	1 301 457	24 744	47 972	695 327	5 394 934	3 656 425	8 984 696	229 206
311	Food mfg	1	53	21	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	19	5	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	16	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	5	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	3	10	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	19	15	h	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	19	15	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	9	g	D	D	D	D	D	D	D	7 588
32222	Paper bag & coated & treated paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	155	26	h	D	D	D	D	D	D	D	10 530
3231	Printing & related support activities	1	155	26	h	D	D	D	D	D	D	D	10 530
32311	Printing	1	129	21	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	67	14	g	D	D	D	D	D	D	D	6 126
323114	Quick printing	1	26	3	651	17 060	511	940	14 081	48 674	16 728	65 209	D
325	Chemical mfg	-	41	18	h	D	D	D	D	D	D	D	52 907
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	4	2	g	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	7	4	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	7	4	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	6	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	5	9	3	557	17 882	386	796	9 553	39 874	52 394	92 805	4 189
32552	Adhesive mfg	4	3	3	539	17 050	376	777	9 198	36 955	48 483	85 871	D
325520	Adhesive mfg	4	3	3	539	17 050	376	777	9 198	36 955	48 483	85 871	D
326	Plastics & rubber products mfg	1	47	24	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	40	21	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	29	17	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	28	17	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	47	16	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	31	15	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	20	7	g	D	D	D	D	D	D	D	9 281
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	160	53	i	D	D	D	D	D	D	D	23 839
3323	Architectural & structural metals mfg	-	37	16	g	D	D	D	D	D	D	D	5 813
33231	Plate work & fabricated structural product mfg	-	11	5	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	10	4	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	26	11	g	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	1	9	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	62	12	f	D	D	D	D	D	D	D	7 927

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSON COUNTY, MO—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	2	30	9	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities.....	2	30	9	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	1	16	10	5 577	259 975	2 570	4 669	101 534	577 271	66 368	642 412	4 180
33299	All other fabricated metal product mfg.....	—	14	9	i	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	83	27	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	—	6	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	2	27	7	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg.....	2	27	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	2	18	6	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	2	9	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	26	13	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media.	—	5	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	—	5	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	5	12	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	3	38	13	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	4	28	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	—	9	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	58	12	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	33	6	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg.....	—	19	3	533	14 438	400	800	9 526	22 039	12 544	34 478	D
337110	Wood kitchen cabinet & counter top mfg....	—	19	3	533	14 438	400	800	9 526	22 039	12 544	34 478	D
339	Miscellaneous mfg.....	2	69	21	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	1	31	10	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	1	31	10	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	2	38	11	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	1	13	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JASPER COUNTY, MO													
31-33	Manufacturing	-	198	78	11 904	289 805	9 293	20 220	207 040	903 117	1 244 671	2 154 593	96 398
311	Food mfg	-	19	11	h	D	D	D	D	D	D	D	50 342
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	2	5	3	f	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	2	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	5	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	4	3	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	43	13	1 792	42 953	1 343	2 798	32 851	96 897	89 035	191 005	8 908
3326	Spring & wire product mfg	-	3	3	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	21	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	3	3	f	D	D	D	D	D	D	D	1 582
335	Electrical equipment, appliance, & component mfg	-	5	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	5	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	16	9	f	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, MO													
31-33	Manufacturing	1	182	45	5 304	168 185	4 018	7 951	112 184	558 252	643 912	1 199 342	64 920
326	Plastics & rubber products mfg	6	17	10	805	25 454	626	1 320	16 934	75 217	88 300	162 891	D
3261	Plastics product mfg	6	14	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	10	7	658	18 629	514	1 085	11 133	42 279	38 814	80 764	D
326199	All other plastics product mfg	3	10	7	658	18 629	514	1 085	11 133	42 279	38 814	80 764	D
327	Nonmetallic mineral product mfg	-	8	3	544	21 307	403	788	14 838	99 506	77 699	176 926	32 201
331	Primary metal mfg	-	6	4	982	35 377	767	1 554	24 457	75 355	167 965	241 454	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	40	6	564	21 452	453	850	15 859	46 428	125 973	173 612	4 831
333	Machinery mfg	-	19	5	663	16 361	453	950	10 284	124 570	65 805	187 654	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSON COUNTY, MO													
31-33	Manufacturing	-	31	8	1 856	46 673	1 431	2 201	25 188	105 051	82 184	183 250	11 881
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
LACLEDE COUNTY, MO													
31-33	Manufacturing	-	57	22	5 177	130 350	4 142	8 772	85 629	352 899	462 792	809 731	46 032
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	4	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	894	17 980	777	1 709	11 421	45 317	54 523	99 291	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	7	g	D	D	D	D	D	D	D	3 090
3366	Ship & boat building	-	6	5	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	6	5	g	D	D	D	D	D	D	D	D
336612	Boat building	-	6	5	g	D	D	D	D	D	D	D	D
LAFAYETTE COUNTY, MO													
31-33	Manufacturing	-	42	13	1 166	22 884	960	1 706	16 045	44 605	87 711	130 358	4 365
LAWRENCE COUNTY, MO													
31-33	Manufacturing	-	54	24	1 614	34 817	1 247	2 349	25 742	112 250	143 514	258 953	11 838
LINCOLN COUNTY, MO													
31-33	Manufacturing	1	43	10	1 078	29 047	848	1 610	19 420	100 185	81 840	176 793	10 329
LINN COUNTY, MO													
31-33	Manufacturing	-	24	10	1 739	45 041	1 240	2 781	25 233	92 536	46 507	137 818	4 255
323	Printing & related support activities	-	4	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	4	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
LIVINGSTON COUNTY, MO													
31-33	Manufacturing	-	28	12	903	23 646	762	1 441	18 175	70 925	47 716	117 056	3 222

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MCDONALD COUNTY, MO													
31-33	Manufacturing	-	34	11	3 052	52 475	2 674	5 330	40 708	182 494	287 228	469 773	20 687
311	Food mfg	-	5	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
MACON COUNTY, MO													
31-33	Manufacturing	-	15	4	g	D	D	D	D	D	D	D	2 240
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	-	1	1	f	D	D	D	D	D	D	D	D
MADISON COUNTY, MO													
31-33	Manufacturing	2	16	4	553	8 349	459	777	6 005	18 645	10 379	28 681	835
MARION COUNTY, MO													
31-33	Manufacturing	-	46	19	3 179	87 482	2 343	4 348	55 403	1 382 343	325 319	1 707 067	42 986
325	Chemical mfg	-	5	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	2	505	12 393	288	504	5 828	34 162	13 143	46 690	1 137
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
MILLER COUNTY, MO													
31-33	Manufacturing	-	29	10	1 500	31 841	1 218	2 086	22 816	66 354	64 040	128 505	3 059
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
MISSISSIPPI COUNTY, MO													
31-33	Manufacturing	1	14	6	571	10 722	473	865	7 553	34 014	28 165	66 405	2 691
MONITEAU COUNTY, MO													
31-33	Manufacturing	4	22	6	1 095	19 458	932	1 612	14 723	114 683	58 799	173 831	3 828
311	Food mfg	3	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
MONROE COUNTY, MO													
31-33	Manufacturing	-	7	3	1 047	27 901	811	1 392	25 635	45 486	27 743	74 772	6 059
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	1	1	f	D	D	D	D	D	D	D	D
MONTGOMERY COUNTY, MO													
31-33	Manufacturing	1	32	12	811	16 569	601	1 137	10 337	37 182	44 645	82 085	1 346

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORGAN COUNTY, MO													
31-33	Manufacturing	-	29	5	649	12 028	574	1 043	9 129	65 354	38 361	115 004	1 882
NEW MADRID COUNTY, MO													
31-33	Manufacturing	-	17	6	2 504	83 424	2 074	4 051	61 857	267 177	265 822	529 847	23 821
326	Plastics & rubber products mfg	-	2	1	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	g	D	D	D	D	D	D	D	D
NEWTON COUNTY, MO													
31-33	Manufacturing	-	63	17	4 315	109 816	3 696	7 907	91 691	288 879	392 821	692 853	32 106
332	Fabricated metal product mfg	-	19	3	997	26 551	858	1 799	22 611	57 896	51 311	106 957	6 679
3326	Spring & wire product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	2	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
NODAWAY COUNTY, MO													
31-33	Manufacturing	-	23	9	1 677	48 247	1 328	2 551	34 359	366 670	286 975	647 209	21 672
335	Electrical equipment, appliance, & component mfg	-	5	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	5	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
OSAGE COUNTY, MO													
31-33	Manufacturing	-	24	6	914	20 332	786	1 374	12 665	58 266	110 644	169 810	2 167
PEMISCOT COUNTY, MO													
31-33	Manufacturing	-	12	5	893	19 819	825	1 406	14 427	48 041	83 468	131 113	1 539

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PERRY COUNTY, MO													
31-33	Manufacturing	-	31	16	2 855	61 920	2 298	4 653	41 609	288 380	317 197	609 297	12 094
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PETTIS COUNTY, MO													
31-33	Manufacturing	-	69	24	5 324	130 245	4 650	8 841	102 031	438 427	522 703	958 901	44 697
311	Food mfg	-	7	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	3	718	21 356	611	1 178	17 402	59 332	45 131	106 186	D
3321	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	3	687	13 916	556	781	10 149	45 580	72 936	119 459	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PHELPS COUNTY, MO													
31-33	Manufacturing	1	55	9	1 132	29 567	833	1 592	17 612	106 538	113 610	218 220	24 486
PIKE COUNTY, MO													
31-33	Manufacturing	-	27	7	771	25 673	544	1 133	16 717	127 578	150 957	277 426	9 059
PLATTE COUNTY, MO													
31-33	Manufacturing	-	47	21	1 599	52 421	1 093	1 992	28 379	104 821	238 520	344 713	5 864
POLK COUNTY, MO													
31-33	Manufacturing	1	34	9	859	13 924	636	1 006	8 245	47 663	33 171	81 121	678
PULASKI COUNTY, MO													
31-33	Manufacturing	1	18	3	682	9 415	582	847	7 030	17 618	19 177	36 444	1 682
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
RALLS COUNTY, MO													
31-33	Manufacturing	-	10	6	913	21 573	762	1 541	16 956	161 556	92 799	253 918	D
RANDOLPH COUNTY, MO													
31-33	Manufacturing	2	37	11	1 381	30 513	1 170	1 956	21 617	82 467	101 462	182 560	7 563
336	Transportation equipment mfg	2	8	7	1 030	23 691	903	1 537	17 375	67 457	81 305	147 325	D
3363	Motor vehicle parts mfg ...	2	7	6	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D
RAY COUNTY, MO													
31-33	Manufacturing	1	21	4	654	16 536	511	1 095	9 736	39 185	22 867	63 939	3 740

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	REYNOLDS COUNTY, MO												
	Manufacturing	6	33	8	634	10 944	541	1 036	8 460	23 401	29 309	52 728	D
31-33	RIPLEY COUNTY, MO												
	Manufacturing	9	42	5	629	10 031	545	941	8 207	24 131	19 408	42 800	2 048
31-33	ST. CHARLES COUNTY, MO												
	Manufacturing	—	279	84	12 160	431 886	9 801	19 591	317 546	2 094 472	2 345 038	4 432 880	140 275
323	Printing & related support activities.....	2	36	8	f	D	D	D	D	D	D	D	2 563
3231	Printing & related support activities.....	2	36	8	f	D	D	D	D	D	D	D	2 563
326	Plastics & rubber products mfg.....	—	22	11	1 426	39 999	1 096	1 898	24 956	120 548	76 905	198 351	17 387
3261	Plastics product mfg.....	—	17	10	1 381	39 084	1 069	1 848	24 401	118 305	75 428	194 618	17 286
32619	Other plastics product mfg.....	—	10	5	758	17 520	561	824	8 410	54 766	23 067	78 582	D
326199	All other plastics product mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	40	10	779	23 575	604	1 253	15 793	48 633	47 712	97 196	3 024
333	Machinery mfg.....	—	27	8	911	26 910	726	1 468	19 195	62 859	44 429	108 863	3 859
334	Computer & electronic product mfg.....	—	9	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	7	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	7	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg.....	—	4	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	15	7	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
31-33	STE. GENEVIEVE COUNTY, MO												
	Manufacturing	—	32	11	1 752	47 762	1 438	2 915	35 259	130 203	81 551	208 232	16 842
327	Nonmetallic mineral product mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
32741	Lime mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
327410	Lime mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
31-33	ST. FRANCOIS COUNTY, MO												
	Manufacturing	2	66	22	3 797	80 263	2 963	5 610	53 611	224 573	174 548	394 619	13 289
327	Nonmetallic mineral product mfg.....	—	7	2	653	17 768	541	1 055	13 672	44 420	13 871	57 962	792
3272	Glass & glass product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg.....	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS COUNTY, MO												
31-33	Manufacturing	-	1 272	434	78 218	3 359 780	46 676	95 016	1 712 870	8 581 756	14 372 482	25 347 905	529 369
311	Food mfg.	-	67	24	3 576	91 610	2 225	4 213	50 703	453 467	421 336	887 914	13 738
3118	Bakeries & tortilla mfg.	4	39	14	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.	3	34	11	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.	4	5	3	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.	8	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.	-	33	20	1 780	61 364	1 410	2 965	40 669	143 489	224 009	366 619	7 403
3222	Converted paper product mfg.	-	33	20	1 780	61 364	1 410	2 965	40 669	143 489	224 009	366 619	7 403
32221	Paperboard container mfg.	-	18	14	g	D	D	D	D	D	D	D	4 939
322211	Corrugated & solid fiber box mfg.	-	11	10	732	26 513	540	1 106	14 387	52 450	109 104	161 296	D
323	Printing & related support activities.	1	274	68	5 768	213 231	3 901	7 625	122 013	390 760	297 845	686 786	38 051
3231	Printing & related support activities.	1	274	68	5 768	213 231	3 901	7 625	122 013	390 760	297 845	686 786	38 051
32311	Printing.	1	228	52	4 779	177 910	3 128	6 118	99 288	324 826	283 720	606 631	33 622
323110	Commercial lithographic printing.	1	107	33	2 944	116 552	1 923	3 739	64 237	204 091	172 071	374 155	17 760
32312	Support activities for printing.	2	46	16	989	35 321	773	1 507	22 725	65 934	14 125	80 155	4 429
323122	Prepress services.	2	35	12	804	29 516	621	1 232	19 373	55 819	12 531	68 513	3 705
325	Chemical mfg.	2	94	44	4 298	163 536	2 482	4 848	75 578	665 486	508 740	1 169 935	62 053
3253	Pesticide, fertilizer, & other agricultural chemical mfg.	6	8	4	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.	2	21	10	1 356	54 211	755	1 312	24 010	259 608	112 112	368 876	D
32541	Pharmaceutical & medicine mfg.	2	21	10	1 356	54 211	755	1 312	24 010	259 608	112 112	368 876	D
325412	Pharmaceutical preparation mfg.	1	11	7	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg.	3	19	10	g	D	D	D	D	D	D	D	18 010
32561	Soap & cleaning compound mfg.	4	13	6	f	D	D	D	D	D	D	D	15 019
3259	Other chemical product mfg.	-	19	9	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.	-	13	7	f	D	D	D	D	D	D	D	2 230
326	Plastics & rubber products mfg.	-	66	37	4 013	108 440	3 239	5 439	61 535	318 615	282 794	590 990	32 134
3261	Plastics product mfg.	-	57	33	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.	-	38	21	2 685	66 413	2 231	3 513	36 492	215 982	173 759	378 869	21 902
326199	All other plastics product mfg.	-	34	20	h	D	D	D	D	D	D	D	21 854
3262	Rubber product mfg.	-	9	4	f	D	D	D	D	D	D	D	D
32621	Tire mfg.	-	5	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.	2	50	23	1 060	35 213	768	1 385	21 949	79 649	76 877	156 872	6 353
3273	Cement & concrete product mfg.	2	32	17	692	24 083	538	979	16 629	55 338	59 356	114 723	D
32732	Ready-mix concrete mfg.	1	21	13	501	16 528	390	644	11 315	36 725	44 950	81 916	3 606
327320	Ready-mix concrete mfg.	1	21	13	501	16 528	390	644	11 315	36 725	44 950	81 916	3 606
331	Primary metal mfg.	-	11	5	f	D	D	D	D	D	D	D	D
3315	Foundries.	-	8	4	f	D	D	D	D	D	D	D	1 404
33152	Nonferrous metal foundries.	-	8	4	f	D	D	D	D	D	D	D	1 404
332	Fabricated metal product mfg.	-	168	53	4 823	156 149	3 641	7 362	97 107	289 693	247 055	543 838	16 862
3322	Cutlery & handtool mfg.	-	8	3	654	20 987	559	1 204	16 433	35 669	20 522	63 307	1 814
33221	Cutlery & handtool mfg.	-	8	3	654	20 987	559	1 204	16 433	35 669	20 522	63 307	1 814
332212	Hand & edge tool mfg.	-	7	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.	-	40	16	1 240	42 715	815	1 742	22 272	89 748	103 876	193 522	2 744
33231	Plate work & fabricated structural product mfg.	-	12	7	511	19 231	339	798	9 853	44 437	63 579	108 229	1 462
33232	Ornamental & architectural metal products mfg.	-	28	9	729	23 484	476	944	12 419	45 311	40 297	85 293	1 282

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ST. LOUIS COUNTY, MO—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	72	18	1 200	40 142	986	2 026	29 542	85 571	37 982	122 294	5 126
33272	Turned product & screw, nut, & bolt mfg	1	24	12	723	22 973	610	1 283	17 227	53 443	27 874	79 707	3 494
332721	Precision turned product mfg	1	20	8	566	17 238	483	1 019	13 463	41 327	21 275	60 980	D
3329	Other fabricated metal product mfg	—	18	7	1 230	35 798	925	1 644	19 203	45 134	58 295	104 975	4 594
33291	Metal valve mfg	—	7	5	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	122	51	8 564	312 299	5 549	11 256	166 398	769 556	565 501	1 333 012	45 640
3332	Industrial machinery mfg ..	—	18	7	807	29 730	484	1 008	15 141	69 397	48 237	115 384	3 609
33329	Other industrial machinery mfg	—	16	7	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	5	3	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	11	5	1 222	45 550	618	1 182	17 278	131 488	108 887	243 730	6 862
33331	Commercial & service industry machinery mfg	—	11	5	1 222	45 550	618	1 182	17 278	131 488	108 887	243 730	6 862
333311	Automatic vending machine mfg	—	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	9	6	2 382	79 323	1 755	3 486	52 392	202 433	178 306	386 071	9 361
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	9	6	2 382	79 323	1 755	3 486	52 392	202 433	178 306	386 071	9 361
333415	AC & warm air heating & commercial/ industrial refig equip mfg	1	5	4	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	40	13	1 683	67 963	1 193	2 531	43 332	157 452	104 523	252 671	15 252
33351	Metalworking machinery mfg	—	40	13	1 683	67 963	1 193	2 531	43 332	157 452	104 523	252 671	15 252
333515	Cutting tool & machine tool accessory mfg ..	—	12	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	33	15	2 112	77 779	1 260	2 602	31 254	181 527	101 432	283 523	9 018
33399	All other general-purpose machinery mfg	—	21	9	1 667	62 805	990	2 062	23 842	143 585	73 210	217 729	8 249
333993	Packaging machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	—	4	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	61	22	h	D	D	D	D	D	D	D	13 283
3345	Navigational, measuring, medical, & control instruments mfg	—	22	10	2 582	119 983	1 052	2 049	30 126	281 023	114 604	412 044	D
33451	Navigational, measuring, medical, & control instruments mfg	—	22	10	2 582	119 983	1 052	2 049	30 126	281 023	114 604	412 044	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	25	12	1 509	57 329	1 151	2 326	37 637	169 205	85 006	255 030	6 893
3353	Electrical equipment mfg ..	1	19	9	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	19	9	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	25	13	32 463	1 804 207	16 318	35 903	893 818	4 399 475	10 905 668	17 682 097	D
3361	Motor vehicle mfg	—	3	3	j	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	3	3	j	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	3	3	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	13	7	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ST. LOUIS COUNTY, MO—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	-	5	3	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	3	j	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	42	10	1 113	33 552	910	1 963	21 066	69 957	67 143	136 012	3 407
3372	Office furniture (including fixtures) mfg	-	14	7	779	23 289	652	1 449	14 413	45 572	47 803	92 214	1 638
33721	Office furniture (including fixtures) mfg	-	14	7	779	23 289	652	1 449	14 413	45 572	47 803	92 214	1 638
337215	Showcase, partition, shelving, & locker mfg	-	8	4	667	18 760	563	1 280	11 331	39 051	45 132	82 998	D
339	Miscellaneous mfg	1	148	34	3 586	115 789	1 904	3 683	46 799	297 041	199 953	495 698	14 864
3391	Medical equipment & supplies mfg	1	84	18	2 229	79 553	1 235	2 431	32 506	234 843	121 008	355 042	10 245
33911	Medical equipment & supplies mfg	1	84	18	2 229	79 553	1 235	2 431	32 506	234 843	121 008	355 042	10 245
339112	Surgical & medical instrument mfg	-	14	6	1 285	51 557	559	1 151	16 279	154 469	84 526	238 853	6 435
3399	Other miscellaneous mfg ..	1	64	16	1 357	36 236	669	1 252	14 293	62 198	78 945	140 656	4 619
	SALINE COUNTY, MO												
31-33	Manufacturing	-	24	9	2 530	55 386	2 266	4 290	46 112	223 133	425 732	647 486	12 124
311	Food mfg	-	7	3	1 666	35 176	1 492	2 463	29 299	169 681	358 440	528 298	9 516
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	f	D	D	D	D	D	D	D	D
	SCOTT COUNTY, MO												
31-33	Manufacturing	-	77	25	3 008	66 057	2 556	4 905	51 114	234 622	303 500	532 559	12 021
321	Wood product mfg	-	5	2	626	15 248	550	1 079	13 313	25 627	48 441	73 863	D
3219	Other wood product mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	-	1	1	f	D	D	D	D	D	D	D	D
	SHANNON COUNTY, MO												
31-33	Manufacturing	2	22	7	710	8 148	592	778	6 298	20 326	20 068	40 854	945
	SHELBY COUNTY, MO												
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	D	3 789
	STODDARD COUNTY, MO												
31-33	Manufacturing	-	40	18	2 372	42 394	2 051	4 011	34 241	149 063	113 479	263 970	3 373
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SULLIVAN COUNTY, MO													
31-33	Manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
TANEY COUNTY, MO													
31-33	Manufacturing	4	59	8	798	15 843	622	1 074	10 571	49 328	38 497	87 835	2 819
TEXAS COUNTY, MO													
31-33	Manufacturing	1	53	10	1 399	26 197	1 200	2 303	21 252	78 906	76 739	169 584	5 108
315	Apparel mfg	2	3	3	664	10 510	574	1 026	7 862	26 786	21 024	47 839	D
3152	Cut & sew apparel mfg	2	2	2	f	D	D	D	D	D	D	D	D
VERNON COUNTY, MO													
31-33	Manufacturing	-	21	11	1 561	43 972	1 286	2 483	31 863	280 118	146 828	425 786	D
326	Plastics & rubber products mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
WARREN COUNTY, MO													
31-33	Manufacturing	3	37	16	2 042	50 093	1 590	3 856	36 154	117 051	123 032	242 682	6 124
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, MO													
31-33	Manufacturing	5	28	6	510	8 331	454	660	5 454	24 205	19 940	43 985	1 491
WEBSTER COUNTY, MO													
31-33	Manufacturing	1	44	13	g	D	D	D	D	D	D	D	4 403
WRIGHT COUNTY, MO													
31-33	Manufacturing	-	18	6	730	14 160	678	1 246	12 697	59 475	43 213	101 953	1 140

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO (IC)												
31-33	Manufacturing	-	802	313	33 836	1 243 627	23 100	47 110	723 397	5 088 636	3 497 376	8 605 466	365 744
311	Food mfg	-	66	29	4 026	118 768	2 727	5 878	68 932	507 688	594 321	1 100 070	20 531
3113	Sugar & confectionery product mfg	-	9	4	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	3	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	18	7	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	17	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	8	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	3	11	8	594	19 917	383	819	9 553	110 272	75 914	187 726	D
312	Beverage & tobacco product mfg	-	5	5	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	5	h	D	D	D	D	D	D	D	D
31212	Breweries	-	2	2	g	D	D	D	D	D	D	D	D
312120	Breweries	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	22	7	829	16 011	698	1 121	11 522	30 445	26 425	57 545	D
3159	Apparel accessories & other apparel mfg	2	13	6	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	13	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	22	16	928	30 977	674	1 431	18 566	64 329	78 582	143 203	5 422
3222	Converted paper product mfg	1	22	16	928	30 977	674	1 431	18 566	64 329	78 582	143 203	5 422
32221	Paperboard container mfg	2	13	10	549	19 621	369	755	10 487	37 763	54 917	92 562	3 332
323	Printing & related support activities.....	2	144	37	3 029	106 967	2 254	4 344	66 658	230 111	127 718	357 317	13 992
3231	Printing & related support activities.....	2	144	37	3 029	106 967	2 254	4 344	66 658	230 111	127 718	357 317	13 992
32311	Printing	2	127	29	h	D	D	D	D	D	D	D	12 270
323110	Commercial lithographic printing ..	4	68	17	1 497	57 668	1 079	2 043	35 501	108 822	62 283	171 443	5 590
325	Chemical mfg	-	71	34	6 228	254 865	3 408	7 316	124 536	1 947 626	969 536	2 924 807	90 156
3251	Basic chemical mfg	-	12	7	780	36 569	446	946	19 442	187 691	126 774	308 179	10 997
3254	Pharmaceutical & medicine mfg	-	10	6	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	10	6	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	3	3	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	3	23	9	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	3	18	7	659	28 497	275	537	8 921	159 796	134 424	292 050	5 353
325510	Paint & coating mfg ...	3	18	7	659	28 497	275	537	8 921	159 796	134 424	292 050	5 353
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	15	8	1 287	48 117	1 058	2 096	34 811	849 093	331 678	1 176 835	D
32561	Soap & cleaning compound mfg	-	14	7	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	9	5	860	36 715	708	1 426	27 634	821 042	304 297	1 121 399	D
326	Plastics & rubber products mfg	3	36	16	1 300	42 411	1 025	2 064	25 785	96 684	106 896	203 867	7 721
3261	Plastics product mfg	5	29	13	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	3	578	22 871	400	911	14 962	72 291	48 330	115 357	D
332	Fabricated metal product mfg	1	161	62	4 745	173 129	3 403	7 045	105 171	331 807	267 179	603 844	21 841
3321	Forging & stamping	-	10	5	529	19 372	391	847	13 169	41 031	34 397	75 750	3 959
33211	Forging & stamping	-	10	5	529	19 372	391	847	13 169	41 031	34 397	75 750	3 959
332116	Metal stamping.....	-	8	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	37	15	911	31 554	638	1 361	17 824	67 901	78 835	146 759	2 645
33231	Plate work & fabricated structural product mfg ..	1	18	10	514	18 878	355	797	10 288	39 110	57 969	97 237	1 930
3324	Boiler, tank, & shipping container mfg	-	9	5	1 024	41 687	713	1 469	25 922	69 400	49 230	125 604	3 414
33241	Power boiler & heat exchanger mfg	-	4	2	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	38	13	757	28 023	610	1 199	19 885	51 418	33 003	83 796	3 428
3328	Coating, engraving, heat treating, & allied activities.	2	35	11	776	28 829	573	1 210	16 551	55 895	19 387	75 261	3 792
33281	Coating, engraving, heat treating, & allied activities.....	2	35	11	776	28 829	573	1 210	16 551	55 895	19 387	75 261	3 792

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ST. LOUIS, MO (IC)— Con. Manufacturing— Con.												
333	Machinery mfg	-	44	20	2 991	103 903	2 081	4 159	63 235	248 279	254 771	505 876	14 574
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	5	847	37 188	517	1 110	18 988	58 674	43 654	104 905	3 794
33399	All other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	17	7	539	16 092	314	581	5 850	29 081	22 730	51 844	D
335	Electrical equipment, appliance, & component mfg	-	12	8	802	32 553	540	1 061	17 684	78 374	67 883	145 624	D
336	Transportation equipment mfg	-	18	9	g	D	D	D	D	D	D	D	6 622
3363	Motor vehicle parts mfg ...	-	11	6	846	32 787	641	1 375	20 833	62 283	47 129	108 574	D
337	Furniture & related product mfg	-	39	15	1 039	31 055	805	1 508	19 251	66 120	49 142	124 880	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	21	8	558	17 042	427	864	10 348	47 881	26 959	74 616	993
339	Miscellaneous mfg	2	58	18	1 420	41 260	863	1 806	18 892	94 847	56 485	150 948	4 973
3391	Medical equipment & supplies mfg	-	19	4	642	21 602	369	952	9 208	56 863	28 249	85 070	D
33911	Medical equipment & supplies mfg	-	19	4	642	21 602	369	952	9 208	56 863	28 249	85 070	D
339112	Surgical & medical instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	39	14	778	19 658	494	854	9 684	37 984	28 236	65 878	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ARNOLD, MO												
	Manufacturing	1	21	5	693	26 328	566	1 285	18 556	61 297	142 239	204 113	5 143
31-33	AURORA, MO												
	Manufacturing	-	15	8	772	15 784	608	1 174	12 382	66 056	58 919	125 795	3 635
31-33	BERKELEY, MO												
	Manufacturing	-	26	12	j	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	4	588	22 329	346	508	8 945	96 431	49 913	146 643	1 374
336	Transportation equipment mfg	-	2	1	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	j	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	j	D	D	D	D	D	D	D	D
31-33	BLUE SPRINGS, MO												
	Manufacturing	6	41	8	978	28 192	698	1 363	15 009	74 315	53 397	127 483	3 483
31-33	BOLIVAR, MO												
	Manufacturing	-	15	6	642	10 236	457	734	5 672	25 974	29 312	54 921	315
31-33	BOONVILLE, MO												
	Manufacturing	-	9	6	754	16 314	625	1 169	12 100	70 229	55 071	124 985	D
31-33	BRENTWOOD, MO												
	Manufacturing	-	65	24	1 872	64 311	1 288	2 479	33 409	146 249	98 647	248 473	9 782
323	Printing & related support activities	1	21	8	512	17 902	377	721	10 880	32 780	11 218	43 751	2 144
3231	Printing & related support activities	1	21	8	512	17 902	377	721	10 880	32 780	11 218	43 751	2 144
31-33	BRIDGETON, MO												
	Manufacturing	-	67	26	5 308	160 705	3 935	7 442	100 778	481 935	489 034	976 527	28 432
326	Plastics & rubber products mfg	-	7	6	910	20 731	728	1 169	11 772	74 831	56 310	130 638	10 123
3261	Plastics product mfg	-	7	6	910	20 731	728	1 169	11 772	74 831	56 310	130 638	10 123
32619	Other plastics product mfg	-	7	6	910	20 731	728	1 169	11 772	74 831	56 310	130 638	10 123
326199	All other plastics product mfg	-	7	6	910	20 731	728	1 169	11 772	74 831	56 310	130 638	10 123
333	Machinery mfg	-	5	4	2 831	96 111	1 992	3 939	59 660	269 742	217 357	495 622	D
3333	Commercial & service industry machinery mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
31-33	BROOKFIELD, MO												
	Manufacturing	-	12	6	f	D	D	D	D	D	D	D	2 176
31-33	CALIFORNIA, MO												
	Manufacturing	4	13	6	g	D	D	D	D	D	D	D	3 763
311	Food mfg	3	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAPE GIRARDEAU, MO *													
31-33	Manufacturing	-	52	18	3 602	111 278	2 957	5 660	84 575	721 404	520 533	1 246 861	50 541
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	g	D	D	D	D	D	D	D	D
CARTHAGE, MO													
31-33	Manufacturing	-	23	12	4 069	93 125	3 323	8 265	77 761	315 139	555 230	874 501	33 403
311	Food mfg	-	4	3	1 761	40 385	1 505	4 491	35 404	159 152	335 911	494 729	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	-	2	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
CARUTHERSVILLE, MO													
31-33	Manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
CENTRALIA, MO *													
31-33	Manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
CHESTERFIELD, MO													
31-33	Manufacturing	-	42	12	1 489	47 825	1 092	2 284	28 449	108 081	102 909	207 702	8 966
333	Machinery mfg	1	8	4	620	25 295	376	880	12 468	55 920	37 716	91 708	4 126
CHILLICOTHE, MO													
31-33	Manufacturing	-	23	10	779	20 651	666	1 267	15 917	63 768	43 810	105 765	3 020
CLINTON, MO													
31-33	Manufacturing	-	17	7	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBIA, MO													
31-33	Manufacturing	-	62	23	4 277	120 654	3 456	7 028	83 472	739 533	636 599	1 376 068	D
311	Food mfg	-	7	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	6	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
3363	Motor vehicle parts mfg ...	-	6	5	609	18 018	461	1 051	12 320	149 800	319 103	469 188	2 754
CRESTWOOD, MO													
31-33	Manufacturing	-	29	10	888	31 512	590	1 222	18 474	81 873	72 925	153 559	5 399
CREVE COEUR, MO													
31-33	Manufacturing	-	31	10	1 377	43 388	1 005	1 776	22 894	305 915	206 810	513 555	9 180
CUBA, MO													
31-33	Manufacturing	-	19	9	661	17 034	538	1 008	10 981	49 740	52 155	102 446	8 487
DEXTER, MO													
31-33	Manufacturing	-	18	9	1 658	30 863	1 497	3 024	26 527	120 561	91 060	212 623	1 949
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELDON, MO													
31-33	Manufacturing	-	10	3	1 130	25 732	908	1 594	18 461	54 790	55 825	108 452	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
EUREKA, MO													
31-33	Manufacturing	-	7	2	570	18 771	476	1 080	15 087	33 590	20 113	60 746	D
332	Fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D
EXCELSIOR SPRINGS, MO *													
31-33	Manufacturing	-	16	6	1 154	29 066	911	1 258	18 678	105 321	167 585	274 203	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FARMINGTON, MO													
31-33	Manufacturing	3	26	10	2 370	44 302	2 000	3 766	29 355	141 633	109 826	247 169	9 821
336	Transportation equipment mfg	1	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
FENTON, MO													
31-33	Manufacturing	-	88	39	10 768	632 820	9 246	19 618	538 542	1 072 610	5 222 362	6 269 533	119 113
336	Transportation equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
FREDERICKTOWN, MO													
31-33	Manufacturing	1	10	4	535	8 106	443	756	5 818	17 882	9 507	27 166	676
FULTON, MO													
31-33	Manufacturing	1	15	9	f	D	D	D	D	D	D	D	3 983
GRANDVIEW, MO													
31-33	Manufacturing	1	73	26	2 575	71 744	1 811	3 407	37 952	162 909	189 725	351 077	14 377
333	Machinery mfg	1	8	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	10	5	f	D	D	D	D	D	D	D	3 616
3363	Motor vehicle parts mfg ...	1	7	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
HANNIBAL, MO *													
31-33	Manufacturing	-	33	15	g	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAZELWOOD, MO													
31-33	Manufacturing	-	36	18	5 349	258 249	3 908	8 097	177 735	3 533 821	3 061 219	6 583 205	86 358
311	Food mfg	4	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	508	9 245	434	563	4 904	50 170	31 525	76 020	2 123
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
INDEPENDENCE, MO *													
31-33	Manufacturing	3	108	31	3 711	129 111	2 692	5 087	85 286	521 830	287 116	812 504	14 686
332	Fabricated metal product mfg	-	24	9	1 545	58 026	1 048	1 856	35 394	151 069	33 289	183 793	2 260
3329	Other fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
332992	Small arms ammunition mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	4	923	33 953	687	1 366	23 021	58 425	123 607	181 232	4 807
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
JACKSON, MO													
31-33	Manufacturing	-	17	6	1 717	34 181	1 079	2 242	19 089	126 857	119 107	246 462	11 924
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON CITY, MO *													
31-33	Manufacturing	-	39	12	3 603	114 948	2 958	5 333	86 808	610 123	438 445	1 046 849	19 627
323	Printing & related support activities	-	10	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	10	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	2	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	1	1	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	JOPLIN, MO *													
31-33	Manufacturing	-	108	40	5 585	148 204	4 252	8 693	101 754	390 960	457 510	849 762	D	
324	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D	
3241	Petroleum & coal products mfg	2	5	3	f	D	D	D	D	D	D	D	D	
32412	Asphalt paving, roofing, & saturated materials mfg	2	5	3	f	D	D	D	D	D	D	D	D	
324122	Asphalt shingle & coating materials mfg	2	5	3	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	22	9		925	32 902	753	1 686	25 647	69 990	59 686	127 079	8 023
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D	
335911	Storage battery mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D	
	KANSAS CITY, MO *													
31-33	Manufacturing	-	575	207	27 888	998 464	17 573	34 482	512 376	4 235 403	2 966 059	7 155 513	173 453	
311	Food mfg	-	44	16	g	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	-	13	3	676	21 219	209	459	6 672	46 718	15 913	62 621	1 437	
31181	Bread & bakery product mfg	-	12	3	f	D	D	D	D	D	D	D	D	
311812	Commercial bakeries ..	-	5	2	f	D	D	D	D	D	D	D	D	
322	Paper mfg	-	20	15	2 829	88 976	2 249	4 269	60 076	193 211	255 646	448 874	16 830	
3222	Converted paper product mfg	-	20	15	2 829	88 976	2 249	4 269	60 076	193 211	255 646	448 874	16 830	
32221	Paperboard container mfg	-	11	8	956	36 107	731	1 608	23 823	56 322	103 131	160 911	10 123	
32222	Paper bag & coated & treated paper mfg	-	3	2	f	D	D	D	D	D	D	D	D	
322224	Uncoated paper & multiwall bag mfg	-	2	2	f	D	D	D	D	D	D	D	D	
32223	Stationery product mfg ..	-	3	3	f	D	D	D	D	D	D	D	D	
322232	Envelope mfg	-	2	2	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	1	112	25	2 744	92 505	2 101	3 931	61 937	197 759	99 997	295 982	10 664	
3231	Printing & related support activities.....	1	112	25	2 744	92 505	2 101	3 931	61 937	197 759	99 997	295 982	10 664	
32311	Printing	1	90	21	g	D	D	D	D	D	D	D	D	
323110	Commercial lithographic printing ..	1	50	13	1 482	53 391	1 139	2 163	34 239	107 131	64 779	170 221	5 793	
323114	Quick printing	1	16	3	614	16 412	486	908	13 690	46 994	15 657	62 402	D	
325	Chemical mfg	-	35	15	h	D	D	D	D	D	D	D	52 511	
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	2	1	g	D	D	D	D	D	D	D	D	
32532	Pesticide & other agricultural chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D	
325320	Pesticide & other agricultural chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	-	6	3	g	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	6	3	g	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	-	5	2	f	D	D	D	D	D	D	D	D	
3255	Paint, coating, & adhesive mfg	4	8	3	f	D	D	D	D	D	D	D	D	
32552	Adhesive mfg	4	3	3	539	17 050	376	777	9 198	36 955	48 483	85 871	D	
325520	Adhesive mfg	4	3	3	539	17 050	376	777	9 198	36 955	48 483	85 871	D	
326	Plastics & rubber products mfg	4	24	14	f	D	D	D	D	D	D	D	3 617	
3261	Plastics product mfg	4	18	10	672	18 697	483	1 053	10 411	44 420	38 922	83 270	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	KANSAS CITY, MO *—Con.													
31-33	Manufacturing—Con.													
331	Primary metal mfg	—	13	5	g	D	D	D	D	D	D	D	D	
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D	
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	—	95	34		6 631	271 451	3 462	6 499	114 405	564 669	213 687	777 107	13 543
3323	Architectural & structural metals mfg	—	25	11		1 371	36 967	918	1 800	21 779	72 277	73 204	145 977	4 473
33232	Ornamental & architectural metal products mfg	—	19	8	f	D	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	8	6	h	D	D	D	D	D	D	D	D	1 829
33299	All other fabricated metal product mfg	—	8	6	h	D	D	D	D	D	D	D	D	1 829
332995	Other ordnance & accessories mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
333	Machinery mfg	2	43	19	g	D	D	D	D	D	D	D	D	4 573
3339	Other general-purpose machinery mfg	2	14	6	f	D	D	D	D	D	D	D	D	1 923
33392	Material handling equipment mfg	2	9	6	f	D	D	D	D	D	D	D	D	1 782
333922	Conveyor & conveying equipment mfg	2	8	6	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	13	6	g	D	D	D	D	D	D	D	D	21 057
3346	Mfg & reproducing magnetic & optical media	—	4	2	f	D	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	4	2	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	8	5		762	22 584	411	803	7 699	32 960	42 558	76 197	D
336	Transportation equipment mfg	3	22	9	f	D	D	D	D	D	D	D	D	4 650
3363	Motor vehicle parts mfg ...	4	14	3	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	34	8		833	22 200	589	1 160	13 211	32 335	29 369	61 269	1 373
3371	Household & institutional furniture & kitchen cabinet mfg	—	16	3	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	42	19		1 770	49 077	1 209	2 243	25 309	115 490	68 622	183 816	6 333
3391	Medical equipment & supplies mfg	1	19	8		628	17 897	416	773	8 223	50 941	20 874	71 537	2 455
33911	Medical equipment & supplies mfg	1	19	8		628	17 897	416	773	8 223	50 941	20 874	71 537	2 455
3399	Other miscellaneous mfg ..	2	23	11		1 142	31 180	793	1 470	17 086	64 549	47 748	112 279	3 878
33999	All other miscellaneous mfg	1	6	3	f	D	D	D	D	D	D	D	D	D
	KENNETT, MO													
31-33	Manufacturing	—	13	5		989	22 417	821	1 723	16 411	120 511	109 957	235 341	3 468
	KIRKSVILLE, MO													
31-33	Manufacturing	—	10	5		1 619	39 777	1 392	3 010	31 915	221 671	190 406	412 448	5 563
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
	KIRKWOOD, MO													
31-33	Manufacturing	1	41	16		1 272	41 060	936	1 778	23 488	74 903	61 239	136 465	4 847

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAMAR, MO													
31-33	Manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
LEBANON, MO													
31-33	Manufacturing	-	33	19	4 541	111 738	3 674	7 911	71 873	326 448	440 108	757 757	43 450
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	894	17 980	777	1 709	11 421	45 317	54 523	99 291	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	4	4	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	4	4	f	D	D	D	D	D	D	D	D
336612	Boat building	-	4	4	f	D	D	D	D	D	D	D	D
LEE'S SUMMIT, MO *													
31-33	Manufacturing	-	77	17	2 577	72 062	1 636	3 331	47 005	296 146	163 971	456 719	22 707
326	Plastics & rubber products mfg	-	8	4	g	D	D	D	D	D	D	D	15 364
3261	Plastics product mfg	-	8	4	g	D	D	D	D	D	D	D	15 364
32619	Other plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	16	4	f	D	D	D	D	D	D	D	3 561
LIBERTY, MO													
31-33	Manufacturing	1	23	9	g	D	D	D	D	D	D	D	11 718
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	6	9	3	527	16 169	392	823	10 819	42 992	33 725	76 211	3 113
3231	Printing & related support activities	6	9	3	527	16 169	392	823	10 819	42 992	33 725	76 211	3 113
32311	Printing	6	8	3	f	D	D	D	D	D	D	D	3 113
MACON, MO													
31-33	Manufacturing	-	10	4	g	D	D	D	D	D	D	D	2 220
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAPLEWOOD, MO													
31-33	Manufacturing	-	32	15	1 502	55 682	1 070	2 007	34 894	113 932	88 227	193 049	9 352
333	Machinery mfg	-	5	4	824	35 289	541	1 222	22 423	87 326	56 952	135 140	D
3335	Metalworking machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
MARCELINE, MO *													
31-33	Manufacturing	1	6	3	975	29 525	611	1 662	15 080	55 191	19 725	73 933	D
323	Printing & related support activities.....	-	2	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	f	D	D	D	D	D	D	D	D
MARSHALL, MO													
31-33	Manufacturing	-	14	6	1 950	42 891	1 746	3 055	35 450	184 980	368 129	552 927	9 740
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
MARSHFIELD, MO													
31-33	Manufacturing	1	18	8	f	D	D	D	D	D	D	D	2 234
MARYLAND HEIGHTS, MO													
31-33	Manufacturing	2	132	56	4 858	171 620	3 047	6 004	82 449	487 540	493 603	980 311	39 773
323	Printing & related support activities.....	3	42	14	863	32 208	585	1 212	18 121	63 122	35 935	100 849	3 806
3231	Printing & related support activities.....	3	42	14	863	32 208	585	1 212	18 121	63 122	35 935	100 849	3 806
32311	Printing	4	30	9	531	18 629	360	725	10 340	39 335	30 307	71 279	1 857
325	Chemical mfg	1	9	7	701	31 665	409	791	15 419	176 106	133 472	306 915	19 399
332	Fabricated metal product mfg	-	18	8	822	26 554	530	1 010	12 251	38 925	40 892	80 452	2 247
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	6	910	31 873	627	1 326	13 421	64 497	26 249	90 437	5 573
3339	Other general-purpose machinery mfg	-	3	3	712	22 751	520	1 074	9 718	51 991	20 126	71 877	D
33399	All other general-purpose machinery mfg	-	3	3	712	22 751	520	1 074	9 718	51 991	20 126	71 877	D
333994	Industrial process furnace & oven mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
MARYVILLE, MO													
31-33	Manufacturing	-	13	7	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MEXICO, MO													
31-33	Manufacturing	1	23	15	1 971	57 589	1 627	3 152	44 187	150 391	281 307	438 461	16 909
327	Nonmetallic mineral product mfg	-	4	3	773	28 239	667	1 278	23 306	56 832	52 564	110 000	D
3271	Clay product & refractory mfg	-	2	2	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	2	2	f	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
MOBERLY, MO													
31-33	Manufacturing	2	26	8	1 245	28 078	1 068	1 816	20 101	78 951	93 077	170 268	D
336	Transportation equipment mfg	2	7	6	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	6	5	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D
MONETT, MO *													
31-33	Manufacturing	-	27	17	4 203	103 488	3 104	7 167	63 424	352 179	405 933	743 623	6 477
311	Food mfg	-	4	4	g	D	D	D	D	D	D	D	1 421
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	1 716	44 874	972	2 483	19 575	108 257	49 408	157 018	3 340
3323	Architectural & structural metals mfg	-	3	3	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	3	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	2	g	D	D	D	D	D	D	D	D
MONROE CITY, MO *													
31-33	Manufacturing	-	5	3	1 109	29 388	833	1 454	26 406	47 194	27 030	75 561	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	1	1	f	D	D	D	D	D	D	D	D
NEOSHO, MO													
31-33	Manufacturing	-	22	12	3 690	88 360	3 176	6 854	73 883	237 289	335 086	585 459	26 271
332	Fabricated metal product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEVADA, MO													
31-33	Manufacturing	-	14	8	1 422	41 761	1 186	2 311	30 476	275 266	142 034	415 960	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEW MADRID, MO													
31-33	Manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing,	-	1	1	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	g	D	D	D	D	D	D	D	D
NIXA, MO													
31-33	Manufacturing	1	33	9	743	16 665	597	1 111	10 502	34 314	31 539	66 386	2 521
NORMANDY, MO													
31-33	Manufacturing	-	9	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
NORTH KANSAS CITY, MO													
31-33	Manufacturing	1	108	56	4 299	146 215	3 102	6 253	92 298	441 655	508 027	944 442	40 677
322	Paper mfg	4	7	5	f	D	D	D	D	D	D	D	3 722
323	Printing & related support activities	1	26	7	619	26 573	437	899	16 878	41 439	43 089	83 566	D
3231	Printing & related support activities	1	26	7	619	26 573	437	899	16 878	41 439	43 089	83 566	D
32311	Printing	1	20	6	f	D	D	D	D	D	D	D	2 875
325	Chemical mfg	-	15	7	515	17 061	301	613	9 202	57 231	58 192	115 642	D
332	Fabricated metal product mfg	-	15	10	711	27 516	519	1 003	18 573	96 179	78 506	167 648	6 350
O'FALLON, MO													
31-33	Manufacturing	-	54	25	g	D	D	D	D	D	D	D	9 808
OLIVETTE, MO													
31-33	Manufacturing	2	23	11	1 277	42 724	738	1 438	16 865	97 790	78 869	176 947	4 896
333	Machinery mfg	3	2	2	f	D	D	D	D	D	D	D	D
OVERLAND, MO													
31-33	Manufacturing	1	57	30	2 937	91 974	2 069	3 948	53 774	234 343	221 666	456 123	9 760
311	Food mfg	-	5	4	896	20 876	548	987	10 560	89 514	90 549	180 289	1 816
3118	Bakeries & tortilla mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	542	14 006	448	881	10 177	25 862	24 901	50 535	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OZARK, MO													
31-33	Manufacturing	-	18	4	1 432	26 790	1 187	2 375	20 390	65 335	60 749	126 742	4 365
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
PACIFIC, MO *													
31-33	Manufacturing	-	20	10	1 566	49 769	1 381	2 212	39 822	208 742	234 575	443 944	10 239
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
PAGEDALE, MO													
31-33	Manufacturing	-	13	6	754	26 641	627	1 284	20 417	51 789	41 126	92 436	13 751
PALMYRA, MO													
31-33	Manufacturing	-	8	3	525	12 188	482	686	11 092	41 411	36 682	78 783	2 776
PARK HILLS, MO *													
31-33	Manufacturing	-	7	3	660	18 409	537	1 053	13 980	47 802	15 535	62 754	D
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
PERRYVILLE, MO													
31-33	Manufacturing	-	17	9	g	D	D	D	D	D	D	D	9 529
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PEVELY, MO													
31-33	Manufacturing	3	9	5	757	28 636	614	1 237	22 348	102 192	96 332	194 935	31 616
POPLAR BLUFF, MO													
31-33	Manufacturing	-	29	10	2 690	59 860	2 412	4 670	48 755	249 438	191 527	465 947	9 035
326	Plastics & rubber products mfg	2	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	PORTAGEVILLE, MO *												
31-33	Manufacturing	-	3	1	g	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	1	1	g	D	D	D	D	D	D	D	
3261	Plastics product mfg	-	1	1	g	D	D	D	D	D	D	D	
32619	Other plastics product mfg	-	1	1	g	D	D	D	D	D	D	D	
326199	All other plastics product mfg	-	1	1	g	D	D	D	D	D	D	D	
	RAYTOWN, MO												
31-33	Manufacturing	3	33	13	663	17 459	508	861	10 269	32 176	25 759	57 970	1 564
	RIVERSIDE, MO												
31-33	Manufacturing	-	14	8	f	D	D	D	D	D	D	3 426	
	ROLLA, MO												
31-33	Manufacturing	-	26	3	633	18 546	476	924	10 924	83 013	65 507	147 443	D
	ST. CHARLES, MO												
31-33	Manufacturing	-	83	26	2 565	78 707	1 926	4 077	50 525	187 380	172 796	360 220	31 646
	ST. CLAIR, MO												
31-33	Manufacturing	2	22	11	1 292	36 270	1 048	2 257	25 891	102 655	114 440	216 282	7 051
	STE. GENEVIEVE, MO												
31-33	Manufacturing	1	15	6	570	12 425	461	867	9 042	38 040	33 658	71 144	D
	ST. JOSEPH, MO												
31-33	Manufacturing	-	91	48	i	D	D	D	D	D	D	D	D
311	Food mfg	-	10	8	1 587	60 908	1 251	2 793	42 761	367 621	819 913	1 190 126	35 612
3111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	5	3	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	3	3	884	37 738	725	1 711	28 044	230 257	623 042	856 011	D
31121	Flour milling & malt mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
311211	Flour milling	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
3222	Converted paper product mfg	-	4	4	1 131	32 560	930	1 635	24 755	48 301	149 748	186 671	5 257
32223	Stationery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	11	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	6	514	17 760	384	784	12 622	39 493	70 926	112 907	D
333	Machinery mfg	-	8	6	825	19 708	606	1 151	13 010	120 415	93 445	213 074	8 377
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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	ST. LOUIS, MO (IC)												
31-33	Manufacturing	-	802	313	33 836	1 243 627	23 100	47 110	723 397	5 088 636	3 497 376	8 605 466	365 744
311	Food mfg	-	66	29	4 026	118 768	2 727	5 878	68 932	507 688	594 321	1 100 070	20 531
3113	Sugar & confectionery product mfg	-	9	4	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	3	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	18	7	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	17	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	8	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	3	11	8	594	19 917	383	819	9 553	110 272	75 914	187 726	D
312	Beverage & tobacco product mfg	-	5	5	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	5	h	D	D	D	D	D	D	D	D
31212	Breweries	-	2	2	g	D	D	D	D	D	D	D	D
312120	Breweries	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	22	7	829	16 011	698	1 121	11 522	30 445	26 425	57 545	D
3159	Apparel accessories & other apparel mfg	2	13	6	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	13	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	22	16	928	30 977	674	1 431	18 566	64 329	78 582	143 203	5 422
3222	Converted paper product mfg	1	22	16	928	30 977	674	1 431	18 566	64 329	78 582	143 203	5 422
32221	Paperboard container mfg	2	13	10	549	19 621	369	755	10 487	37 763	54 917	92 562	3 332
323	Printing & related support activities.....	2	144	37	3 029	106 967	2 254	4 344	66 658	230 111	127 718	357 317	13 992
3231	Printing & related support activities.....	2	144	37	3 029	106 967	2 254	4 344	66 658	230 111	127 718	357 317	13 992
32311	Printing	2	127	29	h	D	D	D	D	D	D	D	12 270
323110	Commercial lithographic printing ..	4	68	17	1 497	57 668	1 079	2 043	35 501	108 822	62 283	171 443	5 590
325	Chemical mfg	-	71	34	6 228	254 865	3 408	7 316	124 536	1 947 626	969 536	2 924 807	90 156
3251	Basic chemical mfg	-	12	7	780	36 569	446	946	19 442	187 691	126 774	308 179	10 997
3254	Pharmaceutical & medicine mfg	-	10	6	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	10	6	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	3	3	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	3	23	9	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	3	18	7	659	28 497	275	537	8 921	159 796	134 424	292 050	5 353
325510	Paint & coating mfg ...	3	18	7	659	28 497	275	537	8 921	159 796	134 424	292 050	5 353
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	15	8	1 287	48 117	1 058	2 096	34 811	849 093	331 678	1 176 835	D
32561	Soap & cleaning compound mfg	-	14	7	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	9	5	860	36 715	708	1 426	27 634	821 042	304 297	1 121 399	D
326	Plastics & rubber products mfg	3	36	16	1 300	42 411	1 025	2 064	25 785	96 684	106 896	203 867	7 721
3261	Plastics product mfg	5	29	13	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	3	578	22 871	400	911	14 962	72 291	48 330	115 357	D
332	Fabricated metal product mfg	1	161	62	4 745	173 129	3 403	7 045	105 171	331 807	267 179	603 844	21 841
3321	Forging & stamping	-	10	5	529	19 372	391	847	13 169	41 031	34 397	75 750	3 959
33211	Forging & stamping	-	10	5	529	19 372	391	847	13 169	41 031	34 397	75 750	3 959
332116	Metal stamping.....	-	8	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	37	15	911	31 554	638	1 361	17 824	67 901	78 835	146 759	2 645
33231	Plate work & fabricated structural product mfg ..	1	18	10	514	18 878	355	797	10 288	39 110	57 969	97 237	1 930
3324	Boiler, tank, & shipping container mfg	-	9	5	1 024	41 687	713	1 469	25 922	69 400	49 230	125 604	3 414
33241	Power boiler & heat exchanger mfg	-	4	2	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	38	13	757	28 023	610	1 199	19 885	51 418	33 003	83 796	3 428
3328	Coating, engraving, heat treating, & allied activities.	2	35	11	776	28 829	573	1 210	16 551	55 895	19 387	75 261	3 792
33281	Coating, engraving, heat treating, & allied activities.....	2	35	11	776	28 829	573	1 210	16 551	55 895	19 387	75 261	3 792

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ST. LOUIS, MO (IC)—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	44	20	2 991	103 903	2 081	4 159	63 235	248 279	254 771	505 876	14 574
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	5	847	37 188	517	1 110	18 988	58 674	43 654	104 905	3 794
33399	All other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	17	7	539	16 092	314	581	5 850	29 081	22 730	51 844	D
335	Electrical equipment, appliance, & component mfg	-	12	8	802	32 553	540	1 061	17 684	78 374	67 883	145 624	D
336	Transportation equipment mfg	-	18	9	g	D	D	D	D	D	D	D	6 622
3363	Motor vehicle parts mfg ...	-	11	6	846	32 787	641	1 375	20 833	62 283	47 129	108 574	D
337	Furniture & related product mfg	-	39	15	1 039	31 055	805	1 508	19 251	66 120	49 142	124 880	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	21	8	558	17 042	427	864	10 348	47 881	26 959	74 616	993
339	Miscellaneous mfg	2	58	18	1 420	41 260	863	1 806	18 892	94 847	56 485	150 948	4 973
3391	Medical equipment & supplies mfg	-	19	4	642	21 602	369	952	9 208	56 863	28 249	85 070	D
33911	Medical equipment & supplies mfg	-	19	4	642	21 602	369	952	9 208	56 863	28 249	85 070	D
339112	Surgical & medical instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	39	14	778	19 658	494	854	9 684	37 984	28 236	65 878	D
	ST. PETERS, MO												
31-33	Manufacturing	-	69	21	3 822	126 424	3 130	5 846	87 626	1 227 392	266 539	1 489 668	79 120
326	Plastics & rubber products mfg	-	5	4	569	16 270	459	737	7 743	47 612	31 534	79 666	11 050
3261	Plastics product mfg	-	5	4	569	16 270	459	737	7 743	47 612	31 534	79 666	11 050
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
	SALEM, MO												
31-33	Manufacturing	1	12	4	538	6 061	512	882	5 441	14 440	8 559	22 469	409
	SCOTT CITY, MO *												
31-33	Manufacturing	-	11	4	811	18 749	705	1 475	15 638	36 166	56 439	92 390	2 861
321	Wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SEDALIA, MO													
31-33	Manufacturing	-	51	19	4 090	95 455	3 605	6 599	75 405	269 557	313 385	589 680	D
311	Food mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	12	3	f	D	D	D	D	D	D	D	D
3321	Forging & stamping.....	-	2	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping.....	-	2	1	f	D	D	D	D	D	D	D	D
332116	Metal stamping.....	-	1	1	f	D	D	D	D	D	D	D	D
SIKESTON, MO *													
31-33	Manufacturing	-	40	10	1 228	29 291	1 030	2 021	22 832	145 424	190 419	330 785	4 709
SPRINGFIELD, MO *													
31-33	Manufacturing	-	310	102	18 260	488 335	13 285	24 568	304 987	1 670 752	2 023 426	3 673 540	79 761
311	Food mfg.....	-	26	13	h	D	D	D	D	D	D	D	26 051
3115	Dairy product mfg.....	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
31151	Dairy product (except frozen) mfg.....	-	3	3	1 581	50 363	1 280	2 359	39 143	376 043	707 506	1 080 030	D
311513	Cheese mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	3	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	9	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	9	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	12	5	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	12	5	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg...	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	53	8	670	14 649	465	746	7 652	36 200	19 196	56 353	2 350
3231	Printing & related support activities.....	1	53	8	670	14 649	465	746	7 652	36 200	19 196	56 353	2 350
32311	Printing.....	1	47	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	11	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	9	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	17	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	50	15	1 930	67 516	1 244	2 556	35 601	121 010	67 459	182 889	D
3324	Boiler, tank, & shipping container mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	19	10	1 346	37 170	1 007	2 007	23 842	76 716	99 682	175 042	4 158
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	4	4	759	22 446	573	1 168	13 941	53 811	41 944	94 997	2 606
333412	Industrial & commercial fan & blower mfg.....	1	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SPRINGFIELD, MO *—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	10	6	h	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	25	11	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	14	5	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	1	g	D	D	D	D	D	D	D	D
	SULLIVAN, MO *												
31-33	Manufacturing	-	18	9	816	18 371	598	1 210	10 799	39 201	30 270	69 208	1 413
	SUNSET HILLS, MO												
31-33	Manufacturing	-	25	10	1 127	38 826	764	1 489	19 302	66 725	55 963	123 108	1 934
	TRENTON, MO												
31-33	Manufacturing	1	10	3	f	D	D	D	D	D	D	D	D
311	Food mfg	-	4	1	f	D	D	D	D	D	D	D	D
	TROY, MO												
31-33	Manufacturing	-	12	5	681	19 988	533	1 057	13 616	82 273	59 930	137 283	5 399
	UNION, MO												
31-33	Manufacturing	-	29	12	1 394	36 607	1 166	2 761	27 347	196 083	153 937	349 933	5 703
	VALLEY PARK, MO												
31-33	Manufacturing	-	18	9	529	16 186	387	796	11 336	39 441	39 654	79 668	2 768
	WARRENSBURG, MO												
31-33	Manufacturing	-	9	4	934	20 981	712	1 116	12 259	57 126	52 218	106 577	2 447
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
	WARRENTON, MO												
31-33	Manufacturing	-	8	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
WASHINGTON, MO													
31-33	Manufacturing	-	47	27	3 867	102 948	2 992	5 452	68 661	298 681	227 352	523 306	16 041
323	Printing & related support activities.....	-	11	4	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	11	4	f	D	D	D	D	D	D	D	D
32311	Printing	-	11	4	f	D	D	D	D	D	D	D	D
323118	Blankbook, looseleaf binder, & device mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	4	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	5	533	20 647	408	854	14 572	48 799	29 096	74 295	551
WEBB CITY, MO													
31-33	Manufacturing	1	24	8	758	17 277	523	952	8 806	30 055	30 939	61 760	1 291
WELLSTON, MO													
31-33	Manufacturing	-	14	3	632	26 953	487	1 245	21 900	128 524	75 948	203 136	3 343
WENTZVILLE, MO													
31-33	Manufacturing	-	16	4	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
WEST PLAINS, MO													
31-33	Manufacturing	-	27	13	2 273	47 298	1 900	3 646	36 683	168 465	173 837	351 001	7 237
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MISSOURI		MISSOURI—Con.	
Companies ¹	number.. 6 880	Quantity of electricity purchased for heat and power	1,000 kWh.. 13 908 741
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 28 841
All establishments	number.. 7 497	Total value of shipments	\$1,000.. 93 115 478
Establishments with 1 to 19 employees	number.. 4 999	Value of resales	\$1,000.. 2 599 063
Establishments with 20 to 99 employees	number.. 1 725	Value added	\$1,000.. 43 186 072
Establishments with 100 employees or more	number.. 773	Total inventories, beginning of year	\$1,000.. 9 787 180
All employees	number.. 371 448	Finished goods inventories, beginning of year	\$1,000.. 2 558 858
Total compensation ²	\$1,000.. 14 687 162	Work-in-process inventories, beginning of year	\$1,000.. 4 038 372
Annual payroll	\$1,000.. 11 647 050	Materials and supplies inventories, beginning of year	\$1,000.. 3 189 950
Total fringe benefits	\$1,000.. 3 040 112	Total inventories, end of year	\$1,000.. 7 402 700
Production workers, average for year	number.. 270 297	Finished goods inventories, end of year	\$1,000.. 2 584 170
Production workers on March 12	number.. 269 250	Work-in-process inventories, end of year	\$1,000.. 1 663 263
Production workers on May 12	number.. 268 831	Materials and supplies inventories, end of year	\$1,000.. 3 155 267
Production workers on August 12	number.. 271 337	Gross book value of total assets at beginning of year	\$1,000.. 26 396 009
Production workers on November 12	number.. 271 770	Total capital expenditures (new and used)	\$1,000.. 2 655 646
Production-worker hours	1,000.. 531 283	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 445 023
Production-worker wages	\$1,000.. 7 197 340	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 2 210 623
Total cost of materials	\$1,000.. 47 579 227	Total retirements ²	\$1,000.. 886 620
Cost of materials, parts, containers, etc., consumed	\$1,000.. 44 303 161	Gross book value of total assets at end of year	\$1,000.. 28 165 035
Cost of resales	\$1,000.. 1 654 552	Total depreciation during year ²	\$1,000.. 1 973 996
Cost of fuels	\$1,000.. 359 311	Total rental payments ²	\$1,000.. 621 976
Cost of purchased electricity	\$1,000.. 675 238	Buildings and other structures rental payments ²	\$1,000.. 209 294
Cost of contract work	\$1,000.. 586 965	Machinery and equipment rental payments ²	\$1,000.. 412 682

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

- 2269 Finishing plants, n.e.c.
- 2282 Yarn throwing and winding mills (pt)
- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)
- 5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

MISSOURI

Cameron is in Clinton and DeKalb Counties.

Cape Girardeau is in Cape Girardeau and Scott Counties.

Centralia is in Audrain and Boone Counties.

Crawford County is the only county outside New England that is split by an MA boundary. Sullivan city, in Crawford and Franklin Counties, is completely within the St. Louis, MO-IL MSA; the remainder of Crawford County outside of Sullivan city is not in any MA. However, Crawford County is excluded from economic census data tabulations for the St. Louis, MO-IL MSA.

Excelsior Springs is in Clay and Ray Counties.

Hannibal is in Marion and Ralls Counties.

Independence is in Clay and Jackson Counties.

Jefferson City is in Callaway and Cole Counties.

Joplin is in Jasper and Newton Counties.

Kansas City is in Cass, Clay, Jackson, and Platte Counties.

Lee's Summit is in Cass and Jackson Counties.

Marceline is in Chariton and Linn Counties.

Monett is in Barry and Lawrence Counties.

Monroe City is in Marion, Monroe, and Ralls Counties.

Mountain Grove is in Texas and Wright Counties.

Oak Grove is in Jackson and Lafayette Counties.

Osage Beach is in Camden and Miller Counties.

Park Hills resulted from the merger of Flat River (reported in the 1992 Economic Census) and Elvins, Esther, and Rivermines (not populous enough for separate tabulation in the 1992 Economic Census) in January 1994.

Pacific is in Franklin and St. Louis Counties.

Portageville is in New Madrid and Pemiscot Counties.

Scott City is in Cape Girardeau and Scott Counties.

Sikeston is in New Madrid and Scott Counties.

Springfield is in Christian and Greene Counties.

Sugar Creek is in Clay and Jackson Counties.

Sullivan is in Crawford and Franklin Counties; see "Crawford County."

Vanadalia is in Audrain and Ralls Counties.

Wildwood was incorporated in September 1995.

Windsor is in Henry and Pettis Counties.

Appendix E. Metropolitan Areas

MISSOURI

Columbia, MO MSA

Boone County, MO

Joplin, MO MSA

Jasper County, MO

Newton County, MO

Kansas City, MO—KS MSA

Johnson County, KS

Leavenworth County, KS

Miami County, KS

Wyandotte County, KS

Cass County, MO

Clay County, MO

Clinton County, MO

Jackson County, MO

Lafayette County, MO

Platte County, MO

Ray County, MO

St. Joseph, MO MSA

Andrew County, MO

Buchanan County, MO

St. Louis, MO—IL MSA

Clinton County, IL

Jersey County, IL

Madison County, IL

Monroe County, IL

St. Clair County, IL

Franklin County, MO

Jefferson County, MO

Lincoln County, MO

St. Charles County, MO

St. Louis County, MO

Warren County, MO

St. Louis, MO (IC)

Springfield, MO MSA

Christian County, MO

Greene County, MO

Webster County, MO

Mississippi

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Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
MISSISSIPPI													
31-33	Manufacturing	-	3 008	1 282	227 800	5 599 392	182 630	362 135	3 905 826	17 088 506	22 563 374	39 658 260	1 416 508
311	Food mfg.....	-	204	90	26 875	488 611	23 127	46 293	362 168	1 875 013	3 043 799	4 919 854	96 156
3111	Animal food mfg.....	-	25	10	564	12 635	408	862	9 098	114 688	298 362	413 154	4 853
31111	Animal food mfg.....	-	25	10	564	12 635	408	862	9 098	114 688	298 362	413 154	4 853
311111	Dog & cat food mfg...	-	1	1	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg.....	-	24	9	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling....	-	11	9	871	25 775	671	1 509	16 570	246 274	751 803	989 333	17 041
31121	Flour milling & malt mfg..	-	4	3	e	D	D	D	D	D	D	D	11 259
311212	Rice milling.....	-	2	2	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg.....	-	7	6	e	D	D	D	D	D	D	D	5 782
311222	Soybean processing..	-	3	3	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing.....	-	4	3	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	9	4	1	c	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	9	4	1	c	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	9	4	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	5	5	489	12 191	231	482	5 144	59 906	72 792	132 861	D
31151	Dairy product (except frozen) mfg.....	-	4	4	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	1	3	3	e	D	D	D	D	D	D	D	1 185
31152	Ice cream & frozen dessert mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	61	34	18 605	319 136	16 550	33 272	250 983	1 035 868	1 503 062	2 547 153	54 419
31161	Animal slaughtering & processing.....	-	61	34	18 605	319 136	16 550	33 272	250 983	1 035 868	1 503 062	2 547 153	54 419
311611	Animal (except poultry) slaughtering.....	-	23	6	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	2	9	3	c	D	D	D	D	D	D	D	552
311613	Rendering & meat byproduct processing.....	-	4	3	248	6 400	134	298	3 155	53 513	17 346	71 808	D
311615	Poultry processing....	-	25	22	15 952	233 735	14 535	27 873	199 256	664 841	1 009 276	1 672 070	29 972
3117	Seafood product preparation & packaging..	2	31	19	2 800	45 360	2 387	4 384	32 621	178 542	244 564	423 507	7 135
31171	Seafood product preparation & packaging.....	2	31	19	2 800	45 360	2 387	4 384	32 621	178 542	244 564	423 507	7 135
311712	Fresh & frozen seafood processing..	2	29	18	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	42	4	893	20 529	519	1 022	10 803	42 687	27 870	71 622	1 445
31181	Bread & bakery product mfg.....	-	40	4	f	D	D	D	D	D	D	D	D
311811	Retail bakeries.....	6	30	-	108	1 188	74	141	638	2 684	1 687	4 375	133
311812	Commercial bakeries..	-	8	4	770	18 902	435	865	9 951	39 211	24 892	65 165	1 247
3119	Other food mfg.....	-	20	8	2 481	50 256	2 191	4 429	34 451	181 696	136 641	318 117	8 744
31191	Snack food mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg..	-	4	1	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
311942	Spice & extract mfg...	-	1	1	c	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	11	6	g	D	D	D	D	D	D	D	4 978
311999	All other miscellaneous food mfg.....	1	10	6	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	25	4	645	16 828	213	449	5 461	84 711	121 350	205 809	2 480
3121	Beverage mfg.....	-	25	4	645	16 828	213	449	5 461	84 711	121 350	205 809	2 480
31211	Soft drink & ice mfg.....	-	23	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	4	4	567	14 587	160	336	4 212	77 876	114 425	192 088	2 024
313	Textile mills.....	-	27	8	2 592	71 187	2 351	4 917	60 071	261 623	227 644	483 403	10 567
3132	Fabric mills.....	-	13	7	2 529	69 850	2 299	4 824	59 135	257 463	223 769	475 147	10 415
31321	Broadwoven fabric mills..	-	7	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	7	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	-	3	3	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills..	-	3	3	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills.....	-	3	2	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSISSIPPI—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	—	58	25	3 343	66 181	2 777	5 894	48 156	194 873	199 864	392 926	13 194
3141	Textile furnishings mills	—	22	9	1 961	38 088	1 674	3 733	28 066	126 862	141 930	267 871	3 671
31411	Carpet & rug mills	—	1	1	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	1	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	21	8	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	9	6	1 392	26 051	1 209	2 942	20 035	104 480	131 911	236 187	3 048
3149	Other textile product mills	2	36	16	1 382	28 093	1 103	2 161	20 090	68 011	57 934	125 055	9 523
31491	Textile bag & canvas mills	1	12	2	227	3 836	205	371	2 836	7 825	4 751	12 923	D
314911	Textile bag mills	—	1	1	c	D	D	D	D	D	D	D	D
314912	Canvas & related product mills	2	11	1	c	D	D	D	D	D	D	D	D
31499	All other textile product mills	2	24	14	1 155	24 257	898	1 790	17 254	60 186	53 183	112 132	D
314991	Rope, cordage, & twine mills	—	5	4	220	4 700	182	412	3 512	12 529	9 493	21 431	D
314999	All other miscellaneous textile product mills	2	19	10	935	19 557	716	1 378	13 742	47 657	43 690	90 701	5 715
315	Apparel mfg	1	148	114	20 390	285 749	17 548	32 084	223 711	824 736	836 202	1 651 442	16 929
3151	Apparel knitting mills	—	11	6	1 596	29 832	1 175	2 260	18 547	119 533	76 760	194 746	3 427
31511	Hosiery & sock mills	—	4	2	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	—	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	7	4	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	4	3	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	3	1	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	117	94	17 480	234 948	15 170	27 565	187 107	673 356	701 804	1 367 413	12 652
31521	Cut & sew apparel contractors	2	37	28	4 421	61 548	3 961	7 416	50 736	103 506	29 723	129 968	3 142
315211	Men's & boys' cut & sew apparel contractors	1	21	18	3 265	42 940	2 980	5 631	37 213	67 997	23 267	88 523	2 543
315212	Women's, girls', & infants' cut & sew apparel contractors	3	16	10	1 156	18 608	981	1 785	13 523	35 509	6 456	41 445	599
31522	Men's & boys' cut & sew apparel mfg	2	59	49	9 384	119 262	8 010	14 189	95 392	414 209	410 649	815 942	7 316
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	9	2	1	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	14	10	1 267	15 969	984	1 657	13 863	63 713	49 151	113 414	709
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	2	13	10	2 888	36 035	2 545	5 293	30 030	127 078	167 783	284 398	2 011
315225	Men's & boys' cut & sew work clothing mfg	2	22	21	3 880	52 143	3 353	5 523	40 232	181 723	166 182	345 230	3 989
315228	Men's & boys' cut & sew other outerwear mfg	1	8	7	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	14	10	2 660	39 946	2 324	4 364	30 497	97 480	214 619	315 081	1 450
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	1	1	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	1	10	7	2 130	31 850	1 830	3 415	23 150	52 160	163 559	214 207	D
31529	Other cut & sew apparel mfg	—	7	7	1 015	14 192	875	1 596	10 482	58 161	46 813	106 422	744
315291	Infants' cut & sew apparel mfg	—	4	4	f	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	3	3	3	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	20	14	1 314	20 969	1 203	2 259	18 057	31 847	57 638	89 283	850
31599	Apparel accessories & other apparel mfg	2	20	14	1 314	20 969	1 203	2 259	18 057	31 847	57 638	89 283	850
315991	Hat, cap, & millinery mfg	—	2	2	c	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	1	10	9	889	13 631	842	1 599	12 809	15 860	37 825	53 054	D
315999	Other apparel accessories & other apparel mfg	3	8	3	e	D	D	D	D	D	D	D	445

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MISSISSIPPI—Con.													
31-33	Manufacturing—Con.												
316	Leather & allied product mfg .	3	9	4	351	6 498	303	543	4 705	21 350	19 234	40 719	276
3162	Footwear mfg	—	3	1	c	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	1	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	—	1	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	1	377	168	18 525	456 179	15 527	32 959	343 465	1 277 905	2 067 907	3 335 469	121 445
3211	Sawmills & wood preservation	1	163	87	6 645	165 868	5 866	12 759	135 579	527 322	1 113 965	1 639 716	71 331
32111	Sawmills & wood preservation	1	163	87	6 645	165 868	5 866	12 759	135 579	527 322	1 113 965	1 639 716	71 331
321113	Sawmills	1	139	75	6 015	150 886	5 388	11 830	126 094	465 874	982 200	1 446 226	68 579
321114	Wood preservation	1	24	12	630	14 982	478	929	9 485	61 448	131 765	193 490	2 752
3212	Veneer, plywood, & engineered wood product mfg	—	34	23	4 140	123 273	3 573	8 180	99 018	359 822	484 038	839 305	32 739
32121	Veneer, plywood, & engineered wood product mfg	—	34	23	4 140	123 273	3 573	8 180	99 018	359 822	484 038	839 305	32 739
321211	Hardwood veneer & plywood mfg	—	7	4	247	5 474	194	356	2 894	18 528	20 652	39 064	654
321212	Softwood veneer & plywood mfg	—	9	8	1 936	63 785	1 769	4 194	55 770	107 367	272 043	377 562	6 396
321219	Reconstituted wood product mfg	—	10	8	1 812	50 849	1 505	3 428	38 660	228 813	183 755	409 975	25 190
3219	Other wood product mfg	2	180	58	7 740	167 038	6 088	12 020	108 868	390 761	469 904	856 448	17 375
32191	Millwork	—	71	25	1 824	37 877	1 517	2 910	27 479	84 668	149 112	231 968	5 705
321911	Wood window & door mfg	—	11	6	467	10 080	348	642	6 151	20 725	30 420	51 644	784
321912	Cut stock, resawing lumber, & planing	1	45	13	814	16 264	692	1 305	12 017	43 960	90 837	132 416	3 324
321918	Other millwork (including flooring)	—	15	6	543	11 533	477	963	9 311	19 983	27 855	47 908	1 597
32192	Wood container & pallet mfg	1	57	14	985	16 162	863	1 526	11 566	43 129	35 875	79 042	1 558
321920	Wood container & pallet mfg	1	57	14	985	16 162	863	1 526	11 566	43 129	35 875	79 042	1 558
32199	All other wood product mfg	3	52	19	4 931	112 999	3 708	7 584	69 823	262 964	284 917	545 438	10 112
321991	Manufactured home (mobile home) mfg	1	9	8	2 887	71 377	2 134	4 125	47 323	118 028	200 012	318 486	D
321992	Prefabricated wood building mfg	1	6	2	195	4 854	166	234	2 076	10 794	12 952	24 282	D
321999	All other miscellaneous wood product mfg	6	37	9	1 849	36 768	1 408	3 225	20 424	134 142	71 953	202 670	4 822
322	Paper mfg	—	62	45	9 140	355 191	7 199	15 111	255 162	1 046 170	1 572 298	2 618 891	105 137
3221	Pulp, paper, & paperboard mills	—	10	10	4 223	205 535	3 345	7 125	150 828	672 423	993 631	1 668 776	71 996
32211	Pulp mills	—	3	3	1 347	59 787	1 078	2 250	45 097	273 628	295 024	568 282	17 379
322110	Pulp mills	—	3	3	1 347	59 787	1 078	2 250	45 097	273 628	295 024	568 282	17 379
32212	Paper mills	—	5	5	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	4	4	1 722	85 240	1 336	2 872	61 822	207 508	313 311	527 353	22 033
322122	Newsprint mills	—	1	1	c	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	52	35	4 917	149 656	3 854	7 986	104 334	373 747	578 667	950 115	33 141
32221	Paperboard container mfg	1	28	24	2 657	79 175	2 188	4 589	57 651	172 844	336 798	505 618	18 256
322211	Corrugated & solid fiber box mfg	1	24	20	2 186	64 593	1 775	3 652	45 436	143 521	247 801	388 150	15 998
322212	Folding paperboard box mfg	—	3	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	6	5	962	39 542	733	1 656	28 269	115 747	128 412	250 645	D
322222	Coated & laminated paper mfg	—	2	1	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	13	4	1 051	22 016	725	1 242	11 098	49 827	66 006	108 838	3 692
322231	Die-cut paper & paperboard office supplies mfg	1	9	2	c	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	3	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	5	2	247	8 923	208	499	7 316	35 329	47 451	85 014	D
322291	Sanitary paper product mfg	—	3	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSISSIPPI—Con.												
	Manufacturing—Con.												
323	Printing & related support activities	1	216	35	4 371	117 281	3 485	6 523	83 189	310 505	237 580	548 029	27 535
3231	Printing & related support activities	1	216	35	4 371	117 281	3 485	6 523	83 189	310 505	237 580	548 029	27 535
32311	Printing	1	205	33	4 241	113 776	3 380	6 355	80 702	302 569	235 614	538 136	27 083
323110	Commercial												
323111	lithographic printing ..	1	105	17	1 810	47 172	1 399	2 574	33 837	95 990	64 471	161 300	10 976
323111	Commercial gravure printing	1	5	3	1 118	35 639	978	1 955	28 086	76 819	66 975	143 101	3 992
323113	Commercial screen printing	1	25	4	195	4 535	145	253	2 363	9 417	7 267	16 657	360
323114	Quick printing	3	37	2	205	3 930	142	187	2 110	7 951	4 909	12 891	727
323116	Manifold business form printing	-	3	2	c	D	D	D	D	D	D	D	D
323118	Blankbook, looseleaf binder, & device mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
323119	Other commercial printing	1	20	2	143	3 512	104	167	2 423	5 428	9 887	15 225	321
32312	Support activities for printing	2	11	2	130	3 505	105	168	2 487	7 936	1 966	9 893	452
324	Petroleum & coal products mfg	-	30	10	1 965	89 769	1 306	2 785	56 631	786 050	2 116 018	2 899 815	110 002
3241	Petroleum & coal products mfg	-	30	10	1 965	89 769	1 306	2 785	56 631	786 050	2 116 018	2 899 815	110 002
32411	Petroleum refineries	-	5	5	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	5	5	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	1	16	2	e	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	2	14	1	c	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	-	2	1	c	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	5	9	3	221	9 000	145	279	5 185	34 411	143 841	184 560	D
324191	Petroleum lubricating oil & grease mfg	5	7	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg	1	114	50	7 685	292 665	5 265	11 501	173 191	1 547 825	1 943 905	3 489 205	337 493
3251	Basic chemical mfg	-	26	11	2 046	91 402	1 474	3 305	57 787	656 881	641 981	1 299 073	152 470
32512	Industrial gas mfg	2	11	3	c	D	D	D	D	D	D	D	2 747
325120	Industrial gas mfg	2	11	3	c	D	D	D	D	D	D	D	2 747
32513	Dye & pigment mfg	-	2	2	g	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	2	2	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	6	3	367	16 484	144	402	6 971	85 817	134 715	219 962	4 518
325188	All other basic inorganic chemical mfg	-	6	3	367	16 484	144	402	6 971	85 817	134 715	219 962	4 518
32519	Other basic organic chemical mfg	-	7	3	353	14 356	260	678	5 995	95 415	119 370	214 300	D
325199	All other basic organic chemical mfg	-	5	3	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	14	9	1 193	49 596	789	1 914	32 919	237 666	578 037	824 737	43 342
32521	Resin & synthetic rubber mfg	3	12	9	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	3	10	7	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	8	5	1 057	46 684	648	1 513	21 373	181 936	205 098	375 544	D
32531	Fertilizer mfg	-	5	2	f	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	-	2	1	f	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	2	1	e	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	3	3	c	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	3	3	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	8	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	8	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	5	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	11	4	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	8	4	580	20 017	365	815	10 397	117 206	70 430	185 704	2 861
325510	Paint & coating mfg	-	8	4	580	20 017	365	815	10 397	117 206	70 430	185 704	2 861

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSISSIPPI—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	20	7	826	24 672	580	1 248	14 041	156 406	111 577	267 373	D
32561	Soap & cleaning compound mfg	1	17	5	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	8	6	2	226	5 835	139	349	2 290	18 829	14 156	32 173	1 597
325612	Polish & other sanitation good mfg ..	—	8	2	e	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	—	3	1	c	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	3	2	c	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	3	2	c	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	27	11	878	29 970	614	1 234	17 903	131 986	289 639	424 987	20 100
32599	All other chemical product & preparation mfg	—	25	11	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ...	—	9	5	468	15 369	357	750	9 656	70 715	193 847	264 964	16 656
325998	All other miscellaneous chemical product & preparation mfg	1	13	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	171	99	12 004	314 226	10 100	20 068	239 003	849 677	1 073 950	1 923 585	90 100
3261	Plastics product mfg	1	126	81	7 749	180 745	6 529	12 484	129 330	519 592	706 061	1 222 939	50 446
32611	Unsupported plastics film, sheet, & bag mfg ..	2	9	4	676	21 738	529	1 158	15 206	37 836	68 568	106 245	2 179
326111	Unsupported plastics bag mfg	7	4	2	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	2	519	17 282	405	822	12 251	27 476	55 942	82 667	1 017
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	9	5	325	8 345	270	479	6 329	39 261	113 963	150 668	11 685
326121	Unsupported plastics profile shape mfg	—	2	1	c	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	—	7	4	c	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	5	12	5	335	7 708	270	488	5 494	19 497	27 062	46 998	2 276
326140	Polystyrene foam product mfg	5	12	5	335	7 708	270	488	5 494	19 497	27 062	46 998	2 276
32615	Urethane & other foam product (except polystyrene) mfg	2	26	24	1 997	39 534	1 704	3 137	27 409	108 256	208 174	317 224	9 010
326150	Urethane & other foam product (except polystyrene) mfg	2	26	24	1 997	39 534	1 704	3 137	27 409	108 256	208 174	317 224	9 010
32619	Other plastics product mfg	1	66	42	4 380	102 324	3 727	7 169	74 099	308 754	283 165	589 699	25 021
326191	Plastics plumbing fixture mfg	4	5	4	c	D	D	D	D	D	D	D	165
326192	Resilient floor covering mfg	—	1	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	60	37	3 983	89 162	3 437	6 634	63 580	263 830	251 456	515 768	D
3262	Rubber product mfg	1	45	18	4 255	133 481	3 571	7 584	109 673	330 085	367 889	700 646	39 654
32621	Tire mfg	1	15	3	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	1	3	3	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	2	1	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	2	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	2	28	14	1 896	41 595	1 521	2 738	28 741	93 796	90 041	183 511	D
326299	All other rubber product mfg	1	24	13	1 848	40 791	1 496	2 688	28 165	92 098	88 724	180 489	21 611
327	Nonmetallic mineral product mfg	1	181	48	5 109	129 442	4 120	8 231	93 346	361 632	372 779	729 401	35 199
3271	Clay product & refractory mfg	—	25	9	1 260	28 993	1 091	1 890	20 833	73 124	58 849	134 677	3 732
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	17	2	755	16 232	686	1 081	12 875	42 760	39 605	84 112	1 594
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	16	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSISSIPPI—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3271	Clay product & refractory mfg—Con.												
32712	Clay building material & refractories mfg	—	8	7	505	12 761	405	809	7 958	30 364	19 244	50 565	2 138
327121	Brick & structural clay tile mfg	—	7	6	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	8	3	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	8	3	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	8	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	119	30	2 372	57 104	1 809	3 700	39 219	164 244	163 666	326 192	16 396
32731	Cement mfg	—	1	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	1	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg .	2	86	15	1 382	30 918	1 041	2 118	22 262	72 541	107 230	179 846	10 141
327320	Ready-mix concrete mfg	2	86	15	1 382	30 918	1 041	2 118	22 262	72 541	107 230	179 846	10 141
32733	Concrete pipe, brick, & block mfg	1	13	7	e	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg	5	7	2	c	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	—	6	5	266	7 311	203	419	4 420	21 933	13 368	35 475	D
32739	Other concrete product mfg	—	19	7	448	10 968	366	742	7 231	39 873	25 084	65 103	1 942
327390	Other concrete product mfg	—	19	7	448	10 968	366	742	7 231	39 873	25 084	65 103	1 942
3279	Other nonmetallic mineral product mfg	—	27	6	1 209	37 512	1 025	2 326	29 708	109 159	125 487	228 556	14 489
32799	All other nonmetallic mineral product mfg . . .	—	26	6	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	7	5	1 102	35 137	952	2 175	28 028	103 724	119 194	216 763	13 910
331	Primary metal mfg	—	35	24	4 261	119 939	3 516	7 637	91 533	384 423	573 228	947 955	44 838
3311	Iron & steel mills & ferroalloy mfg	—	2	1	c	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	1	c	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	7	6	817	21 283	718	1 514	16 535	67 859	85 988	151 995	6 802
33121	Iron & steel pipes & tubes mfg from purchased steel	—	3	3	521	14 355	431	930	10 337	32 418	52 311	82 744	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	3	3	521	14 355	431	930	10 337	32 418	52 311	82 744	D
33122	Rolling & drawing of purchased steel	—	4	3	296	6 928	287	584	6 198	35 441	33 677	69 251	D
331222	Steel wire drawing	—	2	2	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing . .	—	8	6	1 213	34 939	968	2 055	25 999	60 008	122 414	183 789	10 334
33131	Alumina & aluminum production & processing	—	8	6	1 213	34 939	968	2 055	25 999	60 008	122 414	183 789	10 334
331314	Secondary smelting & alloying of aluminum .	—	3	1	c	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	4	4	922	27 544	741	1 571	20 707	46 341	93 561	141 254	8 717
331319	Other aluminum rolling & drawing	—	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	4	911	25 223	710	1 587	17 923	134 590	287 014	418 421	D
33142	Copper rolling, drawing, extruding, & alloying . .	—	3	3	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	—	3	3	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . .	—	2	1	c	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	MISSISSIPPI—Con.													
31-33	Manufacturing—Con.													
331	Primary metal mfg—Con.													
3315	Foundries	1	13	7	g	D	D	D	D	D	D	D	19 238	
33151	Ferrous metal foundries .	—	8	4	e	D	D	D	D	D	D	D	D	
331512	Steel investment foundries	—	2	2	e	D	D	D	D	D	D	D	D	
331513	Steel foundries (except investment)	—	3	1	c	D	D	D	D	D	D	D	D	
33152	Nonferrous metal foundries	1	5	3		621	17 086	554	1 259	14 021	34 683	27 387	61 503	D
331521	Aluminum die-casting foundries	9	1	1	c	D	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	—	2	1	e	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	386	128		14 871	390 545	11 427	22 381	258 875	1 110 975	1 081 974	2 151 858	47 741
3321	Forging & stamping	—	19	12		1 993	52 057	1 347	2 214	26 988	122 496	78 063	199 419	4 418
33211	Forging & stamping	—	19	12		1 993	52 057	1 347	2 214	26 988	122 496	78 063	199 419	4 418
332112	Nonferrous forging	—	1	1	g	D	D	D	D	D	D	D	D	D
332116	Metal stamping	1	14	8		741	16 250	568	1 128	10 654	42 382	37 834	80 049	2 235
3322	Cutlery & handtool mfg	—	7	2		190	5 954	148	319	3 772	12 145	9 443	22 458	533
33221	Cutlery & handtool mfg	—	7	2		190	5 954	148	319	3 772	12 145	9 443	22 458	533
332213	Saw blade & handsaw mfg	—	4	2		181	5 799	140	310	3 670	11 811	9 221	21 899	511
3323	Architectural & structural metals mfg	—	116	48		4 770	116 928	3 662	7 478	73 235	350 274	375 593	722 207	12 925
33231	Plate work & fabricated structural product mfg	—	59	25		2 246	65 960	1 549	3 407	36 385	187 611	234 883	421 786	5 793
332311	Prefabricated metal building & component mfg	—	14	7		959	30 025	568	1 314	13 454	80 187	104 678	185 322	2 489
332312	Fabricated structural metal mfg	1	32	14		1 090	30 456	831	1 831	19 308	95 469	119 314	212 731	2 934
332313	Plate work mfg	4	13	4		197	5 479	150	262	3 623	11 955	10 891	23 733	370
33232	Ornamental & architectural metal products mfg	—	57	23		2 524	50 968	2 113	4 071	36 850	162 663	140 710	300 421	7 132
332321	Metal window & door mfg	—	18	7		1 328	23 530	1 208	2 521	19 016	79 689	72 265	151 739	2 781
332322	Sheet metal work mfg	—	24	13		1 073	24 627	835	1 424	16 000	77 899	63 671	138 775	3 506
332323	Ornamental & architectural metal work mfg	8	15	3		123	2 811	70	126	1 834	5 075	4 774	9 907	845
3324	Boiler, tank, & shipping container mfg	—	19	15		2 323	75 260	1 841	3 711	56 037	262 343	341 850	566 983	8 149
33241	Power boiler & heat exchanger mfg	—	7	6		1 279	37 399	1 015	1 924	28 246	113 664	68 496	148 060	2 203
332410	Power boiler & heat exchanger mfg	—	7	6		1 279	37 399	1 015	1 924	28 246	113 664	68 496	148 060	2 203
33242	Metal tank (heavy gauge) mfg	—	6	4		487	15 810	340	748	9 551	29 377	37 869	68 043	1 882
332420	Metal tank (heavy gauge) mfg	—	6	4		487	15 810	340	748	9 551	29 377	37 869	68 043	1 882
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	5		557	22 051	486	1 039	18 240	119 302	235 485	350 880	4 064
332431	Metal can mfg	—	4	4	e	D	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	15	10		1 613	37 873	1 375	2 936	30 372	106 521	90 040	195 929	5 037
33251	Hardware mfg	—	15	10		1 613	37 873	1 375	2 936	30 372	106 521	90 040	195 929	5 037
332510	Hardware mfg	—	15	10		1 613	37 873	1 375	2 936	30 372	106 521	90 040	195 929	5 037
3326	Spring & wire product mfg	—	10	3		652	16 007	440	831	10 030	66 312	41 268	110 719	1 972
33261	Spring & wire product mfg	—	10	3		652	16 007	440	831	10 030	66 312	41 268	110 719	1 972
332612	Spring (light gauge) mfg	—	4	2	c	D	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	5	1	e	D	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	162	21		1 886	45 335	1 520	2 675	31 698	72 004	47 245	117 788	8 601
33271	Machine shops	3	149	15		1 333	34 612	1 043	1 790	23 897	59 632	25 374	83 756	7 245
332710	Machine shops	3	149	15		1 333	34 612	1 043	1 790	23 897	59 632	25 374	83 756	7 245
33272	Turned product & screw, nut, & bolt mfg	—	13	6		553	10 723	477	885	7 801	12 372	21 871	34 032	1 356
332721	Precision turned product mfg	—	9	4		397	7 477	337	630	5 196	7 128	18 982	25 679	1 216
332722	Bolt, nut, screw, rivet, & washer mfg	—	4	2		156	3 246	140	255	2 605	5 244	2 889	8 353	140

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSISSIPPI—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	—	18	8	561	17 298	442	854	11 083	50 327	49 360	98 324	1 046
33281	Coating, engraving, heat treating, & allied activities.....	—	18	8	561	17 298	442	854	11 083	50 327	49 360	98 324	1 046
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	—	9	5	413	14 053	324	624	8 981	43 224	46 950	88 873	899
332813	Electroplating, plating, polishing, anodizing, & coloring	—	8	3	c	D	D	D	D	D	D	D	147
3329	Other fabricated metal product mfg.....	3	20	9	883	23 833	652	1 363	15 660	68 553	49 112	118 031	5 060
33291	Metal valve mfg.....	4	6	4	565	15 793	403	872	9 777	44 299	32 297	76 908	2 954
332911	Industrial valve mfg...	2	5	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	9	1	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	14	5	318	8 040	249	491	5 883	24 254	16 815	41 123	2 106
332996	Fabricated pipe & pipe fitting mfg	—	2	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	1	10	2	126	3 069	106	201	2 226	6 222	4 201	10 454	719
333	Machinery mfg	—	185	84	15 568	453 560	11 777	24 069	297 042	1 136 209	1 281 256	2 480 941	65 717
3331	Agriculture, construction, & mining machinery mfg....	—	37	21	4 190	101 419	3 297	6 377	65 185	239 719	402 832	650 518	11 204
33311	Agricultural implement mfg	—	29	16	2 750	63 407	2 289	4 927	47 008	177 980	315 688	496 785	6 346
333111	Farm machinery & equipment mfg	1	22	11	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	7	5	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	1	2	2	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	1	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	27	10	848	28 992	586	1 209	17 722	79 749	60 551	140 956	2 909
33321	Sawmill & woodworking machinery mfg	—	7	3	436	14 907	325	669	9 556	51 620	31 781	83 257	1 464
333210	Sawmill & woodworking machinery mfg	—	7	3	436	14 907	325	669	9 556	51 620	31 781	83 257	1 464
33329	Other industrial machinery mfg	—	19	7	e	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	3	3	246	7 963	168	356	5 303	14 132	14 296	29 350	723
3333	Commercial & service industry machinery mfg ..	—	13	6	763	18 111	541	1 011	11 314	75 000	63 484	139 006	D
33331	Commercial & service industry machinery mfg	—	13	6	763	18 111	541	1 011	11 314	75 000	63 484	139 006	D
333314	Optical instrument & lens mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	8	4	650	15 183	449	821	9 389	69 516	60 773	130 893	800
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	13	11	4 693	117 453	3 874	7 908	85 940	266 849	288 281	560 796	21 097
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	13	11	4 693	117 453	3 874	7 908	85 940	266 849	288 281	560 796	21 097
333411	Air purification equipment mfg	7	3	2	e	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	—	1	1	c	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	8	7	4 209	107 557	3 484	7 088	78 961	232 867	275 386	514 055	20 048

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSISSIPPI—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	1	45	10	686	19 625	520	984	13 377	50 943	28 724	77 617	2 950
33351	Metalworking machinery mfg	1	45	10	686	19 625	520	984	13 377	50 943	28 724	77 617	2 950
333511	Industrial mold mfg ...	1	10	1	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	3	27	6	308	8 335	230	362	5 826	17 960	8 008	25 267	1 256
333515	Cutting tool & machine tool accessory mfg ..	-	6	2	161	4 566	115	226	3 063	22 094	14 856	35 691	834
3336	Engine, turbine, & power transmission equipment mfg	-	7	6	991	46 739	815	1 695	36 772	133 833	157 187	345 098	D
33361	Engine, turbine, & power transmission equipment mfg	-	7	6	991	46 739	815	1 695	36 772	133 833	157 187	345 098	D
333618	Other engine equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	43	20	3 397	121 221	2 144	4 885	66 732	290 116	280 197	566 950	18 512
33392	Material handling equipment mfg	-	19	9	1 663	57 384	953	2 274	27 874	107 755	132 720	237 877	8 743
333921	Elevator & moving stairway mfg	-	7	4	891	33 094	456	1 159	13 234	52 113	82 733	134 706	D
333922	Conveyor & conveying equipment mfg	-	6	4	689	21 517	440	1 001	13 084	50 879	43 170	91 299	3 900
33399	All other general-purpose machinery mfg	-	24	11	1 734	63 837	1 191	2 611	38 858	182 361	147 477	329 073	9 769
333991	Power-driven handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	6	3	2	c	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	3	1	f	D	D	D	D	D	D	D	D
333997	Scale & balance (except laboratory) mfg	-	2	2	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	12	4	272	7 354	190	345	4 560	9 792	12 796	22 619	419
334	Computer & electronic product mfg	-	37	17	4 294	98 243	2 913	5 612	56 014	292 469	340 283	628 779	35 894
3341	Computer & peripheral equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	c	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	8	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	7	1 472	29 854	1 196	2 369	19 275	94 184	156 112	250 569	D
33441	Semiconductor & other electronic component mfg	-	12	7	1 472	29 854	1 196	2 369	19 275	94 184	156 112	250 569	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	8	5	f	D	D	D	D	D	D	D	1 257
3345	Navigational, measuring, medical, & control instruments mfg	2	12	3	524	13 482	269	413	6 145	51 547	43 184	96 295	1 736
33451	Navigational, measuring, medical, & control instruments mfg	2	12	3	524	13 482	269	413	6 145	51 547	43 184	96 295	1 736
334511	Search, detection, navigation, & guidance instrument mfg	-	5	1	e	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	9	1	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSISSIPPI—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	69	51	14 930	383 357	11 543	24 363	241 986	1 408 624	1 665 953	3 078 693	94 041
3351	Electric lighting equipment mfg	-	13	8	2 452	63 130	1 854	3 362	35 304	174 914	246 611	422 144	9 274
33512	Lighting fixture mfg	-	13	8	2 452	63 130	1 854	3 362	35 304	174 914	246 611	422 144	9 274
335121	Residential electric lighting fixture mfg ...	1	7	4	284	5 465	214	467	3 616	7 584	19 434	28 919	996
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	8	7	2 959	74 859	2 015	4 312	41 703	354 378	559 488	915 199	32 677
33521	Small electrical appliance mfg	-	6	5	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	c	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	31	20	7 183	191 941	5 711	13 093	127 425	717 246	559 639	1 280 800	42 281
33531	Electrical equipment mfg	-	31	20	7 183	191 941	5 711	13 093	127 425	717 246	559 639	1 280 800	42 281
335311	Power, distribution, & specialty transformer mfg	-	8	6	3 868	101 909	3 129	7 860	66 790	457 995	278 220	739 281	28 602
335312	Motor & generator mfg	-	12	9	2 837	76 234	2 272	4 703	52 907	216 294	230 276	446 218	12 615
335313	Switchgear & switchboard apparatus mfg	1	4	3	e	D	D	D	D	D	D	D	960
3359	Other electrical equipment & component mfg	-	17	16	2 336	53 427	1 963	3 596	37 554	162 086	300 215	460 550	9 809
33591	Battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	6	6	1 090	28 207	909	1 622	17 989	98 225	169 683	266 603	5 117
335921	Fiber optic cable mfg ..	-	1	1	c	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	5	5	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	4	626	9 216	521	926	6 456	34 720	61 902	97 468	2 412
335931	Current-carrying wiring device mfg	-	4	3	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	5	5	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	5	5	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	128	73	25 682	699 512	18 696	36 801	455 422	1 682 511	1 964 201	3 680 838	101 908
3362	Motor vehicle body & trailer mfg	2	22	13	1 295	26 928	1 093	2 044	18 995	65 781	108 927	175 846	4 429
33621	Motor vehicle body & trailer mfg	2	22	13	1 295	26 928	1 093	2 044	18 995	65 781	108 927	175 846	4 429
336211	Motor vehicle body mfg	4	12	7	806	20 358	644	1 292	14 461	40 175	61 901	103 291	3 055
336212	Truck trailer mfg	-	4	3	370	4 428	349	582	3 046	21 876	41 361	63 184	610
336214	Travel trailer & camper mfg	-	6	3	119	2 142	100	170	1 488	3 730	5 665	9 371	764
3363	Motor vehicle parts mfg ...	-	68	41	11 363	269 669	9 904	18 714	206 436	851 511	1 193 669	2 077 902	47 901
33631	Motor vehicle gasoline engine & engine parts mfg	-	15	7	1 266	29 715	1 056	2 007	21 332	101 496	113 302	214 713	4 638
336312	Gasoline engine & engine parts mfg	-	13	6	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	22	16	6 501	161 619	5 865	10 252	129 564	473 646	833 960	1 340 338	23 193
336322	Other motor vehicle electrical & electronic equipment mfg	-	21	16	i	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	3	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	3	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MISSISSIPPI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33635	Motor vehicle transmission & power train parts mfg	5	9	4	393	9 085	298	500	5 514	24 649	22 655	47 319	2 289
336350	Motor vehicle transmission & power train parts mfg	5	9	4	393	9 085	298	500	5 514	24 649	22 655	47 319	2 289
33636	Motor vehicle seating & interior trim mfg	—	4	1	f	D	D	D	D	D	D	D	83
336360	Motor vehicle seating & interior trim mfg ...	—	4	1	f	D	D	D	D	D	D	D	83
33637	Motor vehicle metal stamping	—	1	1	c	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	12	9	1 917	42 358	1 626	3 886	30 945	162 078	138 449	302 146	15 152
336399	All other motor vehicle parts mfg	—	12	9	1 917	42 358	1 626	3 886	30 945	162 078	138 449	302 146	15 152
3366	Ship & boat building	—	24	15	12 854	399 042	7 562	15 838	227 260	757 842	652 779	1 410 508	49 115
33661	Ship & boat building	—	24	15	12 854	399 042	7 562	15 838	227 260	757 842	652 779	1 410 508	49 115
336611	Ship building & repairing	—	17	12	12 535	392 015	7 310	15 400	222 422	737 235	614 471	1 351 706	48 835
336612	Boat building	—	7	3	319	7 027	252	438	4 838	20 607	38 308	58 802	280
337	Furniture & related product mfg	1	368	173	30 270	652 385	25 606	46 890	482 855	1 336 478	1 592 956	2 917 715	48 611
3371	Household & institutional furniture & kitchen cabinet mfg	1	282	122	25 704	557 109	21 773	38 929	408 472	1 103 955	1 341 656	2 433 686	28 524
33711	Wood kitchen cabinet & counter top mfg	3	71	8	785	14 729	653	1 007	10 136	29 190	27 853	56 870	1 035
337110	Wood kitchen cabinet & counter top mfg ...	3	71	8	785	14 729	653	1 007	10 136	29 190	27 853	56 870	1 035
33712	Household & institutional furniture mfg	1	211	114	24 919	542 380	21 120	37 922	398 336	1 074 765	1 313 803	2 376 816	27 489
337121	Upholstered household furniture mfg	—	151	91	20 008	454 413	17 149	30 223	335 017	853 125	1 066 891	1 909 029	18 531
337122	Nonupholstered wood household furniture mfg	3	41	13	2 728	41 725	2 181	4 281	29 015	131 078	143 223	274 028	6 658
337124	Metal household furniture mfg	—	3	2	g	D	D	D	D	D	D	D	D
337125	Household furniture (except wood & metal) mfg	—	2	2	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	14	6	754	15 303	586	1 146	10 934	27 240	32 453	59 737	D
3372	Office furniture (including fixtures) mfg	1	68	40	3 815	78 020	3 323	6 934	63 723	192 483	183 913	376 010	13 693
33721	Office furniture (including fixtures) mfg	1	68	40	3 815	78 020	3 323	6 934	63 723	192 483	183 913	376 010	13 693
337211	Wood office furniture mfg	2	8	5	331	6 273	291	528	5 028	9 932	12 069	22 011	D
337212	Custom architectural woodwork & millwork mfg	—	6	4	117	2 527	87	188	1 805	4 627	2 568	7 251	D
337214	Office furniture (except wood) mfg	1	6	4	1 365	34 536	1 218	3 200	30 211	109 962	98 907	208 524	3 197
337215	Showcase, partition, shelving, & locker mfg	—	48	27	2 002	34 684	1 727	3 018	26 679	67 962	70 369	138 224	10 207
3379	Other furniture related product mfg	2	18	11	751	17 256	510	1 027	10 660	40 040	67 387	108 019	6 394
33791	Mattress mfg	4	14	8	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	4	14	8	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	4	3	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	4	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	178	32	4 929	112 044	3 831	7 024	73 840	294 747	230 993	532 933	11 245
3391	Medical equipment & supplies mfg	2	76	7	1 341	27 760	861	1 369	14 617	39 785	58 253	98 255	2 618
33911	Medical equipment & supplies mfg	2	76	7	1 341	27 760	861	1 369	14 617	39 785	58 253	98 255	2 618
339111	Laboratory apparatus & furniture mfg	1	3	1	c	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	1	13	2	879	18 130	507	759	8 506	27 221	40 496	67 571	1 533
339116	Dental laboratories ...	6	52	3	257	5 714	209	357	3 920	13 482	4 581	18 286	433

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MISSISSIPPI—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . . .	—	102	25	3 588	84 284	2 970	5 655	59 223	254 962	172 740	434 678	8 627
33992	Sporting & athletic goods mfg	1	29	8	1 286	31 953	1 067	2 080	24 544	94 775	48 742	143 356	3 574
339920	Sporting & athletic goods mfg	1	29	8	1 286	31 953	1 067	2 080	24 544	94 775	48 742	143 356	3 574
33993	Doll, toy, & game mfg . . .	—	7	3	e	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	6	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg	—	30	6	363	8 020	252	377	4 251	17 571	18 810	38 709	578
339950	Sign mfg	—	30	6	363	8 020	252	377	4 251	17 571	18 810	38 709	578
33999	All other miscellaneous mfg	—	22	7	1 516	36 848	1 297	2 580	25 424	126 100	81 535	213 136	3 437
339992	Musical instrument mfg	—	3	1	e	D	D	D	D	D	D	D	D
339995	Burial casket mfg	—	4	2	e	D	D	D	D	D	D	D	613
339999	All other miscellaneous mfg	—	14	4	883	21 044	759	1 375	13 319	51 269	43 861	95 218	2 569

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BILOXI-GULFPORT-PASCAGOULA, MS MSA												
	Manufacturing	—	260	81	21 327	685 875	13 864	28 108	409 362	2 412 694	3 387 811	5 785 529	294 076
311	Food mfg	2	30	10	640	14 527	553	1 164	10 429	50 313	82 654	133 005	2 421
3117	Seafood product preparation & packaging . .	2	18	9	569	13 615	493	1 002	9 797	48 493	81 115	129 630	2 357
31171	Seafood product preparation & packaging	2	18	9	569	13 615	493	1 002	9 797	48 493	81 115	129 630	2 357
311712	Fresh & frozen seafood processing . .	2	16	8	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	2	1	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	1	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	11	5	379	9 646	326	724	6 947	22 484	34 734	57 140	937
3219	Other wood product mfg . . .	—	8	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	31	3	309	5 412	202	327	3 338	10 285	5 974	16 243	715
3231	Printing & related support activities	3	31	3	309	5 412	202	327	3 338	10 285	5 974	16 243	715
32311	Printing	3	31	3	309	5 412	202	327	3 338	10 285	5 974	16 243	715

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BILOXI-GULFPORT-PASCAGOULA, MS MSA—Con.												
	Manufacturing—Con.												
324	Petroleum & coal products mfg	-	3	1	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	1	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	18	10		79 679	1 384	3 057	54 716	593 261	555 780	1 146 724	139 386
3251	Basic chemical mfg	-	7	3	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	5	3	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	5	3	2	e	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	8	3		441	8 460	340	475	5 745	11 843	12 691	24 736
3262	Rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	11	5		317	9 769	263	557	6 819	28 273	27 970	56 828
3273	Cement & concrete product mfg	1	8	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	e	D	D	D	D	D	D	D	1 789
3313	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	37	11		825	24 750	606	1 207	16 256	60 415	43 753	97 164
3324	Boiler, tank, & shipping container mfg	-	4	3		455	14 982	321	686	9 429	42 111	32 057	67 108
33241	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	6		838	17 690	682	682	9 987	25 384	33 692	66 448
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4		362	14 432	190	350	5 518	46 060	55 437	101 275
336	Transportation equipment mfg	-	21	8		11 640	363 982	6 495	13 894	198 835	703 347	587 349	1 290 898
3366	Ship & boat building	-	14	7	j	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	14	7	j	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	11	7	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	22	3		345	8 474	292	537	5 662	17 330	16 278	33 619
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HATTIESBURG, MS MSA													
31-33	Manufacturing	1	106	35	5 940	132 724	4 429	8 263	85 308	456 441	699 276	1 153 809	45 698
311	Food mfg.....	-	12	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	5	2	919	9 579	856	907	6 221	17 850	7 405	25 169	D
31161	Animal slaughtering & processing.....	2	5	2	919	9 579	856	907	6 221	17 850	7 405	25 169	D
311615	Poultry processing.....	-	2	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	8	3	2	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
3222	Converted paper product mfg.....	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
32223	Stationery product mfg..	-	2	1	f	D	D	D	D	D	D	D	D
322232	Envelope mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	8	3	336	12 878	229	523	7 787	66 763	81 754	148 670	4 367
327	Nonmetallic mineral product mfg.....	1	16	7	456	6 825	265	485	4 929	18 989	16 875	36 650	1 790
3273	Cement & concrete product mfg.....	1	11	6	412	5 883	237	418	4 292	17 445	15 153	33 368	D
332	Fabricated metal product mfg.....	2	9	2	272	6 182	215	403	4 590	13 338	9 717	23 530	396
333	Machinery mfg.....	-	3	3	399	11 883	326	736	9 601	21 690	25 102	47 472	1 484
335	Electrical equipment, appliance, & component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
JACKSON, MS MSA													
31-33	Manufacturing	-	392	140	19 717	522 361	15 448	30 490	352 203	1 734 858	2 217 656	3 969 239	139 674
311	Food mfg.....	-	22	9	3 979	72 935	3 310	6 576	52 746	242 765	368 608	606 019	11 059
3116	Meat product mfg.....	-	7	5	3 199	52 342	2 691	5 299	40 692	114 416	256 904	365 713	7 693
31161	Animal slaughtering & processing.....	-	7	5	3 199	52 342	2 691	5 299	40 692	114 416	256 904	365 713	7 693
311615	Poultry processing.....	-	5	4	h	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	4	2	e	D	D	D	D	D	D	D	1 704
3121	Beverage mfg.....	-	4	2	e	D	D	D	D	D	D	D	1 704
31211	Soft drink & ice mfg.....	-	4	2	e	D	D	D	D	D	D	D	1 704
312111	Soft drink mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	8	8	3	331	6 763	288	494	5 022	12 992	13 071	26 328	512
3152	Cut & sew apparel mfg....	8	6	3	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	10	9	1 014	29 991	838	1 905	22 917	63 313	166 328	225 924	10 545
3222	Converted paper product mfg.....	-	10	9	1 014	29 991	838	1 905	22 917	63 313	166 328	225 924	10 545
32221	Paperboard container mfg.....	-	9	9	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	8	8	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	53	11	772	23 304	539	959	13 504	44 428	34 114	78 477	4 933
3231	Printing & related support activities.....	3	53	11	772	23 304	539	959	13 504	44 428	34 114	78 477	4 933
32311	Printing.....	4	50	10	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	3	28	4	362	9 548	259	454	6 105	17 715	12 227	29 849	2 449

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JACKSON, MS MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	-	29	11	969	32 752	636	1 389	17 492	225 429	190 247	417 944	17 124
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	7	3	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	6	3	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	-	5	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	7	2	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	5	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	30	13	919	29 475	744	1 533	22 416	96 904	141 941	235 887	11 322
3261	Plastics product mfg	1	24	13	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	15	9	669	22 624	554	1 141	17 666	67 347	50 490	116 561	4 276
326199	All other plastics product mfg	6	12	7	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	26	9	1 269	30 204	1 052	2 132	19 997	70 603	73 770	141 757	10 877
3271	Clay product & refractory mfg	-	6	2	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	5	1	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	5	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	15	6	569	15 516	440	1 144	10 069	32 026	33 638	64 791	6 770
32732	Ready-mix concrete mfg ..	-	7	2	344	9 078	272	734	6 141	15 394	25 438	40 852	D
327320	Ready-mix concrete mfg	-	7	2	344	9 078	272	734	6 141	15 394	25 438	40 852	D
331	Primary metal mfg	-	4	3	565	17 695	458	916	12 763	86 554	54 632	135 148	D
3313	Alumina & aluminum production & processing ..	-	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	68	25	1 757	52 142	1 337	2 818	33 804	138 209	164 547	300 955	4 634
3323	Architectural & structural metals mfg	1	29	12	691	18 328	506	1 148	12 188	43 841	80 358	124 077	1 547
33231	Plate work & fabricated structural product mfg ..	-	16	9	560	15 003	410	969	9 971	37 326	74 674	111 930	880
332312	Fabricated structural metal mfg	-	14	7	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	-	8	6	419	14 656	325	682	9 217	45 423	43 210	87 212	693
33281	Coating, engraving, heat treating, & allied activities	-	8	6	419	14 656	325	682	9 217	45 423	43 210	87 212	693
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	4	3	313	12 299	240	493	7 685	39 699	41 400	79 760	D
333	Machinery mfg	-	28	8	1 660	61 800	1 115	2 509	38 011	217 626	164 015	376 720	8 753
3333	Commercial & service industry machinery mfg ..	-	6	2	e	D	D	D	D	D	D	D	229
33331	Commercial & service industry machinery mfg	-	6	2	e	D	D	D	D	D	D	D	229
333319	Other commercial & service industry machinery mfg	-	4	2	e	D	D	D	D	D	D	D	229
3339	Other general-purpose machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JACKSON, MS MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	14	11	1 315	38 034	1 008	1 900	25 500	134 016	135 725	271 374	7 255
3353	Electrical equipment mfg ..	-	7	4	444	13 424	275	472	7 509	40 224	49 249	90 544	D
33531	Electrical equipment mfg	-	7	4	444	13 424	275	472	7 509	40 224	49 249	90 544	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	4	f	D	D	D	D	D	D	D	3 127
33591	Battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg...	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	3 001	78 338	2 634	4 811	60 432	233 123	479 811	746 876	11 939
3363	Motor vehicle parts mfg ...	-	11	6	3 001	78 338	2 634	4 811	60 432	233 123	479 811	746 876	11 939
33632	Motor vehicle electrical & electronic equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	5	11	8	796	12 011	600	901	7 971	21 507	35 284	63 362	747
3371	Household & institutional furniture & kitchen cabinet mfg	5	5	4	664	9 672	496	729	6 243	17 059	31 798	55 385	587
33712	Household & institutional furniture mfg	5	4	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	9	2	1	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	38	4	316	6 524	237	360	4 125	14 376	10 911	25 382	859
	MEMPHIS, TN-AR-MS MSA												
31-33	Manufacturing	1	1 156	477	58 220	1 868 363	40 561	81 917	1 076 050	6 082 711	8 462 352	14 625 342	505 509
	Memphis, TN-AR-MS MSA (AR Part)	-	45	23	2 323	56 172	1 824	3 584	36 590	224 511	401 064	620 626	21 399
	Memphis, TN-AR-MS MSA (MS Part)	1	131	63	7 232	213 445	5 374	11 549	137 729	565 089	805 064	1 369 616	43 345
	Memphis, TN-AR-MS MSA (TN Part)	-	980	391	48 665	1 598 746	33 363	66 784	901 731	5 293 111	7 256 224	12 635 100	440 765
311	Food mfg	-	60	34	5 398	194 011	3 669	7 623	123 463	847 366	1 129 076	1 976 901	D
3112	Grain & oilseed milling ...	-	7	6	g	D	D	D	D	D	D	D	45 119
31122	Starch & vegetable fats & oils mfg	-	4	4	f	D	D	D	D	D	D	D	D
311221	Wet corn milling	-	1	1	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	1	1	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	8	5	f	D	D	D	D	D	D	D	8 715
31141	Frozen food mfg	-	4	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	4	8	5	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
31161	Animal slaughtering & processing	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
3118	Bakeries & tortilla mfg	1	15	5	1 536	50 692	705	1 287	22 416	123 442	58 008	181 368	4 646
31181	Bread & bakery product mfg	-	14	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	6	5	1 461	49 244	655	1 193	21 472	119 305	53 765	172 981	D

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31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	8	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	9	6	991	41 169	698	1 479	28 329	318 813	347 180	667 829	19 719
3121	Beverage mfg	—	8	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	7	4	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	3	3	e	D	D	D	D	D	D	D	D
31212	Breweries	—	1	1	e	D	D	D	D	D	D	D	D
312120	Breweries	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	28	12	f	D	D	D	D	D	D	D	1 441
3141	Textile furnishings mills	—	13	4	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	13	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	2	2	e	D	D	D	D	D	D	D	D
3149	Other textile product mills	—	15	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	7	4	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	—	4	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	2	22	11	1 944	63 971	966	2 004	15 571	77 889	84 177	157 123	4 124
3152	Cut & sew apparel mfg	2	15	8	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	4	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
315299	All other cut & sew apparel mfg	—	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
321	Wood product mfg	3	50	17	g	D	D	D	D	D	D	D	3 433
3219	Other wood product mfg	3	41	15	1 045	21 559	908	1 716	17 017	41 860	47 574	90 752	2 723
32191	Millwork	3	16	7	674	14 841	591	1 169	12 102	30 271	33 180	64 616	1 438
321918	Other millwork (including flooring) ..	3	9	5	580	11 756	512	1 010	9 487	24 214	26 574	51 999	814
322	Paper mfg	—	36	28	4 348	139 135	3 247	6 988	84 890	326 763	405 708	730 699	34 887
3221	Pulp, paper, & paperboard mills	—	5	5	1 138	49 089	804	1 640	27 237	127 912	154 127	281 982	8 645
32211	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	31	23	3 210	90 046	2 443	5 348	57 653	198 851	251 581	448 717	26 242
32221	Paperboard container mfg	—	20	16	1 849	50 965	1 464	3 119	34 715	106 567	156 015	259 541	D
322211	Corrugated & solid fiber box mfg	—	14	12	1 454	37 940	1 184	2 449	24 677	80 828	132 547	211 987	8 740
322212	Folding paperboard box mfg	—	4	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	7	5	1 180	32 933	830	1 919	18 337	81 389	80 575	163 341	D
322222	Coated & laminated paper mfg	—	3	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	186	47	4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589	26 874
3231	Printing & related support activities	1	186	47	4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589	26 874
32311	Printing	1	160	41	4 392	135 055	3 305	6 447	87 620	318 735	248 470	564 708	25 616
323110	Commercial lithographic printing ..	1	78	26	2 742	84 692	2 140	4 161	55 809	174 130	138 788	310 603	18 882
323114	Quick printing	2	34	3	287	7 118	183	311	3 767	14 478	7 437	22 226	1 243
323116	Manifold business form printing	—	9	4	411	12 681	278	565	7 279	60 139	40 210	100 187	1 224
323119	Other commercial printing	7	12	2	285	9 055	217	465	6 539	20 921	18 008	38 879	1 356
32312	Support activities for printing	3	26	6	359	13 411	274	557	7 377	22 358	5 464	27 881	1 258
323122	Prepress services	3	20	4	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	e	D	D	D	D	D	D	D	D

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31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	2	88	49	7 690	280 830	4 190	8 265	126 180	1 521 772	1 220 295	2 743 960	151 286
3251	Basic chemical mfg	2	15	11	1 905	85 631	945	1 932	39 289	471 166	455 059	941 909	95 576
32518	Other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	5	9	6	1 054	42 249	639	1 320	25 590	187 659	325 241	524 537	D
325199	All other basic organic chemical mfg	5	7	6	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
32521	Resin & synthetic rubber mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
325211	Plastics material & resin mfg	6	5	4	425	13 705	291	627	10 333	60 406	146 207	210 714	7 893
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	6	3	376	14 242	274	564	8 733	44 988	66 841	112 151	D
3254	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
32541	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
325412	Pharmaceutical preparation mfg	1	5	4	2 161	74 981	1 101	1 870	30 454	626 485	82 135	693 915	D
3255	Paint, coating, & adhesive mfg	1	18	11	g	D	D	D	D	D	D	D	6 736
32551	Paint & coating mfg	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
325510	Paint & coating mfg ...	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	16	8	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	5	13	6	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	8	4	3	512	16 644	224	520	5 429	50 067	32 493	82 025	D
325612	Polish & other sanitation good mfg ..	1	7	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	19	7	610	20 005	349	714	8 131	54 349	166 165	218 304	14 159
32599	All other chemical product & preparation mfg	—	12	6	517	16 892	281	572	5 873	44 981	139 610	183 733	13 566
325998	All other miscellaneous chemical product & preparation mfg	—	8	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	49	31	2 664	76 739	2 087	4 308	54 678	241 292	253 420	496 519	18 570
3261	Plastics product mfg	—	40	28	h	D	D	D	D	D	D	D	17 983
32611	Unsupported plastics film, sheet, & bag mfg ..	—	4	3	e	D	D	D	D	D	D	D	1 412
326112	Unsupported plastics packaging film & sheet mfg	—	2	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
326160	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
32619	Other plastics product mfg	—	26	18	1 534	41 626	1 153	2 228	27 816	128 475	127 072	253 976	14 246
326199	All other plastics product mfg	—	21	15	1 406	38 349	1 058	2 001	26 048	122 765	123 123	244 316	14 183
327	Nonmetallic mineral product mfg	2	56	21	1 492	44 912	1 103	2 094	29 575	139 298	108 934	247 656	10 884
3271	Clay product & refractory mfg	3	7	3	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	3	7	3	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	7	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	32	14	838	25 853	569	1 098	14 453	60 483	58 898	118 803	8 097
32732	Ready-mix concrete mfg ..	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
327320	Ready-mix concrete mfg	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
3279	Other nonmetallic mineral product mfg	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D
32799	All other nonmetallic mineral product mfg ...	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN-AR-MS MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	-	14	9	907	29 740	749	1 753	23 716	76 102	122 174	198 928	7 491
3312	Steel product mfg from purchased steel	-	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
33122	Rolling & drawing of purchased steel	-	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
331222	Steel wire drawing	-	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
3313	Alumina & aluminum production & processing	-	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	195	81	6 253	184 820	4 704	9 993	118 581	483 285	587 340	1 067 499	29 381
3321	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
33211	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
3323	Architectural & structural metals mfg	-	68	35	2 637	70 865	1 947	4 131	41 220	166 734	243 084	412 063	8 362
33231	Plate work & fabricated structural product mfg	-	24	11	594	17 602	429	1 024	10 744	41 242	66 856	108 688	1 719
332312	Fabricated structural metal mfg	1	21	10	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	44	24	2 043	53 263	1 518	3 107	30 476	125 492	176 228	303 375	6 643
332321	Metal window & door mfg	-	15	10	987	24 748	725	1 624	13 870	50 925	60 373	112 016	2 395
332322	Sheet metal work mfg	-	24	13	1 015	27 308	762	1 425	16 013	72 119	113 614	186 682	4 101
3324	Boiler, tank, & shipping container mfg	-	14	10	851	30 968	652	1 428	22 504	84 987	153 663	232 685	5 971
33241	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	6	4	301	12 807	256	584	10 946	47 505	120 863	163 938	4 256
332431	Metal can mfg	-	3	3	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	52	11	669	21 852	544	965	13 403	40 468	15 302	55 550	3 226
33271	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
332710	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
3329	Other fabricated metal product mfg	1	17	10	1 054	28 910	730	1 590	19 296	115 311	76 310	190 565	8 724
33291	Metal valve mfg	1	4	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	13	7	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	4	4	386	10 040	261	583	6 172	56 037	38 576	94 073	4 583
332999	All other miscellaneous fabricated metal product mfg	3	8	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	76	36	6 189	189 340	4 640	9 868	115 659	313 144	875 089	1 209 212	22 702
3333	Commercial & service industry machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
333411	Air purification equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	8	5	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MEMPHIS, TN—AR—MS MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	30	16	2 177	81 431	1 342	3 136	39 612	116 455	263 222	378 703	8 291
33392	Material handling equipment mfg	-	16	10	1 822	70 633	1 105	2 661	34 169	96 171	236 820	331 287	D
333921	Elevator & moving stairway mfg	-	4	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	10	8	705	27 961	392	801	10 861	69 481	129 424	199 099	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	31	14	2 634	83 588	1 820	3 595	47 464	197 520	557 568	758 628	21 098
3342	Communications equipment mfg	8	6	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	8	4	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	8	4	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
33451	Navigational, measuring, medical, & control instruments mfg	-	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
335	Electrical equipment, appliance, & component mfg	-	30	14	2 438	65 655	1 557	3 434	40 755	205 229	231 666	431 842	5 724
3351	Electric lighting equipment mfg	-	12	8	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	11	7	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	-	5	2	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	-	4	3	e	D	D	D	D	D	D	D	2 440
3352	Household appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	2	14	4	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	14	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	34	16	1 661	46 199	1 290	2 347	24 852	127 936	148 966	271 725	5 809
3362	Motor vehicle body & trailer mfg	3	7	3	563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
33621	Motor vehicle body & trailer mfg	3	7	3	563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
336211	Motor vehicle body mfg	8	5	2	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	1	22	10	963	28 821	692	1 337	13 641	92 606	93 044	180 102	D
33634	Motor vehicle brake system mfg	-	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN-AR-MS MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	69	24	1 766	41 058	1 432	2 685	28 910	84 619	90 180	182 497	3 960
3371	Household & institutional furniture & kitchen cabinet mfg	2	40	13	680	15 234	571	1 041	11 251	27 910	26 657	55 366	608
33711	Wood kitchen cabinet & counter top mfg	1	23	8	312	6 271	256	492	4 492	12 454	10 379	22 983	299
337110	Wood kitchen cabinet & counter top mfg ...	1	23	8	312	6 271	256	492	4 492	12 454	10 379	22 983	299
33712	Household & institutional furniture mfg	4	17	5	368	8 963	315	549	6 759	15 456	16 278	32 383	309
3372	Office furniture (including fixtures) mfg	—	21	5	490	10 547	378	659	6 980	13 631	21 171	39 389	939
33721	Office furniture (including fixtures) mfg	—	21	5	490	10 547	378	659	6 980	13 631	21 171	39 389	939
337215	Showcase, partition, shelving, & locker mfg	—	6	2	282	5 359	231	369	3 829	4 899	15 043	24 572	D
3379	Other furniture related product mfg	—	8	6	596	15 277	483	985	10 679	43 078	42 352	87 742	2 413
33791	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	5	4	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	5	4	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	99	19	4 073	158 749	2 405	3 757	64 471	469 355	220 678	750 730	32 445
3391	Medical equipment & supplies mfg	—	48	8	2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
33911	Medical equipment & supplies mfg	—	48	8	2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
339112	Surgical & medical instrument mfg	—	8	2	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	7	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	3	51	11	1 146	24 299	861	1 483	15 067	59 199	51 044	110 831	3 698
33992	Sporting & athletic goods mfg	3	8	3	268	7 265	178	368	4 195	23 401	15 228	39 749	D
339920	Sporting & athletic goods mfg	3	8	3	268	7 265	178	368	4 195	23 401	15 228	39 749	D
33995	Sign mfg	2	21	5	e	D	D	D	D	D	D	D	D
339950	Sign mfg	2	21	5	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	8	12	2	406	6 318	333	478	4 397	12 279	11 387	23 769	811
339999	All other miscellaneous mfg	9	10	1	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAMS COUNTY, MS													
31-33	Manufacturing	2	38	11	2 299	76 014	1 910	3 992	58 303	275 199	276 286	549 954	21 826
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32211	Pulp mills	-	2	2	f	D	D	D	D	D	D	D	D
322110	Pulp mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	9	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	9	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	9	1	1	f	D	D	D	D	D	D	D	D
ALCORN COUNTY, MS													
31-33	Manufacturing	-	58	22	4 918	150 831	4 179	8 666	115 428	371 604	535 060	955 637	17 524
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	4	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	4	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	4	2	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	4	614	12 911	580	1 230	11 107	23 586	33 428	57 582	653
3371	Household & institutional furniture & kitchen cabinet mfg	-	10	4	614	12 911	580	1 230	11 107	23 586	33 428	57 582	653
33712	Household & institutional furniture mfg	-	7	3	f	D	D	D	D	D	D	D	D
AMITE COUNTY, MS													
31-33	Manufacturing	2	10	5	691	17 154	609	1 306	14 731	32 997	63 694	97 293	3 086
ATTALA COUNTY, MS													
31-33	Manufacturing	1	22	11	1 267	21 785	926	1 427	12 121	46 819	79 706	119 943	2 719
BOLIVAR COUNTY, MS													
31-33	Manufacturing	-	22	12	2 724	67 028	2 061	3 993	44 181	237 074	178 214	417 762	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CALHOUN COUNTY, MS													
31-33	Manufacturing	-	34	13	1 874	35 388	1 745	3 178	29 632	88 546	213 919	296 218	7 849
315	Apparel mfg	-	4	4	894	12 354	846	1 406	10 463	7 515	94 589	99 342	216
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	12	6	539	9 616	490	841	8 238	41 548	40 175	81 348	1 012
CHICKASAW COUNTY, MS													
31-33	Manufacturing	1	80	33	4 896	93 388	4 326	7 204	75 220	162 359	260 623	420 823	6 265
337	Furniture & related product mfg	-	42	20	3 689	69 291	3 258	5 417	57 421	98 221	174 224	272 004	2 024
3371	Household & institutional furniture & kitchen cabinet mfg	-	38	18	3 585	67 853	3 184	5 314	56 443	95 350	168 902	263 659	D
33712	Household & institutional furniture mfg	-	38	18	3 585	67 853	3 184	5 314	56 443	95 350	168 902	263 659	D
337121	Upholstered household furniture mfg	-	33	17	h	D	D	D	D	D	D	D	1 734
CHOCTAW COUNTY, MS													
31-33	Manufacturing	3	10	5	598	13 932	495	1 112	11 803	44 952	61 267	104 981	1 575
CLAIBORNE COUNTY, MS													
31-33	Manufacturing	2	10	6	629	13 908	523	998	10 279	33 882	54 905	88 643	7 876
CLARKE COUNTY, MS													
31-33	Manufacturing	-	18	11	2 084	51 447	1 825	3 532	38 835	147 706	158 621	304 140	9 350
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
CLAY COUNTY, MS													
31-33	Manufacturing	-	25	11	3 640	113 641	2 805	7 085	74 888	406 239	533 004	925 991	14 406
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	3	802	24 262	660	1 265	19 209	68 507	50 060	93 408	2 295
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
COAHOMA COUNTY, MS													
31-33	Manufacturing	-	28	13	1 353	35 587	1 144	2 419	24 894	85 239	152 818	236 575	4 794

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COPIAH COUNTY, MS													
31-33	Manufacturing	-	32	18	2 735	52 634	2 122	4 246	35 153	141 966	268 679	407 690	12 122
311	Food mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
COVINGTON COUNTY, MS													
31-33	Manufacturing	1	17	6	1 950	32 242	1 735	3 464	26 366	67 867	125 900	194 221	5 490
311	Food mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	g	D	D	D	D	D	D	D	D
DESOTO COUNTY, MS													
31-33	Manufacturing	1	131	63	7 232	213 445	5 374	11 549	137 729	565 089	805 064	1 369 616	43 345
323	Printing & related support activities.....	-	15	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	15	7	f	D	D	D	D	D	D	D	D
32311	Printing.....	-	15	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	3	7	5	777	22 743	510	1 218	14 536	125 375	154 073	277 068	D
326	Plastics & rubber products mfg.....	-	9	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	30	12	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	14	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
FORREST COUNTY, MS													
31-33	Manufacturing	1	84	29	5 170	116 312	3 783	7 081	73 060	419 990	620 309	1 037 051	41 962
311	Food mfg.....	-	11	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	5	2	919	9 579	856	907	6 221	17 850	7 405	25 169	D
31161	Animal slaughtering & processing.....	2	5	2	919	9 579	856	907	6 221	17 850	7 405	25 169	D
311615	Poultry processing.....	-	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
3222	Converted paper product mfg.....	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
32223	Stationery product mfg...	-	2	1	f	D	D	D	D	D	D	D	D
322232	Envelope mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRENADA COUNTY, MS													
31-33	Manufacturing	-	24	14	4 194	109 516	3 364	7 046	81 413	233 593	335 931	571 764	30 453
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	6	6	604	13 357	545	1 099	9 568	27 316	88 579	116 055	12 854
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
HARRISON COUNTY, MS													
31-33	Manufacturing	-	139	38	4 498	133 632	3 525	7 045	89 198	566 763	521 259	1 079 710	D
325	Chemical mfg	-	10	4	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	5	f	D	D	D	D	D	D	D	D
HINDS COUNTY, MS													
31-33	Manufacturing	-	208	69	11 540	314 838	9 002	18 133	217 051	1 001 483	1 458 182	2 484 413	60 380
311	Food mfg	-	12	5	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	18	9	587	19 578	463	915	15 097	72 330	122 488	190 677	D
3261	Plastics product mfg	-	17	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	15	6	677	18 245	508	1 298	11 078	38 942	35 679	73 692	D
3273	Cement & concrete product mfg	1	10	5	f	D	D	D	D	D	D	D	6 770
332	Fabricated metal product mfg	-	40	14	981	30 571	768	1 567	20 483	82 009	94 852	175 290	2 617
333	Machinery mfg	-	12	4	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	4	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
HOLMES COUNTY, MS													
31-33	Manufacturing	-	14	8	1 674	31 449	1 544	2 584	25 952	82 064	132 029	214 539	8 141
321	Wood product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	3	1	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUMPHREYS COUNTY, MS												
	Manufacturing	3	4	3	f	D	D	D	D	D	D	D	
31-33	ITAWAMBA COUNTY, MS												
	Manufacturing	-	40	16	1 366	30 134	1 158	2 191	22 605	129 383	243 390	371 591	2 969
31-33	JACKSON COUNTY, MS												
	Manufacturing	-	98	34	16 340	534 470	9 998	20 409	308 901	1 735 801	2 718 225	4 447 665	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	2	1	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	1	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	4	f	D	D	D	D	D	D	D	2 229
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	5	j	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	9	5	j	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	9	5	j	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	7	5	j	D	D	D	D	D	D	D	D
31-33	JASPER COUNTY, MS												
	Manufacturing	1	15	10	1 720	29 979	1 447	2 693	21 613	70 266	79 289	151 330	3 025
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	JEFFERSON DAVIS COUNTY, MS												
	Manufacturing	-	9	5	769	8 879	738	1 032	7 471	30 046	26 405	56 006	1 647
31-33	JONES COUNTY, MS												
	Manufacturing	-	68	22	6 820	162 687	5 786	13 289	117 530	464 529	524 953	991 273	40 401
311	Food mfg	-	11	4	g	D	D	D	D	D	D	D	2 681
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	1 714	27 300	1 583	3 116	23 038	80 116	109 889	190 030	2 341
321	Wood product mfg	-	11	5	1 355	32 689	1 162	2 536	25 020	163 888	87 460	249 068	4 951
3212	Veneer, plywood, & engineered wood product mfg	-	5	2	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	2	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAFAYETTE COUNTY, MS													
31-33	Manufacturing	-	29	9	2 017	43 151	1 661	2 984	31 053	116 965	176 412	304 462	9 845
335	Electrical equipment, appliance, & component mfg	-	4	3	1 311	27 697	1 147	2 109	21 226	75 655	125 157	209 792	4 910
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAMAR COUNTY, MS													
31-33	Manufacturing	1	22	6	770	16 412	646	1 182	12 248	36 451	78 967	116 758	3 736
LAUDERDALE COUNTY, MS													
31-33	Manufacturing	-	83	33	6 076	164 179	4 441	8 945	111 366	471 476	450 395	916 560	36 896
311	Food mfg	-	4	3	698	17 568	437	833	9 583	30 112	35 124	66 261	1 297
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	9	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	9	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	3	f	D	D	D	D	D	D	D	D
323118	Blankbook, looseleaf binder, & device mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAWRENCE COUNTY, MS													
31-33	Manufacturing	-	9	4	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
LEAKE COUNTY, MS													
31-33	Manufacturing	-	18	10	2 481	29 768	2 403	4 506	27 896	179 244	66 951	242 009	D
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	8	7	758	9 689	730	1 316	8 891	36 807	47 814	80 315	D
3152	Cut & sew apparel mfg	-	7	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEE COUNTY, MS													
31-33	Manufacturing	1	191	92	17 717	472 857	14 552	31 060	335 534	1 192 169	1 511 914	2 708 409	83 297
311	Food mfg	4	6	4	605	11 498	546	1 306	9 142	23 054	57 398	80 633	1 978
315	Apparel mfg	6	7	5	1 198	15 718	947	1 722	11 063	50 065	102 654	151 755	2 755
3152	Cut & sew apparel mfg	6	7	5	1 198	15 718	947	1 722	11 063	50 065	102 654	151 755	2 755
31522	Men's & boys' cut & sew apparel mfg	6	4	3	720	10 222	554	1 187	7 166	41 485	101 986	142 622	D
315225	Men's & boys' cut & sew work clothing mfg	6	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	4	7	3	657	18 318	528	972	12 257	39 003	60 575	99 436	D
3222	Converted paper product mfg	4	7	3	657	18 318	528	972	12 257	39 003	60 575	99 436	D
32221	Paperboard container mfg	4	6	3	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	4	6	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	26	16	2 819	92 137	2 468	5 313	78 378	297 842	366 678	667 223	19 999
3261	Plastics product mfg	2	16	12	1 404	29 669	1 177	2 284	20 497	107 380	158 548	266 785	D
32615	Urethane & other foam product (except polystyrene) mfg	2	11	10	1 247	25 812	1 034	1 996	17 385	75 077	137 715	213 647	5 771
326150	Urethane & other foam product (except polystyrene) mfg	2	11	10	1 247	25 812	1 034	1 996	17 385	75 077	137 715	213 647	5 771
3262	Rubber product mfg	-	10	4	1 415	62 468	1 291	3 029	57 881	190 462	208 130	400 438	D
32621	Tire mfg	-	5	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	9	1 512	33 745	1 328	2 948	27 580	111 520	87 500	195 775	4 581
3325	Hardware mfg	-	3	3	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	3	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	6	2 770	66 232	2 229	4 842	48 276	188 989	262 415	457 355	10 701
3331	Agriculture, construction, & mining machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	43	25	5 359	160 936	4 368	9 494	103 786	297 305	350 311	647 434	14 559
3371	Household & institutional furniture & kitchen cabinet mfg	-	32	17	4 122	130 755	3 307	6 839	78 935	223 012	250 470	472 980	3 764
33712	Household & institutional furniture mfg	-	29	17	4 109	130 614	3 295	6 828	78 824	222 763	250 240	472 500	3 749
337121	Upholstered household furniture mfg	-	25	16	4 018	128 903	3 223	6 713	77 608	220 904	247 568	467 955	3 602
3372	Office furniture (including fixtures) mfg	3	6	4	905	22 800	796	2 103	19 619	54 370	53 337	107 837	D
33721	Office furniture (including fixtures) mfg	3	6	4	905	22 800	796	2 103	19 619	54 370	53 337	107 837	D
337214	Office furniture (except wood) mfg	3	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEFLORE COUNTY, MS													
31-33	Manufacturing	-	40	19	3 572	76 623	2 867	6 175	47 167	219 088	284 968	510 941	14 388
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	3	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
LINCOLN COUNTY, MS													
31-33	Manufacturing	-	28	11	1 383	35 087	1 187	1 684	23 581	129 703	170 635	301 426	5 209
LOWNDES COUNTY, MS													
31-33	Manufacturing	-	71	28	7 611	223 238	5 582	12 279	140 941	617 315	680 391	1 313 861	39 734
315	Apparel mfg	6	5	4	809	14 210	717	1 759	11 483	53 881	42 065	96 283	1 509
3152	Cut & sew apparel mfg	7	4	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	7	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	8	3	950	19 255	784	1 899	10 229	53 004	37 996	92 611	2 481
3219	Other wood product mfg ...	-	4	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	3	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	7	5	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	9	4	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	9	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	6	2	824	16 266	475	710	7 530	23 778	38 062	61 615	D
3391	Medical equipment & supplies mfg	-	5	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
MADISON COUNTY, MS													
31-33	Manufacturing	1	57	23	2 414	57 224	1 891	3 877	33 915	174 542	224 993	396 648	37 408
MARION COUNTY, MS													
31-33	Manufacturing	2	26	5	1 000	15 675	861	1 480	12 525	52 499	50 716	103 934	1 329

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARSHALL COUNTY, MS												
	Manufacturing	1	29	14	1 777	41 163	1 533	3 123	31 098	102 584	99 735	201 334	8 208
	MONROE COUNTY, MS												
31-33	Manufacturing	-	71	33	4 889	124 839	4 078	7 957	88 670	430 079	684 997	1 121 225	72 245
315	Apparel mfg	-	4	4	1 236	17 520	1 187	2 072	15 465	31 633	29 488	56 971	374
3152	Cut & sew apparel mfg	-	4	4	1 236	17 520	1 187	2 072	15 465	31 633	29 488	56 971	374
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	4	956	42 503	687	1 627	26 935	206 753	482 311	695 949	62 373
3251	Basic chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	21	13	1 363	26 999	1 143	2 109	19 420	51 575	76 671	128 901	1 720
3371	Household & institutional furniture & kitchen cabinet mfg	-	13	7	1 078	21 534	914	1 708	15 685	41 977	67 696	110 328	1 185
33712	Household & institutional furniture mfg	-	13	7	1 078	21 534	914	1 708	15 685	41 977	67 696	110 328	1 185
337121	Upholstered household furniture mfg	-	12	7	g	D	D	D	D	D	D	D	D
	MONTGOMERY COUNTY, MS												
31-33	Manufacturing	-	21	11	1 165	21 761	948	2 023	17 409	39 895	78 264	116 558	D
	NESHOBA COUNTY, MS												
31-33	Manufacturing	-	32	13	2 572	57 118	2 157	4 941	49 546	132 329	218 711	347 765	22 854
315	Apparel mfg	-	3	3	923	9 109	719	1 652	8 395	33 438	29 757	63 866	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
	NEWTON COUNTY, MS												
31-33	Manufacturing	-	20	8	2 256	49 505	1 968	3 698	42 856	89 582	78 850	165 674	2 585
337	Furniture & related product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
	NOXUBEE COUNTY, MS												
31-33	Manufacturing	1	20	13	1 201	22 836	1 011	1 921	16 105	68 159	144 456	210 788	6 474
	OKTIBBEHA COUNTY, MS												
31-33	Manufacturing	-	35	17	2 132	49 844	1 566	3 251	28 204	164 681	208 783	372 308	5 774
	PANOLA COUNTY, MS												
31-33	Manufacturing	-	44	20	2 943	68 511	2 447	5 424	50 986	289 719	288 691	574 962	8 125
326	Plastics & rubber products mfg	-	7	5	725	14 639	632	1 321	11 487	26 716	26 540	52 863	3 102

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PEARL RIVER COUNTY, MS													
31-33	Manufacturing	-	47	13	905	20 329	703	1 320	13 544	90 962	100 369	190 274	6 126
PERRY COUNTY, MS													
31-33	Manufacturing	-	7	4	f	D	D	D	D	D	D	D	D
PIKE COUNTY, MS													
31-33	Manufacturing	-	36	18	3 924	64 724	3 456	6 067	49 836	195 844	378 604	580 331	10 587
311	Food mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	11	7	559	11 973	470	878	8 876	64 453	155 076	220 128	4 962
332	Fabricated metal product mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PONTOTOC COUNTY, MS													
31-33	Manufacturing	-	92	46	5 549	116 460	4 671	8 522	91 437	366 648	357 742	720 175	14 690
337	Furniture & related product mfg.....	-	51	33	4 551	95 588	3 805	6 988	75 307	266 229	271 672	533 213	9 490
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	37	25	4 235	90 951	3 540	6 543	71 414	257 953	261 536	514 743	8 956
33712	Household & institutional furniture mfg.....	-	36	25	h	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg.....	-	28	21	3 699	78 919	3 123	5 591	62 327	185 669	206 904	387 886	D
PRENTISS COUNTY, MS													
31-33	Manufacturing	1	46	27	4 507	86 138	3 752	6 655	63 630	371 568	339 996	702 240	11 095
315	Apparel mfg.....	-	6	5	951	13 923	760	1 353	9 572	31 112	24 425	52 038	426
3152	Cut & sew apparel mfg....	-	5	5	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	9	7	2	710	15 109	440	1 016	8 293	82 414	43 550	121 785	2 912
3219	Other wood product mfg... All other wood product mfg.....	9	5	1	f	D	D	D	D	D	D	D	D
32199	All other miscellaneous wood product mfg....	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	6	6	597	14 622	484	886	9 210	65 356	61 546	126 138	4 774
3261	Plastics product mfg.....	-	6	6	597	14 622	484	886	9 210	65 356	61 546	126 138	4 774
337	Furniture & related product mfg.....	1	16	9	1 383	21 283	1 285	1 837	19 423	29 269	64 304	91 978	616
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	13	7	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	1	10	7	1 296	20 001	1 216	1 741	18 458	26 724	61 520	86 652	403
337121	Upholstered household furniture mfg.....	1	10	7	1 296	20 001	1 216	1 741	18 458	26 724	61 520	86 652	403

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RANKIN COUNTY, MS													
31-33	Manufacturing	-	127	48	5 763	150 299	4 555	8 480	101 237	558 833	534 481	1 088 178	41 886
325	Chemical mfg	-	12	7	622	20 325	419	938	11 449	173 888	111 857	287 249	D
327	Nonmetallic mineral product mfg	-	7	2	528	10 463	487	743	7 906	27 631	34 120	60 227	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	6	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	4	f	D	D	D	D	D	D	D	3 127
336	Transportation equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	3	f	D	D	D	D	D	D	D	D
SCOTT COUNTY, MS													
31-33	Manufacturing	-	28	15	5 487	95 850	4 880	10 113	80 235	225 772	374 667	607 420	21 245
311	Food mfg	-	10	8	4 687	76 714	4 340	9 017	69 292	172 140	309 920	488 430	19 146
3116	Meat product mfg	-	5	5	3 899	63 559	3 611	7 590	58 257	148 526	254 456	409 383	D
31161	Animal slaughtering & processing	-	5	5	3 899	63 559	3 611	7 590	58 257	148 526	254 456	409 383	D
311615	Poultry processing	-	4	4	h	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	3	2	f	D	D	D	D	D	D	D	D
SIMPSON COUNTY, MS													
31-33	Manufacturing	-	15	6	1 182	22 183	947	1 720	14 777	334 216	26 188	360 426	2 804
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
SMITH COUNTY, MS													
31-33	Manufacturing	-	17	10	1 801	41 213	1 520	3 093	31 900	138 794	259 338	392 753	4 355
321	Wood product mfg	-	7	5	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
STONE COUNTY, MS													
31-33	Manufacturing	-	15	7	682	15 272	583	1 289	12 236	34 519	90 775	124 631	2 474
SUNFLOWER COUNTY, MS													
31-33	Manufacturing	1	22	14	2 654	48 279	2 237	4 027	35 635	204 892	302 060	508 277	6 886
311	Food mfg	2	8	7	1 315	19 297	1 154	1 844	14 266	86 363	130 699	217 346	4 145
3117	Seafood product preparation & packaging ..	1	4	4	1 071	14 488	924	1 365	10 390	43 492	74 093	117 881	1 496
31171	Seafood product preparation & packaging	1	4	4	1 071	14 488	924	1 365	10 390	43 492	74 093	117 881	1 496
311712	Fresh & frozen seafood processing ..	1	4	4	1 071	14 488	924	1 365	10 390	43 492	74 093	117 881	1 496
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TALLAHATCHIE COUNTY, MS													
31-33	Manufacturing	1	7	5	500	5 562	423	493	3 907	27 245	14 011	41 219	1 261
TATE COUNTY, MS													
31-33	Manufacturing	-	16	6	2 047	45 337	1 728	3 292	33 234	98 040	100 402	199 936	4 480
337	Furniture & related product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
TIPPAH COUNTY, MS													
31-33	Manufacturing	1	42	19	3 247	71 178	2 639	4 554	46 376	160 925	185 696	344 081	6 410
326	Plastics & rubber products mfg	-	3	3	584	12 814	474	915	8 391	21 393	23 153	44 389	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	19	8	1 954	42 202	1 525	2 429	25 022	74 096	96 625	167 904	D
3371	Household & institutional furniture & kitchen cabinet mfg	3	13	6	1 725	38 307	1 318	2 046	22 380	67 098	86 917	151 198	D
33712	Household & institutional furniture mfg	3	11	6	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	3	10	6	g	D	D	D	D	D	D	D	2 301
TISHOMINGO COUNTY, MS													
31-33	Manufacturing	-	46	21	3 361	70 832	2 564	4 403	45 961	126 777	191 195	321 630	3 811
315	Apparel mfg	-	4	3	573	7 048	503	801	5 245	10 754	27 105	40 893	D
3152	Cut & sew apparel mfg	-	4	3	573	7 048	503	801	5 245	10 754	27 105	40 893	D
321	Wood product mfg	-	5	2	1 366	35 268	812	1 521	20 839	40 705	72 725	113 854	D
3219	Other wood product mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	2	1	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	15	6	732	13 607	651	1 029	9 324	31 297	31 689	63 145	657
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	6	732	13 607	651	1 029	9 324	31 297	31 689	63 145	657
33712	Household & institutional furniture mfg	-	15	6	732	13 607	651	1 029	9 324	31 297	31 689	63 145	657
UNION COUNTY, MS													
31-33	Manufacturing	-	39	16	4 204	97 168	3 387	5 227	60 712	228 761	219 368	445 803	7 079
332	Fabricated metal product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
332112	Nonferrous forging	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	6	1 967	38 492	1 837	2 850	31 993	94 053	122 605	216 039	2 257
3371	Household & institutional furniture & kitchen cabinet mfg	-	12	6	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	9	6	1 954	38 274	1 826	2 832	31 818	93 665	122 243	215 289	2 234
337121	Upholstered household furniture mfg	-	8	6	g	D	D	D	D	D	D	D	2 234
WALTHALL COUNTY, MS													
31-33	Manufacturing	1	24	12	940	15 818	785	1 245	10 591	37 770	31 250	68 893	2 028

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN COUNTY, MS													
31-33	Manufacturing	-	43	26	4 698	131 664	3 800	6 918	98 006	349 691	832 946	1 181 827	62 679
321	Wood product mfg	1	9	7	966	24 845	868	1 819	19 892	47 598	89 108	136 446	2 895
3219	Other wood product mfg...	3	6	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, MS													
31-33	Manufacturing	-	65	29	5 067	121 808	4 320	9 217	94 414	492 152	549 861	1 030 280	31 260
311	Food mfg	-	4	3	652	17 974	526	1 129	12 964	235 858	244 536	472 735	11 664
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	7	669	17 725	522	1 107	12 518	58 289	37 602	98 371	825
WAYNE COUNTY, MS													
31-33	Manufacturing	-	16	9	1 323	28 711	1 040	2 051	22 741	100 441	191 968	294 921	4 354
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
WEBSTER COUNTY, MS													
31-33	Manufacturing	-	17	9	1 567	25 220	1 424	2 412	21 272	92 082	63 780	149 750	2 240
315	Apparel mfg	-	3	3	879	12 442	838	1 420	11 349	53 627	11 674	65 399	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	-	1	1	f	D	D	D	D	D	D	D	D
WINSTON COUNTY, MS													
31-33	Manufacturing	-	26	10	1 850	53 541	1 385	2 981	33 797	133 791	189 388	318 271	15 053
321	Wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YALOBUSHA COUNTY, MS													
31-33	Manufacturing	—	17	7	1 576	33 352	1 371	2 495	24 786	109 242	114 883	224 170	4 002
315	Apparel mfg	3	4	3	546	7 893	513	860	7 179	25 203	8 049	33 256	324
3152	Cut & sew apparel mfg	3	4	3	546	7 893	513	860	7 179	25 203	8 049	33 256	324
336	Transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
YAZOO COUNTY, MS													
31-33	Manufacturing	—	21	10	1 987	52 078	1 560	2 998	27 381	101 361	138 988	236 111	D
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	—	1	1	f	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABERDEEN, MS													
31-33	Manufacturing	—	13	5	737	20 000	598	1 272	12 725	76 023	224 248	304 953	D
AMORY, MS													
31-33	Manufacturing	—	26	16	2 227	50 189	1 915	3 553	37 190	132 295	144 834	276 304	5 598
315	Apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	7	756	16 053	624	1 110	11 546	26 013	49 234	75 571	1 094
3371	Household & institutional furniture & kitchen cabinet mfg	—	4	3	558	11 789	469	817	8 698	18 166	43 188	61 628	D
33712	Household & institutional furniture mfg	—	4	3	558	11 789	469	817	8 698	18 166	43 188	61 628	D
337121	Upholstered household furniture mfg	—	4	3	558	11 789	469	817	8 698	18 166	43 188	61 628	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BATESVILLE, MS													
31-33	Manufacturing	-	29	15	2 268	56 660	1 842	3 781	41 724	201 684	209 793	410 419	7 132
326	Plastics & rubber products mfg	-	6	4	f	D	D	D	D	D	D	D	D
BELZONI, MS													
31-33	Manufacturing	3	2	2	f	D	D	D	D	D	D	D	D
BILOXI, MS													
31-33	Manufacturing	2	36	10	f	D	D	D	D	D	D	D	1 169
BOONEVILLE, MS													
31-33	Manufacturing	2	32	22	3 631	76 081	3 046	5 411	55 994	344 551	325 853	662 684	10 045
321	Wood product mfg	9	3	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	9	3	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	9	1	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	6	597	14 622	484	886	9 210	65 356	61 546	126 138	4 774
3261	Plastics product mfg	-	6	6	597	14 622	484	886	9 210	65 356	61 546	126 138	4 774
337	Furniture & related product mfg	1	12	8	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	11	7	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	9	7	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	1	9	7	g	D	D	D	D	D	D	D	D
BROOKHAVEN, MS													
31-33	Manufacturing	-	16	8	1 187	29 982	1 043	1 373	20 179	119 874	161 877	282 728	2 978
CANTON, MS													
31-33	Manufacturing	-	9	6	754	16 642	621	1 294	10 639	41 456	56 239	97 352	D
CLARKSDALE, MS													
31-33	Manufacturing	-	22	9	1 022	29 187	839	1 804	19 911	60 412	119 751	179 409	2 732
CLEVELAND, MS													
31-33	Manufacturing	1	8	4	1 130	31 376	820	1 507	19 258	71 230	55 050	126 939	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON, MS													
31-33	Manufacturing	-	19	4	2 111	76 714	1 788	3 526	58 458	239 384	578 939	849 692	9 182
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
COLLINS, MS													
31-33	Manufacturing	1	9	4	1 760	28 230	1 607	3 223	23 460	59 801	109 701	169 544	5 161
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBIA, MS													
31-33	Manufacturing	3	15	3	812	10 807	702	1 086	8 440	28 705	19 865	48 327	D
COLUMBUS, MS													
31-33	Manufacturing	1	57	24	i	D	D	D	D	D	D	D	D
315	Apparel mfg	6	4	3	f	D	D	D	D	D	D	D	1 509
3152	Cut & sew apparel mfg	7	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	7	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	7	3	f	D	D	D	D	D	D	D	2 481
3219	Other wood product mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	3	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	7	3	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	9	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	9	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	2	f	D	D	D	D	D	D	D	D
CORINTH, MS													
31-33	Manufacturing	-	48	20	h	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	4	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	6	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CRYSTAL SPRINGS, MS													
31-33	Manufacturing	1	9	4	826	16 235	495	1 082	10 184	38 950	54 160	93 430	2 534
DURANT, MS													
31-33	Manufacturing	-	8	5	f	D	D	D	D	D	D	D	D
FLOWOOD, MS													
31-33	Manufacturing	-	16	10	1 593	37 621	1 314	2 401	25 084	87 357	184 865	272 968	5 395
FOREST, MS													
31-33	Manufacturing	-	14	9	3 504	63 164	3 050	6 437	51 148	158 557	209 285	373 359	16 212
311	Food mfg	-	7	6	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	14 446
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	14 446
311615	Poultry processing	-	3	3	h	D	D	D	D	D	D	D	D
FULTON, MS													
31-33	Manufacturing	-	17	8	1 036	24 057	880	1 713	17 815	118 246	233 257	350 146	1 830
GREENVILLE, MS													
31-33	Manufacturing	-	49	25	4 313	105 316	3 684	7 761	80 555	416 767	499 180	904 030	30 117
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Wett knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	6	f	D	D	D	D	D	D	D	D
GREENWOOD, MS													
31-33	Manufacturing	-	31	17	h	D	D	D	D	D	D	D	13 456
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	4	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	3	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
GRENADA, MS													
31-33	Manufacturing	1	16	8	1 230	25 989	881	1 863	17 210	62 675	99 450	163 548	3 318
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
GULFPORT, MS													
31-33	Manufacturing	1	67	16	1 885	50 430	1 429	2 904	34 140	115 299	152 657	259 316	5 330

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HATTIESBURG, MS *													
31-33	Manufacturing	-	62	23	4 625	103 350	3 406	6 355	64 548	387 501	560 512	942 363	39 481
311	Food mfg	-	6	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
3222	Converted paper product mfg	-	4	3	925	23 289	688	1 299	14 953	51 060	70 203	122 956	D
32223	Stationery product mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	g	D	D	D	D	D	D	D	D
HAZLEHURST, MS													
31-33	Manufacturing	-	8	4	1 228	19 972	1 116	2 124	14 024	38 411	67 848	105 189	4 779
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
HERNANDO, MS													
31-33	Manufacturing	-	23	9	f	D	D	D	D	D	D	D	4 398
HOLLY SPRINGS, MS													
31-33	Manufacturing	2	17	8	946	19 960	825	1 711	16 092	57 494	41 390	99 244	2 343
HORN LAKE, MS													
31-33	Manufacturing	-	19	8	1 045	39 262	565	1 300	14 837	45 503	106 938	151 589	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	-	2	1	f	D	D	D	D	D	D	D	D
HOUSTON, MS													
31-33	Manufacturing	-	23	9	2 061	44 518	1 815	3 168	34 164	80 620	136 558	214 885	3 971
337	Furniture & related product mfg	-	9	3	1 311	27 892	1 141	1 959	22 025	30 978	70 480	100 939	857
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	3	1 311	27 892	1 141	1 959	22 025	30 978	70 480	100 939	857
33712	Household & institutional furniture mfg	-	9	3	1 311	27 892	1 141	1 959	22 025	30 978	70 480	100 939	857
337121	Upholstered household furniture mfg	-	9	3	1 311	27 892	1 141	1 959	22 025	30 978	70 480	100 939	857
INDIANOLA, MS													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON, MS *													
31-33	Manufacturing	1	173	64	9 337	236 899	7 121	14 448	158 181	828 738	885 629	1 709 313	53 335
311	Food mfg	-	11	5	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	15	9	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	15	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	12	6	656	17 808	491	1 271	10 783	37 959	35 290	72 323	D
332	Fabricated metal product mfg	-	31	13	911	26 710	730	1 485	19 248	75 876	91 231	165 479	2 614
333	Machinery mfg	-	11	3	1 276	50 366	845	1 984	30 988	182 890	132 061	311 623	D
3339	Other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
KOSCIUSKO, MS													
31-33	Manufacturing	1	16	8	898	15 403	597	930	7 850	35 510	60 762	90 270	D
LAUREL, MS													
31-33	Manufacturing	-	38	16	5 835	142 090	4 952	11 489	103 814	412 886	460 474	874 546	36 439
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	5	5	1 297	31 457	1 120	2 456	24 259	160 614	84 344	242 685	D
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	g	D	D	D	D	D	D	D	D
LOUISVILLE, MS													
31-33	Manufacturing	-	20	8	1 700	50 665	1 254	2 681	31 470	127 266	172 547	295 047	14 656
321	Wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCCOMB, MS													
31-33	Manufacturing	-	8	3	527	9 497	478	1 009	8 518	19 427	57 201	76 254	385
MADISON, MS													
31-33	Manufacturing	3	11	4	637	11 102	571	1 243	8 719	37 493	47 212	83 796	2 364

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MERIDIAN, MS													
31-33	Manufacturing	-	70	31	i	D	D	D	D	D	D	D	D
311	Food mfg	-	4	3	698	17 568	437	833	9 583	30 112	35 124	66 261	1 297
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MORTON, MS													
31-33	Manufacturing	-	6	4	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
MOSS POINT, MS													
31-33	Manufacturing	2	14	9	2 045	70 982	1 612	3 342	53 189	174 236	230 554	404 471	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
NATCHEZ, MS													
31-33	Manufacturing	5	28	7	1 111	34 771	873	1 856	25 411	89 625	115 095	207 073	12 131
326	Plastics & rubber products mfg	9	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	9	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	9	1	1	f	D	D	D	D	D	D	D	D
NEW ALBANY, MS													
31-33	Manufacturing	1	20	10	1 909	37 448	1 750	2 619	30 485	90 391	117 290	207 428	3 793
337	Furniture & related product mfg	-	6	5	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	5	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	6	5	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	5	5	g	D	D	D	D	D	D	D	D
NEWTON, MS													
31-33	Manufacturing	-	7	3	1 703	40 970	1 475	2 779	36 546	76 577	60 658	134 886	1 802
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OCEAN SPRINGS, MS													
31-33	Manufacturing	1	25	7	641	10 738	532	966	7 441	24 490	17 989	42 465	D
OKOLONA, MS													
31-33	Manufacturing	1	21	11	1 562	29 231	1 381	2 272	24 565	48 330	66 563	115 068	1 247
337	Furniture & related product mfg	1	14	9	1 461	27 144	1 294	2 094	23 004	44 090	59 018	103 253	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	13	9	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	13	9	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	1	11	8	g	D	D	D	D	D	D	D	D
OLIVE BRANCH, MS													
31-33	Manufacturing	1	49	32	3 757	107 997	2 910	6 145	76 964	388 046	397 935	785 071	24 574
325	Chemical mfg	4	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	9	6	520	18 115	382	742	13 283	67 843	107 526	171 923	4 093
OXFORD, MS													
31-33	Manufacturing	-	21	7	1 686	34 112	1 428	2 539	25 528	88 762	139 074	239 591	D
335	Electrical equipment, appliance, & component mfg	-	4	3	1 311	27 697	1 147	2 109	21 226	75 655	125 157	209 792	4 910
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
PASCAGOULA, MS													
31-33	Manufacturing	-	39	13	j	D	D	D	D	D	D	D	131 512
324	Petroleum & coal products mfg	-	1	1	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	j	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	4	2	j	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	4	2	j	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	3	2	j	D	D	D	D	D	D	D	D
PEARL, MS													
31-33	Manufacturing	2	34	8	578	18 070	408	791	11 086	47 328	31 796	81 480	1 796
PHILADELPHIA, MS													
31-33	Manufacturing	-	14	9	1 637	47 642	1 468	3 452	42 590	108 949	197 191	302 765	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PONTOTOC, MS													
31-33	Manufacturing	-	45	18	2 562	58 379	2 087	4 020	45 630	203 027	181 345	381 055	4 554
337	Furniture & related product mfg	-	20	10	1 807	42 342	1 428	2 818	32 967	113 734	107 787	217 679	1 745
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	10	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	17	10	1 797	42 123	1 419	2 803	32 792	113 340	107 409	216 906	1 725
337121	Upholstered household furniture mfg	-	14	10	1 787	41 993	1 411	2 795	32 703	113 095	107 196	216 448	D
QUITMAN, MS													
31-33	Manufacturing	-	8	6	886	20 513	786	1 453	14 524	43 824	81 934	124 758	2 892
RICHLAND, MS													
31-33	Manufacturing	-	13	4	719	20 861	526	1 002	13 075	61 462	84 986	145 422	3 758
RIDGELAND, MS													
31-33	Manufacturing	-	22	7	518	16 029	310	609	6 420	42 039	49 738	90 882	D
RIPLEY, MS													
31-33	Manufacturing	3	19	11	2 071	41 936	1 783	3 223	31 519	95 207	97 559	192 071	3 540
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	7	6	1 242	24 504	1 084	1 899	19 572	52 639	70 639	122 682	D
3371	Household & institutional furniture & kitchen cabinet mfg	5	5	4	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	5	5	4	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	5	4	4	g	D	D	D	D	D	D	D	D
SENATOBIA, MS													
31-33	Manufacturing	-	11	4	1 790	40 567	1 495	2 849	29 591	86 869	84 079	172 323	3 239
337	Furniture & related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
STARKVILLE, MS													
31-33	Manufacturing	-	28	15	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TUPELO, MS													
31-33	Manufacturing	1	109	49	8 813	231 336	7 225	15 799	171 732	664 511	807 867	1 470 744	36 001
311	Food mfg	4	6	4	605	11 498	546	1 306	9 142	23 054	57 398	80 633	1 978
315	Apparel mfg	6	5	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	6	5	4	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	6	3	3	f	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	6	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	17	10	2 252	81 359	2 018	4 412	70 987	267 735	304 491	575 207	17 537
3261	Plastics product mfg	1	12	8	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	1	7	6	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	1	7	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	8	1 382	30 945	1 226	2 787	25 422	108 575	84 034	189 641	4 129
3325	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	17	8	1 146	27 489	975	2 380	22 173	43 692	66 157	110 551	2 392
3372	Office furniture (including fixtures) mfg	-	2	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
VERONA, MS													
31-33	Manufacturing	-	15	13	3 544	80 970	3 061	6 374	64 263	220 067	311 572	539 519	29 214
333	Machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
VICKSBURG, MS													
31-33	Manufacturing	-	32	19	2 813	76 333	2 288	3 988	53 503	236 691	510 485	748 914	29 263
321	Wood product mfg	-	6	5	f	D	D	D	D	D	D	D	2 381
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WATER VALLEY, MS													
31-33	Manufacturing	-	11	5	1 283	28 591	1 097	2 017	20 679	91 640	110 997	202 688	3 874
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WAYNESBORO, MS													
31-33	Manufacturing	-	9	7	1 209	26 594	936	1 887	21 335	95 159	184 486	282 096	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
WEST POINT, MS													
31-33	Manufacturing	-	22	10	h	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	3	802	24 262	660	1 265	19 209	68 507	50 060	93 408	2 295
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
WIGGINS, MS													
31-33	Manufacturing	-	12	7	f	D	D	D	D	D	D	D	D
WINONA, MS													
31-33	Manufacturing	-	12	7	f	D	D	D	D	D	D	D	D
YAZOO CITY, MS													
31-33	Manufacturing	-	15	7	g	D	D	D	D	D	D	D	2 456
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MISSISSIPPI		MISSISSIPPI—Con.	
Companies ¹	number.. 2 654	Quantity of electricity purchased for heat and power	1,000 kWh.. 10 850 680
All establishments	number.. 3 008	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 2 344 587
Establishments with 1 to 19 employees	number.. 1 726	Total value of shipments	\$1,000.. 39 658 260
Establishments with 20 to 99 employees	number.. 749	Value of resales	\$1,000.. 1 591 280
Establishments with 100 employees or more	number.. 533	Value added	\$1,000.. 17 088 506
All employees	number.. 227 800	Total inventories, beginning of year	\$1,000.. 4 082 177
Total compensation ²	\$1,000.. 6 954 532	Finished goods inventories, beginning of year	\$1,000.. 1 616 992
Annual payroll	\$1,000.. 5 599 392	Work-in-process inventories, beginning of year	\$1,000.. 867 354
Total fringe benefits	\$1,000.. 1 355 140	Materials and supplies inventories, beginning of year	\$1,000.. 1 597 831
Production workers, average for year	number.. 182 630	Total inventories, end of year	\$1,000.. 3 982 860
Production workers on March 12	number.. 182 450	Finished goods inventories, end of year	\$1,000.. 1 594 888
Production workers on May 12	number.. 182 337	Work-in-process inventories, end of year	\$1,000.. 791 159
Production workers on August 12	number.. 182 378	Materials and supplies inventories, end of year	\$1,000.. 1 596 813
Production workers on November 12	number.. 183 355	Gross book value of total assets at beginning of year	\$1,000.. 16 639 262
Production-worker hours	1,000.. 362 135	Total capital expenditures (new and used)	\$1,000.. 1 416 508
Production-worker wages	\$1,000.. 3 905 826	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 223 234
Total cost of materials	\$1,000.. 22 563 374	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 193 274
Cost of materials, parts, containers, etc., consumed	\$1,000.. 20 055 736	Total retirements ²	\$1,000.. 392 437
Cost of resales	\$1,000.. 1 142 345	Gross book value of total assets at end of year	\$1,000.. 17 663 333
Cost of fuels	\$1,000.. 325 263	Total depreciation during year ²	\$1,000.. 1 004 166
Cost of purchased electricity	\$1,000.. 513 610	Total rental payments ²	\$1,000.. 337 289
Cost of contract work	\$1,000.. 526 420	Buildings and other structures rental payments ²	\$1,000.. 206 489
		Machinery and equipment rental payments ²	\$1,000.. 130 800

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MISSISSIPPI

Baldwyn is in Lee and Prentiss Counties.

Hattiesburg is in Forrest and Lamar Counties.

Jackson is in Hinds, Madison, and Rankin Counties.

Nettleton is in Lee and Monroe Counties.

Appendix E. Metropolitan Areas

MISSISSIPPI

Biloxi—Gulfport—Pascagoula, MS MSA

Hancock County, MS

Harrison County, MS

Jackson County, MS

Hattiesburg, MS MSA

Forrest County, MS

Lamar County, MS

Jackson, MS MSA

Hinds County, MS

Madison County, MS

Rankin County, MS

Memphis, TN—AR—MS MSA

Crittenden County, AR

DeSoto County, MS

Fayette County, TN

Shelby County, TN

Tipton County, TN

Montana

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTANA													
31-33	Manufacturing	-	1 160	179	19 611	560 115	14 988	27 526	393 964	1 732 158	3 112 227	4 866 279	150 948
311	Food mfg.....	1	145	18	2 024	52 348	1 303	2 140	29 955	151 410	314 902	466 563	26 917
3111	Animal food mfg.....	2	17	2	133	3 192	86	154	1 898	10 019	21 266	31 202	779
31111	Animal food mfg.....	2	17	2	133	3 192	86	154	1 898	10 019	21 266	31 202	779
311119	Other animal food mfg.....	2	16	1	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	9	3	151	4 946	116	286	3 681	23 214	52 540	76 525	D
31121	Flour milling & malt mfg .	-	5	3	123	4 049	89	235	3 032	21 447	50 475	72 084	D
311211	Flour milling	-	3	3	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	14	2	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	2	2	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	11	4	330	10 389	140	299	3 955	4 241	85 390	89 833	2 041
31151	Dairy product (except frozen) mfg	-	10	4	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	4	40	2	303	5 738	248	354	3 982	14 948	38 098	53 190	965
31161	Animal slaughtering & processing.....	4	40	2	303	5 738	248	354	3 982	14 948	38 098	53 190	965
311611	Animal (except poultry) slaughtering	9	27	-	c	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	12	2	180	3 940	141	216	2 593	10 198	20 923	31 267	697
3118	Bakeries & tortilla mfg	2	35	4	618	14 842	285	405	5 656	36 970	16 852	53 759	1 342
31181	Bread & bakery product mfg	-	31	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	5	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	24	6	322	7 775	193	314	4 162	24 904	58 780	83 615	2 824
3121	Beverage mfg	3	24	6	322	7 775	193	314	4 162	24 904	58 780	83 615	2 824
31211	Soft drink & ice mfg	3	12	6	271	6 454	154	262	3 188	20 352	54 924	75 211	2 396
312111	Soft drink mfg	3	6	6	258	6 255	144	245	3 038	19 901	54 609	74 441	2 337
314	Textile product mills.....	6	30	3	348	6 155	279	439	3 665	12 778	7 457	19 368	D
3149	Other textile product mills..	6	24	3	332	5 960	266	419	3 548	12 302	6 956	18 393	D
31491	Textile bag & canvas mills	3	14	1	183	3 368	154	282	2 262	5 004	2 843	7 283	D
314911	Textile bag mills	1	7	1	151	2 725	127	243	1 864	3 770	1 734	4 941	D
31499	All other textile product mills	8	10	2	149	2 592	112	137	1 286	7 298	4 113	11 110	D
314999	All other miscellaneous textile product mills ..	8	10	2	149	2 592	112	137	1 286	7 298	4 113	11 110	D
315	Apparel mfg	5	18	1	110	1 123	98	170	871	2 181	1 507	3 647	D
321	Wood product mfg	-	154	46	5 204	152 826	4 645	9 109	130 717	363 832	640 818	1 008 580	23 283
3211	Sawmills & wood preservation	-	61	19	2 327	68 329	2 103	4 146	59 275	177 667	347 776	528 299	8 579
32111	Sawmills & wood preservation	-	61	19	2 327	68 329	2 103	4 146	59 275	177 667	347 776	528 299	8 579
321113	Sawmills	-	52	19	2 289	67 357	2 074	4 091	58 565	176 126	342 406	520 460	8 375
3212	Veneer, plywood, & engineered wood product mfg	-	22	8	1 792	59 676	1 639	3 346	53 134	135 754	218 565	354 826	12 149
32121	Veneer, plywood, & engineered wood product mfg	-	22	8	1 792	59 676	1 639	3 346	53 134	135 754	218 565	354 826	12 149
321212	Softwood veneer & plywood mfg	-	4	4	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	1	71	19	1 085	24 821	903	1 617	18 308	50 411	74 477	125 455	2 555
32191	Millwork	-	25	12	545	12 620	459	842	9 951	26 675	46 541	73 467	1 157
321911	Wood window & door mfg	2	9	3	c	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing....	-	14	9	384	9 046	340	619	7 682	20 650	38 845	59 831	579
32199	All other wood product mfg	3	42	7	515	11 673	420	729	7 903	22 022	26 370	48 718	1 329
321992	Prefabricated wood building mfg	3	25	6	422	10 379	337	598	6 837	19 690	24 132	44 361	1 179
322	Paper mfg	-	4	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MONTANA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities	2	105	12	1 030	20 038	745	1 156	13 121	39 876	28 123	67 907	3 500
3231	Printing & related support activities	2	105	12	1 030	20 038	745	1 156	13 121	39 876	28 123	67 907	3 500
32311	Printing	2	97	12	1 013	19 812	730	1 141	12 950	39 324	27 997	67 229	3 475
323110	Commercial lithographic printing ..	2	58	10	655	13 862	477	800	9 343	26 502	16 524	43 040	1 921
323113	Commercial screen printing	—	5	1	149	2 471	111	156	1 384	6 038	6 444	12 475	719
323114	Quick printing	5	26	—	136	2 183	87	109	1 410	3 783	2 779	6 543	382
324	Petroleum & coal products mfg	—	6	4	866	47 486	604	1 320	30 050	418 760	1 081 845	1 517 675	25 670
3241	Petroleum & coal products mfg	—	6	4	866	47 486	604	1 320	30 050	418 760	1 081 845	1 517 675	25 670
32411	Petroleum refineries	—	4	4	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	49	6	480	15 364	362	692	10 495	70 035	129 065	200 131	4 342
3251	Basic chemical mfg	—	10	2	168	6 854	112	226	4 098	21 184	40 070	59 854	1 576
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	3	14	3	176	4 346	144	278	3 503	22 149	56 442	80 845	1 392
32531	Fertilizer mfg	4	11	2	c	D	D	D	D	D	D	D	1 176
326	Plastics & rubber products mfg	4	32	3	236	5 153	190	304	3 323	11 280	12 591	23 820	D
3261	Plastics product mfg	5	24	3	164	3 626	125	164	1 974	8 183	8 732	16 899	D
327	Nonmetallic mineral product mfg	1	82	16	1 071	33 391	861	1 610	23 626	93 995	71 590	166 311	6 758
3273	Cement & concrete product mfg	1	61	12	883	27 340	716	1 315	19 293	70 998	57 204	129 006	4 951
32731	Cement mfg	—	2	2	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	2	41	10	556	15 438	467	826	11 306	31 946	34 875	66 767	3 154
327320	Ready-mix concrete mfg	2	41	10	556	15 438	467	826	11 306	31 946	34 875	66 767	3 154
3279	Other nonmetallic mineral product mfg	—	11	2	c	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	16	4	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	1	e	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	2	1	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	2	13	2	162	3 269	140	258	2 508	8 049	2 544	10 427	318
332	Fabricated metal product mfg	2	122	11	1 195	28 555	907	1 506	19 219	60 920	57 717	115 865	3 622
3322	Cutlery & handtool mfg	—	7	2	274	4 936	222	255	2 860	17 065	16 321	32 547	1 383
33221	Cutlery & handtool mfg ..	—	7	2	274	4 936	222	255	2 860	17 065	16 321	32 547	1 383
332212	Hand & edge tool mfg ..	—	3	1	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	23	7	479	13 653	363	755	10 027	25 394	30 855	54 431	1 064
33231	Plate work & fabricated structural product mfg ..	1	12	6	414	11 895	309	651	8 755	21 965	27 251	47 208	970
332312	Fabricated structural metal mfg	1	11	6	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	57	1	259	5 849	190	290	3 721	9 788	4 826	14 394	568
33271	Machine shops	4	57	1	259	5 849	190	290	3 721	9 788	4 826	14 394	568
332710	Machine shops	4	57	1	259	5 849	190	290	3 721	9 788	4 826	14 394	568

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTANA—Con. Manufacturing— Con.												
333	Machinery mfg	1	47	10	1 614	43 773	809	1 484	22 058	152 140	80 165	234 154	21 279
3331	Agriculture, construction, & mining machinery mfg....	7	15	1	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	7	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	5	2	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	2	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	16	5	247	5 983	160	289	3 561	13 987	10 363	24 580	D
33392	Material handling equipment mfg	2	5	2	122	3 039	86	168	2 112	7 630	5 945	13 577	D
334	Computer & electronic product mfg.....	4	30	6	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	6	9	2	c	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	6	9	2	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	9	3	1	c	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	9	2	c	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	9	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	37	4	562	16 247	430	800	11 002	24 873	32 703	58 733	3 230
3362	Motor vehicle body & trailer mfg	2	9	3	251	7 697	180	370	4 984	10 353	16 524	26 991	644
33621	Motor vehicle body & trailer mfg	2	9	3	251	7 697	180	370	4 984	10 353	16 524	26 991	644
336212	Truck trailer mfg	—	2	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	1	1	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	84	10	750	15 176	608	1 012	10 492	28 491	23 490	52 101	1 432
3371	Household & institutional furniture & kitchen cabinet mfg	3	72	7	496	9 431	401	671	6 601	16 068	13 960	29 985	873
33711	Wood kitchen cabinet & counter top mfg	5	37	2	212	3 820	173	254	2 684	6 870	4 910	11 823	302
337110	Wood kitchen cabinet & counter top mfg ...	5	37	2	212	3 820	173	254	2 684	6 870	4 910	11 823	302
33712	Household & institutional furniture mfg	3	35	5	284	5 611	228	417	3 917	9 198	9 050	18 162	571
337122	Nonupholstered wood household furniture mfg	5	25	2	168	2 815	142	261	2 049	4 021	3 792	7 838	300
3372	Office furniture (including fixtures) mfg	1	10	2	c	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	10	2	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	143	15	1 405	29 889	1 123	1 913	19 730	78 188	43 249	120 927	2 856
3391	Medical equipment & supplies mfg	5	54	2	232	5 398	172	294	3 368	13 622	5 258	18 934	637
33911	Medical equipment & supplies mfg	5	54	2	232	5 398	172	294	3 368	13 622	5 258	18 934	637
3399	Other miscellaneous mfg ..	3	89	13	1 173	24 491	951	1 619	16 362	64 566	37 991	101 993	2 219
33991	Jewelry & silverware mfg	—	9	2	c	D	D	D	D	D	D	D	D
339914	Costume jewelry & novelty mfg	—	5	2	c	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	6	24	6	386	7 177	310	538	4 611	17 801	15 847	33 032	863
339920	Sporting & athletic goods mfg	6	24	6	386	7 177	310	538	4 611	17 801	15 847	33 032	863
33995	Sign mfg	3	22	3	142	3 762	90	152	1 964	5 439	3 841	9 092	144
339950	Sign mfg	3	22	3	142	3 762	90	152	1 964	5 439	3 841	9 092	144
33999	All other miscellaneous mfg	4	23	1	281	5 430	230	376	3 716	12 625	6 649	19 245	345
339992	Musical instrument mfg	—	3	1	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	7	20	—	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BILLINGS, MT MSA													
31-33	Manufacturing	—	182	28	3 223	110 123	2 177	4 135	68 488	561 036	1 223 789	1 797 881	32 899
311	Food mfg	—	23	5	714	21 721	337	598	9 754	68 687	91 726	157 466	2 882
3118	Bakeries & tortilla mfg	—	6	2	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	2	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	29	3	335	7 039	254	404	4 357	14 733	12 737	27 386	1 138
3231	Printing & related support activities	2	29	3	335	7 039	254	404	4 357	14 733	12 737	27 386	1 138
32311	Printing	2	27	3	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	5	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	5	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	3	3	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	25	3	347	9 455	234	454	6 168	17 501	19 733	35 576	812
GREAT FALLS, MT MSA													
31-33	Manufacturing	1	80	13	925	23 851	691	1 252	15 435	58 101	167 480	228 464	12 999
311	Food mfg	1	16	6	284	8 507	165	387	4 757	16 147	76 665	93 559	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CASCADE COUNTY, MT												
	Manufacturing	1	80	13	925	23 851	691	1 252	15 435	58 101	167 480	228 464	12 999
	FLATHEAD COUNTY, MT												
31-33	Manufacturing	-	124	21	3 887	121 548	2 820	5 367	86 381	353 079	439 008	790 508	32 306
321	Wood product mfg	-	22	13	1 434	48 433	1 315	2 671	42 914	126 771	218 757	342 191	5 575
3211	Sawmills & wood preservation	-	6	4	529	18 649	489	1 030	16 578	52 619	91 510	141 304	D
32111	Sawmills & wood preservation	-	6	4	529	18 649	489	1 030	16 578	52 619	91 510	141 304	D
321113	Sawmills	-	6	4	529	18 649	489	1 030	16 578	52 619	91 510	141 304	D
3212	Veneer, plywood, & engineered wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	6	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
	GALLATIN COUNTY, MT												
31-33	Manufacturing	2	148	28	1 992	48 342	1 498	2 778	30 669	133 449	135 940	273 816	8 746
	LAKE COUNTY, MT												
31-33	Manufacturing	1	30	7	840	19 463	688	1 040	14 004	56 747	58 241	115 263	3 522
	LEWIS AND CLARK COUNTY, MT												
31-33	Manufacturing	-	46	7	f	D	D	D	D	D	D	D	D
	LINCOLN COUNTY, MT												
31-33	Manufacturing	-	33	4	657	21 302	599	1 214	19 122	48 198	79 699	125 413	7 333
321	Wood product mfg	-	16	4	605	20 388	555	1 159	18 462	46 448	77 825	121 765	7 212
	MISSOULA COUNTY, MT												
31-33	Manufacturing	-	136	21	2 690	89 386	2 226	4 239	70 581	218 594	343 235	562 288	13 411
321	Wood product mfg	-	13	5	975	30 405	858	1 644	25 762	60 966	106 083	167 283	4 377
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
	PARK COUNTY, MT												
31-33	Manufacturing	1	36	3	535	13 283	438	799	9 797	24 346	38 057	63 337	2 774
	RAVALLI COUNTY, MT												
31-33	Manufacturing	2	66	12	870	21 293	674	1 191	14 702	42 095	52 554	95 159	2 842
321	Wood product mfg	1	22	8	506	12 456	412	746	8 563	24 800	35 703	61 009	1 124

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YELLOWSTONE COUNTY, MT													
31-33	Manufacturing	-	182	28	3 223	110 123	2 177	4 135	68 488	561 036	1 223 789	1 797 881	32 899
311	Food mfg	-	23	5	714	21 721	337	598	9 754	68 687	91 726	157 466	2 882
324	Petroleum & coal products mfg	-	5	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries ...	-	3	3	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ...	-	3	3	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BILLINGS, MT													
31-33	Manufacturing	-	141	19	g	D	D	D	D	D	D	D	20 971
311	Food mfg	-	17	5	f	D	D	D	D	D	D	D	2 825
324	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ...	-	2	2	f	D	D	D	D	D	D	D	D
BOZEMAN, MT													
31-33	Manufacturing	2	75	14	906	20 448	650	1 239	12 171	41 788	59 408	101 329	3 949
GREAT FALLS, MT													
31-33	Manufacturing	1	64	13	853	22 081	630	1 149	14 214	54 936	163 363	221 237	12 842
MISSOULA, MT													
31-33	Manufacturing	2	94	12	1 103	28 059	877	1 678	21 452	65 422	85 692	150 981	4 789

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
MONTANA		MONTANA—Con.	
Companies ¹	number.. 1 127	Quantity of electricity purchased for heat and power	1,000 kWh.. 4 772 770
All establishments	number.. 1 160	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 21 761
Establishments with 1 to 19 employees	number.. 981	Total value of shipments	\$1,000.. 4 866 279
Establishments with 20 to 99 employees	number.. 139	Value of resales	\$1,000.. 108 788
Establishments with 100 employees or more	number.. 40	Value added	\$1,000.. 1 732 158
All employees	number.. 19 611	Total inventories, beginning of year	\$1,000.. 525 842
Total compensation ²	\$1,000.. 710 296	Finished goods inventories, beginning of year	\$1,000.. 192 423
Annual payroll	\$1,000.. 560 115	Work-in-process inventories, beginning of year	\$1,000.. 111 530
Total fringe benefits	\$1,000.. 150 181	Materials and supplies inventories, beginning of year	\$1,000.. 221 889
Production workers, average for year	number.. 14 988	Total inventories, end of year	\$1,000.. 512 500
Production workers on March 12	number.. 14 674	Finished goods inventories, end of year	\$1,000.. 193 461
Production workers on May 12	number.. 14 866	Work-in-process inventories, end of year	\$1,000.. 88 782
Production workers on August 12	number.. 15 260	Materials and supplies inventories, end of year	\$1,000.. 230 257
Production workers on November 12	number.. 15 152	Gross book value of total assets at beginning of year	\$1,000.. 2 114 630
Production-worker hours	1,000.. 27 526	Total capital expenditures (new and used)	\$1,000.. 150 948
Production-worker wages	\$1,000.. 393 964	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 22 524
Total cost of materials	\$1,000.. 3 112 227	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 128 424
Cost of materials, parts, containers, etc., consumed	\$1,000.. 2 746 829	Total retirements ²	\$1,000.. 62 127
Cost of resales	\$1,000.. 103 978	Gross book value of total assets at end of year	\$1,000.. 2 203 451
Cost of fuels	\$1,000.. 67 772	Total depreciation during year ²	\$1,000.. 113 090
Cost of purchased electricity	\$1,000.. 144 829	Total rental payments ²	\$1,000.. 26 465
Cost of contract work	\$1,000.. 48 819	Buildings and other structures rental payments ²	\$1,000.. 10 058
		Machinery and equipment rental payments ²	\$1,000.. 16 407

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

MONTANA

Butte-Silver Bow. See “Butte-Silver Bow (consolidated city).”

Butte-Silver Bow (consolidated city) is coextensive with Silver Bow County. It includes Walkerville, which is not populous enough for separate tabulation. Therefore, “Butte-Silver Bow” refers to the whole consolidated city.

Appendix E. Metropolitan Areas

MONTANA

Billings, MT MSA

Yellowstone County, MT

Great Falls, MT MSA

Cascade County, MT

North Carolina

1997

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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NORTH CAROLINA													
31-33	Manufacturing	-	11 306	4 621	773 548	21 297 913	601 190	1 195 802	14 060 952	78 638 044	83 255 618	161 900 477	5 389 012
311	Food mfg	-	501	220	52 940	1 212 196	40 874	79 973	772 400	4 162 972	7 461 229	11 634 833	283 705
3111	Animal food mfg	-	59	27	1 568	39 719	1 039	1 925	22 809	375 020	1 021 298	1 398 712	9 905
31111	Animal food mfg	-	59	27	1 568	39 719	1 039	1 925	22 809	375 020	1 021 298	1 398 712	9 905
311111	Dog & cat food mfg	-	5	2	361	8 938	292	581	5 982	134 831	106 862	242 832	3 174
311119	Other animal food mfg	1	54	25	1 207	30 781	747	1 344	16 827	240 189	914 436	1 155 880	6 731
3112	Grain & oilseed milling	1	32	15	1 144	36 477	811	1 634	24 741	200 986	952 688	1 153 854	15 649
31121	Flour milling & malt mfg	5	24	10	644	18 409	435	867	10 610	59 445	180 287	239 928	4 342
311211	Flour milling	5	24	10	644	18 409	435	867	10 610	59 445	180 287	239 928	4 342
31122	Starch & vegetable fats & oils mfg	-	8	5	500	18 068	376	767	14 131	141 541	772 401	913 926	11 307
311222	Soybean processing	-	3	2	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	3	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	19	3	281	7 973	247	401	5 172	28 408	15 009	44 021	563
31134	Nonchocolate confectionery mfg	1	12	3	261	7 514	232	378	4 908	27 313	13 413	41 259	521
311340	Nonchocolate confectionery mfg	1	12	3	261	7 514	232	378	4 908	27 313	13 413	41 259	521
3114	Fruit & vegetable preserving & specialty food mfg	-	23	13	3 460	87 312	2 984	5 787	63 581	895 006	544 873	1 435 469	32 195
31141	Frozen food mfg	-	6	3	655	12 992	608	1 246	11 085	22 323	77 981	95 098	3 463
311411	Frozen fruit, juice, & vegetable mfg	-	2	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	4	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	17	10	2 805	74 320	2 376	4 541	52 496	872 683	466 892	1 340 371	28 732
311421	Fruit & vegetable canning	4	12	6	1 464	31 436	1 263	2 252	21 584	114 340	91 365	206 017	D
311422	Specialty canning	-	3	3	g	D	D	D	D	D	D	D	16 740
311423	Dried & dehydrated food mfg	-	2	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	23	17	1 434	37 144	838	1 903	19 997	124 679	419 819	543 008	7 493
31151	Dairy product (except frozen) mfg	2	14	12	1 110	28 809	678	1 623	17 067	108 774	375 938	482 763	6 526
311511	Fluid milk mfg	2	11	10	1 023	26 691	613	1 500	15 512	100 931	353 511	452 591	D
31152	Ice cream & frozen dessert mfg	-	9	5	324	8 335	160	280	2 930	15 905	43 881	60 245	967
311520	Ice cream & frozen dessert mfg	-	9	5	324	8 335	160	280	2 930	15 905	43 881	60 245	967
3116	Meat product mfg	-	118	67	28 452	559 961	25 221	48 535	435 958	1 137 651	3 583 978	4 738 935	117 934
31161	Animal slaughtering & processing	-	118	67	28 452	559 961	25 221	48 535	435 958	1 137 651	3 583 978	4 738 935	117 934
311611	Animal (except poultry) slaughtering	-	39	11	6 420	125 607	5 315	10 343	93 607	-196 228	1 434 749	1 242 992	D
311612	Meat processed from carcasses	1	40	22	3 290	69 833	2 599	4 989	47 622	125 325	352 273	481 033	13 664
311613	Rendering & meat byproduct processing	1	10	8	576	20 025	382	844	11 008	97 650	66 276	162 722	D
311615	Poultry processing	-	29	26	18 166	344 496	16 925	32 359	283 721	1 110 904	1 730 680	2 852 188	41 486
3117	Seafood product preparation & packaging	3	31	17	933	14 792	706	1 182	8 478	28 617	48 236	76 870	4 136
31171	Seafood product preparation & packaging	3	31	17	933	14 792	706	1 182	8 478	28 617	48 236	76 870	4 136
311712	Fresh & frozen seafood processing	3	28	17	924	14 572	698	1 166	8 325	28 040	46 908	74 973	4 077
3118	Bakeries & tortilla mfg	-	144	36	12 222	333 251	6 591	13 773	145 700	929 629	588 782	1 512 363	68 647
31181	Bread & bakery product mfg	1	126	28	i	D	D	D	D	D	D	D	37 196
311811	Retail bakeries	4	75	2	e	D	D	D	D	D	D	D	528
311812	Commercial bakeries	1	45	23	4 493	119 088	2 194	5 100	46 981	381 100	190 979	571 807	35 270
311813	Frozen cakes, pies, & other pastries mfg	1	6	3	961	23 561	815	1 869	18 533	91 132	72 504	163 551	1 398
31182	Cookie, cracker, & pasta mfg	-	15	6	i	D	D	D	D	D	D	D	31 229
311821	Cookie & cracker mfg	-	7	3	5 716	170 996	2 733	5 342	66 340	387 587	237 351	621 102	D
311822	Flour mixes & dough mfg from purchased flour	-	6	3	137	3 513	100	226	2 309	32 048	59 918	90 053	D
31183	Tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	222
311830	Tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	222

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH CAROLINA—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	52	25	3 446	95 567	2 437	4 833	45 964	442 976	286 546	731 601	27 183
31191	Snack food mfg	—	12	6	971	35 173	825	1 867	21 782	271 445	128 498	400 168	13 019
311911	Roasted nuts & peanut butter mfg	—	3	2	c	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	9	4	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	7	2	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	7	2	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	1	11	3	172	5 013	93	178	1 921	14 417	17 128	34 029	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	1	6	2	125	3 914	67	140	1 419	11 069	13 357	27 059	844
31199	All other food mfg	1	20	13	1 679	31 461	1 280	2 462	18 582	94 229	70 427	164 609	4 963
311991	Perishable prepared food mfg	3	7	5	436	8 471	256	455	3 505	18 060	25 004	42 999	930
311999	All other miscellaneous food mfg	—	13	8	1 243	22 990	1 024	2 007	15 077	76 169	45 423	121 610	4 033
312	Beverage & tobacco product mfg	1	76	43	15 711	683 941	11 085	21 808	464 008	12 110 353	5 545 664	17 631 916	341 698
3121	Beverage mfg	—	56	23	3 443	123 568	1 757	3 418	64 580	885 674	839 374	1 727 335	46 726
31211	Soft drink & ice mfg	—	39	20	g	D	D	D	D	D	D	D	28 975
312111	Soft drink mfg	—	20	15	1 755	49 957	507	1 165	12 718	455 339	431 950	887 404	26 275
312112	Bottled water mfg	3	4	1	122	3 893	76	150	1 764	17 948	22 966	41 059	1 076
312113	Ice mfg	1	15	4	c	D	D	D	D	D	D	D	1 624
31212	Breweries	—	12	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	12	2	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	1	20	20	12 268	560 373	9 328	18 390	399 428	11 224 679	4 706 290	15 904 581	294 972
31221	Tobacco stemming & redrying	—	11	11	h	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	11	11	h	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	1	9	9	i	D	D	D	D	D	D	D	D
312221	Cigarette mfg	1	6	6	i	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	3	3	e	D	D	D	D	D	D	D	841
313	Textile mills	—	721	528	113 249	2 759 432	97 306	206 554	2 111 751	6 270 059	11 056 008	17 364 693	971 136
3131	Fiber, yarn, & thread mills	—	204	180	35 357	810 380	31 446	66 965	649 299	1 981 930	3 907 288	5 919 549	456 110
31311	Fiber, yarn, & thread mills	—	204	180	35 357	810 380	31 446	66 965	649 299	1 981 930	3 907 288	5 919 549	456 110
313111	Yarn spinning mills	—	158	142	26 197	581 576	23 400	50 655	476 071	1 376 714	2 395 824	3 788 285	250 467
313112	Yarn texturing, throwing, & twisting mills	—	38	31	7 243	184 877	6 307	12 511	137 967	528 064	1 256 098	1 800 317	191 769
313113	Thread mills	1	8	7	1 917	43 927	1 739	3 799	35 261	77 152	255 366	330 947	13 874
3132	Fabric mills	1	310	233	58 362	1 462 882	49 736	103 681	1 115 662	3 021 346	5 027 315	8 057 913	387 898
31321	Broadwoven fabric mills	1	112	77	33 072	846 714	28 810	60 358	685 508	1 575 327	2 872 576	4 476 299	222 202
313210	Broadwoven fabric mills	1	112	77	33 072	846 714	28 810	60 358	685 508	1 575 327	2 872 576	4 476 299	222 202
31322	Narrow fabric mills & schiffli machine embroidery	1	40	24	2 912	64 387	2 536	5 318	49 719	145 701	144 569	288 617	9 478
313221	Narrow fabric mills	1	35	21	2 613	58 065	2 286	4 751	45 420	135 496	141 484	275 174	9 412
313222	Schiffli machine embroidery	—	5	3	299	6 322	250	567	4 299	10 205	3 085	13 443	66
31323	Nonwoven fabric mills	—	32	25	4 056	132 952	3 015	6 563	83 132	344 513	480 571	812 704	87 902
313230	Nonwoven fabric mills	—	32	25	4 056	132 952	3 015	6 563	83 132	344 513	480 571	812 704	87 902
31324	Knit fabric mills	—	126	107	18 322	418 829	15 375	31 442	297 303	955 805	1 529 599	2 480 293	68 316
313241	Weft knit fabric mills	1	81	64	10 435	226 819	8 678	17 605	163 841	458 722	948 203	1 407 172	35 072
313249	Other knit fabric & lace mills	—	45	43	7 887	192 010	6 697	13 837	133 462	497 083	581 396	1 073 121	33 244
3133	Textile & fabric finishing & fabric coating mills	1	207	115	19 530	486 170	16 124	35 908	346 790	1 266 783	2 121 405	3 387 231	127 128
31331	Textile & fabric finishing mills	1	191	103	18 297	452 376	15 201	33 891	325 620	1 156 292	1 912 911	3 069 380	119 957
313311	Broadwoven fabric finishing mills	1	116	41	7 499	192 979	6 029	13 777	139 706	504 162	859 863	1 367 326	71 211
313312	Textile & fabric finishing mills	1	75	62	10 798	259 397	9 172	20 114	185 914	652 130	1 053 048	1 702 054	48 746
31332	Fabric coating mills	—	16	12	1 233	33 794	923	2 017	21 170	110 491	208 494	317 851	7 171
313320	Fabric coating mills	—	16	12	1 233	33 794	923	2 017	21 170	110 491	208 494	317 851	7 171

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
314	Textile product mills	1	363	140	23 080	488 967	19 562	39 741	365 372	1 286 960	1 483 183	2 769 431	49 046
3141	Textile furnishings mills	—	181	68	16 552	344 374	14 382	30 609	265 314	998 706	1 085 214	2 091 746	30 050
31411	Carpet & rug mills	—	33	10	2 738	60 467	2 367	4 710	46 315	245 218	310 694	565 560	4 297
314110	Carpet & rug mills	—	33	10	2 738	60 467	2 367	4 710	46 315	245 218	310 694	565 560	4 297
31412	Curtain & linen mills	1	148	58	13 814	283 907	12 015	25 899	218 999	753 488	774 520	1 526 186	25 753
314121	Curtain & drapery mills	2	81	14	3 483	62 547	2 842	5 536	44 260	102 409	105 929	208 285	2 611
314129	Other household textile product mills	—	67	44	10 331	221 360	9 173	20 363	174 739	651 079	668 591	1 317 901	23 142
3149	Other textile product mills	2	182	72	6 528	144 593	5 180	9 132	100 058	288 254	397 969	677 685	18 996
31491	Textile bag & canvas mills	1	49	11	964	20 018	774	1 442	13 231	36 959	40 669	77 304	803
314911	Textile bag mills	1	16	6	544	11 538	463	898	7 967	23 437	26 386	49 514	231
314912	Canvas & related product mills	—	33	5	420	8 480	311	544	5 264	13 522	14 283	27 790	572
31499	All other textile product mills	2	133	61	5 564	124 575	4 406	7 690	86 827	251 295	357 300	600 381	18 193
314991	Rope, cordage, & twine mills	—	7	3	e	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	5	3	3	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	1	123	55	4 565	99 038	3 539	5 965	67 903	205 184	187 747	384 464	12 681
315	Apparel mfg	1	757	486	72 751	1 344 688	62 683	117 786	1 012 452	3 344 939	3 865 427	7 234 714	134 911
3151	Apparel knitting mills	1	359	228	40 891	811 495	36 408	70 990	637 559	1 758 593	2 027 115	3 794 266	94 579
31511	Hosiery & sock mills	1	294	188	31 199	595 928	27 907	54 386	469 016	1 245 710	1 275 417	2 515 233	64 620
315111	Sheer hosiery mills	—	86	53	12 538	240 559	11 329	21 952	190 865	455 976	517 816	982 906	23 535
315119	Other hosiery & sock mills	1	208	135	18 661	355 369	16 578	32 434	278 151	789 734	757 601	1 532 327	41 085
31519	Other apparel knitting mills	1	65	40	9 692	215 567	8 501	16 604	168 543	512 883	751 698	1 279 033	29 959
315191	Outerwear knitting mills	1	53	31	7 040	159 465	6 191	12 011	125 789	415 925	591 167	1 028 777	23 705
315192	Underwear & nightwear knitting mills	1	12	9	2 652	56 102	2 310	4 593	42 754	96 958	160 531	250 256	6 254
3152	Cut & sew apparel mfg	1	335	229	29 089	478 850	23 940	42 584	339 428	1 478 336	1 714 643	3 209 083	35 985
31521	Cut & sew apparel contractors	2	144	93	8 737	112 789	7 812	12 571	93 228	249 871	73 999	320 650	4 037
315211	Men's & boys' cut & sew apparel contractors	2	50	42	4 748	60 689	4 253	7 038	51 148	158 335	53 888	210 913	1 824
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	94	51	3 989	52 100	3 559	5 533	42 080	91 536	20 111	109 737	2 213
31522	Men's & boys' cut & sew apparel mfg	1	95	79	14 065	253 306	11 589	21 814	183 815	907 424	1 022 054	1 942 157	24 546
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	11	8	1 283	30 902	1 100	2 014	24 727	218 615	233 273	452 973	2 239
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	56	50	7 942	137 751	6 329	11 602	91 581	330 876	510 410	857 022	9 172
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	9	6	g	D	D	D	D	D	D	D	3 609
315225	Men's & boys' cut & sew work clothing mfg	—	4	2	152	2 511	129	200	1 274	2 945	3 242	6 326	41
315228	Men's & boys' cut & sew other outerwear mfg	3	15	13	h	D	D	D	D	D	D	D	9 485
31523	Women's & girls' cut & sew apparel mfg	1	68	45	4 581	85 944	3 050	5 398	41 808	277 774	563 340	847 991	5 596
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	19	14	1 589	28 412	1 233	2 305	18 676	135 063	423 082	562 868	592
315232	Women's & girls' cut & sew blouse & shirt mfg	—	11	6	590	10 085	355	646	3 773	69 421	51 076	120 574	D
315233	Women's & girls' cut & sew dress mfg	6	9	8	712	11 897	503	646	6 319	20 103	29 918	50 000	499
315234	Women's & girls' cut & sew suit, coat, skirt mfg	3	10	7	1 018	25 547	420	863	6 538	39 357	52 441	93 935	3 012
315239	Women's & girls' cut & sew other outerwear mfg	2	19	10	672	10 003	539	938	6 502	13 830	6 823	20 614	D
31529	Other cut & sew apparel mfg	3	28	12	1 706	26 811	1 489	2 801	20 577	43 267	55 250	98 285	1 806
315291	Infants' cut & sew apparel mfg	2	7	7	1 414	23 209	1 243	2 428	17 890	36 612	48 932	85 034	1 488
315299	All other cut & sew apparel mfg	9	20	5	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	2	63	29	2 771	54 343	2 335	4 212	35 465	108 010	123 669	231 365	4 347
31599	Apparel accessories & other apparel mfg	2	63	29	2 771	54 343	2 335	4 212	35 465	108 010	123 669	231 365	4 347
315991	Hat, cap, & millinery mfg	—	9	5	205	2 731	161	269	2 059	5 259	2 342	7 470	169
315992	Glove & mitten mfg	4	14	9	966	17 469	833	1 556	13 962	32 756	36 586	70 515	1 149
315993	Men's & boys' neckwear mfg	—	8	5	328	10 260	228	361	3 708	22 944	36 348	59 825	192
315999	Other apparel accessories & other apparel mfg	1	32	10	1 272	23 883	1 113	2 026	15 736	47 051	48 393	93 555	2 837
316	Leather & allied product mfg	—	44	15	3 350	80 954	2 665	5 639	54 261	185 579	218 024	403 669	4 541
3161	Leather & hide tanning & finishing	—	14	4	828	23 384	680	1 380	16 927	35 365	103 211	140 706	1 209
31611	Leather & hide tanning & finishing	—	14	4	828	23 384	680	1 380	16 927	35 365	103 211	140 706	1 209
316110	Leather & hide tanning & finishing	—	14	4	828	23 384	680	1 380	16 927	35 365	103 211	140 706	1 209
3162	Footwear mfg	—	9	7	2 218	50 918	1 763	3 780	33 139	137 806	105 740	241 547	3 180
31621	Footwear mfg	—	9	7	2 218	50 918	1 763	3 780	33 139	137 806	105 740	241 547	3 180
316211	Rubber & plastics footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	1	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	6	4	1 086	24 126	787	1 506	12 741	57 697	60 823	117 471	D
3169	Other leather & allied product mfg	1	21	4	304	6 652	222	479	4 195	12 408	9 073	21 416	152
31699	Other leather & allied product mfg	1	21	4	304	6 652	222	479	4 195	12 408	9 073	21 416	152
316991	Luggage mfg	—	9	3	229	5 386	178	390	3 567	9 917	7 547	17 391	104
321	Wood product mfg	1	869	382	33 399	826 329	28 244	56 092	604 319	1 962 503	2 828 252	4 780 409	204 042
3211	Sawmills & wood preservation	1	280	99	7 016	182 250	5 959	12 530	137 418	540 972	936 007	1 469 097	96 065
32111	Sawmills & wood preservation	1	280	99	7 016	182 250	5 959	12 530	137 418	540 972	936 007	1 469 097	96 065
321113	Sawmills	1	249	88	6 437	169 407	5 518	11 638	129 034	493 841	741 458	1 232 340	94 037
321114	Wood preservation	1	31	11	579	12 843	441	892	8 384	47 131	194 549	236 757	2 028
3212	Veneer, plywood, & engineered wood product mfg	—	133	96	9 125	237 709	7 623	15 951	172 032	565 316	726 012	1 291 855	60 623
32121	Veneer, plywood, & engineered wood product mfg	—	133	96	9 125	237 709	7 623	15 951	172 032	565 316	726 012	1 291 855	60 623
321211	Hardwood veneer & plywood mfg	—	63	45	3 686	80 508	3 270	6 653	61 564	161 216	218 274	386 280	8 637
321212	Softwood veneer & plywood mfg	—	7	7	g	D	D	D	D	D	D	D	8 657
321213	Engineered wood member (except truss) mfg	—	3	3	f	D	D	D	D	D	D	D	D
321214	Truss mfg	5	38	22	1 563	39 975	1 102	2 072	20 324	72 032	83 346	155 421	D
321219	Reconstituted wood product mfg	—	22	19	2 260	65 843	1 795	4 014	46 582	232 582	207 880	434 184	32 863
3219	Other wood product mfg	1	456	187	17 258	406 370	14 662	27 611	294 869	856 215	1 166 233	2 019 457	47 354
32191	Millwork	1	206	81	6 150	132 108	5 365	9 941	103 028	268 021	370 408	637 338	24 376
321911	Wood window & door mfg	1	31	14	1 318	25 809	1 131	2 057	19 929	64 090	95 738	166 543	2 695
321912	Cut stock, resawing lumber, & planing	1	114	48	3 258	68 169	2 914	5 394	55 866	118 165	175 493	292 484	14 013
321918	Other millwork (including flooring)	3	61	19	1 574	38 130	1 320	2 490	27 233	85 766	99 177	178 311	7 668
32192	Wood container & pallet mfg	1	103	42	2 373	47 583	1 989	3 747	31 963	86 699	92 627	178 271	6 857
321920	Wood container & pallet mfg	1	103	42	2 373	47 583	1 989	3 747	31 963	86 699	92 627	178 271	6 857
32199	All other wood product mfg	—	147	64	8 735	226 679	7 308	13 923	159 878	501 495	703 198	1 203 848	16 121
321991	Manufactured home (mobile home) mfg	—	27	27	6 440	175 471	5 400	10 268	125 080	402 842	583 820	984 513	10 664
321992	Prefabricated wood building mfg	—	26	8	841	19 754	688	1 474	13 205	33 682	52 844	86 469	1 974
321999	All other miscellaneous wood product mfg	2	94	29	1 454	31 454	1 220	2 181	21 593	64 971	66 534	132 866	3 483
322	Paper mfg	—	198	150	21 171	835 979	16 211	34 518	567 477	2 170 438	2 975 378	5 141 792	389 385
3221	Pulp, paper, & paperboard mills	—	14	14	6 996	354 457	5 159	11 370	246 889	783 444	1 080 342	1 870 815	247 748
32211	Pulp mills	—	3	3	1 621	85 105	939	1 994	47 733	213 328	354 837	572 504	D
322110	Pulp mills	—	3	3	1 621	85 105	939	1 994	47 733	213 328	354 837	572 504	D
32212	Paper mills	—	6	6	3 074	148 990	2 463	5 579	112 016	324 195	384 123	712 255	D
322121	Paper (except newsprint) mills	—	6	6	3 074	148 990	2 463	5 579	112 016	324 195	384 123	712 255	D
32213	Paperboard mills	—	5	5	2 301	120 362	1 757	3 797	87 140	245 921	341 382	586 056	D
322130	Paperboard mills	—	5	5	2 301	120 362	1 757	3 797	87 140	245 921	341 382	586 056	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	-	184	136	14 175	481 522	11 052	23 148	320 588	1 386 994	1 895 036	3 270 977	141 637
32221	Paperboard container mfg	-	121	98	9 732	316 059	7 479	15 925	202 044	814 484	1 061 169	1 867 068	95 562
322211	Corrugated & solid fiber box mfg	-	70	58	5 058	165 353	3 701	7 786	95 850	403 919	605 201	1 006 925	43 785
322212	Folding paperboard box mfg	-	29	25	3 254	109 544	2 600	5 705	74 147	292 076	316 607	603 444	41 499
322213	Setup paperboard box mfg	4	8	5	e	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	-	13	9	788	22 554	648	1 394	17 606	57 360	68 854	126 078	4 818
322215	Nonfolding sanitary food container mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	23	16	2 316	94 373	1 876	3 875	68 640	192 409	588 182	775 938	15 493
322222	Coated & laminated paper mfg	1	12	7	868	27 098	738	1 554	19 899	70 691	140 473	211 988	6 673
322224	Uncoated paper & multiwall bag mfg	-	3	3	250	5 564	203	363	3 730	12 267	21 788	33 964	D
322225	Laminated aluminum foil mfg for flexible packaging uses	-	3	3	f	D	D	D	D	D	D	D	6 391
322226	Surface-coated paperboard mfg	-	3	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	1	10	5	529	15 650	420	861	10 208	40 757	49 386	89 397	2 048
322231	Die-cut paper & paperboard office supplies mfg	2	5	2	205	4 726	144	265	2 759	12 064	22 713	34 831	1 103
322232	Envelope mfg	-	3	2	c	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	2	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	1	30	17	1 598	55 440	1 277	2 487	39 696	339 344	196 299	538 574	28 534
322291	Sanitary paper product mfg	-	3	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	6	27	15	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	1 157	213	19 830	588 316	14 603	27 713	371 997	1 325 920	871 120	2 213 871	128 918
3231	Printing & related support activities	1	1 157	213	19 830	588 316	14 603	27 713	371 997	1 325 920	871 120	2 213 871	128 918
32311	Printing	1	1 042	179	17 889	531 373	13 115	24 830	333 936	1 210 435	847 041	2 073 721	122 272
323110	Commercial lithographic printing ..	1	482	94	8 237	259 791	5 950	11 484	165 624	603 877	437 510	1 037 249	72 885
323111	Commercial gravure printing	-	13	2	649	26 020	491	838	18 607	31 153	35 141	67 521	928
323112	Commercial flexographic printing ..	-	40	13	995	32 803	711	1 541	17 955	68 676	77 643	144 049	5 725
323113	Commercial screen printing	-	161	28	2 898	66 814	2 265	3 933	40 914	142 555	115 036	274 193	14 449
323114	Quick printing	2	188	7	1 095	25 986	765	1 259	16 087	52 078	29 662	81 730	6 626
323115	Digital printing	1	11	1	101	2 984	62	88	1 348	7 367	3 587	10 954	D
323116	Manifold business form printing	2	29	13	1 403	35 564	921	1 844	24 320	134 642	61 475	195 691	6 625
323117	Book printing	-	18	8	1 576	58 814	1 267	2 695	35 047	112 185	47 553	162 019	8 325
323118	Blankbook, looseleaf binder, & device mfg .	-	6	4	216	4 887	153	286	2 978	14 113	12 208	26 422	D
323119	Other commercial printing	4	94	9	719	17 710	530	862	11 056	43 789	27 226	73 893	2 828
32312	Support activities for printing	2	115	34	1 941	56 943	1 488	2 883	38 061	115 485	24 079	140 150	6 646
323121	Tradebinding & related work	2	40	14	769	14 289	632	1 120	9 941	26 972	5 619	32 657	2 192
323122	Prepress services	2	75	20	1 172	42 654	856	1 763	28 120	88 513	18 460	107 493	4 454
324	Petroleum & coal products mfg	-	32	5	764	24 753	531	1 042	16 256	120 606	191 181	311 487	5 867
3241	Petroleum & coal products mfg	-	32	5	764	24 753	531	1 042	16 256	120 606	191 181	311 487	5 867
32412	Asphalt paving, roofing, & saturated materials mfg	-	26	3	509	18 874	367	815	13 612	67 312	135 721	202 542	4 527
324121	Asphalt paving mixture & block mfg	2	20	1	120	2 867	68	119	1 845	14 571	30 364	45 049	D
324122	Asphalt shingle & coating materials mfg	-	6	2	389	16 007	299	696	11 767	52 741	105 357	157 493	D
32419	Other petroleum & coal products mfg	-	6	2	255	5 879	164	227	2 644	53 294	55 460	108 945	1 340
324191	Petroleum lubricating oil & grease mfg	-	5	2	e	D	D	D	D	D	D	D	D

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NORTH CAROLINA—Con.													
31-33 Manufacturing—Con.													
325	Chemical mfg	1	426	195	40 045	1 543 458	26 120	54 017	836 899	13 985 697	8 429 069	22 251 006	589 848
3251	Basic chemical mfg	—	68	31	5 339	249 264	3 415	7 249	143 579	1 095 921	1 232 512	2 325 214	139 874
32511	Petrochemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	—	15	5	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	15	5	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	9	4	718	27 832	288	598	12 053	101 490	82 747	184 669	14 585
325132	Synthetic organic dye & pigment mfg	—	7	4	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	18	9	1 821	84 811	1 391	2 821	58 348	371 174	202 846	586 756	37 493
325188	All other basic inorganic chemical mfg	—	17	8	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	25	12	2 123	101 190	1 315	2 991	56 286	527 383	567 378	1 077 388	73 978
325192	Cyclic crude & intermediate mfg	—	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	2	24	11	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	42	33	8 780	316 912	6 504	13 469	205 455	1 264 922	1 366 929	2 638 287	100 090
32521	Resin & synthetic rubber mfg	1	28	20	2 266	94 871	1 188	2 462	43 411	324 051	534 658	855 990	51 072
325211	Plastics material & resin mfg	1	24	19	2 191	91 322	1 139	2 361	41 401	306 655	516 909	820 416	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	14	13	6 514	222 041	5 316	11 007	162 044	940 871	832 271	1 782 297	49 018
325222	Noncellulosic organic fiber mfg	—	14	13	6 514	222 041	5 316	11 007	162 044	940 871	832 271	1 782 297	49 018
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	34	11	1 675	56 371	1 108	2 657	35 086	589 016	709 194	1 273 765	27 239
32531	Fertilizer mfg	1	25	7	1 398	43 950	945	2 320	28 897	221 902	481 542	678 757	20 877
325312	Phosphatic fertilizer mfg	—	3	1	g	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	2	18	5	e	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	—	9	4	277	12 421	163	337	6 189	367 114	227 652	595 008	6 362
325320	Pesticide & other agricultural chemical mfg	—	9	4	277	12 421	163	337	6 189	367 114	227 652	595 008	6 362
3254	Pharmaceutical & medicine mfg	—	51	33	9 630	395 196	5 987	13 156	207 880	7 829 795	3 057 074	10 782 002	166 025
32541	Pharmaceutical & medicine mfg	—	51	33	9 630	395 196	5 987	13 156	207 880	7 829 795	3 057 074	10 782 002	166 025
325411	Medicinal & botanical mfg	—	9	5	1 027	46 054	748	1 564	28 363	217 054	224 607	455 945	17 545
325412	Pharmaceutical preparation mfg	—	25	18	5 988	243 625	4 089	9 065	140 566	7 041 443	2 454 342	9 393 669	86 204
325413	In-vitro diagnostic substance mfg	1	4	4	812	43 193	255	498	10 057	93 973	45 105	138 912	D
325414	Biological product (except diagnostic) mfg	5	13	6	1 803	62 324	895	2 029	28 894	477 325	333 020	793 476	D
3255	Paint, coating, & adhesive mfg	1	54	23	2 336	89 138	1 194	2 453	30 965	308 786	367 959	666 515	26 935
32551	Paint & coating mfg	1	29	16	2 018	75 186	1 028	2 131	26 647	273 195	320 399	582 872	21 531
325510	Paint & coating mfg	1	29	16	2 018	75 186	1 028	2 131	26 647	273 195	320 399	582 872	21 531
32552	Adhesive mfg	4	25	7	318	13 952	166	322	4 318	35 591	47 560	83 643	5 404
325520	Adhesive mfg	4	25	7	318	13 952	166	322	4 318	35 591	47 560	83 643	5 404
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	82	33	7 620	242 414	4 905	8 837	114 980	2 070 516	875 619	2 925 079	77 983
32561	Soap & cleaning compound mfg	1	73	25	2 542	98 443	1 195	2 200	32 730	354 721	389 494	736 313	23 356
325611	Soap & other detergent mfg	1	26	6	872	35 356	398	740	9 978	107 920	100 064	206 440	D
325612	Polish & other sanitation good mfg ..	—	15	4	465	11 371	255	343	5 454	53 902	43 648	94 365	D
325613	Surface active agent mfg	2	32	15	1 205	51 716	542	1 117	17 298	192 899	245 782	435 508	15 052
32562	Toilet preparation mfg	2	9	8	5 078	143 971	3 710	6 637	82 250	1 715 795	486 125	2 188 766	54 627
325620	Toilet preparation mfg	2	9	8	5 078	143 971	3 710	6 637	82 250	1 715 795	486 125	2 188 766	54 627

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	NORTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	3	95	31	4 665	194 163	3 007	6 196	98 954	826 741	819 782	1 640 144	51 702
32591	Printing ink mfg	3	26	10	f	D	D	D	D	D	D	D	D
325910	Printing ink mfg	3	26	10	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	68	21	3 884	166 142	2 594	5 361	85 293	737 307	707 953	1 441 933	49 167
325991	Custom compounding of purchased resin ...	3	18	10	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	6	9	2	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	41	9	1 790	80 744	1 170	2 132	34 208	329 586	315 322	634 272	29 842
326	Plastics & rubber products mfg	-	525	312	45 110	1 322 349	36 429	71 519	919 560	3 877 638	3 613 482	7 494 083	359 902
3261	Plastics product mfg	-	415	262	29 914	800 380	23 706	45 561	522 084	2 450 459	2 393 731	4 836 670	233 812
32611	Unsupported plastics film, sheet, & bag mfg ..	-	47	29	4 252	133 898	3 217	6 531	87 809	490 447	519 373	1 025 256	34 262
326111	Unsupported plastics bag mfg	-	14	10	1 922	49 553	1 420	3 061	32 074	123 400	167 248	291 137	12 259
326112	Unsupported plastics packaging film & sheet mfg	3	5	4	342	10 488	260	545	7 802	30 516	44 720	74 675	1 521
326113	Unsupported plastics film & sheet (except packaging) mfg	-	28	15	1 988	73 857	1 537	2 925	47 933	336 531	307 405	659 444	20 482
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	30	14	2 317	76 782	1 678	3 489	44 729	299 515	309 526	585 900	32 329
326121	Unsupported plastics profile shape mfg	-	20	4	962	35 838	552	1 308	15 548	160 724	79 249	237 176	4 378
326122	Plastics pipe & pipe fitting mfg	-	10	10	1 355	40 944	1 126	2 181	29 181	138 791	230 277	348 724	27 951
32613	Laminated plastics plate, sheet, & shape mfg	-	14	5	1 247	40 936	1 067	2 238	31 085	183 606	116 621	298 799	17 665
326130	Laminated plastics plate, sheet, & shape mfg	-	14	5	1 247	40 936	1 067	2 238	31 085	183 606	116 621	298 799	17 665
32614	Polystyrene foam product mfg	-	21	12	1 269	35 045	1 071	2 149	26 297	125 705	126 726	253 933	8 243
326140	Polystyrene foam product mfg	-	21	12	1 269	35 045	1 071	2 149	26 297	125 705	126 726	253 933	8 243
32615	Urethane & other foam product (except polystyrene) mfg	1	60	51	4 738	114 673	3 947	6 852	75 573	290 748	420 988	712 718	25 589
326150	Urethane & other foam product (except polystyrene) mfg	1	60	51	4 738	114 673	3 947	6 852	75 573	290 748	420 988	712 718	25 589
32616	Plastics bottle mfg	-	12	8	779	21 414	655	1 201	16 673	75 515	88 510	164 854	16 250
326160	Plastics bottle mfg	-	12	8	779	21 414	655	1 201	16 673	75 515	88 510	164 854	16 250
32619	Other plastics product mfg	1	231	143	15 312	377 632	12 071	23 101	239 918	984 923	811 987	1 795 210	99 474
326191	Plastics plumbing fixture mfg	3	18	6	273	6 457	188	348	3 838	14 673	8 951	23 600	470
326199	All other plastics product mfg	1	213	137	15 039	371 175	11 883	22 753	236 080	970 250	803 036	1 771 610	99 004
3262	Rubber product mfg	-	110	50	15 196	521 969	12 723	25 958	397 476	1 427 179	1 219 751	2 657 413	126 090
32621	Tire mfg	-	40	9	7 882	317 423	6 879	13 887	261 598	937 576	800 132	1 720 794	67 510
326211	Tire mfg (except retreading)	-	9	7	7 646	312 201	6 673	13 455	257 216	926 967	784 523	1 694 628	67 201
326212	Tire retreading	-	31	2	236	5 222	206	432	4 382	10 609	15 609	26 166	309
32622	Rubber & plastics hoses & belting mfg	-	17	13	2 317	68 310	1 758	3 659	46 008	129 407	137 620	296 655	10 420
326220	Rubber & plastics hoses & belting mfg	-	17	13	2 317	68 310	1 758	3 659	46 008	129 407	137 620	296 655	10 420
32629	Other rubber product mfg	-	53	28	4 997	136 236	4 086	8 412	89 870	360 196	281 999	639 964	48 160
326291	Rubber product mfg for mechanical use	-	24	11	2 453	61 223	2 064	4 384	44 868	145 316	102 413	247 147	17 806
326299	All other rubber product mfg	-	29	17	2 544	75 013	2 022	4 028	45 002	214 880	179 586	392 817	30 354

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	-	554	175	22 447	662 990	18 124	37 586	479 084	2 629 210	1 345 641	3 968 610	299 370
3271	Clay product & refractory mfg	-	87	35	4 426	119 919	3 660	7 666	87 192	340 691	159 811	499 913	27 155
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	52	9	1 913	53 234	1 592	3 458	40 159	162 994	76 670	234 358	16 128
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	48	7	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	1	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	35	26	2 513	66 685	2 068	4 208	47 033	177 697	83 141	265 555	11 027
327121	Brick & structural clay tile mfg	-	26	21	1 906	47 961	1 608	3 159	34 137	141 650	56 788	203 157	6 011
327122	Ceramic wall & floor tile mfg	-	5	1	e	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	-	2	2	c	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	78	31	10 584	340 069	8 704	18 220	250 267	1 637 561	607 736	2 243 290	221 347
32721	Glass & glass product mfg	-	78	31	10 584	340 069	8 704	18 220	250 267	1 637 561	607 736	2 243 290	221 347
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	12	3	h	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	62	24	5 856	172 307	4 538	9 701	113 425	1 033 139	287 817	1 312 060	129 489
3273	Cement & concrete product mfg	2	309	82	5 372	150 858	4 192	8 745	106 298	432 132	435 092	866 546	41 813
32732	Ready-mix concrete mfg ..	2	193	47	3 198	89 930	2 618	5 507	69 216	255 363	304 182	560 141	30 586
327320	Ready-mix concrete mfg	2	193	47	3 198	89 930	2 618	5 507	69 216	255 363	304 182	560 141	30 586
32733	Concrete pipe, brick, & block mfg	1	50	21	1 209	36 197	852	1 836	20 900	108 280	95 922	202 892	D
327331	Concrete block & brick mfg	3	33	10	634	19 593	397	873	10 692	50 554	70 451	120 117	3 960
327332	Concrete pipe mfg	-	17	11	575	16 604	455	963	10 208	57 726	25 471	82 775	D
32739	Other concrete product mfg	1	64	13	f	D	D	D	D	D	D	D	4 547
327390	Other concrete product mfg	1	64	13	f	D	D	D	D	D	D	D	4 547
3274	Lime & gypsum product mfg	-	6	4	229	6 124	191	444	4 513	45 599	49 517	95 269	769
32742	Gypsum product mfg	-	6	4	229	6 124	191	444	4 513	45 599	49 517	95 269	769
327420	Gypsum product mfg ..	-	6	4	229	6 124	191	444	4 513	45 599	49 517	95 269	769
3279	Other nonmetallic mineral product mfg	1	74	23	1 836	46 020	1 377	2 511	30 814	173 227	93 485	263 592	8 286
32791	Abrasive product mfg ...	1	13	7	620	16 039	396	770	8 351	82 917	30 127	108 720	2 467
327910	Abrasive product mfg ..	1	13	7	620	16 039	396	770	8 351	82 917	30 127	108 720	2 467
32799	All other nonmetallic mineral product mfg ...	1	61	16	1 216	29 981	981	1 741	22 463	90 310	63 358	154 872	5 819
327991	Cut stone & stone product mfg	3	30	8	594	14 544	463	925	10 599	44 715	23 733	69 385	2 087
327992	Ground or treated mineral & earth mfg ..	-	12	2	196	6 111	157	271	4 399	15 860	18 573	34 327	1 598
327993	Mineral wool mfg	-	8	4	319	7 515	270	442	6 024	24 045	16 881	41 260	1 756
327999	All other miscellaneous nonmetallic mineral product mfg	2	11	2	107	1 811	91	103	1 441	5 690	4 171	9 900	378
331	Primary metal mfg	-	78	50	7 914	277 592	6 402	13 305	200 877	813 921	1 202 545	1 975 195	70 159
3311	Iron & steel mills & ferroalloy mfg	-	1	1	c	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	c	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	11	7	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	c	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	c	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	9	5	524	15 747	402	797	12 006	43 120	114 184	157 620	6 416
331221	Cold-rolled steel shape mfg	-	1	1	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	8	4	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
331	Primary metal mfg—Con.												
3313	Alumina & aluminum production & processing...	-	11	11	2 146	82 820	1 787	3 691	64 373	253 723	483 006	727 117	15 922
33131	Alumina & aluminum production & processing.....	-	11	11	2 146	82 820	1 787	3 691	64 373	253 723	483 006	727 117	15 922
331314	Secondary smelting & alloying of aluminum .	-	1	1	c	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	3	3	1 085	54 685	932	1 844	44 671	167 642	214 627	377 421	D
331316	Aluminum extruded product mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	16	13	3 054	104 049	2 384	4 833	66 840	341 182	409 793	722 371	25 925
33142	Copper rolling, drawing, extruding, & alloying ...	-	8	7	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	6	5	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	6	5	1 941	72 089	1 478	3 071	46 653	253 323	248 207	477 577	20 987
331491	Other nonferrous metal rolling, drawing, & extruding	-	5	4	g	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	39	18	1 750	58 360	1 478	3 207	45 815	108 719	85 320	194 387	15 332
33151	Ferrous metal foundries .	-	17	7	1 064	40 671	920	2 188	33 315	71 407	56 738	128 979	10 928
331511	Iron foundries	-	12	5	942	36 308	820	1 970	30 232	64 898	54 316	120 095	D
33152	Nonferrous metal foundries	1	22	11	686	17 689	558	1 019	12 500	37 312	28 582	65 408	4 404
331521	Aluminum die-casting foundries	-	5	4	389	10 466	318	583	7 241	24 868	21 574	46 051	3 686
331522	Nonferrous (except aluminum) die-casting foundries	8	6	3	112	2 179	88	132	1 674	4 287	2 349	6 558	370
332	Fabricated metal product mfg.....	-	1 483	411	41 686	1 211 743	32 173	62 923	805 610	2 952 513	3 148 477	6 053 521	249 424
3321	Forging & stamping	-	49	28	2 424	84 303	1 850	3 930	53 923	155 793	192 554	344 500	25 202
33211	Forging & stamping	-	49	28	2 424	84 303	1 850	3 930	53 923	155 793	192 554	344 500	25 202
332111	Iron & steel forging ...	-	9	5	811	28 242	660	1 430	20 031	44 426	67 224	108 251	12 072
332114	Custom roll forming ...	2	7	4	c	D	D	D	D	D	D	D	342
332115	Crown & closure mfg...	-	2	2	c	D	D	D	D	D	D	D	D
332116	Metal stamping.....	-	26	15	1 005	32 738	785	1 671	21 982	62 180	53 940	115 019	6 613
332117	Powder metallurgy part mfg.....	-	3	2	181	5 718	133	251	3 485	7 303	43 420	50 745	D
3322	Cutlery & handtool mfg....	-	43	21	2 472	76 583	1 965	4 008	52 992	206 926	183 854	388 730	12 422
33221	Cutlery & handtool mfg..	-	43	21	2 472	76 583	1 965	4 008	52 992	206 926	183 854	388 730	12 422
332211	Cutlery & flatware (except precious) mfg.....	-	6	1	185	4 631	130	299	2 824	13 166	4 156	17 321	D
332212	Hand & edge tool mfg.	-	33	17	1 886	61 066	1 563	3 159	43 310	161 124	151 010	312 454	7 184
332213	Saw blade & handsaw mfg.....	-	4	3	401	10 886	272	550	6 858	32 636	28 688	58 955	D
3323	Architectural & structural metals mfg	-	309	107	9 123	267 037	6 620	13 357	159 503	608 525	785 577	1 390 478	29 014
33231	Plate work & fabricated structural product mfg ..	-	131	48	3 910	130 408	2 589	5 313	71 667	314 446	475 519	786 272	12 014
332311	Prefabricated metal building & component mfg.....	-	20	9	1 333	45 383	892	1 787	25 529	107 440	144 644	249 759	2 711
332312	Fabricated structural metal mfg	-	91	33	2 218	74 168	1 454	3 079	39 819	189 801	320 073	508 793	8 361
332313	Plate work mfg.....	1	20	6	359	10 857	243	447	6 319	17 205	10 802	27 720	942
33232	Ornamental & architectural metal products mfg.....	1	178	59	5 213	136 629	4 031	8 044	87 836	294 079	310 058	604 206	17 000
332321	Metal window & door mfg.....	-	21	10	1 405	30 251	1 117	2 168	20 427	64 302	107 408	171 402	1 839
332322	Sheet metal work mfg.	1	108	38	2 950	84 997	2 260	4 568	53 814	190 572	142 602	330 545	14 083
332323	Ornamental & architectural metal work mfg	1	49	11	858	21 381	654	1 308	13 595	39 205	60 048	102 259	1 078
3324	Boiler, tank, & shipping container mfg	-	44	28	2 038	78 462	1 657	3 418	57 319	193 555	457 138	643 294	12 224
33241	Power boiler & heat exchanger mfg	1	8	4	359	10 595	281	583	6 968	17 607	31 448	48 688	1 271
332410	Power boiler & heat exchanger mfg	1	8	4	359	10 595	281	583	6 968	17 607	31 448	48 688	1 271
33242	Metal tank (heavy gauge) mfg.....	-	20	12	583	17 858	448	859	10 489	45 573	43 382	89 479	1 106
332420	Metal tank (heavy gauge) mfg	-	20	12	583	17 858	448	859	10 489	45 573	43 382	89 479	1 106

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg—Con.												
33243	Metal can, box, & other metal container (light gauge) mfg	-	16	12	1 096	50 009	928	1 976	39 862	130 375	382 308	505 127	9 847
332431	Metal can mfg	-	5	5	800	41 738	684	1 531	35 065	108 994	349 731	450 962	8 977
332439	Other metal container mfg	-	11	7	296	8 271	244	445	4 797	21 381	32 577	54 165	870
3325	Hardware mfg	-	30	14	3 339	83 948	2 778	5 414	62 638	260 162	189 654	445 907	19 609
33251	Hardware mfg	-	30	14	3 339	83 948	2 778	5 414	62 638	260 162	189 654	445 907	19 609
332510	Hardware mfg	-	30	14	3 339	83 948	2 778	5 414	62 638	260 162	189 654	445 907	19 609
3326	Spring & wire product mfg .	-	54	27	3 132	70 577	2 656	4 909	51 757	181 897	178 453	360 841	9 671
33261	Spring & wire product mfg	-	54	27	3 132	70 577	2 656	4 909	51 757	181 897	178 453	360 841	9 671
332612	Spring (light gauge) mfg	-	16	9	1 429	31 798	1 232	2 114	22 890	104 723	78 616	183 128	5 466
332618	Other fabricated wire product mfg	1	37	18	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	686	96	7 991	230 722	6 196	11 516	155 113	439 683	211 415	649 497	42 035
33271	Machine shops	2	632	72	6 325	182 206	4 967	8 992	121 593	329 821	166 606	496 659	29 599
332710	Machine shops	2	632	72	6 325	182 206	4 967	8 992	121 593	329 821	166 606	496 659	29 599
33272	Turned product & screw, nut, & bolt mfg	-	54	24	1 666	48 516	1 229	2 524	33 520	109 862	44 809	152 838	12 436
332721	Precision turned product mfg	-	44	20	1 149	32 954	815	1 594	21 916	63 468	35 268	98 432	7 762
332722	Bolt, nut, screw, rivet, & washer mfg	-	10	4	517	15 562	414	930	11 604	46 394	9 541	54 406	4 674
3328	Coating, engraving, heat treating, & allied activities .	1	111	27	1 772	51 158	1 361	2 778	33 701	121 025	73 129	195 783	13 901
33281	Coating, engraving, heat treating, & allied activities	1	111	27	1 772	51 158	1 361	2 778	33 701	121 025	73 129	195 783	13 901
332811	Metal heat treating	1	15	5	236	6 288	191	383	4 192	16 773	5 546	22 318	1 115
332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	1	37	10	648	17 550	517	1 017	12 646	48 063	30 025	79 583	5 735
332813	Electroplating, plating, polishing, anodizing, & coloring	1	59	12	888	27 320	653	1 378	16 863	56 189	37 558	93 882	7 051
3329	Other fabricated metal product mfg	-	157	63	9 395	268 953	7 090	13 593	178 664	784 947	876 703	1 634 491	85 346
33291	Metal valve mfg	-	33	26	4 491	110 524	3 392	6 157	68 610	362 438	528 357	897 345	26 889
332911	Industrial valve mfg ...	-	18	15	1 878	49 537	1 313	2 493	26 807	217 343	158 807	378 520	14 004
332912	Fluid power valve & hose fitting mfg	-	9	5	743	21 914	538	1 078	12 665	48 442	55 375	107 967	5 614
332913	Plumbing fixture fitting & trim mfg	-	3	3	1 331	27 278	1 175	1 840	20 857	67 731	292 055	359 328	5 527
332919	Other metal valve & pipe fitting mfg	-	3	3	539	11 795	366	746	8 281	28 922	22 120	51 530	1 744
33299	All other fabricated metal product mfg	-	124	37	4 904	158 429	3 698	7 436	110 054	422 509	348 346	737 146	58 457
332991	Ball & roller bearing mfg	-	7	7	1 501	57 154	1 221	2 561	45 328	167 104	129 387	271 528	27 131
332996	Fabricated pipe & pipe fitting mfg	1	24	11	960	27 657	675	1 413	16 068	65 304	55 155	121 200	D
332998	Enameled iron & metal sanitary ware mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	76	16	1 499	44 333	985	1 824	26 103	119 204	75 883	192 365	11 687
333	Machinery mfg	-	757	305	42 180	1 384 484	28 787	56 543	754 320	3 668 214	5 011 774	8 697 514	303 306
3331	Agriculture, construction, & mining machinery mfg	-	56	32	5 686	189 429	3 506	6 782	93 911	633 475	1 217 921	1 843 574	48 399
33311	Agricultural implement mfg	-	30	14	2 890	80 054	1 867	3 372	39 731	282 265	274 021	543 276	15 621
333111	Farm machinery & equipment mfg	1	28	12	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	20	14	2 524	100 482	1 433	2 966	47 850	329 508	935 221	1 269 375	31 734
333120	Construction machinery mfg	-	20	14	2 524	100 482	1 433	2 966	47 850	329 508	935 221	1 269 375	31 734
33313	Mining & oil & gas field machinery mfg	-	6	4	272	8 893	206	444	6 330	21 702	8 679	30 923	1 044
333131	Mining machinery & equipment mfg	-	3	3	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con.												
	Manufacturing— Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	-	241	91	7 813	267 155	4 696	9 231	129 984	615 226	658 175	1 249 029	46 041
33321	Sawmill & woodworking machinery mfg	-	20	6	799	24 866	499	956	12 992	56 140	44 509	99 897	1 929
333210	Sawmill & woodworking machinery mfg	-	20	6	799	24 866	499	956	12 992	56 140	44 509	99 897	1 929
33322	Plastics & rubber industry machinery mfg	2	12	9	404	13 813	217	450	6 101	39 681	29 932	65 465	3 694
333220	Plastics & rubber industry machinery mfg	2	12	9	404	13 813	217	450	6 101	39 681	29 932	65 465	3 694
33329	Other industrial machinery mfg	-	209	76	6 610	228 476	3 980	7 825	110 891	519 405	583 734	1 083 667	40 418
333291	Paper industry machinery mfg	-	11	4	513	18 201	236	394	6 995	54 526	193 702	242 980	3 447
333292	Textile machinery mfg	-	127	40	3 681	117 967	2 242	4 407	55 801	276 056	215 830	483 819	24 535
333293	Printing machinery & equipment mfg	-	13	5	376	15 619	218	455	8 715	32 999	31 884	64 897	3 257
333294	Food product machinery mfg	-	7	5	775	30 668	492	983	16 553	51 762	55 601	105 874	2 636
333298	All other industrial machinery mfg	2	51	22	1 265	46 021	792	1 586	22 827	104 062	86 717	186 097	6 543
3333	Commercial & service industry machinery mfg ..	-	40	13	1 587	48 777	978	2 066	21 682	129 445	145 247	262 268	17 684
33331	Commercial & service industry machinery mfg	-	40	13	1 587	48 777	978	2 066	21 682	129 445	145 247	262 268	17 684
333313	Office machinery mfg ..	-	3	2	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	28	10	1 364	41 243	817	1 763	17 736	67 002	108 235	176 541	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	60	34	5 592	152 209	4 161	8 698	94 958	437 563	435 474	873 543	26 071
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	60	34	5 592	152 209	4 161	8 698	94 958	437 563	435 474	873 543	26 071
333411	Air purification equipment mfg	-	23	14	1 830	48 816	1 351	2 917	28 579	110 714	93 512	202 190	6 847
333412	Industrial & commercial fan & blower mfg	6	8	5	403	10 365	303	547	6 543	26 077	23 554	49 838	1 064
333414	Heating equipment (except warm air furnaces) mfg	-	10	6	772	18 628	548	1 179	11 392	54 884	44 691	98 837	1 547
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	19	9	2 587	74 400	1 959	4 055	48 444	245 888	273 717	522 678	16 613
3335	Metalworking machinery mfg	2	156	36	3 171	110 248	2 473	4 890	72 678	230 403	127 897	356 445	16 819
33351	Metalworking machinery mfg	2	156	36	3 171	110 248	2 473	4 890	72 678	230 403	127 897	356 445	16 819
333511	Industrial mold mfg ...	3	39	12	690	28 771	558	1 222	20 877	51 652	14 908	66 445	4 034
333512	Machine tool (metal cutting types) mfg ...	-	4	2	109	4 812	66	116	1 990	14 481	14 169	28 001	D
333513	Machine tool (metal forming types) mfg ...	6	4	4	305	12 244	172	394	5 984	26 466	24 928	51 416	1 490
333514	Special die & tool, die set, jig, & fixture mfg ..	2	75	9	730	22 437	602	1 101	16 788	47 169	12 977	59 451	3 399
333515	Cutting tool & machine tool accessory mfg ..	-	28	8	1 204	36 868	971	1 943	25 022	80 551	52 012	131 277	6 892
333518	Other metalworking machinery mfg	8	5	1	c	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	37	22	5 623	215 227	4 195	7 509	120 143	518 374	1 084 983	1 668 306	70 227
33361	Engine, turbine, & power transmission equipment mfg	-	37	22	5 623	215 227	4 195	7 509	120 143	518 374	1 084 983	1 668 306	70 227
333611	Turbine & turbine generator set unit mfg	-	2	2	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	11	5	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	12	9	946	29 173	690	1 377	17 412	79 983	139 199	226 558	D
333618	Other engine equipment mfg	-	12	6	2 828	100 792	2 200	3 542	47 948	237 452	884 405	1 121 474	54 509

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NORTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	167	77	12 708	401 439	8 778	17 367	220 964	1 103 728	1 342 077	2 444 349	78 065
33391	Pump & compressor mfg	-	20	12	3 416	127 138	2 008	3 951	58 999	365 916	555 015	926 302	17 142
333911	Pump & pumping equipment mfg	-	9	6	f	D	D	D	D	D	D	D	5 411
333912	Air & gas compressor mfg	-	8	4	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	3	2	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	45	23	3 138	101 675	2 372	5 132	66 423	277 755	436 813	716 340	18 693
333921	Elevator & moving stairway mfg	-	1	1	c	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	21	10	727	23 692	484	1 166	13 359	54 946	59 966	116 970	3 194
333923	Overhead traveling crane, hoist, & monorail system mfg	-	6	2	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	17	10	1 797	59 462	1 431	3 034	40 199	155 686	304 684	457 877	11 064
33399	All other general-purpose machinery mfg	-	102	42	6 154	172 626	4 398	8 284	95 542	460 057	350 249	801 707	42 230
333991	Power-driven handtool mfg	-	7	3	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	5	2	273	8 196	177	346	3 617	20 335	17 707	40 912	1 707
333993	Packaging machinery mfg	1	19	5	338	13 152	169	328	4 987	20 583	31 280	51 552	774
333994	Industrial process furnace & oven mfg	1	6	4	342	13 128	204	504	8 313	29 524	30 148	57 736	2 512
333995	Fluid power cylinder & actuator mfg	4	4	3	193	5 646	147	265	3 699	9 178	7 044	15 916	D
333996	Fluid power pump & motor mfg	-	3	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	56	23	2 385	74 963	1 539	3 272	37 599	238 877	147 160	382 809	11 111
334	Computer & electronic product mfg	-	328	157	51 206	1 625 042	23 443	43 112	574 713	5 771 890	10 503 880	16 552 379	290 136
3341	Computer & peripheral equipment mfg	-	35	11	j	D	D	D	D	D	D	D	45 257
33411	Computer & peripheral equipment mfg	-	35	11	j	D	D	D	D	D	D	D	45 257
334111	Electronic computer mfg	-	11	3	j	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	3	2	e	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	-	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	19	5	e	D	D	D	D	D	D	D	2 583
3342	Communications equipment mfg	-	42	25	8 221	382 914	3 747	6 781	122 329	1 486 248	1 373 917	2 902 772	39 057
33421	Telephone apparatus mfg	-	17	12	h	D	D	D	D	D	D	D	26 426
334210	Telephone apparatus mfg	-	17	12	h	D	D	D	D	D	D	D	26 426
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	16	10	h	D	D	D	D	D	D	D	10 666
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	16	10	h	D	D	D	D	D	D	D	10 666
33429	Other communications equipment mfg	8	9	3	e	D	D	D	D	D	D	D	1 965
334290	Other communications equipment mfg	8	9	3	e	D	D	D	D	D	D	D	1 965
3343	Audio & video equipment mfg	2	13	3	e	D	D	D	D	D	D	D	361
33431	Audio & video equipment mfg	2	13	3	e	D	D	D	D	D	D	D	361
334310	Audio & video equipment mfg	2	13	3	e	D	D	D	D	D	D	D	361

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NORTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	132	74	16 385	524 365	11 392	22 069	299 691	2 155 108	1 766 492	3 913 983	146 772
33441	Semiconductor & other electronic component mfg	-	132	74	16 385	524 365	11 392	22 069	299 691	2 155 108	1 766 492	3 913 983	146 772
334412	Bare printed circuit board mfg	3	23	5	e	D	D	D	D	D	D	D	670
334413	Semiconductor & related device mfg ...	-	14	6	1 796	83 839	855	1 461	28 923	166 851	179 970	350 600	81 914
334414	Electronic capacitor mfg	-	5	5	1 469	31 474	936	1 854	22 237	80 495	97 918	175 285	1 696
334415	Electronic resistor mfg	-	4	3	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	2	10	5	457	8 819	380	628	4 891	20 732	13 971	34 638	934
334417	Electronic connector mfg	-	14	13	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	18	16	4 535	147 572	3 104	6 790	76 655	876 298	947 954	1 822 217	15 485
334419	Other electronic component mfg	1	40	20	2 986	81 743	2 214	4 035	46 449	217 119	161 163	377 565	14 590
3345	Navigational, measuring, medical, & control instruments mfg	-	95	39	4 968	160 657	3 009	5 677	73 715	449 913	297 059	745 302	33 808
33451	Navigational, measuring, medical, & control instruments mfg	-	95	39	4 968	160 657	3 009	5 677	73 715	449 913	297 059	745 302	33 808
334510	Electromedical & electrotherapeutic apparatus mfg	1	8	3	389	15 347	246	511	7 099	47 713	25 828	73 149	6 794
334511	Search, detection, navigation, & guidance instrument mfg	-	10	5	953	28 719	569	979	14 562	89 241	41 200	128 965	7 662
334512	Automatic environmental control mfg	-	5	2	c	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	2	25	8	459	13 519	243	379	5 840	31 258	18 480	50 011	1 402
334514	Totalizing fluid meter & counting device mfg ...	-	7	3	496	14 940	354	727	8 600	54 616	31 375	85 801	1 310
334515	Electricity measuring & testing instrument mfg	-	9	5	861	37 283	560	1 177	16 862	108 377	102 463	210 456	9 849
334516	Analytical laboratory instrument mfg	2	11	3	265	9 840	88	139	2 585	21 061	16 502	37 532	1 023
334517	Irradiation apparatus mfg	7	4	2	134	4 873	57	113	1 633	4 760	10 406	17 618	529
334518	Watch, clock, & part mfg	-	3	3	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	13	5	726	22 453	350	709	7 925	56 907	19 311	75 054	2 354
3346	Mfg & reproducing magnetic & optical media .	3	11	5	g	D	D	D	D	D	D	D	24 881
33461	Mfg & reproducing magnetic & optical media	3	11	5	g	D	D	D	D	D	D	D	24 881
334612	Prerecorded CD (except software), tape, & record reproducing	3	7	5	g	D	D	D	D	D	D	D	24 497
335	Electrical equipment, appliance, & component mfg	-	199	110	34 419	1 021 333	26 873	53 748	673 630	3 114 481	3 844 087	6 914 675	223 515
3351	Electric lighting equipment mfg	-	38	15	2 687	77 595	2 162	4 381	53 852	279 382	159 532	445 768	D
33511	Electric lamp bulb & part mfg	-	1	1	c	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	c	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	37	14	h	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	24	8	903	17 900	769	1 563	11 678	39 920	32 739	72 231	1 133
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	6	3	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	7	3	1 367	46 128	1 068	2 090	32 019	188 812	94 846	290 335	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORTH CAROLINA— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3352	Household appliance mfg..	-	9	8	3 539	79 639	3 138	5 702	62 641	210 359	309 597	511 866	D
33521	Small electrical appliance mfg	-	6	6	h	D	D	D	D	D	D	D	11 222
335211	Electric housewares & household fan mfg...	-	6	6	h	D	D	D	D	D	D	D	11 222
33522	Major appliance mfg	-	3	2	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	90	45	12 368	396 910	9 006	17 948	239 503	975 897	1 362 331	2 335 426	80 021
33531	Electrical equipment mfg	-	90	45	12 368	396 910	9 006	17 948	239 503	975 897	1 362 331	2 335 426	80 021
335311	Power, distribution, & specialty transformer mfg	-	9	5	1 160	39 312	821	1 632	22 269	107 403	83 439	188 477	12 624
335312	Motor & generator mfg	-	21	14	3 642	107 760	2 776	6 144	77 326	182 551	393 990	577 837	31 926
335313	Switchgear & switchboard apparatus mfg	-	17	9	1 574	49 450	1 235	2 420	30 785	93 758	177 483	273 910	9 217
335314	Relay & industrial control mfg	-	43	17	5 992	200 388	4 174	7 752	109 123	592 185	707 419	1 295 202	26 254
3359	Other electrical equipment & component mfg	-	62	42	15 825	467 189	12 567	25 717	317 634	1 648 843	2 012 627	3 621 615	121 640
33591	Battery mfg	-	9	7	3 305	107 190	2 523	4 615	71 857	612 664	455 812	1 058 960	24 524
335911	Storage battery mfg ...	-	3	3	g	D	D	D	D	D	D	D	9 005
335912	Primary battery mfg ...	-	6	4	g	D	D	D	D	D	D	D	15 519
33592	Communication & energy wire & cable mfg	-	16	15	5 597	182 753	4 379	9 465	124 165	603 528	1 096 109	1 673 483	64 308
335921	Fiber optic cable mfg..	-	4	4	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	12	11	h	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	18	11	4 482	105 440	3 804	7 980	77 338	268 279	191 154	457 461	18 761
335931	Current-carrying wiring device mfg	-	12	9	h	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	6	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	19	9	2 441	71 806	1 861	3 657	44 274	164 372	269 552	431 711	14 047
335991	Carbon & graphite product mfg	-	3	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	16	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	315	133	32 624	1 090 877	25 827	52 149	789 647	3 570 549	5 155 852	8 657 765	244 813
3361	Motor vehicle mfg	-	25	3	h	D	D	D	D	D	D	D	11 870
33611	Automobile & light duty motor vehicle mfg	7	20	1	c	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	5	2	h	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	5	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	69	23	4 197	124 283	3 244	6 829	92 836	177 079	551 928	715 946	24 805
33621	Motor vehicle body & trailer mfg	-	69	23	4 197	124 283	3 244	6 829	92 836	177 079	551 928	715 946	24 805
336211	Motor vehicle body mfg	-	41	19	3 818	115 254	2 931	6 215	86 462	155 678	520 538	662 832	24 147
336212	Truck trailer mfg	3	6	1	131	2 923	117	230	2 320	9 886	12 587	21 956	272
336214	Travel trailer & camper mfg	3	22	3	248	6 106	196	384	4 054	11 515	18 803	31 158	386
3363	Motor vehicle parts mfg ...	-	137	79	19 223	627 247	14 809	30 972	431 883	2 158 192	2 510 996	4 609 109	182 944
33631	Motor vehicle gasoline engine & engine parts mfg	-	28	6	2 080	68 815	1 585	3 153	43 447	220 807	156 712	377 460	34 209
336312	Gasoline engine & engine parts mfg	-	28	6	2 080	68 815	1 585	3 153	43 447	220 807	156 712	377 460	34 209
33632	Motor vehicle electrical & electronic equipment mfg	-	14	10	1 535	38 465	1 171	2 499	21 310	139 838	133 280	267 028	16 693
336322	Other motor vehicle electrical & electronic equipment mfg	-	14	10	1 535	38 465	1 171	2 499	21 310	139 838	133 280	267 028	16 693
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NORTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33634	Motor vehicle brake system mfg	-	15	9	2 453	70 602	1 791	3 867	46 310	233 400	632 835	860 953	16 276
336340	Motor vehicle brake system mfg	-	15	9	2 453	70 602	1 791	3 867	46 310	233 400	632 835	860 953	16 276
33635	Motor vehicle transmission & power train parts mfg	-	27	21	5 513	209 476	4 396	8 886	150 083	872 850	1 002 920	1 836 188	70 170
336350	Motor vehicle transmission & power train parts mfg	-	27	21	5 513	209 476	4 396	8 886	150 083	872 850	1 002 920	1 836 188	70 170
33636	Motor vehicle seating & interior trim mfg	-	9	6	970	35 087	724	1 759	19 920	83 665	71 978	143 419	11 439
336360	Motor vehicle seating & interior trim mfg ...	-	9	6	970	35 087	724	1 759	19 920	83 665	71 978	143 419	11 439
33637	Motor vehicle metal stamping	-	9	6	e	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	9	6	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	33	20	5 980	182 065	4 653	9 741	134 551	536 447	473 613	1 013 152	30 502
336399	All other motor vehicle parts mfg	-	32	19	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	13	7	2 129	105 673	1 568	3 020	71 412	303 150	288 753	598 076	16 217
33641	Aerospace product & parts mfg	-	13	7	2 129	105 673	1 568	3 020	71 412	303 150	288 753	598 076	16 217
336412	Aircraft engine & engine parts mfg	-	6	5	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	4	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	4	2	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	4	2	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	4	2	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	58	17	h	D	D	D	D	D	D	D	6 671
33661	Ship & boat building	2	58	17	h	D	D	D	D	D	D	D	6 671
336611	Ship building & repairing	4	10	3	g	D	D	D	D	D	D	D	D
336612	Boat building	1	48	14	1 535	34 106	1 259	2 023	20 294	74 074	106 481	179 421	D
3369	Other transportation equipment mfg	8	9	2	c	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	8	9	2	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	8	8	2	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1 178	458	81 384	1 812 245	69 660	134 749	1 399 524	3 889 525	3 399 333	7 301 225	149 210
3371	Household & institutional furniture & kitchen cabinet mfg	-	865	323	67 843	1 499 189	58 753	113 759	1 189 380	3 213 254	2 856 171	6 078 079	104 889
33711	Wood kitchen cabinet & counter top mfg	2	248	22	2 926	69 485	2 396	5 003	50 158	129 887	102 217	232 233	8 147
337110	Wood kitchen cabinet & counter top mfg ...	2	248	22	2 926	69 485	2 396	5 003	50 158	129 887	102 217	232 233	8 147
33712	Household & institutional furniture mfg	-	617	301	64 917	1 429 704	56 357	108 756	1 139 222	3 083 367	2 753 954	5 845 846	96 742
337121	Upholstered household furniture mfg	-	294	163	28 235	638 195	24 317	44 694	496 615	1 333 842	1 374 838	2 698 787	36 057
337122	Nonupholstered wood household furniture mfg	-	237	102	31 997	687 307	28 283	56 178	567 238	1 547 045	1 160 653	2 725 312	51 487
337124	Metal household furniture mfg	1	31	15	2 240	51 468	1 738	3 942	37 601	109 757	105 733	214 652	5 166
337125	Household furniture (except wood & metal) mfg	-	10	6	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	1	42	13	1 009	21 285	741	1 311	13 948	40 382	43 824	84 385	1 646
337129	Wood television, radio, & sewing machine cabinet mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH CAROLINA—Con.													
31-33 Manufacturing—Con.													
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	274	116	12 142	274 400	9 808	18 969	188 517	580 380	450 179	1 033 940	36 134
33721	Office furniture (including fixtures) mfg	1	274	116	12 142	274 400	9 808	18 969	188 517	580 380	450 179	1 033 940	36 134
337211	Wood office furniture mfg	—	51	32	5 942	131 835	4 738	9 558	91 424	263 808	213 902	477 910	22 096
337212	Custom architectural woodwork & millwork mfg	1	30	5	398	10 148	306	620	6 742	17 550	13 070	30 843	1 153
337214	Office furniture (except wood) mfg	2	16	7	863	18 362	709	1 268	11 994	90 276	51 401	140 927	1 620
337215	Showcase, partition, shelving, & locker mfg	1	177	72	4 939	114 055	4 055	7 523	78 357	208 746	171 806	384 260	11 265
3379	Other furniture related product mfg	—	39	19	1 399	38 656	1 099	2 021	21 627	95 891	92 983	189 206	8 187
33791	Mattress mfg	—	31	16	1 266	34 326	1 020	1 920	20 141	91 936	86 869	179 051	7 263
337910	Mattress mfg	—	31	16	1 266	34 326	1 020	1 920	20 141	91 936	86 869	179 051	7 263
33792	Blind & shade mfg	4	8	3	133	4 330	79	101	1 486	3 955	6 114	10 155	924
337920	Blind & shade mfg	4	8	3	133	4 330	79	101	1 486	3 955	6 114	10 155	924
339	Miscellaneous mfg	1	745	133	18 288	500 245	13 588	25 285	286 795	1 424 077	1 106 012	2 547 689	96 080
3391	Medical equipment & supplies mfg	1	359	44	7 358	222 556	5 443	10 758	120 831	724 690	480 515	1 222 651	40 562
33911	Medical equipment & supplies mfg	1	359	44	7 358	222 556	5 443	10 758	120 831	724 690	480 515	1 222 651	40 562
339111	Laboratory apparatus & furniture mfg	—	8	2	587	21 491	375	731	9 142	19 726	47 186	66 211	1 216
339112	Surgical & medical instrument mfg	—	28	15	2 672	80 648	2 242	4 597	48 415	359 247	172 211	536 075	16 538
339113	Surgical appliance & supplies mfg	—	51	19	2 606	75 895	1 764	3 530	38 782	254 781	197 457	470 702	19 420
339114	Dental equipment & supplies mfg	—	24	3	443	17 908	281	581	8 150	29 654	42 411	65 602	1 318
339116	Dental laboratories	7	244	5	1 033	26 120	771	1 298	16 130	60 434	20 776	82 735	1 885
3399	Other miscellaneous mfg ..	1	386	89	10 930	277 689	8 145	14 527	165 964	699 387	625 497	1 325 038	55 518
33992	Sporting & athletic goods mfg	3	56	12	750	14 938	557	900	8 492	38 176	34 762	72 354	2 071
339920	Sporting & athletic goods mfg	3	56	12	750	14 938	557	900	8 492	38 176	34 762	72 354	2 071
33993	Doll, toy, & game mfg ...	—	14	3	1 022	36 475	745	1 115	20 516	60 554	40 689	105 745	2 288
339932	Game, toy, & children's vehicle mfg	—	12	3	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	15	4	721	17 621	505	1 002	11 992	83 634	40 240	134 749	D
339942	Lead pencil & art good mfg	—	1	1	f	D	D	D	D	D	D	D	D
339943	Marking device mfg ...	2	11	2	c	D	D	D	D	D	D	D	D
33995	Sign mfg	2	141	17	1 357	34 775	886	1 657	17 663	68 304	40 172	107 360	2 532
339950	Sign mfg	2	141	17	1 357	34 775	886	1 657	17 663	68 304	40 172	107 360	2 532
33999	All other miscellaneous mfg	1	132	53	6 998	172 186	5 395	9 758	106 347	443 826	465 080	895 349	43 933
339991	Gasket, packing, & sealing device mfg ...	—	15	9	912	25 242	712	1 525	16 884	49 776	33 295	85 341	6 790
339992	Musical instrument mfg	—	19	3	279	5 405	235	418	3 757	13 644	25 602	38 721	328
339993	Fastener, button, needle, & pin mfg	2	5	3	717	18 727	573	1 186	11 429	34 694	20 575	54 957	3 561
339994	Broom, brush, & mop mfg	—	9	4	1 084	22 187	863	1 337	15 269	45 133	52 687	96 634	2 312
339995	Burial casket mfg	1	8	2	167	4 427	130	260	2 364	7 464	9 506	17 359	422
339999	All other miscellaneous mfg	2	76	32	3 839	96 198	2 882	5 032	56 644	293 115	323 415	602 337	30 520

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ASHEVILLE, NC MSA													
31-33	Manufacturing	-	347	133	18 516	517 723	13 999	28 665	323 154	1 480 618	1 617 125	3 110 550	108 793
311	Food mfg	2	8	4	864	20 082	729	1 823	15 460	223 748	212 476	436 014	4 299
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	e	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	-	17	12	1 981	51 312	1 707	3 889	37 776	115 897	101 643	219 445	12 333
3132	Fabric mills	-	12	9	1 626	42 422	1 365	2 932	29 382	98 292	88 530	188 858	11 863
31323	Nonwoven fabric mills	-	5	4	916	24 465	763	1 660	16 130	59 497	65 100	125 341	9 999
313230	Nonwoven fabric mills	-	5	4	916	24 465	763	1 660	16 130	59 497	65 100	125 341	9 999
31324	Knit fabric mills	-	3	2	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	-	3	2	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	4	2	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	3	1	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	11	3	1 071	24 090	995	2 542	18 416	41 545	61 086	110 570	D
3141	Textile furnishings mills	-	3	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	8	2	e	D	D	D	D	D	D	D	246
31499	All other textile product mills	-	5	1	287	5 468	249	402	3 539	8 366	10 208	18 280	D
314999	All other miscellaneous textile product mills	-	5	1	287	5 468	249	402	3 539	8 366	10 208	18 280	D
321	Wood product mfg	-	12	4	513	11 015	468	986	9 035	14 382	18 703	33 002	D
3219	Other wood product mfg	-	9	3	e	D	D	D	D	D	D	D	D
32191	Millwork	-	4	2	343	6 807	327	615	6 302	7 921	9 851	17 954	D
321912	Cut stock, resawing lumber, & planing	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	34	9	661	18 296	490	894	11 553	33 207	21 736	54 282	7 718
3231	Printing & related support activities	1	34	9	661	18 296	490	894	11 553	33 207	21 736	54 282	7 718
32311	Printing	1	33	9	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	17	7	426	11 717	300	563	7 175	21 462	11 237	32 480	4 594
325	Chemical mfg	-	6	2	f	D	D	D	D	D	D	D	152
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	19	16	1 792	50 266	1 458	2 579	30 164	120 502	136 181	256 252	18 435
3261	Plastics product mfg	1	17	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	12	11	1 021	21 941	879	1 303	15 108	44 651	43 459	86 552	6 132
326199	All other plastics product mfg	2	11	10	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	66	21	1 234	35 272	922	1 761	22 155	70 904	74 811	145 869	4 111
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	38	10	614	16 865	464	897	11 499	29 014	13 076	41 992	2 403
33271	Machine shops	2	33	7	476	12 812	360	687	8 925	21 949	9 063	30 989	1 493
332710	Machine shops	2	33	7	476	12 812	360	687	8 925	21 949	9 063	30 989	1 493
333	Machinery mfg	-	42	18	2 325	76 284	1 646	3 507	46 943	227 359	182 117	411 465	7 602
3331	Agriculture, construction, & mining machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ASHEVILLE, NC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	4	655	18 719	424	877	10 214	65 656	39 548	105 017	1 810
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	4	655	18 719	424	877	10 214	65 656	39 548	105 017	1 810
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	15	5	353	13 779	264	543	8 554	32 314	13 493	45 113	1 054
33351	Metalworking machinery mfg	—	15	5	353	13 779	264	543	8 554	32 314	13 493	45 113	1 054
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	720	21 850	582	1 243	16 153	83 297	76 444	161 020	3 783
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	720	21 850	582	1 243	16 153	83 297	76 444	161 020	3 783
333618	Other engine equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	20	10	g	D	D	D	D	D	D	D	17 169
3342	Communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	9	2	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	7	3	e	D	D	D	D	D	D	D	1 378
33441	Semiconductor & other electronic component mfg	—	7	3	e	D	D	D	D	D	D	D	1 378
334419	Other electronic component mfg	—	3	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	7	3	478	14 408	335	677	8 338	19 033	18 665	37 761	D
33451	Navigational, measuring, medical, & control instruments mfg	—	7	3	478	14 408	335	677	8 338	19 033	18 665	37 761	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	—	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	10	8	2 562	72 059	1 916	3 550	45 176	275 391	179 657	455 573	10 035
3353	Electrical equipment mfg	—	7	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	7	7	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	5	5	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	5	1 250	36 726	894	1 979	23 019	92 122	341 568	434 210	4 819
3363	Motor vehicle parts mfg	—	7	3	f	D	D	D	D	D	D	D	2 468
33634	Motor vehicle brake system mfg	—	3	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	40	7	685	20 269	434	828	9 390	46 830	51 341	101 474	9 626
3391	Medical equipment & supplies mfg	2	20	5	531	17 223	313	607	7 343	41 777	47 821	93 040	9 296
33911	Medical equipment & supplies mfg	2	20	5	531	17 223	313	607	7 343	41 777	47 821	93 040	9 296
339113	Surgical appliance & supplies mfg	—	6	2	253	7 055	126	246	2 340	18 326	37 672	59 620	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA												
31-33	Manufacturing	-	2 422	926	133 983	4 061 600	100 901	208 784	2 620 572	17 634 645	14 545 193	32 133 936	1 076 320
	Charlotte—Gastonia—Rock Hill, NC—SC MSA (NC Part)	-	2 200	836	122 252	3 669 824	92 213	190 962	2 370 223	16 471 675	13 385 512	29 808 220	998 712
	Charlotte—Gastonia—Rock Hill, NC—SC MSA (SC Part)	-	222	90	11 731	391 776	8 688	17 822	250 349	1 162 970	1 159 681	2 325 716	77 608
311	Food mfg	-	84	36	j	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	14	5	2 174	44 114	2 029	4 204	33 539	227 211	207 696	439 052	3 627
31161	Animal slaughtering & processing	-	14	5	2 174	44 114	2 029	4 204	33 539	227 211	207 696	439 052	3 627
311615	Poultry processing	-	5	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	38	11	i	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	33	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	18	7	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	5	4	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	h	D	D	D	D	D	D	D	D
3119	Other food mfg	-	16	10	1 602	58 216	1 006	2 024	24 236	326 699	166 792	492 651	22 831
31191	Snack food mfg	-	4	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	4	3	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	2	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg	5	7	5	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	5	6	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	12	8	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	11	7	f	D	D	D	D	D	D	D	15 242
31211	Soft drink & ice mfg	-	10	7	722	19 833	326	769	8 862	257 094	236 634	493 747	D
312111	Soft drink mfg	-	7	6	674	18 995	307	739	8 585	255 456	235 500	490 971	14 885
3122	Tobacco mfg	-	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	198	140	26 518	617 760	23 285	51 675	490 448	1 506 300	2 378 962	3 886 695	172 112
3131	Fiber, yarn, & thread mills	-	70	58	10 741	221 619	9 697	21 286	186 917	519 487	910 470	1 433 327	100 526
31311	Fiber, yarn, & thread mills	-	70	58	10 741	221 619	9 697	21 286	186 917	519 487	910 470	1 433 327	100 526
313111	Yarn spinning mills	-	61	53	10 352	213 043	9 347	20 544	180 233	510 382	890 770	1 404 456	D
313112	Yarn texturing, throwing, & twisting mills	1	8	4	e	D	D	D	D	D	D	D	D
3132	Fabric mills	1	69	48	11 210	284 321	9 749	22 097	226 693	590 859	823 482	1 419 291	51 393
31321	Broadwoven fabric mills	1	22	16	6 887	181 653	6 284	14 701	156 372	399 186	572 109	981 520	33 209
313210	Broadwoven fabric mills	1	22	16	6 887	181 653	6 284	14 701	156 372	399 186	572 109	981 520	33 209
31324	Knit fabric mills	2	35	27	3 926	93 366	3 126	6 668	63 784	169 020	226 298	390 124	16 589
313241	Weft knit fabric mills	5	26	19	2 222	51 276	1 726	3 589	34 022	81 205	93 547	171 888	7 381
313249	Other knit fabric & lace mills	-	9	8	1 704	42 090	1 400	3 079	29 762	87 815	132 751	218 236	9 208
3133	Textile & fabric finishing & fabric coating mills	-	59	34	4 567	111 820	3 839	8 292	76 838	395 954	645 010	1 034 077	20 193
31331	Textile & fabric finishing mills	-	55	31	h	D	D	D	D	D	D	D	19 168
313311	Broadwoven fabric finishing mills	-	25	7	g	D	D	D	D	D	D	D	4 330
313312	Textile & fabric finishing mills	-	30	24	3 049	76 668	2 677	5 842	53 321	293 044	374 702	661 573	14 838
31332	Fabric coating mills	-	4	3	e	D	D	D	D	D	D	D	1 025
313320	Fabric coating mills	-	4	3	e	D	D	D	D	D	D	D	1 025
314	Textile product mills	1	53	24	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	2	28	11	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	2	28	11	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	21	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	2	7	7	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	25	13	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	23	12	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	22	11	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con. Manufacturing—Con.												
315	Apparel mfg	3	87	49	5 190	88 205	4 536	8 312	66 179	216 093	241 875	459 963	D
3151	Apparel knitting mills	2	33	17	2 544	42 579	2 287	4 301	34 321	122 030	118 023	240 128	D
31511	Hosiery & sock mills	3	23	11	1 880	31 415	1 678	3 263	24 674	77 588	80 219	157 512	D
315111	Sheer hosiery mills	3	18	8	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	3	5	3	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	2	10	6	664	11 164	609	1 038	9 647	44 442	37 804	82 616	D
315191	Outerwear knitting mills	1	9	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	43	27	2 085	35 556	1 732	3 015	24 724	74 115	100 988	178 204	D
31522	Men's & boys' cut & sew apparel mfg	3	14	11	965	18 837	741	1 304	12 208	45 786	69 236	117 862	1 225
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	9	8	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	9	7	352	5 645	304	535	3 981	9 712	10 372	19 990	461
315239	Women's & girls' cut & sew other outerwear mfg	5	4	4	260	4 057	237	466	3 317	6 662	2 689	9 268	D
31529	Other cut & sew apparel mfg	9	7	5	519	7 913	462	817	5 904	12 556	19 919	32 826	1 034
315291	Infants' cut & sew apparel mfg	9	2	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	11	5	561	10 070	517	996	7 134	19 948	22 864	41 631	D
31599	Apparel accessories & other apparel mfg	2	11	5	561	10 070	517	996	7 134	19 948	22 864	41 631	D
315999	Other apparel accessories & other apparel mfg	2	9	5	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	84	29	h	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	5	4	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	4	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	1	63	22	2 212	55 044	1 889	3 657	39 946	121 497	172 803	293 723	D
32191	Millwork	2	28	9	761	17 200	631	1 258	11 974	46 708	55 133	101 761	D
321911	Wood window & door mfg	1	10	6	586	12 616	495	994	9 250	32 014	34 075	66 781	1 404
32192	Wood container & pallet mfg	1	18	5	258	5 231	207	400	3 188	10 082	8 138	18 246	577
321920	Wood container & pallet mfg	1	18	5	258	5 231	207	400	3 188	10 082	8 138	18 246	577
32199	All other wood product mfg	1	17	8	1 193	32 613	1 051	1 999	24 784	64 707	109 532	173 716	D
321991	Manufactured home (mobile home) mfg ..	1	6	6	1 061	30 596	941	1 862	23 313	61 060	102 493	162 972	1 750
322	Paper mfg	-	51	38	4 682	180 356	3 482	7 333	120 623	581 036	505 164	1 094 578	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	49	36	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	37	29	2 873	91 074	2 137	4 480	59 491	211 028	271 519	482 654	21 413
322211	Corrugated & solid fiber box mfg	-	20	17	1 504	48 792	1 094	2 341	29 210	104 740	170 856	275 321	11 673
322212	Folding paperboard box mfg	-	6	6	804	26 244	587	1 124	17 763	66 087	49 380	115 609	6 326
322214	Fiber can, tube, drum, & similar products mfg	-	9	6	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	4	3	308	10 091	255	563	6 459	27 264	25 263	51 858	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con. Manufacturing—Con.												
323	Printing & related support activities.....	1	307	58	5 460	180 809	3 902	7 679	112 849	380 785	334 451	716 506	49 001
3231	Printing & related support activities.....	1	307	58	5 460	180 809	3 902	7 679	112 849	380 785	334 451	716 506	49 001
32311	Printing	1	268	47	4 791	156 908	3 417	6 671	96 858	331 774	322 604	655 595	45 528
323110	Commercial lithographic printing ..	1	100	24	2 078	70 509	1 504	2 927	45 793	147 526	134 061	279 750	28 055
323112	Commercial flexographic printing .	1	12	3	391	12 517	275	666	7 754	30 707	35 363	64 650	3 235
323113	Commercial screen printing	1	43	6	569	11 632	438	735	7 085	26 392	22 497	51 801	1 458
323114	Quick printing	2	60	—	346	9 105	242	426	5 622	17 348	10 971	28 289	2 654
323116	Manifold business form printing	1	13	8	637	19 935	368	734	11 379	70 091	92 488	161 359	3 955
323117	Book printing.....	1	6	2	322	19 831	281	601	12 037	13 934	6 421	23 175	4 573
32312	Support activities for printing	1	39	11	669	23 901	485	1 008	15 991	49 011	11 847	60 911	3 473
323122	Prepress services	1	28	9	548	20 689	391	811	13 922	42 342	10 085	52 465	2 919
324	Petroleum & coal products mfg	1	6	2	e	D	D	D	D	D	D	D	1 014
3241	Petroleum & coal products mfg	1	6	2	e	D	D	D	D	D	D	D	1 014
325	Chemical mfg	1	148	67	9 276	352 854	5 964	13 099	189 284	1 302 201	1 363 690	2 657 258	116 737
3251	Basic chemical mfg	2	23	12	1 286	51 954	587	1 181	21 333	184 827	187 605	372 335	27 743
32513	Dye & pigment mfg	—	10	5	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	8	5	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	6	8	5	e	D	D	D	D	D	D	D	9 841
325199	All other basic organic chemical mfg	6	7	4	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	15	11	4 126	148 670	3 227	7 629	101 755	497 041	537 283	1 035 217	47 724
32521	Resin & synthetic rubber mfg	1	9	6	f	D	D	D	D	D	D	D	22 255
325211	Plastics material & resin mfg	1	7	5	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	6	5	h	D	D	D	D	D	D	D	25 469
325221	Cellulosic organic fiber mfg	—	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	1	5	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	7	8	4	452	14 948	236	381	4 637	37 159	29 462	70 458	4 079
32541	Pharmaceutical & medicine mfg	7	8	4	452	14 948	236	381	4 637	37 159	29 462	70 458	4 079
325412	Pharmaceutical preparation mfg	6	3	3	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	24	8	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	31	12	991	41 259	520	996	16 023	149 110	195 067	340 701	9 600
32561	Soap & cleaning compound mfg	2	29	10	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	1	11	4	e	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	3	15	6	609	26 803	276	544	9 149	104 586	136 206	238 517	D
3259	Other chemical product mfg	2	45	19	1 881	74 244	1 062	2 220	35 054	260 399	236 578	487 929	23 643
32591	Printing ink mfg	4	18	11	782	28 444	435	880	13 595	96 760	119 419	212 509	D
325910	Printing ink mfg	4	18	11	782	28 444	435	880	13 595	96 760	119 419	212 509	D
32599	All other chemical product & preparation mfg	1	26	8	g	D	D	D	D	D	D	D	20 742
325991	Custom compounding of purchased resin...	—	9	5	e	D	D	D	D	D	D	D	2 174
325998	All other miscellaneous chemical product & preparation mfg	1	16	3	f	D	D	D	D	D	D	D	D

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31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con. Manufacturing—Con.												
326	Plastics & rubber products mfg	1	116	60	8 631	263 617	6 613	12 726	172 374	781 263	749 720	1 513 005	77 610
3261	Plastics product mfg	2	81	46	5 566	159 143	4 243	8 233	100 970	426 261	497 102	915 892	57 108
32611	Unsupported plastics film, sheet, & bag mfg ..	2	13	9	905	30 219	688	1 391	19 698	104 487	127 322	233 150	5 893
326113	Unsupported plastics film & sheet (except packaging) mfg	1	6	4	593	19 873	461	956	13 229	79 965	97 957	179 669	3 266
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	6	3	775	23 928	668	1 316	18 799	73 418	141 280	200 255	D
326122	Plastics pipe & pipe fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	7	3	2	269	8 179	212	331	3 807	19 976	37 348	57 404	2 009
326150	Urethane & other foam product (except polystyrene) mfg	7	3	2	269	8 179	212	331	3 807	19 976	37 348	57 404	2 009
32619	Other plastics product mfg	3	51	25	3 071	80 515	2 257	4 341	47 840	178 745	143 542	327 036	19 912
326199	All other plastics product mfg	3	43	22	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	35	14	3 065	104 474	2 370	4 493	71 404	355 002	252 618	597 113	20 502
32621	Tire mfg	-	10	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	10	6	802	26 531	515	1 028	13 895	64 960	58 017	122 907	D
326220	Rubber & plastics hoses & belting mfg..	-	10	6	802	26 531	515	1 028	13 895	64 960	58 017	122 907	D
32629	Other rubber product mfg	-	15	7	f	D	D	D	D	D	D	D	1 394
326299	All other rubber product mfg	-	6	4	312	9 888	227	477	5 218	22 058	22 702	45 555	549
327	Nonmetallic mineral product mfg	2	87	35	3 712	97 392	3 064	6 197	71 286	305 117	243 954	553 537	42 513
3271	Clay product & refractory mfg	-	15	7	843	22 598	705	1 389	16 217	87 110	35 187	122 368	9 239
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	8	2	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	1	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	7	5	f	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	-	6	4	513	12 711	426	842	8 645	42 795	14 816	57 997	D
3272	Glass & glass product mfg	-	11	5	1 293	29 013	1 116	2 223	22 083	74 003	67 707	146 045	21 682
32721	Glass & glass product mfg	-	11	5	1 293	29 013	1 116	2 223	22 083	74 003	67 707	146 045	21 682
327215	Glass product mfg made of purchased glass	-	9	4	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	40	16	1 104	33 987	858	1 898	24 246	100 348	100 191	200 241	D
32732	Ready-mix concrete mfg	5	23	8	689	22 894	539	1 228	16 381	60 869	78 568	139 339	6 553
327320	Ready-mix concrete mfg	5	23	8	689	22 894	539	1 228	16 381	60 869	78 568	139 339	6 553
32739	Other concrete product mfg	1	10	4	270	6 526	214	430	4 980	28 079	8 089	36 223	1 443
327390	Other concrete product mfg	1	10	4	270	6 526	214	430	4 980	28 079	8 089	36 223	1 443
3279	Other nonmetallic mineral product mfg	1	18	6	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	14	4	303	8 104	265	469	6 282	22 781	22 418	45 220	2 135
331	Primary metal mfg	-	17	10	2 741	113 971	2 063	4 594	78 821	410 127	501 521	882 152	27 281
3311	Iron & steel mills & ferroalloy mfg	-	3	3	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	e	D	D	D	D	D	D	D	D

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31-33	CHARLOTTE-GASTONIA-ROCK HILL, NC-SC MSA—Con.													
	Manufacturing—Con.													
331	Primary metal mfg—Con.													
3314	Nonferrous metal (except aluminum) production & processing.....	-	2	1	g	D	D	D	D	D	D	D	D	
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	g	D	D	D	D	D	D	D	D	
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	1	g	D	D	D	D	D	D	D	D	
3315	Foundries	-	9	3	f	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries ..	-	6	3	f	D	D	D	D	D	D	D	D	
331511	Iron foundries	-	5	2	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	471	117		11 441	356 698	8 728	17 426	236 245	780 322	829 310	1 605 481	61 313
3321	Forging & stamping	1	25	11		1 070	34 390	862	1 727	24 133	60 228	41 924	102 058	3 971
33211	Forging & stamping	1	25	11		1 070	34 390	862	1 727	24 133	60 228	41 924	102 058	3 971
332111	Iron & steel forging ...	1	4	1	e	D	D	D	D	D	D	D	D	D
332116	Metal stamping	2	13	5		459	13 931	377	799	9 625	29 112	18 400	47 169	2 050
3322	Cutlery & handtool mfg	-	7	4	f	D	D	D	D	D	D	D	D	3 146
33221	Cutlery & handtool mfg ..	-	7	4	f	D	D	D	D	D	D	D	D	3 146
332212	Hand & edge tool mfg .	-	7	4	f	D	D	D	D	D	D	D	D	3 146
3323	Architectural & structural metals mfg	-	83	26		1 857	60 424	1 264	2 497	33 042	98 984	212 353	309 419	7 302
33231	Plate work & fabricated structural product mfg ..	-	31	9		868	32 669	523	1 021	15 649	40 789	148 551	188 123	4 553
332312	Fabricated structural metal mfg	-	25	7		780	30 567	477	948	14 441	37 147	145 785	181 707	4 467
33232	Ornamental & architectural metal products mfg	-	52	17		989	27 755	741	1 476	17 393	58 195	63 802	121 296	2 749
332322	Sheet metal work mfg .	1	29	10		602	17 251	462	934	10 857	32 578	34 152	66 365	1 790
3324	Boiler, tank, & shipping container mfg	-	11	8	e	D	D	D	D	D	D	D	D	1 692
33243	Metal can, box, & other metal container (light gauge) mfg	-	5	4		303	11 097	251	524	7 277	21 083	68 449	85 606	1 328
3325	Hardware mfg	-	7	4		931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
33251	Hardware mfg	-	7	4		931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
332510	Hardware mfg	-	7	4		931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
3326	Spring & wire product mfg .	-	10	7		777	20 850	653	1 199	14 093	70 201	41 291	112 386	5 153
33261	Spring & wire product mfg	-	10	7		777	20 850	653	1 199	14 093	70 201	41 291	112 386	5 153
332612	Spring (light gauge) mfg	-	4	3		505	13 630	426	724	9 255	56 949	26 765	84 372	3 727
332618	Other fabricated wire product mfg	-	6	4		272	7 220	227	475	4 838	13 252	14 526	28 014	1 426
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	237	25		2 167	64 087	1 685	3 085	42 728	113 578	59 296	174 492	10 794
33271	Machine shops	2	219	19		1 812	52 872	1 407	2 531	34 844	92 300	45 702	139 791	6 528
332710	Machine shops	2	219	19		1 812	52 872	1 407	2 531	34 844	92 300	45 702	139 791	6 528
33272	Turned product & screw, nut, & bolt mfg	2	18	6		355	11 215	278	554	7 884	21 278	13 594	34 701	4 266
332721	Precision turned product mfg	-	13	5		280	9 013	219	450	6 344	17 386	10 488	27 870	D
3328	Coating, engraving, heat treating, & allied activities.	2	47	12		917	26 810	663	1 365	18 102	58 758	34 126	93 233	7 113
33281	Coating, engraving, heat treating, & allied activities	2	47	12		917	26 810	663	1 365	18 102	58 758	34 126	93 233	7 113
332812	Metal coating engraving (exc jewelry/silverware)/ allied services	2	12	5		336	10 241	262	537	7 611	21 058	19 904	41 187	5 265
332813	Electroplating, plating, polishing, anodizing, & coloring	2	28	5		447	13 091	290	597	7 873	27 512	10 837	38 473	1 114
3329	Other fabricated metal product mfg	-	44	20		2 670	85 430	1 912	3 958	56 615	176 376	183 722	359 936	15 555
33291	Metal valve mfg	-	7	5		733	16 662	482	929	10 544	26 808	45 161	74 872	2 198
332919	Other metal valve & pipe fitting mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	37	15		1 937	68 768	1 430	3 029	46 071	149 568	138 561	285 064	13 357
332991	Ball & roller bearing mfg	-	3	3	f	D	D	D	D	D	D	D	D	6 325
332996	Fabricated pipe & pipe fitting mfg	-	5	3		261	9 813	179	374	5 643	19 497	20 935	40 811	D
332999	All other miscellaneous fabricated metal product mfg	-	24	9		794	23 052	503	935	11 659	47 678	25 933	72 939	6 337

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con. Manufacturing—Con.												
333	Machinery mfg	—	245	107	11 178	392 650	6 638	12 796	193 610	1 078 052	1 000 681	2 067 545	57 164
3331	Agriculture, construction, & mining machinery mfg	—	11	8	1 502	39 885	915	1 512	17 826	229 556	153 658	370 361	9 069
33311	Agricultural implement mfg	—	4	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	1	3	2	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	1	5	4	252	7 427	168	302	3 790	20 761	29 174	51 773	1 088
333120	Construction machinery mfg	1	5	4	252	7 427	168	302	3 790	20 761	29 174	51 773	1 088
3332	Industrial machinery mfg	—	110	45	4 120	135 511	2 356	4 584	63 286	331 753	432 867	746 953	28 862
33321	Sawmill & woodworking machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	102	40	3 588	119 694	1 963	3 819	53 073	291 996	399 974	676 418	25 448
333291	Paper industry machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D
333292	Textile machinery mfg	—	76	26	2 528	81 242	1 477	2 971	38 698	193 985	152 941	340 148	20 265
333298	All other industrial machinery mfg	2	16	10	495	15 647	240	390	5 506	42 979	33 591	73 433	1 705
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	17	9	834	24 576	580	1 010	14 037	38 944	47 241	87 369	1 805
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	17	9	834	24 576	580	1 010	14 037	38 944	47 241	87 369	1 805
333415	AC & warm air heating & commercial industrial refrig equip mfg	1	5	3	610	18 713	436	773	11 109	23 468	31 423	56 708	1 226
3335	Metalworking machinery mfg	4	35	9	778	32 325	509	1 088	19 243	72 852	39 498	110 837	3 369
33351	Metalworking machinery mfg	4	35	9	778	32 325	509	1 088	19 243	72 852	39 498	110 837	3 369
3336	Engine, turbine, & power transmission equipment mfg	—	15	9	1 216	52 967	772	1 503	27 943	144 299	51 330	214 743	2 246
33361	Engine, turbine, & power transmission equipment mfg	—	15	9	1 216	52 967	772	1 503	27 943	144 299	51 330	214 743	2 246
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	7	5	461	15 010	318	629	7 811	38 560	38 063	77 350	1 686
3339	Other general-purpose machinery mfg	—	44	25	2 563	101 114	1 420	2 973	49 473	248 362	264 273	513 094	11 524
33391	Pump & compressor mfg	—	5	4	661	27 428	311	598	10 181	73 844	122 711	196 501	D
333911	Pump & pumping equipment mfg	—	3	3	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	2	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	14	7	433	15 169	271	582	7 883	28 852	23 220	53 441	D
333922	Conveyor & conveying equipment mfg	—	8	6	355	12 757	212	469	6 448	24 195	18 522	44 177	D
33399	All other general-purpose machinery mfg	1	25	14	1 469	58 517	838	1 793	31 409	145 666	118 342	263 152	8 843
333991	Power-driven handtool mfg	—	1	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	2	17	9	676	21 310	411	899	10 485	56 656	30 096	86 010	3 238

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31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	-	60	24	5 398	201 535	3 588	8 044	109 703	1 105 144	970 379	2 082 825	20 940
3344	Semiconductor & other electronic component mfg	-	22	9	4 208	162 170	3 019	6 928	96 090	1 012 258	888 110	1 908 174	13 953
33441	Semiconductor & other electronic component mfg	-	22	9	4 208	162 170	3 019	6 928	96 090	1 012 258	888 110	1 908 174	13 953
334417	Electronic connector mfg	-	3	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	h	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	6	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	18	8	712	24 647	334	595	8 359	56 501	45 026	101 247	2 862
33451	Navigational, measuring, medical, & control instruments mfg	-	18	8	712	24 647	334	595	8 359	56 501	45 026	101 247	2 862
335	Electrical equipment, appliance, & component mfg	-	49	21	2 258	72 017	1 707	3 292	41 787	163 341	230 199	392 740	19 391
3353	Electrical equipment mfg ..	-	29	11	1 126	40 055	770	1 428	23 586	64 419	135 906	200 023	12 794
33531	Electrical equipment mfg	-	29	11	1 126	40 055	770	1 428	23 586	64 419	135 906	200 023	12 794
335311	Power, distribution, & specialty transformer mfg	-	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	1	9	5	358	12 769	241	489	7 712	20 754	20 608	42 324	1 471
3359	Other electrical equipment & component mfg	1	13	8	913	24 856	792	1 607	15 817	79 809	74 916	155 000	D
33593	Wiring device mfg	-	6	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	81	35	10 675	362 735	8 971	17 658	293 427	1 361 116	2 130 267	3 491 768	56 686
3361	Motor vehicle mfg	-	8	2	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	14	4	407	13 491	261	566	8 016	26 079	40 902	66 774	D
33621	Motor vehicle body & trailer mfg	-	14	4	407	13 491	261	566	8 016	26 079	40 902	66 774	D
336211	Motor vehicle body mfg	-	9	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	51	28	i	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	8	5	g	D	D	D	D	D	D	D	10 367
336340	Motor vehicle brake system mfg	-	8	5	g	D	D	D	D	D	D	D	10 367
33635	Motor vehicle transmission & power train parts mfg	-	8	6	f	D	D	D	D	D	D	D	2 875
336350	Motor vehicle transmission & power train parts mfg	-	8	6	f	D	D	D	D	D	D	D	2 875
33636	Motor vehicle seating & interior trim mfg	2	4	3	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	2	4	3	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	17	11	3 931	126 719	3 166	6 519	99 566	372 718	281 455	653 171	17 173
336399	All other motor vehicle parts mfg	-	16	10	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	112	29	3 877	94 492	3 217	6 542	69 015	252 351	208 912	462 297	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	76	18	2 932	70 049	2 425	4 950	52 612	148 642	144 705	293 899	6 102
33711	Wood kitchen cabinet & counter top mfg	1	41	5	652	15 217	551	1 017	10 219	34 352	22 750	57 114	3 203
337110	Wood kitchen cabinet & counter top mfg ...	1	41	5	652	15 217	551	1 017	10 219	34 352	22 750	57 114	3 203
33712	Household & institutional furniture mfg	1	35	13	2 280	54 832	1 874	3 933	42 393	114 290	121 955	236 785	2 899
337121	Upholstered household furniture mfg	-	11	7	1 445	35 378	1 273	2 780	30 051	76 942	80 621	157 730	854
337122	Nonupholstered wood household furniture mfg	1	13	3	431	8 795	356	698	6 280	22 661	19 634	42 436	700

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.													
	Manufacturing—Con.													
337	Furniture & related product mfg—Con.													
3372	Office furniture (including fixtures) mfg	—	32	10	f	D	D	D	D	D	D	D	D	
33721	Office furniture (including fixtures) mfg	—	32	10	f	D	D	D	D	D	D	D	D	
337214	Office furniture (except wood) mfg	—	2	2	e	D	D	D	D	D	D	D	D	
337215	Showcase, partition, shelving, & locker mfg	2	18	6		378	10 260	310	577	6 406	20 831	16 972	38 101	131
339	Miscellaneous mfg	1	150	36		3 798	111 300	2 605	5 139	59 206	268 704	249 468	511 405	18 493
3391	Medical equipment & supplies mfg	1	56	11		1 478	50 062	977	1 892	24 541	137 884	112 980	244 357	D
33911	Medical equipment & supplies mfg	1	56	11		1 478	50 062	977	1 892	24 541	137 884	112 980	244 357	D
339113	Surgical appliance & supplies mfg	—	14	6		777	24 323	496	948	11 714	94 283	67 450	161 199	2 832
339114	Dental equipment & supplies mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	4	32	2		321	10 045	256	486	6 364	18 298	4 852	23 759	D
3399	Other miscellaneous mfg ..	1	94	25		2 320	61 238	1 628	3 247	34 665	130 820	136 488	267 048	D
33995	Sign mfg	2	29	5		336	10 185	209	468	4 920	18 156	11 133	28 819	433
339950	Sign mfg	2	29	5		336	10 185	209	468	4 920	18 156	11 133	28 819	433
33999	All other miscellaneous mfg	1	37	15		1 601	42 247	1 211	2 437	26 065	92 123	109 649	202 079	11 924
339991	Gasket, packing, & sealing device mfg ...	—	5	3		493	13 470	389	848	9 155	25 246	17 229	44 155	1 716
339993	Fastener, button, needle, & pin mfg	3	3	2	e	D	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	17	6		409	10 172	283	535	6 091	28 373	52 678	80 615	6 584
	FAYETTEVILLE, NC MSA													
31-33	Manufacturing	—	121	52		12 282	384 612	9 912	19 938	281 927	1 419 353	1 367 574	2 766 911	93 238
311	Food mfg	—	9	5		310	10 607	254	521	7 057	58 362	245 086	297 852	4 107
313	Textile mills	8	2	2	e	D	D	D	D	D	D	D	D	D
3132	Fabric mills	8	2	2	e	D	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	2	g	D	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	5	2	g	D	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
321	Wood product mfg	3	15	9		462	9 534	369	732	6 275	19 144	26 847	46 386	856
323	Printing & related support activities.....	2	20	5		267	6 197	194	331	3 534	9 832	6 205	16 097	1 065
3231	Printing & related support activities.....	2	20	5		267	6 197	194	331	3 534	9 832	6 205	16 097	1 065
32311	Printing	2	20	5		267	6 197	194	331	3 534	9 832	6 205	16 097	1 065
325	Chemical mfg	—	7	4		663	30 363	471	1 007	18 770	364 285	308 649	668 789	17 900
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	3	2	h	D	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	1	1	f	D	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	h	D	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	h	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	10	6		259	5 231	207	435	3 844	18 854	18 692	37 260	1 016
3273	Cement & concrete product mfg	1	9	6	e	D	D	D	D	D	D	D	D	D

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31-33	FAYETTEVILLE, NC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4									
			6	4	1 490	43 114	1 026	2 280	26 012	118 235	144 493	267 256	D
3363	Motor vehicle parts mfg	-	6	4	1 490	43 114	1 026	2 280	26 012	118 235	144 493	267 256	D
33639	Other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
31-33	GOLDSBORO, NC MSA		101	44	9 495	231 053	7 597	12 716	159 152	646 669	762 695	1 417 451	47 660
311	Food mfg	1	13	7	3 820	84 799	2 980	3 136	53 534	248 070	351 013	603 620	19 587
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	6	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	9	2	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	9	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	9	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	6	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	6	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	6	2	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	5	1	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	4	580	7 315	481	950	6 355	3 597	18 602	22 309	D
3151	Apparel knitting mills	-	2	2	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	5	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	1	1	e	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	11	6	352	8 493	245	495	4 934	18 861	9 535	28 381	D
333	Machinery mfg	-	4	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D

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GOLDSBORO, NC MSA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	4	4	748	25 103	577	1 212	17 108	74 404	49 498	120 689	5 874
3353	Electrical equipment mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	11	2	264	4 529	228	484	3 016	19 803	20 001	38 449	94
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC MSA													
31-33	Manufacturing	1	2 401	1 022	149 443	4 217 250	118 187	229 745	2 862 280	16 889 636	13 944 990	30 771 384	1 057 688
311	Food mfg	-	81	39	3 784	96 431	2 491	4 982	54 168	405 561	693 086	1 097 679	25 335
3112	Grain & oilseed milling	-	5	3	307	10 710	233	445	8 854	100 683	139 312	238 909	D
31122	Starch & vegetable fats & oils mfg	-	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	5	4	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	3	3	348	11 530	252	695	7 232	56 865	194 115	250 062	1 643
311511	Fluid milk mfg	-	3	3	348	11 530	252	695	7 232	56 865	194 115	250 062	1 643
3116	Meat product mfg	1	17	10	1 073	22 391	582	1 145	9 695	57 154	143 497	199 682	5 418
31161	Animal slaughtering & processing	1	17	10	1 073	22 391	582	1 145	9 695	57 154	143 497	199 682	5 418
311611	Animal (except poultry) slaughtering	-	10	4	638	12 739	302	600	5 404	27 611	82 973	109 755	D
311612	Meat processed from carcasses	3	5	4	e	D	D	D	D	D	D	D	2 525
3118	Bakeries & tortilla mfg	-	31	9	976	23 117	678	1 394	13 657	103 502	91 125	193 063	3 025
31181	Bread & bakery product mfg	-	26	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	11	8	813	19 678	565	1 186	11 447	79 261	38 773	118 022	2 701
3119	Other food mfg	-	10	8	585	14 929	386	706	6 772	42 636	38 790	84 341	1 504
31199	All other food mfg	-	5	5	358	7 164	235	422	3 468	22 635	20 431	43 004	386
312	Beverage & tobacco product mfg	2	16	10	6 487	341 446	4 941	8 846	250 527	5 316 995	1 758 424	7 077 269	84 272
3121	Beverage mfg	-	10	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	7	3	374	12 256	132	261	3 220	105 896	68 707	174 941	D
312111	Soft drink mfg	-	4	2	e	D	D	D	D	D	D	D	D
31212	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	2	6	6	i	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	2	5	5	i	D	D	D	D	D	D	D	D
312221	Cigarette mfg	2	3	3	i	D	D	D	D	D	D	D	D
313	Textile mills	-	143	92	19 231	500 968	16 546	35 781	373 739	1 292 636	2 235 376	3 540 399	270 106
3131	Fiber, yarn, & thread mills ..	-	21	18	4 035	110 597	3 523	7 550	81 563	327 921	665 598	987 906	162 406
31311	Fiber, yarn, & thread mills	-	21	18	4 035	110 597	3 523	7 550	81 563	327 921	665 598	987 906	162 406
313111	Yarn spinning mills ...	-	13	11	1 199	34 056	1 056	2 466	25 672	90 988	141 520	230 941	D
313112	Yarn texturing, throwing, & twisting mills	-	8	7	2 836	76 541	2 467	5 084	55 891	236 933	524 078	756 965	D
3132	Fabric mills	1	73	52	10 452	263 600	9 095	18 777	199 641	597 990	915 485	1 525 905	77 412
31321	Broadwoven fabric mills ..	1	24	12	4 615	115 437	4 078	8 687	92 508	200 396	394 590	610 162	40 660
313210	Broadwoven fabric mills	1	24	12	4 615	115 437	4 078	8 687	92 508	200 396	394 590	610 162	40 660
31322	Narrow fabric mills & schiffli machine embroidery	1	11	7	884	19 516	796	1 597	15 715	40 283	49 691	92 306	D
313221	Narrow fabric mills	1	11	7	884	19 516	796	1 597	15 715	40 283	49 691	92 306	D
31323	Nonwoven fabric mills ...	-	4	4	560	19 747	430	998	13 179	49 179	88 440	134 470	D
313230	Nonwoven fabric mills ..	-	4	4	560	19 747	430	998	13 179	49 179	88 440	134 470	D
31324	Knit fabric mills	1	34	29	4 393	108 900	3 791	7 495	78 239	308 132	382 764	688 967	17 391
313241	Weft knit fabric mills ..	1	16	12	1 353	31 494	1 153	2 329	21 930	81 488	101 718	180 995	4 051
313249	Other knit fabric & lace mills	-	18	17	3 040	77 406	2 638	5 166	56 309	226 644	281 046	507 972	13 340

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENSBORO—WINSTON-SALEM—HIGH POINT, NC MSA—Con.												
	Manufacturing—Con.												
313	Textile mills—Con.												
3133	Textile & fabric finishing & fabric coating mills	1	49	22	4 744	126 771	3 928	9 454	92 535	366 725	654 293	1 026 588	30 288
31331	Textile & fabric finishing mills	1	47	21	h	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	1	37	13	2 669	73 060	2 177	5 598	53 323	253 542	482 140	734 473	22 150
313312	Textile & fabric finishing mills	1	10	8	g	D	D	D	D	D	D	D	D
314	Textile product mills	1	80	31	3 078	73 324	2 501	4 421	51 450	177 661	189 017	371 644	6 360
3141	Textile furnishings mills	—	33	8	1 466	35 456	1 237	2 559	26 453	120 100	120 289	243 701	2 756
31412	Curtain & linen mills	—	31	8	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	17	7	1 351	33 443	1 146	2 385	25 056	114 514	116 527	234 490	2 507
3149	Other textile product mills	2	47	23	1 612	37 868	1 264	1 862	24 997	57 561	68 728	127 943	3 604
31491	Textile bag & canvas mills	1	8	4	251	5 901	185	373	3 096	8 156	12 460	20 696	89
31499	All other textile product mills	2	39	19	1 361	31 967	1 079	1 489	21 901	49 405	56 268	107 247	3 515
314999	All other miscellaneous textile product mills	2	37	19	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	158	100	15 089	285 910	13 075	24 583	217 460	703 732	812 842	1 523 325	30 236
3151	Apparel knitting mills	1	102	71	10 828	208 780	9 688	18 588	165 113	406 667	505 555	914 585	24 949
31511	Hosiery & sock mills	1	91	63	10 084	194 672	9 045	17 456	154 647	373 464	428 501	803 245	22 781
315111	Sheer hosiery mills	1	32	21	5 118	101 061	4 658	9 061	81 086	160 434	193 758	356 503	10 479
315119	Other hosiery & sock mills	1	59	42	4 966	93 611	4 387	8 395	73 561	213 030	234 743	446 742	12 302
31519	Other apparel knitting mills	1	11	8	744	14 108	643	1 132	10 466	33 203	77 054	111 340	2 168
315191	Outerwear knitting mills	7	7	5	e	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	4	3	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	42	24	3 792	67 167	3 006	5 221	46 063	274 786	292 326	571 888	D
31521	Cut & sew apparel contractors	5	13	8	741	8 451	625	1 100	6 527	18 406	11 089	29 591	404
315211	Men's & boys' cut & sew apparel contractors	5	9	7	680	7 446	573	1 015	5 845	15 335	9 043	24 367	363
31522	Men's & boys' cut & sew apparel mfg	1	11	8	2 322	44 168	1 883	3 347	33 543	227 295	239 316	467 843	3 340
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	6	4	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	9	3	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	4	14	8	716	14 383	487	757	5 876	28 754	41 596	73 798	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	6	4	314	4 450	260	424	2 939	11 770	15 929	28 675	36
3159	Apparel accessories & other apparel mfg	—	14	5	469	9 963	381	774	6 284	22 279	14 961	36 852	D
31599	Apparel accessories & other apparel mfg	—	14	5	469	9 963	381	774	6 284	22 279	14 961	36 852	D
315999	Other apparel accessories & other apparel mfg	—	8	2	343	6 625	281	585	4 349	17 657	11 496	28 864	D
316	Leather & allied product mfg	—	9	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	3	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	1	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	3	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	167	69	5 006	122 490	4 074	7 526	80 366	237 599	303 381	537 802	23 113
3211	Sawmills & wood preservation	—	34	7	497	12 235	407	807	8 746	41 995	71 024	107 196	6 769
32111	Sawmills & wood preservation	—	34	7	497	12 235	407	807	8 746	41 995	71 024	107 196	6 769
321113	Sawmills	—	29	6	447	10 981	371	730	7 952	35 441	46 387	78 825	6 353

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENSBORO—WINSTON-SALEM—HIGH POINT, NC MSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg—Con.												
3212	Veneer, plywood, & engineered wood product mfg	2	44	27	1 928	49 480	1 500	2 851	29 029	80 060	101 858	180 666	5 217
32121	Veneer, plywood, & engineered wood product mfg	2	44	27	1 928	49 480	1 500	2 851	29 029	80 060	101 858	180 666	5 217
321211	Hardwood veneer & plywood mfg	2	28	16	894	20 183	789	1 514	14 398	34 259	35 553	69 705	2 232
321214	Truss mfg	7	8	4	f	D	D	D	D	D	D	D	1 672
321219	Reconstituted wood product mfg	—	7	6	470	13 997	347	762	8 475	24 993	42 465	66 190	D
3219	Other wood product mfg ...	2	89	35	2 581	60 775	2 167	3 868	42 591	115 544	130 499	249 940	11 127
32191	Millwork	3	41	15	1 354	32 482	1 153	2 134	23 565	65 663	81 610	151 896	8 963
321912	Cut stock, resawing lumber, & planing	1	25	6	400	7 860	347	616	6 207	13 652	17 232	30 323	5 379
321918	Other millwork (including flooring) ...	4	11	7	839	22 382	714	1 336	15 842	46 223	43 969	89 923	3 349
32192	Wood container & pallet mfg	1	18	7	586	12 861	490	868	8 832	22 146	21 138	42 599	1 319
321920	Wood container & pallet mfg	1	18	7	586	12 861	490	868	8 832	22 146	21 138	42 599	1 319
32199	All other wood product mfg	1	30	13	641	15 432	524	866	10 194	27 735	27 751	55 445	845
321999	All other miscellaneous wood product mfg ...	2	24	10	433	10 040	358	646	6 555	15 968	11 001	26 929	613
322	Paper mfg	1	64	40	4 131	153 434	3 088	6 382	95 203	383 765	526 434	911 152	29 027
3222	Converted paper product mfg	1	64	40	4 131	153 434	3 088	6 382	95 203	383 765	526 434	911 152	29 027
32221	Paperboard container mfg	—	36	26	2 663	91 482	1 975	4 160	51 718	225 243	278 730	504 082	21 698
322211	Corrugated & solid fiber box mfg	—	21	14	1 444	48 067	1 047	2 157	26 548	128 087	163 321	291 847	12 949
322212	Folding paperboard box mfg	—	9	7	823	33 184	626	1 399	17 841	73 593	86 980	160 324	D
322214	Fiber can, tube, drum, & similar products mfg	—	3	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	11	5	883	44 640	655	1 303	31 379	115 420	203 428	318 525	4 915
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	7	13	8	512	15 243	390	785	10 204	38 439	39 415	79 091	D
322299	All other converted paper product mfg ...	7	13	8	512	15 243	390	785	10 204	38 439	39 415	79 091	D
323	Printing & related support activities	1	279	76	6 404	184 063	4 735	9 148	112 051	456 228	223 156	679 517	39 702
3231	Printing & related support activities	1	279	76	6 404	184 063	4 735	9 148	112 051	456 228	223 156	679 517	39 702
32311	Printing	—	236	57	5 379	157 411	3 931	7 628	94 761	403 967	213 484	617 127	36 925
323110	Commercial lithographic printing ..	—	114	28	2 698	87 694	1 943	3 781	51 824	194 624	102 285	296 433	27 068
323112	Commercial flexographic printing .	—	15	6	306	10 689	218	431	4 859	18 638	20 297	38 902	1 302
323113	Commercial screen printing	—	32	10	624	16 305	476	773	8 624	52 049	40 331	91 677	3 750
323116	Manifold business form printing	2	7	3	622	13 238	430	952	10 609	66 610	19 653	86 704	1 681
323117	Book printing	—	2	2	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	2	43	19	1 025	26 652	804	1 520	17 290	52 261	9 672	62 390	2 777
323121	Tradebinding & related work	1	19	10	563	9 560	473	814	6 638	17 299	3 510	20 854	1 604
323122	Prepress services	2	24	9	462	17 092	331	706	10 652	34 962	6 162	41 536	1 173
325	Chemical mfg	—	84	44	6 890	253 776	4 222	8 489	123 782	2 113 560	1 223 615	3 308 062	93 472
3251	Basic chemical mfg	1	10	3	260	11 313	112	253	4 316	39 703	59 909	99 656	4 053
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	7	3	e	D	D	D	D	D	D	D	17 353
32521	Resin & synthetic rubber mfg	—	6	2	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	5	2	260	9 717	137	244	5 526	122 914	26 059	150 330	D

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31-33	GREENSBORO-WINSTON-SALEM-HIGH POINT, NC MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg.....	1	8	6	1 195	37 430	730	1 776	23 965	416 794	149 346	554 171	9 856
32541	Pharmaceutical & medicine mfg.....	1	8	6	1 195	37 430	730	1 776	23 965	416 794	149 346	554 171	9 856
325412	Pharmaceutical preparation mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	1	15	11	g	D	D	D	D	D	D	D	14 465
32551	Paint & coating mfg.....	—	11	9	1 549	57 007	736	1 538	17 772	164 017	210 782	372 196	D
325510	Paint & coating mfg.....	—	11	9	1 549	57 007	736	1 538	17 772	164 017	210 782	372 196	D
3256	Soap, cleaning compound, & toilet preparation mfg... ..	—	20	10	1 957	75 018	1 303	2 528	40 441	1 173 017	357 135	1 513 519	34 689
32561	Soap & cleaning compound mfg.....	—	19	9	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg... ..	—	4	2	e	D	D	D	D	D	D	D	D
325613	Surface active agent mfg.....	—	12	6	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg... ..	—	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg... ..	—	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	—	21	9	1 392	54 480	996	1 787	26 029	157 810	346 858	507 217	12 789
32599	All other chemical product & preparation mfg.....	—	13	7	1 267	50 850	919	1 632	23 875	146 927	324 068	474 162	12 312
325992	Photographic film, paper, plate, & chemical mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	—	7	4	652	28 369	472	752	10 133	80 245	164 185	238 799	D
326	Plastics & rubber products mfg.....	—	138	74	7 147	179 037	5 786	11 166	118 352	471 313	504 452	974 208	57 693
3261	Plastics product mfg.....	—	116	64	6 428	159 553	5 204	9 996	104 270	415 743	438 549	852 174	39 333
32611	Unsupported plastics film, sheet, & bag mfg... ..	—	14	9	772	25 307	582	1 358	15 082	61 046	71 464	135 946	4 198
326111	Unsupported plastics bag mfg.....	—	5	4	468	14 482	339	854	8 556	32 730	24 932	57 726	2 281
32614	Polystyrene foam product mfg.....	—	11	4	404	10 599	355	703	8 432	35 712	49 556	85 906	4 795
326140	Polystyrene foam product mfg.....	—	11	4	404	10 599	355	703	8 432	35 712	49 556	85 906	4 795
32615	Urethane & other foam product (except polystyrene) mfg.....	—	23	18	1 715	38 231	1 412	2 585	26 137	84 977	130 808	215 701	5 105
326150	Urethane & other foam product (except polystyrene) mfg.....	—	23	18	1 715	38 231	1 412	2 585	26 137	84 977	130 808	215 701	5 105
32619	Other plastics product mfg.....	—	51	28	3 161	74 474	2 528	4 737	47 512	200 445	141 841	337 151	21 026
326199	All other plastics product mfg.....	—	49	28	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	—	22	10	719	19 484	582	1 170	14 082	55 570	65 903	122 034	18 360
32629	Other rubber product mfg.....	1	14	6	381	10 459	311	555	7 396	35 187	26 512	61 824	D
326299	All other rubber product mfg.....	1	8	4	311	8 483	259	442	6 033	30 295	23 965	54 413	D
327	Nonmetallic mineral product mfg.....	—	95	35	3 883	114 814	3 216	6 394	85 261	354 225	196 372	546 513	51 363
3271	Clay product & refractory mfg.....	—	21	7	818	23 222	621	1 284	15 237	49 464	30 189	79 730	D
32712	Clay building material & refractories mfg.....	—	7	6	670	19 760	501	1 058	12 793	38 544	23 901	63 318	5 383
327122	Ceramic wall & floor tile mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.....	—	12	5	1 853	57 645	1 638	3 119	45 735	190 629	60 370	250 018	D
32721	Glass & glass product mfg.....	—	12	5	1 853	57 645	1 638	3 119	45 735	190 629	60 370	250 018	D
327212	Other pressed & blown glass & glassware mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	—	11	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENSBORO-WINSTON-SALEM-HIGH POINT, NC MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	48	19	989	28 083	800	1 653	20 974	74 950	75 145	150 027	7 143
32732	Ready-mix concrete mfg.	2	30	9	475	12 977	416	863	11 019	34 423	42 264	76 692	4 756
327320	Ready-mix concrete mfg	2	30	9	475	12 977	416	863	11 019	34 423	42 264	76 692	4 756
32733	Concrete pipe, brick, & block mfg	2	11	6	349	10 621	250	532	6 664	28 324	25 039	53 238	1 782
331	Primary metal mfg	—	17	10	g	D	D	D	D	D	D	D	7 496
3313	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	1	11	6	368	10 272	318	650	7 528	23 258	13 359	36 304	1 953
33152	Nonferrous metal foundries	1	8	5	338	9 513	289	590	6 873	21 915	12 657	34 264	D
332	Fabricated metal product mfg	—	300	98	9 243	260 022	7 066	13 229	170 968	694 183	596 499	1 289 960	37 117
3321	Forging & stamping	—	9	5	300	11 242	225	475	7 397	21 297	21 511	42 037	3 660
33211	Forging & stamping	—	9	5	300	11 242	225	475	7 397	21 297	21 511	42 037	3 660
332116	Metal stamping	—	8	5	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	13	6	320	10 038	231	421	6 019	20 945	9 066	30 189	1 055
33221	Cutlery & handtool mfg	—	13	6	320	10 038	231	421	6 019	20 945	9 066	30 189	1 055
3323	Architectural & structural metals mfg	—	61	24	2 123	62 503	1 445	2 907	35 754	147 462	183 449	329 547	4 758
33231	Plate work & fabricated structural product mfg	—	31	14	1 261	39 471	823	1 724	22 424	101 437	146 114	246 777	2 579
332311	Prefabricated metal building & component mfg	—	3	2	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	24	11	689	20 044	449	1 003	11 528	65 053	97 840	162 099	1 398
33232	Ornamental & architectural metal products mfg	1	30	10	862	23 032	622	1 183	13 330	46 025	37 335	82 770	2 179
332321	Metal window & door mfg	—	6	3	351	8 034	243	460	4 272	18 379	19 146	37 256	D
332322	Sheet metal work mfg	—	14	5	312	9 133	244	456	5 835	16 587	11 334	27 926	1 358
3324	Boiler, tank, & shipping container mfg	—	9	5	415	18 760	335	675	13 514	65 001	100 807	166 246	D
3325	Hardware mfg	—	14	7	1 277	27 182	1 043	1 742	20 883	78 701	57 635	135 838	3 914
33251	Hardware mfg	—	14	7	1 277	27 182	1 043	1 742	20 883	78 701	57 635	135 838	3 914
332510	Hardware mfg	—	14	7	1 277	27 182	1 043	1 742	20 883	78 701	57 635	135 838	3 914
3326	Spring & wire product mfg	1	17	9	764	14 736	666	1 152	11 515	38 241	50 484	88 206	1 629
33261	Spring & wire product mfg	1	17	9	764	14 736	666	1 152	11 515	38 241	50 484	88 206	1 629
332612	Spring (light gauge) mfg	1	7	4	443	9 069	369	649	6 794	26 970	35 492	61 661	815
332618	Other fabricated wire product mfg	2	10	5	321	5 667	297	503	4 721	11 271	14 992	26 545	814
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	121	25	2 142	63 016	1 701	3 200	43 428	130 722	44 182	174 455	12 225
33271	Machine shops	2	108	19	1 532	45 929	1 239	2 241	30 520	79 633	30 544	110 061	8 122
332710	Machine shops	2	108	19	1 532	45 929	1 239	2 241	30 520	79 633	30 544	110 061	8 122
33272	Turned product & screw, nut, & bolt mfg	—	13	6	610	17 087	462	959	12 908	51 089	13 638	64 394	4 103
332721	Precision turned product mfg	—	9	4	e	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	4	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	32	15	1 653	45 146	1 222	2 333	28 286	178 763	125 733	306 702	8 137
33291	Metal valve mfg	—	11	9	1 222	32 037	883	1 654	18 728	152 118	100 788	258 114	7 295
332911	Industrial valve mfg	—	9	8	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	21	6	431	13 109	339	679	9 558	26 645	24 945	48 588	842

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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31-33	GREENSBORO—WINSTON-SALEM—HIGH POINT, NC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	133	52	7 324	271 146	4 820	9 523	148 464	602 636	1 161 508	1 803 738	56 947
3331	Agriculture, construction, & mining machinery mfg.	-	8	3	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.	-	4	1	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.	-	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg. ..	-	44	16	1 417	50 311	858	1 666	23 962	109 492	88 179	192 281	D
33321	Sawmill & woodworking machinery mfg.	-	10	4	387	12 851	182	358	4 671	30 940	17 369	47 739	D
333210	Sawmill & woodworking machinery mfg.	-	10	4	387	12 851	182	358	4 671	30 940	17 369	47 739	D
33329	Other industrial machinery mfg.	-	34	12	1 030	37 460	676	1 308	19 291	78 552	70 810	144 542	3 563
333292	Textile machinery mfg.	-	22	7	579	20 368	373	730	8 636	49 539	38 525	84 390	2 292
3333	Commercial & service industry machinery mfg. ..	2	7	3	e	D	D	D	D	D	D	D	3 008
33331	Commercial & service industry machinery mfg.	2	7	3	e	D	D	D	D	D	D	D	3 008
333319	Other commercial & service industry machinery mfg.	1	6	3	285	8 747	143	283	3 192	-5 799	27 611	22 597	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	-	7	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	-	7	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.	1	34	9	715	23 312	549	996	14 926	54 653	25 183	79 184	5 733
33351	Metalworking machinery mfg.	1	34	9	715	23 312	549	996	14 926	54 653	25 183	79 184	5 733
333515	Cutting tool & machine tool accessory mfg. ..	-	3	2	266	7 965	218	340	4 850	23 563	11 163	34 074	D
3336	Engine, turbine, & power transmission equipment mfg.	-	3	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.	-	3	1	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	-	30	18	3 263	119 249	1 986	3 957	57 459	321 241	438 554	765 845	15 123
33391	Pump & compressor mfg.	-	3	3	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg.	-	2	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg.	-	1	1	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.	1	7	6	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.	-	20	9	855	27 297	572	1 270	14 778	119 023	49 157	166 611	3 755
333999	All other miscellaneous general-purpose machinery mfg.	-	13	6	712	21 692	486	1 054	11 915	106 625	39 103	144 805	3 229
334	Computer & electronic product mfg.	-	51	30	6 454	216 781	4 455	8 242	124 819	822 427	443 444	1 239 478	71 598
3344	Semiconductor & other electronic component mfg.	-	28	20	5 028	170 176	3 562	6 494	102 786	673 007	375 108	1 016 158	55 832
33441	Semiconductor & other electronic component mfg.	-	28	20	5 028	170 176	3 562	6 494	102 786	673 007	375 108	1 016 158	55 832
334413	Semiconductor & related device mfg.	-	3	3	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.	-	10	9	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.	-	2	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.	-	6	4	g	D	D	D	D	D	D	D	D

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	GREENSBORO—WINSTON-SALEM—HIGH POINT, NC MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	12	7	f	D	D	D	D	D	D	D	12 846
33451	Navigational, measuring, medical, & control instruments mfg	1	12	7	f	D	D	D	D	D	D	D	12 846
334510	Electromedical & electrotherapeutic apparatus mfg	—	2	2	e	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	—	3	1	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	3	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	38	24	7 564	226 005	6 219	11 775	162 491	910 593	914 632	1 809 351	53 467
3351	Electric lighting equipment mfg	—	11	5	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	11	5	e	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	—	7	4	286	5 596	230	444	3 677	14 588	6 101	20 520	D
3352	Household appliance mfg	—	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	2	2	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	13	7	1 930	63 546	1 706	3 431	48 556	69 376	259 793	329 468	11 949
33531	Electrical equipment mfg	—	13	7	1 930	63 546	1 706	3 431	48 556	69 376	259 793	329 468	11 949
335312	Motor & generator mfg	—	4	3	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	7	3	g	D	D	D	D	D	D	D	2 179
3359	Other electrical equipment & component mfg	—	12	10	3 966	123 506	3 118	5 929	85 451	659 057	514 073	1 162 860	32 356
33591	Battery mfg	—	6	6	h	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	3	3	g	D	D	D	D	D	D	D	9 005
335912	Primary battery mfg	—	3	3	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	45	17	4 784	172 561	3 768	8 279	123 787	241 880	585 367	798 624	43 796
3362	Motor vehicle body & trailer mfg	—	16	4	1 963	63 026	1 523	3 359	51 532	47 087	356 360	390 767	9 296
33621	Motor vehicle body & trailer mfg	—	16	4	1 963	63 026	1 523	3 359	51 532	47 087	356 360	390 767	9 296
336211	Motor vehicle body mfg	—	8	4	1 922	62 005	1 491	3 295	50 837	45 403	352 588	385 289	9 179
3363	Motor vehicle parts mfg	—	19	11	g	D	D	D	D	D	D	D	33 068
33632	Motor vehicle electrical & electronic equipment mfg	1	5	3	546	10 682	481	1 138	8 675	36 030	38 145	73 340	836
336322	Other motor vehicle electrical & electronic equipment mfg	1	5	3	546	10 682	481	1 138	8 675	36 030	38 145	73 340	836
33635	Motor vehicle transmission & power train parts mfg	—	3	3	953	52 508	832	1 615	37 929	53 621	112 818	163 558	D
336350	Motor vehicle transmission & power train parts mfg	—	3	3	953	52 508	832	1 615	37 929	53 621	112 818	163 558	D
33636	Motor vehicle seating & interior trim mfg	—	3	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	3	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	8	3	2	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	8	3	2	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing	9	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GREENSBORO—WINSTON-SALEM—HIGH POINT, NC MSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	347	153	27 799	606 370	23 327	43 449	464 580	1 288 038	1 118 716	2 402 959	52 433
3371	Household & institutional furniture & kitchen cabinet mfg	-	234	95	21 285	459 899	18 192	34 066	369 144	996 904	871 777	1 864 765	28 865
33711	Wood kitchen cabinet & counter top mfg	-	36	5	994	27 171	823	2 140	21 063	44 616	40 156	84 960	1 845
337110	Wood kitchen cabinet & counter top mfg ...	-	36	5	994	27 171	823	2 140	21 063	44 616	40 156	84 960	1 845
33712	Household & institutional furniture mfg	-	198	90	20 291	432 728	17 369	31 926	348 081	952 288	831 621	1 779 805	27 020
337121	Upholstered household furniture mfg	-	105	49	8 305	170 023	7 198	12 388	136 712	404 022	411 620	812 381	13 404
337122	Nonupholstered wood household furniture mfg	-	70	30	10 447	224 577	8 850	16 637	183 599	481 255	337 433	819 496	11 279
337124	Metal household furniture mfg	-	10	5	737	19 300	571	1 296	14 297	34 215	43 771	77 652	1 941
337129	Wood television, radio, & sewing machine cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	93	47	5 650	122 248	4 459	8 122	81 492	228 407	193 766	422 354	18 597
33721	Office furniture (including fixtures) mfg	1	93	47	5 650	122 248	4 459	8 122	81 492	228 407	193 766	422 354	18 597
337211	Wood office furniture mfg	-	25	22	3 863	82 032	3 003	5 627	53 946	150 271	132 773	283 334	14 238
337214	Office furniture (except wood) mfg	6	7	2	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	59	23	1 448	32 947	1 203	2 179	22 878	56 531	47 157	103 531	3 492
3379	Other furniture related product mfg	-	20	11	864	24 223	676	1 261	13 944	62 727	53 173	115 840	4 971
33791	Mattress mfg	-	17	9	780	21 928	639	1 212	12 971	60 646	49 983	110 693	D
337910	Mattress mfg	-	17	9	780	21 928	639	1 212	12 971	60 646	49 983	110 693	D
339	Miscellaneous mfg	-	150	26	3 220	93 678	2 344	4 542	56 315	285 708	243 640	517 099	23 931
3391	Medical equipment & supplies mfg	-	70	7	1 366	40 312	1 122	2 273	29 022	136 034	73 291	204 936	11 914
33911	Medical equipment & supplies mfg	-	70	7	1 366	40 312	1 122	2 273	29 022	136 034	73 291	204 936	11 914
339112	Surgical & medical instrument mfg	-	8	5	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	80	19	1 854	53 366	1 222	2 269	27 293	149 674	170 349	312 163	12 017
33995	Sign mfg	-	37	6	462	11 546	306	527	5 770	25 116	13 604	38 073	1 101
339950	Sign mfg	-	37	6	462	11 546	306	527	5 770	25 116	13 604	38 073	1 101
33999	All other miscellaneous mfg	-	24	11	1 153	35 681	784	1 579	19 597	116 363	146 908	256 271	10 140
339999	All other miscellaneous mfg	-	12	8	977	30 329	671	1 369	17 005	107 118	136 550	236 117	9 394
	GREENVILLE, NC MSA												
31-33	Manufacturing	-	119	50	9 305	280 849	6 985	13 886	174 479	1 707 304	1 027 491	2 741 904	112 077
312	Beverage & tobacco product mfg	9	1	1	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg	9	1	1	e	D	D	D	D	D	D	D	D
31221	Tobacco stemming & redrying	9	1	1	e	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	9	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	-	6	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	12	6	365	4 942	311	593	3 576	8 281	8 910	14 950	D
3152	Cut & sew apparel mfg	-	11	6	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	GREENVILLE, NC MSA—Con.													
	Manufacturing—Con.													
325	Chemical mfg	-	4	4	g	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	-	2	2	g	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	3	14	4		7 711	180	307	4 425	12 772	10 039	22 771	1 678	
333	Machinery mfg	-	7	5		1 589	49 141	1 299	2 884	35 388	154 076	264 267	414 016	
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	e	D	D	D	D	D	D	D	D	
333414	Heating equipment (except warm air furnaces) mfg	-	1	1	e	D	D	D	D	D	D	D	D	
3335	Metalworking machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D	
33351	Metalworking machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D	
333515	Cutting tool & machine tool accessory mfg	-	1	1	e	D	D	D	D	D	D	D	D	
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	-	4	2	f	D	D	D	D	D	D	D	D	
3341	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D	
33411	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D	
334113	Computer terminal mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	8	6		1 114	31 156	825	1 584	19 551	93 650	102 767	191 720	
3363	Motor vehicle parts mfg	-	3	3		626	20 103	427	937	13 551	73 044	56 319	125 289	
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D	
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D	
3366	Ship & boat building	1	5	3		488	11 053	398	647	6 000	20 606	46 448	66 431	
33661	Ship & boat building	1	5	3		488	11 053	398	647	6 000	20 606	46 448	66 431	
336612	Boat building	1	5	3		488	11 053	398	647	6 000	20 606	46 448	66 431	
339	Miscellaneous mfg	-	11	2	g	D	D	D	D	D	D	D	1 952	
3399	Other miscellaneous mfg	-	4	1	f	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D	
339994	Broom, brush, & mop mfg	-	1	1	f	D	D	D	D	D	D	D	D	
31-33	HICKORY—MORGANTON—LENOIR, NC MSA													
	Manufacturing	-	1 012	516		78 514	1 925 433	66 050	128 025	1 409 200	4 681 888	5 285 089	9 907 714	336 411
311	Food mfg	-	11	8		2 241	55 440	1 587	3 447	30 721	168 689	184 539	352 738	
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D	
31141	Frozen food mfg	-	1	1	e	D	D	D	D	D	D	D	D	
311412	Frozen specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	4	3		748	14 971	673	1 506	12 171	39 341	68 297	108 167	
31161	Animal slaughtering & processing	-	4	3		748	14 971	673	1 506	12 171	39 341	68 297	108 167	
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	-	4	2	f	D	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	-	4	2	f	D	D	D	D	D	D	D	D	
311812	Commercial bakeries	-	2	2	f	D	D	D	D	D	D	D	D	

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HICKORY—MORGANTON—LENOIR, NC MSA—Con. Manufacturing—Con.												
313	Textile mills	2	61	51	7 896	194 738	6 906	14 433	153 873	472 747	583 074	1 047 506	33 408
3131	Fiber, yarn, & thread mills .	—	21	19	2 036	46 164	1 836	3 741	37 509	117 681	159 090	274 855	10 104
31311	Fiber, yarn, & thread mills	—	21	19	2 036	46 164	1 836	3 741	37 509	117 681	159 090	274 855	10 104
313111	Yarn spinning mills ...	—	16	15	1 621	37 500	1 500	3 062	30 996	91 635	107 834	198 596	D
313112	Yarn texturing, throwing, & twisting mills	—	4	4	e	D	D	D	D	D	D	D	D
3132	Fabric mills	3	22	18	3 504	91 475	3 052	6 624	72 703	243 612	258 876	496 280	13 126
31321	Broadwoven fabric mills .	4	10	8	2 137	60 622	1 837	4 045	47 254	153 447	162 941	313 800	7 329
313210	Broadwoven fabric mills	4	10	8	2 137	60 622	1 837	4 045	47 254	153 447	162 941	313 800	7 329
31322	Narrow fabric mills & schiffli machine embroidery	—	3	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	—	8	7	f	D	D	D	D	D	D	D	2 624
313241	Weft knit fabric mills ..	—	6	5	675	14 153	610	1 274	11 706	46 854	42 711	89 197	D
3133	Textile & fabric finishing & fabric coating mills	1	18	14	2 356	57 099	2 018	4 068	43 661	111 454	165 108	276 371	10 178
31331	Textile & fabric finishing mills	1	17	13	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	4	9	5	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	8	8	1 316	30 029	1 148	2 368	22 595	57 556	103 745	160 543	5 444
314	Textile product mills	1	29	14	1 529	29 992	1 300	2 290	22 249	100 534	64 567	159 697	5 500
3141	Textile furnishings mills	2	12	7	966	19 100	866	1 575	15 424	67 089	47 947	114 719	1 479
31412	Curtain & linen mills	2	12	7	966	19 100	866	1 575	15 424	67 089	47 947	114 719	1 479
314129	Other household textile product mills	2	10	7	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	17	7	563	10 892	434	715	6 825	33 445	16 620	44 978	4 021
31499	All other textile product mills	—	14	7	544	10 546	422	694	6 615	32 947	15 984	43 842	D
314999	All other miscellaneous textile product mills ..	—	13	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	131	70	8 266	164 256	7 126	13 258	117 727	355 099	419 885	774 024	19 575
3151	Apparel knitting mills	1	105	55	6 923	142 756	5 979	11 496	103 106	308 163	371 724	679 368	18 533
31511	Hosiery & sock mills	2	99	51	5 623	113 078	4 898	9 444	82 505	267 969	274 680	538 406	13 548
315111	Sheer hosiery mills ...	—	15	5	972	20 300	829	1 509	15 496	36 513	35 838	69 602	3 080
315119	Other hosiery & sock mills	2	84	46	4 651	92 778	4 069	7 935	67 009	231 456	238 842	468 804	10 468
31519	Other apparel knitting mills	1	6	4	1 300	29 678	1 081	2 052	20 601	40 194	97 044	140 962	4 985
315191	Outerwear knitting mills	2	5	3	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	19	10	981	15 660	853	1 238	10 515	31 010	37 355	67 743	530
31521	Cut & sew apparel contractors	4	13	7	625	9 055	565	774	6 570	14 839	6 620	20 511	422
315211	Men's & boys' cut & sew apparel contractors	7	6	4	376	5 121	344	499	4 328	8 301	2 480	10 833	D
31523	Women's & girls' cut & sew apparel mfg	—	3	2	e	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	2	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	5	7	5	362	5 840	294	524	4 106	15 926	10 806	26 913	512
31599	Apparel accessories & other apparel mfg	5	7	5	362	5 840	294	524	4 106	15 926	10 806	26 913	512
315992	Glove & mitten mfg ...	5	5	4	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	7	4	g	D	D	D	D	D	D	D	2 150
3161	Leather & hide tanning & finishing	—	6	3	752	21 925	617	1 247	15 766	32 668	98 848	133 674	D
31611	Leather & hide tanning & finishing	—	6	3	752	21 925	617	1 247	15 766	32 668	98 848	133 674	D
316110	Leather & hide tanning & finishing	—	6	3	752	21 925	617	1 247	15 766	32 668	98 848	133 674	D
3162	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HICKORY—MORGANTON—LENOIR, NC MSA—Con. Manufacturing—Con.												
321	Wood product mfg	1	112	52	2 837	62 639	2 496	4 570	48 688	114 561	136 908	250 805	8 844
3212	Veneer, plywood, & engineered wood product mfg	—	20	18	987	22 167	889	1 685	18 069	38 019	51 454	89 307	2 966
32121	Veneer, plywood, & engineered wood product mfg	—	20	18	987	22 167	889	1 685	18 069	38 019	51 454	89 307	2 966
321211	Hardwood veneer & plywood mfg	—	13	12	684	15 204	622	1 164	12 575	24 576	39 797	64 307	2 143
3219	Other wood product mfg	1	69	33	1 671	36 378	1 452	2 637	27 879	66 514	71 362	137 410	5 458
32191	Millwork	2	42	19	1 107	23 529	987	1 757	18 796	37 994	43 149	80 932	3 344
321912	Cut stock, resawing lumber, & planing	2	37	18	1 035	22 232	924	1 665	17 757	36 074	41 080	76 943	3 302
32199	All other wood product mfg	—	18	8	368	8 750	314	579	6 315	22 500	17 523	39 852	1 364
321999	All other miscellaneous wood product mfg	—	18	8	368	8 750	314	579	6 315	22 500	17 523	39 852	1 364
322	Paper mfg	1	19	15	1 879	58 077	1 567	3 310	41 149	143 667	199 163	341 371	25 702
3222	Converted paper product mfg	1	18	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	12	9	1 097	35 723	870	1 915	24 012	83 094	101 089	180 379	20 405
322211	Corrugated & solid fiber box mfg	—	6	6	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	3	4	2	415	14 553	359	850	11 980	39 918	50 159	86 316	D
32222	Paper bag & coated & treated paper mfg	—	3	3	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	46	10	1 415	46 921	1 118	2 088	36 025	83 284	59 705	143 714	3 762
3231	Printing & related support activities	—	46	10	1 415	46 921	1 118	2 088	36 025	83 284	59 705	143 714	3 762
32311	Printing	—	39	8	1 330	45 386	1 054	1 982	34 822	78 227	58 793	137 741	3 720
323110	Commercial lithographic printing	1	25	5	374	12 761	285	552	10 275	24 858	21 184	45 358	D
323111	Commercial gravure printing	—	3	1	e	D	D	D	D	D	D	D	D
323113	Commercial screen printing	—	4	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	26	9	722	24 912	381	720	11 223	105 987	94 739	199 725	8 261
326	Plastics & rubber products mfg	—	56	40	4 240	105 425	3 347	5 764	66 888	334 479	363 827	698 014	37 288
3261	Plastics product mfg	—	46	37	3 707	91 890	2 928	4 882	59 825	303 871	334 383	638 730	D
32611	Unsupported plastics film, sheet, & bag mfg	—	4	3	373	11 640	214	358	7 429	70 960	45 680	116 988	2 471
32615	Urethane & other foam product (except polystyrene) mfg	—	24	23	1 862	42 550	1 663	2 692	31 038	110 617	158 908	269 818	13 858
326150	Urethane & other foam product (except polystyrene) mfg	—	24	23	1 862	42 550	1 663	2 692	31 038	110 617	158 908	269 818	13 858
32619	Other plastics product mfg	—	15	10	1 407	36 600	998	1 766	20 585	118 886	125 406	243 952	10 717
326199	All other plastics product mfg	—	15	10	1 407	36 600	998	1 766	20 585	118 886	125 406	243 952	10 717
3262	Rubber product mfg	—	10	3	533	13 535	419	882	7 063	30 608	29 444	59 284	D
32629	Other rubber product mfg	—	6	3	511	13 042	398	842	6 587	29 632	28 325	57 181	D
326299	All other rubber product mfg	—	4	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	32	11	1 690	48 807	1 342	2 756	32 813	131 471	75 940	202 176	30 573
3272	Glass & glass product mfg	—	5	5	1 025	29 429	871	1 827	22 755	71 538	44 362	111 042	D
32721	Glass & glass product mfg	—	5	5	1 025	29 429	871	1 827	22 755	71 538	44 362	111 042	D
327215	Glass product mfg made of purchased glass	—	5	5	1 025	29 429	871	1 827	22 755	71 538	44 362	111 042	D
3273	Cement & concrete product mfg	2	20	3	276	9 057	215	403	4 724	19 835	18 081	37 702	1 844
3279	Other nonmetallic mineral product mfg	—	6	2	e	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	—	4	2	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	4	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HICKORY—MORGANTON—LENOIR, NC MSA—Con. Manufacturing—Con.												
332	Fabricated metal product mfg.....	-	69	20	2 162	55 789	1 730	3 195	38 560	175 744	105 188	255 044	12 028
3322	Cutlery & handtool mfg....	-	6	4	324	9 765	252	500	6 089	18 214	12 446	30 886	712
33221	Cutlery & handtool mfg..	-	6	4	324	9 765	252	500	6 089	18 214	12 446	30 886	712
332212	Hand & edge tool mfg..	-	4	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	1	3	1	e	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	1	3	1	e	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	1	3	1	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	-	5	2	558	11 605	512	875	8 965	22 913	27 926	50 767	1 111
33261	Spring & wire product mfg	-	5	2	558	11 605	512	875	8 965	22 913	27 926	50 767	1 111
332612	Spring (light gauge) mfg	-	2	1	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	6	3	373	11 562	267	600	8 520	84 587	25 833	83 967	D
33299	All other fabricated metal product mfg.....	-	6	3	373	11 562	267	600	8 520	84 587	25 833	83 967	D
332991	Ball & roller bearing mfg	-	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	35	8	1 168	37 546	898	1 834	24 610	76 620	101 715	179 290	7 030
3339	Other general-purpose machinery mfg	-	9	3	582	20 210	484	1 155	14 712	45 399	64 952	110 124	3 415
33392	Material handling equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	13	8	856	19 754	599	1 021	10 106	110 737	75 926	184 415	3 012
3342	Communications equipment mfg	4	5	4	f	D	D	D	D	D	D	D	2 316
33429	Other communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	17	9	6 528	194 544	5 247	11 209	136 832	560 437	954 869	1 497 438	58 085
3351	Electric lighting equipment mfg	-	4	1	302	5 963	278	623	3 810	12 122	13 048	24 619	D
33512	Lighting fixture mfg	-	4	1	302	5 963	278	623	3 810	12 122	13 048	24 619	D
335121	Residential electric lighting fixture mfg ...	-	4	1	302	5 963	278	623	3 810	12 122	13 048	24 619	D
3359	Other electrical equipment & component mfg	-	10	7	6 188	186 571	4 940	10 529	132 242	544 046	939 859	1 466 574	57 492
33592	Communication & energy wire & cable mfg	-	4	4	4 032	131 981	3 185	6 709	90 052	450 956	842 394	1 275 281	48 636
335921	Fiber optic cable mfg...	-	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	1	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	3	1	e	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	5	1 267	44 210	1 002	2 115	32 264	97 352	311 735	407 301	14 426
3363	Motor vehicle parts mfg ...	-	7	4	1 164	40 726	913	1 968	29 548	89 862	306 652	395 102	14 297
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HICKORY—MORGANTON—LENOIR, NC MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	301	170	31 666	725 435	27 685	52 588	568 904	1 510 870	1 340 425	2 856 373	52 242
3371	Household & institutional furniture & kitchen cabinet mfg	-	226	138	29 556	682 333	25 836	49 238	535 399	1 438 542	1 276 448	2 720 582	48 674
33712	Household & institutional furniture mfg	-	218	137	29 495	680 994	25 791	49 159	534 425	1 436 451	1 274 471	2 716 444	48 439
337121	Upholstered household furniture mfg	1	140	93	16 168	389 519	13 793	25 502	295 959	757 834	774 775	1 526 796	20 069
337122	Nonupholstered wood household furniture mfg	-	59	37	12 764	282 019	11 551	22 882	231 319	649 814	478 124	1 139 692	27 297
3372	Office furniture (including fixtures) mfg	1	72	31	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	72	31	g	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	8	5	649	14 209	550	972	10 614	29 618	21 777	51 207	1 512
337215	Showcase, partition, shelving, & locker mfg	1	61	26	1 377	27 063	1 229	2 247	21 508	41 558	35 690	76 930	2 022
339	Miscellaneous mfg	-	27	7	706	16 912	535	1 080	10 449	60 096	42 495	107 838	D
3391	Medical equipment & supplies mfg	-	18	4	506	12 082	374	746	7 371	48 639	37 267	91 153	1 162
33911	Medical equipment & supplies mfg	-	18	4	506	12 082	374	746	7 371	48 639	37 267	91 153	1 162
339113	Surgical appliance & supplies mfg	-	7	3	e	D	D	D	D	D	D	D	1 017
	JACKSONVILLE, NC MSA												
31-33	Manufacturing	-	37	12	1 829	37 731	1 554	3 169	29 201	169 443	180 009	346 411	D
311	Food mfg	1	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	3	338	4 142	297	537	3 331	6 878	5 146	11 920	D
3152	Cut & sew apparel mfg	-	5	3	338	4 142	297	537	3 331	6 878	5 146	11 920	D
333	Machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
	NORFOLK—VIRGINIA BEACH—NEWPORT NEWS, VA—NC MSA												
31-33	Manufacturing	-	1 043	294	62 701	2 066 784	47 989	95 591	1 375 411	7 873 317	8 913 554	16 721 023	386 837
	Norfolk—Virginia Beach—Newport News, VA—NC MSA (VA Part)	-	1 027	292	62 589	2 064 243	47 903	95 463	1 373 749	7 866 784	8 906 696	16 708 787	D
311	Food mfg	-	88	34	8 371	199 405	6 372	12 649	132 393	1 484 007	1 555 991	3 021 157	28 421
3115	Dairy product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	18	9	i	D	D	D	D	D	D	D	9 528
31161	Animal slaughtering & processing	-	18	9	i	D	D	D	D	D	D	D	9 528
311611	Animal (except poultry) slaughtering	-	5	2	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	10	6	1 002	24 246	778	1 761	17 215	85 507	138 477	223 562	D
3117	Seafood product preparation & packaging ..	1	14	5	323	7 332	173	295	3 070	17 924	44 758	62 681	1 167
31171	Seafood product preparation & packaging ..	1	14	5	323	7 332	173	295	3 070	17 924	44 758	62 681	1 167
311712	Fresh & frozen seafood processing ..	1	12	5	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	33	8	1 133	24 413	646	1 040	10 734	69 270	42 140	111 501	3 571
31181	Bread & bakery product mfg	-	31	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	12	7	860	20 108	433	751	7 684	61 260	36 456	97 758	3 153

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.													
	Manufacturing—Con.													
311	Food mfg—Con.													
3119	Other food mfg	—	10	5	g	D	D	D	D	D	D	D	D	
31191	Snack food mfg	—	4	2	e	D	D	D	D	D	D	D	D	
311911	Roasted nuts & peanut butter mfg	—	4	2	e	D	D	D	D	D	D	D	D	
31192	Coffee & tea mfg	—	3	3	f	D	D	D	D	D	D	D	D	
311920	Coffee & tea mfg	—	3	3	f	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg	—	9	4	g	D	D	D	D	D	D	D	D	
3121	Beverage mfg	—	9	4	g	D	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg	—	5	3	e	D	D	D	D	D	D	D	D	
312111	Soft drink mfg	—	2	2	e	D	D	D	D	D	D	D	D	
31212	Breweries	—	4	1	f	D	D	D	D	D	D	D	D	
312120	Breweries	—	4	1	f	D	D	D	D	D	D	D	D	
313	Textile mills	1	10	3		322	6 309	291	548	4 849	10 784	6 509	16 934	D
314	Textile product mills	1	41	8		495	9 149	391	636	5 335	16 744	17 277	33 519	D
3149	Other textile product mills	3	25	6		280	6 043	218	357	3 375	9 071	8 947	18 177	D
315	Apparel mfg	1	19	6		377	5 424	322	590	3 569	14 345	9 844	21 803	1 281
321	Wood product mfg	—	39	15		976	22 662	767	1 565	15 914	64 087	141 241	204 437	4 552
3211	Sawmills & wood preservation	—	7	4		349	8 810	303	713	6 964	32 205	55 356	87 867	2 456
32111	Sawmills & wood preservation	—	7	4		349	8 810	303	713	6 964	32 205	55 356	87 867	2 456
321113	Sawmills	—	5	4	e	D	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	8	4		280	7 506	200	373	4 196	17 812	62 892	79 578	699
32121	Veneer, plywood, & engineered wood product mfg	—	8	4		280	7 506	200	373	4 196	17 812	62 892	79 578	699
3219	Other wood product mfg	2	24	7		347	6 346	264	479	4 754	14 070	22 993	36 992	1 397
322	Paper mfg	3	11	8		989	29 482	684	1 323	17 353	88 372	100 787	187 104	5 907
3222	Converted paper product mfg	3	11	8		989	29 482	684	1 323	17 353	88 372	100 787	187 104	5 907
32221	Paperboard container mfg	5	7	5	f	D	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	9	1	1	e	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	152	18		2 113	44 671	1 173	2 163	25 716	96 726	85 937	182 676	16 452
3231	Printing & related support activities	4	152	18		2 113	44 671	1 173	2 163	25 716	96 726	85 937	182 676	16 452
32311	Printing	4	143	18		2 065	43 863	1 136	2 120	25 138	95 152	85 560	180 725	D
323110	Commercial lithographic printing	5	73	9		1 311	26 811	625	1 207	14 721	59 625	46 836	106 403	12 128
325	Chemical mfg	—	35	9		758	29 387	462	859	16 062	59 891	277 496	332 291	11 577
326	Plastics & rubber products mfg	2	38	17		1 290	35 069	988	1 806	20 680	80 356	105 565	185 525	4 767
3261	Plastics product mfg	2	28	14		980	26 386	768	1 376	14 708	52 965	69 836	122 880	3 565
32611	Unsupported plastics film, sheet, & bag mfg	2	6	4		315	10 397	236	388	4 903	9 519	15 432	25 009	872
32619	Other plastics product mfg	2	16	7		459	12 370	343	646	6 757	32 826	45 631	78 661	1 742
326199	All other plastics product mfg	1	13	6		413	11 484	304	582	6 104	30 647	43 844	74 688	1 655
3262	Rubber product mfg	—	10	3		310	8 683	220	430	5 972	27 391	35 729	62 645	1 202
32629	Other rubber product mfg	—	6	3		290	8 343	203	411	5 702	26 626	34 864	61 009	1 149
326299	All other rubber product mfg	—	4	3	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	58	23	2 105	65 600	1 459	3 119	39 482	191 352	190 145	379 128	19 471
3271	Clay product & refractory mfg	5	5	2	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	9	3	536	16 584	417	929	11 137	52 576	45 159	95 681	3 399
32721	Glass & glass product mfg	—	9	3	536	16 584	417	929	11 137	52 576	45 159	95 681	3 399
327215	Glass product mfg made of purchased glass	—	7	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	36	14	738	22 941	552	1 160	14 989	64 191	57 119	121 399	8 249
32732	Ready-mix concrete mfg	1	17	7	391	13 539	304	619	9 266	38 614	38 983	77 496	7 349
327320	Ready-mix concrete mfg	1	17	7	391	13 539	304	619	9 266	38 614	38 983	77 496	7 349
3279	Other nonmetallic mineral product mfg	1	7	3	370	11 496	255	512	6 440	32 825	32 216	64 682	1 954
32791	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	13	3	1 435	43 278	1 172	2 088	31 173	133 285	96 862	223 533	5 790
3315	Foundries	—	8	2	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	4	1	g	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	—	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	155	40	2 910	89 922	2 224	4 052	60 087	212 332	219 517	417 714	18 788
3323	Architectural & structural metals mfg	1	53	19	1 315	38 195	975	1 771	22 346	69 236	71 923	138 311	6 394
33231	Plate work & fabricated structural product mfg	1	24	13	822	23 264	597	1 028	13 083	40 722	52 063	90 913	1 516
332312	Fabricated structural metal mfg	1	15	8	439	11 606	308	505	6 296	23 651	34 931	58 363	512 968
332313	Plate work mfg	—	6	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	29	6	493	14 931	378	743	9 263	28 514	19 860	47 398	4 878
332322	Sheet metal work mfg	—	21	6	463	14 284	357	709	8 888	27 229	18 432	44 676	4 819
3324	Boiler, tank, & shipping container mfg	—	6	4	375	18 959	315	663	15 402	64 022	121 689	177 863	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	3	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	61	11	821	20 275	621	1 023	14 133	50 265	11 026	60 608	3 668
33271	Machine shops	2	56	7	463	13 317	346	620	8 881	26 664	7 835	33 918	1 711
332710	Machine shops	2	56	7	463	13 317	346	620	8 881	26 664	7 835	33 918	1 711
33272	Turned product & screw, nut, & bolt mfg	—	5	4	358	6 958	275	403	5 252	23 601	3 191	26 690	1 957
333	Machinery mfg	—	67	31	4 263	143 146	2 731	5 423	73 880	361 506	642 196	990 931	41 638
3331	Agriculture, construction, & mining machinery mfg	—	7	4	1 153	37 015	765	1 438	21 293	140 601	285 268	427 670	11 066
33311	Agricultural implement mfg	—	5	3	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	6	2	264	9 773	184	380	6 017	15 794	26 546	48 199	D
33329	Other industrial machinery mfg	—	6	2	264	9 773	184	380	6 017	15 794	26 546	48 199	D
3333	Commercial & service industry machinery mfg ..	—	10	5	578	24 093	442	937	12 333	33 776	113 570	146 420	D
33331	Commercial & service industry machinery mfg	—	10	5	578	24 093	442	937	12 333	33 776	113 570	146 420	D
333315	Photographic & photocopying equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.													
	Manufacturing—Con.													
333	Machinery mfg—Con.													
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	7	7	2	e	D	D	D	D	D	D	D	634	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	7	7	2	e	D	D	D	D	D	D	D	634	
3335	Metalworking machinery mfg	1	13	7		610	22 127	397	889	11 982	48 354	20 849	65 713	5 353
33351	Metalworking machinery mfg	1	13	7		610	22 127	397	889	11 982	48 354	20 849	65 713	5 353
333514	Special die & tool, die set, jig, & fixture mfg .	2	6	3		328	11 008	207	449	5 863	20 833	8 203	28 980	3 042
3336	Engine, turbine, & power transmission equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	20	10		1 027	34 580	619	1 177	15 812	68 326	103 033	171 068	3 916
33391	Pump & compressor mfg	—	7	3	e	D	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	7	4		359	10 629	227	380	4 999	20 040	16 226	36 744	877
334	Computer & electronic product mfg	—	45	13		4 869	128 393	3 468	6 706	77 337	282 137	973 818	1 254 808	44 027
3341	Computer & peripheral equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	12	1	e	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	12	1	e	D	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	17	6		961	23 818	607	1 326	13 520	44 128	27 888	72 747	1 892
33451	Navigational, measuring, medical, & control instruments mfg	2	17	6		961	23 818	607	1 326	13 520	44 128	27 888	72 747	1 892
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	f	D	D	D	D	D	D	D	D	348
335	Electrical equipment, appliance, & component mfg	1	18	7		773	23 366	501	985	10 630	59 358	89 713	149 807	4 300
3353	Electrical equipment mfg ..	2	10	3		479	17 082	253	544	6 183	44 982	33 105	78 809	2 739
33531	Electrical equipment mfg	2	10	3		479	17 082	253	544	6 183	44 982	33 105	78 809	2 739
335314	Relay & industrial control mfg	—	6	2		399	14 331	200	399	4 148	37 497	25 864	63 804	2 407
3359	Other electrical equipment & component mfg	—	6	3	e	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	57	27		26 251	1 036 305	21 753	45 033	741 901	3 868 203	3 551 830	7 426 715	122 383
3361	Motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3363	Motor vehicle parts mfg ...	-	14	5	g	D	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	2	g	D	D	D	D	D	D	D	D	
336312	Gasoline engine & engine parts mfg	-	5	2	g	D	D	D	D	D	D	D	D	
33632	Motor vehicle electrical & electronic equipment mfg	1	5	3	e	D	D	D	D	D	D	D	D	
3366	Ship & boat building	-	36	20	j	D	D	D	D	D	D	D	43 955	
33661	Ship & boat building	-	36	20	j	D	D	D	D	D	D	D	43 955	
336611	Ship building & repairing	-	28	17	j	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	4	78	7		15 875	598	1 038	10 675	28 640	24 877	53 596	1 412	
3371	Household & institutional furniture & kitchen cabinet mfg	4	62	5	f	D	D	D	D	D	D	D	D	
33711	Wood kitchen cabinet & counter top mfg	3	43	4		8 653	305	604	6 012	14 622	10 783	25 446	D	
337110	Wood kitchen cabinet & counter top mfg ...	3	43	4		8 653	305	604	6 012	14 622	10 783	25 446	D	
339	Miscellaneous mfg	1	105	20		2 232	54 686	1 706	2 982	31 728	112 877	78 229	189 226	5 269
3391	Medical equipment & supplies mfg	3	44	7		551	16 237	360	667	8 331	22 216	11 194	32 719	3 342
33911	Medical equipment & supplies mfg	3	44	7		551	16 237	360	667	8 331	22 216	11 194	32 719	3 342
3399	Other miscellaneous mfg ..	-	61	13		1 681	38 449	1 346	2 315	23 397	90 661	67 035	156 507	1 927
33995	Sign mfg	2	28	4		322	8 872	221	432	4 847	15 317	9 900	24 625	322
339950	Sign mfg	2	28	4		322	8 872	221	432	4 847	15 317	9 900	24 625	322
33999	All other miscellaneous mfg	-	11	6		1 108	25 058	946	1 595	15 559	65 415	47 087	111 144	1 362
339991	Gasket, packing, & sealing device mfg...	-	5	4	e	D	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	6	2	f	D	D	D	D	D	D	D	D	D
	RALEIGH-DURHAM-CHAPEL HILL, NC MSA													
31-33	Manufacturing	-	1 143	355		72 443	2 263 538	39 693	74 453	939 773	10 479 080	14 179 036	24 866 965	494 599
311	Food mfg	-	62	21		5 066	116 814	4 214	7 630	83 917	265 727	657 338	921 169	33 221
3116	Meat product mfg	-	11	7		2 937	59 823	2 408	4 579	41 539	97 808	224 275	323 047	19 046
31161	Animal slaughtering & processing	-	11	7		2 937	59 823	2 408	4 579	41 539	97 808	224 275	323 047	19 046
311612	Meat processed from carcasses	-	3	3		791	18 089	518	940	9 422	41 592	55 582	97 893	D
311615	Poultry processing	-	4	3	g	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	22	4	g	D	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	4	1	g	D	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	3	1	g	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	10	5		1 018	28 004	637	1 152	13 729	272 804	251 534	526 782	7 637
3121	Beverage mfg	-	8	3	e	D	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	4	3	e	D	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
31221	Tobacco stemming & redrying	-	1	1	e	D	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	-	1	1	e	D	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	1	1	e	D	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	2	22	10	2 800	88 559	2 035	3 609	56 572	207 048	258 977	465 747	28 864
3131	Fiber, yarn, & thread mills .	4	3	3	500	11 895	436	665	8 971	39 100	42 667	83 526	3 123
31311	Fiber, yarn, & thread mills	4	3	3	500	11 895	436	665	8 971	39 100	42 667	83 526	3 123
313111	Yarn spinning mills ...	—	2	2	e	D	D	D	D	D	D	D	D
3132	Fabric mills	2	9	5	2 015	70 289	1 389	2 463	42 806	151 745	188 171	337 618	25 307
31321	Broadwoven fabric mills .	9	4	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	4	2	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	—	4	3	g	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	4	3	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	10	2	285	6 375	210	481	4 795	16 203	28 139	44 603	434
31331	Textile & fabric finishing mills	2	10	2	285	6 375	210	481	4 795	16 203	28 139	44 603	434
314	Textile product mills	6	24	3	1 411	24 846	1 072	2 162	15 272	38 875	8 401	47 095	D
3141	Textile furnishings mills....	9	12	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills....	9	9	1	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	9	9	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	31	22	2 514	40 791	2 250	3 509	32 044	80 138	68 456	146 387	1 131
3151	Apparel knitting mills	—	7	4	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	4	3	878	15 969	822	1 633	14 070	30 200	47 484	75 848	D
315111	Sheer hosiery mills	—	4	3	878	15 969	822	1 633	14 070	30 200	47 484	75 848	D
3152	Cut & sew apparel mfg	3	19	16	1 502	22 428	1 309	1 642	16 252	46 256	16 930	62 985	719
31521	Cut & sew apparel contractors	1	9	6	716	8 062	699	707	7 758	14 142	976	14 870	199
315212	Women's, girls', & infants' cut & sew apparel contractors ..	1	9	6	716	8 062	699	707	7 758	14 142	976	14 870	199
31522	Men's & boys' cut & sew apparel mfg	2	5	5	387	8 514	308	581	4 895	21 721	4 859	26 736	318
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	4	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	1	1	e	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	9	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	70	37	2 588	68 066	2 128	4 369	47 168	147 383	197 156	345 284	27 719
3211	Sawmills & wood preservation	1	21	13	657	19 510	524	1 069	13 645	45 797	69 799	116 320	11 884
32111	Sawmills & wood preservation	1	21	13	657	19 510	524	1 069	13 645	45 797	69 799	116 320	11 884
321113	Sawmills	1	18	11	584	18 065	462	941	12 684	42 088	64 973	107 953	11 733
3212	Veneer, plywood, & engineered wood product mfg	2	13	11	957	26 995	803	1 790	19 138	60 738	66 607	126 402	13 835
32121	Veneer, plywood, & engineered wood product mfg	2	13	11	957	26 995	803	1 790	19 138	60 738	66 607	126 402	13 835
321211	Hardwood veneer & plywood mfg	—	4	4	e	D	D	D	D	D	D	D	D
321214	Truss mfg	6	6	4	320	9 162	244	523	5 383	18 272	23 612	41 905	D
321219	Reconstituted wood product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	36	13	974	21 561	801	1 510	14 385	40 848	60 750	102 562	2 000
32191	Millwork	4	17	7	347	6 949	275	525	5 142	13 905	25 578	40 222	662
32199	All other wood product mfg	3	14	4	480	10 246	400	741	6 985	21 308	29 440	50 991	1 098
322	Paper mfg	1	13	10	1 039	34 612	844	1 782	25 113	104 166	139 455	243 252	7 728
3222	Converted paper product mfg	1	13	10	1 039	34 612	844	1 782	25 113	104 166	139 455	243 252	7 728
32221	Paperboard container mfg	1	10	9	873	30 504	733	1 564	22 851	93 389	118 218	211 227	6 717
322211	Corrugated & solid fiber box mfg	2	5	5	303	11 154	227	523	6 699	26 507	40 164	65 811	D
322212	Folding paperboard box mfg	4	3	3	e	D	D	D	D	D	D	D	1 328
322215	Nonfolding sanitary food container mfg ...	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities	1	191	26	2 907	88 701	2 226	4 265	58 331	228 077	188 534	429 622	13 027
3231	Printing & related support activities	1	191	26	2 907	88 701	2 226	4 265	58 331	228 077	188 534	429 622	13 027
32311	Printing	1	169	24	2 765	84 291	2 108	4 041	55 089	219 666	187 086	419 692	12 721
323110	Commercial lithographic printing ..	1	86	15	1 408	47 120	1 084	2 212	33 520	155 841	133 773	288 698	5 712
323113	Commercial screen printing	2	26	3	414	8 576	329	489	5 749	3 290	18 272	36 512	1 018
323117	Book printing	—	4	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	49	24	5 640	236 491	3 443	6 839	111 378	4 378 292	2 368 095	6 634 459	90 494
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	1 211	40 143	937	1 796	28 023	176 314	116 108	299 233	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	19	12	3 679	164 571	1 984	4 000	67 736	4 047 623	2 127 630	6 057 670	74 948
32541	Pharmaceutical & medicine mfg	—	19	12	3 679	164 571	1 984	4 000	67 736	4 047 623	2 127 630	6 057 670	74 948
325411	Medicinal & botanical mfg	—	3	3	847	38 983	649	1 389	24 984	119 697	127 930	261 815	D
325412	Pharmaceutical preparation mfg	—	10	6	g	D	D	D	D	D	D	D	32 533
325413	In-vitro diagnostic substance mfg	—	1	1	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	9	5	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	13	3	499	21 955	372	737	10 749	137 054	104 949	241 067	2 543
32599	All other chemical product & preparation mfg	—	12	3	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	9	2	e	D	D	D	D	D	D	D	2 404
326	Plastics & rubber products mfg	—	35	20	2 501	76 263	1 767	3 531	38 633	291 823	154 416	442 675	15 072
3261	Plastics product mfg	—	31	20	2 488	76 048	1 757	3 516	38 470	291 379	153 950	441 760	15 044
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	2	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	2	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	2	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	22	16	1 386	35 768	1 134	2 081	21 692	107 255	68 860	175 329	10 849
326199	All other plastics product mfg	—	21	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	68	17	1 307	38 017	1 055	2 160	27 564	134 482	115 120	251 068	23 190
3271	Clay product & refractory mfg	—	10	4	295	7 632	240	463	5 404	23 713	9 442	34 311	D
32712	Clay building material & refractories mfg	—	5	4	e	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	4	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	8	2	316	10 047	234	497	6 757	40 399	28 670	68 798	D
327215	Glass & glass product mfg	—	8	2	316	10 047	234	497	6 757	40 399	28 670	68 798	D
327215	Glass product mfg made of purchased glass	—	5	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	45	10	647	18 985	544	1 123	14 427	64 691	73 476	138 725	10 246
32732	Ready-mix concrete mfg	2	34	4	375	10 673	363	771	10 380	41 349	49 574	91 645	8 834
327320	Ready-mix concrete mfg	2	34	4	375	10 673	363	771	10 380	41 349	49 574	91 645	8 834

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31-33	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	120	35	3 703	120 089	2 798	5 851	73 662	299 181	202 132	500 708	29 562
3321	Forging & stamping	-	5	4	393	17 211	256	627	8 137	43 602	32 362	74 790	8 340
33211	Forging & stamping	-	5	4	393	17 211	256	627	8 137	43 602	32 362	74 790	8 340
3322	Cutlery & handtool mfg	-	3	1	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	3	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	3	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	32	12	1 142	36 260	889	1 914	22 978	73 144	67 461	140 064	6 445
33232	Ornamental & architectural metal products mfg	-	24	8	967	30 155	764	1 656	19 508	60 070	48 152	108 003	5 551
332322	Sheet metal work mfg	-	16	8	926	29 303	738	1 621	19 013	58 280	47 251	105 302	5 488
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	47	7	707	18 323	556	1 057	12 676	33 802	34 823	68 395	D
33271	Machine shops	1	44	6	593	15 988	479	935	10 605	30 173	30 922	60 934	4 450
332710	Machine shops	1	44	6	593	15 988	479	935	10 605	30 173	30 922	60 934	4 450
3328	Coating, engraving, heat treating, & allied activities	-	12	5	268	8 168	223	505	5 712	21 585	9 460	32 059	D
33281	Coating, engraving, heat treating, & allied activities	-	12	5	268	8 168	223	505	5 712	21 585	9 460	32 059	D
3329	Other fabricated metal product mfg	-	14	5	654	22 125	422	847	10 956	76 461	36 705	113 297	6 536
33291	Metal valve mfg	-	5	4	556	19 317	352	714	9 275	70 793	32 129	102 630	6 160
333	Machinery mfg	-	61	22	2 671	90 814	1 705	3 429	46 134	368 686	389 402	749 494	27 499
3331	Agriculture, construction, & mining machinery mfg	-	4	4	f	D	D	D	D	D	D	D	9 856
33312	Construction machinery mfg	-	3	3	f	D	D	D	D	D	D	D	9 856
333120	Construction machinery mfg	-	3	3	f	D	D	D	D	D	D	D	9 856
3332	Industrial machinery mfg	-	16	4	416	16 487	255	505	8 582	43 319	20 774	63 337	2 889
33329	Other industrial machinery mfg	-	16	4	416	16 487	255	505	8 582	43 319	20 774	63 337	2 889
3333	Commercial & service industry machinery mfg	-	8	4	400	13 699	249	497	6 315	76 642	44 073	106 763	D
33331	Commercial & service industry machinery mfg	-	8	4	400	13 699	249	497	6 315	76 642	44 073	106 763	D
333319	Other commercial & service industry machinery mfg	-	5	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	3	474	7 203	426	806	5 836	19 394	26 610	46 380	1 073
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	3	474	7 203	426	806	5 836	19 394	26 610	46 380	1 073
333411	Air purification equipment mfg	-	4	3	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	5	16	3	267	9 961	157	318	4 632	18 003	16 782	34 845	1 884
334	Computer & electronic product mfg	-	124	54	30 191	987 509	8 838	14 821	204 612	3 106 444	8 473 591	11 885 709	155 143
3341	Computer & peripheral equipment mfg	-	21	5	j	D	D	D	D	D	D	D	42 755
33411	Computer & peripheral equipment mfg	-	21	5	j	D	D	D	D	D	D	D	42 755
334111	Electronic computer mfg	-	7	3	j	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	2	1	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	18	13	i	D	D	D	D	D	D	D	32 194
33421	Telephone apparatus mfg	-	7	6	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	7	6	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	10	7	2 760	131 421	1 859	3 226	76 553	308 342	354 748	661 158	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	10	7	2 760	131 421	1 859	3 226	76 553	308 342	354 748	661 158	D

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31-33	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	45	22	h	D	D	D	D	D	D	D	68 472
33441	Semiconductor & other electronic component mfg	-	45	22	h	D	D	D	D	D	D	D	68 472
334413	Semiconductor & related device mfg ...	1	6	3	g	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	3	2	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	3	6	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	9	8	f	D	D	D	D	D	D	D	3 168
334419	Other electronic component mfg	-	12	6	537	19 413	335	667	6 799	52 121	24 203	77 003	D
3345	Navigational, measuring, medical, & control instruments mfg	1	35	14	g	D	D	D	D	D	D	D	11 389
33451	Navigational, measuring, medical, & control instruments mfg	1	35	14	g	D	D	D	D	D	D	D	11 389
334515	Electricity measuring & testing instrument mfg	-	5	3	f	D	D	D	D	D	D	D	8 249
334519	Other measuring & controlling device mfg	1	9	5	f	D	D	D	D	D	D	D	2 300
335	Electrical equipment, appliance, & component mfg	-	29	14	3 328	123 956	1 906	3 781	49 391	328 288	503 982	839 687	19 767
3353	Electrical equipment mfg ..	-	14	8	1 994	82 677	907	1 794	24 736	216 731	374 434	603 483	9 824
33531	Electrical equipment mfg	-	14	8	1 994	82 677	907	1 794	24 736	216 731	374 434	603 483	9 824
335312	Motor & generator mfg	-	3	3	490	15 542	262	485	7 314	26 474	33 894	64 044	D
335313	Switchgear & switchboard apparatus mfg	-	3	2	e	D	D	D	D	D	D	D	458
335314	Relay & industrial control mfg	-	5	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	11	6	1 307	40 577	984	1 961	24 325	110 948	128 892	234 940	D
33593	Wiring device mfg	-	3	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	3	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	4	1	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	3	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	6	501	14 988	349	813	9 880	33 983	41 184	75 156	1 640
3362	Motor vehicle body & trailer mfg	-	7	2	316	9 356	213	575	6 583	17 105	25 371	42 785	123
33621	Motor vehicle body & trailer mfg	-	7	2	316	9 356	213	575	6 583	17 105	25 371	42 785	123
336211	Motor vehicle body mfg	-	5	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	109	14	1 741	30 108	1 477	3 022	22 637	66 673	57 817	124 254	5 734
3371	Household & institutional furniture & kitchen cabinet mfg	2	80	7	1 066	13 535	941	1 798	10 390	28 757	26 171	54 815	D
33711	Wood kitchen cabinet & counter top mfg	3	55	3	355	7 236	284	520	5 465	14 392	11 832	26 116	823
337110	Wood kitchen cabinet & counter top mfg ...	3	55	3	355	7 236	284	520	5 465	14 392	11 832	26 116	823
33712	Household & institutional furniture mfg	1	25	4	711	6 299	657	1 278	4 925	14 365	14 339	28 699	D
337121	Upholstered household furniture mfg	1	7	2	563	3 534	535	1 047	2 845	9 913	10 246	20 314	352
3372	Office furniture (including fixtures) mfg	1	26	7	651	16 091	518	1 194	11 935	36 571	30 114	66 536	4 232
33721	Office furniture (including fixtures) mfg	1	26	7	651	16 091	518	1 194	11 935	36 571	30 114	66 536	4 232
337211	Wood office furniture mfg	-	6	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RALEIGH-DURHAM-CHAPEL HILL, NC MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	3	98	12	1 234	44 897	733	1 417	18 253	92 342	45 410	147 866	4 185
3391	Medical equipment & supplies mfg.....	3	52	6	736	30 827	398	789	10 235	66 835	27 889	105 551	3 184
33911	Medical equipment & supplies mfg.....	3	52	6	736	30 827	398	789	10 235	66 835	27 889	105 551	3 184
339113	Surgical appliance & supplies mfg.....	—	5	1	369	18 131	191	427	5 932	34 711	13 420	58 940	1 079
3399	Other miscellaneous mfg... All other miscellaneous mfg.....	4	46	6	498	14 070	335	628	8 018	25 507	17 521	42 315	1 001
33999		4	13	4	255	8 190	170	320	4 873	12 958	9 363	21 707	607
31-33	ROCKY MOUNT, NC MSA												
	Manufacturing	—	154	80	17 599	501 804	13 871	28 157	327 271	1 399 471	1 925 487	3 328 369	139 128
311	Food mfg.....	1	8	5	1 341	37 182	889	2 313	22 764	109 947	169 560	279 742	D
3118	Bakeries & tortilla mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	1	1	e	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	3	3	438	10 066	234	482	3 524	26 903	65 141	92 033	D
3122	Tobacco mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
31221	Tobacco stemming & redrying	—	1	1	e	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	—	9	8	2 515	56 210	2 098	4 714	42 256	96 004	231 988	324 328	11 694
3132	Fabric mills	—	6	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	—	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	2	2	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	—	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	9	5	482	13 615	441	874	10 653	19 839	40 235	58 522	1 715
3141	Textile furnishings mills....	—	4	2	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	—	4	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	13	9	1 219	21 670	1 102	2 201	17 951	29 751	38 954	69 914	2 127
3151	Apparel knitting mills	—	2	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	1	1	e	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	10	6	e	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	—	7	5	284	3 764	268	523	3 617	6 027	1 588	7 615	128
315212	Women's, girls', & infants' cut & sew apparel contractors ..	—	7	5	284	3 764	268	523	3 617	6 027	1 588	7 615	128
321	Wood product mfg	—	13	7	784	18 955	659	1 300	13 454	35 043	51 110	86 301	2 479
3212	Veneer, plywood, & engineered wood product mfg	1	3	3	292	7 685	246	581	5 722	13 769	17 925	31 889	1 410
32121	Veneer, plywood, & engineered wood product mfg.....	1	3	3	292	7 685	246	581	5 722	13 769	17 925	31 889	1 410
3219	Other wood product mfg... All other wood product mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
32199		—	6	2	e	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKY MOUNT, NC MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	-	7	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	e	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	1 142	27 279	1 045	1 891	21 954	62 719	57 939	121 340	5 658
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	25	10	1 488	42 287	1 079	2 331	26 581	101 248	102 973	202 143	8 017
3323	Architectural & structural metals mfg	-	8	3	416	12 974	249	498	6 711	36 153	34 712	70 837	1 191
33231	Plate work & fabricated structural product mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	5	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	3	1	e	D	D	D	D	D	D	D	413
33311	Agricultural implement mfg	-	2	1	e	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	5	1 137	37 437	824	1 784	22 564	93 827	137 477	229 844	10 390
3353	Electrical equipment mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKY MOUNT, NC MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	10	3	609	14 609	466	940	9 751	31 024	40 870	70 936	936
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	2	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	4	2	e	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	9	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	6	2	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
	WILMINGTON, NC MSA												
31-33	Manufacturing	-	260	72	10 718	425 722	7 707	16 180	269 867	2 073 537	1 678 453	3 711 435	204 016
321	Wood product mfg	-	11	7	600	14 332	523	1 071	10 494	22 455	62 037	84 087	1 035
3219	Other wood product mfg ...	-	8	5	e	D	D	D	D	D	D	D	286
322	Paper mfg	-	4	3	e	D	D	D	D	D	D	D	5 650
3222	Converted paper product mfg	-	4	3	e	D	D	D	D	D	D	D	5 650
32221	Paperboard container mfg	-	4	3	e	D	D	D	D	D	D	D	5 650
322212	Folding paperboard box mfg	-	3	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	35	4	280	6 082	171	302	3 434	14 036	9 424	23 486	3 455
3231	Printing & related support activities	1	35	4	280	6 082	171	302	3 434	14 036	9 424	23 486	3 455
32311	Printing	1	35	4	280	6 082	171	302	3 434	14 036	9 424	23 486	3 455
325	Chemical mfg	-	17	10	3 541	177 017	2 570	5 599	114 481	849 883	938 868	1 759 856	105 051
3251	Basic chemical mfg	-	10	7	3 266	165 092	2 358	5 143	105 535	780 941	898 035	1 674 117	102 914
32511	Petrochemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	4	3	1 455	70 661	1 136	2 350	49 959	306 331	152 362	470 199	D
325188	All other basic inorganic chemical mfg	-	4	3	1 455	70 661	1 136	2 350	49 959	306 331	152 362	470 199	D
32519	Other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	2	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	22	7	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	5	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	5	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	5	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	49	9	603	18 622	464	923	11 856	63 571	30 469	95 033	2 027
3323	Architectural & structural metals mfg	-	16	5	286	8 932	205	454	5 091	46 577	20 610	68 351	1 028
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	22	4	267	8 590	219	407	5 983	15 149	7 906	22 881	837
333	Machinery mfg	1	14	7	618	19 418	389	850	10 207	49 834	115 042	164 635	3 534
335	Electrical equipment, appliance, & component mfg	-	6	2	e	D	D	D	D	D	D	D	2 199
3359	Other electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WILMINGTON, NC MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	10	6	1 322	65 370	1 043	1 726	46 835	148 610	168 621	317 358	D
3363	Motor vehicle parts mfg ...	-	4	3	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALAMANCE COUNTY, NC												
	Manufacturing	-	282	153	21 490	588 155	17 603	35 199	406 451	1 415 506	1 931 324	3 324 750	134 026
313	Textile mills	1	44	35	6 541	158 549	5 655	12 683	122 313	388 452	657 443	1 042 996	47 018
3131	Fiber, yarn, & thread mills .	-	9	8	1 272	31 100	1 107	2 580	24 150	94 095	80 413	168 598	14 340
31311	Fiber, yarn, & thread mills	-	9	8	1 272	31 100	1 107	2 580	24 150	94 095	80 413	168 598	14 340
313112	Yarn texturing, throwing, & twisting mills	-	4	4	f	D	D	D	D	D	D	D	D
3132	Fabric mills	2	23	17	2 934	70 813	2 565	5 548	54 929	137 631	206 778	344 294	24 057
31321	Broadwoven fabric mills .	3	5	3	1 269	29 368	1 126	2 503	24 726	65 538	103 950	168 229	D
313210	Broadwoven fabric mills	3	5	3	1 269	29 368	1 126	2 503	24 726	65 538	103 950	168 229	D
31324	Knit fabric mills	1	13	10	1 284	33 844	1 095	2 355	23 944	57 736	84 975	143 532	D
313249	Other knit fabric & lace mills	-	7	6	849	22 639	729	1 556	16 723	29 373	33 360	63 208	D
3133	Textile & fabric finishing & fabric coating mills	1	12	10	2 335	56 636	1 983	4 555	43 234	156 726	370 252	530 104	8 621
31331	Textile & fabric finishing mills	1	12	10	2 335	56 636	1 983	4 555	43 234	156 726	370 252	530 104	8 621
313311	Broadwoven fabric finishing mills	1	8	6	1 448	33 285	1 213	2 803	25 727	108 680	258 068	364 675	4 251
313312	Textile & fabric finishing mills	-	4	4	887	23 351	770	1 752	17 507	48 046	112 184	165 429	4 370
314	Textile product mills	-	12	6	1 267	32 968	1 110	1 623	25 423	87 728	82 123	172 174	1 097
3141	Textile furnishings mills ...	-	6	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	5	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	2	6	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	47	33	3 807	72 787	3 353	6 247	55 483	164 759	206 963	367 467	8 845
3151	Apparel knitting mills	-	40	30	h	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	39	29	3 545	67 803	3 168	5 921	53 029	159 600	199 600	354 720	8 812
315111	Sheer hosiery mills	-	9	8	999	19 459	874	1 560	14 349	48 299	47 827	93 162	2 927
315119	Other hosiery & sock mills	1	30	21	2 546	48 344	2 294	4 361	38 680	111 024	151 773	261 558	5 885
322	Paper mfg	-	7	7	694	24 051	531	1 158	14 858	39 210	75 117	114 504	4 346
3222	Converted paper product mfg	-	7	7	694	24 051	531	1 158	14 858	39 210	75 117	114 504	4 346
32221	Paperboard container mfg	-	5	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	ALAMANCE COUNTY, NC—Con.													
	Manufacturing—Con.													
325	Chemical mfg	3	10	5	f	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	3	4	4	f	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	3	4	4	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	—	19	14		1 064	27 336	866	1 406	17 165	88 945	56 543	146 121	18 660
3261	Plastics product mfg	—	14	11	f	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	1	10	8		537	12 097	409	604	6 604	41 155	16 591	57 333	4 858
326199	All other plastics product mfg	1	10	8		537	12 097	409	604	6 604	41 155	16 591	57 333	4 858
332	Fabricated metal product mfg	—	27	9		844	21 732	607	952	12 595	99 089	30 430	133 402	3 170
333	Machinery mfg	—	11	7		627	22 527	457	974	13 597	64 165	88 999	152 075	D
334	Computer & electronic product mfg	—	8	4	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	5		1 837	61 688	1 592	3 143	46 700	94 087	248 191	348 120	11 291
3353	Electrical equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	3		892	50 282	782	1 588	36 900	51 822	88 607	139 496	D
3363	Motor vehicle parts mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
	ALEXANDER COUNTY, NC													
31-33	Manufacturing	4	99	50		5 512	129 158	4 741	9 091	101 274	295 543	342 185	634 966	15 750
321	Wood product mfg	—	23	10		531	11 995	462	875	9 358	20 776	30 666	51 430	1 867
322	Paper mfg	3	3	3		542	18 565	460	1 054	13 588	43 555	66 328	108 238	5 159
3222	Converted paper product mfg	3	3	3		542	18 565	460	1 054	13 588	43 555	66 328	108 238	5 159
337	Furniture & related product mfg	2	42	24		2 995	67 810	2 580	4 907	54 621	122 674	151 252	272 114	2 547
3371	Household & institutional furniture & kitchen cabinet mfg	2	28	17	h	D	D	D	D	D	D	D	D	2 110
33712	Household & institutional furniture mfg	2	27	17	h	D	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	2	20	16	h	D	D	D	D	D	D	D	D	D
	ALLEGHANY COUNTY, NC													
31-33	Manufacturing	—	22	10		1 422	27 246	1 124	2 434	19 629	80 016	158 571	245 309	2 011
333	Machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D	D
	ANSON COUNTY, NC													
31-33	Manufacturing	1	37	22		3 426	74 306	2 867	5 853	53 417	174 021	192 308	364 839	19 988
313	Textile mills	—	4	4		1 274	27 689	1 136	2 356	19 914	60 067	62 166	122 266	4 465
3132	Fabric mills	—	2	2	f	D	D	D	D	D	D	D	D	D
314	Textile product mills	9	3	1	f	D	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	9	2	1	f	D	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	9	2	1	f	D	D	D	D	D	D	D	D	D
314129	Other household textile product mills	9	2	1	f	D	D	D	D	D	D	D	D	D
	ASHE COUNTY, NC													
31-33	Manufacturing	1	37	12		2 093	42 167	1 823	3 369	33 236	99 182	131 858	242 129	8 585

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AVERY COUNTY, NC													
31-33	Manufacturing	-	11	5	802	14 601	749	1 415	13 111	49 020	36 385	85 359	1 219
BEAUFORT COUNTY, NC													
31-33	Manufacturing	-	65	27	5 772	139 826	4 606	9 128	95 478	328 028	581 084	927 805	33 248
313	Textile mills	-	2	1	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	2	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	1	g	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	2	1	g	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	1 019	26 514	807	1 513	14 875	54 887	73 169	128 261	6 837
BERTIE COUNTY, NC													
31-33	Manufacturing	1	16	8	h	D	D	D	D	D	D	D	5 254
311	Food mfg	-	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
BLADEN COUNTY, NC													
31-33	Manufacturing	-	36	21	6 559	127 404	5 846	11 016	103 419	-192 517	1 224 024	1 040 858	59 511
311	Food mfg	-	5	2	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	1	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	h	D	D	D	D	D	D	D	D
313	Textile mills	-	5	5	843	19 215	677	1 399	14 446	-31 300	147 682	121 187	6 480
3132	Fabric mills	1	2	2	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Wett knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
BRUNSWICK COUNTY, NC													
31-33	Manufacturing	-	57	18	2 340	86 904	1 785	3 673	58 442	458 331	570 237	1 013 255	D
325	Chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BUNCOMBE COUNTY, NC												
31-33	Manufacturing	-	332	127	j	D	D	D	D	D	D	D	105 362
311	Food mfg	2	8	4	864	20 082	729	1 823	15 460	223 748	212 476	436 014	4 299
313	Textile mills	-	17	12	1 981	51 312	1 707	3 889	37 776	115 897	101 643	219 445	12 333
3132	Fabric mills	-	12	9	1 626	42 422	1 365	2 932	29 382	98 292	88 530	188 858	11 863
31323	Nonwoven fabric mills . . .	-	5	4	916	24 465	763	1 660	16 130	59 497	65 100	125 341	9 999
313230	Nonwoven fabric mills . . .	-	5	4	916	24 465	763	1 660	16 130	59 497	65 100	125 341	9 999
314	Textile product mills	-	11	3	1 071	24 090	995	2 542	18 416	41 545	61 086	110 570	D
3141	Textile furnishings mills . . .	-	3	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	8	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	33	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	33	8	f	D	D	D	D	D	D	D	D
32311	Printing	2	32	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	2	f	D	D	D	D	D	D	D	152
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	18	15	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	16	14	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	12	11	1 021	21 941	879	1 303	15 108	44 651	43 459	86 552	6 132
326199	All other plastics product mfg	2	11	10	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	65	21	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	38	10	614	16 865	464	897	11 499	29 014	13 076	41 992	2 403
333	Machinery mfg	-	40	17	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	5	3	720	21 850	582	1 243	16 153	83 297	76 444	161 020	3 783
33361	Engine, turbine, & power transmission equipment mfg	-	5	3	720	21 850	582	1 243	16 153	83 297	76 444	161 020	3 783
334	Computer & electronic product mfg	1	20	10	g	D	D	D	D	D	D	D	17 169
3346	Mfg & reproducing magnetic & optical media	-	2	2	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	2	2	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	7	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	7	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	7	7	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	5	5	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	5	1 250	36 726	894	1 979	23 019	92 122	341 568	434 210	4 819
3363	Motor vehicle parts mfg	-	7	3	f	D	D	D	D	D	D	D	2 468
33634	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
BUNCOMBE COUNTY, NC—Con.														
31-33	Manufacturing—Con.													
339	Miscellaneous mfg	2	38	6	f	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg	2	20	5	531	17 223	313	607	7 343	41 777	47 821	93 040	9 296	
33911	Medical equipment & supplies mfg	2	20	5	531	17 223	313	607	7 343	41 777	47 821	93 040	9 296	
BURKE COUNTY, NC														
31-33	Manufacturing	—	171	83		17 279	416 684	14 305	27 565	297 204	1 026 722	1 116 534	2 126 871	73 503
311	Food mfg	—	2	2	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	—	1	1	f	D	D	D	D	D	D	D	D	
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
311812	Commercial bakeries	—	1	1	f	D	D	D	D	D	D	D	D	
313	Textile mills	3	16	11	2 487	59 443	2 089	4 292	43 162	122 340	138 654	261 640	D	
3132	Fabric mills	5	6	5	g	D	D	D	D	D	D	D	D	
31321	Broadwoven fabric mills	7	3	3	f	D	D	D	D	D	D	D	D	
313210	Broadwoven fabric mills	7	3	3	f	D	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills	1	6	4	1 196	26 466	1 014	2 037	19 370	43 765	71 247	114 707	D	
31331	Textile & fabric finishing mills	1	6	4	1 196	26 466	1 014	2 037	19 370	43 765	71 247	114 707	D	
313312	Textile & fabric finishing mills	—	3	3	f	D	D	D	D	D	D	D	D	
315	Apparel mfg	—	33	18	2 989	54 895	2 589	4 624	41 635	114 091	152 191	269 562	5 951	
3151	Apparel knitting mills	—	30	16	h	D	D	D	D	D	D	D	D	
31511	Hosiery & sock mills	—	28	14	g	D	D	D	D	D	D	D	D	
315119	Other hosiery & sock mills	—	24	14	1 457	21 367	1 320	2 226	18 546	68 470	62 068	130 694	D	
31519	Other apparel knitting mills	—	2	2	g	D	D	D	D	D	D	D	D	
315192	Underwear & nightwear knitting mills	—	1	1	f	D	D	D	D	D	D	D	D	
316	Leather & allied product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
3162	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D	
31621	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D	
316213	Men's footwear (except athletic) mfg	—	1	1	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	4	3	g	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	—	3	3	g	D	D	D	D	D	D	D	D	
33593	Wiring device mfg	—	1	1	g	D	D	D	D	D	D	D	D	
335931	Current-carrying wiring device mfg	—	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	4	4	f	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg	—	3	3	f	D	D	D	D	D	D	D	D	
33634	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336340	Motor vehicle brake system mfg	—	1	1	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	—	28	17	3 957	88 864	3 634	6 247	69 755	221 844	116 142	340 813	11 592	
3371	Household & institutional furniture & kitchen cabinet mfg	—	27	17	h	D	D	D	D	D	D	D	11 592	
33712	Household & institutional furniture mfg	—	27	17	h	D	D	D	D	D	D	D	11 592	
337121	Upholstered household furniture mfg	—	10	6	f	D	D	D	D	D	D	D	D	
337122	Nonupholstered wood household furniture mfg	—	13	10	h	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CABARRUS COUNTY, NC													
31-33	Manufacturing	-	166	56	13 099	409 681	10 652	22 844	295 268	6 096 688	1 882 385	7 991 845	288 731
311	Food mfg	-	6	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	19	12	4 906	127 890	4 396	10 470	107 594	276 125	457 955	741 306	42 534
3132	Fabric mills	-	9	7	h	D	D	D	D	D	D	D	24 771
31321	Broadwoven fabric mills	-	4	4	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	4	4	h	D	D	D	D	D	D	D	D
315	Apparel mfg	5	20	9	1 535	22 652	1 317	2 369	16 894	55 132	54 762	114 769	D
3151	Apparel knitting mills	5	14	6	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	5	14	6	g	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	4	13	5	955	13 284	839	1 453	9 987	34 966	23 633	61 582	D
3152	Cut & sew apparel mfg	6	5	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	7	9	6	1 080	26 605	889	1 821	20 074	56 468	54 973	109 659	4 730
3261	Plastics product mfg	7	6	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	8	5	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	8	4	4	f	D	D	D	D	D	D	D	D
CALDWELL COUNTY, NC													
31-33	Manufacturing	-	167	88	15 254	344 434	13 275	26 359	269 441	831 866	796 744	1 633 060	35 131
313	Textile mills	-	7	7	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	5	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	22	9	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	1	12	3	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	1	12	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	10	6	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	4	8	6	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	34	21	1 062	23 202	946	1 711	18 589	44 443	50 959	95 261	3 064
3212	Veneer, plywood, & engineered wood product mfg	-	10	10	576	13 253	518	981	10 817	22 371	25 000	47 285	1 565
32121	Veneer, plywood, & engineered wood product mfg	-	10	10	576	13 253	518	981	10 817	22 371	25 000	47 285	1 565
323	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	11	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	2	509	11 164	441	833	9 091	16 400	17 976	34 575	1 660
333	Machinery mfg	-	7	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	41	24	8 802	192 402	7 934	16 371	160 200	443 000	377 373	826 483	13 886
3371	Household & institutional furniture & kitchen cabinet mfg	-	35	24	i	D	D	D	D	D	D	D	13 848
33712	Household & institutional furniture mfg	-	33	23	i	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	15	10	1 871	38 133	1 722	3 274	32 360	101 552	90 362	191 129	D
337122	Nonupholstered wood household furniture mfg	-	17	13	6 852	152 891	6 147	12 994	126 790	339 077	285 059	631 027	11 924

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CARTERET COUNTY, NC												
	Manufacturing	-	69	12	1 576	29 407	1 369	2 660	21 588	72 531	98 951	173 073	4 973
31-33	CATAWBA COUNTY, NC												
	Manufacturing	-	575	295	40 469	1 035 157	33 729	65 010	741 281	2 527 757	3 029 626	5 512 817	212 027
311	Food mfg	-	8	5	f	D	D	D	D	D	D	D	D
313	Textile mills	-	37	32	4 237	107 382	3 736	7 984	87 223	253 334	348 670	593 116	16 442
3131	Fiber, yarn, & thread mills .	-	12	12	1 253	29 208	1 104	2 328	23 047	71 150	93 725	162 661	6 918
31311	Fiber, yarn, & thread mills	-	12	12	1 253	29 208	1 104	2 328	23 047	71 150	93 725	162 661	6 918
313111	Yarn spinning mills ...	-	10	10	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	13	10	1 824	47 541	1 628	3 625	39 885	114 495	161 084	268 791	D
31321	Broadwoven fabric mills .	-	5	3	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	5	3	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	3	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	12	10	1 160	30 633	1 004	2 031	24 291	67 689	93 861	161 664	D
31331	Textile & fabric finishing mills	2	11	9	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	3	6	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	20	9	922	16 954	765	1 340	12 221	59 760	30 019	84 642	4 312
315	Apparel mfg	2	71	40	3 928	86 840	3 377	6 780	59 754	196 063	194 711	384 392	11 612
3151	Apparel knitting mills	2	61	35	h	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	2	58	34	h	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	9	4	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	3	49	30	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	5	2	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	5	2	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	5	2	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	5	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	34	15	831	18 291	727	1 354	13 530	33 257	30 576	63 555	2 984
3219	Other wood product mfg ...	2	28	14	776	17 321	678	1 286	12 852	30 769	28 872	59 348	2 881
32191	Millwork	3	16	8	513	11 115	456	857	8 816	18 723	17 711	36 233	D
322	Paper mfg	-	11	8	1 070	32 629	894	1 884	23 266	87 703	109 705	197 651	18 960
3222	Converted paper product mfg	-	11	8	1 070	32 629	894	1 884	23 266	87 703	109 705	197 651	18 960
32221	Paperboard container mfg	-	9	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	30	7	800	30 462	624	1 089	23 571	41 397	39 987	82 255	D
3231	Printing & related support activities	-	30	7	800	30 462	624	1 089	23 571	41 397	39 987	82 255	D
32311	Printing	-	27	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	39	25	2 629	68 190	2 049	3 446	41 809	203 236	239 975	443 384	30 676
3261	Plastics product mfg	-	30	23	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	14	14	g	D	D	D	D	D	D	D	11 088
326150	Urethane & other foam product (except polystyrene) mfg	-	14	14	g	D	D	D	D	D	D	D	11 088
32619	Other plastics product mfg	-	10	6	633	18 304	444	741	9 705	69 634	73 546	143 334	D
326199	All other plastics product mfg	-	10	6	633	18 304	444	741	9 705	69 634	73 546	143 334	D
327	Nonmetallic mineral product mfg	-	13	8	946	32 050	690	1 507	19 113	108 251	47 810	151 127	D
332	Fabricated metal product mfg	-	42	13	1 529	36 767	1 286	2 254	25 185	77 116	72 253	150 256	6 587
3326	Spring & wire product mfg .	-	5	2	558	11 605	512	875	8 965	22 913	27 926	50 767	1 111
33261	Spring & wire product mfg	-	5	2	558	11 605	512	875	8 965	22 913	27 926	50 767	1 111
334	Computer & electronic product mfg	3	10	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CATAWBA COUNTY, NC—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	9	6	4 362	139 825	3 479	7 370	94 454	470 629	856 487	1 307 548	D
3359	Other electrical equipment & component mfg	-	5	4	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	4	4	4 032	131 981	3 185	6 709	90 052	450 956	842 394	1 275 281	48 636
335921	Fiber optic cable mfg...	-	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	190	105	15 912	376 359	13 537	25 063	284 328	723 352	695 658	1 416 963	24 217
3371	Household & institutional furniture & kitchen cabinet mfg	1	136	80	14 209	341 159	12 053	22 411	257 328	663 074	641 997	1 303 499	21 124
33712	Household & institutional furniture mfg	1	131	80	j	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	1	95	61	10 764	270 028	9 100	16 726	200 377	497 449	502 452	997 030	12 137
337122	Nonupholstered wood household furniture mfg	1	25	13	h	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	52	24	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	52	24	g	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	8	5	649	14 209	550	972	10 614	29 618	21 777	51 207	1 512
337215	Showcase, partition, shelving, & locker mfg	1	44	19	f	D	D	D	D	D	D	D	D
	CHATHAM COUNTY, NC												
31-33	Manufacturing	-	76	36	7 109	158 246	6 261	12 196	122 659	431 484	580 024	1 014 269	45 096
311	Food mfg	-	12	7	2 132	41 844	1 902	3 790	33 396	84 239	277 916	361 941	14 353
3116	Meat product mfg	-	6	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	4	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	4	3	g	D	D	D	D	D	D	D	D
313	Textile mills	7	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	15	10	924	24 977	807	1 690	18 462	59 022	73 502	131 838	D
325	Chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	4	715	5 679	647	1 263	3 971	13 281	12 067	25 575	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	5	3	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	4	2	f	D	D	D	D	D	D	D	D
	CHEROKEE COUNTY, NC												
31-33	Manufacturing	1	27	12	2 776	56 277	2 375	4 754	44 804	136 485	180 183	314 989	6 066
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CHOWAN COUNTY, NC													
31-33	Manufacturing	2	18	8	1 061	23 842	890	1 968	17 133	53 484	59 942	114 226	2 922
313	Textile mills	5	2	2	f	D	D	D	D	D	D	D	D
CLEVELAND COUNTY, NC													
31-33	Manufacturing	—	173	82	14 655	399 872	11 767	23 839	293 286	1 321 179	1 181 848	2 496 989	119 706
313	Textile mills	1	33	21	3 579	74 841	2 973	6 339	55 575	184 876	265 920	444 610	29 471
3131	Fiber, yarn, & thread mills	2	10	7	1 165	23 581	1 000	2 171	18 695	77 867	72 444	151 654	12 416
31311	Fiber, yarn, & thread mills	2	10	7	1 165	23 581	1 000	2 171	18 695	77 867	72 444	151 654	12 416
313111	Yarn spinning mills	2	10	7	1 165	23 581	1 000	2 171	18 695	77 867	72 444	151 654	12 416
3132	Fabric mills	—	15	10	1 897	38 030	1 593	3 374	28 857	61 291	137 093	189 709	10 018
31321	Broadwoven fabric mills	1	7	5	957	20 794	801	1 790	16 077	35 182	71 661	100 999	6 159
313210	Broadwoven fabric mills	1	7	5	957	20 794	801	1 790	16 077	35 182	71 661	100 999	6 159
31324	Knit fabric mills	—	6	5	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	—	4	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	8	4	517	13 230	380	794	8 023	45 718	56 383	103 247	7 037
31331	Textile & fabric finishing mills	—	6	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	16	4	574	14 386	504	936	10 167	23 341	77 736	101 688	743
325	Chemical mfg	—	4	3	1 300	47 973	1 080	2 125	35 327	243 138	181 238	427 986	9 612
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	8	4	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	15	8	807	22 546	628	1 313	14 329	125 256	85 551	209 759	12 588
334	Computer & electronic product mfg	5	4	4	g	D	D	D	D	D	D	D	8 722
3344	Semiconductor & other electronic component mfg	1	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	2	2	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	—	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	9	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	9	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	4	1 305	41 997	1 024	2 185	28 351	129 403	75 843	201 801	5 218
3353	Electrical equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	5	1 150	43 472	949	1 986	33 932	188 508	140 890	326 604	13 996
3363	Motor vehicle parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBUS COUNTY, NC													
31-33	Manufacturing	-	46	25	4 767	129 932	3 707	7 570	83 069	379 395	511 914	895 463	116 778
315	Apparel mfg	-	7	6	1 648	25 977	1 441	2 696	20 775	99 240	64 972	163 780	393
3152	Cut & sew apparel mfg	-	7	6	1 648	25 977	1 441	2 696	20 775	99 240	64 972	163 780	393
31521	Cut & sew apparel contractors	-	3	2	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	271
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	3	3	f	D	D	D	D	D	D	D	271
321	Wood product mfg	-	7	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	g	D	D	D	D	D	D	D	D
322110	Pulp mills	-	1	1	g	D	D	D	D	D	D	D	D
CRAVEN COUNTY, NC													
31-33	Manufacturing	-	86	23	4 344	118 469	3 477	5 974	87 847	237 592	561 731	796 366	52 075
332	Fabricated metal product mfg	-	11	3	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	5	3	f	D	D	D	D	D	D	D	2 125
3366	Ship & boat building	-	3	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	1	f	D	D	D	D	D	D	D	D
CUMBERLAND COUNTY, NC													
31-33	Manufacturing	-	121	52	12 282	384 612	9 912	19 938	281 927	1 419 353	1 367 574	2 766 911	93 238
315	Apparel mfg	-	6	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	4	663	30 363	471	1 007	18 770	364 285	308 649	668 789	17 900
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	h	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CUMBERLAND COUNTY, NC—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	6	4	1 490	43 114	1 026	2 280	26 012	118 235	144 493	267 256	D
3363	Motor vehicle parts mfg ...	-	6	4	1 490	43 114	1 026	2 280	26 012	118 235	144 493	267 256	D
33639	Other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
DAVIDSON COUNTY, NC													
31-33	Manufacturing	-	326	132	21 576	521 653	17 683	34 042	384 515	1 229 795	1 022 149	2 249 372	116 216
313	Textile mills	-	12	7	1 165	34 328	1 043	2 495	28 205	90 490	145 747	235 089	27 546
3132	Fabric mills	-	5	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	22	12	1 133	19 316	987	1 922	15 271	40 739	38 963	80 015	D
3151	Apparel knitting mills	5	15	8	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	5	15	8	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	48	24	1 649	35 716	1 386	2 475	25 709	63 640	78 350	146 328	3 170
3212	Veneer, plywood, & engineered wood product mfg	1	21	11	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	1	21	11	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	23	13	f	D	D	D	D	D	D	D	D
32191	Millwork	3	13	7	539	10 819	469	835	8 560	21 043	32 993	59 607	D
326	Plastics & rubber products mfg	-	22	8	g	D	D	D	D	D	D	D	5 078
3261	Plastics product mfg	-	17	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	8	4	802	18 724	651	1 208	11 937	45 638	39 454	83 936	2 887
326199	All other plastics product mfg	-	8	4	802	18 724	651	1 208	11 937	45 638	39 454	83 936	2 887
327	Nonmetallic mineral product mfg	-	18	8	2 329	71 407	2 017	3 933	56 400	218 784	80 517	298 466	39 657
3272	Glass & glass product mfg .	-	4	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	3	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	42	13	1 219	30 582	961	1 847	20 778	77 094	64 068	138 883	6 303
333	Machinery mfg	-	17	7	721	25 719	493	895	13 773	61 217	56 745	113 272	D
3332	Industrial machinery mfg ..	-	10	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	667	19 797	400	797	7 881	45 834	27 942	72 856	D
337	Furniture & related product mfg	-	79	32	9 901	215 111	8 237	15 404	171 746	451 076	329 664	781 437	9 773
3371	Household & institutional furniture & kitchen cabinet mfg	-	54	24	9 301	203 457	7 714	14 498	162 665	421 142	296 045	718 103	9 216
33712	Household & institutional furniture mfg	-	51	24	9 289	203 285	7 704	14 486	162 537	420 829	295 804	717 549	9 202
337122	Nonupholstered wood household furniture mfg	-	26	14	8 421	184 289	7 024	13 119	148 633	384 572	249 747	635 665	7 844
DAVIE COUNTY, NC													
31-33	Manufacturing	1	45	18	2 886	76 397	2 423	4 619	52 570	178 140	232 626	406 851	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVIE COUNTY, NC—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	5	3	1 011	23 161	970	2 034	19 062	52 791	45 716	96 041	575
3371	Household & institutional furniture & kitchen cabinet mfg	1	3	3	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	3	3	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	3	2	2	f	D	D	D	D	D	D	D	D
	DUPLIN COUNTY, NC												
31-33	Manufacturing	2	48	21	4 688	95 249	3 763	7 785	68 698	190 311	486 895	675 934	17 777
311	Food mfg	2	10	4	1 871	33 333	1 636	3 330	25 887	67 994	162 222	233 352	6 518
3116	Meat product mfg	—	5	3	1 397	23 609	1 241	2 631	18 623	43 672	129 907	176 429	D
31161	Animal slaughtering & processing	—	5	3	1 397	23 609	1 241	2 631	18 623	43 672	129 907	176 429	D
311615	Poultry processing	—	2	2	g	D	D	D	D	D	D	D	D
313	Textile mills	2	6	6	1 972	47 615	1 497	3 400	33 416	91 387	297 842	385 567	9 990
3133	Textile & fabric finishing & fabric coating mills	4	2	2	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	4	2	2	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	4	2	2	g	D	D	D	D	D	D	D	D
	DURHAM COUNTY, NC												
31-33	Manufacturing	—	181	60	31 489	1 027 204	10 092	17 951	252 127	2 961 050	7 970 703	11 223 803	181 480
313	Textile mills	—	5	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	8	5	2	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	9	2	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	9	2	1	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	9	2	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	37	8	1 087	40 278	871	1 814	25 907	148 058	120 753	267 381	5 087
3231	Printing & related support activities	—	37	8	1 087	40 278	871	1 814	25 907	148 058	120 753	267 381	5 087
32311	Printing	—	29	7	g	D	D	D	D	D	D	D	4 917
323110	Commercial lithographic printing	—	12	5	531	20 940	454	957	16 325	104 274	99 315	202 974	2 632
325	Chemical mfg	1	16	5	893	45 508	407	814	14 950	107 872	75 781	184 424	5 248
3254	Pharmaceutical & medicine mfg	2	7	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	2	7	2	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	23	16	j	D	D	D	D	D	D	D	121 548
3341	Computer & peripheral equipment mfg	—	5	1	j	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	5	1	j	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	j	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	5	5	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	3	3	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	3	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
DURHAM COUNTY, NC—Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3344	Semiconductor & other electronic component mfg	1	6	4	g	D	D	D	D	D	D	D	59 959	
33441	Semiconductor & other electronic component mfg	1	6	4	g	D	D	D	D	D	D	D	59 959	
334413	Semiconductor & related device mfg...	1	3	3	g	D	D	D	D	D	D	D	D	
EDGECOMBE COUNTY, NC														
31-33	Manufacturing	-	50	28		7 720	233 994	5 995	11 554	136 655	539 082	1 070 729	1 606 555	84 061
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
313	Textile mills	-	5	5	g	D	D	D	D	D	D	D	D	D
3132	Fabric mills	-	4	4	g	D	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	2	f	D	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	2	2	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
FORSYTH COUNTY, NC														
31-33	Manufacturing	-	399	147		26 545	908 591	20 891	40 668	642 097	5 769 305	3 886 757	9 676 293	219 042
311	Food mfg	-	20	10		967	27 251	735	1 640	19 565	103 034	274 457	376 684	6 372
3118	Bakeries & tortilla mfg	-	13	6	f	D	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	9	5	f	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	7	6	h	D	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	4	4	h	D	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	4	4	h	D	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	2	2	h	D	D	D	D	D	D	D	D	D
313	Textile mills	-	13	7		1 607	45 098	1 310	3 250	31 213	132 200	142 578	274 347	17 221
3132	Fabric mills	-	6	4		517	13 507	398	720	7 553	29 351	26 905	56 470	D
3133	Textile & fabric finishing & fabric coating mills	-	7	3		1 090	31 591	912	2 530	23 660	102 849	115 673	217 877	D
31331	Textile & fabric finishing mills	-	7	3		1 090	31 591	912	2 530	23 660	102 849	115 673	217 877	D
313311	Broadwoven fabric finishing mills	-	6	2	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FORSYTH COUNTY, NC—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	1	12	9	3 706	75 117	3 266	6 236	61 098	272 825	304 389	581 375	D
3151	Apparel knitting mills	—	5	5	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	4	4	g	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	1	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	4	4	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	3	3	g	D	D	D	D	D	D	D	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	9	1	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	—	12	9	1 548	70 058	1 146	2 262	43 379	198 341	249 242	446 295	14 878
3222	Converted paper product mfg	—	12	9	1 548	70 058	1 146	2 262	43 379	198 341	249 242	446 295	14 878
32221	Paperboard container mfg	—	8	7	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	6	5	502	17 488	360	703	8 605	50 897	45 460	96 234	D
32222	Paper bag & coated & treated paper mfg	—	3	1	f	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	67	15	1 394	37 603	1 058	1 987	23 512	94 851	48 881	142 792	D
3231	Printing & related support activities	2	67	15	1 394	37 603	1 058	1 987	23 512	94 851	48 881	142 792	D
32311	Printing	2	59	12	1 271	33 330	974	1 821	20 935	86 816	47 616	133 416	D
325	Chemical mfg	1	16	7	637	17 960	436	736	10 861	77 710	102 091	174 253	4 073
332	Fabricated metal product mfg	—	58	24	2 864	85 682	2 140	4 051	58 339	241 394	245 026	482 371	11 786
3323	Architectural & structural metals mfg	—	19	9	864	26 395	601	1 197	15 633	70 624	90 572	160 119	2 069
33231	Plate work & fabricated structural product mfg	—	9	6	677	21 088	460	930	12 287	59 627	83 118	141 705	1 109
3325	Hardware mfg	—	5	3	588	11 083	433	630	8 292	37 688	24 412	61 138	D
33251	Hardware mfg	—	5	3	588	11 083	433	630	8 292	37 688	24 412	61 138	D
332510	Hardware mfg	—	5	3	588	11 083	433	630	8 292	37 688	24 412	61 138	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	17	5	708	20 945	551	1 088	15 185	59 059	13 664	72 049	3 968
333	Machinery mfg	—	26	11	1 956	74 229	1 475	3 006	50 883	186 312	547 941	772 868	28 578
3336	Engine, turbine, & power transmission equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	8	5	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	7	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	14	9	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	6	5	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	3	3	g	D	D	D	D	D	D	D	D
33591	Battery mfg	—	2	2	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FORSYTH COUNTY, NC													
—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	12	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	5	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	21	9		1 150	25 046	1 007	1 953	19 852	55 744	38 208	92 789
3371	Household & institutional furniture & kitchen cabinet mfg	—	13	5	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	7	4	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	5	4	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, NC													
31-33	Manufacturing	—	55	26		2 259	67 251	1 859	3 578	43 946	259 098	190 339	444 570
321	Wood product mfg	3	18	11	f	D	D	D	D	D	D	D	D
GASTON COUNTY, NC													
31-33	Manufacturing	—	492	195		31 175	863 240	25 139	52 240	617 062	2 758 229	3 039 648	5 772 680
313	Textile mills	—	86	66		11 861	272 043	10 347	23 347	207 653	712 414	1 206 647	1 913 860
3131	Fiber, yarn, & thread mills	—	42	35		7 320	153 943	6 533	15 027	128 479	329 641	654 171	984 588
31311	Fiber, yarn, & thread mills	—	42	35		7 320	153 943	6 533	15 027	128 479	329 641	654 171	984 588
313111	Yarn spinning mills	—	37	32	i	D	D	D	D	D	D	D	D
3132	Fabric mills	2	19	13	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	2	12	10	1 644	43 804	1 258	2 743	27 483	80 586	97 137	177 050	8 374
313241	Weft knit fabric mills	6	9	7	g	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	—	3	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	25	18	h	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	24	17	h	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	20	17		2 564	65 420	2 267	4 984	45 209	259 645	331 836	585 277
315	Apparel mfg	3	16	13		1 139	19 388	1 020	1 891	16 383	57 611	57 552	116 310
3151	Apparel knitting mills	1	8	6		784	12 941	706	1 388	11 230	45 402	40 770	87 405
323	Printing & related support activities	2	35	6		582	17 516	405	766	10 094	50 578	30 059	79 949
3231	Printing & related support activities	2	35	6		582	17 516	405	766	10 094	50 578	30 059	79 949
32311	Printing	2	34	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	23	11		1 451	58 317	880	1 774	31 067	301 187	331 312	628 910
3259	Other chemical product mfg	—	4	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	4	2	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	20	10		622	19 034	477	992	11 156	41 776	33 302	76 075
327	Nonmetallic mineral product mfg	1	7	3		966	17 285	854	1 720	13 330	31 843	26 933	60 006
3272	Glass & glass product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	148	24		2 725	81 523	2 123	3 941	53 202	211 228	203 823	415 510
3322	Cutlery & handtool mfg	—	2	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	2	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	2	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	105	8		822	24 500	628	1 098	15 880	45 914	19 677	66 422
33271	Machine shops	2	98	6		735	21 615	569	974	13 948	40 530	16 279	57 635
332710	Machine shops	2	98	6		735	21 615	569	974	13 948	40 530	16 279	57 635

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GASTON COUNTY, NC													
—Con.													
31-33	Manufacturing—												
	Con.												
333	Machinery mfg	1	74	27	3 190	93 001	2 075	3 940	47 666	318 113	191 593	494 977	D
3331	Agriculture, construction, & mining machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	1	50	16	1 481	46 983	933	1 867	23 791	89 562	81 675	171 331	D
33329	Other industrial machinery mfg	1	50	16	1 481	46 983	933	1 867	23 791	89 562	81 675	171 331	D
333292	Textile machinery mfg	1	44	13	1 340	42 168	838	1 691	21 359	82 932	76 654	159 613	D
334	Computer & electronic product mfg	—	8	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	4	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	3	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	4	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	11	3	f	D	D	D	D	D	D	D	836
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	14	4	f	D	D	D	D	D	D	D	1 353
3399	Other miscellaneous mfg	2	12	4	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	7	4	f	D	D	D	D	D	D	D	1 336
GRAHAM COUNTY, NC													
31-33	Manufacturing	—	3	2	f	D	D	D	D	D	D	D	1 464
337	Furniture & related product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
GRANVILLE COUNTY, NC													
31-33	Manufacturing	—	57	30	6 990	185 222	5 353	10 619	121 540	944 981	595 966	1 534 209	49 445
313	Textile mills	1	8	5	1 219	29 001	1 011	2 269	22 284	46 823	90 215	136 870	21 455
3133	Textile & fabric finishing & fabric coating mills	3	4	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	4	2	f	D	D	D	D	D	D	D	2 244
3271	Clay product & refractory mfg	—	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	1	1	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	10	4	615	18 749	410	753	12 240	64 114	28 924	92 099	2 134

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GRANVILLE COUNTY, NC—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	8	2	f	D	D	D	D	D	D	D	D
31-33	GUILFORD COUNTY, NC												
	Manufacturing	2	862	366	47 158	1 431 196	34 628	68 806	875 882	6 136 405	4 451 397	10 546 411	326 852
311	Food mfg.....	-	27	16	1 648	42 666	881	1 806	18 250	165 540	250 825	415 224	12 120
3116	Meat product mfg.....	1	7	5	660	14 058	274	540	4 650	44 372	92 190	135 055	D
31161	Animal slaughtering & processing.....	1	7	5	660	14 058	274	540	4 650	44 372	92 190	135 055	D
312	Beverage & tobacco product mfg.....	9	5	2	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	9	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg.....	9	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills.....	1	45	23	4 944	128 419	4 235	8 253	95 655	322 218	578 242	909 040	27 409
3132	Fabric mills.....	-	23	14	3 680	94 416	3 248	6 040	72 751	224 378	417 635	647 352	20 962
31321	Broadwoven fabric mills .	-	9	4	1 898	46 947	1 704	3 163	39 717	52 207	174 807	235 973	13 301
313210	Broadwoven fabric mills.....	-	9	4	1 898	46 947	1 704	3 163	39 717	52 207	174 807	235 973	13 301
31324	Knit fabric mills.....	-	10	8	1 625	43 280	1 423	2 578	30 566	161 881	232 384	392 437	7 449
313249	Other knit fabric & lace mills.....	-	6	6	1 483	38 581	1 327	2 372	28 400	152 051	214 344	364 621	D
3133	Textile & fabric finishing & fabric coating mills.....	2	20	7	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills.....	3	18	6	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills.....	2	16	5	560	16 732	428	917	10 827	55 570	110 905	167 969	D
314	Textile product mills.....	1	38	13	921	21 124	716	1 432	13 115	60 926	74 778	137 367	D
3149	Other textile product mills..	2	26	11	680	15 808	498	1 014	9 119	33 825	36 766	70 532	D
31499	All other textile product mills.....	2	22	9	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	2	21	9	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	2	26	16	g	D	D	D	D	D	D	D	2 496
3151	Apparel knitting mills.....	3	10	8	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills.....	2	7	6	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills.....	2	6	6	1 036	21 300	928	1 965	16 449	47 000	34 296	81 015	D
321	Wood product mfg.....	2	28	15	g	D	D	D	D	D	D	D	4 440
3219	Other wood product mfg...	2	18	8	f	D	D	D	D	D	D	D	D
32191	Millwork.....	3	6	4	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	3	32	18	1 304	41 459	954	2 021	25 019	95 579	127 352	224 521	8 151
3222	Converted paper product mfg.....	3	32	18	1 304	41 459	954	2 021	25 019	95 579	127 352	224 521	8 151
32221	Paperboard container mfg.....	1	15	9	773	25 093	552	1 220	14 215	54 144	83 007	137 420	5 552
322211	Corrugated & solid fiber box mfg.....	1	10	6	568	18 094	388	830	9 323	38 814	57 179	96 207	4 264
323	Printing & related support activities.....	-	129	39	3 675	107 345	2 733	5 248	66 526	282 592	122 285	405 304	18 184
3231	Printing & related support activities.....	-	129	39	3 675	107 345	2 733	5 248	66 526	282 592	122 285	405 304	18 184
32311	Printing.....	-	104	27	2 934	87 935	2 126	4 111	53 777	242 500	115 251	357 801	15 830
323110	Commercial lithographic printing..	-	60	15	1 709	56 299	1 265	2 357	33 533	131 300	67 776	198 180	12 258
323116	Manifold business form printing.....	-	4	2	f	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	2	25	12	741	19 410	607	1 137	12 749	40 092	7 034	47 503	2 354
325	Chemical mfg.....	-	52	29	5 295	202 387	3 254	6 574	96 312	1 933 360	1 017 243	2 926 911	79 354
3254	Pharmaceutical & medicine mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	1	12	9	g	D	D	D	D	D	D	D	D
32551	Paint & coating mfg.....	1	10	8	g	D	D	D	D	D	D	D	12 626
325510	Paint & coating mfg...	1	10	8	g	D	D	D	D	D	D	D	12 626
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	10	8	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	-	9	7	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg.	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GUILFORD COUNTY, NC—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	-	12	5	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	9	5	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	5	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	47	30	2 232	57 722	1 793	3 657	37 270	145 505	173 741	318 005	10 044
3261	Plastics product mfg	-	43	28	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	13	11	826	18 718	690	1 221	12 616	41 282	67 203	107 832	2 883
326150	Urethane & other foam product (except polystyrene) mfg	-	13	11	826	18 718	690	1 221	12 616	41 282	67 203	107 832	2 883
32619	Other plastics product mfg	2	12	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	10	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	26	14	896	26 005	683	1 402	16 886	86 119	55 035	137 670	7 528
332	Fabricated metal product mfg	-	113	41	3 069	85 431	2 409	4 564	56 073	181 857	181 991	365 018	11 842
3323	Architectural & structural metals mfg	-	20	8	555	16 673	383	800	9 802	37 214	50 936	87 906	1 020
3326	Spring & wire product mfg .	1	9	5	503	10 045	420	715	7 499	28 889	38 517	66 730	D
33261	Spring & wire product mfg	1	9	5	503	10 045	420	715	7 499	28 889	38 517	66 730	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	40	10	675	21 347	542	1 025	13 722	36 494	14 823	51 349	D
33271	Machine shops	2	37	9	632	20 107	502	950	12 740	34 122	13 433	47 583	5 013
332710	Machine shops	2	37	9	632	20 107	502	950	12 740	34 122	13 433	47 583	5 013
333	Machinery mfg	-	54	17	2 973	113 525	1 622	3 352	49 734	223 907	354 762	584 252	13 975
3339	Other general-purpose machinery mfg	-	15	7	1 942	76 217	1 036	2 085	32 489	170 735	296 246	473 059	9 611
33391	Pump & compressor mfg	-	2	2	g	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	24	15	h	D	D	D	D	D	D	D	51 071
3344	Semiconductor & other electronic component mfg	-	13	10	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	13	10	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	4	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	18	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	2 383	75 471	1 821	3 911	57 824	67 778	390 249	442 811	D
3362	Motor vehicle body & trailer mfg	-	5	3	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	5	3	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	5	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GUILFORD COUNTY, NC—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	118	46	7 051	168 186	5 688	11 310	119 693	309 299	271 303	581 001	21 166
3371	Household & institutional furniture & kitchen cabinet mfg	-	83	28	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	9	3	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	9	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	74	25	h	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	44	20	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	29	16	3 489	74 521	2 719	5 152	49 750	139 112	118 841	258 845	14 162
33721	Office furniture (including fixtures) mfg	-	29	16	3 489	74 521	2 719	5 152	49 750	139 112	118 841	258 845	14 162
337211	Wood office furniture mfg	-	13	11	h	D	D	D	D	D	D	D	12 884
339	Miscellaneous mfg	-	62	15	1 584	48 407	1 014	1 870	24 218	112 961	106 322	218 438	5 810
3399	Other miscellaneous mfg ...	-	37	13	g	D	D	D	D	D	D	D	5 037
33999	All other miscellaneous mfg	-	10	5	f	D	D	D	D	D	D	D	3 619
	HALIFAX COUNTY, NC												
31-33	Manufacturing	-	59	28	4 136	113 700	3 442	5 469	84 186	211 435	348 574	567 720	55 518
313	Textile mills	-	5	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	7	7	7	501	6 697	424	681	4 909	9 262	6 502	16 945	265
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	542	14 211	437	846	8 535	38 833	22 049	60 756	D
	HARNETT COUNTY, NC												
31-33	Manufacturing	1	82	33	5 959	149 250	5 020	9 785	104 130	309 069	321 002	633 670	18 463
313	Textile mills	-	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	6	4	532	8 130	485	858	6 583	31 681	5 720	37 655	D
3152	Cut & sew apparel mfg	2	5	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	6	712	16 377	622	1 121	10 410	33 796	42 188	76 291	1 396
3219	Other wood product mfg ...	-	5	4	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAYWOOD COUNTY, NC													
31-33	Manufacturing	-	49	13	3 321	130 249	2 645	5 402	97 554	178 730	537 315	726 272	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
HENDERSON COUNTY, NC													
31-33	Manufacturing	-	132	37	8 361	260 117	6 845	14 422	189 953	848 541	921 287	1 745 822	64 566
313	Textile mills	1	4	4	1 182	35 420	993	2 222	25 836	95 374	157 464	248 254	9 178
314	Textile product mills	-	13	4	736	15 381	607	1 280	11 113	37 204	46 313	83 949	1 895
3141	Textile furnishings mills	-	8	3	621	13 491	520	1 121	9 811	34 387	41 860	76 777	1 690
31412	Curtain & linen mills	-	5	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	3	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	3	g	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	26	4	500	18 066	361	716	10 558	33 260	35 868	68 462	1 991
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	g	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
HERTFORD COUNTY, NC													
31-33	Manufacturing	-	30	17	1 695	37 176	1 364	2 866	25 840	105 766	352 917	459 151	8 684
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	4	4	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	4	4	f	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOKE COUNTY, NC													
31-33	Manufacturing	-	11	5	3 151	72 840	2 903	5 511	62 508	238 388	180 714	414 787	13 228
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	3	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
IREDELL COUNTY, NC													
31-33	Manufacturing	1	263	121	16 978	476 537	12 941	26 975	304 597	1 288 969	1 922 924	3 172 642	118 836
311	Food mfg	5	17	6	502	14 543	334	610	7 707	69 054	112 732	181 550	2 874
313	Textile mills	1	28	23	2 960	73 224	2 544	5 244	55 639	152 098	277 074	424 029	41 109
3131	Fiber, yarn, & thread mills .	-	3	3	544	11 731	508	1 117	10 605	13 854	28 191	41 894	D
31311	Fiber, yarn, & thread mills	-	3	3	544	11 731	508	1 117	10 605	13 854	28 191	41 894	D
3132	Fabric mills	1	18	14	2 046	52 047	1 754	3 616	39 762	125 464	232 545	353 524	39 999
31321	Broadwoven fabric mills .	-	5	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	5	2	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	4	7	7	526	11 683	462	928	9 211	32 797	38 691	69 348	333
314	Textile product mills	5	7	3	972	21 501	857	1 875	16 015	33 116	35 121	66 556	D
3141	Textile furnishings mills	5	4	3	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	5	4	3	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	9	5	1 091	26 301	714	1 514	12 940	99 878	360 636	460 035	2 341
3152	Cut & sew apparel mfg	-	6	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	15	7	591	17 109	458	876	9 676	41 637	69 684	109 179	2 137
326	Plastics & rubber products mfg	1	16	13	1 440	40 898	1 147	2 392	27 836	106 133	119 885	229 201	8 177
3261	Plastics product mfg	2	14	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	8	7	742	20 775	550	1 308	12 738	42 140	51 330	95 179	5 867
326199	All other plastics product mfg	1	8	7	742	20 775	550	1 308	12 738	42 140	51 330	95 179	5 867
331	Primary metal mfg	-	5	4	635	19 731	514	1 043	13 867	36 360	72 371	108 039	4 188
332	Fabricated metal product mfg	2	44	6	617	16 690	483	983	10 953	55 871	37 537	94 240	3 572
333	Machinery mfg	-	32	13	2 112	78 440	1 396	2 812	43 786	194 841	218 389	407 496	13 214
3331	Agriculture, construction, & mining machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	3	671	23 296	503	955	14 860	58 249	47 700	102 088	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	5	3	671	23 296	503	955	14 860	58 249	47 700	102 088	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	3	846	26 526	465	923	12 510	174 609	69 549	212 016	4 945
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
IREDELL COUNTY, NC													
—Con.													
31-33	Manufacturing—												
	Con.												
337	Furniture & related product mfg	1	20	11	1 057	24 732	881	2 547	16 753	39 147	52 653	91 630	1 095
3371	Household & institutional furniture & kitchen cabinet mfg	1	16	10	1 023	24 086	853	2 522	16 352	37 524	52 279	89 575	1 077
33712	Household & institutional furniture mfg	1	14	9	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	15	6	1 777	48 289	1 413	2 698	31 588	135 836	149 462	296 625	7 045
3391	Medical equipment & supplies mfg	—	9	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	9	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	6	4	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	1	1	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	—	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	3	3	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	9	2	2	f	D	D	D	D	D	D	D	D
JACKSON COUNTY, NC													
31-33	Manufacturing	1	36	9	699	15 853	539	1 030	11 181	36 346	40 607	76 327	2 301
JOHNSTON COUNTY, NC													
31-33	Manufacturing	2	114	45	6 588	192 096	4 713	8 946	111 239	682 402	937 585	1 622 280	74 102
313	Textile mills	—	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	8	5	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	8	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	8	3	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	9	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	6	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	3	2	f	D	D	D	D	D	D	D	D
LEE COUNTY, NC													
31-33	Manufacturing	2	108	54	12 130	319 400	9 340	18 666	193 000	1 180 173	980 697	2 167 911	129 930
311	Food mfg	—	4	2	1 639	34 903	1 498	2 639	27 329	75 104	114 248	189 736	2 896
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	—	10	10	1 171	34 915	1 054	2 349	23 048	51 941	139 655	192 515	D
3131	Fiber, yarn, & thread mills .	—	9	9	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	9	9	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	—	6	6	829	22 416	786	1 629	17 687	43 767	128 514	173 279	33 288
325	Chemical mfg	5	4	3	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	9	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	9	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	5	3	1 115	22 913	821	1 681	14 701	49 211	89 169	139 030	D
3261	Plastics product mfg	—	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LEE COUNTY, NC— Con. Manufacturing— Con.												
332	Fabricated metal product mfg	-	15	5	928	29 143	788	1 546	22 146	53 583	96 267	143 297	D
3329	Other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	7	1 181	38 649	761	1 700	17 662	83 132	87 198	169 052	9 406
335	Electrical equipment, appliance, & component mfg	-	3	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	LENOIR COUNTY, NC Manufacturing	-	82	36	7 120	201 413	5 411	11 128	127 274	650 936	932 432	1 596 109	20 098
311	Food mfg	-	4	2	630	12 602	516	1 067	9 406	7 921	21 267	30 014	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	7	6	1 250	37 400	639	1 229	11 186	108 059	205 885	319 677	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	2	g	D	D	D	D	D	D	D	282
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	4	899	24 543	750	1 755	18 153	72 142	91 839	164 603	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	LINCOLN COUNTY, NC Manufacturing	1	112	53	8 047	196 414	6 834	14 121	150 054	470 853	525 846	990 901	24 374
313	Textile mills	2	19	16	2 926	62 152	2 593	5 616	50 961	129 417	167 382	292 219	7 730
3131	Fiber, yarn, & thread mills .	-	7	6	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	7	6	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	5	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills	2	9	7	1 958	42 655	1 695	3 726	34 019	80 317	117 865	193 884	4 843
31324	Knit fabric mills	2	6	4	1 371	29 277	1 188	2 643	23 728	56 649	90 166	142 040	D
313241	Weft knit fabric mills ..	9	4	2	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	9	7	551	10 691	467	907	8 330	27 703	19 600	46 887	1 928
321	Wood product mfg	3	11	6	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	3	7	5	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	2	3	3	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	2	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LINCOLN COUNTY, NC—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	20	4	665	28 692	557	1 136	23 055	50 361	76 221	125 879	D
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	9	2 055	47 352	1 744	3 708	36 527	146 554	108 821	255 261	4 240
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	5	1 673	39 419	1 427	3 067	31 302	88 630	81 473	170 126	D
33712	Household & institutional furniture mfg	-	4	4	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	3	3	f	D	D	D	D	D	D	D	D
	MCDOWELL COUNTY, NC												
31-33	Manufacturing	-	63	31	6 084	140 861	5 186	10 639	109 862	382 489	476 777	866 330	40 509
313	Textile mills	-	5	5	1 597	35 753	1 432	3 115	29 502	61 554	167 866	228 211	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313113	Thread mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	12	7	896	22 795	808	1 628	19 196	62 828	92 679	159 438	3 606
337	Furniture & related product mfg	-	8	4	1 451	30 499	1 248	2 453	26 207	77 680	45 474	121 186	1 835
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	4	1 451	30 499	1 248	2 453	26 207	77 680	45 474	121 186	1 835
33712	Household & institutional furniture mfg	-	4	4	1 436	30 214	1 236	2 434	25 998	77 161	45 089	120 281	D
337122	Nonupholstered wood household furniture mfg	-	4	4	1 436	30 214	1 236	2 434	25 998	77 161	45 089	120 281	D
	MACON COUNTY, NC												
31-33	Manufacturing	1	34	10	1 358	32 469	1 134	2 332	23 617	98 010	82 932	174 716	9 927
	MARTIN COUNTY, NC												
31-33	Manufacturing	-	22	8	1 902	40 646	1 673	4 370	30 339	96 360	210 419	307 855	2 169
311	Food mfg	1	7	2	688	12 000	622	2 456	10 009	27 523	61 330	88 826	1 371
3116	Meat product mfg	-	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	3	3	1 045	25 510	919	1 660	18 505	61 232	144 655	207 042	623
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MECKLENBURG COUNTY, NC													
31-33	Manufacturing	1	1 001	338	42 494	1 429 815	27 420	57 249	767 886	4 383 550	4 441 459	8 831 390	298 484
311	Food mfg.	—	39	15	6 781	205 606	2 938	6 886	70 635	632 154	520 012	1 157 156	43 215
3118	Bakeries & tortilla mfg.	—	22	7	5 722	167 721	2 124	5 011	48 088	393 363	221 750	614 561	D
31181	Bread & bakery product mfg.	—	18	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	11	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.	—	4	4	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	—	2	2	h	D	D	D	D	D	D	D	D
3119	Other food mfg.	—	8	5	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.	—	3	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.	—	3	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	—	6	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.	—	6	3	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.	—	5	3	f	D	D	D	D	D	D	D	D
313	Textile mills	4	32	11	1 088	25 553	875	1 744	17 891	48 547	50 135	99 705	4 933
3132	Fabric mills	4	18	9	825	19 842	694	1 438	14 796	37 006	42 278	79 446	4 174
314	Textile product mills	—	25	10	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	15	4	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	15	4	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	4	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg.	1	16	4	f	D	D	D	D	D	D	D	D
322	Paper mfg.	—	27	21	2 112	71 328	1 613	3 448	47 360	176 911	171 353	347 224	10 825
3222	Converted paper product mfg.	—	26	20	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.	—	18	15	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.	—	10	8	692	24 681	527	1 229	15 469	51 001	75 323	125 800	D
322212	Folding paperboard box mfg.	—	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	199	40	3 657	131 865	2 626	5 294	84 009	256 648	193 622	449 898	39 297
3231	Printing & related support activities	1	199	40	3 657	131 865	2 626	5 294	84 009	256 648	193 622	449 898	39 297
32311	Printing	1	164	29	3 009	108 273	2 157	4 309	68 239	208 062	181 919	389 557	35 849
323110	Commercial lithographic printing	1	67	19	1 589	56 923	1 151	2 241	36 760	116 442	115 404	229 912	23 603
32312	Support activities for printing	1	35	11	648	23 592	469	985	15 770	48 586	11 703	60 341	3 448
323122	Prepress services	1	27	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg.	2	75	29	2 805	117 492	1 418	2 872	48 028	393 988	421 355	808 578	46 371
3251	Basic chemical mfg.	2	11	5	f	D	D	D	D	D	D	D	17 608
32513	Dye & pigment mfg.	—	5	2	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.	—	4	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.	3	27	8	693	25 410	408	825	12 263	73 111	108 615	179 040	D
326	Plastics & rubber products mfg.	1	49	24	4 999	167 742	3 709	6 954	106 136	552 228	484 644	1 034 151	44 921
3261	Plastics product mfg.	2	37	18	2 668	82 877	1 862	3 503	45 908	242 339	262 079	512 335	26 330
32611	Unsupported plastics film, sheet, & bag mfg.	2	8	5	602	20 355	464	970	13 940	83 058	99 806	183 446	3 060
326113	Unsupported plastics film & sheet (except packaging) mfg.	1	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.	1	20	7	1 302	38 836	805	1 447	17 097	81 129	68 681	157 346	12 557
326199	All other plastics product mfg.	1	18	6	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.	—	12	6	2 331	84 865	1 847	3 451	60 228	309 889	222 565	521 816	18 591
32621	Tire mfg.	—	6	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg.	—	5	4	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg.	—	5	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.	3	31	11	835	24 089	655	1 478	17 636	81 474	67 628	149 075	6 081
3273	Cement & concrete product mfg.	4	16	9	f	D	D	D	D	D	D	D	5 570
331	Primary metal mfg.	—	8	4	969	43 724	777	1 854	34 820	110 904	170 313	279 414	D
3315	Foundries	—	5	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MECKLENBURG COUNTY, NC—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	156	54	4 565	143 335	3 348	6 930	90 197	270 196	308 865	581 478	24 715
3321	Forging & stamping	2	14	7	542	16 947	426	879	11 465	34 377	23 902	57 999	2 194
33211	Forging & stamping	2	14	7	542	16 947	426	879	11 465	34 377	23 902	57 999	2 194
3323	Architectural & structural metals mfg	—	34	9	899	33 864	570	1 117	16 877	44 832	145 224	188 829	4 430
33231	Plate work & fabricated structural product mfg ..	—	11	5	671	27 131	404	784	12 637	30 659	129 710	159 129	D
332312	Fabricated structural metal mfg	—	10	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	47	9	f	D	D	D	D	D	D	D	3 272
33271	Machine shops	1	42	7	527	16 748	412	822	10 834	25 463	18 527	44 819	D
332710	Machine shops	1	42	7	527	16 748	412	822	10 834	25 463	18 527	44 819	D
3329	Other fabricated metal product mfg	—	24	10	1 130	30 201	747	1 481	18 185	58 311	52 231	113 254	7 212
33291	Metal valve mfg	—	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	104	48	4 859	185 383	2 678	5 275	86 214	485 224	571 929	1 064 582	19 013
3332	Industrial machinery mfg ..	—	38	18	1 470	52 283	701	1 350	21 244	149 654	277 380	415 117	9 019
33329	Other industrial machinery mfg	—	33	15	1 266	45 931	576	1 089	17 892	130 568	267 184	387 795	D
333292	Textile machinery mfg ..	—	19	7	553	17 717	261	560	7 606	52 754	35 573	87 229	D
3336	Engine, turbine, & power transmission equipment mfg	—	8	5	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	8	5	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	22	14	1 280	45 423	673	1 320	18 571	111 665	149 275	261 918	3 630
33399	All other general-purpose machinery mfg	—	12	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	31	14	3 687	141 860	2 298	5 550	68 513	798 693	893 398	1 703 260	D
3344	Semiconductor & other electronic component mfg	—	11	5	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	11	5	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	29	12	1 062	31 070	773	1 569	18 117	80 718	97 131	177 689	8 409
3363	Motor vehicle parts mfg ...	1	20	10	880	25 762	645	1 324	14 732	74 153	81 775	155 921	D
339	Miscellaneous mfg	2	88	18	1 551	49 652	1 023	1 925	23 619	107 090	94 493	195 508	6 838
3391	Medical equipment & supplies mfg	1	39	7	705	25 739	463	859	11 861	57 745	58 386	110 458	D
33911	Medical equipment & supplies mfg	1	39	7	705	25 739	463	859	11 861	57 745	58 386	110 458	D
3399	Other miscellaneous mfg ...	2	49	11	846	23 913	560	1 066	11 758	49 345	36 107	85 050	D
33999	All other miscellaneous mfg	3	16	6	517	15 236	386	709	8 141	34 063	28 267	62 022	D
MITCHELL COUNTY, NC													
31-33	Manufacturing	—	32	9	1 868	37 078	1 706	3 185	30 632	64 465	80 475	151 377	6 314
337	Furniture & related product mfg	—	6	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	6	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	5	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	4	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTGOMERY COUNTY, NC													
31-33	Manufacturing	1	78	44	5 292	112 057	4 493	8 697	83 779	303 361	357 031	666 656	29 041
313	Textile mills	-	5	5	815	17 326	746	1 447	14 354	45 669	33 385	78 815	5 395
3132	Fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	25	16	2 023	36 964	1 809	3 298	30 016	80 095	61 263	150 312	3 917
3151	Apparel knitting mills	-	18	14	1 866	34 525	1 678	3 079	28 449	74 776	58 067	142 024	3 816
31511	Hosiery & sock mills	-	17	13	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	14	10	1 670	31 279	1 499	2 716	25 894	63 792	50 780	123 986	D
337	Furniture & related product mfg	-	11	7	818	14 080	638	1 259	10 526	33 755	38 075	71 498	1 573
MOORE COUNTY, NC													
31-33	Manufacturing	1	105	41	5 943	129 850	4 945	9 466	93 395	366 890	538 050	903 734	17 260
313	Textile mills	2	11	9	609	16 031	464	995	9 794	28 141	44 537	74 454	2 872
3132	Fabric mills	3	7	6	531	13 783	410	882	8 389	20 538	35 547	57 530	D
314	Textile product mills.....	1	4	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	1	4	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	5	4	1 858	34 031	1 674	3 027	30 593	55 755	68 209	124 109	1 444
3151	Apparel knitting mills	-	3	3	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	2	2	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	9	3	689	13 503	631	1 349	11 162	41 114	38 941	80 514	1 739
3371	Household & institutional furniture & kitchen cabinet mfg	2	8	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	2	7	3	f	D	D	D	D	D	D	D	D
NASH COUNTY, NC													
31-33	Manufacturing	-	104	52	9 879	267 810	7 876	16 603	190 616	860 389	854 758	1 721 814	55 067
313	Textile mills	-	4	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	10	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	9	4	683	16 735	575	1 123	12 017	30 601	41 607	72 418	1 723
325	Chemical mfg	-	4	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	g	D	D	D	D	D	D	D	5 658
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	8	1 339	38 509	951	2 059	23 646	90 883	84 550	173 825	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW HANOVER COUNTY, NC													
31-33	Manufacturing	-	203	54	8 378	338 818	5 922	12 507	211 425	1 615 206	1 108 216	2 698 180	D
325	Chemical mfg	-	14	7	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	8	5	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	4	3	1 455	70 661	1 136	2 350	49 959	306 331	152 362	470 199	D
325188	All other basic inorganic chemical mfg	-	4	3	1 455	70 661	1 136	2 350	49 959	306 331	152 362	470 199	D
327	Nonmetallic mineral product mfg	-	12	6	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	4	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	2	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	4	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	3	13	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
NORTHAMPTON COUNTY, NC													
31-33	Manufacturing	2	13	8	749	20 532	601	1 242	14 508	84 297	147 107	233 012	4 679
ONSLow COUNTY, NC													
31-33	Manufacturing	-	37	12	1 829	37 731	1 554	3 169	29 201	169 443	180 009	346 411	D
311	Food mfg	1	3	2	f	D	D	D	D	D	D	D	D
ORANGE COUNTY, NC													
31-33	Manufacturing	1	78	15	1 209	34 045	913	1 769	21 487	69 733	71 841	142 060	5 751
PASQUOTANK COUNTY, NC													
31-33	Manufacturing	1	31	11	884	18 458	698	1 238	12 576	75 214	77 848	148 556	6 905
PENDER COUNTY, NC													
31-33	Manufacturing	-	39	12	1 123	24 299	902	1 722	17 302	41 262	90 357	135 810	2 731
PERSON COUNTY, NC													
31-33	Manufacturing	-	39	19	5 138	135 484	4 048	9 115	95 619	471 603	613 132	1 084 827	40 144
313	Textile mills	-	4	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	3	2	f	D	D	D	D	D	D	D	258
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	5	3	750	19 790	574	1 038	14 026	40 370	97 090	137 289	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PITT COUNTY, NC													
31-33	Manufacturing	-	119	50	9 305	280 849	6 985	13 886	174 479	1 707 304	1 027 491	2 741 904	112 077
313	Textile mills	-	6	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	5	1 589	49 141	1 299	2 884	35 388	154 076	264 267	414 016	13 504
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6	1 114	31 156	825	1 584	19 551	93 650	102 767	191 720	D
3363	Motor vehicle parts mfg	-	3	3	626	20 103	427	937	13 551	73 044	56 319	125 289	D
339	Miscellaneous mfg	-	11	2	g	D	D	D	D	D	D	D	1 952
3399	Other miscellaneous mfg	-	4	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	-	1	1	f	D	D	D	D	D	D	D	D
POLK COUNTY, NC													
31-33	Manufacturing	2	25	10	904	19 933	771	1 520	15 003	72 245	80 999	150 923	6 926
313	Textile mills	3	6	5	655	14 978	589	1 201	11 919	51 559	66 818	117 969	5 625
RANDOLPH COUNTY, NC													
31-33	Manufacturing	-	411	178	24 954	559 806	20 933	38 249	410 727	1 853 689	1 775 211	3 612 670	112 500
311	Food mfg	1	11	6	659	16 237	536	911	11 026	105 255	108 405	214 092	4 164
313	Textile mills	1	21	14	2 562	62 997	2 232	5 051	47 038	144 842	204 625	359 354	D
3132	Fabric mills	1	13	11	2 162	53 634	1 894	4 279	40 795	117 371	154 112	282 279	D
31321	Broadwoven fabric mills	-	5	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	5	3	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	5	6	6	833	18 123	701	1 497	14 044	45 875	31 070	77 923	D
315	Apparel mfg	1	42	25	3 655	67 278	3 041	5 436	46 673	132 653	166 417	303 070	6 640
3151	Apparel knitting mills	-	28	18	h	D	D	D	D	D	D	D	6 326
31511	Hosiery & sock mills	-	24	15	h	D	D	D	D	D	D	D	5 298
315111	Sheer hosiery mills	-	15	9	g	D	D	D	D	D	D	D	3 558
315119	Other hosiery & sock mills	-	9	6	f	D	D	D	D	D	D	D	1 740
3152	Cut & sew apparel mfg	5	9	5	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	37	12	820	15 275	696	1 185	11 416	33 901	53 520	85 310	3 773

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RANDOLPH COUNTY, NC—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	-	30	15	2 156	51 998	1 800	3 472	36 731	129 964	167 214	298 474	19 408
3261	Plastics product mfg.....	-	25	13	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg.....	1	5	4	660	13 546	586	1 069	10 365	31 698	49 008	81 281	1 744
326150	Urethane & other foam product (except polystyrene) mfg.....	1	5	4	660	13 546	586	1 069	10 365	31 698	49 008	81 281	1 744
32619	Other plastics product mfg.....	-	10	5	1 011	24 810	807	1 544	16 347	66 757	51 320	118 309	7 719
326199	All other plastics product mfg.....	-	10	5	1 011	24 810	807	1 544	16 347	66 757	51 320	118 309	7 719
332	Fabricated metal product mfg.....	-	41	8	969	28 439	735	1 427	17 617	81 783	68 780	151 072	D
335	Electrical equipment, appliance, & component mfg.....	-	5	5	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33591	Battery mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	106	57	8 205	161 238	7 039	12 009	126 353	393 496	412 322	802 919	16 731
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	67	32	i	D	D	D	D	D	D	D	13 675
33712	Household & institutional furniture mfg.....	-	56	31	i	D	D	D	D	D	D	D	13 107
337121	Upholstered household furniture mfg.....	-	39	23	5 753	110 436	5 050	8 439	91 502	292 421	312 286	602 315	11 560
337122	Nonupholstered wood household furniture mfg.....	-	14	7	f	D	D	D	D	D	D	D	1 518
3372	Office furniture (including fixtures) mfg.....	2	34	23	g	D	D	D	D	D	D	D	3 028
33721	Office furniture (including fixtures) mfg.....	2	34	23	g	D	D	D	D	D	D	D	3 028
337211	Wood office furniture mfg.....	1	8	7	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg.....	1	24	15	843	16 962	699	1 245	12 212	27 639	24 103	51 847	1 233
339	Miscellaneous mfg.....	-	13	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31-33	RICHMOND COUNTY, NC												
	Manufacturing.....	-	58	25	4 814	114 546	4 033	8 013	88 969	384 396	308 608	719 715	15 188
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	-	4	4	1 190	29 131	881	1 842	21 119	97 949	129 221	227 323	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	5	5	1 288	33 457	1 193	2 462	29 534	50 339	33 437	111 110	657
3151	Apparel knitting mills.....	-	4	4	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills....	-	2	2	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills....	-	2	2	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills.....	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	7	6	550	13 418	448	836	9 518	41 770	50 034	90 708	4 847

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROBESON COUNTY, NC													
31-33	Manufacturing	-	96	50	11 890	264 008	10 112	20 314	194 256	1 305 280	1 094 613	2 407 922	40 820
311	Food mfg.....	-	8	5	g	D	D	D	D	D	D	D	11 900
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	5	2	560	10 200	503	1 046	8 851	47 939	67 927	115 860	D
31161	Animal slaughtering & processing.....	1	5	2	560	10 200	503	1 046	8 851	47 939	67 927	115 860	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	-	16	12	3 048	63 224	2 515	5 101	45 604	189 275	257 327	448 716	9 771
3131	Fiber, yarn, & thread mills .	-	3	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	-	3	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	11	9	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills.....	-	8	7	1 936	39 997	1 553	3 189	28 039	151 312	193 337	347 303	3 926
313241	Weft knit fabric mills ..	-	8	7	1 936	39 997	1 553	3 189	28 039	151 312	193 337	347 303	3 926
315	Apparel mfg.....	2	17	15	2 664	41 384	2 385	4 735	34 701	145 906	164 129	315 394	2 949
3151	Apparel knitting mills.....	-	4	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills.....	-	2	2	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	3	13	13	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	4	6	6	958	13 938	849	1 504	11 660	47 973	67 254	121 003	1 892
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	3	4	4	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	7	4	f	D	D	D	D	D	D	D	636
3219	Other wood product mfg...	-	5	3	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	10	3	1 027	23 626	940	1 886	20 164	61 802	102 553	163 406	3 601
3323	Architectural & structural metals mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
ROCKINGHAM COUNTY, NC													
31-33	Manufacturing	-	124	64	13 958	386 995	11 643	23 494	297 248	1 169 048	2 029 645	3 214 369	114 145
312	Beverage & tobacco product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31212	Breweries.....	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	-	24	22	5 069	121 553	4 463	8 942	98 334	349 532	995 068	1 362 412	67 438
3131	Fiber, yarn, & thread mills .	-	17	17	4 103	101 433	3 590	7 369	81 366	305 307	868 771	1 192 275	62 813
31311	Fiber, yarn, & thread mills.....	-	17	17	4 103	101 433	3 590	7 369	81 366	305 307	868 771	1 192 275	62 813
313111	Yarn spinning mills ...	-	6	6	g	D	D	D	D	D	D	D	11 812
313112	Yarn texturing, throwing, & twisting mills.....	-	10	10	2 728	68 035	2 368	4 550	54 289	223 265	626 912	868 999	D
3132	Fabric mills.....	-	6	5	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCKINGHAM COUNTY, NC—Con.												
	Manufacturing—Con.												
314	Textile product mills	—	7	5	2 081	43 147	1 681	3 313	36 083	111 743	134 006	245 836	998
3141	Textile furnishings mills	—	5	3	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	4	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	1	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	2	2	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	2	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	7	6	1 821	45 033	1 563	3 019	34 614	106 750	183 049	291 690	D
3151	Apparel knitting mills	—	4	3	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	3	2	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	3	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	7	5	919	26 014	757	1 819	17 824	37 436	44 538	80 143	5 383
3262	Rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	7	4	515	12 331	447	822	9 655	34 917	20 062	54 911	2 033
332	Fabricated metal product mfg	—	18	6	712	26 881	528	1 215	19 820	69 774	159 541	227 491	7 172
	ROWAN COUNTY, NC												
31-33	Manufacturing	—	201	104	14 324	413 818	11 907	24 391	316 346	1 506 095	2 174 439	3 677 912	94 422
313	Textile mills	1	17	15	3 007	71 099	2 690	5 594	59 376	190 905	225 022	420 135	18 731
3131	Fiber, yarn, & thread mills	2	8	8	1 159	21 062	1 064	1 946	18 486	81 198	103 557	185 899	12 979
31311	Fiber, yarn, & thread mills	2	8	8	1 159	21 062	1 064	1 946	18 486	81 198	103 557	185 899	12 979
313111	Yarn spinning mills	2	8	8	1 159	21 062	1 064	1 946	18 486	81 198	103 557	185 899	12 979
3132	Fabric mills	—	4	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	3	3	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	19	6	687	17 282	622	1 166	15 184	36 769	69 914	105 829	D
3219	Other wood product mfg	—	14	4	568	14 630	534	1 018	13 423	31 911	59 932	91 316	D
32199	All other wood product mfg	—	7	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	13	8	g	D	D	D	D	D	D	D	19 625
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	13	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	22	11	952	26 741	775	1 512	18 415	102 224	60 955	162 843	10 689
3271	Clay product & refractory mfg	—	8	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	29	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	13	9	882	28 351	551	1 125	16 907	54 178	60 054	114 556	D
336	Transportation equipment mfg	—	11	5	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RUTHERFORD COUNTY, NC													
31-33	Manufacturing	-	97	48	11 480	278 595	9 409	18 347	198 540	524 149	983 103	1 514 162	55 782
311	Food mfg.....	-	7	3	581	11 382	503	830	8 972	12 766	61 976	76 555	790
313	Textile mills	-	14	11	5 454	137 923	4 655	9 089	104 740	205 913	547 530	755 824	34 089
3132	Fabric mills	-	7	5	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	6	5	3 818	99 386	3 256	6 334	75 962	111 970	410 891	527 511	D
313210	Broadwoven fabric mills	-	6	5	3 818	99 386	3 256	6 334	75 962	111 970	410 891	527 511	D
3133	Textile & fabric finishing & fabric coating mills	1	5	4	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	2	4	3	f	D	D	D	D	D	D	D	8 405
313311	Broadwoven fabric finishing mills	1	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	4	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	2	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	11	g	D	D	D	D	D	D	D	5 384
3261	Plastics product mfg	-	11	10	g	D	D	D	D	D	D	D	5 384
32619	Other plastics product mfg	-	10	9	1 131	24 680	972	2 063	18 639	68 666	52 330	121 490	D
326199	All other plastics product mfg	-	10	9	1 131	24 680	972	2 063	18 639	68 666	52 330	121 490	D
332	Fabricated metal product mfg	-	12	3	620	12 667	520	1 147	9 183	45 704	70 680	112 164	D
3329	Other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	6	2	f	D	D	D	D	D	D	D	D
SAMPSON COUNTY, NC													
31-33	Manufacturing	-	61	29	4 202	102 390	3 176	6 452	59 902	207 601	560 383	768 477	14 903
311	Food mfg.....	-	7	4	1 341	34 789	999	2 395	22 569	55 741	380 335	435 252	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	9	6	622	8 311	511	834	5 534	33 977	20 853	54 078	656
3152	Cut & sew apparel mfg	-	9	6	622	8 311	511	834	5 534	33 977	20 853	54 078	656
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SCOTLAND COUNTY, NC													
31-33	Manufacturing	1	59	35	8 534	233 982	7 422	16 100	174 926	716 143	826 344	1 533 308	53 124
313	Textile mills	1	8	7	1 651	41 579	1 467	3 233	34 379	77 835	112 833	193 514	6 970
3131	Fiber, yarn, & thread mills	—	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	3	3	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	—	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	2	4	4	1 037	28 395	911	2 011	23 680	53 313	77 249	133 429	5 399
31321	Broadwoven fabric mills	2	4	4	1 037	28 395	911	2 011	23 680	53 313	77 249	133 429	5 399
313210	Broadwoven fabric mills	2	4	4	1 037	28 395	911	2 011	23 680	53 313	77 249	133 429	5 399
314	Textile product mills	2	4	4	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	2	2	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	1	1	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	8	6	879	22 885	774	1 606	18 352	50 641	99 371	150 298	1 415
3219	Other wood product mfg	—	7	5	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	3	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	5	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	4	660	20 580	485	1 110	11 135	78 153	87 178	165 946	D
3363	Motor vehicle parts mfg	—	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	2	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	1	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	1	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D
STANLY COUNTY, NC													
31-33	Manufacturing	—	124	60	8 086	210 303	6 544	13 760	152 120	547 139	629 769	1 167 548	53 212
313	Textile mills	—	16	12	1 919	44 586	1 681	3 897	35 794	124 505	101 477	227 440	22 970
3131	Fiber, yarn, & thread mills	—	4	3	792	18 948	681	1 681	15 021	47 720	57 684	106 552	7 705
31311	Fiber, yarn, & thread mills	—	4	3	792	18 948	681	1 681	15 021	47 720	57 684	106 552	7 705
313111	Yarn spinning mills	—	4	3	792	18 948	681	1 681	15 021	47 720	57 684	106 552	7 705
3133	Textile & fabric finishing & fabric coating mills	—	5	4	874	21 698	790	1 810	17 562	67 242	38 061	105 672	D
31331	Textile & fabric finishing mills	—	5	4	874	21 698	790	1 810	17 562	67 242	38 061	105 672	D
314	Textile product mills	—	7	5	913	18 141	835	1 641	15 301	38 264	92 496	129 998	D
3141	Textile furnishings mills	—	5	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	25	15	1 266	23 089	992	2 019	13 872	42 587	30 405	71 678	621
3151	Apparel knitting mills	—	12	6	814	14 682	646	1 404	9 079	30 640	23 185	51 850	479
31519	Other apparel knitting mills	1	6	1	635	11 870	554	1 194	7 531	25 149	16 512	39 684	D
315191	Outerwear knitting mills	1	6	1	635	11 870	554	1 194	7 531	25 149	16 512	39 684	D
321	Wood product mfg	—	14	6	1 327	38 119	1 032	2 144	26 882	92 436	131 107	222 744	2 848
3219	Other wood product mfg	—	11	5	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	5	4	1 185	32 717	919	1 894	23 630	68 586	107 479	175 440	643
321991	Manufactured home (mobile home) mfg	—	4	4	g	D	D	D	D	D	D	D	643
326	Plastics & rubber products mfg	—	5	3	670	23 653	584	1 185	20 601	48 132	45 066	89 750	D
3262	Rubber product mfg	—	4	2	f	D	D	D	D	D	D	D	D
32621	Tire mfg	—	2	1	f	D	D	D	D	D	D	D	D
STOKES COUNTY, NC													
31-33	Manufacturing	1	33	11	1 218	36 950	958	2 014	21 866	75 125	93 947	167 728	D
331	Primary metal mfg	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SURRY COUNTY, NC													
31-33	Manufacturing	—	149	65	14 915	300 052	13 186	27 052	238 495	762 303	969 447	1 697 308	58 182
311	Food mfg	—	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	—	10	6	2 477	52 700	2 178	4 970	43 088	112 056	298 207	410 084	8 482
3132	Fabric mills	—	5	3	1 768	38 298	1 546	3 721	31 349	81 456	166 328	247 993	5 184
31321	Broadwoven fabric mills	—	2	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	2	1	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	3	2	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	3	2	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	42	25	6 960	128 619	6 257	12 907	106 220	321 458	282 408	575 498	14 165
3151	Apparel knitting mills	—	26	17	5 686	108 618	5 193	10 926	91 382	267 212	207 788	445 832	12 441
31511	Hosiery & sock mills	—	22	13	3 984	73 347	3 720	7 931	63 690	162 447	111 643	253 920	9 443
315119	Other hosiery & sock mills	—	22	13	3 984	73 347	3 720	7 931	63 690	162 447	111 643	253 920	9 443
31519	Other apparel knitting mills	1	4	4	1 702	35 271	1 473	2 995	27 692	104 765	96 145	191 912	2 998
315191	Outerwear knitting mills	2	3	3	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	15	8	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	5	3	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	4	1 102	20 099	1 055	2 158	18 484	48 571	42 228	89 840	1 144
3371	Household & institutional furniture & kitchen cabinet mfg	—	7	4	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	5	4	1 081	19 860	1 038	2 142	18 320	48 173	41 883	89 094	D
337122	Nonupholstered wood household furniture mfg	—	4	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	8	3	667	12 084	546	787	6 354	45 353	22 960	67 547	D
3399	Other miscellaneous mfg	—	6	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
TRANSYLVANIA COUNTY, NC													
31-33	Manufacturing	6	28	10	3 071	119 324	2 337	5 076	79 708	435 503	276 064	715 127	27 388
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	9	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	9	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNION COUNTY, NC													
31-33	Manufacturing	-	228	90	13 113	356 856	10 261	20 117	223 607	1 256 260	1 321 735	2 543 492	94 110
311	Food mfg.....	-	12	6	2 092	40 027	1 943	4 040	30 974	282 603	308 844	597 547	2 567
3116	Meat product mfg.....	-	6	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	6	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	5	3	g	D	D	D	D	D	D	D	D
313	Textile mills.....	1	6	4	593	13 814	504	1 012	10 885	46 756	97 461	142 373	5 064
315	Apparel mfg.....	1	14	9	905	14 949	815	1 420	10 796	28 238	49 430	76 906	888
321	Wood product mfg.....	-	17	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	22	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	2	22	5	f	D	D	D	D	D	D	D	D
32311	Printing.....	2	22	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	14	7	1 013	26 785	859	1 592	20 808	74 075	136 966	196 603	22 833
3261	Plastics product mfg.....	-	12	6	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	48	11	1 311	40 934	1 025	2 099	28 283	103 079	56 034	158 271	9 907
333	Machinery mfg.....	-	18	9	941	34 395	526	990	14 457	84 672	57 478	138 471	15 918
3332	Industrial machinery mfg ..	-	8	5	587	19 198	347	636	8 546	54 576	41 393	90 572	D
33329	Other industrial machinery mfg.....	-	8	5	587	19 198	347	636	8 546	54 576	41 393	90 572	D
333292	Textile machinery mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	3	7	6	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	6	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	9	3	f	D	D	D	D	D	D	D	D
VANCE COUNTY, NC													
31-33	Manufacturing	-	53	32	5 085	119 204	4 217	8 598	80 916	464 552	777 935	1 217 961	24 004
313	Textile mills.....	-	7	6	1 104	25 417	1 006	2 242	21 169	57 463	117 018	175 664	D
3131	Fiber, yarn, & thread mills .	-	4	4	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	-	4	4	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	3	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	3	3	625	9 913	559	949	7 293	14 202	5 742	19 929	374
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	4	4	861	20 134	722	1 507	10 582	47 157	28 992	73 759	D
3151	Apparel knitting mills.....	-	4	4	861	20 134	722	1 507	10 582	47 157	28 992	73 759	D
31511	Hosiery & sock mills.....	-	3	3	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	4	8	5	624	12 583	484	924	8 997	39 310	83 189	121 267	1 448

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
WAKE COUNTY, NC													
31-33	Manufacturing	-	639	173	23 789	784 696	15 855	30 013	388 315	6 075 313	4 428 544	10 419 983	173 859
311	Food mfg	-	25	7	2 408	64 505	1 974	3 389	45 881	149 812	312 615	460 136	16 742
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	12	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	1	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	6	12	8	f	D	D	D	D	D	D	D	577
3152	Cut & sew apparel mfg	6	8	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	26	11	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	8	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	8	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	8	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	125	15	1 380	37 045	1 014	1 832	23 896	78 340	55 388	133 283	6 385
3231	Printing & related support activities	2	125	15	1 380	37 045	1 014	1 832	23 896	78 340	55 388	133 283	6 385
32311	Printing	2	111	14	g	D	D	D	D	D	D	D	6 249
323110	Commercial lithographic printing ..	2	60	10	806	24 437	578	1 155	15 921	47 182	31 800	78 709	2 935
325	Chemical mfg	-	22	13	g	D	D	D	D	D	D	D	44 191
3254	Pharmaceutical & medicine mfg	-	8	7	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	8	7	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	3	3	847	38 983	649	1 389	24 984	119 697	127 930	261 815	D
325412	Pharmaceutical preparation mfg	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	21	11	1 480	50 465	894	1 957	21 105	232 080	113 677	342 214	9 904
3261	Plastics product mfg	-	19	11	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	2	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	2	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	13	9	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	12	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	38	9	544	16 406	437	847	11 492	52 800	57 721	111 459	8 116
332	Fabricated metal product mfg	-	73	23	2 606	90 653	1 922	4 030	53 713	237 546	142 614	381 256	16 260
3323	Architectural & structural metals mfg	-	20	9	f	D	D	D	D	D	D	D	3 895
33232	Ornamental & architectural metal products mfg	-	16	7	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	-	12	7	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	10	5	f	D	D	D	D	D	D	D	6 396
33291	Metal valve mfg	-	5	4	556	19 317	352	714	9 275	70 793	32 129	102 630	6 160
333	Machinery mfg	1	35	9	f	D	D	D	D	D	D	D	6 434
334	Computer & electronic product mfg	-	79	31	i	D	D	D	D	D	D	D	31 924
3341	Computer & peripheral equipment mfg	-	15	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	15	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	11	8	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAKE COUNTY, NC—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	27	12	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	27	12	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	1	7	6	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	21	7	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	21	7	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	19	9	2 407	96 976	1 206	2 505	32 072	262 549	458 709	725 084	16 756
3353	Electrical equipment mfg ..	-	10	5	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	10	5	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	5	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	8	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	6	63	9	f	D	D	D	D	D	D	D	2 558
WARREN COUNTY, NC													
31-33	Manufacturing	-	13	9	813	15 310	757	1 435	13 587	36 558	60 314	95 545	6 171
WASHINGTON COUNTY, NC													
31-33	Manufacturing	-	15	7	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
WATAUGA COUNTY, NC													
31-33	Manufacturing	1	56	9	1 223	24 762	1 014	1 622	18 322	54 539	41 548	97 431	3 034
WAYNE COUNTY, NC													
31-33	Manufacturing	-	101	44	9 495	231 053	7 597	12 716	159 152	646 669	762 695	1 417 451	47 660
311	Food mfg	1	13	7	3 820	84 799	2 980	3 136	53 534	248 070	351 013	603 620	19 587
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	6	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	6	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	9	2	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	9	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	6	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	6	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	6	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	4	580	7 315	481	950	6 355	3 597	18 602	22 309	D
321	Wood product mfg	-	9	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAYNE COUNTY, NC—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	4	748	25 103	577	1 212	17 108	74 404	49 498	120 689	5 874
3353	Electrical equipment mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
WILKES COUNTY, NC													
31-33	Manufacturing	-	108	40	8 082	168 069	7 025	13 423	129 358	403 730	672 244	1 081 153	16 707
311	Food mfg	-	7	6	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	3	13	11	1 996	35 367	1 803	3 298	28 836	62 942	96 115	168 156	2 976
3151	Apparel knitting mills	5	4	4	f	D	D	D	D	D	D	D	2 265
31511	Hosiery & sock mills	1	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	23	6	998	23 600	860	1 562	18 761	111 188	68 085	174 340	3 877
327	Nonmetallic mineral product mfg	-	10	2	715	13 536	564	1 098	8 967	34 645	41 325	75 932	2 529
3272	Glass & glass product mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	5	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	5	1 114	26 418	951	1 904	20 020	47 901	48 093	97 939	1 117
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	5	1 114	26 418	951	1 904	20 020	47 901	48 093	97 939	1 117
33712	Household & institutional furniture mfg	-	6	5	g	D	D	D	D	D	D	D	1 117
337122	Nonupholstered wood household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
WILSON COUNTY, NC													
31-33	Manufacturing	-	96	39	8 954	288 119	7 218	14 940	195 795	2 605 937	2 388 685	4 980 319	103 639
312	Beverage & tobacco product mfg	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
3122	Tobacco mfg	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
31221	Tobacco stemming & redrying	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
312210	Tobacco stemming & redrying	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILSON COUNTY, NC													
—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	—	10	7	2 631	95 100	2 241	4 468	74 592	229 547	231 724	457 507	29 390
3261	Plastics product mfg	1	7	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	2	1	g	D	D	D	D	D	D	D	D
YADKIN COUNTY, NC													
31-33	Manufacturing	—	43	17	3 616	94 502	3 068	6 148	68 172	231 671	551 579	787 309	D
313	Textile mills	—	4	3	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	—	2	2	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	2	2	g	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	—	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	4	3	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	3	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	—	1	1	f	D	D	D	D	D	D	D	D
YANCEY COUNTY, NC													
31-33	Manufacturing	—	21	13	1 645	39 276	1 369	2 742	28 193	92 364	279 403	373 390	4 776
313	Textile mills	—	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABERDEEN, NC													
31-33	Manufacturing	1	22	9	1 191	29 341	909	1 748	16 433	111 476	118 833	229 508	7 956
AHOSKIE, NC													
31-33	Manufacturing	—	9	6	532	11 444	423	893	8 036	38 113	104 546	145 912	6 685
ALBEMARLE, NC													
31-33	Manufacturing	—	50	26	3 363	81 346	2 706	5 795	59 279	199 415	278 755	479 559	28 138
313	Textile mills	—	8	8	1 310	31 594	1 144	2 642	24 766	85 707	77 627	164 927	D
3133	Textile & fabric finishing & fabric coating mills	—	4	4	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	4	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	5	2	f	D	D	D	D	D	D	D	500

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANDREWS, NC													
31-33	Manufacturing	-	7	2	671	10 939	597	918	8 944	18 924	21 510	40 299	736
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
APEX, NC													
31-33	Manufacturing	-	22	10	g	D	D	D	D	D	D	D	16 973
332	Fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
ARCHDALE, NC *													
31-33	Manufacturing	2	40	20	1 441	33 419	1 173	2 208	23 577	70 719	87 080	157 327	3 216
337	Furniture & related product mfg	2	14	10	541	9 980	448	766	7 669	25 005	25 063	49 080	815
ASHEBORO, NC													
31-33	Manufacturing	-	89	47	9 211	223 029	7 622	14 003	164 730	978 623	898 762	1 853 152	60 319
313	Textile mills	2	8	7	1 083	25 048	928	2 071	19 417	64 710	109 217	174 338	D
3132	Fabric mills	4	6	6	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	6	4	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	18	12	1 946	40 294	1 526	2 860	27 182	68 581	113 393	184 756	2 924
3151	Apparel knitting mills	-	12	9	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	9	7	g	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	1	5	4	867	19 574	739	1 439	13 504	19 491	36 324	57 183	D
315119	Other hosiery & sock mills	-	4	3	f	D	D	D	D	D	D	D	642
326	Plastics & rubber products mfg	-	7	5	1 263	29 441	1 071	1 957	21 295	82 477	102 406	184 376	13 329
3261	Plastics product mfg	-	6	4	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	4	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33591	Battery mfg	-	2	2	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	-	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ASHEVILLE, NC													
31-33	Manufacturing	-	142	48	6 168	164 746	4 631	9 494	107 604	628 646	779 981	1 405 312	26 235
311	Food mfg	2	5	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	4	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	1 080	32 437	745	1 670	19 900	84 486	330 188	415 196	D
3363	Motor vehicle parts mfg ...	-	5	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D
BELMONT, NC													
31-33	Manufacturing	1	38	27	2 723	63 688	2 347	5 032	51 123	159 575	254 148	414 265	16 215
313	Textile mills	-	19	16	1 871	43 049	1 702	3 638	36 543	112 748	202 958	315 573	13 726
3131	Fiber, yarn, & thread mills .	-	10	10	1 107	25 004	1 014	2 299	22 169	72 688	136 126	208 739	11 498
31311	Fiber, yarn, & thread mills	-	10	10	1 107	25 004	1 014	2 299	22 169	72 688	136 126	208 739	11 498
313111	Yarn spinning mills ...	-	10	10	1 107	25 004	1 014	2 299	22 169	72 688	136 126	208 739	11 498
3133	Textile & fabric finishing & fabric coating mills	-	5	4	573	14 006	522	953	11 358	34 506	60 024	94 296	D
31331	Textile & fabric finishing mills	-	5	4	573	14 006	522	953	11 358	34 506	60 024	94 296	D
313312	Textile & fabric finishing mills	-	4	4	f	D	D	D	D	D	D	D	D
BENSON, NC													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
BESSEMER CITY, NC													
31-33	Manufacturing	-	13	5	932	35 266	620	1 284	18 850	111 235	38 924	146 335	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLACK MOUNTAIN, NC													
31-33	Manufacturing	-	14	6	1 388	35 099	1 159	2 109	24 438	55 694	54 917	112 203	3 839
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
BOONE, NC													
31-33	Manufacturing	1	20	5	840	16 548	684	1 057	12 298	33 132	28 883	63 391	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BURLINGTON, NC													
31-33	Manufacturing	-	110	58	8 811	208 566	7 241	14 648	147 652	600 468	833 411	1 435 558	53 268
313	Textile mills	-	15	12	2 560	62 889	2 230	5 032	48 542	164 327	398 134	564 381	32 667
3133	Textile & fabric finishing & fabric coating mills	-	8	7	1 896	45 831	1 659	3 770	35 547	129 268	353 045	484 694	D
31331	Textile & fabric finishing mills	-	8	7	1 896	45 831	1 659	3 770	35 547	129 268	353 045	484 694	D
313311	Broadwoven fabric finishing mills	-	4	3	1 009	22 480	889	2 018	18 040	81 222	240 861	319 265	D
313312	Textile & fabric finishing mills	-	4	4	887	23 351	770	1 752	17 507	48 046	112 184	165 429	4 370
314	Textile product mills	-	6	3	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	3	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	3	2	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	23	17	2 849	52 910	2 568	4 648	41 814	133 632	161 818	291 996	6 579
3151	Apparel knitting mills	-	23	17	2 849	52 910	2 568	4 648	41 814	133 632	161 818	291 996	6 579
31511	Hosiery & sock mills	-	23	17	2 849	52 910	2 568	4 648	41 814	133 632	161 818	291 996	6 579
315111	Sheer hosiery mills	-	4	3	695	12 395	606	1 034	9 136	37 345	29 717	64 319	941
315119	Other hosiery & sock mills	-	19	14	2 154	40 515	1 962	3 614	32 678	96 287	132 101	227 677	5 638
325	Chemical mfg	3	5	4	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	3	4	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	3	4	4	f	D	D	D	D	D	D	D	D
CANTON, NC													
31-33	Manufacturing	-	8	3	1 620	80 041	1 221	2 432	57 598	136 977	229 171	364 452	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
CARY, NC *													
31-33	Manufacturing	-	65	15	2 767	89 319	2 102	3 909	53 826	217 430	171 023	384 692	16 426
311	Food mfg	-	5	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	4	1	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	1	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	1	g	D	D	D	D	D	D	D	D
CHARLOTTE, NC													
31-33	Manufacturing	-	787	245	31 811	1 058 526	20 279	42 892	565 410	3 235 192	3 278 853	6 504 029	213 473
311	Food mfg	-	28	11	i	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	17	6	i	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	14	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	8	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	3	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	h	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	6	3	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	5	3	f	D	D	D	D	D	D	D	D
313	Textile mills	4	23	7	f	D	D	D	D	D	D	D	3 524
314	Textile product mills	-	20	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	13	3	549	11 377	501	1 009	8 403	29 738	40 625	67 373	548
322	Paper mfg	-	20	15	1 596	57 634	1 218	2 589	38 630	144 200	145 472	288 647	9 200
3222	Converted paper product mfg	-	19	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	12	10	g	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	3	3	523	20 361	374	722	14 182	54 689	40 140	94 731	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHARLOTTE, NC—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	169	35	3 019	107 211	2 120	4 353	67 081	209 780	152 197	363 244	25 652
3231	Printing & related support activities.....	1	169	35	3 019	107 211	2 120	4 353	67 081	209 780	152 197	363 244	25 652
32311	Printing.....	1	136	24	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	58	16	1 159	38 424	807	1 631	23 610	78 975	81 171	159 788	D
32312	Support activities for printing.....	1	33	11	f	D	D	D	D	D	D	D	D
323122	Prepress services	1	25	9	f	D	D	D	D	D	D	D	2 897
325	Chemical mfg	3	62	20	2 103	87 201	1 039	2 132	34 840	295 956	303 918	594 427	37 682
3251	Basic chemical mfg	—	7	3	565	23 132	213	439	9 451	84 660	71 060	155 398	D
32513	Dye & pigment mfg	—	4	2	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	33	14	3 205	109 682	2 511	4 742	75 443	352 330	304 156	646 340	26 490
3261	Plastics product mfg	1	24	10	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	12	4	648	19 522	394	750	8 046	23 813	32 875	56 730	D
326199	All other plastics product mfg	—	10	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	9	4	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	5	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	23	8	686	19 728	562	1 262	15 055	56 729	50 930	107 605	5 117
3273	Cement & concrete product mfg	5	12	7	f	D	D	D	D	D	D	D	4 785
331	Primary metal mfg	—	6	3	f	D	D	D	D	D	D	D	D
3315	Foundries	—	4	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	121	40	3 027	94 969	2 261	4 649	59 627	160 330	220 687	382 794	15 256
3323	Architectural & structural metals mfg	—	26	6	631	21 373	374	706	10 599	10 999	102 949	114 220	2 770
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	38	8	511	16 236	402	799	10 503	23 945	16 772	41 286	D
333	Machinery mfg	1	82	32	2 555	88 519	1 497	3 000	43 016	228 991	180 007	402 914	11 424
3332	Industrial machinery mfg ..	—	31	12	831	28 015	419	820	11 787	91 212	61 416	146 594	5 150
33329	Other industrial machinery mfg	—	27	10	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	17	10	669	23 121	368	713	9 806	53 507	33 576	87 916	D
33399	All other general-purpose machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	24	11	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	10	5	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	10	5	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	2	2	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	70	14	1 345	43 631	886	1 711	21 127	93 636	85 852	173 407	6 242
3391	Medical equipment & supplies mfg	1	29	6	594	22 285	389	764	10 638	48 923	51 955	95 180	D
33911	Medical equipment & supplies mfg	1	29	6	594	22 285	389	764	10 638	48 923	51 955	95 180	D
3399	Other miscellaneous mfg ..	2	41	8	751	21 346	497	947	10 489	44 713	33 897	78 227	D
	CHERRYVILLE, NC												
31-33	Manufacturing	—	17	7	1 097	23 646	982	2 010	18 940	65 037	70 524	133 807	D
313	Textile mills.....	—	7	3	513	10 561	460	1 038	8 750	31 568	44 806	74 850	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHINA GROVE, NC													
31-33	Manufacturing	-	10	3	597	11 824	536	940	10 001	26 811	33 881	61 919	3 485
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	2	2	f	D	D	D	D	D	D	D	D
CLAYTON, NC													
31-33	Manufacturing	4	13	7	g	D	D	D	D	D	D	D	37 244
325	Chemical mfg	9	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	9	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	9	2	2	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	9	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON, NC													
31-33	Manufacturing	-	26	12	2 063	49 962	1 590	3 547	33 857	63 816	397 386	465 017	7 583
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
CONCORD, NC													
31-33	Manufacturing	-	78	32	6 253	225 383	4 667	9 261	148 204	5 678 518	1 285 857	6 968 576	245 230
312	Beverage & tobacco product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	5	10	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	6	14	6	f	D	D	D	D	D	D	D	1 275
3151	Apparel knitting mills	7	10	4	698	10 704	609	1 030	8 273	22 011	22 254	47 207	D
31511	Hosiery & sock mills	7	10	4	698	10 704	609	1 030	8 273	22 011	22 254	47 207	D
315111	Sheer hosiery mills	7	9	3	f	D	D	D	D	D	D	D	D
CONOVER, NC													
31-33	Manufacturing	1	84	57	7 707	195 160	6 397	12 251	140 296	519 195	479 371	993 555	49 942
314	Textile product mills	-	4	3	582	10 413	478	925	8 034	47 456	16 624	58 773	D
326	Plastics & rubber products mfg	-	11	8	1 142	28 651	962	1 721	18 257	82 108	88 890	170 371	12 885
3261	Plastics product mfg	-	10	7	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	6	6	671	17 195	588	1 009	12 409	54 539	65 120	119 886	D
326150	Urethane & other foam product (except polystyrene) mfg	-	6	6	671	17 195	588	1 009	12 409	54 539	65 120	119 886	D
337	Furniture & related product mfg	1	28	22	3 639	89 391	3 039	5 899	66 117	180 386	168 112	347 885	4 473
3371	Household & institutional furniture & kitchen cabinet mfg	1	25	20	3 557	87 596	2 962	5 757	64 618	176 987	166 608	342 992	4 416
33712	Household & institutional furniture mfg	1	24	20	h	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	2	18	15	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	4	3	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
DAVIDSON, NC *													
31-33	Manufacturing	-	7	5	763	24 801	437	891	10 857	66 447	127 318	193 698	1 828
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
DUNN, NC													
31-33	Manufacturing	1	24	10	1 735	40 932	1 452	2 907	24 950	84 152	89 133	171 966	5 669
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	-	1	1	g	D	D	D	D	D	D	D	D
DURHAM, NC *													
31-33	Manufacturing	1	123	37	i	D	D	D	D	D	D	D	53 712
314	Textile product mills	8	4	2	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	9	2	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	9	2	1	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	9	2	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	7	3	755	40 999	298	603	11 266	99 414	65 193	165 106	D
3254	Pharmaceutical & medicine mfg	2	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	2	3	2	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	5	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	5	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	3	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
EDEN, NC													
31-33	Manufacturing	-	22	11	3 787	111 860	3 230	6 614	85 541	501 895	621 951	1 122 842	31 961
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	5	5	g	D	D	D	D	D	D	D	8 729
3131	Fiber, yarn, & thread mills .	-	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	2	2	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	2	2	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	2	2	g	D	D	D	D	D	D	D	D
EDENTON, NC													
31-33	Manufacturing	-	11	6	674	14 701	585	1 264	11 195	30 939	44 761	76 436	D
ELIZABETH CITY, NC *													
31-33	Manufacturing	1	26	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ELIZABETHTOWN, NC													
31-33	Manufacturing	-	11	7	1 281	30 460	1 025	1 912	20 504	4 727	145 830	154 568	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
ELKIN, NC *													
31-33	Manufacturing	-	17	5	2 244	44 472	2 000	4 410	37 519	103 403	117 347	218 649	4 228
313	Textile mills	-	2	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELON COLLEGE, NC													
31-33	Manufacturing	-	6	3	626	13 907	476	773	9 029	78 221	39 321	120 352	4 623
ERWIN, NC													
31-33	Manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
FARMVILLE, NC													
31-33	Manufacturing	-	18	9	g	D	D	D	D	D	D	D	5 879
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
FAYETTEVILLE, NC													
31-33	Manufacturing	-	78	36	9 100	295 112	7 503	14 836	223 238	1 107 190	1 077 499	2 169 990	75 624
315	Apparel mfg	-	5	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	h	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLETCHER, NC													
31-33	Manufacturing	-	18	8	1 953	65 859	1 515	3 635	46 163	177 352	177 443	352 767	22 288
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337211	Wood office furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
FOREST CITY, NC													
31-33	Manufacturing	-	30	14	3 166	76 599	2 694	5 052	55 436	167 023	270 442	446 184	8 924
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	7	996	21 789	843	1 795	16 328	62 127	47 503	110 005	5 193
3261	Plastics product mfg	-	7	7	996	21 789	843	1 795	16 328	62 127	47 503	110 005	5 193
32619	Other plastics product mfg	-	6	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	6	f	D	D	D	D	D	D	D	D
FRANKLIN, NC													
31-33	Manufacturing	2	15	6	811	19 781	664	1 425	13 776	48 107	47 024	88 692	4 637
FUQUAY-VARINA, NC													
31-33	Manufacturing	-	17	9	1 657	53 230	1 064	2 251	25 595	227 434	134 668	358 158	8 984
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
GASTONIA, NC													
31-33	Manufacturing	-	211	80	12 666	360 045	10 120	20 778	261 541	1 193 568	1 186 692	2 385 766	80 870
313	Textile mills	1	24	18	3 175	75 013	2 743	6 059	57 310	175 037	356 154	535 341	20 319
3131	Fiber, yarn, & thread mills	-	10	8	1 601	37 408	1 438	3 143	30 134	86 050	143 857	230 870	13 837
31311	Fiber, yarn, & thread mills	-	10	8	1 601	37 408	1 438	3 143	30 134	86 050	143 857	230 870	13 837
313111	Yarn spinning mills	-	8	7	g	D	D	D	D	D	D	D	D
3132	Fabric mills	6	7	5	820	20 601	647	1 360	14 282	36 345	27 673	64 024	2 443
31324	Knit fabric mills	6	5	5	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	6	4	4	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	7	5	754	17 004	658	1 556	12 894	52 642	184 624	240 447	4 039
31331	Textile & fabric finishing mills	-	6	4	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	4	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	4	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	60	11	1 675	50 590	1 350	2 558	34 342	152 796	165 853	318 715	7 408
3322	Cutlery & handtool mfg	-	2	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	2	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GASTONIA, NC—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	2	39	11	885	26 976	578	1 128	14 400	53 984	37 780	91 088	2 055
3332	Industrial machinery mfg ..	2	29	8	686	20 868	454	899	11 186	39 593	28 459	67 029	1 553
33329	Other industrial machinery mfg	2	29	8	686	20 868	454	899	11 186	39 593	28 459	67 029	1 553
333292	Textile machinery mfg	2	25	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	3	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	h	D	D	D	D	D	D	D	D
GOLDSBORO, NC													
31-33	Manufacturing	1	64	27	4 644	116 076	3 294	6 659	72 290	305 196	270 063	579 783	25 222
311	Food mfg	8	7	4	853	20 040	290	565	5 697	48 648	51 533	100 152	D
3118	Bakeries & tortilla mfg	9	2	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	9	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	2	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	3	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
GRAHAM, NC													
31-33	Manufacturing	2	43	24	2 636	69 453	2 109	4 475	44 224	179 786	243 492	412 412	15 398
313	Textile mills	5	9	7	1 126	25 977	969	2 209	20 421	49 279	85 269	134 366	5 131
3132	Fabric mills	5	7	6	f	D	D	D	D	D	D	D	D
GRANITE FALLS, NC													
31-33	Manufacturing	—	25	16	1 557	35 463	1 312	2 408	24 961	92 500	87 456	178 128	4 069
GREENSBORO, NC													
31-33	Manufacturing	3	411	158	21 305	711 528	14 979	29 582	416 689	3 497 301	2 419 842	5 903 619	167 068
311	Food mfg	1	14	11	1 060	24 912	542	1 074	9 937	63 061	125 479	187 709	4 009
3116	Meat product mfg	1	4	4	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	4	4	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	9	3	2	g	D	D	D	D	D	D	D	D
3122	Tobacco mfg	9	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	9	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	9	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	—	23	14	4 084	105 595	3 531	6 798	80 306	268 254	499 740	772 616	24 789
3132	Fabric mills	—	12	8	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	—	3	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	3	1	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	—	8	7	g	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	—	5	5	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	1	10	5	811	21 795	615	1 491	14 698	69 985	138 583	210 336	D
31331	Textile & fabric finishing mills	2	8	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	4	12	7	524	18 876	382	891	12 588	50 019	63 996	115 170	2 269
3222	Converted paper product mfg	4	12	7	524	18 876	382	891	12 588	50 019	63 996	115 170	2 269

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GREENSBORO, NC—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	-	87	22	2 366	69 564	1 655	3 482	42 285	197 870	75 120	273 028	9 207
3231	Printing & related support activities.....	-	87	22	2 366	69 564	1 655	3 482	42 285	197 870	75 120	273 028	9 207
32311	Printing.....	-	77	18	2 151	61 497	1 507	3 177	37 522	180 501	72 641	253 193	D
323110	Commercial lithographic printing ..	-	50	11	1 205	37 879	851	1 771	21 758	95 622	45 616	140 642	6 632
323116	Manifold business form printing.....	-	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	25	15	1 857	73 319	1 205	2 173	34 479	637 685	522 323	1 149 072	28 600
3259	Other chemical product mfg.....	-	7	3	747	36 605	489	735	12 968	108 437	293 341	404 772	D
32599	All other chemical product & preparation mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	22	11	721	20 389	532	1 199	12 630	55 385	52 587	107 791	4 547
3261	Plastics product mfg.....	1	19	10	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	61	24	1 436	44 448	1 045	2 044	26 490	85 263	85 077	171 812	6 132
333	Machinery mfg.....	-	32	11	2 439	94 119	1 323	2 723	41 050	184 755	319 431	511 547	12 052
3339	Other general-purpose machinery mfg.....	-	7	4	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	14	9	2 386	88 467	1 490	2 645	43 575	294 598	166 159	447 710	D
3344	Semiconductor & other electronic component mfg.....	-	7	5	g	D	D	D	D	D	D	D	35 970
33441	Semiconductor & other electronic component mfg.....	-	7	5	g	D	D	D	D	D	D	D	35 970
334413	Semiconductor & related device mfg...	-	2	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	37	7	974	31 315	691	1 293	18 142	70 445	82 183	150 107	D
3399	Other miscellaneous mfg ..	-	20	5	f	D	D	D	D	D	D	D	D
	GREENVILLE, NC												
31-33	Manufacturing	-	60	23	4 006	143 460	2 646	5 254	76 255	1 330 242	477 856	1 827 235	D
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	2	5	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENDERSON, NC													
31-33	Manufacturing	1	35	24	h	D	D	D	D	D	D	D	D
313	Textile mills	-	6	5	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	4	4	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	3	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	3	3	625	9 913	559	949	7 293	14 202	5 742	19 929	374
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	861	20 134	722	1 507	10 582	47 157	28 992	73 759	D
3151	Apparel knitting mills	-	4	4	861	20 134	722	1 507	10 582	47 157	28 992	73 759	D
31511	Hosiery & sock mills	-	3	3	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	5	5	3	f	D	D	D	D	D	D	D	D
HENDERSONVILLE, NC													
31-33	Manufacturing	1	42	8	1 649	48 762	1 335	2 793	33 385	146 708	180 923	321 035	13 767
313	Textile mills	2	2	2	f	D	D	D	D	D	D	D	D
HICKORY, NC *													
31-33	Manufacturing	-	253	125	17 501	441 105	14 497	27 884	320 464	965 332	1 287 713	2 235 803	65 008
313	Textile mills	-	14	12	1 921	51 420	1 717	3 757	43 029	110 842	190 034	296 084	5 718
3132	Fabric mills	-	6	4	1 235	34 368	1 140	2 536	30 486	72 522	121 508	188 861	D
31321	Broadwoven fabric mills .	-	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	45	21	1 932	39 428	1 618	3 229	29 196	71 426	82 486	150 466	D
3151	Apparel knitting mills	2	42	20	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	2	41	20	1 892	38 696	1 582	3 164	28 677	70 457	81 980	148 982	4 548
315111	Sheer hosiery mills ...	-	10	4	825	17 869	693	1 361	13 619	32 459	31 975	62 018	2 412
315119	Other hosiery & sock mills	4	31	16	1 067	20 827	889	1 803	15 058	37 998	50 005	86 964	2 136
322	Paper mfg	1	5	3	510	14 679	452	918	11 397	42 090	56 176	100 139	D
3222	Converted paper product mfg	1	5	3	510	14 679	452	918	11 397	42 090	56 176	100 139	D
326	Plastics & rubber products mfg	-	13	8	659	16 870	491	769	10 973	39 125	66 281	105 829	8 809
3261	Plastics product mfg	-	9	8	622	15 802	460	707	10 144	36 698	63 988	101 091	D
332	Fabricated metal product mfg	1	18	4	762	15 455	655	1 059	10 233	35 196	31 595	67 072	1 763
335	Electrical equipment, appliance, & component mfg	-	6	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	g	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	78	48	7 681	188 421	6 397	11 680	140 119	373 573	334 401	705 904	11 855
3371	Household & institutional furniture & kitchen cabinet mfg	-	62	37	7 008	172 582	5 862	10 771	129 952	347 438	312 091	658 269	11 320
33712	Household & institutional furniture mfg	-	59	37	6 999	172 428	5 854	10 760	129 834	347 104	311 808	657 650	11 303
337121	Upholstered household furniture mfg	-	47	30	5 577	140 575	4 711	8 599	105 165	262 665	258 123	519 788	D
337122	Nonupholstered wood household furniture mfg	1	10	6	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	15	10	f	D	D	D	D	D	D	D	535
33721	Office furniture (including fixtures) mfg	-	15	10	f	D	D	D	D	D	D	D	535

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	HIGH POINT, NC *												
31-33	Manufacturing	1	288	134	17 182	464 995	13 076	26 232	298 193	972 213	1 292 573	2 247 888	66 225
314	Textile product mills.....	2	25	9	742	17 863	592	1 248	11 589	33 585	41 162	74 760	D
3149	Other textile product mills...	2	17	8	f	D	D	D	D	D	D	D	2 756
31499	All other textile product mills	2	16	7	568	14 227	453	993	9 446	28 309	34 189	62 492	2 756
314999	All other miscellaneous textile product mills ..	2	16	7	568	14 227	453	993	9 446	28 309	34 189	62 492	2 756
315	Apparel mfg	2	13	11	g	D	D	D	D	D	D	D	2 288
3151	Apparel knitting mills	3	7	6	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	3	6	5	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	2	5	5	g	D	D	D	D	D	D	D	D
321	Wood product mfg	3	14	10	f	D	D	D	D	D	D	D	2 328
323	Printing & related support activities.....	-	30	14	854	25 017	695	1 129	15 713	57 565	35 761	93 656	6 039
3231	Printing & related support activities.....	-	30	14	854	25 017	695	1 129	15 713	57 565	35 761	93 656	6 039
32311	Printing	-	20	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	17	8	1 673	63 597	736	1 566	19 489	197 937	226 431	424 382	11 298
3255	Paint, coating, & adhesive mfg	1	6	4	g	D	D	D	D	D	D	D	4 106
32551	Paint & coating mfg	1	6	4	g	D	D	D	D	D	D	D	4 106
325510	Paint & coating mfg ...	1	6	4	g	D	D	D	D	D	D	D	4 106
326	Plastics & rubber products mfg	-	17	13	793	19 450	683	1 219	12 901	39 928	58 071	98 219	3 292
3261	Plastics product mfg	-	16	12	f	D	D	D	D	D	D	D	3 292
32615	Urethane & other foam product (except polystyrene) mfg	-	9	8	525	11 402	460	779	7 698	21 788	34 484	55 986	D
326150	Urethane & other foam product (except polystyrene) mfg	-	9	8	525	11 402	460	779	7 698	21 788	34 484	55 986	D
332	Fabricated metal product mfg	-	24	8	1 169	27 114	990	1 777	19 965	70 397	66 715	136 545	4 175
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	81	35	6 032	144 983	4 815	9 734	104 835	260 990	228 687	490 975	16 240
3371	Household & institutional furniture & kitchen cabinet mfg	-	56	21	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	3	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	53	20	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	36	17	2 140	52 468	1 826	3 407	41 021	107 055	91 814	197 939	1 718
3372	Office furniture (including fixtures) mfg	-	21	14	2 972	67 304	2 226	4 233	43 499	112 306	95 839	209 891	13 078
33721	Office furniture (including fixtures) mfg	-	21	14	2 972	67 304	2 226	4 233	43 499	112 306	95 839	209 891	13 078
337211	Wood office furniture mfg	-	9	8	2 548	57 234	1 857	3 635	36 234	91 508	82 083	175 288	12 068
	HILLSBOROUGH, NC												
31-33	Manufacturing	-	19	7	626	18 395	484	987	11 876	34 643	42 872	77 629	D
	HUDSON, NC												
31-33	Manufacturing	-	16	10	683	14 708	570	886	10 158	36 565	32 481	69 810	1 835
	HUNTERSVILLE, NC												
31-33	Manufacturing	-	19	6	630	22 072	382	753	10 663	55 022	50 604	106 761	3 459

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KANNAPOLIS, NC *													
31-33	Manufacturing	-	21	4	h	D	D	D	D	D	D	D	D
313	Textile mills	-	3	3	h	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	3	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	3	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	h	D	D	D	D	D	D	D	D
KERNERSVILLE, NC *													
31-33	Manufacturing	-	49	19	2 454	72 732	1 781	3 537	44 964	220 729	653 010	865 806	29 245
332	Fabricated metal product mfg	-	14	5	666	20 921	479	946	13 280	41 523	50 278	91 559	1 809
KINGS MOUNTAIN, NC *													
31-33	Manufacturing	-	39	22	2 992	75 362	2 403	4 718	52 533	216 710	245 261	458 106	20 299
313	Textile mills	-	13	8	1 140	24 013	935	1 908	16 400	58 068	117 825	172 796	12 888
3132	Fabric mills	-	6	4	679	11 613	577	1 126	8 611	14 793	43 846	55 648	3 791
31324	Knit fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
KINSTON, NC													
31-33	Manufacturing	-	51	24	3 832	98 115	2 796	5 743	56 093	345 211	552 732	904 491	15 997
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	5	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg . . .	-	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
LAURINBURG, NC													
31-33	Manufacturing	-	32	14	3 631	102 039	3 142	6 550	71 031	301 647	324 239	623 748	34 319
327	Nonmetallic mineral product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	1	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	1	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LENOIR, NC													
31-33	Manufacturing	-	69	42	9 699	226 136	8 460	17 172	181 107	528 077	475 185	1 005 168	24 293
323	Printing & related support activities.....	-	5	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	5	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	4	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	523	11 169	366	574	5 888	29 235	37 597	67 571	2 590
3261	Plastics product mfg	-	4	4	523	11 169	366	574	5 888	29 235	37 597	67 571	2 590
337	Furniture & related product mfg	-	20	15	6 854	151 635	6 254	12 828	129 295	353 345	273 545	629 754	11 407
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	15	i	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	17	15	i	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	5	5	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	12	10	i	D	D	D	D	D	D	D	D
LEXINGTON, NC													
31-33	Manufacturing	-	93	37	7 746	190 339	6 552	12 235	141 425	446 189	364 037	812 974	27 514
321	Wood product mfg	3	14	6	530	11 898	468	890	9 395	23 263	37 067	65 873	1 397
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	19	13	4 625	102 592	4 223	7 604	87 185	237 301	153 768	392 936	2 262
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	11	h	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	14	11	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	11	9	4 313	96 678	3 946	7 158	82 287	214 284	139 365	355 587	D
LINCOLNTON, NC													
31-33	Manufacturing	1	47	29	4 253	109 486	3 633	7 633	85 659	272 280	281 898	553 151	15 430
313	Textile mills	2	12	10	1 223	28 598	1 098	2 421	23 752	62 716	58 330	121 068	3 467
3132	Fabric mills	2	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	5	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	4	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	3	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
LONG VIEW, NC *													
31-33	Manufacturing	2	25	16	1 582	35 991	1 355	2 479	25 518	68 387	65 843	133 856	5 083
313	Textile mills	7	6	6	547	12 877	470	898	9 104	24 418	11 903	36 049	D
LOWELL, NC													
31-33	Manufacturing	-	8	5	1 100	34 993	932	1 915	28 110	138 674	47 743	183 866	6 051
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LUMBERTON, NC													
31-33	Manufacturing	-	42	24	4 822	111 680	4 035	8 605	79 938	344 256	402 291	755 307	15 258
313	Textile mills	-	8	7	1 065	20 490	924	1 874	15 302	30 418	84 277	116 512	2 545
3132	Fabric mills	1	7	6	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	1	5	5	f	D	D	D	D	D	D	D	D
313241	Wett knit fabric mills ..	1	5	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	6	6	1 297	21 632	1 139	2 526	17 206	83 345	98 581	186 999	1 730
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	5	5	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
MARION, NC													
31-33	Manufacturing	-	19	12	2 331	54 547	2 026	4 058	44 152	140 230	140 380	274 685	24 000
337	Furniture & related product mfg	-	3	3	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	3	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	3	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	3	3	g	D	D	D	D	D	D	D	D
MATTHEWS, NC													
31-33	Manufacturing	-	47	15	1 734	49 688	1 281	2 760	33 108	152 143	140 311	295 702	8 534
332	Fabricated metal product mfg	1	11	5	611	14 775	438	893	11 711	27 402	26 195	55 106	2 180
MAXTON, NC *													
31-33	Manufacturing	-	14	7	1 433	50 907	1 206	2 476	39 624	637 988	331 309	968 251	12 674
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
MEBANE, NC *													
31-33	Manufacturing	1	29	16	2 036	59 816	1 649	3 457	39 910	148 386	211 577	351 834	14 035
335	Electrical equipment, appliance, & component mfg	3	2	2	f	D	D	D	D	D	D	D	D
MOCKSVILLE, NC													
31-33	Manufacturing	1	18	11	1 963	53 173	1 624	3 212	35 279	112 075	174 275	285 524	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	4	3	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	3	3	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	3	3	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	3	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONROE, NC													
31-33	Manufacturing	-	105	57	9 686	269 536	7 533	14 657	168 232	964 429	905 118	1 829 268	75 059
311	Food mfg	-	5	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	8	6		737	11 539	675	1 195	8 752	21 134	40 304	60 685
326	Plastics & rubber products mfg	-	6	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	1	1	f	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	6		704	21 871	533	1 039	14 467	34 752	20 586	54 943
333	Machinery mfg	-	11	6		813	30 527	438	815	11 978	78 212	47 640	122 151
336	Transportation equipment mfg	3	4	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	3	4	4	f	D	D	D	D	D	D	D	D
MOORESVILLE, NC													
31-33	Manufacturing	1	44	21	3 721	102 166	3 025	6 234	69 893	253 083	300 289	548 767	45 381
313	Textile mills	-	5	4	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	5	5	3	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills ...	5	4	3	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	5	4	3	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	3		703	23 486	507	872	14 158	58 206	46 777	101 303
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
MORGANTON, NC													
31-33	Manufacturing	-	61	36	8 299	203 397	7 143	13 671	155 611	496 535	483 979	954 296	40 333
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	5	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORGANTON, NC—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	16	10	2 367	54 038	2 210	3 481	40 802	145 175	66 605	208 655	8 016
3371	Household & institutional furniture & kitchen cabinet mfg	-	16	10	2 367	54 038	2 210	3 481	40 802	145 175	66 605	208 655	8 016
33712	Household & institutional furniture mfg	-	16	10	2 367	54 038	2 210	3 481	40 802	145 175	66 605	208 655	8 016
337122	Nonupholstered wood household furniture mfg	-	8	6	g	D	D	D	D	D	D	D	D
MOUNT AIRY, NC													
31-33	Manufacturing	-	55	33	9 063	183 480	8 038	16 756	147 685	442 323	586 666	998 389	25 870
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	19	15	6 148	116 975	5 518	11 652	96 123	300 754	257 008	529 045	13 242
3151	Apparel knitting mills	-	14	13	i	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills ...	-	11	10	h	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	11	10	h	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	1	3	3	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	2	2	2	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	3	f	D	D	D	D	D	D	D	D
MOUNT HOLLY, NC													
31-33	Manufacturing	-	24	11	2 950	108 771	2 570	5 107	85 202	478 703	756 786	1 225 902	14 500
313	Textile mills	-	9	8	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	6	5	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	6	5	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	6	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D
MOUNT OLIVE, NC *													
31-33	Manufacturing	-	8	5	3 179	71 712	2 874	2 783	54 347	227 693	301 745	533 305	16 756
311	Food mfg	-	3	2	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
NASHVILLE, NC													
31-33	Manufacturing	-	6	4	502	10 817	414	693	7 332	9 589	106 638	116 345	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW BERN, NC													
31-33	Manufacturing	-	50	14	3 246	72 357	2 655	4 441	55 394	144 518	437 722	582 997	D
332	Fabricated metal product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	1	f	D	D	D	D	D	D	D	D
NEWTON, NC													
31-33	Manufacturing	-	70	37	5 777	151 769	5 006	9 340	105 474	329 168	360 142	686 644	19 558
313	Textile mills	-	5	4	528	12 436	480	886	9 594	29 619	43 093	70 835	2 984
315	Apparel mfg	2	11	9	1 289	35 284	1 133	2 407	20 693	106 729	89 148	192 982	5 055
3151	Apparel knitting mills	2	7	7	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	2	6	6	g	D	D	D	D	D	D	D	4 449
315119	Other hosiery & sock mills	2	6	6	g	D	D	D	D	D	D	D	4 449
337	Furniture & related product mfg	-	17	9	2 266	52 370	2 099	3 655	40 277	89 282	100 974	189 933	3 260
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	7	1 918	45 921	1 765	3 021	34 227	77 409	87 440	164 317	D
33712	Household & institutional furniture mfg	-	11	7	1 918	45 921	1 765	3 021	34 227	77 409	87 440	164 317	D
337121	Upholstered household furniture mfg	-	6	6	g	D	D	D	D	D	D	D	880
NORTH WILKESBORO, NC													
31-33	Manufacturing	-	35	16	2 914	59 056	2 467	4 656	44 441	120 656	160 665	290 451	5 069
315	Apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	6	2	683	13 053	540	1 063	8 648	33 519	40 078	73 613	2 466
3272	Glass & glass product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	5	g	D	D	D	D	D	D	D	1 117
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	5	g	D	D	D	D	D	D	D	1 117
33712	Household & institutional furniture mfg	-	5	5	g	D	D	D	D	D	D	D	1 117
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
OXFORD, NC													
31-33	Manufacturing	-	22	10	1 639	39 781	1 352	2 868	31 074	105 532	144 277	246 959	11 356
313	Textile mills	-	4	2	f	D	D	D	D	D	D	D	D
PINEVILLE, NC													
31-33	Manufacturing	1	23	7	551	14 005	341	571	7 290	41 559	49 374	89 498	2 158
PLYMOUTH, NC													
31-33	Manufacturing	-	10	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RAEFORD, NC													
31-33	Manufacturing	-	9	5	h	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	3	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
RALEIGH, NC													
31-33	Manufacturing	-	328	78	7 954	241 490	5 580	10 728	131 696	1 057 542	1 085 008	2 147 108	56 344
322	Paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	4	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	80	7	677	19 316	486	926	11 762	38 125	21 097	59 109	2 603
3231	Printing & related support activities	4	80	7	677	19 316	486	926	11 762	38 125	21 097	59 109	2 603
32311	Printing	4	71	7	f	D	D	D	D	D	D	D	2 504
325	Chemical mfg	-	11	6	f	D	D	D	D	D	D	D	12 963
332	Fabricated metal product mfg	-	31	13	1 197	40 771	874	1 839	24 256	100 653	69 341	170 394	9 076
3323	Architectural & structural metals mfg	-	10	6	f	D	D	D	D	D	D	D	2 950
33232	Ornamental & architectural metal products mfg	-	9	5	544	19 199	429	982	12 556	39 136	29 523	68 588	D
332322	Sheet metal work mfg .	-	8	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	47	19	2 306	66 815	1 578	2 760	30 427	323 891	354 313	674 709	9 458
3342	Communications equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	13	10	g	D	D	D	D	D	D	D	6 058
33441	Semiconductor & other electronic component mfg	-	13	10	g	D	D	D	D	D	D	D	6 058
334418	Printed circuit assembly (electronic assembly) mfg	1	6	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	3	673	20 966	475	973	12 369	45 562	72 669	118 778	D
3359	Other electrical equipment & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
RANDLEMAN, NC													
31-33	Manufacturing	-	21	11	1 779	37 230	1 533	2 688	25 494	93 085	93 329	186 902	5 672
315	Apparel mfg	-	5	3	719	11 633	621	812	7 203	34 470	27 254	62 146	D
3151	Apparel knitting mills	-	3	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	3	2	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
REIDSVILLE, NC													
31-33	Manufacturing	-	43	24	3 722	122 840	3 076	6 011	93 122	296 170	635 254	928 893	16 166
313	Textile mills	-	5	5	g	D	D	D	D	D	D	D	2 908
3131	Fiber, yarn, & thread mills .	-	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	3	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	563	23 310	410	994	17 523	61 709	151 796	211 384	6 625
ROANOKE RAPIDS, NC													
31-33	Manufacturing	-	21	10	2 456	79 835	2 040	2 909	60 127	95 705	250 888	351 202	50 709
313	Textile mills	-	4	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
ROCKINGHAM, NC													
31-33	Manufacturing	-	27	11	2 680	61 523	2 390	4 807	51 181	253 762	95 529	378 237	6 940
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	g	D	D	D	D	D	D	D	657
3151	Apparel knitting mills	-	3	3	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	2	2	f	D	D	D	D	D	D	D	D
ROCKY MOUNT, NC *													
31-33	Manufacturing	-	65	31	7 886	220 310	6 006	13 352	153 934	767 332	707 279	1 474 962	62 697
311	Food mfg	3	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	5	4	1 382	28 302	1 136	2 484	22 740	22 254	159 440	179 892	8 160
3132	Fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	5	913	24 006	707	1 573	16 534	56 562	54 523	107 885	3 913
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	6	2	f	D	D	D	D	D	D	D	777

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROXBORO, NC													
31-33	Manufacturing	-	24	14	3 203	87 912	2 494	5 461	63 196	247 320	327 444	575 293	35 543
313	Textile mills	-	4	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
RUTHERFORDTON, NC													
31-33	Manufacturing	1	12	8	1 305	32 903	1 073	2 068	22 152	76 659	82 932	159 785	7 941
SALISBURY, NC													
31-33	Manufacturing	-	100	55	5 790	166 708	4 626	9 684	120 789	456 869	531 365	984 337	30 906
313	Textile mills	-	8	6	1 722	45 814	1 576	3 561	39 356	106 254	117 357	227 078	7 021
3132	Fabric mills	-	4	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	6	521	12 909	380	802	7 823	32 614	24 147	56 826	1 668
333	Machinery mfg	-	10	8	f	D	D	D	D	D	D	D	D
SANFORD, NC													
31-33	Manufacturing	2	77	45	10 365	277 766	7 805	15 862	162 700	1 091 937	854 575	1 951 559	124 900
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	9	9	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	8	8	g	D	D	D	D	D	D	D	33 288
31311	Fiber, yarn, & thread mills	-	8	8	g	D	D	D	D	D	D	D	33 288
313111	Yarn spinning mills	-	6	6	829	22 416	786	1 629	17 687	43 767	128 514	173 279	33 288
325	Chemical mfg	5	4	3	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	9	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	9	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	9	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	1 115	22 913	821	1 681	14 701	49 211	89 169	139 030	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	5	894	28 487	763	1 515	21 689	52 275	95 459	141 178	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	5	1 029	33 420	664	1 471	14 833	67 586	71 401	136 760	8 165
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SANFORD, NC—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	2	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	SELMA, NC												
31-33	Manufacturing	-	9	5	804	20 161	655	1 140	13 042	55 421	65 244	119 270	8 949
	SHELBY, NC												
31-33	Manufacturing	-	51	26	5 063	159 896	4 205	8 393	119 003	605 864	506 093	1 116 792	51 586
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg . .	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	3	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	g	D	D	D	D	D	D	D	D
	SILER CITY, NC												
31-33	Manufacturing	1	25	17	4 768	88 491	4 308	8 082	70 926	160 151	246 023	405 204	19 303
311	Food mfg	-	5	3	1 661	32 123	1 492	2 935	26 005	34 226	117 734	151 742	D
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	2	g	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	9	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	4	679	5 062	615	1 209	3 434	12 245	10 615	23 087	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	3	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
	SMITHFIELD, NC												
31-33	Manufacturing	-	27	9	1 363	29 602	1 027	1 888	18 839	77 823	213 616	292 706	12 002
	SPINDALE, NC												
31-33	Manufacturing	-	17	10	2 910	66 485	2 376	4 827	46 973	138 866	203 248	334 753	10 135
313	Textile mills	-	3	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
	STANLEY, NC												
31-33	Manufacturing	2	11	8	1 103	25 672	840	1 581	16 809	63 174	44 040	104 979	4 597

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STATESVILLE, NC													
31-33	Manufacturing	1	134	73	9 475	269 653	6 928	14 967	162 801	878 716	1 191 094	2 034 689	50 905
313	Textile mills	1	20	17	1 555	38 980	1 337	2 747	29 346	90 146	109 330	195 598	D
3132	Fabric mills	2	14	12	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	4	7	7	526	11 683	462	928	9 211	32 797	38 691	69 348	333
315	Apparel mfg	-	5	5	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	10	8	1 115	32 180	884	1 827	21 912	89 516	104 017	196 627	7 224
3261	Plastics product mfg	2	8	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	4	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	6	1 102	45 148	694	1 571	24 237	115 091	139 503	253 889	8 778
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	13	7	712	15 119	598	2 045	11 355	26 328	39 524	65 806	1 003
3371	Household & institutional furniture & kitchen cabinet mfg	1	10	6	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	10	6	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	9	4	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	4	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	5	3	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	2	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	9	2	2	f	D	D	D	D	D	D	D	D
TARBORO, NC													
31-33	Manufacturing	-	19	13	4 017	112 940	3 310	7 006	80 203	286 899	308 047	596 301	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	4	4	1 133	27 908	962	2 230	19 516	73 750	72 548	144 436	D
3132	Fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	THOMASVILLE, NC *												
31-33	Manufacturing	1	110	49	6 697	158 352	5 596	11 225	114 161	352 217	356 863	709 283	25 040
315	Apparel mfg	2	11	7	f	D	D	D	D	D	D	D	1 661
321	Wood product mfg	1	14	9	517	11 219	439	794	8 200	17 479	16 313	33 764	1 234
337	Furniture & related product mfg	—	37	12	3 114	76 505	2 551	4 960	53 780	143 106	118 561	259 775	6 301
3371	Household & institutional furniture & kitchen cabinet mfg	—	25	8	2 851	71 188	2 320	4 544	49 681	137 869	101 019	237 012	D
33712	Household & institutional furniture mfg	—	25	8	2 851	71 188	2 320	4 544	49 681	137 869	101 019	237 012	D
337122	Nonupholstered wood household furniture mfg	—	8	2	g	D	D	D	D	D	D	D	D
	TROY, NC												
31-33	Manufacturing	—	15	6	805	16 741	674	1 360	11 057	36 941	41 311	78 196	4 041
	VALDESE, NC												
31-33	Manufacturing	—	21	13	3 695	87 049	2 749	5 474	51 166	188 121	184 054	375 574	11 895
311	Food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	—	7	6	1 293	29 476	1 127	2 304	22 988	61 230	75 402	138 034	5 005
3133	Textile & fabric finishing & fabric coating mills	—	3	3	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	3	3	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	7	4	g	D	D	D	D	D	D	D	2 078
3151	Apparel knitting mills	—	7	4	g	D	D	D	D	D	D	D	2 078
31519	Other apparel knitting mills	—	1	1	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	1	1	f	D	D	D	D	D	D	D	D
	WADESBORO, NC												
31-33	Manufacturing	1	17	7	1 429	32 938	1 229	2 501	24 370	82 830	82 155	165 121	5 401
313	Textile mills	—	3	3	f	D	D	D	D	D	D	D	D
	WAKE FOREST, NC												
31-33	Manufacturing	2	10	4	607	19 018	419	977	12 768	51 668	27 921	79 870	D
	WALLACE, NC *												
31-33	Manufacturing	—	11	6	1 121	22 265	946	1 982	16 423	31 249	156 980	192 379	2 451
	WASHINGTON, NC												
31-33	Manufacturing	—	34	12	3 613	81 194	3 020	5 848	58 000	119 903	156 256	296 294	8 630
313	Textile mills	—	2	1	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	—	1	1	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	1	1	g	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAYNESVILLE, NC													
31-33	Manufacturing	-	22	7	1 570	46 547	1 320	2 760	37 457	29 816	297 148	339 520	2 604
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
WENDELL, NC													
31-33	Manufacturing	-	15	3	610	20 239	388	719	7 983	54 205	61 466	121 402	1 380
WHITEVILLE, NC													
31-33	Manufacturing	-	15	8	1 862	36 977	1 608	3 191	29 687	131 785	112 249	244 272	D
315	Apparel mfg	-	4	3	1 318	20 796	1 138	2 153	16 437	86 550	53 122	139 557	D
3152	Cut & sew apparel mfg	-	4	3	1 318	20 796	1 138	2 153	16 437	86 550	53 122	139 557	D
31521	Cut & sew apparel contractors	-	2	1	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
WILKESBORO, NC													
31-33	Manufacturing	1	33	15	4 274	86 397	3 854	7 376	68 194	174 437	368 905	544 484	8 044
311	Food mfg	-	5	5	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	6	5	4	1 110	21 314	999	1 881	16 716	36 582	46 843	85 435	D
3151	Apparel knitting mills	5	2	2	f	D	D	D	D	D	D	D	D
WILMINGTON, NC													
31-33	Manufacturing	-	139	41	5 257	201 995	3 933	7 679	136 696	700 865	560 360	1 241 089	52 799
325	Chemical mfg	-	12	5	1 620	74 288	1 225	2 575	52 606	346 381	160 233	493 539	D
3251	Basic chemical mfg	-	6	3	1 373	63 492	1 039	2 174	44 534	280 685	121 318	413 011	D
32518	Other basic inorganic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
WILSON, NC													
31-33	Manufacturing	-	70	30	7 534	238 487	6 095	12 650	159 744	833 769	1 991 820	2 821 091	65 166
312	Beverage & tobacco product mfg	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
3122	Tobacco mfg	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
31221	Tobacco stemming & redrying	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
312210	Tobacco stemming & redrying	-	3	3	1 657	47 465	1 227	2 653	20 764	202 284	1 400 228	1 598 576	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	6	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WINSTON-SALEM, NC													
31-33	Manufacturing	-	241	94	17 789	582 965	14 025	26 946	406 953	2 444 535	2 012 928	4 449 718	136 990
311	Food mfg	-	18	10	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	12	6	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	9	5	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	5	2 220	108 531	1 656	2 774	78 817	1 104 851	512 443	1 616 531	45 702
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	3	3	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	3	3	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	8	5	g	D	D	D	D	D	D	D	2 869
3133	Textile & fabric finishing & fabric coating mills	-	3	2	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	3	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	2	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	8	6	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	1	3	3	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	1	2	2	g	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	1	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	3	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	2	2	g	D	D	D	D	D	D	D	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	9	1	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	7	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	10	7	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	5	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	3	1	f	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	47	13	1 088	30 060	804	1 514	18 925	71 546	28 836	100 459	6 030
3231	Printing & related support activities	1	47	13	1 088	30 060	804	1 514	18 925	71 546	28 836	100 459	6 030
32311	Printing	1	40	10	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	13	1 669	52 156	1 314	2 402	37 907	158 718	147 061	303 355	8 451
3325	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	6	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	6	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	4	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
33591	Battery mfg	-	2	2	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	3	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WINSTON-SALEM, NC —Con.												
31-33	Manufacturing— Con.												
337	Furniture & related product mfg	—	16	6	825	18 938	696	1 315	14 114	37 201	24 864	63 050	1 933
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	2	f	D	D	D	D	D	D	D	D
	WINTERVILLE, NC												
31-33	Manufacturing	—	4	3	f	D	D	D	D	D	D	D	1 436
334	Computer & electronic product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	1	1	f	D	D	D	D	D	D	D	D
	WOODFIN, NC												
31-33	Manufacturing	1	12	7	888	23 394	665	1 249	13 908	71 044	49 222	119 350	2 889
	YADKINVILLE, NC												
31-33	Manufacturing	—	13	7	2 834	72 509	2 461	4 911	53 725	191 027	497 002	691 831	D
313	Textile mills	—	1	1	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	—	1	1	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	1	1	g	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	—	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	3	2	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	3	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	f	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills ...	—	1	1	f	D	D	D	D	D	D	D	D
	ZEBULON, NC												
31-33	Manufacturing	—	13	6	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NORTH CAROLINA		NORTH CAROLINA—Con.	
Companies ¹ number..	9 857	Quantity of electricity purchased for heat and power 1,000 kWh..	35 292 205
		Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	2 433 537
All establishments number..	11 306	Total value of shipments \$1,000..	161 900 477
Establishments with 1 to 19 employees number..	6 685	Value of resales \$1,000..	10 170 165
Establishments with 20 to 99 employees number..	2 847	Value added \$1,000..	78 638 044
Establishments with 100 employees or more number..	1 774	Total inventories, beginning of year \$1,000..	17 062 504
All employees number..	773 548	Finished goods inventories, beginning of year \$1,000..	5 982 036
Total compensation ² \$1,000..	26 627 382	Work-in-process inventories, beginning of year \$1,000..	4 125 256
Annual payroll \$1,000..	21 297 913	Materials and supplies inventories, beginning of year \$1,000..	6 955 212
Total fringe benefits \$1,000..	5 329 469	Total inventories, end of year \$1,000..	17 104 069
Production workers, average for year number..	601 190	Finished goods inventories, end of year \$1,000..	6 255 550
Production workers on March 12 number..	601 638	Work-in-process inventories, end of year \$1,000..	3 900 757
Production workers on May 12 number..	599 954	Materials and supplies inventories, end of year \$1,000..	6 947 762
Production workers on August 12 number..	601 350	Gross book value of total assets at beginning of year \$1,000..	57 395 056
Production workers on November 12 number..	601 818	Total capital expenditures (new and used) \$1,000..	5 389 012
Production-worker hours 1,000..	1 195 802	Capital expenditures for buildings and other structures (new and used) \$1,000..	792 765
Production-worker wages \$1,000..	14 060 952	Capital expenditures for machinery and equipment (new and used) \$1,000..	4 596 247
Total cost of materials \$1,000..	83 255 618	Total retirements ² \$1,000..	1 571 227
Cost of materials, parts, containers, etc., consumed \$1,000..	72 188 471	Gross book value of total assets at end of year \$1,000..	61 212 841
Cost of resales \$1,000..	7 240 372	Total depreciation during year ² \$1,000..	3 626 355
Cost of fuels \$1,000..	783 690	Total rental payments ² \$1,000..	883 134
Cost of purchased electricity \$1,000..	1 677 038	Buildings and other structures rental payments ² \$1,000..	367 468
Cost of contract work \$1,000..	1 366 047	Machinery and equipment rental payments ² \$1,000..	515 666

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

NORTH CAROLINA

Archdale is in Guilford and Randolph Counties.

Cary is in Chatham and Wake Counties; it annexed into Chatham County in April 1995.

Chapel Hill is in Durham and Orange Counties.

Davidson is in Iredell and Mecklenburg Counties.

Durham is in Durham and Orange Counties.

Elizabeth City is in Camden and Pasquotank Counties.

Elkin is in Surry and Wilkes Counties.

Gibsonville is in Alamance and Guilford Counties.

Hickory is in Burke and Catawba Counties.

High Point is in Davidson, Forsyth, Guilford, and Randolph Counties.

Kannapolis is in Cabarrus and Rowan Counties.

Kernersville is in Forsyth and Guilford Counties.

King is in Forsyth and Stokes Counties.

Kings Mountain is in Cleveland and Gaston Counties.

Long View is in Burke and Catawba Counties.

Maxton is in Robeson and Scotland Counties.

Mebane is in Alamance and Orange Counties.

Mount Olive is in Duplin and Wayne Counties.

Rocky Mount is in Edgecombe and Nash Counties.

Thomasville is in Davidson and Randolph Counties; it annexed into Randolph County in October 1996.

Wallace is in Duplin and Pender Counties.

Weddington is in Mecklenburg and Union Counties.

Appendix E. Metropolitan Areas

NORTH CAROLINA

Asheville, NC MSA

Buncombe County, NC

Madison County, NC

Charlotte—Gastonia—Rock Hill, NC—SC MSA

Cabarrus County, NC

Gaston County, NC

Lincoln County, NC

Mecklenburg County, NC

Rowan County, NC

Union County, NC

York County, SC

Fayetteville, NC MSA

Cumberland County, NC

Goldsboro, NC MSA

Wayne County, NC

Greensboro—Winston-Salem—High Point, NC MSA

Alamance County, NC

Davidson County, NC

Davie County, NC

Forsyth County, NC

Guilford County, NC

Randolph County, NC

Stokes County, NC

Yadkin County, NC

Greenville, NC MSA

Pitt County, NC

Hickory—Morganton—Lenoir, NC MSA

Alexander County, NC

Burke County, NC

Caldwell County, NC

Catawba County, NC

Jacksonville, NC MSA

Onslow County, NC

Norfolk—Virginia Beach—Newport News, VA—NC MSA

Currituck County, NC

Gloucester County, VA

Isle of Wight County, VA

James City County, VA

Mathews County, VA

York County, VA

Chesapeake, VA (IC)

Hampton, VA (IC)

Newport News, VA (IC)

Norfolk, VA (IC)

Poquoson, VA (IC)

Portsmouth, VA (IC)

Suffolk, VA (IC)

Virginia Beach, VA (IC)

Williamsburg, VA (IC)

Raleigh—Durham—Chapel Hill, NC MSA

Chatham County, NC

Durham County, NC

Franklin County, NC

Johnston County, NC

Orange County, NC

Wake County, NC

Rocky Mount, NC MSA

Edgecombe County, NC

Nash County, NC

Wilmington, NC MSA

Brunswick County, NC

New Hanover County, NC

North Dakota

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



U S C E N S U S B U R E A U

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Economics and Statistics Administration
U.S. CENSUS BUREAU



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division	301-457-4673
Service Sector Statistics Division	301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH DAKOTA													
31-33	Manufacturing	1	704	188	21 956	604 752	16 364	31 457	386 916	1 802 403	3 296 694	5 115 890	196 220
311	Food mfg	1	117	46	5 226	134 444	3 937	7 992	92 194	631 018	1 218 404	1 856 121	101 208
3111	Animal food mfg	5	9	3	171	4 190	120	203	2 360	14 349	35 014	47 640	D
31111	Animal food mfg	5	9	3	171	4 190	120	203	2 360	14 349	35 014	47 640	D
311119	Other animal food mfg	5	9	3	171	4 190	120	203	2 360	14 349	35 014	47 640	D
3112	Grain & oilseed milling	-	13	7	479	17 452	323	703	10 627	138 745	470 405	619 308	12 769
31121	Flour milling & malt mfg	-	5	3	c	D	D	D	D	D	D	D	D
311211	Flour milling	-	3	2	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	7	4	e	D	D	D	D	D	D	D	D
311223	Other oilseed processing	-	4	3	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	7	3	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	3	3	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	3	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	6	3	900	19 719	794	1 621	15 997	87 588	63 575	150 808	14 923
31141	Frozen food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	4	1	c	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	-	3	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	14	7	486	11 771	254	484	6 002	31 957	100 258	132 027	3 910
31151	Dairy product (except frozen) mfg	1	14	7	486	11 771	254	484	6 002	31 957	100 258	132 027	3 910
311511	Fluid milk mfg	1	8	4	359	9 386	150	300	4 158	25 562	65 967	91 409	3 209
311513	Cheese mfg	2	6	3	127	2 385	104	184	1 844	6 395	34 291	40 618	701
3116	Meat product mfg	6	22	9	800	16 828	668	1 358	12 595	65 858	181 397	246 645	2 017
31161	Animal slaughtering & processing	6	22	9	800	16 828	668	1 358	12 595	65 858	181 397	246 645	2 017
311611	Animal (except poultry) slaughtering	8	13	5	482	9 873	405	843	7 754	24 575	150 385	174 934	1 313
311612	Meat processed from carcasses	-	7	4	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	30	9	1 212	26 422	789	1 516	15 148	105 331	70 704	173 144	18 181
31181	Bread & bakery product mfg	-	22	4	710	15 843	363	599	6 742	41 024	19 885	60 914	D
311812	Commercial bakeries	-	5	3	499	11 811	194	342	3 996	32 112	12 211	44 322	D
311813	Frozen cakes, pies, & other pastries mfg	-	2	1	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	8	5	502	10 579	426	917	8 406	64 307	50 819	112 230	D
311823	Dry pasta mfg	-	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	15	5	e	D	D	D	D	D	D	D	D
31191	Snack food mfg	1	5	3	192	4 766	143	319	2 957	10 778	40 499	52 432	D
311911	Roasted nuts & peanut butter mfg	1	4	2	c	D	D	D	D	D	D	D	D
31199	All other food mfg	2	9	2	116	2 642	86	202	1 793	10 263	10 102	20 208	452
311999	All other miscellaneous food mfg	2	6	2	106	2 433	77	190	1 664	9 897	9 748	19 488	403
314	Textile product mills	-	14	4	270	4 510	190	299	2 410	11 454	8 994	20 005	585
3149	Other textile product mills	-	11	4	264	4 474	187	296	2 389	11 321	8 858	19 737	D
31491	Textile bag & canvas mills	-	5	2	140	2 091	114	189	1 350	5 508	3 526	8 629	D
314912	Canvas & related product mills	-	5	2	140	2 091	114	189	1 350	5 508	3 526	8 629	D
31499	All other textile product mills	-	6	2	124	2 383	73	107	1 039	5 813	5 332	11 108	D
321	Wood product mfg	1	24	7	1 066	23 446	842	1 609	15 879	49 167	56 660	106 989	5 371
3212	Veneer, plywood, & engineered wood product mfg	1	9	6	858	19 227	655	1 282	12 276	35 998	34 495	70 693	4 013
32121	Veneer, plywood, & engineered wood product mfg	1	9	6	858	19 227	655	1 282	12 276	35 998	34 495	70 693	4 013
321211	Hardwood veneer & plywood mfg	-	1	1	f	D	D	D	D	D	D	D	D
321214	Truss mfg	4	7	4	c	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	14	1	c	D	D	D	D	D	D	D	D
32191	Millwork	-	3	1	c	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	3	1	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	84	14	903	19 804	671	1 146	13 082	43 320	21 630	64 906	3 303
3231	Printing & related support activities	2	84	14	903	19 804	671	1 146	13 082	43 320	21 630	64 906	3 303
32311	Printing	2	79	14	881	19 235	653	1 118	12 666	42 351	21 344	63 655	D
323110	Commercial lithographic printing	2	43	11	621	13 942	475	838	9 835	32 903	15 638	48 518	2 548

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NORTH DAKOTA—Con. Manufacturing—Con.													
324	Petroleum & coal products mfg	—	2	1	c	D	D	D	D	D	D	D	D	
3241	Petroleum & coal products mfg	—	2	1	c	D	D	D	D	D	D	D	D	
32411	Petroleum refineries	—	1	1	c	D	D	D	D	D	D	D	D	
324110	Petroleum refineries	—	1	1	c	D	D	D	D	D	D	D	D	
325	Chemical mfg	5	13	1	c	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	31	10		841	19 098	632	1 214	12 907	51 672	55 842	105 664	9 836
3261	Plastics product mfg	—	26	9		726	16 934	584	1 120	12 164	46 109	44 693	89 360	9 667
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	19	5		369	9 335	310	568	7 134	15 562	14 395	29 983	5 556
326199	All other plastics product mfg	2	17	5	e	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	2	5	1		115	2 164	48	94	743	5 563	11 149	16 304	169
327	Nonmetallic mineral product mfg	2	54	9		611	17 662	511	997	13 285	31 902	34 318	66 761	3 622
3273	Cement & concrete product mfg	2	45	8		541	16 265	448	891	12 124	29 303	32 925	62 687	3 586
32732	Ready-mix concrete mfg	4	28	4		237	8 191	201	385	5 487	15 210	21 713	36 991	1 461
327320	Ready-mix concrete mfg	4	28	4		237	8 191	201	385	5 487	15 210	21 713	36 991	1 461
32733	Concrete pipe, brick, & block mfg	—	8	2		111	3 066	105	210	2 971	8 064	5 853	13 936	588
32739	Other concrete product mfg	1	9	2		193	5 008	142	296	3 666	6 029	5 359	11 760	1 537
327390	Other concrete product mfg	1	9	2		193	5 008	142	296	3 666	6 029	5 359	11 760	1 537
331	Primary metal mfg	2	2	1	c	D	D	D	D	D	D	D	D	D
3315	Foundries	—	1	1	c	D	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	1	1	c	D	D	D	D	D	D	D	D	D
331511	Iron foundries	—	1	1	c	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	85	21		1 621	41 003	1 230	2 168	25 790	98 883	108 992	207 380	5 295
3321	Forging & stamping	—	1	1	c	D	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	1	1	c	D	D	D	D	D	D	D	D	D
332116	Metal stamping	—	1	1	c	D	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	3	3		147	4 025	94	152	2 068	7 574	8 627	16 242	509
33221	Cutlery & handtool mfg	—	3	3		147	4 025	94	152	2 068	7 574	8 627	16 242	509
332212	Hand & edge tool mfg	—	3	3		147	4 025	94	152	2 068	7 574	8 627	16 242	509
3323	Architectural & structural metals mfg	—	29	12		909	23 800	680	1 241	14 045	50 101	80 154	130 025	2 170
33231	Plate work & fabricated structural product mfg	1	17	11		752	19 690	553	1 000	11 243	44 989	69 053	113 946	1 711
332311	Prefabricated metal building & component mfg	—	4	4	e	D	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	1	11	6		448	10 996	335	592	6 479	22 254	37 188	59 502	1 042
33232	Ornamental & architectural metal products mfg	—	12	1		157	4 110	127	241	2 802	5 112	11 101	16 079	459
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	37	3	e	D	D	D	D	D	D	D	D	D
33271	Machine shops	4	36	2	e	D	D	D	D	D	D	D	D	1 407
332710	Machine shops	4	36	2	e	D	D	D	D	D	D	D	D	1 407
333	Machinery mfg	—	86	32		4 852	169 058	3 477	7 035	103 197	504 350	836 230	1 342 481	33 102
3331	Agriculture, construction, & mining machinery mfg	—	57	26	h	D	D	D	D	D	D	D	D	31 883
33311	Agricultural implement mfg	—	46	19	g	D	D	D	D	D	D	D	D	21 566
333111	Farm machinery & equipment mfg	—	44	19		2 371	66 034	1 751	3 393	42 797	353 128	399 401	755 794	D
33312	Construction machinery mfg	—	8	6	g	D	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	8	6	g	D	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	8	8	2		110	3 356	66	108	1 618	7 586	6 008	13 527	D
3339	Other general-purpose machinery mfg	1	10	1		112	4 180	67	130	1 874	11 878	11 328	23 254	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH DAKOTA—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	15	7	1 476	44 685	1 087	2 237	28 228	15 873	99 685	112 339	6 165
3344	Semiconductor & other electronic component mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	1	1	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	4	2	c	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media.	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	-	1	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg.	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	6	36	13	2 562	65 986	2 005	3 528	40 663	183 481	347 665	538 031	14 783
3361	Motor vehicle mfg.....	8	3	2	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg.....	8	2	2	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg.....	8	2	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	1	14	4	438	10 517	361	588	7 001	19 297	29 339	48 815	2 608
33621	Motor vehicle body & trailer mfg.....	1	14	4	438	10 517	361	588	7 001	19 297	29 339	48 815	2 608
336211	Motor vehicle body mfg.....	2	6	1	131	3 417	103	163	1 933	5 212	9 142	14 339	D
336212	Truck trailer mfg.....	-	4	2	255	6 140	213	351	4 398	12 257	18 137	30 621	D
3363	Motor vehicle parts mfg....	2	11	4	664	11 248	594	1 011	7 501	17 678	17 096	34 802	D
33632	Motor vehicle electrical & electronic equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	1	1	c	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	-	1	1	c	D	D	D	D	D	D	D	D
336612	Boat building.....	-	1	1	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	51	11	1 076	23 709	799	1 483	15 634	46 191	40 005	86 453	3 350
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	42	8	955	21 051	704	1 317	13 796	40 564	34 564	75 405	3 059
33711	Wood kitchen cabinet & counter top mfg.....	-	30	5	562	13 234	360	679	7 524	25 134	21 183	46 151	2 152
337110	Wood kitchen cabinet & counter top mfg....	-	30	5	562	13 234	360	679	7 524	25 134	21 183	46 151	2 152
33712	Household & institutional furniture mfg.....	1	12	3	393	7 817	344	638	6 272	15 430	13 381	29 254	907
337122	Nonupholstered wood household furniture mfg.....	1	6	1	233	4 820	219	440	4 216	8 874	8 247	17 554	615
337127	Institutional furniture mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	58	8	695	15 722	471	788	8 623	28 404	26 029	55 331	1 772
3391	Medical equipment & supplies mfg.....	4	19	3	227	5 899	168	258	3 198	8 076	5 499	14 211	637
33911	Medical equipment & supplies mfg.....	4	19	3	227	5 899	168	258	3 198	8 076	5 499	14 211	637
339116	Dental laboratories....	5	14	2	183	4 636	142	212	2 645	7 028	3 062	10 231	556
3399	Other miscellaneous mfg..	1	39	5	468	9 823	303	530	5 425	20 328	20 530	41 120	1 135
33991	Jewelry & silverware mfg.....	1	7	1	100	2 029	35	52	556	4 339	8 049	12 954	D
33995	Sign mfg.....	-	12	3	264	6 282	187	357	3 839	13 345	10 385	23 738	926
339950	Sign mfg.....	-	12	3	264	6 282	187	357	3 839	13 345	10 385	23 738	926

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BISMARCK, ND MSA													
31-33	Manufacturing	–	81	22	2 193	74 449	1 568	3 054	48 123	43 167	625 341	673 073	11 327
311	Food mfg	2	14	7	509	11 668	310	577	5 885	51 476	82 995	132 191	D
3115	Dairy product mfg	2	6	4	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	2	6	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	6	8	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	8	6	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	6	2	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	6	2	1	f	D	D	D	D	D	D	D	D
FARGO–MOORHEAD, ND–MN MSA													
31-33	Manufacturing	1	221	79	7 982	209 204	5 946	11 567	133 915	683 376	1 057 204	1 741 578	57 137
	Fargo–Moorhead, ND–MN MSA (MN Part)	–	38	11	1 225	35 699	999	2 021	27 458	57 541	174 280	229 403	10 969
	Fargo–Moorhead, ND–MN MSA (ND Part)	1	183	68	6 757	173 505	4 947	9 546	106 457	625 835	882 924	1 512 175	46 168
311	Food mfg	2	28	16	1 656	45 863	1 235	2 632	31 845	125 340	474 746	602 618	16 727
3113	Sugar & confectionery product mfg	–	2	1	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	–	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	–	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	7	6	5	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	7	6	5	e	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	3	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	8	3	343	8 435	168	347	3 733	23 008	12 367	35 379	1 329
31181	Bread & bakery product mfg	–	4	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	–	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	11	3	312	6 486	268	460	5 059	16 843	28 061	45 767	1 694
323	Printing & related support activities	3	30	7	466	11 380	362	650	7 888	26 486	13 746	40 151	1 838
3231	Printing & related support activities	3	30	7	466	11 380	362	650	7 888	26 486	13 746	40 151	1 838
32311	Printing	3	28	7	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	14	5	342	8 683	265	483	6 130	22 067	10 548	32 531	1 398
326	Plastics & rubber products mfg	–	15	8	654	14 257	469	912	8 720	37 053	45 478	81 319	8 967
3261	Plastics product mfg	–	13	7	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	–	3	2	e	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	–	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	–	9	5	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	–	8	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	5	11	4	e	D	D	D	D	D	D	D	1 268
3273	Cement & concrete product mfg	5	9	4	e	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, & block mfg	–	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	–	29	9	674	17 723	505	895	10 737	47 382	51 087	98 101	2 251
3323	Architectural & structural metals mfg	1	12	6	478	12 228	366	655	7 481	23 320	40 482	63 656	D
33231	Plate work & fabricated structural product mfg ..	1	8	5	378	9 283	284	497	5 511	20 638	30 986	51 615	D
332312	Fabricated structural metal mfg	1	7	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FARGO—MOORHEAD, ND—MN MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	28	15	g	D	D	D	D	D	D	D	16 254
3331	Agriculture, construction, & mining machinery mfg.	-	15	12	1 705	49 039	1 264	2 558	32 288	316 535	332 624	648 416	D
33311	Agricultural implement mfg	-	11	8	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	10	8	g	D	D	D	D	D	D	D	14 222
33312	Construction machinery mfg	2	3	3	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	2	3	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	12	5	797	16 368	666	1 173	10 486	28 857	33 265	62 397	2 271
3363	Motor vehicle parts mfg ...	2	5	3	559	9 632	503	864	6 413	15 253	14 807	30 071	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	18	4	299	6 224	220	381	3 921	12 628	11 481	24 134	672
3371	Household & institutional furniture & kitchen cabinet mfg	1	16	4	e	D	D	D	D	D	D	D	D
	GRAND FORKS, ND—MN MSA												
31-33	Manufacturing	-	92	25	3 087	75 293	2 494	4 626	54 934	275 369	277 675	551 735	17 554
	Grand Forks, ND—MN MSA (MN Part)	-	40	12	1 350	36 299	1 107	2 064	26 606	130 024	168 604	300 278	4 252
	Grand Forks, ND—MN MSA (ND Part)	-	52	13	1 737	38 994	1 387	2 562	28 328	145 345	109 071	251 457	13 302
311	Food mfg	-	14	7	1 358	36 757	1 173	2 391	28 577	191 323	183 174	373 941	11 351
3113	Sugar & confectionery product mfg	-	2	1	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	11	4	e	D	D	D	D	D	D	D	556
337	Furniture & related product mfg	-	6	3	258	5 180	217	438	4 343	9 576	9 878	19 802	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BURLEIGH COUNTY, ND													
31-33	Manufacturing	3	54	12	1 310	47 254	927	1 898	30 467	S	S	99 654	D
333	Machinery mfg	2	4	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
CASS COUNTY, ND													
31-33	Manufacturing	1	183	68	6 757	173 505	4 947	9 546	106 457	625 835	882 924	1 512 175	46 168
311	Food mfg	3	23	14	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	23	13	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	13	11	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	9	7	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	8	7	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	12	5	797	16 368	666	1 173	10 486	28 857	33 265	62 397	2 271
3363	Motor vehicle parts mfg ...	2	5	3	559	9 632	503	864	6 413	15 253	14 807	30 071	D
GRAND FORKS COUNTY, ND													
31-33	Manufacturing	-	52	13	1 737	38 994	1 387	2 562	28 328	145 345	109 071	251 457	13 302
311	Food mfg	-	7	3	744	15 754	647	1 254	12 271	92 880	39 644	131 582	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
MORTON COUNTY, ND													
31-33	Manufacturing	-	27	10	883	27 195	641	1 156	17 656	109 841	456 122	573 419	D
PEMBINA COUNTY, ND													
31-33	Manufacturing	9	16	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	9	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	9	1	1	f	D	D	D	D	D	D	D	D
RICHLAND COUNTY, ND													
31-33	Manufacturing	-	34	13	2 261	69 199	1 758	3 739	50 044	120 538	248 386	373 047	D
321	Wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
321211	Hardwood veneer & plywood mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SARGENT COUNTY, ND													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	g	D	D	D	D	D	D	D	
33312	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	
333120	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	
STARK COUNTY, ND													
31-33	Manufacturing	1	30	6	718	17 626	508	904	10 218	36 555	38 962	75 760	3 073
STUTSMAN COUNTY, ND													
31-33	Manufacturing	-	28	10	1 446	41 043	1 001	1 953	20 768	110 116	144 778	250 334	11 813
WARD COUNTY, ND													
31-33	Manufacturing	1	58	11	770	18 003	499	868	10 407	91 567	188 851	281 572	10 369

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BISMARCK, ND													
31-33	Manufacturing	4	48	11	g	D	D	D	D	D	D	D	
333	Machinery mfg	4	2	1	f	D	D	D	D	D	D	D	
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	
FARGO, ND													
31-33	Manufacturing	-	133	48	5 206	131 229	3 721	7 002	78 350	493 433	563 360	1 057 521	35 784
311	Food mfg	1	17	9	715	17 605	430	875	9 290	44 595	65 600	111 095	2 407
326	Plastics & rubber products mfg	-	11	5	f	D	D	D	D	D	D	D	
333	Machinery mfg	-	15	7	1 307	39 224	956	1 930	25 786	289 418	320 844	610 901	13 927
3331	Agriculture, construction, & mining machinery mfg.	-	8	6	g	D	D	D	D	D	D	D	
33311	Agricultural implement mfg	-	7	5	g	D	D	D	D	D	D	D	
333111	Farm machinery & equipment mfg	-	6	5	g	D	D	D	D	D	D	13 530	
336	Transportation equipment mfg	-	7	3	f	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	4	2	f	D	D	D	D	D	D	D	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAND FORKS, ND													
31-33	Manufacturing	-	43	10	1 536	33 709	1 275	2 357	26 146	131 601	100 702	231 871	D
311	Food mfg.....	-	7	3	744	15 754	647	1 254	12 271	92 880	39 644	131 582	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
JAMESTOWN, ND													
31-33	Manufacturing	-	19	6	f	D	D	D	D	D	D	D	D
MANDAN, ND													
31-33	Manufacturing	-	19	9	f	D	D	D	D	D	D	D	D
MINOT, ND													
31-33	Manufacturing	4	41	9	f	D	D	D	D	D	D	D	D
WAHPETON, ND													
31-33	Manufacturing	-	17	8	g	D	D	D	D	D	D	D	4 291
321	Wood product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
321211	Hardwood veneer & plywood mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	1	1	f	D	D	D	D	D	D	D	D
WEST FARGO, ND													
31-33	Manufacturing	3	36	17	1 322	36 424	1 053	2 198	24 484	117 681	283 066	403 423	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NORTH DAKOTA		NORTH DAKOTA—Con.	
Companies ¹	number.. 666	Quantity of electricity purchased for heat and power	1,000 kWh.. 838 620
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 181 275
All establishments	number.. 704	Total value of shipments	\$1,000.. 5 115 890
Establishments with 1 to 19 employees	number.. 516	Value of resales	\$1,000.. 137 336
Establishments with 20 to 99 employees	number.. 139	Value added	\$1,000.. 1 802 403
Establishments with 100 employees or more	number.. 49	Total inventories, beginning of year	\$1,000.. 565 065
All employees	number.. 21 956	Finished goods inventories, beginning of year	\$1,000.. 229 246
Total compensation ²	\$1,000.. 761 458	Work-in-process inventories, beginning of year	\$1,000.. 68 748
Annual payroll	\$1,000.. 604 752	Materials and supplies inventories, beginning of year	\$1,000.. 267 071
Total fringe benefits	\$1,000.. 156 706	Total inventories, end of year	\$1,000.. 567 714
Production workers, average for year	number.. 16 364	Finished goods inventories, end of year	\$1,000.. 227 785
Production workers on March 12	number.. 16 052	Work-in-process inventories, end of year	\$1,000.. 64 277
Production workers on May 12	number.. 16 257	Materials and supplies inventories, end of year	\$1,000.. 275 652
Production workers on August 12	number.. 16 463	Gross book value of total assets at beginning of year	\$1,000.. 1 460 136
Production workers on November 12	number.. 16 684	Total capital expenditures (new and used)	\$1,000.. 196 220
Production-worker hours	1,000.. 31 457	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 39 144
Production-worker wages	\$1,000.. 386 916	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 157 076
Total cost of materials	\$1,000.. 3 296 694	Total retirements ²	\$1,000.. 43 129
Cost of materials, parts, containers, etc., consumed	\$1,000.. 3 086 491	Gross book value of total assets at end of year	\$1,000.. 1 613 227
Cost of resales	\$1,000.. 110 284	Total depreciation during year ²	\$1,000.. 95 006
Cost of fuels	\$1,000.. 39 157	Total rental payments ²	\$1,000.. 30 199
Cost of purchased electricity	\$1,000.. 38 377	Buildings and other structures rental payments ²	\$1,000.. 11 778
Cost of contract work	\$1,000.. 22 385	Machinery and equipment rental payments ²	\$1,000.. 18 421

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NORTH DAKOTA

There are no geographic notes for the state of North Dakota.

Appendix E. Metropolitan Areas

NORTH DAKOTA

Bismarck, ND MSA

Burleigh County, ND

Morton County, ND

Fargo—Moorhead, ND—MN MSA

Clay County, MN

Cass County, ND

Grand Forks, ND—MN MSA

Polk County, MN

Grand Forks County, ND

Nebraska

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NEBRASKA													
31-33	Manufacturing	-	1 960	612	106 690	3 040 509	84 085	172 470	2 132 721	10 822 657	17 009 228	27 859 177	822 220
311	Food mfg.....	-	292	128	33 692	827 285	27 939	61 567	639 780	3 569 397	10 769 547	14 323 711	241 874
3111	Animal food mfg.....	-	71	22	1 666	53 122	1 109	2 290	27 580	364 775	479 700	840 871	33 749
31111	Animal food mfg.....	-	71	22	1 666	53 122	1 109	2 290	27 580	364 775	479 700	840 871	33 749
311111	Dog & cat food mfg....	-	5	3	558	19 701	451	1 052	12 084	198 605	136 566	333 940	D
311119	Other animal food mfg.....	1	66	19	1 108	33 421	658	1 238	15 496	166 170	343 134	506 931	D
3112	Grain & oilseed milling	-	22	12	1 886	91 536	1 487	3 472	73 749	507 353	1 327 971	1 851 307	65 489
31121	Flour milling & malt mfg .	-	11	4	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	11	4	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	8	5	701	24 916	508	1 282	16 820	160 478	963 159	1 137 246	39 373
311221	Wet corn milling	-	2	2	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	4	2	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	3	3	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	10	4	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	1	6	3	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	1	4	1	101	2 114	76	160	1 184	3 947	5 527	9 500	D
3115	Dairy product mfg	-	13	9	942	25 028	633	1 525	15 173	87 107	278 555	363 963	5 811
31151	Dairy product (except frozen) mfg	-	12	8	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	5	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	98	53	22 839	511 708	20 004	45 113	421 650	1 724 246	7 992 361	9 697 353	77 079
31161	Animal slaughtering & processing.....	-	98	53	22 839	511 708	20 004	45 113	421 650	1 724 246	7 992 361	9 697 353	77 079
311611	Animal (except poultry) slaughtering	-	55	25	18 461	415 242	16 376	37 881	349 910	1 413 569	7 293 251	8 689 517	54 957
311612	Meat processed from carcasses	1	21	15	3 369	73 250	2 817	5 513	54 538	211 867	557 645	770 789	13 151
311613	Rendering & meat byproduct processing.....	-	15	9	474	10 823	320	684	6 580	75 212	87 464	159 515	6 316
311615	Poultry processing.....	-	7	4	535	12 393	491	1 035	10 622	23 598	54 001	77 532	2 655
3118	Bakeries & tortilla mfg.....	-	55	15	2 691	61 576	1 481	2 723	35 380	273 648	127 775	397 829	17 018
31181	Bread & bakery product mfg	1	46	8	1 935	38 831	876	1 386	18 992	131 716	55 478	186 453	14 505
311811	Retail bakeries.....	5	29	-	132	1 383	92	97	919	2 957	1 800	4 778	154
311812	Commercial bakeries ..	-	14	6	g	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	9	3	2	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	7	5	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg.....	-	4	4	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	2	2	e	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	18	10	1 245	21 575	1 097	2 060	18 043	74 464	114 976	190 076	11 649
31191	Snack food mfg	-	6	3	c	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	6	3	c	D	D	D	D	D	D	D	D
31199	All other food mfg	-	10	5	1 052	17 470	967	1 865	15 964	55 658	98 469	153 980	10 651
311999	All other miscellaneous food mfg	-	7	4	1 009	16 713	928	1 795	15 323	52 568	94 618	147 049	10 563
312	Beverage & tobacco product mfg.....	2	11	5	502	15 766	235	486	5 209	68 658	150 097	219 964	D
3121	Beverage mfg.....	2	10	5	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	2	8	5	483	15 443	216	477	4 982	68 168	149 642	219 039	D
312111	Soft drink mfg.....	2	5	4	e	D	D	D	D	D	D	D	D
313	Textile mills.....	2	11	3	196	3 863	170	330	3 071	10 273	5 790	15 924	D
3132	Fabric mills	2	6	2	160	3 325	135	262	2 555	9 037	4 341	13 327	D
31322	Narrow fabric mills & schiffli machine embroidery	-	1	1	c	D	D	D	D	D	D	D	D
313221	Narrow fabric mills....	-	1	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEBRASKA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills	2	45	5	560	9 934	435	699	6 363	21 575	20 764	41 315	D
3141	Textile furnishings mills	—	19	2	311	5 420	239	398	3 700	13 176	12 337	24 740	D
31412	Curtain & linen mills	—	18	2	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	5	2	269	4 699	206	342	3 274	11 328	11 064	21 628	D
3149	Other textile product mills . . .	4	26	3	249	4 514	196	301	2 663	8 399	8 427	16 575	D
31491	Textile bag & canvas mills	3	15	3	193	3 489	156	242	2 120	6 370	6 312	12 363	D
314911	Textile bag mills	1	3	1	102	1 590	80	110	930	2 800	2 492	5 129	D
315	Apparel mfg	—	26	10	987	17 279	833	2 608	12 824	68 417	51 523	118 763	D
3152	Cut & sew apparel mfg	—	19	10	971	16 991	820	2 588	12 635	67 996	51 213	118 030	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	c	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	1	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	7	5	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	3	3	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	2	3	3	109	2 214	74	129	1 113	4 685	2 730	7 286	D
315299	All other cut & sew apparel mfg	2	3	3	109	2 214	74	129	1 113	4 685	2 730	7 286	D
316	Leather & allied product mfg . .	2	7	5	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	2	4	4	482	13 709	390	908	10 166	29 012	190 625	217 335	D
31611	Leather & hide tanning & finishing	2	4	4	482	13 709	390	908	10 166	29 012	190 625	217 335	D
316110	Leather & hide tanning & finishing	2	4	4	482	13 709	390	908	10 166	29 012	190 625	217 335	D
321	Wood product mfg	3	81	16	2 469	59 420	1 950	3 795	40 323	113 320	213 146	326 207	7 068
3212	Veneer, plywood, & engineered wood product mfg	2	7	2	146	3 088	99	176	1 812	5 602	6 993	12 502	208
32121	Veneer, plywood, & engineered wood product mfg	2	7	2	146	3 088	99	176	1 812	5 602	6 993	12 502	208
321214	Truss mfg	2	7	2	146	3 088	99	176	1 812	5 602	6 993	12 502	208
3219	Other wood product mfg	3	67	14	2 257	55 106	1 792	3 522	37 479	104 745	194 665	299 227	6 394
32191	Millwork	1	18	4	629	15 934	472	948	10 354	30 552	67 000	97 395	1 900
321911	Wood window & door mfg	2	7	3	349	7 830	270	545	5 401	22 012	42 103	64 135	926
321912	Cut stock, resawing lumber, & planing	—	4	1	c	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	1	25	4	303	5 766	253	442	3 791	10 643	14 355	24 972	924
321920	Wood container & pallet mfg	1	25	4	303	5 766	253	442	3 791	10 643	14 355	24 972	924
32199	All other wood product mfg	4	24	6	1 325	33 406	1 067	2 132	23 334	63 550	113 310	176 860	3 570
321991	Manufactured home (mobile home) mfg	4	5	4	1 076	28 209	873	1 771	19 840	54 538	106 719	161 251	3 268
321992	Prefabricated wood building mfg	—	4	1	158	3 688	112	223	2 215	6 471	3 610	10 066	145
322	Paper mfg	—	19	14	1 426	49 487	1 135	2 385	32 845	126 239	170 472	295 457	14 599
3222	Converted paper product mfg	—	19	14	1 426	49 487	1 135	2 385	32 845	126 239	170 472	295 457	14 599
32221	Paperboard container mfg	1	11	10	900	32 661	692	1 427	20 359	67 954	99 649	165 692	3 921
322211	Corrugated & solid fiber box mfg	—	6	6	357	12 245	261	579	7 116	30 943	50 956	81 613	833
322212	Folding paperboard box mfg	2	5	4	543	20 416	431	848	13 243	37 011	48 693	84 079	3 088
32222	Paper bag & coated & treated paper mfg	—	2	2	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	1	1	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	4	2	c	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	2	2	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEBRASKA—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	277	49	5 481	153 500	4 019	7 150	92 818	366 259	234 338	600 363	31 772
3231	Printing & related support activities.....	1	277	49	5 481	153 500	4 019	7 150	92 818	366 259	234 338	600 363	31 772
32311	Printing.....	1	253	42	5 054	142 283	3 656	6 538	85 216	340 641	229 370	569 844	30 464
323110	Commercial lithographic printing ..	1	127	27	2 831	79 274	2 193	3 849	51 136	167 234	126 980	294 151	20 916
323112	Commercial flexographic printing ..	1	5	5	863	28 666	606	1 263	16 708	76 311	58 179	134 224	5 272
323113	Commercial screen printing.....	2	33	2	261	5 407	193	264	3 047	13 158	6 040	19 320	568
323114	Quick printing.....	4	49	1	246	5 296	157	250	2 841	10 949	5 413	16 407	667
323116	Manifold business form printing.....	-	4	3	280	10 001	175	306	5 277	40 296	18 179	58 805	697
323117	Book printing.....	-	4	1	e	D	D	D	D	D	D	D	D
323119	Other commercial printing.....	1	22	1	226	5 214	165	274	2 811	12 221	6 042	18 161	638
32312	Support activities for printing.....	1	24	7	427	11 217	363	612	7 602	25 618	4 968	30 519	1 308
323121	Tradebinding & related work.....	4	10	2	176	3 722	144	252	2 229	5 069	1 193	6 185	147
323122	Prepress services	-	14	5	251	7 495	219	360	5 373	20 549	3 775	24 334	1 161
325	Chemical mfg	-	67	26	2 765	116 675	1 918	4 051	66 340	1 194 217	557 936	1 840 901	70 737
3251	Basic chemical mfg	1	18	9	522	18 308	396	793	11 543	112 395	181 378	292 869	13 502
32518	Other basic inorganic chemical mfg	1	5	3	123	3 761	89	147	2 603	29 835	29 477	59 018	D
325188	All other basic inorganic chemical mfg	1	5	3	123	3 761	89	147	2 603	29 835	29 477	59 018	D
32519	Other basic organic chemical mfg	1	8	6	352	12 784	289	610	8 020	72 563	146 832	218 771	9 726
325193	Ethyl alcohol mfg	-	4	4	c	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	11	5	403	18 753	264	565	11 017	232 057	201 897	420 793	9 098
32531	Fertilizer mfg.....	-	8	3	e	D	D	D	D	D	D	D	8 138
325312	Phosphatic fertilizer mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	3	2	c	D	D	D	D	D	D	D	960
325320	Pesticide & other agricultural chemical mfg	-	3	2	c	D	D	D	D	D	D	D	960
3254	Pharmaceutical & medicine mfg	-	16	10	1 632	73 023	1 126	2 489	39 852	828 792	154 191	1 085 592	47 331
32541	Pharmaceutical & medicine mfg	-	16	10	1 632	73 023	1 126	2 489	39 852	828 792	154 191	1 085 592	47 331
325412	Pharmaceutical preparation mfg	-	7	3	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	c	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	6	5	863	33 604	689	1 808	23 562	204 326	82 547	296 802	D
3259	Other chemical product mfg	2	10	1	105	3 605	68	93	2 266	7 161	8 715	15 880	254
326	Plastics & rubber products mfg	1	79	41	6 643	201 120	5 559	11 399	151 542	457 777	438 478	888 614	48 163
3261	Plastics product mfg	1	62	30	3 029	76 542	2 433	5 032	52 874	193 140	216 414	404 607	16 595
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	11	4	396	11 405	286	664	7 154	32 056	69 212	98 259	2 221
326122	Plastics pipe & pipe fitting mfg	-	8	4	391	11 252	281	655	7 050	31 693	68 912	97 594	2 184
32614	Polystyrene foam product mfg.....	4	2	2	c	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg.....	4	2	2	c	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	39	23	2 443	61 066	2 000	4 109	43 194	147 500	135 078	280 651	13 353
326199	All other plastics product mfg.....	1	37	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	17	11	3 614	124 578	3 126	6 367	98 668	264 637	222 064	484 007	31 568
32622	Rubber & plastics hoses & belting mfg	-	4	4	h	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	4	4	h	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	2	7	6	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	4	3	c	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	3	3	3	449	10 939	369	671	8 556	28 110	16 900	45 817	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEBRASKA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	131	32	2 446	65 878	1 976	3 746	46 901	213 159	184 747	404 047	15 366
3271	Clay product & refractory mfg	—	11	2	319	7 035	273	374	4 645	12 304	7 011	19 230	1 400
32712	Clay building material & refractories mfg	—	5	2	301	6 800	257	346	4 452	11 492	6 556	17 970	1 387
327121	Brick & structural clay tile mfg	—	3	2	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	2	8	2	226	5 849	196	367	4 061	13 520	9 362	22 986	D
32721	Glass & glass product mfg	2	8	2	226	5 849	196	367	4 061	13 520	9 362	22 986	D
327215	Glass product mfg made of purchased glass	1	6	2	c	D	D	D	D	D	D	D	343
3273	Cement & concrete product mfg	1	102	27	1 826	50 807	1 453	2 900	36 679	180 171	160 736	347 054	11 933
32731	Cement mfg	—	1	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	1	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	1	69	12	737	17 151	598	1 033	12 106	71 450	95 368	173 160	6 831
327320	Ready-mix concrete mfg	1	69	12	737	17 151	598	1 033	12 106	71 450	95 368	173 160	6 831
32733	Concrete pipe, brick, & block mfg	—	5	3	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	4	27	11	801	21 830	643	1 405	16 791	43 560	42 354	86 833	2 708
327390	Other concrete product mfg	4	27	11	801	21 830	643	1 405	16 791	43 560	42 354	86 833	2 708
331	Primary metal mfg	—	13	7	1 133	52 690	957	2 094	42 157	144 693	170 431	314 159	D
3311	Iron & steel mills & ferroalloy mfg	—	2	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	1	10	5	f	D	D	D	D	D	D	D	3 209
33151	Ferrous metal foundries	—	5	4	535	16 792	415	968	11 576	38 614	16 528	55 295	3 039
331511	Iron foundries	—	4	3	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	1	1	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	276	80	9 523	265 286	7 242	13 455	184 309	624 087	645 532	1 260 532	36 771
3321	Forging & stamping	1	10	5	284	7 794	227	426	5 078	23 520	29 785	53 029	925
33211	Forging & stamping	1	10	5	284	7 794	227	426	5 078	23 520	29 785	53 029	925
332114	Custom roll forming	—	3	3	177	5 206	142	292	3 298	18 713	25 880	44 325	579
3322	Cutlery & handtool mfg	—	8	5	986	25 026	903	1 790	22 685	85 061	31 235	116 995	4 032
33221	Cutlery & handtool mfg	—	8	5	986	25 026	903	1 790	22 685	85 061	31 235	116 995	4 032
332212	Hand & edge tool mfg	—	7	4	f	D	D	D	D	D	D	D	4 032
3323	Architectural & structural metals mfg	—	75	27	3 364	102 325	2 285	3 800	63 200	225 488	347 773	569 101	10 044
33231	Plate work & fabricated structural product mfg	—	38	16	2 408	77 470	1 583	2 507	47 656	155 778	239 809	395 951	6 374
332311	Prefabricated metal building & component mfg	—	6	5	1 510	40 148	946	1 188	24 410	28 933	86 624	116 069	D
332312	Fabricated structural metal mfg	—	22	9	726	32 807	506	1 042	20 162	116 554	144 419	260 907	D
332313	Plate work mfg	—	10	2	172	4 515	131	277	3 084	10 291	8 766	18 975	1 573
33232	Ornamental & architectural metal products mfg	1	37	11	956	24 855	702	1 293	15 544	69 710	107 964	173 150	3 670
332321	Metal window & door mfg	—	10	4	481	11 942	342	627	7 766	42 135	62 085	101 661	823
332322	Sheet metal work mfg	1	15	6	357	10 162	269	504	5 846	22 603	39 316	60 077	2 351
332323	Ornamental & architectural metal work mfg	3	12	1	118	2 751	91	162	1 932	4 972	6 563	11 412	496
3324	Boiler, tank, & shipping container mfg	—	5	4	698	24 913	557	1 290	18 939	45 404	63 666	108 082	3 143
33241	Power boiler & heat exchanger mfg	—	2	2	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	2	2	c	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	1	1	c	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	1	1	c	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	2	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	1	1	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	5	1	c	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	1	5	1	c	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	4	1	c	D	D	D	D	D	D	D	D

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NEBRASKA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	121	18	1 358	31 769	1 085	1 800	22 426	58 199	28 626	86 031	5 471
33271	Machine shops	2	110	14	1 014	24 171	797	1 342	17 032	44 362	21 917	65 625	4 361
332710	Machine shops	2	110	14	1 014	24 171	797	1 342	17 032	44 362	21 917	65 625	4 361
33272	Turned product & screw, nut, & bolt mfg	—	11	4	344	7 598	288	458	5 394	13 837	6 709	20 406	1 110
332721	Precision turned product mfg	—	9	3	c	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	2	1	c	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	2	17	4	416	11 358	295	598	7 198	23 161	9 284	31 644	1 563
33281	Coating, engraving, heat treating, & allied activities	2	17	4	416	11 358	295	598	7 198	23 161	9 284	31 644	1 563
332813	Electroplating, plating, polishing, anodizing, & coloring	2	8	3	299	8 539	204	433	5 136	17 409	6 421	23 143	1 102
3329	Other fabricated metal product mfg	—	33	15	2 205	56 937	1 722	3 419	41 404	147 899	124 634	269 883	10 711
33291	Metal valve mfg	—	6	4	524	14 446	426	854	10 483	41 081	17 690	58 424	3 002
332912	Fluid power valve & hose fitting mfg	—	5	3	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	27	11	1 681	42 491	1 296	2 565	30 921	106 818	106 944	211 459	7 709
332992	Small arms ammunition mfg	—	4	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	19	8	1 423	34 486	1 088	2 143	24 971	85 261	97 401	180 320	7 499
333	Machinery mfg	—	205	74	11 804	401 308	8 471	17 104	248 914	904 487	998 175	1 882 780	84 576
3331	Agriculture, construction, & mining machinery mfg	—	95	36	7 376	256 055	5 183	10 560	149 030	535 537	729 038	1 259 418	51 678
33311	Agricultural implement mfg	—	86	28	6 349	223 489	4 467	9 057	131 716	483 902	649 570	1 127 742	46 128
333111	Farm machinery & equipment mfg	—	84	28	i	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	1	9	8	1 027	32 566	716	1 503	17 314	51 635	79 468	131 676	5 550
333120	Construction machinery mfg	1	9	8	1 027	32 566	716	1 503	17 314	51 635	79 468	131 676	5 550
3332	Industrial machinery mfg ..	3	17	4	252	7 711	134	269	3 521	14 601	12 261	26 504	629
33329	Other industrial machinery mfg	3	12	3	193	5 871	96	187	2 655	9 839	9 988	19 463	487
333298	All other industrial machinery mfg	2	6	2	123	3 751	55	107	1 469	5 722	6 072	11 429	260
3333	Commercial & service industry machinery mfg ..	2	13	5	509	15 776	376	714	9 285	77 392	67 598	142 541	4 512
33331	Commercial & service industry machinery mfg	2	13	5	509	15 776	376	714	9 285	77 392	67 598	142 541	4 512
333315	Photographic & photocopying equipment mfg	3	2	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	6	2	c	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	7	3	197	5 666	145	348	3 949	12 291	12 150	24 136	610
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	4	7	3	197	5 666	145	348	3 949	12 291	12 150	24 136	610
333415	AC & warm air heating & commercial/ industrial refig equip mfg	2	2	2	c	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	26	6	365	12 341	282	526	8 682	28 743	12 102	40 187	1 384
33351	Metalworking machinery mfg	2	26	6	365	12 341	282	526	8 682	28 743	12 102	40 187	1 384
333511	Industrial mold mfg ..	1	7	2	113	4 218	86	183	3 353	8 937	3 331	11 412	668
3336	Engine, turbine, & power transmission equipment mfg	—	5	4	333	11 055	225	452	5 387	19 920	18 803	38 006	3 164
33361	Engine, turbine, & power transmission equipment mfg	—	5	4	333	11 055	225	452	5 387	19 920	18 803	38 006	3 164
333613	Mechanical power transmission equipment mfg	—	4	3	e	D	D	D	D	D	D	D	3 164

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEBRASKA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	42	16	2 772	92 704	2 126	4 235	69 060	216 003	146 223	351 988	22 599
33391	Pump & compressor mfg	-	8	4	362	11 833	268	676	8 786	24 549	25 295	46 519	D
333911	Pump & pumping equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	16	5	354	9 434	210	364	5 212	18 999	16 172	34 487	D
333922	Conveyor & conveying equipment mfg	-	9	4	266	7 469	131	208	3 585	12 196	11 168	22 942	756
33399	All other general-purpose machinery mfg	-	18	7	2 056	71 437	1 648	3 195	55 062	172 455	104 756	270 982	17 599
333995	Fluid power cylinder & actuator mfg	-	2	2	c	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	3	3	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	3	8	1	178	3 190	140	130	1 966	9 302	9 880	19 720	318
334	Computer & electronic product mfg	-	55	24	6 030	193 767	4 273	8 287	119 942	567 006	390 358	946 998	42 491
3342	Communications equipment mfg	-	15	7	2 603	96 595	1 903	3 504	66 927	289 461	214 543	486 519	26 064
33421	Telephone apparatus mfg	-	3	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	7	3	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	7	3	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	5	3	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	5	3	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	13	9	1 870	44 987	1 381	2 882	25 483	144 209	102 339	255 812	6 524
33441	Semiconductor & other electronic component mfg	1	13	9	1 870	44 987	1 381	2 882	25 483	144 209	102 339	255 812	6 524
334414	Electronic capacitor mfg	-	2	2	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	2	2	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	2	2	1	c	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	14	7	1 462	49 713	920	1 778	25 983	127 516	68 816	194 189	9 074
33451	Navigational, measuring, medical, & control instruments mfg	-	14	7	1 462	49 713	920	1 778	25 983	127 516	68 816	194 189	9 074
334513	Industrial process control instrument mfg	1	5	3	511	14 325	245	518	5 189	42 628	15 133	56 876	3 383
334514	Totalizing fluid meter & counting device mfg	-	1	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	4	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	24	14	5 100	157 402	4 145	7 437	118 046	696 360	502 486	1 190 117	33 925
3353	Electrical equipment mfg	-	7	4	1 370	48 260	999	1 729	33 006	185 076	132 386	319 560	12 191
33531	Electrical equipment mfg	-	7	4	1 370	48 260	999	1 729	33 006	185 076	132 386	319 560	12 191
335312	Motor & generator mfg	-	2	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	4	3	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEBRASKA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	-	11	9	3 659	107 908	3 090	5 588	84 195	507 709	368 837	865 654	21 687
33592	Communication & energy wire & cable mfg	-	2	2	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	4	g	D	D	D	D	D	D	D	4 532
335931	Current-carrying wiring device mfg	-	4	3	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	4	3	1 317	20 742	1 131	1 638	13 058	90 433	62 183	150 927	D
335999	All other miscellaneous electrical equipment & component mfg	-	4	3	1 317	20 742	1 131	1 638	13 058	90 433	62 183	150 927	D
336	Transportation equipment mfg	-	69	27	7 610	228 088	6 192	12 659	167 361	568 212	920 008	1 496 977	29 502
3362	Motor vehicle body & trailer mfg	-	18	7	1 478	38 491	1 210	2 345	26 180	104 451	170 684	273 820	2 220
33621	Motor vehicle body & trailer mfg	-	18	7	1 478	38 491	1 210	2 345	26 180	104 451	170 684	273 820	2 220
336211	Motor vehicle body mfg	-	9	2	409	10 326	312	587	7 145	18 178	36 372	55 238	556
336212	Truck trailer mfg	-	5	3	646	18 659	560	1 154	12 620	63 721	106 278	166 432	1 305
336214	Travel trailer & camper mfg	-	3	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	1	33	13	4 514	140 648	3 786	8 120	109 766	356 975	349 790	709 808	18 780
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	3	1 188	47 578	961	2 063	39 197	136 743	49 244	184 828	D
336311	Carburetor, piston, piston ring, & valve mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	1	c	D	D	D	D	D	D	D	123
33633	Motor vehicle steering & suspension component (except spring) mfg	-	3	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	3	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	c	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	c	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	3	1	c	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	3	1	c	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	1	c	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	1	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	2	14	5	1 993	58 497	1 641	3 529	42 664	147 439	191 419	340 213	11 847
336391	Motor vehicle air-conditioning mfg	-	2	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	12	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	4	3	f	D	D	D	D	D	D	D	3 386
33641	Aerospace product & parts mfg	-	4	3	f	D	D	D	D	D	D	D	3 386
336413	Other aircraft part & auxiliary equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	-	5	2	184	5 063	135	233	3 116	16 656	14 877	31 168	D
33651	Railroad rolling stock mfg	-	5	2	184	5 063	135	233	3 116	16 656	14 877	31 168	D
336510	Railroad rolling stock mfg	-	5	2	184	5 063	135	233	3 116	16 656	14 877	31 168	D
3369	Other transportation equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEBRASKA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	105	21	3 075	77 462	2 396	4 469	50 819	216 551	165 392	379 777	9 582
3371	Household & institutional furniture & kitchen cabinet mfg	1	68	8	820	16 061	709	1 243	12 478	31 850	36 475	68 311	3 584
33711	Wood kitchen cabinet & counter top mfg	1	46	5	495	9 188	419	665	6 563	22 144	20 873	43 052	3 164
337110	Wood kitchen cabinet & counter top mfg ...	1	46	5	495	9 188	419	665	6 563	22 144	20 873	43 052	3 164
33712	Household & institutional furniture mfg	1	22	3	325	6 873	290	578	5 915	9 706	15 602	25 259	420
337121	Upholstered household furniture mfg	1	6	1	146	2 873	128	222	2 310	5 125	6 475	11 600	162
337127	Institutional furniture mfg	1	4	2	156	3 657	141	325	3 329	3 960	8 543	12 453	191
3372	Office furniture (including fixtures) mfg	-	29	9	1 858	48 987	1 418	2 658	32 485	168 035	96 696	262 390	5 561
33721	Office furniture (including fixtures) mfg	-	29	9	1 858	48 987	1 418	2 658	32 485	168 035	96 696	262 390	5 561
337212	Custom architectural woodwork & millwork mfg	-	7	4	365	9 974	250	479	5 917	14 315	8 200	23 116	D
337215	Showcase, partition, shelving, & locker mfg	-	10	5	1 420	37 615	1 111	2 088	25 604	151 150	86 668	234 871	5 114
3379	Other furniture related product mfg	-	8	4	397	12 414	269	568	5 856	16 666	32 221	49 076	437
33791	Mattress mfg	-	4	3	275	9 559	198	386	4 582	16 268	23 644	39 966	D
337910	Mattress mfg	-	4	3	275	9 559	198	386	4 582	16 268	23 644	39 966	D
33792	Blind & shade mfg	-	4	1	122	2 855	71	182	1 274	398	8 577	9 110	D
337920	Blind & shade mfg	-	4	1	122	2 855	71	182	1 274	398	8 577	9 110	D
339	Miscellaneous mfg	-	164	31	4 721	129 425	3 812	7 765	92 187	858 693	220 098	1 081 801	33 186
3391	Medical equipment & supplies mfg	-	72	14	3 537	105 569	2 927	6 143	77 938	806 959	183 164	992 833	27 186
33911	Medical equipment & supplies mfg	-	72	14	3 537	105 569	2 927	6 143	77 938	806 959	183 164	992 833	27 186
339112	Surgical & medical instrument mfg	-	9	7	h	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	8	3	f	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	4	44	2	273	6 541	202	357	3 952	12 520	4 509	17 125	432
3399	Other miscellaneous mfg ..	2	92	17	1 184	23 856	885	1 622	14 249	51 734	36 934	88 968	6 000
33992	Sporting & athletic goods mfg	2	12	4	228	4 555	174	304	2 719	10 891	8 810	20 017	336
339920	Sporting & athletic goods mfg	2	12	4	228	4 555	174	304	2 719	10 891	8 810	20 017	336
33995	Sign mfg	1	37	8	326	8 822	228	421	4 799	16 367	11 704	28 130	722
339950	Sign mfg	1	37	8	326	8 822	228	421	4 799	16 367	11 704	28 130	722
33999	All other miscellaneous mfg	1	22	4	543	8 301	419	772	5 075	19 663	13 525	33 155	4 709
339994	Broom, brush, & mop mfg	-	3	1	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	14	3	320	4 801	261	490	2 962	11 707	6 638	18 306	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LINCOLN, NE MSA												
31-33	Manufacturing	-	267	92	15 322	502 303	11 577	22 413	323 906	1 962 919	1 787 670	3 855 102	101 575
311	Food mfg.....	-	27	10	1 463	40 214	1 045	2 186	24 802	136 886	621 281	767 396	11 305
3116	Meat product mfg.....	-	6	2	f	D	D	D	D	D	D	D	1 818
31161	Animal slaughtering & processing.....	-	6	2	f	D	D	D	D	D	D	D	1 818
311612	Meat processed from carcasses.....	-	4	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	49	9	1 219	35 702	1 009	1 660	23 815	71 037	62 435	134 714	D
3231	Printing & related support activities.....	-	49	9	1 219	35 702	1 009	1 660	23 815	71 037	62 435	134 714	D
32311	Printing.....	-	42	8	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	22	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	8	3	g	D	D	D	D	D	D	D	19 992
3254	Pharmaceutical & medicine mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	11	7	2 361	92 623	2 012	3 967	72 215	200 916	114 283	313 747	9 614
3261	Plastics product mfg.....	-	8	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	8	5	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	8	5	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	13	6	433	11 670	344	681	8 545	27 517	30 223	58 139	1 094
3273	Cement & concrete product mfg.....	-	10	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	33	15	1 471	47 509	1 107	2 387	30 998	106 589	77 946	182 813	6 008
3323	Architectural & structural metals mfg.....	-	9	6	338	12 415	245	507	7 164	21 582	21 574	43 746	888
33231	Plate work & fabricated structural product mfg..	-	8	6	e	D	D	D	D	D	D	D	888
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	3	17	4	259	6 967	194	361	4 748	12 528	5 579	17 696	1 605
33271	Machine shops.....	3	17	4	259	6 967	194	361	4 748	12 528	5 579	17 696	1 605
332710	Machine shops.....	3	17	4	259	6 967	194	361	4 748	12 528	5 579	17 696	1 605
3329	Other fabricated metal product mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	19	6	1 051	36 837	648	1 363	20 925	73 943	98 325	169 772	4 917
3331	Agriculture, construction, & mining machinery mfg....	-	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	16	9	1 221	43 565	575	1 146	14 344	122 218	47 450	169 215	D
3342	Communications equipment mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	LINCOLN, NE MSA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3345	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D	
334513	Industrial process control instrument mfg	2	3	2	e	D	D	D	D	D	D	D	D	
334516	Analytical laboratory instrument mfg	—	4	2	e	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	7	4		2 182	61 222	1 894	3 010	47 214	287 393	132 573	420 333	16 655
3353	Electrical equipment mfg ..	—	2	1	f	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	3	2	g	D	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	3	2	g	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	11	6	g	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	6	3		391	9 387	331	724	7 006	22 838	24 951	47 892	D
3369	Other transportation equipment mfg	—	3	1	f	D	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	3	1	f	D	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	23	5		358	8 159	262	447	4 693	15 845	17 120	33 315	384
339	Miscellaneous mfg	2	27	4		261	6 234	200	379	4 126	12 950	6 057	18 967	392
	OMAHA, NE—IA MSA													
31-33	Manufacturing	—	709	229		34 735	1 099 771	26 317	53 488	740 681	4 042 391	4 809 376	8 809 328	301 844
	Omaha, NE—IA MSA (IA Part)	1	59	26		4 109	113 186	3 285	6 422	84 571	429 356	453 987	888 662	29 180
	Omaha, NE—IA MSA (NE Part)	—	650	203		30 626	986 585	23 032	47 066	656 110	3 613 035	4 355 389	7 920 666	272 664
311	Food mfg	—	78	44		9 854	281 926	7 822	16 707	216 084	1 534 813	2 632 841	4 167 059	102 104
3112	Grain & oilseed milling	—	6	5		1 039	61 519	842	1 912	52 606	343 408	447 025	798 115	D
31123	Breakfast cereal mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	—	2	2	f	D	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	5	3	g	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	4	2	g	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	4	2	g	D	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	30	20	h	D	D	D	D	D	D	D	D	18 609
31161	Animal slaughtering & processing	—	30	20	h	D	D	D	D	D	D	D	D	18 609
311611	Animal (except poultry) slaughtering	—	15	10	h	D	D	D	D	D	D	D	D	10 866
311612	Meat processed from carcasses	—	6	6		907	21 641	772	1 645	16 941	55 781	186 866	241 886	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE-IA MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	—	23	9	1 868	45 310	1 025	2 004	26 153	214 055	93 308	303 483	13 041
31181	Bread & bakery product mfg	1	18	4	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	8	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	3	3	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	—	2	2	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg	—	2	2	e	D	D	D	D	D	D	D	D
311830	Tortilla mfg	—	2	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	4	5	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	5	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	4	4	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	10	3	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	5	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	2	1	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	4	4	3	e	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	4	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	27	3	305	7 365	236	485	4 927	16 850	16 555	33 726	1 516
3219	Other wood product mfg	1	26	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
3222	Converted paper product mfg	—	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
32221	Paperboard container mfg	—	6	6	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	4	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	154	37	3 817	114 820	2 827	5 470	71 072	286 375	201 644	487 953	25 726
3231	Printing & related support activities	2	154	37	3 817	114 820	2 827	5 470	71 072	286 375	201 644	487 953	25 726
32311	Printing	2	139	32	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	4	69	22	2 047	59 150	1 573	3 144	38 928	129 732	111 033	240 520	D
323112	Commercial flexographic printing	1	5	5	863	28 666	606	1 263	16 708	76 311	58 179	134 224	5 272
323116	Manifold business form printing	—	3	3	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	—	15	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	27	13	972	38 570	600	1 163	20 267	283 763	226 017	504 294	33 553
3254	Pharmaceutical & medicine mfg	1	9	7	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	9	7	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	30	15	1 477	34 313	1 201	2 416	24 649	92 350	100 484	192 082	8 931
3261	Plastics product mfg	2	26	13	g	D	D	D	D	D	D	D	8 099
32619	Other plastics product mfg	—	15	7	953	22 993	781	1 666	16 479	53 515	46 745	99 287	6 282
326199	All other plastics product mfg	—	13	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	41	11	884	28 798	685	1 448	20 171	129 631	92 705	221 153	6 135
3273	Cement & concrete product mfg	1	27	10	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	5	10	5	410	11 910	317	779	9 257	29 346	19 088	48 060	1 705
327390	Other concrete product mfg	5	10	5	410	11 910	317	779	9 257	29 346	19 088	48 060	1 705
331	Primary metal mfg	—	6	5	f	D	D	D	D	D	D	D	D
3315	Foundries	—	6	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	4	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	3	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OMAHA, NE-IA MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	84	23	2 191	62 286	1 609	3 075	41 229	135 855	163 185	297 828	8 162
3323	Architectural & structural metals mfg	-	20	6	559	15 773	348	709	8 614	40 884	77 664	118 376	1 171
33231	Plate work & fabricated structural product mfg ..	-	11	3	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	9	3	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	1	1	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	1	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	38	10	653	16 486	522	875	12 216	30 071	16 199	45 881	2 859
33271	Machine shops	1	32	8	484	13 195	387	713	9 994	24 326	12 435	36 371	2 307
332710	Machine shops	1	32	8	484	13 195	387	713	9 994	24 326	12 435	36 371	2 307
3329	Other fabricated metal product mfg	-	8	4	474	12 220	319	549	6 871	32 734	35 759	67 486	D
33299	All other fabricated metal product mfg	-	5	2	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	4	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	44	20	4 345	175 849	3 060	6 365	99 639	350 267	361 177	708 364	39 076
3331	Agriculture, construction, & mining machinery mfg	-	9	5	1 955	87 511	1 313	2 787	39 239	149 578	213 307	366 824	18 429
33311	Agricultural implement mfg	-	7	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	7	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	3	3	2	e	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	3	3	2	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	3	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	14	6	1 581	60 969	1 188	2 440	45 664	141 797	81 803	216 446	D
33399	All other general-purpose machinery mfg	-	8	4	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	19	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	5	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	6	1 046	26 623	845	1 462	17 775	61 886	74 725	138 826	3 438
3362	Motor vehicle body & trailer mfg	-	7	3	795	19 535	656	1 127	13 407	40 886	54 191	97 609	D
33621	Motor vehicle body & trailer mfg	-	7	3	795	19 535	656	1 127	13 407	40 886	54 191	97 609	D
336211	Motor vehicle body mfg	-	4	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE—IA MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	56	15	2 333	60 161	1 831	3 483	40 131	186 408	130 225	313 554	6 074
3371	Household & institutional furniture & kitchen cabinet mfg	3	36	8	f	D	D	D	D	D	D	D	746
33712	Household & institutional furniture mfg	4	14	5	e	D	D	D	D	D	D	D	396
337121	Upholstered household furniture mfg	5	6	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	16	5	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	16	5	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	5	4	1 369	36 720	1 069	2 042	25 049	149 929	85 743	232 657	D
339	Miscellaneous mfg	-	67	10	1 134	32 956	801	1 601	20 257	202 451	62 924	269 118	10 960
3391	Medical equipment & supplies mfg	-	33	5	f	D	D	D	D	D	D	D	6 904
33911	Medical equipment & supplies mfg	-	33	5	f	D	D	D	D	D	D	D	6 904
339113	Surgical appliance & supplies mfg	-	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	2	34	5	e	D	D	D	D	D	D	D	4 056
	SIOUX CITY, IA—NE MSA												
31-33	Manufacturing	-	136	73	11 977	300 929	9 256	18 388	207 528	827 861	3 683 577	4 502 457	113 114
	Sioux City, IA—NE MSA (IA Part)	-	113	59	i	D	D	D	D	D	D	D	99 373
	Sioux City, IA—NE MSA (NE Part)	-	23	14	i	D	D	D	D	D	D	D	13 741
311	Food mfg	-	30	25	7 353	166 779	6 075	12 173	129 020	472 498	3 098 384	3 562 236	17 310
3116	Meat product mfg	-	12	10	6 062	133 967	5 279	10 898	111 333	309 547	2 350 603	2 652 042	10 697
31161	Animal slaughtering & processing	-	12	10	6 062	133 967	5 279	10 898	111 333	309 547	2 350 603	2 652 042	10 697
311611	Animal (except poultry) slaughtering	-	7	7	i	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	3	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	5	4	482	9 657	373	409	4 560	32 227	44 165	76 407	D
31199	All other food mfg	-	5	4	482	9 657	373	409	4 560	32 227	44 165	76 407	D
311999	All other miscellaneous food mfg	-	3	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
3222	Converted paper product mfg	-	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
32221	Paperboard container mfg	-	3	3	339	10 602	265	584	7 103	27 458	43 314	71 200	583
322211	Corrugated & solid fiber box mfg	-	2	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	4	408	19 319	268	647	10 616	93 199	112 581	203 128	76 296
327	Nonmetallic mineral product mfg	2	7	4	281	7 699	231	418	5 486	13 046	17 635	30 530	2 383
332	Fabricated metal product mfg	2	17	8	564	14 979	387	743	8 991	32 965	36 720	68 888	2 270
3323	Architectural & structural metals mfg	2	10	6	422	12 113	288	572	7 184	27 295	34 264	61 444	2 012
33231	Plate work & fabricated structural product mfg	2	5	4	299	8 898	201	416	5 426	21 079	28 295	49 273	1 782
332312	Fabricated structural metal mfg	2	5	4	299	8 898	201	416	5 426	21 079	28 295	49 273	1 782
333	Machinery mfg	-	16	8	934	30 404	547	1 166	15 457	51 377	80 741	131 375	5 401
3339	Other general-purpose machinery mfg	-	4	4	518	18 525	301	672	9 059	28 585	58 178	85 609	3 274
33399	All other general-purpose machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SIOUX CITY, IA-NE MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ADAMS COUNTY, NE												
	Manufacturing	-	63	24	3 526	88 942	2 606	5 476	62 424	238 502	354 638	593 013	15 412
311	Food mfg	-	5	3	878	17 898	564	1 109	12 060	55 651	100 861	157 620	2 535
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	5	821	23 266	610	1 362	17 307	33 855	54 451	89 532	3 787
3331	Agriculture, construction, & mining machinery mfg	-	4	3	533	13 498	403	871	10 388	21 148	37 794	60 514	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
31-33	BUFFALO COUNTY, NE												
	Manufacturing	-	47	16	4 392	122 122	3 371	6 846	87 325	354 108	466 321	817 097	16 205
311	Food mfg	-	9	4	1 004	20 449	889	2 033	17 601	60 258	219 049	277 713	2 735
3116	Meat product mfg	-	5	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	2	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	4	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLFAX COUNTY, NE													
31-33	Manufacturing	-	4	1	g	D	D	D	D	D	D	D	D
311	Food mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
CUMING COUNTY, NE													
31-33	Manufacturing	-	30	5	803	18 039	641	1 277	13 036	427 687	94 229	522 216	3 092
311	Food mfg.....	-	10	3	575	13 229	477	1 047	9 616	418 576	84 303	502 872	2 431
3116	Meat product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	2	f	D	D	D	D	D	D	D	D
DAKOTA COUNTY, NE													
31-33	Manufacturing	-	23	14	i	D	D	D	D	D	D	D	13 741
311	Food mfg.....	-	5	5	h	D	D	D	D	D	D	D	11 845
3116	Meat product mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	h	D	D	D	D	D	D	D	D
DAWSON COUNTY, NE													
31-33	Manufacturing	-	26	12	3 899	88 757	3 339	7 398	72 084	185 799	1 114 106	1 300 004	6 803
311	Food mfg.....	-	10	5	h	D	D	D	D	D	D	D	3 309
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
DODGE COUNTY, NE													
31-33	Manufacturing	-	67	31	3 437	87 455	2 703	5 210	59 854	317 331	690 049	1 009 701	12 330
311	Food mfg.....	-	22	12	1 776	50 005	1 352	2 670	33 908	222 485	611 063	839 269	D
3116	Meat product mfg.....	-	3	3	g	D	D	D	D	D	D	D	2 322
31161	Animal slaughtering & processing.....	-	3	3	g	D	D	D	D	D	D	D	2 322
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DOUGLAS COUNTY, NE												
31-33	Manufacturing	-	555	177	27 335	897 391	20 962	42 897	603 273	3 274 247	3 914 583	7 140 397	223 236
311	Food mfg	-	63	36	i	D	D	D	D	D	D	D	57 106
3112	Grain & oilseed milling	-	5	4	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	23	16	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	23	16	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	11	9	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	21	8	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	4	16	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
3222	Converted paper product mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
32221	Paperboard container mfg	-	6	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	126	32	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	126	32	h	D	D	D	D	D	D	D	D
32311	Printing	1	114	27	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	53	17	g	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	1	5	5	863	28 666	606	1 263	16 708	76 311	58 179	134 224	5 272
325	Chemical mfg	-	23	11	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	22	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	18	8	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	12	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	63	13	1 297	37 392	989	1 884	26 173	75 600	80 312	155 992	4 146
333	Machinery mfg	-	28	15	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	4	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	4	2	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	16	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	5	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	14	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DOUGLAS COUNTY, NE—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	41	10	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	15	5	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	15	5	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	5	4		1 369	36 720	1 069	2 042	25 049	149 929	85 743	232 657
339	Miscellaneous mfg	-	57	10		1 108	32 480	781	1 577	20 007	201 376	62 178	267 292
3391	Medical equipment & supplies mfg	-	28	5	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	28	5	f	D	D	D	D	D	D	D	D
GAGE COUNTY, NE													
31-33	Manufacturing	-	34	17		1 700	43 929	1 314	2 509	31 271	134 867	174 338	305 463
332	Fabricated metal product mfg	1	9	6		543	13 277	453	808	10 068	26 460	29 365	55 771
HALL COUNTY, NE													
31-33	Manufacturing	1	81	25		5 791	156 272	4 873	10 437	122 208	475 591	1 362 170	1 823 288
311	Food mfg	1	10	4	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	4	4	f	D	D	D	D	D	D	D	1 974
3261	Plastics product mfg	2	4	4	f	D	D	D	D	D	D	D	1 974
332	Fabricated metal product mfg	-	13	4		693	18 735	505	1 274	12 998	37 314	84 567	120 769
3323	Architectural & structural metals mfg	-	4	2	f	D	D	D	D	D	D	D	552
333	Machinery mfg	-	15	7		1 345	50 225	1 124	2 194	40 528	188 406	146 840	326 580
3331	Agriculture, construction, & mining machinery mfg	-	7	2	f	D	D	D	D	D	D	D	7 769
33311	Agricultural implement mfg	-	7	2	f	D	D	D	D	D	D	D	7 769
333111	Farm machinery & equipment mfg	-	7	2	f	D	D	D	D	D	D	D	7 769
HAMILTON COUNTY, NE													
31-33	Manufacturing	-	21	6		691	19 887	508	1 053	13 988	160 623	173 283	332 714
JEFFERSON COUNTY, NE													
31-33	Manufacturing	2	11	6		649	11 791	572	988	8 934	38 020	31 122	67 506

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LANCASTER COUNTY, NE												
31-33	Manufacturing	-	267	92	15 322	502 303	11 577	22 413	323 906	1 962 919	1 787 670	3 855 102	101 575
311	Food mfg.....	-	27	10	1 463	40 214	1 045	2 186	24 802	136 886	621 281	767 396	11 305
3116	Meat product mfg.....	-	6	2	f	D	D	D	D	D	D	D	1 818
31161	Animal slaughtering & processing.....	-	6	2	f	D	D	D	D	D	D	D	1 818
311612	Meat processed from carcasses	-	4	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	49	9	1 219	35 702	1 009	1 660	23 815	71 037	62 435	134 714	D
3231	Printing & related support activities.....	-	49	9	1 219	35 702	1 009	1 660	23 815	71 037	62 435	134 714	D
32311	Printing	-	42	8	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	22	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	3	g	D	D	D	D	D	D	D	19 992
3254	Pharmaceutical & medicine mfg	-	4	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	4	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	7	2 361	92 623	2 012	3 967	72 215	200 916	114 283	313 747	9 614
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	g	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	33	15	1 471	47 509	1 107	2 387	30 998	106 589	77 946	182 813	6 008
333	Machinery mfg	-	19	6	1 051	36 837	648	1 363	20 925	73 943	98 325	169 772	4 917
3331	Agriculture, construction, & mining machinery mfg....	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	16	9	1 221	43 565	575	1 146	14 344	122 218	47 450	169 215	D
3345	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	4	2 182	61 222	1 894	3 010	47 214	287 393	132 573	420 333	16 655
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON COUNTY, NE													
31-33	Manufacturing	-	52	19	4 908	154 282	3 959	8 041	116 353	486 270	909 667	1 402 420	132 639
311	Food mfg.....	1	12	8	2 049	48 082	1 676	3 238	36 682	114 749	444 140	556 779	5 195
3116	Meat product mfg.....	1	6	5	1 872	43 580	1 567	3 027	34 299	101 669	399 393	498 941	D
31161	Animal slaughtering & processing.....	1	6	5	1 872	43 580	1 567	3 027	34 299	101 669	399 393	498 941	D
311611	Animal (except poultry) slaughtering.....	-	3	2	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	9	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
OTOE COUNTY, NE													
31-33	Manufacturing	-	17	5	1 354	35 004	1 149	2 308	28 284	97 348	114 116	212 291	5 145
334	Computer & electronic product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PHELPS COUNTY, NE													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	4 836
339	Miscellaneous mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PLATTE COUNTY, NE													
31-33	Manufacturing	-	74	27	6 120	164 058	4 613	9 074	113 263	551 065	668 444	1 217 183	32 351
311	Food mfg.....	1	11	5	580	17 313	442	1 065	12 654	108 654	318 741	428 324	5 236
332	Fabricated metal product mfg.....	-	16	9	2 081	49 474	1 487	2 006	35 032	68 151	77 010	144 206	8 522
3323	Architectural & structural metals mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg..	-	3	2	922	23 320	531	47	13 412	8 888	16 633	25 628	D
332311	Prefabricated metal building & component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	13	5	957	29 477	636	1 398	15 395	62 551	103 479	164 718	4 823
3331	Agriculture, construction, & mining machinery mfg....	-	7	3	832	25 501	549	1 191	13 194	53 620	98 939	151 644	D
33311	Agricultural implement mfg.....	-	7	3	832	25 501	549	1 191	13 194	53 620	98 939	151 644	D
333111	Farm machinery & equipment mfg.....	-	7	3	832	25 501	549	1 191	13 194	53 620	98 939	151 644	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLATTE COUNTY, NE—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
SALINE COUNTY, NE													
31-33	Manufacturing	-	19	7	g	64 701	2 262	5 277	48 934	238 464	422 698	659 934	10 370
311	Food mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg..	-	1	1	f	D	D	D	D	D	D	D	D
SARPY COUNTY, NE													
31-33	Manufacturing	1	55	17	g	D	D	D	D	D	D	D	12 287
311	Food mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg....	-	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	1	1	f	D	D	D	D	D	D	D	D
SCOTTS BLUFF COUNTY, NE													
31-33	Manufacturing	1	54	14	g	1 732	46 248	1 397	2 616	31 558	134 849	226 301	357 467
311	Food mfg.....	-	14	5	g	669	19 605	558	1 026	13 714	99 564	163 045	258 357
SEWARD COUNTY, NE													
31-33	Manufacturing	7	18	3	g	1 039	30 094	892	1 899	23 347	27 019	82 098	111 664
336	Transportation equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	9	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, NE													
31-33	Manufacturing	-	21	6	g	861	25 136	559	1 157	13 672	94 145	273 767	372 125
WAYNE COUNTY, NE													
31-33	Manufacturing	-	15	5	g	1 473	28 604	1 284	2 467	22 398	83 026	142 325	221 254
311	Food mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YORK COUNTY, NE												
	Manufacturing	4	33	11	1 207	32 799	962	1 813	22 367	78 215	130 412	214 626	10 576

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BEATRICE, NE												
	Manufacturing	1	20	9	835	20 390	652	1 208	15 083	42 581	74 904	119 526	3 332
31-33	BELLEVUE, NE												
	Manufacturing	—	10	5	1 070	20 892	479	865	9 835	86 962	58 888	146 129	D
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	2	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	1	1	f	D	D	D	D	D	D	D	D
31-33	COLUMBUS, NE												
	Manufacturing	—	39	10	2 120	55 040	1 709	3 765	41 627	197 603	160 059	355 522	14 582
332	Fabricated metal product mfg	—	8	4	955	20 808	772	1 587	17 197	47 912	59 194	106 151	D
3329	Other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	4	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	COZAD, NE												
	Manufacturing	—	8	4	f	D	D	D	D	D	D	D	3 220
336	Transportation equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	CRETE, NE												
	Manufacturing	—	9	3	g	D	D	D	D	D	D	D	D
311	Food mfg	—	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREMONT, NE													
31-33	Manufacturing	-	40	18	1 469	34 715	1 161	2 231	23 321	107 041	212 174	316 386	D
GERING, NE													
31-33	Manufacturing	-	12	5	668	19 110	485	985	11 472	60 183	105 744	165 518	7 201
GRAND ISLAND, NE													
31-33	Manufacturing	1	59	17	5 107	139 085	4 296	9 146	110 234	414 467	1 312 375	1 714 938	27 707
311	Food mfg	1	8	3	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	4	2	f	D	D	D	D	D	D	D	552
333	Machinery mfg	-	10	5	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	5	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
HASTINGS, NE													
31-33	Manufacturing	-	42	17	2 779	69 208	2 053	4 289	48 337	196 653	303 672	501 786	12 705
311	Food mfg	-	5	3	878	17 898	564	1 109	12 060	55 651	100 861	157 620	2 535
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
KEARNEY, NE													
31-33	Manufacturing	-	21	5	1 518	40 935	1 141	2 304	26 318	129 585	86 720	214 795	6 893
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
LINCOLN, NE													
31-33	Manufacturing	-	234	84	j	D	D	D	D	D	D	D	90 231
311	Food mfg	-	24	10	1 443	39 871	1 027	2 165	24 561	136 246	619 911	765 389	D
3116	Meat product mfg	-	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	48	9	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	48	9	g	D	D	D	D	D	D	D	D
32311	Printing	-	41	8	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	21	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	4	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	4	3	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	6	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	g	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LINCOLN, NE—Con. Manufacturing—Con.												
332	Fabricated metal product mfg	-	25	12	953	32 037	694	1 483	19 973	65 016	56 284	120 284	3 424
333	Machinery mfg	-	18	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	16	9	1 221	43 565	575	1 146	14 344	122 218	47 450	169 215	D
3345	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	9	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	4	2 182	61 222	1 894	3 010	47 214	287 393	132 573	420 333	16 655
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	5	f	D	D	D	D	D	D	D	D
	NEBRASKA CITY, NE												
31-33	Manufacturing	-	11	3	g	D	D	D	D	D	D	D	4 826
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
	NORFOLK, NE												
31-33	Manufacturing	4	31	7	1 062	29 230	819	1 224	20 170	56 492	160 180	217 567	7 214
311	Food mfg	7	8	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	8	4	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	8	4	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
	OMAHA, NE												
31-33	Manufacturing	-	497	167	24 767	787 180	19 192	39 195	548 226	2 939 121	3 645 536	6 528 109	173 921
311	Food mfg	-	60	36	i	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	5	4	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	22	16	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	22	16	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	11	9	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	20	8	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	4	15	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OMAHA, NE—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
3222	Converted paper product mfg	-	11	8	848	30 890	665	1 379	20 011	72 391	100 476	171 099	11 345
32221	Paperboard container mfg	-	6	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	119	30	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	119	30	h	D	D	D	D	D	D	D	D
32311	Printing	1	107	25	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	49	16	g	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	1	5	5	863	28 666	606	1 263	16 708	76 311	58 179	134 224	5 272
325	Chemical mfg	-	19	9	f	D	D	D	D	D	D	D	5 887
326	Plastics & rubber products mfg	1	20	10	g	D	D	D	D	D	D	D	7 455
3261	Plastics product mfg	-	17	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	11	6	884	21 698	749	1 607	15 913	50 418	44 869	94 310	6 153
326199	All other plastics product mfg	-	11	6	884	21 698	749	1 607	15 913	50 418	44 869	94 310	6 153
332	Fabricated metal product mfg	1	58	12	g	D	D	D	D	D	D	D	3 608
333	Machinery mfg	1	23	14	2 333	87 986	1 752	3 600	60 255	201 151	144 164	338 167	20 688
3339	Other general-purpose machinery mfg	-	6	4	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	13	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	35	10	1 925	52 534	1 494	2 903	34 341	170 705	116 991	284 645	5 644
3372	Office furniture (including fixtures) mfg	-	12	5	g	D	D	D	D	D	D	D	5 127
33721	Office furniture (including fixtures) mfg	-	12	5	g	D	D	D	D	D	D	D	5 127
337215	Showcase, partition, shelving, & locker mfg	-	4	4	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	51	9	f	D	D	D	D	D	D	D	D
	SCHUYLER, NE												
31-33	Manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
	SCOTTSBLUFF, NE												
31-33	Manufacturing	-	19	5	501	12 777	428	676	8 985	45 664	60 677	109 053	D
	SOUTH SIOUX CITY, NE												
31-33	Manufacturing	-	14	10	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	YORK, NE Manufacturing	3	21	9	1 083	29 709	863	1 632	20 137	71 398	125 086	202 331	10 196

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEBRASKA		NEBRASKA—Con.	
Companies ¹ number..	1 801	Quantity of electricity purchased for heat and power 1,000 kWh..	5 346 938
All establishments number..	1 960	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	78 970
Establishments with 1 to 19 employees number..	1 348	Total value of shipments \$1,000..	27 859 177
Establishments with 20 to 99 employees number..	391	Value of resales \$1,000..	1 776 595
Establishments with 100 employees or more number..	221	Value added \$1,000..	10 822 657
All employees number..	106 690	Total inventories, beginning of year \$1,000..	2 053 423
Total compensation ² \$1,000..	3 819 877	Finished goods inventories, beginning of year \$1,000..	838 820
Annual payroll \$1,000..	3 040 509	Work-in-process inventories, beginning of year \$1,000..	481 180
Total fringe benefits \$1,000..	779 368	Materials and supplies inventories, beginning of year \$1,000..	733 423
Production workers, average for year number..	84 085	Total inventories, end of year \$1,000..	2 038 123
Production workers on March 12 number..	83 151	Finished goods inventories, end of year \$1,000..	877 037
Production workers on May 12 number..	83 543	Work-in-process inventories, end of year \$1,000..	419 168
Production workers on August 12 number..	84 523	Materials and supplies inventories, end of year \$1,000..	741 918
Production workers on November 12 number..	85 123	Gross book value of total assets at beginning of year \$1,000..	7 342 741
Production-worker hours 1,000..	172 470	Total capital expenditures (new and used) \$1,000..	822 220
Production-worker wages \$1,000..	2 132 721	Capital expenditures for buildings and other structures (new and used) \$1,000..	162 074
Total cost of materials \$1,000..	17 009 228	Capital expenditures for machinery and equipment (new and used) \$1,000..	660 146
Cost of materials, parts, containers, etc., consumed \$1,000..	15 103 361	Total retirements ² \$1,000..	175 971
Cost of resales \$1,000..	1 464 505	Gross book value of total assets at end of year \$1,000..	7 988 990
Cost of fuels \$1,000..	126 855	Total depreciation during year ² \$1,000..	498 994
Cost of purchased electricity \$1,000..	185 521	Total rental payments ² \$1,000..	148 315
Cost of contract work \$1,000..	128 986	Buildings and other structures rental payments ² \$1,000..	61 929
		Machinery and equipment rental payments ² \$1,000..	86 386

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NEBRASKA

There are no geographic notes for the state of Nebraska.

Appendix E. Metropolitan Areas

NEBRASKA

Lincoln, NE MSA

Lancaster County, NE

Omaha, NE—IA MSA

Pottawattamie County, IA

Cass County, NE

Douglas County, NE

Sarpy County, NE

Washington County, NE

Sioux City, IA—NE MSA

Woodbury County, IA

Dakota County, NE

New Hampshire

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW HAMPSHIRE													
31-33	Manufacturing	1	2 328	757	98 934	3 361 445	68 942	135 506	1 935 481	11 320 082	8 519 079	19 813 107	704 893
311	Food mfg	3	100	19	2 053	52 286	1 369	2 512	28 478	218 862	331 144	550 657	11 203
3114	Fruit & vegetable preserving & specialty food mfg	-	2	1	c	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	9	3	347	10 901	174	382	4 934	19 484	85 319	104 734	2 064
31151	Dairy product (except frozen) mfg	2	7	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	2	5	3	e	D	D	D	D	D	D	D	1 975
3116	Meat product mfg	9	5	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	5	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	5	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	-	9	4	328	8 787	233	392	4 551	39 028	44 876	83 847	1 387
31171	Seafood product preparation & packaging	-	9	4	328	8 787	233	392	4 551	39 028	44 876	83 847	1 387
311712	Fresh & frozen seafood processing	-	7	4	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	49	4	376	5 312	218	304	2 603	12 047	8 811	20 880	617
31181	Bread & bakery product mfg	4	46	3	e	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	36	-	178	2 004	112	121	992	4 879	2 594	7 496	225
311812	Commercial bakeries	9	8	2	112	1 244	43	75	476	2 614	2 129	4 743	171
3119	Other food mfg	-	13	5	228	5 702	142	241	3 356	82 524	62 641	145 702	2 190
312	Beverage & tobacco product mfg	-	14	5	782	38 415	579	959	26 712	224 283	200 501	424 682	D
3121	Beverage mfg	-	14	5	782	38 415	579	959	26 712	224 283	200 501	424 682	D
31211	Soft drink & ice mfg	-	5	2	c	D	D	D	D	D	D	D	1 858
31212	Breweries	-	8	2	f	D	D	D	D	D	D	D	D
312120	Breweries	-	8	2	f	D	D	D	D	D	D	D	D
313	Textile mills	1	34	17	2 436	69 709	2 012	3 995	50 811	130 764	103 893	233 983	27 164
3132	Fabric mills	-	20	13	2 029	59 886	1 679	3 383	44 441	111 175	86 488	197 417	25 942
31321	Broadwoven fabric mills	-	9	6	962	29 232	820	1 663	23 400	51 553	50 825	99 063	D
313210	Broadwoven fabric mills	-	9	6	962	29 232	820	1 663	23 400	51 553	50 825	99 063	D
31322	Narrow fabric mills & schiffli machine embroidery	-	6	4	821	21 827	640	1 266	13 661	48 237	15 893	65 477	D
313221	Narrow fabric mills	-	6	4	821	21 827	640	1 266	13 661	48 237	15 893	65 477	D
31324	Knit fabric mills	-	3	3	c	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	3	3	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	7	12	3	e	D	D	D	D	D	D	D	1 222
31331	Textile & fabric finishing mills	9	8	2	251	5 509	206	369	3 823	11 976	8 300	20 118	997
313311	Broadwoven fabric finishing mills	9	6	2	c	D	D	D	D	D	D	D	D
314	Textile product mills	2	45	11	1 192	34 824	858	1 862	23 492	66 273	59 927	122 805	6 282
3141	Textile furnishings mills	3	19	3	463	11 444	331	638	6 586	23 739	25 346	48 828	1 557
31411	Carpet & rug mills	-	2	1	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	6	17	2	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	7	4	2	c	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	26	8	729	23 380	527	1 224	16 906	42 534	34 581	73 977	4 725
31491	Textile bag & canvas mills	4	17	4	202	4 500	135	269	2 567	10 370	11 425	20 903	D
314911	Textile bag mills	6	5	2	116	2 503	61	145	1 230	5 696	4 863	10 434	230
31499	All other textile product mills	1	9	4	527	18 880	392	955	14 339	32 164	23 156	53 074	D
314999	All other miscellaneous textile product mills	1	9	4	527	18 880	392	955	14 339	32 164	23 156	53 074	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW HAMPSHIRE—Con.													
31-33 Manufacturing—Con.													
315	Apparel mfg	2	48	20	1 575	29 782	1 341	2 220	18 854	54 861	62 041	116 160	D
3151	Apparel knitting mills	3	6	2	169	4 192	141	313	2 719	8 995	17 111	25 723	388
31519	Other apparel knitting mills	3	5	2	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	29	16	1 240	22 628	1 055	1 715	14 444	38 758	40 122	78 398	870
31521	Cut & sew apparel contractors	2	14	7	437	5 875	399	691	4 807	8 271	906	9 192	137
315212	Women's, girls', & infants' cut & sew apparel contractors	—	11	4	360	4 966	326	569	3 995	6 513	723	7 251	102
31522	Men's & boys' cut & sew apparel mfg	2	7	6	669	14 893	545	862	8 452	26 533	37 366	63 678	672
315221	Men's & boys' cut & sew underwear & nightwear mfg	—	2	2	c	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	1	1	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	9	2	2	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	7	3	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	5	13	2	166	2 962	145	192	1 691	7 108	4 808	12 039	D
31599	Apparel accessories & other apparel mfg	5	13	2	166	2 962	145	192	1 691	7 108	4 808	12 039	D
316	Leather & allied product mfg	—	26	14	1 582	40 519	1 239	2 391	21 229	256 048	128 470	392 211	12 359
3161	Leather & hide tanning & finishing	—	3	2	e	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	3	2	e	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	3	2	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	1	13	9	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	1	13	9	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	3	5	3	330	6 294	285	601	4 612	19 517	14 477	31 872	D
316214	Women's footwear (except athletic) mfg	—	4	4	439	8 142	373	647	3 962	14 115	22 006	35 773	D
316219	Other footwear mfg	1	3	1	170	2 546	138	218	1 620	6 316	4 971	11 475	D
3169	Other leather & allied product mfg	6	10	3	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	6	10	3	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	3	7	2	c	D	D	D	D	D	D	D	115
321	Wood product mfg	2	179	54	3 665	94 691	2 886	5 741	64 196	223 423	255 479	476 121	17 570
3211	Sawmills & wood preservation	1	70	18	1 300	37 217	1 027	2 148	26 820	92 568	116 549	208 454	12 065
32111	Sawmills & wood preservation	1	70	18	1 300	37 217	1 027	2 148	26 820	92 568	116 549	208 454	12 065
321113	Sawmills	1	68	18	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	106	35	2 314	55 908	1 816	3 502	36 303	126 835	134 733	259 404	4 910
32191	Millwork	3	30	12	824	22 215	663	1 267	14 887	58 931	68 263	124 535	2 507
321911	Wood window & door mfg	6	11	6	499	12 069	394	714	8 762	22 305	31 332	53 183	1 110
321912	Cut stock, resawing lumber, & planing	1	9	4	210	6 357	187	379	3 801	30 132	28 726	56 619	1 058
321918	Other millwork (including flooring)	1	10	2	115	3 789	82	174	2 324	6 494	8 205	14 733	339
32192	Wood container & pallet mfg	5	21	5	250	4 238	209	340	2 965	10 553	11 264	21 853	484
321920	Wood container & pallet mfg	5	21	5	250	4 238	209	340	2 965	10 553	11 264	21 853	484
32199	All other wood product mfg	2	55	18	1 240	29 455	944	1 895	18 451	57 351	55 206	113 016	1 919
321992	Prefabricated wood building mfg	1	18	6	512	13 175	370	774	7 714	24 661	26 795	51 154	631
321999	All other miscellaneous wood product mfg	3	37	12	728	16 280	574	1 121	10 737	32 690	28 411	61 862	1 288

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW HAMPSHIRE—Con.													
31-33 Manufacturing—Con.													
322	Paper mfg	—	40	26	3 822	142 190	2 839	5 879	93 586	500 593	384 669	882 412	34 603
3221	Pulp, paper, & paperboard mills	—	12	11	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	9	9	1 961	81 022	1 478	3 198	55 938	266 386	210 729	474 830	23 501
322121	Paper (except newsprint) mills	—	9	9	1 961	81 022	1 478	3 198	55 938	266 386	210 729	474 830	23 501
32213	Paperboard mills	—	3	2	c	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	2	c	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	28	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	3	10	7	f	D	D	D	D	D	D	D	5 123
322211	Corrugated & solid fiber box mfg	8	6	4	161	5 549	115	223	2 960	11 760	24 545	36 432	994
322212	Folding paperboard box mfg	—	3	2	351	12 574	261	546	7 178	18 150	19 716	38 476	D
32222	Paper bag & coated & treated paper mfg	—	9	5	711	24 774	446	892	13 373	54 700	56 784	110 595	4 064
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	6	3	519	18 091	302	584	10 179	42 663	45 893	87 955	3 512
32229	Other converted paper product mfg	—	5	1	e	D	D	D	D	D	D	D	121
322291	Sanitary paper product mfg	—	2	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	253	50	5 069	156 821	3 592	6 875	92 129	372 140	284 370	659 565	28 333
3231	Printing & related support activities	5	253	50	5 069	156 821	3 592	6 875	92 129	372 140	284 370	659 565	28 333
32311	Printing	5	221	41	4 396	134 933	3 112	5 932	77 800	334 818	275 914	614 051	25 354
323110	Commercial												
323112	Commercial flexographic printing	3	113	25	2 452	76 987	1 843	3 531	47 495	133 351	105 423	241 235	14 718
323113	Commercial screen printing	—	6	4	427	11 428	319	554	7 209	60 186	18 928	80 097	813
323114	Quick printing	9	33	4	674	24 386	321	613	8 405	73 373	90 925	166 453	4 898
323116	Manifold business form printing	3	39	3	264	6 113	189	309	3 567	12 931	7 086	20 015	801
323118	Blankbook, looseleaf binder, & device mfg	8	5	2	e	D	D	D	D	D	D	D	1 130
32312	Support activities for printing	9	2	2	c	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	3	32	9	673	21 888	480	943	14 329	37 322	8 456	45 514	2 979
323122	Prepress services	7	9	4	212	5 592	176	404	4 416	9 790	2 124	11 913	510
323122	Prepress services	2	23	5	461	16 296	304	539	9 913	27 532	6 332	33 601	2 469
325	Chemical mfg	3	55	23	1 803	69 691	966	1 905	32 294	204 794	224 922	428 873	30 479
3251	Basic chemical mfg	9	2	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	3	2	167	6 141	94	169	2 991	21 518	45 555	66 166	4 018
32521	Resin & synthetic rubber mfg	1	3	2	167	6 141	94	169	2 991	21 518	45 555	66 166	4 018
325211	Plastics material & resin mfg	1	3	2	167	6 141	94	169	2 991	21 518	45 555	66 166	4 018
3254	Pharmaceutical & medicine mfg	1	6	4	172	4 612	93	187	1 794	12 342	6 895	19 695	D
32541	Pharmaceutical & medicine mfg	1	6	4	172	4 612	93	187	1 794	12 342	6 895	19 695	D
3255	Paint, coating, & adhesive mfg	—	13	6	395	12 649	196	339	6 293	28 087	41 655	70 035	D
32552	Adhesive mfg	—	8	4	309	9 786	160	280	4 963	22 051	33 816	56 263	1 172
325520	Adhesive mfg	—	8	4	309	9 786	160	280	4 963	22 051	33 816	56 263	1 172
3259	Other chemical product mfg	—	21	7	651	27 129	308	608	10 110	75 537	78 990	154 484	10 217
32599	All other chemical product & preparation mfg	—	19	7	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	1	1	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	12	4	343	14 281	135	304	3 971	42 514	30 394	72 171	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAMPSHIRE— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	1	111	62	7 052	211 660	5 587	11 388	147 344	489 958	464 596	951 894	38 319
3261	Plastics product mfg	1	92	52	5 935	181 602	4 723	9 713	127 262	431 305	415 290	843 924	33 870
32611	Unsupported plastics film, sheet, & bag mfg . .	—	11	7	426	14 759	293	678	9 598	34 598	33 445	67 479	5 289
326111	Unsupported plastics bag mfg	—	4	4	250	7 882	184	405	5 806	19 171	17 758	36 616	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	7	3	176	6 877	109	273	3 792	15 427	15 687	30 863	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	9	3	217	7 718	130	185	2 858	12 542	11 239	23 765	564
326121	Unsupported plastics profile shape mfg	—	8	3	c	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	3	2	e	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	3	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	2	9	6	720	20 648	610	1 238	15 398	80 557	91 592	171 647	10 267
326160	Plastics bottle mfg	2	9	6	720	20 648	610	1 238	15 398	80 557	91 592	171 647	10 267
32619	Other plastics product mfg	2	56	33	4 045	119 586	3 266	6 591	87 662	272 141	236 322	507 268	15 429
326199	All other plastics product mfg	2	55	33	h	D	D	D	D	D	D	D	15 429
3262	Rubber product mfg	1	19	10	1 117	30 058	864	1 675	20 082	58 653	49 306	107 970	4 449
32622	Rubber & plastics hoses & belting mfg	—	3	2	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	3	2	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	13	8	991	26 700	767	1 481	18 052	52 334	41 821	94 253	4 187
326291	Rubber product mfg for mechanical use	2	5	3	456	12 282	361	746	8 719	23 416	15 688	38 956	1 425
326299	All other rubber product mfg	1	8	5	535	14 418	406	735	9 333	28 918	26 133	55 297	2 762
327	Nonmetallic mineral product mfg	1	84	24	2 212	74 885	1 662	3 350	47 992	227 990	163 274	390 145	9 717
3271	Clay product & refractory mfg	3	12	4	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	3	9	4	239	7 148	150	287	2 756	13 865	7 184	20 239	747
327112	Vitreous china, fine earthenware, & other pottery product mfg	3	9	4	239	7 148	150	287	2 756	13 865	7 184	20 239	747
3272	Glass & glass product mfg	—	14	3	671	24 192	536	978	17 093	71 026	35 534	105 657	1 646
32721	Glass & glass product mfg	—	14	3	671	24 192	536	978	17 093	71 026	35 534	105 657	1 646
327212	Other pressed & blown glass & glassware mfg	—	6	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	8	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	43	10	838	26 838	612	1 297	16 300	53 410	52 140	106 290	4 487
32732	Ready-mix concrete mfg	4	18	4	389	14 286	278	627	8 854	27 271	33 923	61 601	2 465
327320	Ready-mix concrete mfg	4	18	4	389	14 286	278	627	8 854	27 271	33 923	61 601	2 465
32733	Concrete pipe, brick, & block mfg	2	8	2	150	4 618	95	222	2 359	7 528	7 411	15 390	1 199
327332	Concrete pipe mfg	—	3	1	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	4	17	4	299	7 934	239	448	5 087	18 611	10 806	29 299	823
327390	Other concrete product mfg	4	17	4	299	7 934	239	448	5 087	18 611	10 806	29 299	823
3274	Lime & gypsum product mfg	—	2	2	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	2	2	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	2	2	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	13	5	e	D	D	D	D	D	D	D	1 102
32791	Abrasive product mfg	—	4	3	c	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	4	3	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW HAMPSHIRE—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	34	19	3 526	111 565	2 644	4 476	79 058	263 372	156 857	419 700	26 031
3313	Alumina & aluminum production & processing	—	3	3	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	3	3	e	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum	—	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	6	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	4	2	435	15 193	345	688	10 415	46 404	55 655	104 152	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	4	2	435	15 193	345	688	10 415	46 404	55 655	104 152	D
3315	Foundries	—	24	13	2 732	85 855	2 001	3 218	60 598	188 405	58 749	245 064	15 360
33151	Ferrous metal foundries	—	5	5	2 087	65 503	1 513	2 160	46 275	148 792	43 443	191 295	D
331512	Steel investment foundries	—	3	3	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	19	8	645	20 352	488	1 058	14 323	39 613	15 306	53 769	D
331524	Aluminum foundries (except die-casting)	—	12	7	570	17 848	429	945	12 725	34 852	11 889	45 585	2 223
332	Fabricated metal product mfg	—	454	123	12 971	421 578	9 951	19 616	278 899	929 592	531 282	1 470 406	63 360
3321	Forging & stamping	—	22	7	428	13 221	304	592	7 484	27 962	25 942	53 932	969
33211	Forging & stamping	—	22	7	428	13 221	304	592	7 484	27 962	25 942	53 932	969
332116	Metal stamping	—	13	5	304	8 889	224	438	5 223	15 364	11 023	26 187	573
3322	Cutlery & handtool mfg	6	11	3	129	5 256	104	209	3 726	9 476	3 146	12 618	686
33221	Cutlery & handtool mfg	6	11	3	129	5 256	104	209	3 726	9 476	3 146	12 618	686
332212	Hand & edge tool mfg	5	8	3	123	5 134	100	202	3 643	9 066	2 931	11 993	654
3323	Architectural & structural metals mfg	1	81	28	2 412	75 274	1 882	3 733	47 761	148 124	123 770	273 640	6 506
33231	Plate work & fabricated structural product mfg	2	25	7	904	25 452	707	1 409	15 791	48 953	62 525	113 733	1 641
332311	Prefabricated metal building & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	3	18	4	383	11 921	260	527	6 633	22 556	37 793	62 538	1 386
332313	Plate work mfg	—	5	2	c	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	56	21	1 508	49 822	1 175	2 324	31 970	99 171	61 245	159 907	4 865
332322	Sheet metal work mfg	—	42	18	1 315	44 907	1 020	2 081	28 708	89 722	50 708	139 617	4 720
332323	Ornamental & architectural metal work mfg	—	12	2	c	D	D	D	D	D	D	D	145
3324	Boiler, tank, & shipping container mfg	—	9	3	223	9 120	170	270	5 330	24 993	22 952	47 101	873
33242	Metal tank (heavy gauge) mfg	1	4	3	198	8 119	152	228	4 736	23 655	15 358	36 927	702
332420	Metal tank (heavy gauge) mfg	1	4	3	198	8 119	152	228	4 736	23 655	15 358	36 927	702
3325	Hardware mfg	5	6	2	250	8 543	168	367	5 337	15 663	7 931	22 981	686
33251	Hardware mfg	5	6	2	250	8 543	168	367	5 337	15 663	7 931	22 981	686
332510	Hardware mfg	5	6	2	250	8 543	168	367	5 337	15 663	7 931	22 981	686
3326	Spring & wire product mfg	1	8	3	174	4 836	127	252	2 478	14 531	10 799	24 243	719
33261	Spring & wire product mfg	1	8	3	174	4 836	127	252	2 478	14 531	10 799	24 243	719
332618	Other fabricated wire product mfg	1	8	3	174	4 836	127	252	2 478	14 531	10 799	24 243	719
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	240	47	3 059	105 904	2 345	4 551	69 867	196 674	79 368	276 867	20 117
33271	Machine shops	2	206	31	2 183	75 738	1 695	3 148	51 306	130 994	52 735	184 285	14 554
332710	Machine shops	2	206	31	2 183	75 738	1 695	3 148	51 306	130 994	52 735	184 285	14 554
33272	Turned product & screw, nut, & bolt mfg	1	34	16	876	30 166	650	1 403	18 561	65 680	26 633	92 582	5 563
332721	Precision turned product mfg	1	28	12	665	23 477	493	1 063	14 406	52 539	17 640	70 232	5 049
332722	Bolt, nut, screw, rivet, & washer mfg	1	6	4	211	6 689	157	340	4 155	13 141	8 993	22 350	514

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAMPSHIRE— Con.												
	Manufacturing— Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	3	30	5	342	8 553	255	462	5 184	16 927	4 985	22 012	1 128
33281	Coating, engraving, heat treating, & allied activities	3	30	5	342	8 553	255	462	5 184	16 927	4 985	22 012	1 128
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	4	15	—	c	D	D	D	D	D	D	D	619
332813	Electroplating, plating, polishing, anodizing, & coloring	2	13	4	189	4 012	143	231	2 523	7 580	2 352	9 966	D
3329	Other fabricated metal product mfg	—	47	25	5 954	190 871	4 596	9 180	131 732	475 242	252 389	737 012	31 676
33291	Metal valve mfg	—	12	8	1 645	57 373	1 115	2 589	30 287	145 677	126 576	274 457	8 168
332911	Industrial valve mfg	—	8	5	953	30 299	555	1 326	15 366	100 655	72 739	175 754	D
332912	Fluid power valve & hose fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	35	17	4 309	133 498	3 481	6 591	101 445	329 565	125 813	462 555	23 508
332991	Ball & roller bearing mfg	—	5	5	h	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	4	3	g	D	D	D	D	D	D	D	3 276
332996	Fabricated pipe & pipe fitting mfg	—	5	4	154	5 288	96	184	2 865	12 548	5 955	17 869	D
332999	All other miscellaneous fabricated metal product mfg	—	16	4	350	12 991	209	431	5 692	29 542	34 204	63 789	1 623
333	Machinery mfg	1	206	76	10 660	423 386	5 952	12 065	182 042	978 220	837 541	1 811 315	63 567
3331	Agriculture, construction, & mining machinery mfg	—	5	2	129	6 135	62	139	1 610	21 890	19 414	40 197	D
3332	Industrial machinery mfg	1	43	23	3 251	142 296	1 677	3 371	53 898	375 676	342 665	715 331	21 949
33329	Other industrial machinery mfg	1	34	20	3 092	136 246	1 576	3 181	50 995	362 834	329 990	690 054	21 179
333291	Paper industry machinery mfg	—	8	6	690	28 233	373	685	12 941	60 087	64 128	125 500	4 602
333293	Printing machinery & equipment mfg	2	8	5	1 851	88 487	973	2 042	31 436	256 551	217 345	470 955	D
333294	Food product machinery mfg	—	5	2	120	5 040	54	96	1 930	15 701	27 374	42 803	264
333295	Semiconductor machinery mfg	—	4	3	188	6 126	63	119	1 405	10 287	6 595	16 042	381
333298	All other industrial machinery mfg	—	5	3	200	6 799	84	182	2 417	17 286	12 167	29 390	364
3333	Commercial & service industry machinery mfg	—	40	16	2 464	87 465	1 262	2 456	35 921	134 728	164 114	297 318	7 661
33331	Commercial & service industry machinery mfg	—	40	16	2 464	87 465	1 262	2 456	35 921	134 728	164 114	297 318	7 661
333313	Office machinery mfg	9	1	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	19	8	1 083	44 894	549	1 139	16 009	57 343	113 413	170 182	3 626
333319	Other commercial & service industry machinery mfg	—	14	6	581	20 442	405	862	10 319	59 733	32 845	91 718	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	16	3	285	11 028	210	371	4 809	18 646	18 218	36 867	938
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	16	3	285	11 028	210	371	4 809	18 646	18 218	36 867	938
333415	AC & warm air heating & commercial industrial refrig equip mfg	6	8	2	209	8 503	156	278	3 339	15 052	14 628	29 638	757
3335	Metalworking machinery mfg	1	58	10	1 098	44 915	735	1 603	28 174	78 130	57 303	132 297	5 496
33351	Metalworking machinery mfg	1	58	10	1 098	44 915	735	1 603	28 174	78 130	57 303	132 297	5 496
333511	Industrial mold mfg	—	13	3	233	10 046	167	399	6 974	14 444	5 921	20 289	662
333512	Machine tool (metal cutting types) mfg	—	4	3	467	21 244	304	660	12 326	33 867	37 176	69 093	D
333515	Cutting tool & machine tool accessory mfg	3	14	3	226	6 326	152	323	4 592	15 627	6 290	20 956	600
3336	Engine, turbine, & power transmission equipment mfg	2	4	3	357	12 682	249	547	7 872	21 386	21 005	42 824	D
33361	Engine, turbine, & power transmission equipment mfg	2	4	3	357	12 682	249	547	7 872	21 386	21 005	42 824	D
333613	Mechanical power transmission equipment mfg	2	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAMPSHIRE—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	40	19	3 076	118 865	1 757	3 578	49 758	327 764	214 822	546 481	24 934
33391	Pump & compressor mfg	4	7	5	410	15 517	210	459	6 710	37 980	37 071	76 763	D
333912	Air & gas compressor mfg	4	4	4	342	13 011	173	369	5 393	32 593	32 970	65 610	1 850
33392	Material handling equipment mfg	—	4	1	160	5 941	136	262	4 352	13 946	5 687	18 700	D
333922	Conveyor & conveying equipment mfg	—	2	1	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	29	13	2 506	97 407	1 411	2 857	38 696	275 838	172 064	451 018	22 490
333992	Welding & soldering equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	8	6	2	c	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	5	6	4	260	10 635	119	284	4 770	21 287	17 397	39 005	576
333999	All other miscellaneous general-purpose machinery mfg	—	12	5	1 273	48 342	656	1 361	18 013	133 145	74 514	211 681	6 103
334	Computer & electronic product mfg	—	261	114	22 878	921 601	14 598	28 459	465 082	4 933 858	3 407 896	8 323 698	215 680
3341	Computer & peripheral equipment mfg	—	29	10	2 541	113 189	1 107	2 425	37 441	2 537 354	1 791 625	4 305 125	17 088
33411	Computer & peripheral equipment mfg	—	29	10	2 541	113 189	1 107	2 425	37 441	2 537 354	1 791 625	4 305 125	17 088
334111	Electronic computer mfg	—	14	6	g	D	D	D	D	D	D	D	14 303
334112	Computer storage device mfg	—	2	1	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	9	9	2	120	5 079	62	127	3 295	9 202	10 219	19 918	1 209
3342	Communications equipment mfg	—	40	20	2 695	94 674	1 405	2 735	31 705	676 656	363 171	1 033 557	37 582
33421	Telephone apparatus mfg	—	13	7	1 551	51 924	747	1 252	14 046	592 256	308 558	895 125	30 755
334210	Telephone apparatus mfg	—	13	7	1 551	51 924	747	1 252	14 046	592 256	308 558	895 125	30 755
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	24	12	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	24	12	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	116	54	9 570	308 751	6 260	12 157	156 997	850 937	776 507	1 645 471	118 431
33441	Semiconductor & other electronic component mfg	—	116	54	9 570	308 751	6 260	12 157	156 997	850 937	776 507	1 645 471	118 431
334412	Bare printed circuit board mfg	—	35	18	2 520	82 894	1 772	3 602	46 153	240 137	175 379	415 138	27 397
334413	Semiconductor & related device mfg ...	—	13	6	1 450	55 166	766	1 435	26 147	209 817	66 657	273 485	57 405
334414	Electronic capacitor mfg	—	1	1	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	10	5	477	14 207	351	860	7 840	28 064	13 753	41 737	492
334417	Electronic connector mfg	—	6	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	11	9	2 100	58 976	1 393	2 358	29 234	73 788	397 046	490 519	19 168
334419	Other electronic component mfg	1	37	12	1 154	36 587	701	1 283	14 580	96 234	59 907	158 587	5 423
3345	Navigational, measuring, medical, & control instruments mfg	—	66	28	7 913	397 703	5 711	10 889	234 649	852 042	458 529	1 304 171	39 685
33451	Navigational, measuring, medical, & control instruments mfg	—	66	28	7 913	397 703	5 711	10 889	234 649	852 042	458 529	1 304 171	39 685
334511	Search, detection, navigation, & guidance instrument mfg	—	6	4	h	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	4	2	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	5	11	1	101	3 862	44	79	1 041	8 570	4 821	13 523	256

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	NEW HAMPSHIRE—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg—Con.												
334515	Electricity measuring & testing instrument mfg	-	18	10	1 819	61 074	1 332	2 642	38 216	138 038	87 118	222 309	6 945
334516	Analytical laboratory instrument mfg	4	9	5	270	12 224	104	170	3 309	20 913	24 249	45 053	1 384
334519	Other measuring & controlling device mfg	-	11	4	462	22 595	259	586	10 154	32 552	23 423	57 552	6 414
335	Electrical equipment, appliance, & component mfg	-	55	32	5 558	174 700	3 907	7 863	105 300	571 437	448 193	1 010 505	50 599
3351	Electric lighting equipment mfg	-	8	5	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	2	2	g	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	2	2	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	3	6	3	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	5	3	2	c	D	D	D	D	D	D	D	441
3353	Electrical equipment mfg ..	-	22	11	1 145	34 244	745	1 344	14 293	109 171	115 575	221 969	D
33531	Electrical equipment mfg	-	22	11	1 145	34 244	745	1 344	14 293	109 171	115 575	221 969	D
335311	Power, distribution, & specialty transformer mfg	4	4	2	129	4 243	86	172	1 926	9 580	8 025	17 022	384
335312	Motor & generator mfg	-	4	2	c	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	2	1	c	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	12	6	590	19 467	388	777	6 461	60 006	89 734	147 380	4 068
3359	Other electrical equipment & component mfg	-	24	16	2 479	79 865	1 717	3 510	50 137	228 984	201 117	425 630	19 883
33592	Communication & energy wire & cable mfg	-	9	9	1 722	59 268	1 228	2 658	40 641	164 496	174 100	333 427	17 056
335921	Fiber optic cable mfg..	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	8	8	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	4	489	12 669	327	545	5 873	47 498	14 054	61 857	2 017
335931	Current-carrying wiring device mfg	-	4	4	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	6	10	3	268	7 928	162	307	3 623	16 990	12 963	30 346	810
335999	All other miscellaneous electrical equipment & component mfg	5	9	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	29	12	2 006	71 256	1 546	3 004	49 077	140 891	107 946	244 357	8 258
3363	Motor vehicle parts mfg ...	-	14	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	5	8	4	149	4 159	104	341	2 231	5 683	4 780	10 874	D
336322	Other motor vehicle electrical & electronic equipment mfg	5	8	4	149	4 159	104	341	2 231	5 683	4 780	10 874	D
33639	Other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	3	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	3	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW HAMPSHIRE— Con. Manufacturing— Con.												
337	Furniture & related product mfg	2	104	15	1 547	40 305	1 082	2 036	22 950	71 789	64 126	137 944	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	81	10	1 217	29 459	855	1 615	17 818	47 955	37 855	87 943	D
33711	Wood kitchen cabinet & counter top mfg	4	40	2	308	8 570	243	500	5 806	14 405	12 940	27 367	D
337110	Wood kitchen cabinet & counter top mfg ...	4	40	2	308	8 570	243	500	5 806	14 405	12 940	27 367	D
33712	Household & institutional furniture mfg	1	41	8	909	20 889	612	1 115	12 012	33 550	24 915	60 576	D
337122	Nonupholstered wood household furniture mfg	1	35	6	778	16 085	511	942	9 839	25 023	20 336	47 261	D
337127	Institutional furniture mfg	—	2	2	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	17	5	269	9 313	182	339	4 251	18 852	18 564	37 285	D
33721	Office furniture (including fixtures) mfg	1	17	5	269	9 313	182	339	4 251	18 852	18 564	37 285	D
337212	Custom architectural woodwork & millwork mfg	—	5	3	152	6 129	91	186	2 428	11 646	7 655	19 326	D
337215	Showcase, partition, shelving, & locker mfg	1	8	2	110	3 002	84	141	1 695	6 836	10 595	17 274	D
339	Miscellaneous mfg	1	185	39	6 447	178 518	4 249	8 731	103 453	452 361	286 154	741 028	28 331
3391	Medical equipment & supplies mfg	1	76	14	2 391	71 670	1 317	2 608	34 996	170 131	91 141	265 674	16 632
33911	Medical equipment & supplies mfg	1	76	14	2 391	71 670	1 317	2 608	34 996	170 131	91 141	265 674	16 632
339111	Laboratory apparatus & furniture mfg	—	4	2	f	D	D	D	D	D	D	D	636
339112	Surgical & medical instrument mfg	2	19	9	1 299	39 732	693	1 240	19 999	98 595	49 034	150 780	14 968
339113	Surgical appliance & supplies mfg	1	14	2	261	7 233	144	338	3 029	18 244	10 321	28 350	463
339116	Dental laboratories ...	4	34	1	c	D	D	D	D	D	D	D	440
3399	Other miscellaneous mfg ..	1	109	25	4 056	106 848	2 932	6 123	68 457	282 230	195 013	475 354	11 699
33991	Jewelry & silverware mfg	8	18	2	304	6 524	209	353	3 557	17 026	18 135	35 107	408
339911	Jewelry (except costume) mfg	9	11	1	236	5 357	163	275	2 845	14 605	17 062	31 619	D
33992	Sporting & athletic goods mfg	1	14	3	184	3 978	110	187	1 715	10 140	17 246	27 522	250
339920	Sporting & athletic goods mfg	1	14	3	184	3 978	110	187	1 715	10 140	17 246	27 522	250
33993	Doll, toy, & game mfg ...	—	10	4	506	10 366	357	547	5 246	21 259	6 750	28 407	218
339931	Doll & stuffed toy mfg .	—	5	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg	1	25	3	243	7 015	144	292	3 146	12 621	7 926	20 404	701
339950	Sign mfg	1	25	3	243	7 015	144	292	3 146	12 621	7 926	20 404	701
33999	All other miscellaneous mfg	—	38	12	2 755	77 493	2 071	4 672	53 688	218 028	143 017	358 879	10 047
339991	Gasket, packing, & sealing device mfg ...	—	7	5	1 960	54 791	1 445	3 460	39 461	120 360	100 578	217 025	D
339994	Broom, brush, & mop mfg	—	3	2	c	D	D	D	D	D	D	D	D
339995	Burial casket mfg	—	3	1	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	18	3	314	8 201	236	394	3 721	18 054	9 262	27 216	774

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA												
	Manufacturing	1	8 844	3 074	395 322	15 798 742	241 095	484 982	7 435 157	45 718 100	33 681 939	79 309 730	3 482 539
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (CT Part)	-	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (ME Part)	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (MA Part)	1	7 448	2 622	332 006	13 505 530	198 540	401 940	6 174 666	37 417 970	27 017 210	64 365 196	2 975 800
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (NH Part)	1	1 336	437	61 381	2 229 004	41 436	80 545	1 230 147	8 395 120	6 376 277	14 748 569	499 261
311	Food mfg	1	664	187	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	48	16	h	D	D	D	D	D	D	D	D
313	Textile mills	1	128	69	i	D	D	D	D	D	D	D	D
314	Textile product mills	1	180	42	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	194	73	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	116	40	i	D	D	D	D	D	D	D	D
321	Wood product mfg	3	198	38	h	D	D	D	D	D	D	D	D
322	Paper mfg	-	166	118	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	1 077	234	j	D	D	D	D	D	D	D	107 053
324	Petroleum & coal products mfg	1	45	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	351	152	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	421	218	21 622	706 201	16 689	33 833	442 348	1 757 409	1 510 618	3 269 053	141 171
327	Nonmetallic mineral product mfg	1	245	76	i	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	98	49	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 634	476	40 901	1 517 003	29 397	59 553	880 171	3 702 019	1 916 028	5 599 963	357 939
333	Machinery mfg	2	769	294	33 456	1 463 248	18 414	37 238	634 513	3 253 851	2 673 862	5 937 448	227 624
334	Computer & electronic product mfg	-	1 039	537	m	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	228	124	j	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	167	61	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	339	71	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	737	189	24 304	919 994	13 974	27 807	372 702	2 449 330	1 422 551	3 902 291	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA—Con.												
	Boston, MA-NH PMSA												
31-33	Manufacturing	1	4 865	1 645	207 661	8 725 408	119 591	242 987	3 838 597	23 000 994	16 453 372	39 379 994	1 715 295
	Boston, MA-NH PMSA (MA Part)	1	4 829	1 630	206 345	8 676 512	118 686	241 497	3 806 656	22 908 566	16 350 156	39 183 910	1 707 820
	Boston, MA-NH PMSA (NH Part)	4	36	15	1 316	48 896	905	1 490	31 941	92 428	103 216	196 084	7 475
311	Food mfg	1	439	123	13 043	356 463	8 605	16 272	211 441	1 325 624	1 729 383	3 054 476	80 780
3113	Sugar & confectionery product mfg	—	34	11	1 171	26 892	915	1 678	19 056	129 107	113 801	244 202	9 334
31133	Confectionery mfg from purchased chocolate	—	17	7	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	17	7	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	1	13	3	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	1	13	3	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	7	16	6	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	29	12	2 461	87 313	1 525	3 364	53 143	298 508	540 517	837 990	16 923
31151	Dairy product (except frozen) mfg	—	9	5	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	7	5	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	1	20	7	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	1	20	7	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	22	12	1 162	32 424	789	1 691	18 591	77 977	201 779	281 083	5 905
31161	Animal slaughtering & processing	1	22	12	1 162	32 424	789	1 691	18 591	77 977	201 779	281 083	5 905
311612	Meat processed from carcasses	1	11	4	633	17 877	344	692	7 945	48 605	116 263	165 030	D
311615	Poultry processing	—	4	4	e	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	1	31	9	1 641	47 793	996	1 906	26 081	162 198	344 698	506 199	7 451
31171	Seafood product preparation & packaging	1	31	9	1 641	47 793	996	1 906	26 081	162 198	344 698	506 199	7 451
311712	Fresh & frozen seafood processing	—	26	9	1 616	46 993	981	1 883	25 784	160 490	340 689	500 484	D
3118	Bakeries & tortilla mfg	1	259	50	4 454	100 140	2 971	5 048	63 237	360 512	160 792	521 187	24 627
31181	Bread & bakery product mfg	1	242	46	4 063	90 293	2 678	4 600	57 016	343 936	147 258	491 280	23 527
311811	Retail bakeries	4	167	14	1 292	16 295	764	939	8 329	34 205	19 096	53 427	D
311812	Commercial bakeries	1	64	28	2 457	66 354	1 701	3 232	44 094	291 451	113 254	404 497	20 813
311813	Frozen cakes, pies, & other pastries mfg	1	11	4	314	7 644	213	429	4 593	18 280	14 908	33 356	D
31182	Cookie, cracker, & pasta mfg	2	16	4	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	38	20	1 693	49 656	1 022	1 856	22 650	261 705	282 998	542 853	11 784
31191	Snack food mfg	2	9	7	353	9 894	229	418	5 121	48 875	41 028	89 545	2 172
31192	Coffee & tea mfg	1	6	3	389	12 877	114	224	2 605	67 020	96 529	162 113	D
311920	Coffee & tea mfg	1	6	3	389	12 877	114	224	2 605	67 020	96 529	162 113	D
31194	Seasoning & dressing mfg	—	7	4	f	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	4	2	e	D	D	D	D	D	D	D	D
31199	All other food mfg	—	14	6	390	8 329	293	426	5 230	27 397	26 473	53 837	D
312	Beverage & tobacco product mfg	2	22	8	1 253	53 912	691	1 627	29 903	344 312	409 785	756 853	21 848
3121	Beverage mfg	2	22	8	1 253	53 912	691	1 627	29 903	344 312	409 785	756 853	21 848
31211	Soft drink & ice mfg	—	9	5	653	22 741	264	548	8 898	141 250	247 450	388 664	D
312111	Soft drink mfg	—	4	4	e	D	D	D	D	D	D	D	D
31212	Breweries	—	10	2	e	D	D	D	D	D	D	D	9 381
312120	Breweries	—	10	2	e	D	D	D	D	D	D	D	9 381

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con. Boston, MA—NH PMSA—Con. Manufacturing—Con.												
313	Textile mills	3	53	28	2 287	80 496	1 603	3 562	45 280	182 371	179 988	360 737	12 191
3132	Fabric mills	6	24	13	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	8	6	4	402	13 524	282	690	7 761	25 946	39 464	65 024	D
313230	Nonwoven fabric mills..	8	6	4	402	13 524	282	690	7 761	25 946	39 464	65 024	D
3133	Textile & fabric finishing & fabric coating mills	2	26	15	1 385	53 033	923	2 134	29 307	130 903	120 082	251 740	D
31331	Textile & fabric finishing mills	3	16	9	818	27 429	550	1 182	15 479	71 971	64 982	138 043	D
313311	Broadwoven fabric finishing mills	3	13	8	677	23 706	434	935	12 851	66 469	62 370	130 038	D
31332	Fabric coating mills	—	10	6	567	25 604	373	952	13 828	58 932	55 100	113 697	D
313320	Fabric coating mills ...	—	10	6	567	25 604	373	952	13 828	58 932	55 100	113 697	D
314	Textile product mills	1	105	22	1 587	36 128	1 225	2 396	20 596	93 224	91 238	182 282	4 073
3141	Textile furnishings mills....	2	45	11	938	19 591	755	1 489	11 496	56 497	54 700	109 899	D
31412	Curtain & linen mills	2	42	10	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	3	35	6	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	1	60	11	649	16 537	470	907	9 100	36 727	36 538	72 383	D
31491	Textile bag & canvas mills	1	23	5	274	6 803	208	395	4 296	12 969	12 603	26 090	D
314912	Canvas & related product mills	1	21	5	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	37	6	375	9 734	262	512	4 804	23 758	23 935	46 293	2 561
314999	All other miscellaneous textile product mills ..	1	35	6	e	D	D	D	D	D	D	D	D
315	Apparel mfg	2	118	39	3 200	79 589	2 380	4 426	37 774	164 035	191 778	344 002	4 225
3152	Cut & sew apparel mfg	2	84	33	h	D	D	D	D	D	D	D	3 787
31521	Cut & sew apparel contractors	7	42	14	896	13 071	852	1 425	11 448	19 254	4 305	23 573	537
315212	Women's, girls', & infants' cut & sew apparel contractors ..	8	40	13	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	11	5	510	10 038	322	766	6 239	24 326	32 489	56 824	508
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	7	4	e	D	D	D	D	D	D	D	487
31523	Women's & girls' cut & sew apparel mfg	1	22	13	1 316	45 332	814	1 523	13 463	99 430	129 597	215 000	2 593
315233	Women's & girls' cut & sew dress mfg	6	5	4	290	6 895	212	390	3 663	12 499	13 172	25 136	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	4	4	495	24 477	217	362	2 743	38 961	41 327	74 089	D
315239	Women's & girls' cut & sew other outerwear mfg	—	7	3	268	10 032	157	337	4 080	39 267	66 945	98 926	D
3159	Apparel accessories & other apparel mfg	1	33	6	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	33	6	e	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	29	5	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	2	61	18	1 532	34 455	1 276	2 553	23 871	85 558	80 505	164 428	D
3161	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
31611	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
316110	Leather & hide tanning & finishing	3	27	5	411	12 952	332	721	8 499	44 387	33 696	76 174	961
3162	Footwear mfg	2	8	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	2	8	4	f	D	D	D	D	D	D	D	D
316219	Other footwear mfg ...	2	3	3	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	26	9	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	1	26	9	f	D	D	D	D	D	D	D	D
321	Wood product mfg	5	72	9	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	4	59	9	970	28 281	724	1 555	18 259	53 564	67 944	121 290	2 880
32191	Millwork	2	27	3	287	8 704	209	433	5 331	14 805	24 679	39 638	548
32199	All other wood product mfg	5	22	4	503	13 978	372	830	8 932	28 821	34 171	62 550	1 760
321999	All other miscellaneous wood product mfg ...	1	20	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	—	82	57	i	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	79	54	i	D	D	D	D	D	D	D	34 456
32221	Paperboard container mfg	1	34	29	2 187	78 230	1 622	3 539	46 296	172 238	228 004	400 821	17 801
322211	Corrugated & solid fiber box mfg	1	15	13	1 099	39 819	761	1 589	21 667	89 222	133 403	222 003	8 861
322212	Folding paperboard box mfg	1	11	9	785	29 911	626	1 448	18 785	61 782	64 986	128 025	8 058
32222	Paper bag & coated & treated paper mfg	—	17	11	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	15	10	g	D	D	D	D	D	D	D	13 666
32223	Stationery product mfg ..	—	17	8	f	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	—	6	3	f	D	D	D	D	D	D	D	563
32229	Other converted paper product mfg	2	11	6	522	17 364	396	984	10 606	90 360	51 023	142 153	1 853
322299	All other converted paper product mfg ...	2	10	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	696	156	13 955	523 487	10 060	20 534	329 122	1 056 500	618 669	1 680 590	69 873
3231	Printing & related support activities	2	696	156	13 955	523 487	10 060	20 534	329 122	1 056 500	618 669	1 680 590	69 873
32311	Printing	2	604	131	12 485	470 720	8 915	18 106	290 682	961 383	588 120	1 552 401	60 202
323110	Commercial lithographic printing ..	2	296	74	6 785	279 192	4 672	9 625	167 288	536 631	322 115	860 463	36 648
323113	Commercial screen printing	5	62	18	1 480	48 625	1 091	2 137	32 254	85 905	72 210	158 574	6 963
323114	Quick printing	1	143	7	960	27 681	679	1 253	17 163	58 401	34 364	92 587	3 340
323116	Manifold business form printing	—	11	4	400	18 885	281	628	12 861	78 205	30 035	108 468	1 067
323117	Book printing	3	18	15	1 931	66 693	1 520	3 166	45 379	135 705	84 788	221 147	7 538
323119	Other commercial printing	3	47	4	417	15 049	301	597	7 739	29 438	25 952	55 345	3 240
32312	Support activities for printing	1	92	25	1 470	52 767	1 145	2 428	38 440	95 117	30 549	128 189	9 671
323121	Tradebinding & related work	1	27	11	718	21 117	576	1 195	16 406	38 440	13 227	51 770	2 188
323122	Prepress services	2	65	14	752	31 650	569	1 233	22 034	56 677	17 322	76 419	7 483
324	Petroleum & coal products mfg	—	22	6	619	26 524	454	1 079	18 551	65 014	125 443	188 433	7 704
3241	Petroleum & coal products mfg	—	22	6	619	26 524	454	1 079	18 551	65 014	125 443	188 433	7 704
32412	Asphalt paving, roofing, & saturated materials mfg	—	19	6	597	25 822	440	1 054	18 241	63 715	122 700	184 416	D
324121	Asphalt paving mixture & block mfg	1	16	3	295	13 897	236	587	11 067	38 579	80 376	118 322	D
324122	Asphalt shingle & coating materials mfg	—	3	3	302	11 925	204	467	7 174	25 136	42 324	66 094	D
325	Chemical mfg	1	230	96	11 746	548 448	5 973	12 157	222 773	1 577 644	1 458 388	3 059 376	156 325
3251	Basic chemical mfg	1	25	11	903	47 810	450	758	22 142	143 153	83 015	227 313	13 130
32519	Other basic organic chemical mfg	—	12	7	f	D	D	D	D	D	D	D	D
325193	Ethyl alcohol mfg	—	2	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	8	6	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	15	10	f	D	D	D	D	D	D	D	14 473
32521	Resin & synthetic rubber mfg	1	13	10	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	1	11	10	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	49	26	3 360	128 336	1 739	3 562	58 462	560 862	352 559	912 350	56 000
32541	Pharmaceutical & medicine mfg	1	49	26	3 360	128 336	1 739	3 562	58 462	560 862	352 559	912 350	56 000
325412	Pharmaceutical preparation mfg	2	20	7	1 078	36 841	567	1 362	19 843	100 484	104 665	202 964	D
325413	In-vitro diagnostic substance mfg	—	10	9	1 193	55 646	415	791	19 196	185 331	96 151	283 999	D
325414	Biological product (except diagnostic) mfg	—	11	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	1	53	21	1 507	61 714	744	1 540	25 624	233 935	188 201	421 067	6 334
32551	Paint & coating mfg	1	29	12	f	D	D	D	D	D	D	D	3 075
325510	Paint & coating mfg	1	29	12	f	D	D	D	D	D	D	D	3 075
32552	Adhesive mfg	2	24	9	f	D	D	D	D	D	D	D	3 259
325520	Adhesive mfg	2	24	9	f	D	D	D	D	D	D	D	3 259
3256	Soap, cleaning compound, & toilet preparation mfg	4	32	8	836	31 829	440	933	12 629	125 288	124 192	248 346	D
32561	Soap & cleaning compound mfg	3	28	7	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	1	8	3	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	9	4	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	9	4	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	44	19	4 269	238 748	2 201	4 492	87 881	421 061	563 268	1 008 391	58 635
32591	Printing ink mfg	1	13	5	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	1	13	5	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	31	14	h	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	1	13	6	e	D	D	D	D	D	D	D	2 178
325992	Photographic film, paper, plate, & chemical mfg	—	5	2	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	13	6	1 339	78 097	605	1 145	26 438	239 510	181 592	425 934	D
326	Plastics & rubber products mfg	1	170	87	7 359	244 164	5 569	10 745	145 260	634 789	541 925	1 188 352	47 837
3261	Plastics product mfg	2	142	75	6 494	211 938	4 953	9 604	130 254	522 442	442 506	976 692	43 128
32611	Unsupported plastics film, sheet, & bag mfg	—	15	10	897	28 468	691	1 190	15 999	95 389	70 159	168 506	5 399
326111	Unsupported plastics bag mfg	—	6	4	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	2	8	5	366	12 325	292	500	7 674	22 295	29 754	52 808	1 268
32614	Polystyrene foam product mfg	2	2	2	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	2	2	2	e	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	7	5	254	10 127	184	381	5 142	19 749	24 604	44 346	1 055
326150	Urethane & other foam product (except polystyrene) mfg	—	7	5	254	10 127	184	381	5 142	19 749	24 604	44 346	1 055
32616	Plastics bottle mfg	—	4	3	277	8 044	261	543	7 230	26 383	27 825	54 212	2 420
326160	Plastics bottle mfg	—	4	3	277	8 044	261	543	7 230	26 383	27 825	54 212	2 420
32619	Other plastics product mfg	2	100	52	4 299	144 838	3 203	6 173	87 973	332 660	264 354	603 934	26 720
326199	All other plastics product mfg	2	98	52	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	28	12	865	32 226	616	1 141	15 006	112 347	99 419	211 660	4 709
32629	Other rubber product mfg	—	25	11	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	19	10	739	26 719	539	983	12 580	99 230	88 791	187 878	4 437
327	Nonmetallic mineral product mfg	2	123	32	2 584	89 795	1 928	3 684	55 309	219 256	184 011	402 443	22 867
3271	Clay product & refractory mfg	1	21	7	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	1	16	6	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	1	21	2	376	14 269	320	622	11 241	44 151	28 788	71 481	D
32721	Glass & glass product mfg	1	21	2	376	14 269	320	622	11 241	44 151	28 788	71 481	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	45	18	1 024	36 437	768	1 487	24 345	89 360	93 877	183 624	13 393
32732	Ready-mix concrete mfg.	3	19	10	499	20 861	394	843	15 489	56 242	66 880	123 077	10 281
327320	Ready-mix concrete mfg	3	19	10	499	20 861	394	843	15 489	56 242	66 880	123 077	10 281
32739	Other concrete product mfg	2	14	5	e	D	D	D	D	D	D	D	2 233
327390	Other concrete product mfg	2	14	5	e	D	D	D	D	D	D	D	2 233
3279	Other nonmetallic mineral product mfg	2	31	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	1	26	3	452	17 820	293	539	7 066	30 012	29 018	59 355	2 280
331	Primary metal mfg	2	42	16	1 358	48 410	989	2 067	30 302	142 918	212 911	317 251	9 148
3313	Alumina & aluminum production & processing ..	8	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	8	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	5	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	2	30	8	558	17 699	459	944	13 197	34 056	19 104	53 382	987
33151	Ferrous metal foundries ..	-	10	4	282	8 887	239	524	7 392	17 925	8 149	26 187	340
33152	Nonferrous metal foundries	4	20	4	276	8 812	220	420	5 805	16 131	10 955	27 195	647
332	Fabricated metal product mfg	-	830	255	21 104	819 229	14 686	30 102	465 925	2 261 396	932 677	3 173 860	262 552
3321	Forging & stamping	-	48	18	1 658	58 274	1 285	2 681	37 762	126 206	74 221	199 822	D
33211	Forging & stamping	-	48	18	1 658	58 274	1 285	2 681	37 762	126 206	74 221	199 822	D
332116	Metal stamping	-	37	16	1 373	48 001	1 098	2 296	31 088	109 766	60 643	168 367	D
3322	Cutlery & handtool mfg	-	17	8	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	17	8	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	1	1	g	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	1	16	7	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	167	70	4 204	154 446	2 928	5 661	91 666	288 835	199 213	488 421	D
33231	Plate work & fabricated structural product mfg ..	1	38	15	729	26 176	485	1 030	14 722	60 641	41 286	102 252	D
332312	Fabricated structural metal mfg	2	28	9	461	16 494	293	609	8 784	42 020	28 900	70 984	D
33232	Ornamental & architectural metal products mfg	-	129	55	3 475	128 270	2 443	4 631	76 944	228 194	157 927	386 169	D
332322	Sheet metal work mfg ..	-	90	46	2 732	105 782	1 998	3 742	65 040	186 090	117 737	304 173	D
332323	Ornamental & architectural metal work mfg	-	30	6	f	D	D	D	D	D	D	D	1 491
3324	Boiler, tank, & shipping container mfg	-	18	6	395	13 938	272	586	6 686	33 099	37 358	71 944	D
3325	Hardware mfg	-	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
33251	Hardware mfg	-	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
332510	Hardware mfg	-	9	4	489	13 946	352	775	7 124	38 778	22 778	61 834	401
3326	Spring & wire product mfg ..	-	10	5	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	10	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	382	85	6 300	239 508	4 636	9 393	147 807	437 998	213 765	650 944	44 236
33271	Machine shops	1	321	55	4 412	169 606	3 186	6 315	104 718	310 390	158 268	470 081	33 016
332710	Machine shops	1	321	55	4 412	169 606	3 186	6 315	104 718	310 390	158 268	470 081	33 016
33272	Turned product & screw, nut, & bolt mfg	2	61	30	1 888	69 902	1 450	3 078	43 089	127 608	55 497	180 863	11 220
332721	Precision turned product mfg	2	47	24	1 262	44 827	979	2 052	29 975	90 506	32 003	119 242	8 073
332722	Bolt, nut, screw, rivet, & washer mfg	3	14	6	626	25 075	471	1 026	13 114	37 102	23 494	61 621	3 147

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	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities	1	104	37	1 944	66 512	1 471	3 244	41 279	127 890	36 984	165 493	D
33281	Coating, engraving, heat treating, & allied activities	1	104	37	1 944	66 512	1 471	3 244	41 279	127 890	36 984	165 493	D
332811	Metal heat treating	2	12	5	301	12 330	238	574	8 442	25 439	6 028	31 792	4 419
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	45	19	868	29 038	655	1 521	17 462	56 819	15 760	72 635	2 766
332813	Electroplating, plating, polishing, anodizing, & coloring	1	47	13	775	25 144	578	1 149	15 375	45 632	15 196	61 066	D
3329	Other fabricated metal product mfg	—	75	22	3 470	159 892	1 708	3 185	58 048	411 529	208 980	617 927	24 508
33291	Metal valve mfg	—	13	5	888	42 354	494	976	20 571	102 521	55 772	155 991	6 674
332911	Industrial valve mfg	—	6	3	548	28 466	253	494	12 134	60 217	31 142	90 667	D
332913	Plumbing fixture fitting & trim mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	62	17	2 582	117 538	1 214	2 209	37 477	309 008	153 208	461 936	17 834
332993	Ammunition (except small arms) mfg	—	5	5	1 465	79 261	425	667	14 144	214 458	108 976	322 828	D
332999	All other miscellaneous fabricated metal product mfg	1	42	11	938	32 066	644	1 206	18 657	77 862	35 688	113 838	3 876
333	Machinery mfg	1	341	135	15 699	708 297	8 343	16 570	284 937	1 666 844	1 336 032	3 019 286	130 848
3331	Agriculture, construction, & mining machinery mfg	2	10	4	342	12 892	213	482	6 081	24 504	37 232	61 187	2 457
3332	Industrial machinery mfg	1	84	36	7 238	347 267	3 326	6 677	117 309	922 181	696 660	1 623 560	67 627
33322	Plastics & rubber industry machinery mfg	—	10	4	785	34 364	368	797	14 792	100 782	92 895	196 933	D
333220	Plastics & rubber industry machinery mfg	—	10	4	785	34 364	368	797	14 792	100 782	92 895	196 933	D
33329	Other industrial machinery mfg	1	71	31	6 422	312 144	2 933	5 847	102 058	820 377	603 088	1 425 056	63 660
333291	Paper industry machinery mfg	9	4	2	e	D	D	D	D	D	D	D	1 300
333293	Printing machinery & equipment mfg	5	12	7	906	39 539	496	1 153	16 741	65 801	55 773	121 394	3 108
333295	Semiconductor machinery mfg	—	15	11	3 546	181 660	1 550	2 825	50 629	560 410	415 359	975 755	26 155
333298	All other industrial machinery mfg	4	32	11	1 607	76 558	657	1 409	26 739	166 523	103 528	270 498	32 919
3333	Commercial & service industry machinery mfg	2	47	22	2 283	103 070	1 332	2 749	43 470	164 406	133 700	299 342	26 666
33331	Commercial & service industry machinery mfg	2	47	22	2 283	103 070	1 332	2 749	43 470	164 406	133 700	299 342	26 666
333314	Optical instrument & lens mfg	1	22	10	877	33 270	472	911	14 925	85 856	36 930	122 633	5 241
333315	Photographic & photocopying equipment mfg	2	7	3	973	54 740	582	1 293	21 359	47 603	65 739	114 584	D
333319	Other commercial & service industry machinery mfg	—	13	7	355	12 169	224	443	5 921	23 209	26 114	49 417	1 093
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	20	7	804	35 996	500	1 013	17 495	70 339	65 178	136 063	4 941
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	20	7	804	35 996	500	1 013	17 495	70 339	65 178	136 063	4 941
333415	AC & warm air heating & commercial/industrial refig equip mfg	—	8	4	535	24 539	305	637	11 009	44 280	40 341	83 249	2 354
3335	Metalworking machinery mfg	2	70	15	892	33 162	577	1 077	18 452	64 475	37 463	102 337	3 570
33351	Metalworking machinery mfg	2	70	15	892	33 162	577	1 077	18 452	64 475	37 463	102 337	3 570
333512	Machine tool (metal cutting types) mfg	1	8	5	280	11 994	152	308	5 337	22 573	16 144	39 921	905

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	1	12	4	276	12 727	186	358	5 953	25 655	18 137	42 835	1 280
33361	Engine, turbine, & power transmission equipment mfg	1	12	4	276	12 727	186	358	5 953	25 655	18 137	42 835	1 280
3339	Other general-purpose machinery mfg	1	98	47	3 864	163 183	2 209	4 214	76 177	395 284	347 662	753 962	24 307
33391	Pump & compressor mfg	2	7	6	757	29 634	374	788	12 678	88 008	100 376	189 882	5 617
333912	Air & gas compressor mfg	3	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	2	15	9	330	11 695	201	455	6 468	19 833	34 847	55 140	1 007
33399	All other general-purpose machinery mfg	—	76	32	2 777	121 854	1 634	2 971	57 031	287 443	212 439	508 940	17 683
333993	Packaging machinery mfg	—	9	3	e	D	D	D	D	D	D	D	974
333994	Industrial process furnace & oven mfg ..	5	10	4	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	44	20	1 645	74 838	895	1 615	35 376	184 206	142 144	334 340	12 648
334	Computer & electronic product mfg	1	593	307	71 715	3 560 208	31 529	65 239	1 196 180	9 355 171	4 857 737	14 134 592	653 035
3341	Computer & peripheral equipment mfg	1	73	39	6 295	332 070	2 205	4 592	107 713	1 158 410	891 547	2 039 708	64 003
33411	Computer & peripheral equipment mfg	1	73	39	6 295	332 070	2 205	4 592	107 713	1 158 410	891 547	2 039 708	64 003
334111	Electronic computer mfg	—	15	7	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	8	4	752	39 985	86	216	2 893	53 725	98 246	156 767	D
334119	Other computer peripheral equipment mfg	1	45	26	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	62	40	10 627	558 748	6 358	12 857	310 138	1 324 035	714 951	2 043 614	D
33421	Telephone apparatus mfg	5	20	12	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	5	20	12	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	31	21	7 454	370 795	4 983	10 184	252 881	827 038	467 752	1 290 448	38 496
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	31	21	7 454	370 795	4 983	10 184	252 881	827 038	467 752	1 290 448	38 496
33429	Other communications equipment mfg	4	11	7	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	4	11	7	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	2	13	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	210	105	19 102	823 207	10 650	22 288	301 390	2 424 368	1 059 968	3 451 797	296 371
33441	Semiconductor & other electronic component mfg	—	210	105	19 102	823 207	10 650	22 288	301 390	2 424 368	1 059 968	3 451 797	296 371
334411	Electron tube mfg	—	6	2	f	D	D	D	D	D	D	D	1 339
334412	Bare printed circuit board mfg	—	30	13	1 460	60 317	724	1 668	20 478	174 321	92 602	259 613	10 616
334413	Semiconductor & related device mfg ...	—	47	23	6 679	302 222	3 454	6 599	110 790	1 029 702	330 775	1 342 388	216 745
334417	Electronic connector mfg	1	14	10	905	33 425	646	1 464	19 476	94 427	39 069	125 562	5 091
334418	Printed circuit assembly (electronic assembly) mfg	—	34	27	5 930	285 050	3 302	7 181	85 319	824 524	425 247	1 248 872	45 518
334419	Other electronic component mfg	2	59	24	3 145	108 048	1 842	4 039	46 931	212 990	145 776	359 920	16 297

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	209	113	34 208	1 788 198	11 330	23 490	446 000	4 287 122	1 995 540	6 244 357	197 807
33451	Navigational, measuring, medical, & control instruments mfg	—	209	113	34 208	1 788 198	11 330	23 490	446 000	4 287 122	1 995 540	6 244 357	197 807
334510	Electromedical & electrotherapeutic apparatus mfg	—	24	12	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	27	10	j	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	6	4	354	12 924	212	483	5 418	28 633	14 892	43 902	D
334513	Industrial process control instrument mfg	—	37	21	4 053	187 614	1 656	3 193	48 333	519 852	206 334	731 541	20 502
334515	Electricity measuring & testing instrument mfg	1	30	18	4 495	204 056	1 452	2 682	48 955	659 707	279 305	943 702	41 785
334516	Analytical laboratory instrument mfg	—	40	20	4 247	216 787	1 214	2 496	41 328	479 231	306 994	784 207	28 335
334517	Irradiation apparatus mfg	—	6	4	g	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	33	19	g	D	D	D	D	D	D	D	8 496
3346	Mfg & reproducing magnetic & optical media	1	26	6	f	D	D	D	D	D	D	D	25 320
33461	Mfg & reproducing magnetic & optical media	1	26	6	f	D	D	D	D	D	D	D	25 320
334613	Magnetic & optical recording media mfg	1	14	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	132	68	8 669	309 635	5 605	11 807	150 715	886 037	640 848	1 521 168	47 017
3351	Electric lighting equipment mfg	1	16	8	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	2	15	7	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	—	5	3	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	2	5	3	309	9 246	244	472	7 025	25 149	47 800	73 305	D
3353	Electrical equipment mfg	1	50	21	2 840	110 044	1 610	3 569	42 704	362 646	148 061	510 051	D
33531	Electrical equipment mfg	1	50	21	2 840	110 044	1 610	3 569	42 704	362 646	148 061	510 051	D
335313	Switchgear & switchboard apparatus mfg	—	9	6	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	27	13	1 122	45 425	596	1 076	14 550	103 347	79 863	183 002	D
3359	Other electrical equipment & component mfg	1	62	36	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	11	11	920	35 771	609	1 293	17 135	91 828	142 361	229 745	7 283
335929	Other communication & energy wire mfg	—	10	10	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	20	10	2 018	66 578	1 359	2 806	36 306	158 161	101 775	257 640	D
335931	Current-carrying wiring device mfg	—	16	7	1 338	44 750	827	1 696	22 524	128 310	85 788	209 442	7 611
335932	Noncurrent-carrying wiring device mfg	—	4	3	680	21 828	532	1 110	13 782	29 851	15 987	48 198	D
33599	All other electrical equipment & component mfg	3	27	14	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	3	26	14	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	106	37	7 538	364 140	4 882	9 426	202 821	840 113	1 245 170	2 113 979	66 453
3363	Motor vehicle parts mfg . . .	3	51	14	1 197	44 316	789	1 709	22 193	101 529	121 781	222 468	8 702
33632	Motor vehicle electrical & electronic equipment mfg	4	23	8	487	21 192	220	444	6 971	59 394	78 269	135 847	3 803
336322	Other motor vehicle electrical & electronic equipment mfg	4	23	8	487	21 192	220	444	6 971	59 394	78 269	135 847	3 803
33637	Motor vehicle metal stamping	—	6	4	331	13 421	243	638	8 205	25 525	21 913	48 293	D
336370	Motor vehicle metal stamping	—	6	4	331	13 421	243	638	8 205	25 525	21 913	48 293	D
3364	Aerospace product & parts mfg	—	16	12	5 745	302 800	3 641	6 851	169 693	712 491	1 092 377	1 833 687	56 755
33641	Aerospace product & parts mfg	—	16	12	5 745	302 800	3 641	6 851	169 693	712 491	1 092 377	1 833 687	56 755
336412	Aircraft engine & engine parts mfg	—	12	12	5 722	302 000	3 627	6 826	169 259	710 874	1 091 525	1 831 152	D
337	Furniture & related product mfg	1	179	29	2 756	84 204	2 064	4 214	53 299	188 925	164 706	355 571	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	131	17	1 677	51 200	1 251	2 539	32 954	105 848	71 424	177 661	4 986
33711	Wood kitchen cabinet & counter top mfg	3	70	5	443	13 826	348	733	9 796	26 721	21 044	48 026	657
337110	Wood kitchen cabinet & counter top mfg ...	3	70	5	443	13 826	348	733	9 796	26 721	21 044	48 026	657
33712	Household & institutional furniture mfg	1	61	12	1 234	37 374	903	1 806	23 158	79 127	50 380	129 635	4 329
337122	Nonupholstered wood household furniture mfg	3	35	5	338	7 564	288	565	5 556	14 483	14 464	28 882	725
337127	Institutional furniture mfg	—	7	4	650	23 177	431	861	13 570	51 098	24 518	75 835	2 613
3372	Office furniture (including fixtures) mfg	1	32	7	522	16 508	385	805	9 575	25 235	32 819	58 815	D
33721	Office furniture (including fixtures) mfg	1	32	7	522	16 508	385	805	9 575	25 235	32 819	58 815	D
3379	Other furniture related product mfg	1	16	5	557	16 496	428	870	10 770	57 842	60 463	119 095	4 326
33791	Mattress mfg	1	8	5	479	14 758	373	762	9 741	54 614	56 854	112 156	4 254
337910	Mattress mfg	1	8	5	479	14 758	373	762	9 741	54 614	56 854	112 156	4 254
339	Miscellaneous mfg	1	449	117	13 147	520 051	7 079	13 937	175 951	1 322 361	879 569	2 197 289	66 910
3391	Medical equipment & supplies mfg	2	219	65	7 381	323 416	3 762	7 535	94 219	839 827	413 803	1 258 461	47 265
33911	Medical equipment & supplies mfg	2	219	65	7 381	323 416	3 762	7 535	94 219	839 827	413 803	1 258 461	47 265
339111	Laboratory apparatus & furniture mfg	—	23	10	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	2	76	36	4 893	236 441	2 414	5 013	59 255	634 748	301 188	937 892	38 456
339113	Surgical appliance & supplies mfg	2	23	11	747	26 140	483	961	13 436	74 572	28 541	104 273	2 936
339115	Ophthalmic goods mfg	—	12	3	452	12 969	185	346	3 443	41 107	16 413	56 406	856
339116	Dental laboratories ...	6	74	5	e	D	D	D	D	D	D	D	685
3399	Other miscellaneous mfg ..	1	230	52	5 766	196 635	3 317	6 402	81 732	482 534	465 766	938 828	19 645
33991	Jewelry & silverware mfg	—	48	11	1 450	56 868	690	1 387	17 036	131 241	199 234	320 964	4 335
339911	Jewelry (except costume) mfg	2	25	3	380	13 380	225	436	5 603	42 324	40 026	82 137	798
339912	Silverware & plated ware mfg	—	6	4	861	38 124	295	638	8 111	80 427	151 012	222 098	D
33992	Sporting & athletic goods mfg	5	15	4	305	9 604	202	402	3 195	31 885	29 830	63 789	D
339920	Sporting & athletic goods mfg	5	15	4	305	9 604	202	402	3 195	31 885	29 830	63 789	D
33993	Doll, toy, & game mfg ...	2	16	3	255	6 597	168	294	3 338	19 605	13 631	32 179	D
339932	Game, toy, & children's vehicle mfg	2	14	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg	1	68	9	733	22 357	482	901	12 786	39 214	20 890	59 811	1 213
339950	Sign mfg	1	68	9	733	22 357	482	901	12 786	39 214	20 890	59 811	1 213

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	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Boston, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	1	68	22	2 811	95 494	1 629	3 152	42 089	246 135	194 514	439 858	11 458
339991	Gasket, packing, & sealing device mfg ...	2	12	7	1 030	38 220	579	1 118	17 615	103 409	59 273	161 363	5 430
339992	Musical instrument mfg	1	15	6	435	13 782	292	578	7 009	35 618	12 036	47 241	2 348
339994	Broom, brush, & mop mfg	—	8	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	29	4	813	30 805	479	906	12 048	79 674	93 205	173 119	D
	Lawrence, MA—NH PMSA												
31-33	Manufacturing	—	615	222	32 584	1 302 783	20 926	41 446	670 568	6 674 863	4 091 443	10 755 677	499 323
	Lawrence, MA—NH PMSA (MA Part)	—	389	160	25 972	1 082 081	16 696	33 198	554 503	4 316 177	3 054 611	7 364 993	465 556
	Lawrence, MA—NH PMSA (NH Part)	—	226	62	6 612	220 702	4 230	8 248	116 065	2 358 686	1 036 832	3 390 684	33 767
311	Food mfg	3	46	10	f	D	D	D	D	D	D	D	9 075
3118	Bakeries & tortilla mfg	1	29	5	517	12 383	306	561	5 554	25 639	26 970	52 405	1 233
31181	Bread & bakery product mfg	3	27	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	12	3	271	6 184	199	415	4 006	12 519	8 718	21 237	746
313	Textile mills	—	11	5	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	7	4	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	—	4	2	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	2	19	4	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	1	12	2	357	8 560	295	583	6 070	9 436	24 115	33 552	D
31499	All other textile product mills	1	7	2	337	7 882	282	559	5 776	8 607	18 262	26 866	D
314999	All other miscellaneous textile product mills ..	1	7	2	337	7 882	282	559	5 776	8 607	18 262	26 866	D
315	Apparel mfg	3	9	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	6	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	9	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	9	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	—	12	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	—	2	1	e	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	25	11	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	2	23	9	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	17	13	1 086	43 169	855	1 821	28 711	94 759	122 192	216 993	11 665
3221	Pulp, paper, & paperboard mills	—	4	3	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	13	10	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	9	7	452	12 339	375	747	8 934	18 784	32 265	50 297	1 515
323	Printing & related support activities	3	53	13	865	28 880	650	1 241	19 050	59 056	26 371	85 128	3 931
3231	Printing & related support activities	3	53	13	865	28 880	650	1 241	19 050	59 056	26 371	85 128	3 931
32311	Printing	3	48	11	712	22 568	537	1 017	14 820	48 326	24 109	72 162	2 779
323110	Commercial lithographic printing ..	2	21	7	415	13 937	322	627	9 781	28 689	13 669	42 066	2 014

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	Lawrence, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	-	22	7	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	7	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	7	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	6	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	29	17	2 041	75 371	1 342	2 754	41 651	160 780	155 162	310 646	16 920
3261	Plastics product mfg	4	27	17	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	4	7	7	g	D	D	D	D	D	D	D	12 110
326113	Unsupported plastics film & sheet (except packaging) mfg	4	5	5	1 141	43 200	735	1 539	26 439	92 505	102 353	189 173	D
32619	Other plastics product mfg	3	14	6	358	9 931	234	444	5 439	17 351	12 292	30 020	2 022
326199	All other plastics product mfg	3	14	6	358	9 931	234	444	5 439	17 351	12 292	30 020	2 022
332	Fabricated metal product mfg	1	129	33	2 531	88 260	1 797	3 576	52 840	191 148	180 630	373 231	15 611
3323	Architectural & structural metals mfg	4	20	5	288	9 667	194	429	5 335	17 325	16 305	33 829	1 388
3324	Boiler, tank, & shipping container mfg	-	5	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	64	12	927	31 263	694	1 305	19 237	58 490	26 773	84 921	7 507
33271	Machine shops	1	55	9	696	21 574	538	959	13 992	36 616	17 009	53 327	4 150
332710	Machine shops	1	55	9	696	21 574	538	959	13 992	36 616	17 009	53 327	4 150
3328	Coating, engraving, heat treating, & allied activities.	1	18	8	524	15 044	372	790	9 234	36 602	14 562	51 307	2 758
33281	Coating, engraving, heat treating, & allied activities	1	18	8	524	15 044	372	790	9 234	36 602	14 562	51 307	2 758
332813	Electroplating, plating, polishing, anodizing, & coloring	2	9	5	354	8 826	250	546	5 141	16 431	5 332	21 767	1 161
3329	Other fabricated metal product mfg	-	11	4	342	13 945	218	408	6 421	28 770	35 711	64 710	1 192
333	Machinery mfg	1	57	24	1 769	69 984	1 062	2 088	34 794	163 574	120 316	283 481	9 537
3332	Industrial machinery mfg ..	-	19	8	519	17 947	313	620	9 357	39 881	32 280	72 640	3 119
33329	Other industrial machinery mfg	-	16	8	502	17 485	301	601	9 120	38 754	31 709	70 957	D
3333	Commercial & service industry machinery mfg ..	-	13	5	336	11 858	211	445	6 358	25 964	16 368	42 579	1 778
33331	Commercial & service industry machinery mfg	-	13	5	336	11 858	211	445	6 358	25 964	16 368	42 579	1 778
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	4	7	5	336	13 506	243	495	8 683	27 705	31 659	60 958	1 905
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	4	7	5	336	13 506	243	495	8 683	27 705	31 659	60 958	1 905
3339	Other general-purpose machinery mfg	-	8	4	435	21 350	208	329	7 388	59 649	35 148	92 111	D
33391	Pump & compressor mfg	-	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lawrence, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	101	52	14 121	645 606	8 683	16 937	314 492	4 575 434	2 505 688	7 114 531	142 221
3341	Computer & peripheral equipment mfg.....	-	9	3	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	9	3	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	5	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	13	7	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	6	8	5	302	11 391	202	379	6 380	24 909	15 041	40 624	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	6	8	5	302	11 391	202	379	6 380	24 909	15 041	40 624	D
3344	Semiconductor & other electronic component mfg.....	1	55	30	4 518	152 345	3 001	6 010	79 820	371 207	303 949	679 314	46 065
33441	Semiconductor & other electronic component mfg.....	1	55	30	4 518	152 345	3 001	6 010	79 820	371 207	303 949	679 314	46 065
334412	Bare printed circuit board mfg.....	-	19	12	2 221	71 588	1 549	3 146	41 484	188 795	148 994	339 346	18 645
334413	Semiconductor & related device mfg...	8	11	6	451	17 825	289	555	7 705	45 539	21 761	67 470	11 675
334418	Printed circuit assembly (electronic assembly) mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	12	6	1 378	48 556	861	1 705	23 135	91 879	84 202	178 892	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	21	11	3 624	230 042	1 505	3 667	62 313	655 690	483 869	1 152 464	28 730
33451	Navigational, measuring, medical, & control instruments mfg.....	-	21	11	3 624	230 042	1 505	3 667	62 313	655 690	483 869	1 152 464	28 730
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	13	6	1 527	61 923	501	781	12 980	173 763	117 922	293 315	D
3353	Electrical equipment mfg ..	-	6	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	6	3	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	35	12	1 373	44 636	734	1 425	17 775	122 270	92 510	228 945	5 197
3391	Medical equipment & supplies mfg.....	-	15	4	578	16 718	315	585	6 699	30 571	32 653	74 885	1 880
33911	Medical equipment & supplies mfg.....	-	15	4	578	16 718	315	585	6 699	30 571	32 653	74 885	1 880
339112	Surgical & medical instrument mfg.....	-	5	3	495	14 443	252	496	5 552	23 854	27 961	63 352	D
3399	Other miscellaneous mfg ..	-	20	8	795	27 918	419	840	11 076	91 699	59 857	154 060	3 317
33999	All other miscellaneous mfg.....	-	10	6	634	23 648	320	657	9 424	80 974	42 810	126 525	2 584
339991	Gasket, packing, & sealing device mfg...	-	4	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lowell, MA—NH PMSA												
31-33	Manufacturing	1	460	176	23 531	977 469	11 934	23 747	365 205	3 014 245	2 005 755	5 008 323	243 424
	Lowell, MA—NH PMSA (MA Part)	1	443	175	23 270	970 625	11 710	23 380	360 122	3 000 011	1 990 314	4 979 117	D
	Lowell, MA—NH PMSA (NH Part)	1	17	1	261	6 844	224	367	5 083	14 234	15 441	29 206	D
311	Food mfg	—	20	6	609	19 888	347	668	6 805	70 067	67 815	144 309	4 761
312	Beverage & tobacco product mfg	—	2	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	2	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	—	12	7	661	18 645	563	1 154	14 301	48 843	72 881	121 986	5 684
3131	Fiber, yarn, & thread mills	—	3	3	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	—	3	3	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	—	3	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	10	9	984	36 141	718	1 589	25 781	91 859	113 747	206 254	4 759
3221	Pulp, paper, & paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	8	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	5	5	423	13 902	323	709	10 222	20 824	28 955	50 148	648
32222	Paper bag & coated & treated paper mfg	—	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	34	6	554	19 862	387	754	11 195	36 190	23 003	59 454	1 847
3231	Printing & related support activities	3	34	6	554	19 862	387	754	11 195	36 190	23 003	59 454	1 847
32311	Printing	4	31	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	14	6	1 334	68 505	572	1 199	22 258	342 225	71 108	409 272	18 170
3254	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	3	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	6	15	6	488	14 014	363	793	8 959	40 351	30 485	70 323	2 858
3261	Plastics product mfg	6	13	6	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	11	5	437	12 329	331	723	8 020	35 870	24 654	60 069	2 532
326199	All other plastics product mfg	7	11	5	437	12 329	331	723	8 020	35 870	24 654	60 069	2 532
327	Nonmetallic mineral product mfg	5	12	5	270	9 910	223	410	6 212	26 694	14 907	40 294	1 713
331	Primary metal mfg	—	8	5	f	D	D	D	D	D	D	D	7 242
3315	Foundries	—	2	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	1	1	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	107	25	1 597	57 986	1 224	2 344	36 069	106 870	56 391	163 424	9 405
3323	Architectural & structural metals mfg	1	16	5	e	D	D	D	D	D	D	D	1 460
33232	Ornamental & architectural metal products mfg	1	14	4	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	12	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	68	13	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	60	10	665	24 684	515	953	17 340	42 339	18 854	61 315	5 141
332710	Machine shops	2	60	10	665	24 684	515	953	17 340	42 339	18 854	61 315	5 141

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lowell, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	5	47	20	2 614	140 347	1 395	3 044	59 200	274 406	259 117	536 635	20 762
3332	Industrial machinery mfg ..	6	15	7	1 685	99 614	872	1 958	40 247	211 995	190 954	402 046	13 826
33329	Other industrial machinery mfg	6	15	7	1 685	99 614	872	1 958	40 247	211 995	190 954	402 046	13 826
333295	Semiconductor machinery mfg	8	4	4	1 366	83 719	741	1 667	34 943	167 839	160 395	327 606	12 000
3333	Commercial & service industry machinery mfg ..	3	13	7	540	23 650	313	612	10 886	48 334	23 569	71 522	3 841
33331	Commercial & service industry machinery mfg	3	13	7	540	23 650	313	612	10 886	48 334	23 569	71 522	3 841
333314	Optical instrument & lens mfg	—	7	3	280	10 571	181	357	6 104	23 010	7 045	29 820	D
3339	Other general-purpose machinery mfg	—	9	3	257	11 925	115	288	5 154	8 420	39 492	51 170	2 557
334	Computer & electronic product mfg	—	108	59	10 795	456 955	4 053	7 855	120 565	1 627 616	1 030 371	2 640 857	152 343
3341	Computer & peripheral equipment mfg	—	10	4	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	10	4	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	19	9	5 067	216 768	1 510	2 763	52 389	836 145	380 769	1 192 357	D
33421	Telephone apparatus mfg	—	5	4	3 680	161 167	932	1 659	31 754	701 999	317 804	1 003 311	67 443
334210	Telephone apparatus mfg	—	5	4	3 680	161 167	932	1 659	31 754	701 999	317 804	1 003 311	67 443
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	9	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	49	27	3 286	126 871	1 635	3 160	37 896	328 076	302 360	647 074	31 739
33441	Semiconductor & other electronic component mfg	1	49	27	3 286	126 871	1 635	3 160	37 896	328 076	302 360	647 074	31 739
334412	Bare printed circuit board mfg	5	13	6	565	13 536	450	966	8 523	26 698	13 105	39 758	1 862
334413	Semiconductor & related device mfg ...	1	9	7	1 113	42 949	511	772	12 081	163 507	86 497	263 159	17 979
334418	Printed circuit assembly (electronic assembly) mfg	—	12	10	1 288	61 205	428	999	12 290	122 001	184 581	309 728	10 703
3345	Navigational, measuring, medical, & control instruments mfg	2	29	19	g	D	D	D	D	D	D	D	22 590
33451	Navigational, measuring, medical, & control instruments mfg	2	29	19	g	D	D	D	D	D	D	D	22 590
334511	Search, detection, navigation, & guidance instrument mfg	5	3	2	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	1	3	3	308	14 057	66	136	1 966	60 947	17 816	75 417	D
334515	Electricity measuring & testing instrument mfg	3	5	5	e	D	D	D	D	D	D	D	5 479
334516	Analytical laboratory instrument mfg	—	10	5	478	18 431	188	369	5 849	33 632	17 377	52 949	2 290
335	Electrical equipment, appliance, & component mfg	2	12	7	542	23 801	236	483	7 167	63 557	40 451	103 489	4 678
3359	Other electrical equipment & component mfg	3	8	5	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	5	3	279	12 080	100	226	3 195	34 054	24 535	57 684	3 354
335999	All other miscellaneous electrical equipment & component mfg	4	5	3	279	12 080	100	226	3 195	34 054	24 535	57 684	3 354
336	Transportation equipment mfg	5	7	3	322	10 425	257	482	7 034	9 882	14 562	24 799	1 432
3363	Motor vehicle parts mfg ...	5	7	3	322	10 425	257	482	7 034	9 882	14 562	24 799	1 432

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Lowell, MA—NH PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	10	4	359	9 319	268	477	4 767	19 258	26 519	46 371	1 436
339	Miscellaneous mfg	—	27	5	1 141	51 569	525	799	14 180	83 509	40 024	124 184	3 736
3391	Medical equipment & supplies mfg	—	13	5	1 092	50 049	491	719	13 160	82 478	33 495	116 623	3 120
33911	Medical equipment & supplies mfg	—	13	5	1 092	50 049	491	719	13 160	82 478	33 495	116 623	3 120
339112	Surgical & medical instrument mfg	—	6	2	f	D	D	D	D	D	D	D	D
	Manchester, NH PMSA												
31-33	Manufacturing	2	311	101	12 844	438 903	8 814	17 950	236 552	1 021 902	1 084 458	2 107 741	106 710
311	Food mfg	6	11	5	866	25 724	643	1 337	14 927	72 269	152 259	224 319	5 752
3116	Meat product mfg	9	1	1	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	—	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	3	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	8	43	6	1 028	37 817	564	1 154	18 033	118 286	112 782	232 967	8 307
3231	Printing & related support activities	8	43	6	1 028	37 817	564	1 154	18 033	118 286	112 782	232 967	8 307
32311	Printing	8	38	6	981	36 243	529	1 087	16 744	115 278	111 874	229 057	8 238
323110	Commercial lithographic printing ..	2	20	4	e	D	D	D	D	D	D	D	2 739
323113	Commercial screen printing	9	7	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	14	7	859	25 689	641	1 371	16 748	76 876	63 468	139 684	2 058
3261	Plastics product mfg	—	13	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	5	3	598	16 724	472	981	12 023	54 998	35 253	89 971	844
326199	All other plastics product mfg	—	5	3	598	16 724	472	981	12 023	54 998	35 253	89 971	844
331	Primary metal mfg	—	5	4	354	10 623	272	603	7 726	38 412	29 291	67 795	D
332	Fabricated metal product mfg	1	54	17	1 446	50 254	1 158	2 346	29 609	85 380	83 381	168 543	6 524
3323	Architectural & structural metals mfg	—	17	7	683	19 596	543	1 051	11 772	36 645	32 399	68 852	1 116
33231	Plate work & fabricated structural product mfg ..	—	6	2	449	11 001	375	748	7 005	17 684	24 043	41 729	199
332311	Prefabricated metal building & component mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	26	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	2	24	6	285	12 072	227	487	8 735	24 973	9 836	34 558	1 749
332710	Machine shops	2	24	6	285	12 072	227	487	8 735	24 973	9 836	34 558	1 749
3329	Other fabricated metal product mfg	—	5	1	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	24	6	592	22 848	320	620	8 898	42 150	31 482	69 868	1 654

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Manchester, NH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	1	52	25	2 609	96 058	1 413	2 904	33 000	189 651	174 296	376 669	27 181
3341	Computer & peripheral equipment mfg	1	6	3	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	1	6	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	4	8	3	e	D	D	D	D	D	D	D	5 313
3344	Semiconductor & other electronic component mfg	-	23	12	g	D	D	D	D	D	D	D	18 661
33441	Semiconductor & other electronic component mfg	-	23	12	g	D	D	D	D	D	D	D	18 661
334418	Printed circuit assembly (electronic assembly) mfg	-	3	3	f	D	D	D	D	D	D	D	6 618
3345	Navigational, measuring, medical, & control instruments mfg	-	13	7	f	D	D	D	D	D	D	D	2 209
33451	Navigational, measuring, medical, & control instruments mfg	-	13	7	f	D	D	D	D	D	D	D	2 209
334515	Electricity measuring & testing instrument mfg	-	5	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	6	1 288	38 509	1 026	2 233	24 025	123 415	148 480	269 492	18 145
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	5	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	36	5	1 142	35 282	736	1 628	21 524	71 779	65 410	134 810	6 582
3391	Medical equipment & supplies mfg	1	16	2	339	8 869	204	452	4 441	19 811	9 331	28 857	747
33911	Medical equipment & supplies mfg	1	16	2	339	8 869	204	452	4 441	19 811	9 331	28 857	747
3399	Other miscellaneous mfg ..	-	20	3	803	26 413	532	1 176	17 083	51 968	56 079	105 953	5 835
33999	All other miscellaneous mfg	-	6	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg	-	2	1	f	D	D	D	D	D	D	D	D
	Nashua, NH PMSA												
31-33	Manufacturing	1	442	159	24 870	1 015 280	17 046	32 801	571 802	2 520 078	1 862 575	4 377 667	241 405
312	Beverage & tobacco product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	8	5	476	20 634	419	861	16 230	27 819	29 063	58 036	3 753
3132	Fabric mills	-	5	4	e	D	D	D	D	D	D	D	3 621

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Nashua, NH PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	—	10	7	793	28 282	517	1 093	15 858	59 688	64 048	122 925	6 563
3222	Converted paper product mfg	—	10	7	793	28 282	517	1 093	15 858	59 688	64 048	122 925	6 563
32222	Paper bag & coated & treated paper mfg	—	4	3	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	37	8	f	D	D	D	D	D	D	D	2 508
3231	Printing & related support activities	1	37	8	f	D	D	D	D	D	D	D	2 508
32311	Printing	1	31	6	406	14 435	273	506	7 931	22 081	19 566	41 792	2 071
323110	Commercial lithographic printing	—	17	5	295	11 397	205	392	6 427	16 913	15 623	32 707	1 797
325	Chemical mfg	5	11	5	678	28 265	384	766	15 408	91 548	96 729	188 905	23 097
3251	Basic chemical mfg	9	1	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	31	17	1 496	44 883	1 196	2 495	31 808	125 493	114 336	239 942	13 109
3261	Plastics product mfg	2	28	16	g	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	2	6	4	587	17 522	509	1 035	13 464	68 306	77 839	146 269	9 002
326160	Plastics bottle mfg	2	6	4	587	17 522	509	1 035	13 464	68 306	77 839	146 269	9 002
32619	Other plastics product mfg	2	18	10	692	19 903	530	1 123	14 075	44 673	26 212	70 773	D
326199	All other plastics product mfg	2	17	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	12	3	284	9 077	207	422	5 675	15 423	14 467	29 768	1 324
331	Primary metal mfg	—	8	3	g	D	D	D	D	D	D	D	D
3315	Foundries	—	8	3	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	97	26	2 037	66 171	1 602	3 188	41 210	136 867	63 587	199 884	8 000
3323	Architectural & structural metals mfg	—	19	7	656	20 061	546	989	12 414	40 513	23 441	63 532	D
33232	Ornamental & architectural metal products mfg	—	16	7	f	D	D	D	D	D	D	D	1 995
332322	Sheet metal work mfg	—	15	6	f	D	D	D	D	D	D	D	1 995
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	52	10	675	23 671	541	1 165	15 163	50 264	17 728	68 272	4 075
33271	Machine shops	3	41	4	299	10 674	238	484	7 370	20 000	7 170	27 385	2 338
332710	Machine shops	3	41	4	299	10 674	238	484	7 370	20 000	7 170	27 385	2 338
33272	Turned product & screw, nut, & bolt mfg	2	11	6	376	12 997	303	681	7 793	30 264	10 558	40 887	1 737
333	Machinery mfg	3	51	19	2 879	121 635	1 748	3 508	59 058	222 224	276 400	503 081	12 238
3332	Industrial machinery mfg	4	10	7	1 416	58 134	963	1 843	31 145	127 142	127 395	255 207	4 521
33329	Other industrial machinery mfg	4	9	7	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	4	3	557	23 030	273	477	9 228	45 599	56 804	102 615	4 292
333293	Printing machinery & equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	10	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	10	2	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	5	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	6	12	5	413	17 548	237	497	8 497	40 631	32 288	74 553	2 375
33391	Pump & compressor mfg	6	4	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Nashua, NH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	—	83	42	11 479	536 268	7 630	14 901	284 945	1 238 906	868 353	2 100 029	121 184
3341	Computer & peripheral equipment mfg.....	1	9	3	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	1	9	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	4	16	11	f	D	D	D	D	D	D	D	5 253
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	4	11	8	784	30 565	409	931	10 571	45 812	32 502	78 734	4 292
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	4	11	8	784	30 565	409	931	10 571	45 812	32 502	78 734	4 292
3344	Semiconductor & other electronic component mfg.....	—	38	19	4 704	161 557	2 977	5 927	78 938	459 553	440 790	903 081	80 292
33441	Semiconductor & other electronic component mfg.....	—	38	19	4 704	161 557	2 977	5 927	78 938	459 553	440 790	903 081	80 292
334412	Bare printed circuit board mfg.....	—	11	7	905	30 325	708	1 416	18 943	82 528	53 194	134 434	12 034
334413	Semiconductor & related device mfg...	—	6	2	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	1	14	6	720	22 367	417	822	9 053	65 343	33 939	100 354	4 392
3345	Navigational, measuring, medical, & control instruments mfg.....	—	15	8	i	D	D	D	D	D	D	D	30 454
33451	Navigational, measuring, medical, & control instruments mfg.....	—	15	8	i	D	D	D	D	D	D	D	30 454
334511	Search, detection, navigation, & guidance instrument mfg.....	—	3	3	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	9	3	257	10 587	171	369	5 371	33 877	56 306	87 782	D
339	Miscellaneous mfg.....	2	28	6	839	27 393	618	1 242	16 046	107 238	40 664	149 338	2 582
3399	Other miscellaneous mfg ..	—	14	5	601	18 504	460	927	11 765	83 462	31 621	116 283	1 095
33999	All other miscellaneous mfg.....	—	6	3	450	13 788	377	767	9 922	74 284	26 205	101 834	D
	Portsmouth—Rochester, NH—ME PMSA												
31-33	Manufacturing	—	345	107	16 866	542 230	10 951	21 342	288 778	2 248 876	2 533 494	4 771 908	109 989
	Portsmouth—Rochester, NH—ME PMSA (ME Part).....	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Portsmouth—Rochester, NH—ME PMSA (NH Part).....	—	304	99	15 478	498 379	10 217	19 689	268 704	2 387 792	2 273 755	4 647 187	105 161
311	Food mfg.....	1	19	5	379	10 652	254	449	5 098	42 825	46 900	89 735	D
314	Textile product mills.....	1	13	5	574	19 747	422	986	14 578	35 418	28 377	61 914	4 393
3149	Other textile product mills..	—	10	5	562	19 557	413	972	14 467	34 963	27 906	60 990	D
31499	All other textile product mills.....	—	4	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	—	4	4	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	9	7	1 657	51 104	1 085	2 104	22 363	25 540	319 289	359 098	D
3161	Leather & hide tanning & finishing.....	—	2	2	g	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing.....	—	2	2	g	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing.....	—	2	2	g	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	—	5	4	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con. Portsmouth—Rochester, NH—ME PMSA—Con. Manufacturing—Con.													
321	Wood product mfg	1	15	2	e	D	D	D	D	D	D	D	1 174	
3219	Other wood product mfg . . .	—	11	2	e	D	D	D	D	D	D	D	D	
322	Paper mfg	2	4	3	e	D	D	D	D	D	D	D	D	
323	Printing & related support activities	2	39	7		517	14 801	381	684	8 265	41 979	18 576	61 489	1 563
3231	Printing & related support activities	2	39	7		517	14 801	381	684	8 265	41 979	18 576	61 489	1 563
32311	Printing	2	36	6	e		D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	18	11		1 692	49 025	1 418	2 930	36 823	88 204	88 036	175 889	5 366
3261	Plastics product mfg	1	12	7	g		D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	8	5		1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
326199	All other plastics product mfg	1	8	5		1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
3262	Rubber product mfg	1	6	4	e		D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	5	3		331	8 731	272	548	6 258	19 423	9 258	28 373	566
326291	Rubber product mfg for mechanical use	—	2	1	e		D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	22	7	f		D	D	D	D	D	D	D	3 461
3272	Glass & glass product mfg	—	4	2	f		D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	2	f		D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	3	1	e		D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	e		D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	52	11		1 147	35 704	820	1 469	19 126	75 708	46 827	126 504	6 256
3323	Architectural & structural metals mfg	4	11	5	e		D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	10	4	e		D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	9	4		275	9 961	191	518	6 395	18 383	9 630	28 004	1 073
3329	Other fabricated metal product mfg	—	6	3		436	11 817	308	316	3 867	26 236	18 786	48 854	1 347
33299	All other fabricated metal product mfg	—	3	1	e		D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	1	e		D	D	D	D	D	D	D	D
333	Machinery mfg	—	33	12		2 639	97 130	1 094	2 447	35 622	255 036	207 243	459 355	18 251
3332	Industrial machinery mfg	—	9	5	g		D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	8	4	g		D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	2	1	f		D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	9	5	1	f		D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	5	1	f		D	D	D	D	D	D	D	D
333313	Office machinery mfg	9	1	1	f		D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	6	3		538	16 465	290	862	9 705	39 656	23 299	61 722	D
33399	All other general-purpose machinery mfg	—	5	3	f		D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	3	2	e		D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	26	13		3 325	113 249	2 064	3 835	55 017	1 234 144	1 439 905	2 652 928	43 412
3341	Computer & peripheral equipment mfg	—	5	2	f		D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	5	2	f		D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	2	2	f		D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.												
	Portsmouth—Rochester, NH—ME PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	11	4	1 136	39 206	952	1 808	29 608	98 635	62 617	158 563	5 032
33451	Navigational, measuring, medical, & control instruments mfg	-	11	4	1 136	39 206	952	1 808	29 608	98 635	62 617	158 563	5 032
334515	Electricity measuring & testing instrument mfg	-	4	3	g	D	D	D	D	D	D	D	4 947
335	Electrical equipment, appliance, & component mfg	-	10	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	31	6	1 016	27 274	602	1 128	12 409	64 283	35 009	100 417	D
3391	Medical equipment & supplies mfg	1	12	4	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	1	12	4	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BELKNAP COUNTY, NH													
31-33	Manufacturing	1	133	43	4 658	133 434	3 373	6 794	84 401	306 331	195 052	497 417	18 469
332	Fabricated metal product mfg	-	37	12	1 324	42 002	1 060	2 098	30 626	97 153	49 008	144 052	8 715
3329	Other fabricated metal product mfg	-	8	4	906	30 144	755	1 528	23 576	75 439	41 283	114 728	D
33299	All other fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	13	9	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	8	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	8	6	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	10	3	f	D	D	D	D	D	D	D	213
CARROLL COUNTY, NH													
31-33	Manufacturing	3	93	26	1 634	45 924	1 095	2 098	23 272	93 282	89 082	180 726	6 793
CHESHIRE COUNTY, NH													
31-33	Manufacturing	1	168	49	6 212	196 432	4 036	7 886	110 766	480 431	299 814	787 340	35 199
332	Fabricated metal product mfg	1	29	9	1 280	37 491	995	1 906	30 084	78 625	25 260	104 235	5 357
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	8	1 793	71 033	1 019	2 117	31 137	182 821	120 869	306 563	7 668
3339	Other general-purpose machinery mfg	-	6	2	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	18	6	1 060	27 769	580	1 003	15 085	75 402	52 419	131 494	D
3391	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	4	2	f	D	D	D	D	D	D	D	D
COOS COUNTY, NH													
31-33	Manufacturing	-	50	18	3 051	93 990	2 394	4 798	69 530	255 211	239 724	494 275	24 743
322	Paper mfg	-	3	3	1 530	60 904	1 228	2 597	46 165	192 738	163 479	353 868	D
3221	Pulp, paper, & paperboard mills	-	3	3	1 530	60 904	1 228	2 597	46 165	192 738	163 479	353 868	D
32212	Paper mills	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	570	13 267	468	875	9 755	22 248	32 144	54 183	3 412

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAFTON COUNTY, NH													
31-33	Manufacturing	1	148	45	6 886	205 612	5 069	10 402	125 321	508 962	371 760	881 469	50 899
321	Wood product mfg	1	24	8	613	19 496	513	1 055	11 683	42 440	59 713	102 801	4 634
323	Printing & related support activities.....	1	24	5	555	15 410	384	755	10 055	26 026	24 528	50 357	4 602
3231	Printing & related support activities.....	1	24	5	555	15 410	384	755	10 055	26 026	24 528	50 357	4 602
32311	Printing	1	22	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	13	5	512	14 529	355	717	9 516	24 090	23 335	47 358	4 063
332	Fabricated metal product mfg	-	13	3	855	28 490	680	1 383	21 171	58 404	20 743	81 302	6 519
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	14	7	1 256	49 416	799	1 544	19 899	134 691	98 690	232 629	17 850
3339	Other general-purpose machinery mfg	1	4	3	909	36 381	606	1 151	15 018	115 997	76 983	191 914	D
33399	All other general-purpose machinery mfg	1	4	3	909	36 381	606	1 151	15 018	115 997	76 983	191 914	D
333992	Welding & soldering equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	6	1 012	25 577	707	1 371	15 704	94 180	42 353	136 978	4 471
3359	Other electrical equipment & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	9	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	5	1	g	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
HILLSBOROUGH COUNTY, NH													
31-33	Manufacturing	1	737	240	36 656	1 397 851	25 257	49 653	782 092	3 527 210	2 746 248	6 260 661	348 527
311	Food mfg	5	21	7	932	24 434	691	1 341	14 618	131 914	149 391	281 736	6 246
3116	Meat product mfg	9	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	9	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	2	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	6	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	4	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	4	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	9	6	1 013	34 835	845	1 610	24 992	59 810	39 662	100 845	18 733
3132	Fabric mills	-	6	5	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	1	1	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills....	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	12	8	1 015	40 224	644	1 418	21 493	90 840	91 435	180 965	8 702
3222	Converted paper product mfg	-	11	7	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	4	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	83	15	1 347	41 129	933	1 720	25 036	118 473	57 619	176 197	5 100
3231	Printing & related support activities.....	3	83	15	1 347	41 129	933	1 720	25 036	118 473	57 619	176 197	5 100
32311	Printing	3	72	13	g	D	D	D	D	D	D	D	4 599
323110	Commercial lithographic printing ..	1	38	9	520	18 617	369	708	11 062	30 401	24 180	54 773	2 663
325	Chemical mfg	4	16	6	788	32 346	449	876	17 554	112 488	123 022	235 128	26 922

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HILLSBOROUGH COUNTY, NH—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	42	23	2 318	69 385	1 812	3 805	47 954	199 292	175 176	373 937	15 015
3261	Plastics product mfg	1	39	22	g	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	2	8	5	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	2	8	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	22	12	1 270	36 069	990	2 070	25 723	98 197	61 190	159 014	3 033
326199	All other plastics product mfg	1	21	12	g	D	D	D	D	D	D	D	3 033
331	Primary metal mfg	—	11	5	2 153	65 126	1 546	2 162	45 129	169 128	73 895	241 634	D
3315	Foundries	—	8	3	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	144	39	3 696	119 943	2 974	5 900	75 912	235 890	147 922	383 480	16 039
3323	Architectural & structural metals mfg	—	32	12	1 259	36 137	1 018	1 907	22 359	71 738	50 010	121 133	3 099
33232	Ornamental & architectural metal products mfg	—	25	10	809	24 544	643	1 162	15 343	51 467	28 289	79 140	2 849
332322	Sheet metal work mfg	—	21	8	694	21 654	552	1 031	13 369	45 033	21 009	65 146	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	75	13	823	28 992	666	1 372	18 937	60 449	21 456	82 053	4 662
3329	Other fabricated metal product mfg	—	10	6	1 037	37 977	845	1 756	24 043	71 669	59 296	131 289	7 003
33299	All other fabricated metal product mfg	—	7	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	75	23	3 313	139 397	1 930	3 877	63 741	251 591	301 537	554 358	13 404
3332	Industrial machinery mfg ..	4	16	9	1 588	64 103	989	1 883	31 594	138 757	134 385	273 167	D
33329	Other industrial machinery mfg	4	14	9	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	4	3	557	23 030	273	477	9 228	45 599	56 804	102 615	4 292
333293	Printing machinery & equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	14	3	752	33 474	332	678	9 526	35 199	105 015	139 152	1 827
33331	Commercial & service industry machinery mfg	—	14	3	752	33 474	332	678	9 526	35 199	105 015	139 152	1 827
333314	Optical instrument & lens mfg	—	8	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	135	63	13 595	616 201	8 715	17 319	313 071	1 401 911	990 752	2 387 872	143 540
3342	Communications equipment mfg	4	28	14	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	18	10	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	18	10	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	59	29	5 675	194 934	3 603	7 321	95 693	520 897	496 816	1 022 470	94 522
33441	Semiconductor & other electronic component mfg	—	59	29	5 675	194 934	3 603	7 321	95 693	520 897	496 816	1 022 470	94 522
334412	Bare printed circuit board mfg	—	19	9	g	D	D	D	D	D	D	D	13 885
334413	Semiconductor & related device mfg ..	—	8	3	f	D	D	D	D	D	D	D	54 652
334417	Electronic connector mfg	—	3	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	5	5	1 400	39 595	888	1 516	20 859	31 461	306 943	345 960	14 525
334419	Other electronic component mfg	1	20	9	930	30 097	546	1 063	11 759	80 581	43 892	125 620	D
3345	Navigational, measuring, medical, & control instruments mfg	—	27	14	5 998	332 331	4 289	8 175	194 235	694 413	358 623	1 047 943	32 638
33451	Navigational, measuring, medical, & control instruments mfg	—	27	14	5 998	332 331	4 289	8 175	194 235	694 413	358 623	1 047 943	32 638
334511	Search, detection, navigation, & guidance instrument mfg	—	3	3	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HILLSBOROUGH COUNTY, NH—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	17	10	2 411	78 580	1 792	3 763	47 933	285 030	281 780	562 262	D
3351	Electric lighting equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	2	2	g	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	9	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	66	10	1 841	58 176	1 260	2 665	35 249	170 699	99 819	269 206	8 674
3391	Medical equipment & supplies mfg	5	31	3	581	17 761	364	766	8 725	43 582	18 344	61 876	2 222
33911	Medical equipment & supplies mfg	5	31	3	581	17 761	364	766	8 725	43 582	18 344	61 876	2 222
3399	Other miscellaneous mfg ..	-	35	7	1 260	40 415	896	1 899	26 524	127 117	81 475	207 330	6 452
33999	All other miscellaneous mfg	-	11	4	g	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg...	-	4	2	f	D	D	D	D	D	D	D	D
MERRIMACK COUNTY, NH													
31-33	Manufacturing	1	224	87	9 674	304 859	7 282	14 153	185 983	677 297	626 895	1 314 403	40 665
321	Wood product mfg	5	27	11	814	19 214	657	1 269	13 860	40 126	47 285	85 981	2 220
3219	Other wood product mfg...	6	16	8	597	14 135	501	971	10 103	30 087	35 352	64 138	1 418
323	Printing & related support activities	5	31	9	1 157	35 556	911	1 756	21 558	62 028	47 417	111 769	7 417
3231	Printing & related support activities	5	31	9	1 157	35 556	911	1 756	21 558	62 028	47 417	111 769	7 417
32311	Printing	5	25	8	1 094	33 943	864	1 684	20 637	59 533	46 649	108 520	7 202
323110	Commercial lithographic printing ..	5	17	6	991	31 326	793	1 541	19 105	54 463	43 163	99 977	D
326	Plastics & rubber products mfg	-	10	6	874	27 742	737	1 682	19 890	73 138	80 754	152 610	3 344
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	13	1 408	42 555	907	1 967	24 399	107 393	85 280	193 922	6 062
3329	Other fabricated metal product mfg	-	7	4	854	25 312	512	1 239	13 702	80 911	65 691	148 984	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	7	671	25 925	455	953	12 686	66 136	42 322	107 971	1 236
3333	Commercial & service industry machinery mfg ..	-	6	4	f	D	D	D	D	D	D	D	1 040
33331	Commercial & service industry machinery mfg	-	6	4	f	D	D	D	D	D	D	D	1 040
334	Computer & electronic product mfg	-	15	8	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	7	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROCKINGHAM COUNTY, NH												
31-33	Manufacturing	-	500	149	16 582	573 315	10 704	20 993	312 886	3 730 206	2 886 988	6 596 479	89 193
311	Food mfg.....	1	27	6	f	D	D	D	D	D	D	D	3 298
314	Textile product mills.....	3	18	3	599	19 403	452	1 041	14 757	33 315	27 730	60 226	D
321	Wood product mfg.....	1	26	10	566	14 095	411	721	8 638	25 781	31 767	57 223	1 240
323	Printing & related support activities.....	7	54	11	1 090	40 465	645	1 217	19 214	104 094	100 823	206 950	7 159
3231	Printing & related support activities.....	7	54	11	1 090	40 465	645	1 217	19 214	104 094	100 823	206 950	7 159
32311	Printing.....	8	47	8	875	31 488	490	904	13 269	88 721	97 344	188 138	5 720
323113	Commercial screen printing.....	9	13	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	18	8	502	19 248	231	442	7 785	37 594	67 612	105 982	1 736
326	Plastics & rubber products mfg.....	6	21	10	1 030	35 148	725	1 165	23 202	73 592	64 672	137 625	7 485
3261	Plastics product mfg.....	6	20	10	g	D	D	D	D	D	D	D	7 485
32619	Other plastics product mfg.....	8	10	4	596	20 603	435	645	15 107	44 731	37 108	81 640	4 044
326199	All other plastics product mfg.....	8	10	4	596	20 603	435	645	15 107	44 731	37 108	81 640	4 044
327	Nonmetallic mineral product mfg.....	-	18	7	979	34 197	791	1 499	24 534	142 455	94 506	235 870	3 467
3272	Glass & glass product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	111	29	2 074	80 967	1 488	3 074	48 413	178 340	126 712	305 080	11 809
3323	Architectural & structural metals mfg.....	2	19	7	587	23 240	454	1 022	15 500	44 125	36 100	80 503	2 233
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	58	14	790	28 934	597	1 201	19 717	56 604	20 417	77 054	7 014
33271	Machine shops.....	-	51	12	674	24 575	504	1 010	16 853	47 052	16 501	63 698	6 370
332710	Machine shops.....	-	51	12	674	24 575	504	1 010	16 853	47 052	16 501	63 698	6 370
333	Machinery mfg.....	1	45	17	1 140	40 568	695	1 437	21 949	93 453	59 488	152 164	4 179
334	Computer & electronic product mfg.....	-	59	21	4 202	157 804	2 343	4 876	69 005	2 710 270	1 925 683	4 617 711	33 788
3341	Computer & peripheral equipment mfg.....	-	11	4	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	11	4	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	9	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	27	9	g	D	D	D	D	D	D	D	16 029
33441	Semiconductor & other electronic component mfg.....	-	27	9	g	D	D	D	D	D	D	D	16 029
334412	Bare printed circuit board mfg.....	-	10	5	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	9	5	g	D	D	D	D	D	D	D	1 965
3359	Other electrical equipment & component mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	8	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	5	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	33	6	1 054	30 589	578	1 226	14 462	70 430	50 840	122 439	1 791
3391	Medical equipment & supplies mfg.....	-	11	2	694	21 425	324	747	9 284	50 787	26 896	78 278	D
33911	Medical equipment & supplies mfg.....	-	11	2	694	21 425	324	747	9 284	50 787	26 896	78 278	D
339111	Laboratory apparatus & furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	STRAFFORD COUNTY, NH												
31-33	Manufacturing	-	159	56	9 080	281 462	6 019	11 268	146 032	1 306 427	796 765	2 106 175	73 072
316	Leather & allied product mfg .	-	5	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	9	g	D	D	D	D	D	D	D	4 959
3261	Plastics product mfg	1	8	5	1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
32619	Other plastics product mfg	1	8	5	1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
326199	All other plastics product mfg	1	8	5	1 185	36 042	1 030	2 186	27 895	59 363	68 026	127 911	4 281
332	Fabricated metal product mfg	1	27	4	600	15 253	439	591	7 338	25 485	18 477	47 730	3 243
333	Machinery mfg	-	19	7	1 985	76 496	759	1 512	24 589	199 482	173 551	370 729	D
3332	Industrial machinery mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	9	4	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	4	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg .	9	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	14	8	2 470	71 839	1 695	3 078	42 779	642 357	345 116	978 698	29 774
3342	Communications equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	4	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	3	3	g	D	D	D	D	D	D	D	D
	SULLIVAN COUNTY, NH												
31-33	Manufacturing	1	116	44	4 501	128 566	3 713	7 461	95 198	434 725	266 751	694 162	17 333
332	Fabricated metal product mfg	-	32	10	1 486	46 738	1 234	2 318	35 621	133 927	42 895	179 100	3 307
3329	Other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERLIN, NH													
31-33	Manufacturing	-	18	7	1 432	50 149	1 144	2 336	37 655	146 890	90 937	235 585	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
CLAREMONT, NH													
31-33	Manufacturing	2	47	22	1 888	51 342	1 560	3 134	35 221	223 256	153 203	370 329	8 158
CONCORD, NH													
31-33	Manufacturing	2	56	28	3 016	89 641	2 294	4 234	50 465	216 070	155 374	372 666	11 591
323	Printing & related support activities	5	16	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	5	16	7	f	D	D	D	D	D	D	D	D
32311	Printing	5	13	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	6	8	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	3	f	D	D	D	D	D	D	D	D
DERRY TOWN, NH													
31-33	Manufacturing	-	34	13	1 622	51 215	1 066	2 036	26 470	163 961	118 968	284 874	9 885
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
DOVER, NH													
31-33	Manufacturing	1	58	23	3 300	111 427	1 713	3 338	44 325	291 829	236 653	525 156	23 413
333	Machinery mfg	-	7	4	1 791	70 915	629	1 272	21 112	189 390	168 386	355 456	D
3332	Industrial machinery mfg ..	-	3	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
EXETER TOWN, NH													
31-33	Manufacturing	-	23	5	g	D	D	D	D	D	D	D	12 515
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	2	2	f	D	D	D	D	D	D	D	D
FRANKLIN, NH													
31-33	Manufacturing	-	24	12	1 826	56 207	1 316	3 016	34 941	160 623	158 866	318 541	8 347
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
HAMPTON TOWN, NH													
31-33	Manufacturing	-	17	8	f	D	D	D	D	D	D	D	5 693

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HUDSON TOWN, NH													
31-33	Manufacturing	2	82	36	4 910	168 437	3 462	6 639	92 080	372 083	527 640	894 788	31 969
332	Fabricated metal product mfg	1	18	10	743	23 718	610	1 244	15 023	46 424	23 923	69 579	4 321
333	Machinery mfg	8	11	5	g	D	D	D	D	D	D	D	3 114
3332	Industrial machinery mfg ..	9	2	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	14	10	2 040	67 389	1 266	2 259	30 234	138 189	356 968	487 106	19 010
3344	Semiconductor & other electronic component mfg	-	9	7	g	D	D	D	D	D	D	D	17 495
33441	Semiconductor & other electronic component mfg	-	9	7	g	D	D	D	D	D	D	D	17 495
334412	Bare printed circuit board mfg	-	4	4	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
KEENE, NH													
31-33	Manufacturing	1	50	19	3 599	118 460	2 204	4 184	66 612	257 672	155 012	415 672	21 749
332	Fabricated metal product mfg	1	7	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	1 171	50 974	631	1 389	22 198	92 196	73 838	165 206	3 376
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	9	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D
LACONIA, NH													
31-33	Manufacturing	1	60	24	2 862	81 920	2 083	4 178	55 211	191 406	107 425	296 676	13 303
332	Fabricated metal product mfg	-	23	9	g	D	D	D	D	D	D	D	7 967
3329	Other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	5	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	4	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEBANON, NH													
31-33	Manufacturing	2	41	16	2 007	71 110	1 500	3 232	46 124	172 031	100 123	273 942	13 275
332	Fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	9	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	2	3	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	3	2	f	D	D	D	D	D	D	D	D
LONDONDERRY TOWN, NH													
31-33	Manufacturing	3	55	23	1 934	77 119	1 132	2 394	36 295	182 312	257 377	440 582	15 200
MANCHESTER, NH													
31-33	Manufacturing	2	191	63	8 952	289 686	6 141	12 907	151 681	705 764	695 806	1 394 493	81 102
311	Food mfg	8	7	4	f	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	1	1	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	4	f	D	D	D	D	D	D	D	1 244
3261	Plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	1 244
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	28	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	38	19	g	D	D	D	D	D	D	D	21 979
3344	Semiconductor & other electronic component mfg	-	17	9	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	17	9	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	9	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	9	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	6	g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	26	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	15	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	5	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	2	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MERRIMACK TOWN, NH													
31-33	Manufacturing	-	37	15	3 187	144 454	1 957	3 862	73 825	474 881	346 505	819 501	86 576
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	6	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	1	1	f	D	D	D	D	D	D	D	D
MILFORD TOWN, NH													
31-33	Manufacturing	-	43	19	3 216	106 063	2 204	3 579	62 954	253 843	146 822	402 657	25 337
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	8	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	3	5	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	3	5	4	f	D	D	D	D	D	D	D	D
NASHUA, NH													
31-33	Manufacturing	1	179	58	11 164	521 242	7 803	15 541	301 531	1 255 871	735 416	1 990 376	86 990
325	Chemical mfg	5	5	3	f	D	D	D	D	D	D	D	22 797
326	Plastics & rubber products mfg	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	40	8	552	17 658	431	846	11 304	33 576	13 079	46 865	1 596
333	Machinery mfg	1	19	10	1 056	44 861	580	1 144	20 723	87 305	107 746	195 505	7 027
3332	Industrial machinery mfg ..	-	6	5	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	6	5	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	41	18	7 293	383 595	5 145	10 260	219 855	844 886	395 711	1 237 502	44 551
3344	Semiconductor & other electronic component mfg	-	19	7	1 968	66 709	1 293	2 998	35 208	193 867	61 389	255 509	D
33441	Semiconductor & other electronic component mfg	-	19	7	1 968	66 709	1 293	2 998	35 208	193 867	61 389	255 509	D
334417	Electronic connector mfg	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	h	D	D	D	D	D	D	D	D
PORTSMOUTH, NH													
31-33	Manufacturing	-	50	16	1 497	46 231	1 048	1 914	27 399	159 643	121 443	279 301	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCHESTER, NH													
31-33	Manufacturing	-	38	16	2 694	74 819	1 741	2 938	32 761	808 492	401 523	1 218 010	38 998
316	Leather & allied product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
SALEM TOWN, NH													
31-33	Manufacturing	-	73	25	h	D	D	D	D	D	D	D	17 235
334	Computer & electronic product mfg	-	20	9	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	4	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	8	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	8	4	f	D	D	D	D	D	D	D	D
SOMERSWORTH, NH													
31-33	Manufacturing	-	27	9	1 671	50 576	1 392	2 539	38 026	126 590	80 799	205 434	5 678
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEW HAMPSHIRE		NEW HAMPSHIRE—Con.	
Companies ¹	number.. 2 243	Quantity of electricity purchased for heat and power	1,000 kWh.. 2 169 173
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 282 512
All establishments	number.. 2 328	Total value of shipments	\$1,000.. 19 813 107
Establishments with 1 to 19 employees	number.. 1 571	Value of resales	\$1,000.. 1 417 920
Establishments with 20 to 99 employees	number.. 561	Value added	\$1,000.. 11 320 082
Establishments with 100 employees or more	number.. 196	Total inventories, beginning of year	\$1,000.. 2 461 118
All employees	number.. 98 934	Finished goods inventories, beginning of year	\$1,000.. 699 860
Total compensation ²	\$1,000.. 4 192 307	Work-in-process inventories, beginning of year	\$1,000.. 848 383
Annual payroll	\$1,000.. 3 361 445	Materials and supplies inventories, beginning of year	\$1,000.. 912 875
Total fringe benefits	\$1,000.. 830 862	Total inventories, end of year	\$1,000.. 2 543 977
Production workers, average for year	number.. 68 942	Finished goods inventories, end of year	\$1,000.. 791 746
Production workers on March 12	number.. 68 390	Work-in-process inventories, end of year	\$1,000.. 780 251
Production workers on May 12	number.. 68 707	Materials and supplies inventories, end of year	\$1,000.. 971 980
Production workers on August 12	number.. 69 127	Gross book value of total assets at beginning of year	\$1,000.. 6 029 383
Production workers on November 12	number.. 69 544	Total capital expenditures (new and used)	\$1,000.. 704 893
Production-worker hours	1,000.. 135 506	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 115 862
Production-worker wages	\$1,000.. 1 935 481	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 589 031
Total cost of materials	\$1,000.. 8 519 079	Total retirements ²	\$1,000.. 211 140
Cost of materials, parts, containers, etc., consumed	\$1,000.. 6 757 353	Gross book value of total assets at end of year	\$1,000.. 6 523 136
Cost of resales	\$1,000.. 1 194 120	Total depreciation during year ²	\$1,000.. 484 697
Cost of fuels	\$1,000.. 81 132	Total rental payments ²	\$1,000.. 133 854
Cost of purchased electricity	\$1,000.. 190 461	Buildings and other structures rental payments ²	\$1,000.. 70 052
Cost of contract work	\$1,000.. 296 013	Machinery and equipment rental payments ²	\$1,000.. 63 802

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NEW HAMPSHIRE

There are no geographic notes for the state of New Hampshire.

Appendix E. Metropolitan Areas

NEW HAMPSHIRE

Boston, MA—NH PMSA

Bristol County, MA (Part)

Mansfield town, MA

Norton town, MA

Taunton city, MA

Essex County, MA (Part)

Amesbury town, MA

Beverly city, MA

Danvers town, MA

Gloucester city, MA

Ipswich town, MA

Lynn city, MA

Lynnfield town, MA

Marblehead town, MA

Newburyport city, MA

Peabody city, MA

Salem city, MA

Saugus town, MA

Swampscott town, MA

Middlesex County, MA (Part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Bedford town, MA

Belmont town, MA

Burlington town, MA

Cambridge city, MA

Concord town, MA

Everett city, MA

Framingham town, MA

Holliston town, MA

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Hopkinton town, MA

Hudson town, MA

Lexington town, MA

Malden city, MA

Marlborough city, MA

Maynard town, MA

Medford city, MA

Melrose city, MA

Natick town, MA

Newton city, MA

North Reading town, MA

Reading town, MA

Somerville city, MA

Stoneham town, MA

Sudbury town, MA

Wakefield town, MA

Waltham city, MA

Watertown city, MA

Wayland town, MA

Weston town, MA

Wilmington town, MA

Winchester town, MA

Woburn city, MA

Norfolk County, MA (Part)

Bellingham town, MA

Braintree town, MA

Brookline town, MA

Canton town, MA

Dedham town, MA

Foxborough town, MA

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)—Con.

Franklin city, MA
Holbrook town, MA
Medfield town, MA
Medway town, MA
Milton town, MA
Needham town, MA
Norfolk town, MA
Norwood town, MA
Quincy city, MA
Randolph town, MA
Sharon town, MA
Stoughton town, MA
Walpole town, MA
Wellesley town, MA
Westwood town, MA
Weymouth town, MA
Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA
Duxbury town, MA
Hanover town, MA
Hingham town, MA
Hull town, MA
Kingston town, MA
Marshfield town, MA
Pembroke town, MA
Plymouth town, MA
Rockland town, MA
Scituate town, MA
Wareham town, MA

Suffolk County, MA (Part)

Boston city, MA
Chelsea city, MA
Revere city, MA
Winthrop town, MA

Boston, MA—NH PMSA—Con.

Worcester County, MA (Part)

Harvard town, MA
Milford town, MA

Rockingham County, NH (Part)

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA**

Boston, MA—NH PMSA

Bristol County, MA (Part)

Mansfield town, MA
Norton town, MA
Taunton city, MA

Essex County, MA (Part)

Amesbury town, MA
Beverly city, MA
Danvers town, MA
Gloucester city, MA
Ipswich town, MA
Lynn city, MA

Lynnfield town, MA

Marblehead town, MA

Newburyport city, MA

Peabody city, MA

Salem city, MA

Saugus town, MA

Swampscott town, MA

Middlesex County, MA (Part)

Acton town, MA
Arlington town, MA
Ashland town, MA
Bedford town, MA
Belmont town, MA
Burlington town, MA
Cambridge city, MA
Concord town, MA
Everett city, MA
Framingham town, MA
Holliston town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Hopkinton town, MA
Hudson town, MA
Lexington town, MA
Malden city, MA
Marlborough city, MA
Maynard town, MA
Medford city, MA
Melrose city, MA
Natick town, MA
Newton city, MA
North Reading town, MA
Reading town, MA
Somerville city, MA
Stoneham town, MA
Sudbury town, MA
Wakefield town, MA
Waltham city, MA
Watertown city, MA
Wayland town, MA
Weston town, MA
Wilmington town, MA
Winchester town, MA
Woburn city, MA

Norfolk County, MA (Part)

Bellingham town, MA
Braintree town, MA
Brookline town, MA
Canton town, MA
Dedham town, MA
Foxborough town, MA
Franklin city, MA
Holbrook town, MA
Medfield town, MA
Medway town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)—Con.

Milton town, MA
Needham town, MA
Norfolk town, MA
Norwood town, MA
Quincy city, MA
Randolph town, MA
Sharon town, MA
Stoughton town, MA
Walpole town, MA
Wellesley town, MA
Westwood town, MA
Weymouth town, MA
Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA
Duxbury town, MA
Hanover town, MA
Hingham town, MA
Hull town, MA
Kingston town, MA
Marshfield town, MA
Pembroke town, MA
Plymouth town, MA
Rockland town, MA
Scituate town, MA
Wareham town, MA

Suffolk County, MA (Part)

Boston city, MA
Chelsea city, MA
Revere city, MA
Winthrop town, MA

Worcester County, MA (Part)

Harvard town, MA
Milford town, MA

Rockingham County, NH (Part)

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Brockton, MA PMSA
Bristol County, MA (Part)
Easton town, MA
Raynham town, MA
Norfolk County, MA (Part)
Plymouth County, MA (Part)
Abington town, MA
Bridgewater town, MA
Brockton city, MA
East Bridgewater town, MA
Middleborough town, MA
Whitman town, MA
Fitchburg—Leominster, MA PMSA
Middlesex County, MA (Part)
Worcester County, MA (Part)
Fitchburg city, MA
Gardner city, MA
Leominster city, MA
Lawrence, MA—NH PMSA
Essex County, MA (Part)
Andover town, MA
Haverhill city, MA
Lawrence city, MA
Methuen city, MA
North Andover town, MA
Rockingham County, NH (Part)
Derry town, NH
Salem town, NH
Lowell, MA—NH PMSA
Middlesex County, MA (Part)
Billerica town, MA
Chelmsford town, MA
Dracut town, MA
Lowell city, MA
Pepperell town, MA
Tewksbury town, MA
Westford town, MA
Hillsborough County, NH (Part)
Pelham town, NH

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Manchester, NH PMSA
Hillsborough County, NH (Part)
Bedford town, NH
Goffstown town, NH
Manchester city, NH
Merrimack County, NH (Part)
Rockingham County, NH (Part)
Londonderry town, NH
Nashua, NH PMSA
Hillsborough County, NH (Part)
Hudson town, NH
Merrimack town, NH
Milford town, NH
Nashua city, NH
New Bedford, MA PMSA
Bristol County, MA (Part)
Dartmouth town, MA
Fairhaven town, MA
New Bedford city, MA
Plymouth County, MA (Part)
Portsmouth—Rochester, NH—ME PMSA
York County, ME (Part)
York town, ME
Rockingham County, NH (Part)
Exeter town, NH
Hampton town, NH
Portsmouth city, NH
Strafford County, NH (Part)
Dover city, NH
Durham town, NH
Rochester city, NH
Somersworth city, NH
Worcester, MA—CT PMSA
Windham County, CT (Part)
Hampden County, MA (Part)
Worcester County, MA (Part)
Auburn town, MA
Charlton town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT
CMSA—Con.**

Worcester, MA—CT PMSA—Con.

Worcester County, MA (Part)—Con.

Clinton town, MA
Grafton town, MA
Holden town, MA
Leicester town, MA
Millbury town, MA
Northborough town, MA
Northbridge town, MA
Oxford town, MA
Shrewsbury town, MA
Southbridge town, MA
Spencer town, MA
Uxbridge town, MA
Webster town, MA
Westborough town, MA
Worcester city, MA

Lawrence, MA—NH PMSA

Essex County, MA (Part)
Andover town, MA
Haverhill city, MA
Lawrence city, MA
Methuen city, MA
North Andover town, MA
Rockingham County, NH (Part)
Derry town, NH
Salem town, NH

Lowell, MA—NH PMSA

Middlesex County, MA (Part)
Billerica town, MA
Chelmsford town, MA
Dracut town, MA
Lowell city, MA

Lowell, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

Pepperell town, MA
Tewksbury town, MA
Westford town, MA

Hillsborough County, NH (Part)

Pelham town, NH

Manchester, NH PMSA

Hillsborough County, NH (Part)

Bedford town, NH
Goffstown town, NH
Manchester city, NH

Merrimack County, NH (Part)

Rockingham County, NH (Part)

Londonderry town, NH

Nashua, NH PMSA

Hillsborough County, NH (Part)

Hudson town, NH
Merrimack town, NH
Milford town, NH
Nashua city, NH

Portsmouth—Rochester, NH—ME PMSA

York County, ME (Part)

York town, ME

Rockingham County, NH (Part)

Exeter town, NH
Hampton town, NH
Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH
Durham town, NH
Rochester city, NH
Somersworth city, NH

New Jersey

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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econgguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW JERSEY													
31-33	Manufacturing	1	11 812	3 828	409 788	15 430 197	275 840	557 459	8 152 112	50 101 691	47 025 139	97 060 800	3 113 961
311	Food mfg	2	1 035	263	29 339	939 341	20 728	41 125	567 872	3 616 729	4 268 065	7 888 559	189 419
3111	Animal food mfg	5	8	4	382	14 284	262	586	9 196	67 596	102 069	169 318	5 302
31111	Animal food mfg	5	8	4	382	14 284	262	586	9 196	67 596	102 069	169 318	5 302
311111	Dog & cat food mfg	-	2	1	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg	9	6	3	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	2	9	5	364	12 669	214	487	6 265	53 776	237 684	291 528	2 838
31121	Flour milling & malt mfg	9	4	2	114	3 513	87	180	2 522	19 004	57 124	76 370	1 370
311211	Flour milling	9	4	2	114	3 513	87	180	2 522	19 004	57 124	76 370	1 370
31122	Starch & vegetable fats & oils mfg	-	5	3	250	9 156	127	307	3 743	34 772	180 560	215 158	1 468
311223	Other oilseed processing	-	2	1	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	3	2	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	71	15	1 633	69 581	1 316	2 664	45 650	394 910	336 202	723 658	23 181
31132	Chocolate & confectionery mfg from cacao beans	7	11	3	c	D	D	D	D	D	D	D	1 549
311320	Chocolate & confectionery mfg from cacao beans	7	11	3	c	D	D	D	D	D	D	D	1 549
31133	Confectionery mfg from purchased chocolate	-	34	6	f	D	D	D	D	D	D	D	792
311330	Confectionery mfg from purchased chocolate	-	34	6	f	D	D	D	D	D	D	D	792
31134	Nonchocolate confectionery mfg	1	26	6	617	25 943	461	921	13 693	48 937	88 167	138 459	20 840
311340	Nonchocolate confectionery mfg	1	26	6	617	25 943	461	921	13 693	48 937	88 167	138 459	20 840
3114	Fruit & vegetable preserving & specialty food mfg	1	48	30	3 704	122 326	2 876	6 010	79 209	505 175	559 392	1 063 059	24 775
31141	Frozen food mfg	3	24	14	1 633	47 412	1 366	2 879	31 749	168 313	185 792	353 986	6 125
311411	Frozen fruit, juice, & vegetable mfg	1	4	4	569	16 318	506	1 215	12 584	31 949	66 201	98 061	1 953
311412	Frozen specialty food mfg	3	20	10	1 064	31 094	860	1 664	19 165	136 364	119 591	255 925	4 172
31142	Fruit & vegetable canning, pickling, & drying	1	24	16	2 071	74 914	1 510	3 131	47 460	336 862	373 600	709 073	18 650
311421	Fruit & vegetable canning	1	17	11	1 391	48 872	952	2 032	28 747	208 195	237 383	444 085	12 409
311422	Specialty canning	-	4	3	f	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	-	3	2	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	51	22	3 251	118 295	1 938	4 119	65 144	389 056	901 626	1 288 059	27 542
31151	Dairy product (except frozen) mfg	3	34	20	2 823	104 394	1 578	3 401	53 667	263 286	817 259	1 078 275	20 386
311511	Fluid milk mfg	4	10	8	1 930	78 928	878	1 906	37 730	169 261	547 914	716 534	12 360
311513	Cheese mfg	2	15	7	595	14 982	468	1 065	10 551	51 699	172 213	222 790	5 579
311514	Dry, condensed, & evaporated dairy product mfg	2	9	5	298	10 484	232	430	5 386	42 326	97 132	138 951	2 447
31152	Ice cream & frozen dessert mfg	-	17	2	428	13 901	360	718	11 477	125 770	84 367	209 784	7 156
311520	Ice cream & frozen dessert mfg	-	17	2	428	13 901	360	718	11 477	125 770	84 367	209 784	7 156
3116	Meat product mfg	3	82	37	3 586	105 924	2 710	5 459	60 130	305 095	410 599	711 357	17 261
31161	Animal slaughtering & processing	3	82	37	3 586	105 924	2 710	5 459	60 130	305 095	410 599	711 357	17 261
311611	Animal (except poultry) slaughtering	6	20	3	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	3	49	22	1 815	67 485	1 400	2 880	37 427	181 926	255 549	435 723	10 231
311613	Rendering & meat byproduct processing	-	2	2	c	D	D	D	D	D	D	D	D
311615	Poultry processing	2	11	10	1 255	23 255	1 016	2 037	16 378	62 232	90 674	152 013	3 773
3117	Seafood product preparation & packaging	-	14	8	618	13 608	513	957	9 425	41 661	78 744	120 181	1 855
31171	Seafood product preparation & packaging	-	14	8	618	13 608	513	957	9 425	41 661	78 744	120 181	1 855
311711	Seafood canning	1	6	5	301	6 870	241	426	5 005	27 653	45 425	73 039	1 407
311712	Fresh & frozen seafood processing	-	8	3	317	6 738	272	531	4 420	14 008	33 319	47 142	448

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg.....	1	662	98	11 319	304 214	7 777	14 491	190 344	1 014 147	627 032	1 648 711	46 097
31181	Bread & bakery product mfg.....	2	615	74	i	D	D	D	D	D	D	D	D
311811	Retail bakeries.....	3	466	29	3 060	45 806	1 834	2 591	24 467	95 228	56 186	152 101	4 523
311812	Commercial bakeries..	2	136	40	3 314	92 366	2 053	3 936	49 896	279 899	149 737	430 054	10 660
311813	Frozen cakes, pies, & other pastries mfg...	7	13	5	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	1	44	23	4 731	160 546	3 738	7 606	112 725	626 366	406 373	1 039 078	30 134
311821	Cookie & cracker mfg..	1	22	13	3 473	110 979	2 845	5 777	84 692	442 755	247 203	694 797	20 576
311822	Flour mixes & dough mfg from purchased flour.....	1	11	7	596	23 961	354	753	9 606	80 077	89 100	170 609	4 114
311823	Dry pasta mfg.....	-	11	3	662	25 606	539	1 076	18 427	103 534	70 070	173 672	5 444
3119	Other food mfg.....	1	90	44	4 482	178 440	3 122	6 352	102 509	845 313	1 014 717	1 872 688	40 568
31191	Snack food mfg.....	1	8	5	274	5 182	209	280	3 325	28 524	30 345	59 776	1 697
311911	Roasted nuts & peanut butter mfg.....	-	3	3	153	3 154	113	194	1 981	16 867	26 338	44 106	D
311919	Other snack food mfg..	5	5	2	121	2 028	96	86	1 344	11 657	4 007	15 670	D
31192	Coffee & tea mfg.....	-	7	6	590	26 037	416	879	17 216	114 191	207 076	324 943	6 298
311920	Coffee & tea mfg.....	-	7	6	590	26 037	416	879	17 216	114 191	207 076	324 943	6 298
31193	Flavoring syrup & concentrate mfg.....	1	15	8	479	20 756	335	600	13 740	108 962	132 289	248 463	3 861
311930	Flavoring syrup & concentrate mfg.....	1	15	8	479	20 756	335	600	13 740	108 962	132 289	248 463	3 861
31194	Seasoning & dressing mfg.....	5	25	12	876	39 579	468	970	14 551	220 389	181 115	402 966	9 997
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	7	7	4	302	12 876	186	370	7 089	158 840	85 780	245 380	3 005
311942	Spice & extract mfg...	1	18	8	574	26 703	282	600	7 462	61 549	95 335	157 586	6 992
31199	All other food mfg.....	-	35	13	2 263	86 886	1 694	3 623	53 677	373 247	463 892	836 540	18 715
311991	Perishable prepared food mfg.....	1	7	1	210	5 642	159	304	3 412	18 697	19 612	38 380	1 030
311999	All other miscellaneous food mfg.....	-	28	12	2 053	81 244	1 535	3 319	50 265	354 550	444 280	798 160	17 685
312	Beverage & tobacco product mfg.....	-	49	15	3 698	170 497	2 491	5 328	104 096	1 322 307	976 462	2 303 949	86 652
3121	Beverage mfg.....	-	47	15	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	32	12	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	20	10	2 326	96 186	1 386	3 086	48 899	636 467	643 941	1 286 018	D
31212	Breweries.....	-	10	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	-	10	1	g	D	D	D	D	D	D	D	D
313	Textile mills.....	3	372	112	9 089	296 755	6 969	14 669	183 279	663 211	585 976	1 244 145	40 022
3131	Fiber, yarn, & thread mills..	1	11	6	299	9 303	207	392	3 736	17 808	40 173	58 147	1 221
31311	Fiber, yarn, & thread mills.....	1	11	6	299	9 303	207	392	3 736	17 808	40 173	58 147	1 221
313112	Yarn texturing, throwing, & twisting mills.....	-	4	3	183	6 062	111	212	1 912	10 574	32 880	43 620	590
3132	Fabric mills.....	2	210	50	4 050	116 640	3 093	6 395	72 181	247 308	234 098	480 030	17 892
31321	Broadwoven fabric mills..	3	29	6	672	18 598	547	1 076	11 614	39 538	55 811	95 119	4 522
313210	Broadwoven fabric mills.....	3	29	6	672	18 598	547	1 076	11 614	39 538	55 811	95 119	4 522
31322	Narrow fabric mills & schiffli machine embroidery.....	1	124	18	1 582	39 927	1 145	2 235	21 373	88 992	44 647	132 885	3 435
313221	Narrow fabric mills....	2	15	7	529	17 543	349	636	6 268	32 870	17 040	49 735	1 953
313222	Schiffli machine embroidery.....	1	109	11	1 053	22 384	796	1 599	15 105	56 122	27 607	83 150	1 482
31323	Nonwoven fabric mills...	-	8	4	337	11 155	221	511	5 658	18 983	59 956	79 126	2 760
313230	Nonwoven fabric mills..	-	8	4	337	11 155	221	511	5 658	18 983	59 956	79 126	2 760
31324	Knit fabric mills.....	4	49	22	1 459	46 960	1 180	2 573	33 536	99 795	73 684	172 900	7 175
313241	Weft knit fabric mills..	1	17	9	721	22 047	593	1 286	16 709	38 184	23 146	60 838	3 609
313249	Other knit fabric & lace mills.....	6	32	13	738	24 913	587	1 287	16 827	61 611	50 538	112 062	3 566
3133	Textile & fabric finishing & fabric coating mills.....	4	151	56	4 740	170 812	3 669	7 882	107 362	398 095	311 705	705 968	20 909
31331	Textile & fabric finishing mills.....	5	128	48	3 957	144 202	3 083	6 680	91 131	313 987	241 120	554 452	16 925
313311	Broadwoven fabric finishing mills.....	4	90	33	2 671	100 899	2 041	4 540	65 938	237 181	192 917	429 619	12 642
313312	Textile & fabric finishing mills.....	6	38	15	1 286	43 303	1 042	2 140	25 193	76 806	48 203	124 833	4 283
31332	Fabric coating mills.....	2	23	8	783	26 610	586	1 202	16 231	84 108	70 585	151 516	3 984
313320	Fabric coating mills...	2	23	8	783	26 610	586	1 202	16 231	84 108	70 585	151 516	3 984

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW JERSEY—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	1	315	75	6 024	126 247	4 820	9 001	80 011	325 900	273 936	597 196	11 005
3141	Textile furnishings mills	—	97	30	2 357	47 031	1 909	3 670	28 179	127 686	130 473	256 901	4 092
31412	Curtain & linen mills	—	92	30	2 331	46 349	1 890	3 631	27 683	128 618	128 618	253 230	3 981
314121	Curtain & drapery mills	—	52	6	645	13 402	515	997	7 923	28 067	23 802	52 664	1 681
314129	Other household textile product mills	—	40	24	1 686	32 947	1 375	2 634	19 760	97 804	104 816	200 566	2 300
3149	Other textile product mills	2	218	45	3 667	79 216	2 911	5 331	51 832	198 214	143 463	340 295	6 913
31491	Textile bag & canvas mills	1	65	6	666	13 568	542	918	8 220	28 252	28 340	55 807	1 167
314911	Textile bag mills	—	8	4	388	7 808	321	580	4 652	17 908	20 292	37 455	511
314912	Canvas & related product mills	4	57	2	278	5 760	221	338	3 568	10 344	8 048	18 352	656
31499	All other textile product mills	2	153	39	3 001	65 648	2 369	4 413	43 612	169 962	115 123	284 488	5 746
314991	Rope, cordage, & twine mills	4	7	3	c	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	2	145	36	2 857	61 808	2 288	4 248	41 674	160 207	104 394	264 107	5 112
315	Apparel mfg	1	607	235	22 567	528 778	16 542	31 741	285 272	1 126 366	1 305 992	2 457 069	25 676
3151	Apparel knitting mills	1	54	22	1 519	29 161	1 289	2 348	20 575	73 188	78 744	151 280	2 500
31519	Other apparel knitting mills	1	50	21	g	D	D	D	D	D	D	D	2 371
315191	Outerwear knitting mills	1	48	20	1 360	26 524	1 143	2 128	18 488	69 059	75 761	144 227	D
3152	Cut & sew apparel mfg	1	462	190	19 306	464 150	13 821	26 747	239 894	976 617	1 169 019	2 171 657	21 278
31521	Cut & sew apparel contractors	3	264	103	7 692	116 433	6 695	12 276	91 698	201 951	32 476	234 070	5 207
315211	Men's & boys' cut & sew apparel contractors	1	20	10	864	13 727	807	1 335	10 650	27 076	1 470	28 551	458
315212	Women's, girls', & infants' cut & sew apparel contractors	4	244	93	6 828	102 706	5 888	10 941	81 048	174 875	31 006	205 519	4 749
31522	Men's & boys' cut & sew apparel mfg	3	37	16	2 772	59 986	2 078	4 386	38 094	126 938	107 636	226 977	6 119
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	7	4	318	6 821	290	556	4 696	11 093	3 896	14 982	372
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	4	9	5	1 552	33 395	1 195	2 581	20 276	76 504	66 289	136 313	4 964
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	2	5	1	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	4	14	6	792	17 577	492	1 075	11 713	35 680	32 174	66 508	731
31523	Women's & girls' cut & sew apparel mfg	1	129	63	8 060	271 610	4 486	8 994	101 154	618 951	1 000 637	1 653 883	9 681
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	23	9	1 604	34 680	1 009	2 259	17 639	80 970	144 973	269 671	894
315232	Women's & girls' cut & sew blouse & shirt mfg	1	24	10	797	21 736	621	1 259	10 532	63 363	124 148	186 172	1 098
315233	Women's & girls' cut & sew dress mfg	3	19	7	364	7 557	258	382	3 583	22 033	36 285	57 747	344
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	33	20	1 053	27 615	762	1 314	12 892	102 108	139 028	236 780	873
315239	Women's & girls' cut & sew other outerwear mfg	—	30	17	4 242	180 022	1 836	3 780	56 508	350 477	556 203	903 513	6 472
31529	Other cut & sew apparel mfg	2	32	8	782	16 121	562	1 091	8 948	28 777	28 270	56 727	271
315291	Infants' cut & sew apparel mfg	—	3	2	c	D	D	D	D	D	D	D	D
315292	Fur & leather apparel mfg	2	5	2	268	7 235	226	455	3 644	11 888	11 495	23 166	D
315299	All other cut & sew apparel mfg	4	24	4	e	D	D	D	D	D	D	D	190
3159	Apparel accessories & other apparel mfg	4	91	23	1 742	35 467	1 432	2 646	24 803	76 561	58 229	134 132	1 898
31599	Apparel accessories & other apparel mfg	4	91	23	1 742	35 467	1 432	2 646	24 803	76 561	58 229	134 132	1 898
315991	Hat, cap, & millinery mfg	—	11	7	389	6 971	326	545	5 437	10 136	11 706	22 062	85
315993	Men's & boys' neckwear mfg	1	7	2	151	3 362	141	303	2 791	5 067	2 109	7 177	163
315999	Other apparel accessories & other apparel mfg	5	73	14	1 202	25 134	965	1 798	16 575	61 358	44 414	104 893	1 650

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
316	Leather & allied product mfg .	2	56	18	2 632	62 151	2 003	4 211	37 545	144 509	179 456	323 522	5 858
3161	Leather & hide tanning & finishing	2	11	4	220	6 588	187	406	4 873	13 748	26 504	44 112	496
31611	Leather & hide tanning & finishing	2	11	4	220	6 588	187	406	4 873	13 748	26 504	44 112	496
316110	Leather & hide tanning & finishing	2	11	4	220	6 588	187	406	4 873	13 748	26 504	44 112	496
3162	Footwear mfg	3	8	6	1 198	32 493	985	2 057	17 995	76 689	97 479	170 700	2 022
31621	Footwear mfg	3	8	6	1 198	32 493	985	2 057	17 995	76 689	97 479	170 700	2 022
316211	Rubber & plastics footwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	3	2	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	9	1	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	37	8	1 214	23 070	831	1 748	14 677	54 072	55 473	108 710	3 340
31699	Other leather & allied product mfg	—	37	8	1 214	23 070	831	1 748	14 677	54 072	55 473	108 710	3 340
316991	Luggage mfg	—	11	4	459	11 322	331	751	6 045	23 246	31 272	53 379	484
316992	Women's handbag & purse mfg	—	8	1	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	3	6	2	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	2	12	1	110	2 013	74	138	1 094	6 791	4 461	11 581	D
321	Wood product mfg	3	161	37	2 793	80 339	2 110	4 160	46 786	188 453	221 125	406 402	7 865
3212	Veneer, plywood, & engineered wood product mfg	1	11	8	501	18 850	342	743	9 181	45 562	68 809	111 957	1 983
32121	Veneer, plywood, & engineered wood product mfg	1	11	8	501	18 850	342	743	9 181	45 562	68 809	111 957	1 983
321211	Hardwood veneer & plywood mfg	1	3	2	c	D	D	D	D	D	D	D	983
321214	Truss mfg	2	8	6	e	D	D	D	D	D	D	D	1 000
3219	Other wood product mfg	3	141	29	2 236	59 574	1 720	3 312	36 022	137 813	142 800	279 934	5 520
32191	Millwork	3	65	13	1 058	33 500	791	1 580	20 084	79 122	76 222	154 508	2 886
321911	Wood window & door mfg	5	33	7	600	16 196	443	824	10 587	41 383	29 638	71 085	1 671
321912	Cut stock, resawing lumber, & planing	—	6	1	c	D	D	D	D	D	D	D	518
321918	Other millwork (including flooring)	3	26	5	e	D	D	D	D	D	D	D	697
32192	Wood container & pallet mfg	3	45	9	559	11 794	453	803	7 563	26 631	29 817	56 698	1 354
321920	Wood container & pallet mfg	3	45	9	559	11 794	453	803	7 563	26 631	29 817	56 698	1 354
32199	All other wood product mfg	3	31	7	619	14 280	476	929	8 375	32 060	36 761	68 728	1 280
321992	Prefabricated wood building mfg	9	7	1	196	3 612	151	306	2 264	7 247	10 639	17 971	366
321999	All other miscellaneous wood product mfg	1	24	6	423	10 668	325	623	6 111	24 813	26 122	50 757	914
322	Paper mfg	1	258	162	17 095	619 535	12 839	26 708	384 696	1 511 335	1 698 932	3 210 798	115 503
3221	Pulp, paper, & paperboard mills	—	16	16	2 579	123 076	1 899	4 380	82 785	396 392	318 413	712 029	44 795
32212	Paper mills	—	6	6	1 795	90 286	1 309	2 982	58 282	305 193	243 888	545 762	36 314
322121	Paper (except newsprint) mills	—	5	5	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	10	10	784	32 790	590	1 398	24 503	91 199	74 525	166 267	8 481
322130	Paperboard mills	—	10	10	784	32 790	590	1 398	24 503	91 199	74 525	166 267	8 481
3222	Converted paper product mfg	1	242	146	14 516	496 459	10 940	22 328	301 911	1 114 943	1 380 519	2 498 769	70 708
32221	Paperboard container mfg	1	122	77	8 055	284 171	6 010	12 192	171 586	619 965	714 421	1 339 146	43 875
322211	Corrugated & solid fiber box mfg	2	71	42	4 683	172 502	3 337	6 603	97 140	357 690	488 037	847 391	30 332
322212	Folding paperboard box mfg	1	28	20	2 440	84 577	1 896	4 079	55 086	190 947	134 549	327 995	11 803
322213	Setup paperboard box mfg	3	8	3	c	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	—	13	10	512	15 009	437	842	11 624	44 878	51 820	97 437	1 117
322215	Nonfolding sanitary food container mfg	—	2	2	c	D	D	D	D	D	D	D	D

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31-33	NEW JERSEY—Con. Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32222	Paper bag & coated & treated paper mfg	1	58	34	3 508	128 303	2 477	5 407	71 659	316 476	429 015	744 273	20 107
322221	Coated & laminated packaging paper & plastics film mfg	—	5	3	199	6 939	144	296	4 987	16 763	25 943	42 402	825
322222	Coated & laminated paper mfg	1	37	19	1 963	73 242	1 317	2 787	41 086	183 327	236 840	421 730	11 669
322223	Plastics, foil, & coated paper bag mfg	—	4	2	309	10 249	189	393	4 889	22 247	23 602	45 667	1 935
322224	Uncoated paper & multiwall bag mfg	—	4	3	589	21 835	510	1 236	11 731	49 659	70 258	117 490	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	3	3	153	6 313	97	227	3 329	20 181	28 953	49 443	D
322226	Surface-coated paperboard mfg	—	5	4	295	9 725	220	468	5 637	24 299	43 419	67 541	743
32223	Stationery product mfg . .	1	34	17	1 718	53 001	1 397	2 843	36 233	94 192	110 768	205 560	2 772
322231	Die-cut paper & paperboard office supplies mfg	3	21	8	454	14 882	356	707	8 178	23 456	21 707	45 138	1 038
322232	Envelope mfg	—	7	5	955	30 363	795	1 588	22 840	57 739	72 229	130 385	1 432
322233	Stationery, tablet, & related product mfg . .	1	6	4	309	7 756	246	548	5 215	12 997	16 832	30 037	302
32229	Other converted paper product mfg	1	28	18	1 235	30 984	1 056	1 886	22 433	84 310	126 315	209 790	3 954
322291	Sanitary paper product mfg	—	6	4	329	7 561	312	608	6 383	25 520	39 621	63 917	913
322299	All other converted paper product mfg . . .	1	22	14	906	23 423	744	1 278	16 050	58 790	86 694	145 873	3 041
323	Printing & related support activities	3	1 661	331	32 226	1 192 476	22 986	44 885	740 336	2 422 220	1 564 087	3 985 692	173 318
3231	Printing & related support activities	3	1 661	331	32 226	1 192 476	22 986	44 885	740 336	2 422 220	1 564 087	3 985 692	173 318
32311	Printing	3	1 419	261	26 471	987 892	18 601	35 804	603 081	2 030 830	1 470 199	3 500 536	156 968
323110	Commercial lithographic printing . .	3	684	149	15 432	651 282	10 661	21 379	401 200	1 294 359	940 040	2 231 834	108 504
323111	Commercial gravure printing	7	19	4	274	8 860	233	401	6 665	21 944	16 822	38 552	2 350
323112	Commercial flexographic printing .	1	40	10	786	30 902	591	1 194	18 935	68 236	56 851	124 264	3 993
323113	Commercial screen printing	3	148	30	2 965	70 144	2 318	4 136	43 673	141 703	90 733	232 570	7 641
323114	Quick printing	1	300	13	1 946	56 332	1 299	2 224	33 040	125 041	62 945	187 163	15 392
323116	Manifold business form printing	6	32	16	1 832	63 473	1 183	2 211	35 728	123 342	143 545	271 984	6 010
323117	Book printing	2	29	10	601	20 516	483	869	13 745	56 180	33 211	89 142	1 555
323118	Blankbook, looseleaf binder, & device mfg .	3	14	7	373	9 392	290	549	6 391	32 054	11 623	43 375	513
323119	Other commercial printing	4	143	21	2 172	73 911	1 484	2 709	41 902	161 910	110 409	271 567	10 433
32312	Support activities for printing	3	242	70	5 755	204 584	4 385	9 081	137 255	391 390	93 888	485 156	16 350
323121	Tradebinding & related work	2	69	33	2 433	64 320	2 024	4 325	46 736	119 584	26 002	146 922	4 962
323122	Prepress services	4	173	37	3 322	140 264	2 361	4 756	90 519	271 806	67 886	338 234	11 388
324	Petroleum & coal products mfg	—	67	27	3 996	222 559	2 407	5 380	122 705	1 571 195	6 646 820	8 043 819	93 217
3241	Petroleum & coal products mfg	—	67	27	3 996	222 559	2 407	5 380	122 705	1 571 195	6 646 820	8 043 819	93 217
32411	Petroleum refineries	—	8	7	2 277	137 553	1 412	3 195	81 486	1 276 636	5 767 682	6 861 602	76 405
324110	Petroleum refineries . .	—	8	7	2 277	137 553	1 412	3 195	81 486	1 276 636	5 767 682	6 861 602	76 405
32412	Asphalt paving, roofing, & saturated materials mfg	1	43	12	989	46 615	617	1 278	24 350	145 570	237 455	386 322	12 625
324121	Asphalt paving mixture & block mfg	1	36	6	665	33 991	390	811	17 266	104 325	159 236	264 789	11 331
324122	Asphalt shingle & coating materials mfg	—	7	6	324	12 624	227	467	7 084	41 245	78 219	121 533	1 294
32419	Other petroleum & coal products mfg	2	16	8	730	38 391	378	907	16 869	148 989	641 683	795 895	4 187
324191	Petroleum lubricating oil & grease mfg	2	16	8	730	38 391	378	907	16 869	148 989	641 683	795 895	4 187
325	Chemical mfg	1	793	436	60 988	3 024 053	32 659	67 280	1 187 897	17 662 042	11 473 449	29 189 933	1 009 880
3251	Basic chemical mfg	—	144	91	9 995	528 279	5 609	11 482	252 583	2 367 794	2 654 098	5 056 910	192 160
32512	Industrial gas mfg	—	14	4	2 080	119 667	1 028	1 845	58 116	226 422	178 026	421 329	26 765
325120	Industrial gas mfg	—	14	4	2 080	119 667	1 028	1 845	58 116	226 422	178 026	421 329	26 765
32513	Dye & pigment mfg	—	26	16	g	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	23	16	1 241	54 712	789	1 605	29 962	198 306	211 042	418 606	13 141

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3251	Basic chemical mfg—Con.												
32518	Other basic inorganic chemical mfg	-	32	20	1 549	76 535	986	2 191	42 490	537 303	618 744	1 156 004	31 184
325188	All other basic inorganic chemical mfg	-	31	20	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	70	50	5 072	275 469	2 764	5 745	120 687	1 396 592	1 630 906	3 036 734	119 320
325192	Cyclic crude & intermediate mfg	-	6	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	62	47	4 636	245 847	2 597	5 357	113 744	1 009 014	1 298 262	2 320 485	113 684
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	27	22	2 162	109 844	1 308	2 801	60 521	473 901	720 950	1 186 553	60 152
32521	Resin & synthetic rubber mfg	1	27	22	2 162	109 844	1 308	2 801	60 521	473 901	720 950	1 186 553	60 152
325211	Plastics material & resin mfg	1	22	19	1 898	96 403	1 171	2 479	54 512	369 878	596 492	956 201	55 521
325212	Synthetic rubber mfg..	1	5	3	264	13 441	137	322	6 009	104 023	124 458	230 352	4 631
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	7	13	3	292	9 696	217	474	6 255	117 715	78 149	193 893	3 440
32531	Fertilizer mfg	3	11	2	c	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	9	2	1	c	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	9	2	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	146	92	23 881	1 370 271	11 348	24 245	429 755	9 373 398	4 058 020	13 421 106	493 255
32541	Pharmaceutical & medicine mfg	-	146	92	23 881	1 370 271	11 348	24 245	429 755	9 373 398	4 058 020	13 421 106	493 255
325411	Medicinal & botanical mfg	2	28	13	3 297	204 117	1 491	3 585	88 941	799 928	585 697	1 401 392	118 668
325412	Pharmaceutical preparation mfg	-	99	64	18 719	1 063 195	9 066	19 143	306 485	8 078 499	3 292 628	11 357 855	317 668
325413	In-vitro diagnostic substance mfg	-	14	11	1 383	83 568	506	886	19 895	456 311	146 578	590 879	51 128
325414	Biological product (except diagnostic) mfg	4	5	4	482	19 391	285	631	14 434	38 660	33 117	70 980	5 791
3255	Paint, coating, & adhesive mfg	1	130	51	3 715	155 831	2 002	4 064	68 480	730 810	745 818	1 471 612	42 358
32551	Paint & coating mfg	2	77	29	2 207	92 515	1 193	2 336	41 162	484 649	450 172	931 857	25 570
325510	Paint & coating mfg	2	77	29	2 207	92 515	1 193	2 336	41 162	484 649	450 172	931 857	25 570
32552	Adhesive mfg	1	53	22	1 508	63 316	809	1 728	27 318	246 161	295 646	539 755	16 788
325520	Adhesive mfg	1	53	22	1 508	63 316	809	1 728	27 318	246 161	295 646	539 755	16 788
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	179	106	15 912	641 138	9 188	17 932	269 002	3 684 800	2 423 523	6 142 968	167 538
32561	Soap & cleaning compound mfg	2	88	44	3 914	175 217	2 400	5 395	86 883	1 131 977	851 485	1 983 798	48 661
325611	Soap & other detergent mfg	2	41	23	1 921	93 566	1 150	2 670	44 425	560 570	415 580	973 520	20 376
325612	Polish & other sanitation good mfg ..	1	28	11	1 295	41 626	916	1 982	25 899	417 250	218 238	636 532	7 435
325613	Surface active agent mfg	3	19	10	698	40 025	334	743	16 559	154 157	217 667	373 746	20 850
32562	Toilet preparation mfg ...	3	91	62	11 998	465 921	6 788	12 537	182 119	2 552 823	1 572 038	4 159 170	118 877
325620	Toilet preparation mfg .	3	91	62	11 998	465 921	6 788	12 537	182 119	2 552 823	1 572 038	4 159 170	118 877
3259	Other chemical product mfg	1	154	71	5 031	208 994	2 987	6 282	101 301	913 624	792 891	1 716 891	50 977
32591	Printing ink mfg	-	33	19	797	33 358	391	824	14 035	111 932	105 827	219 613	2 819
325910	Printing ink mfg	-	33	19	797	33 358	391	824	14 035	111 932	105 827	219 613	2 819
32599	All other chemical product & preparation mfg	1	121	52	4 234	175 636	2 596	5 458	87 266	801 692	687 064	1 497 278	48 158
325991	Custom compounding of purchased resin ...	2	49	26	2 024	77 703	1 356	2 839	40 666	197 052	361 425	563 625	17 683
325992	Photographic film, paper, plate, & chemical mfg	-	17	7	880	44 010	511	1 097	23 824	254 872	106 562	366 686	20 169
325998	All other miscellaneous chemical product & preparation mfg	2	55	19	1 330	53 923	729	1 522	22 776	349 768	219 077	566 967	10 306

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW JERSEY—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	2	607	337	33 170	1 002 865	25 356	52 043	623 412	2 471 083	2 245 973	4 703 226	203 094
3261	Plastics product mfg.....	2	527	307	30 352	906 556	23 353	47 875	569 973	2 264 793	2 075 294	4 327 583	192 211
32611	Unsupported plastics film, sheet, & bag mfg..	3	98	61	4 909	152 148	3 504	7 049	92 288	384 489	557 936	941 307	29 347
326111	Unsupported plastics bag mfg.....	1	29	22	1 346	35 474	1 032	2 034	21 564	98 765	141 145	240 632	7 316
326112	Unsupported plastics packaging film & sheet mfg.....	5	9	6	482	17 808	358	759	11 929	40 539	60 704	101 933	2 952
326113	Unsupported plastics film & sheet (except packaging) mfg.....	3	60	33	3 081	98 866	2 114	4 256	58 795	245 185	356 087	598 742	19 079
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	1	51	31	1 976	68 446	1 437	2 858	40 498	160 065	109 004	267 445	11 894
326121	Unsupported plastics profile shape mfg....	1	43	26	1 726	61 382	1 260	2 525	36 669	143 232	86 297	228 052	10 657
326122	Plastics pipe & pipe fitting mfg.....	4	8	5	250	7 064	177	333	3 829	16 833	22 707	39 393	1 237
32613	Laminated plastics plate, sheet, & shape mfg....	-	18	5	472	18 334	363	754	10 976	63 100	50 156	112 624	2 833
326130	Laminated plastics plate, sheet, & shape mfg.....	-	18	5	472	18 334	363	754	10 976	63 100	50 156	112 624	2 833
32614	Polystyrene foam product mfg.....	1	12	5	372	11 673	289	634	7 973	34 101	39 687	73 254	1 533
326140	Polystyrene foam product mfg.....	1	12	5	372	11 673	289	634	7 973	34 101	39 687	73 254	1 533
32615	Urethane & other foam product (except polystyrene) mfg.....	2	21	12	1 174	48 356	916	1 927	29 869	84 149	91 551	177 108	9 327
326150	Urethane & other foam product (except polystyrene) mfg....	2	21	12	1 174	48 356	916	1 927	29 869	84 149	91 551	177 108	9 327
32616	Plastics bottle mfg.....	3	30	23	2 426	75 967	1 933	4 087	54 217	194 493	181 342	373 902	26 461
326160	Plastics bottle mfg....	3	30	23	2 426	75 967	1 933	4 087	54 217	194 493	181 342	373 902	26 461
32619	Other plastics product mfg.....	2	297	170	19 023	531 632	14 911	30 566	334 152	1 344 396	1 045 618	2 381 943	110 816
326191	Plastics plumbing fixture mfg.....	3	7	2	c	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg.....	2	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	2	286	165	17 407	466 991	13 760	28 191	295 600	1 094 668	896 855	1 983 123	D
3262	Rubber product mfg.....	1	80	30	2 818	96 309	2 003	4 168	53 439	206 290	170 679	375 643	10 883
32621	Tire mfg.....	1	17	1	239	7 805	200	512	5 607	12 963	18 345	31 217	D
326212	Tire retreading.....	1	17	1	239	7 805	200	512	5 607	12 963	18 345	31 217	D
32622	Rubber & plastics hoses & belting mfg.....	-	6	4	250	7 457	145	276	3 680	12 656	14 544	27 392	D
326220	Rubber & plastics hoses & belting mfg..	-	6	4	250	7 457	145	276	3 680	12 656	14 544	27 392	D
32629	Other rubber product mfg.....	1	57	25	2 329	81 047	1 658	3 380	44 152	180 671	137 790	317 034	10 079
326291	Rubber product mfg for mechanical use.....	2	28	11	1 063	36 914	720	1 500	18 623	61 260	41 345	101 880	5 147
326299	All other rubber product mfg.....	1	29	14	1 266	44 133	938	1 880	25 529	119 411	96 445	215 154	4 932
327	Nonmetallic mineral product mfg.....	1	360	148	14 439	507 736	11 073	22 900	355 825	1 307 950	856 739	2 144 930	102 025
3271	Clay product & refractory mfg.....	-	43	19	2 440	76 673	2 005	3 984	58 178	192 385	70 233	256 551	6 937
32711	Pottery, ceramics, & plumbing fixture mfg....	-	24	13	1 994	60 471	1 661	3 245	46 804	143 839	41 069	178 282	4 027
327111	Vitreous china plumbing fixture & bathroom accessories mfg.....	-	4	3	566	19 941	475	984	16 129	52 786	18 162	69 546	1 218
327112	Vitreous china, fine earthenware, & other pottery product mfg..	-	14	5	1 122	30 670	969	1 840	24 546	71 930	16 742	82 950	1 544
327113	Porcelain electrical supply mfg.....	-	6	5	306	9 860	217	421	6 129	19 123	6 165	25 786	1 265
32712	Clay building material & refractories mfg.....	1	19	6	446	16 202	344	739	11 374	48 546	29 164	78 269	2 910
327121	Brick & structural clay tile mfg.....	1	3	2	109	3 400	82	166	2 545	10 351	3 786	14 144	683
327125	Nonclay refractory mfg.....	-	3	2	c	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	NEW JERSEY—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3272	Glass & glass product mfg.	—	102	41	6 793	237 376	5 453	11 234	179 811	564 061	300 644	862 109	59 297
32721	Glass & glass product mfg	—	102	41	6 793	237 376	5 453	11 234	179 811	564 061	300 644	862 109	59 297
327211	Flat glass mfg.	—	1	1	c	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	21	4	g	D	D	D	D	D	D	D	D
327213	Glass container mfg . .	—	5	5	2 193	81 808	1 784	3 689	65 715	182 455	95 990	276 449	17 413
327215	Glass product mfg made of purchased glass.	1	75	31	2 599	83 211	1 937	3 763	53 290	187 558	119 246	306 838	9 100
3273	Cement & concrete product mfg	3	147	63	3 548	127 251	2 370	5 015	74 925	317 396	320 167	635 846	24 517
32732	Ready-mix concrete mfg.	5	65	32	1 753	66 716	1 238	2 661	44 643	141 969	186 039	328 143	14 605
327320	Ready-mix concrete mfg	5	65	32	1 753	66 716	1 238	2 661	44 643	141 969	186 039	328 143	14 605
32733	Concrete pipe, brick, & block mfg.	—	31	16	971	36 044	610	1 301	17 452	100 176	84 457	181 846	7 963
327331	Concrete block & brick mfg	—	25	13	759	28 900	466	979	13 065	80 911	70 033	147 801	7 457
327332	Concrete pipe mfg. . . .	—	6	3	212	7 144	144	322	4 387	19 265	14 424	34 045	506
32739	Other concrete product mfg	2	46	15	f	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	2	46	15	f	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	—	9	5	419	19 024	334	807	12 776	83 431	60 936	140 070	4 582
32742	Gypsum product mfg. . .	—	8	4	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg. . .	—	8	4	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.	2	59	20	1 239	47 412	911	1 860	30 135	150 677	104 759	250 354	6 692
32791	Abrasive product mfg . .	1	15	8	392	15 001	289	601	9 354	36 647	29 891	66 809	1 176
327910	Abrasive product mfg . .	1	15	8	392	15 001	289	601	9 354	36 647	29 891	66 809	1 176
32799	All other nonmetallic mineral product mfg	2	44	12	847	32 411	622	1 259	20 781	114 030	74 868	183 545	5 516
327992	Ground or treated mineral & earth mfg. . .	5	12	6	291	11 564	185	369	5 347	43 474	30 643	67 557	3 277
327993	Mineral wool mfg	1	7	2	315	12 596	264	547	10 498	47 041	27 386	75 387	1 012
327999	All other miscellaneous nonmetallic mineral product mfg.	—	9	4	151	5 855	105	207	3 329	18 921	12 846	31 954	1 045
331	Primary metal mfg	—	139	80	10 746	411 658	7 893	16 307	251 033	1 073 818	1 637 484	2 747 497	101 183
3311	Iron & steel mills & ferroalloy mfg	—	10	8	1 750	90 662	1 213	2 690	56 653	264 320	578 828	824 747	43 960
33111	Iron & steel mills & ferroalloy mfg	—	10	8	1 750	90 662	1 213	2 690	56 653	264 320	578 828	824 747	43 960
331111	Iron & steel mills	—	8	6	g	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	1	2	2	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	1	18	12	1 052	38 379	782	1 587	21 715	91 494	121 892	212 603	11 425
33121	Iron & steel pipes & tubes mfg from purchased steel	2	7	5	409	17 330	288	532	8 779	37 528	53 459	89 244	3 603
331210	Iron & steel pipes & tubes mfg from purchased steel	2	7	5	409	17 330	288	532	8 779	37 528	53 459	89 244	3 603
33122	Rolling & drawing of purchased steel	—	11	7	643	21 049	494	1 055	12 936	53 966	68 433	123 359	7 822
331222	Steel wire drawing	—	8	6	615	20 331	473	1 029	12 422	51 891	64 026	116 832	7 658
3313	Alumina & aluminum production & processing . .	—	4	3	1 352	43 775	1 140	1 856	27 924	98 850	179 199	273 690	D
33131	Alumina & aluminum production & processing	—	4	3	1 352	43 775	1 140	1 856	27 924	98 850	179 199	273 690	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	1	54	29	3 349	130 248	2 337	4 990	75 113	305 821	558 412	926 729	25 578
33141	Nonferrous metal (except aluminum) smelting & refining.....	—	10	3	563	23 195	310	775	8 831	63 136	93 394	157 232	8 226
331419	Other nonferrous metal primary smelting & refining.....	—	10	3	563	23 195	310	775	8 831	63 136	93 394	157 232	8 226
33142	Copper rolling, drawing, extruding, & alloying ...	—	13	12	1 142	36 128	858	1 846	22 758	108 515	114 518	225 254	7 232
331421	Copper rolling, drawing, & extruding .	—	10	9	935	28 145	728	1 579	19 052	59 968	87 389	149 860	6 076
331423	Secondary smelting, refining, & alloying of copper	—	3	3	207	7 983	130	267	3 706	48 547	27 129	75 394	1 156
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	2	31	14	1 644	70 925	1 169	2 369	43 524	134 170	350 500	544 243	10 120
331491	Other nonferrous metal rolling, drawing, & extruding	4	17	8	1 149	50 064	840	1 739	32 371	50 529	154 533	267 298	6 525
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	14	6	495	20 861	329	630	11 153	83 641	195 967	276 945	3 595
3315	Foundries	—	53	28	3 243	108 594	2 421	5 184	69 628	313 333	199 153	509 728	D
33151	Ferrous metal foundries .	—	14	8	1 991	75 059	1 465	3 306	48 328	231 092	151 353	383 554	8 458
331511	Iron foundries	—	10	5	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	4	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	39	20	1 252	33 535	956	1 878	21 300	82 241	47 800	126 174	D
331521	Aluminum die-casting foundries	—	5	2	e	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	11	6	346	9 252	269	506	5 614	21 825	12 426	34 019	881
331524	Aluminum foundries (except die-casting) ..	—	12	4	331	9 252	250	546	6 017	19 490	7 636	26 890	785
331525	Copper foundries (except die-casting) ..	2	7	5	209	6 614	155	354	4 257	15 590	12 933	25 234	D
331528	Other nonferrous foundries (except die-casting)	—	4	3	c	D	D	D	D	D	D	D	95
332	Fabricated metal product mfg	1	1 806	482	39 023	1 418 613	27 790	59 031	837 637	2 912 327	2 360 322	5 282 040	157 283
3321	Forging & stamping	—	118	50	3 790	144 554	2 845	5 834	86 516	276 689	212 042	485 673	14 213
33211	Forging & stamping	—	118	50	3 790	144 554	2 845	5 834	86 516	276 689	212 042	485 673	14 213
332111	Iron & steel forging	1	7	2	192	7 507	139	305	4 451	16 651	18 910	34 490	1 751
332114	Custom roll forming	—	7	4	193	8 063	148	310	4 313	18 883	28 626	47 317	D
332116	Metal stamping	1	101	41	3 211	123 694	2 431	5 010	74 729	227 557	154 895	379 131	11 299
332117	Powder metallurgy part mfg	—	2	2	c	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	3	54	20	2 039	57 924	1 531	3 065	33 831	159 754	102 746	261 071	6 877
33221	Cutlery & handtool mfg ..	3	54	20	2 039	57 924	1 531	3 065	33 831	159 754	102 746	261 071	6 877
332211	Cutlery & flatware (except precious) mfg	—	7	6	423	11 195	338	703	6 944	39 467	28 382	67 515	1 700
332212	Hand & edge tool mfg .	5	41	11	1 395	40 580	1 059	2 129	23 866	95 648	52 027	146 393	4 660
332213	Saw blade & handsaw mfg	1	4	2	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	363	104	7 971	276 989	5 655	11 978	162 476	605 401	618 381	1 204 866	25 391
33231	Plate work & fabricated structural product mfg ..	—	101	23	1 700	61 291	1 179	2 499	35 160	136 603	187 180	325 114	4 557
332311	Prefabricated metal building & component mfg	—	7	3	141	5 022	93	201	2 428	8 745	14 194	23 029	196
332312	Fabricated structural metal mfg	—	77	14	1 216	43 612	853	1 704	25 576	102 772	156 943	260 571	2 827
332313	Plate work mfg	—	17	6	343	12 657	233	594	7 156	25 086	16 043	41 514	1 534
33232	Ornamental & architectural metal products mfg	1	262	81	6 271	215 698	4 476	9 479	127 316	468 798	431 201	879 752	20 834
332321	Metal window & door mfg	1	41	17	1 169	33 955	813	1 653	18 180	66 096	55 964	122 107	947
332322	Sheet metal work mfg .	—	165	56	4 481	158 500	3 278	7 074	98 459	346 605	328 886	655 375	18 597
332323	Ornamental & architectural metal work mfg	2	56	8	621	23 243	385	752	10 677	56 097	46 351	102 270	1 290

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	1	55	27	2 369	95 040	1 696	3 593	60 845	198 238	290 215	495 544	12 678
33241	Power boiler & heat exchanger mfg	1	15	7	518	18 445	314	606	9 145	38 709	43 575	81 065	1 746
332410	Power boiler & heat exchanger mfg	1	15	7	518	18 445	314	606	9 145	38 709	43 575	81 065	1 746
33242	Metal tank (heavy gauge) mfg	—	13	9	478	21 135	307	641	10 632	24 848	30 893	59 970	1 025
332420	Metal tank (heavy gauge) mfg	—	13	9	478	21 135	307	641	10 632	24 848	30 893	59 970	1 025
33243	Metal can, box, & other metal container (light gauge) mfg	1	27	11	1 373	55 460	1 075	2 346	41 068	134 681	215 747	354 509	9 907
332431	Metal can mfg	—	9	6	792	38 247	604	1 441	29 559	107 341	151 519	260 895	6 767
332439	Other metal container mfg	2	18	5	581	17 213	471	905	11 509	27 340	64 228	93 614	3 140
3325	Hardware mfg	—	19	5	1 104	52 151	868	2 365	41 531	78 902	150 215	230 646	1 090
33251	Hardware mfg	—	19	5	1 104	52 151	868	2 365	41 531	78 902	150 215	230 646	1 090
332510	Hardware mfg	—	19	5	1 104	52 151	868	2 365	41 531	78 902	150 215	230 646	1 090
3326	Spring & wire product mfg	1	67	26	1 860	55 621	1 406	2 744	31 260	112 375	82 936	195 799	7 396
33261	Spring & wire product mfg	1	67	26	1 860	55 621	1 406	2 744	31 260	112 375	82 936	195 799	7 396
332612	Spring (light gauge) mfg	7	6	2	c	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	60	24	1 721	51 285	1 297	2 536	28 364	103 097	75 709	179 309	6 760
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	760	124	9 503	358 079	6 840	15 260	219 398	667 671	395 631	1 075 456	45 681
33271	Machine shops	1	637	81	6 595	247 907	4 776	9 418	152 260	435 404	278 192	731 310	29 755
332710	Machine shops	1	637	81	6 595	247 907	4 776	9 418	152 260	435 404	278 192	731 310	29 755
33272	Turned product & screw, nut, & bolt mfg	2	123	43	2 908	110 172	2 064	5 842	67 138	232 267	117 439	344 146	15 926
332721	Precision turned product mfg	1	84	24	1 556	56 965	1 217	4 149	37 975	96 985	36 546	133 873	5 544
332722	Bolt, nut, screw, rivet, & washer mfg	3	39	19	1 352	53 207	847	1 693	29 163	135 282	80 893	210 273	10 382
3328	Coating, engraving, heat treating, & allied activities	1	186	62	3 487	113 204	2 594	5 241	65 303	224 768	97 886	320 688	16 481
33281	Coating, engraving, heat treating, & allied activities	1	186	62	3 487	113 204	2 594	5 241	65 303	224 768	97 886	320 688	16 481
332811	Metal heat treating	2	20	11	523	18 185	394	816	11 097	39 899	16 925	56 848	1 827
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	60	19	1 174	37 197	904	1 875	23 093	75 876	27 500	101 677	9 238
332813	Electroplating, plating, polishing, anodizing, & coloring	1	106	32	1 790	57 822	1 296	2 550	31 113	108 993	53 461	162 163	5 416
3329	Other fabricated metal product mfg	—	184	64	6 900	265 051	4 355	8 951	136 477	588 529	410 270	1 012 297	27 476
33291	Metal valve mfg	—	37	23	2 982	127 414	1 546	3 259	52 102	265 463	169 892	446 740	9 686
332911	Industrial valve mfg	—	20	16	2 403	105 524	1 176	2 458	42 003	227 874	119 987	357 966	8 651
332912	Fluid power valve & hose fitting mfg	—	10	4	402	16 704	234	520	6 839	29 124	38 001	67 838	763
332919	Other metal valve & pipe fitting mfg	—	6	3	c	D	D	D	D	D	D	D	272
33299	All other fabricated metal product mfg	—	147	41	3 918	137 637	2 809	5 692	84 375	323 066	240 378	565 557	17 790
332991	Ball & roller bearing mfg	1	6	4	570	23 802	423	870	15 494	65 565	28 637	92 917	5 671
332993	Ammunition (except small arms) mfg	—	3	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	1	28	7	700	19 631	488	922	10 922	42 701	32 266	74 883	3 054
332997	Industrial pattern mfg	3	14	1	120	3 825	99	177	2 868	6 214	2 402	8 563	357
332999	All other miscellaneous fabricated metal product mfg	—	90	27	2 284	81 781	1 608	3 323	49 234	197 859	156 115	353 731	8 101
333	Machinery mfg	1	915	280	25 858	1 028 577	15 712	32 264	511 837	2 153 163	2 050 556	4 187 160	122 647
3331	Agriculture, construction, & mining machinery mfg	6	19	5	450	19 305	269	502	8 908	38 595	43 421	83 565	2 407
33311	Agricultural implement mfg	—	4	2	c	D	D	D	D	D	D	D	205
333111	Farm machinery & equipment mfg	—	3	1	c	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	8	10	1	204	10 420	136	288	5 799	21 702	27 773	50 912	1 471
333120	Construction machinery mfg	8	10	1	204	10 420	136	288	5 799	21 702	27 773	50 912	1 471
33313	Mining & oil & gas field machinery mfg	5	5	2	c	D	D	D	D	D	D	D	731

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	1	187	67	5 194	231 900	2 844	5 951	109 655	521 859	583 401	1 089 627	32 964
33322	Plastics & rubber industry machinery mfg	1	15	4	329	14 884	172	375	7 022	35 471	38 486	74 884	D
333220	Plastics & rubber industry machinery mfg	1	15	4	329	14 884	172	375	7 022	35 471	38 486	74 884	D
33329	Other industrial machinery mfg	1	169	62	4 818	215 186	2 643	5 506	101 712	484 328	541 970	1 009 732	32 064
333291	Paper industry machinery mfg	—	16	7	1 236	62 571	540	1 229	26 623	166 691	290 091	439 081	14 914
333292	Textile machinery mfg	2	21	6	300	11 659	200	352	7 228	18 016	14 090	33 207	651
333293	Printing machinery & equipment mfg	—	34	12	723	33 014	379	718	16 635	74 448	51 680	126 306	3 387
333294	Food product machinery mfg	1	17	4	220	7 989	136	266	4 015	28 820	24 444	53 169	688
333295	Semiconductor machinery mfg	6	5	3	443	21 518	263	654	9 719	44 216	34 592	79 079	3 215
333298	All other industrial machinery mfg	1	76	30	1 896	78 435	1 125	2 287	37 492	152 137	127 073	278 890	9 209
3333	Commercial & service industry machinery mfg ..	3	100	38	4 123	142 948	2 023	4 181	50 265	273 539	263 461	530 373	13 999
33331	Commercial & service industry machinery mfg	3	100	38	4 123	142 948	2 023	4 181	50 265	273 539	263 461	530 373	13 999
333313	Office machinery mfg	5	7	5	f	D	D	D	D	D	D	D	3 186
333314	Optical instrument & lens mfg	1	22	9	655	23 928	295	626	8 714	69 598	38 128	99 851	D
333315	Photographic & photocopying equipment mfg	3	27	8	663	20 931	372	684	7 982	37 742	54 193	98 044	3 115
333319	Other commercial & service industry machinery mfg	4	42	15	1 954	62 771	1 084	2 290	25 907	117 676	115 437	228 653	5 029
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	49	23	3 711	114 797	3 097	6 240	84 327	326 912	328 000	665 659	19 413
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	49	23	3 711	114 797	3 097	6 240	84 327	326 912	328 000	665 659	19 413
333411	Air purification equipment mfg	—	10	5	e	D	D	D	D	D	D	D	1 986
333412	Industrial & commercial fan & blower mfg	—	4	1	c	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	21	8	515	17 674	393	782	9 954	35 844	26 897	62 253	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	14	9	2 712	80 770	2 336	4 632	64 783	265 535	266 864	537 651	12 923
3335	Metalworking machinery mfg	2	292	47	3 695	149 464	2 758	5 871	96 874	274 853	131 317	401 788	19 759
33351	Metalworking machinery mfg	2	292	47	3 695	149 464	2 758	5 871	96 874	274 853	131 317	401 788	19 759
333511	Industrial mold mfg ...	—	92	18	1 256	56 412	1 014	2 203	39 653	89 789	30 631	119 270	6 434
333512	Machine tool (metal cutting types) mfg ...	7	7	2	131	5 609	88	185	2 880	9 006	7 701	16 324	545
333514	Special die & tool, die set, jig, & fixture mfg ...	2	128	11	1 347	48 049	1 049	2 182	33 163	81 168	31 257	111 877	4 692
333515	Cutting tool & machine tool accessory mfg ..	2	45	6	539	19 394	369	773	12 133	53 022	18 284	71 445	5 261
333518	Other metalworking machinery mfg	3	15	9	378	17 960	210	467	8 078	38 853	40 714	76 669	2 768
3336	Engine, turbine, & power transmission equipment mfg	—	25	11	1 256	59 457	657	1 135	27 548	76 520	126 915	204 797	6 651
33361	Engine, turbine, & power transmission equipment mfg	—	25	11	1 256	59 457	657	1 135	27 548	76 520	126 915	204 797	6 651
333611	Turbine & turbine generator set unit mfg	—	2	1	f	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	—	11	4	327	13 202	191	386	6 896	34 323	20 879	55 701	1 764
333613	Mechanical power transmission equipment mfg	—	7	4	322	11 229	209	415	6 266	28 158	10 878	38 854	D
3339	Other general-purpose machinery mfg	2	243	89	7 429	310 706	4 064	8 384	134 260	640 885	574 041	1 211 351	27 454

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33391	Pump & compressor mfg	1	22	9	1 337	59 655	743	1 499	24 180	109 003	127 613	246 376	4 466
333911	Pump & pumping equipment mfg	—	13	5	805	36 939	413	844	14 964	63 225	83 768	151 734	2 778
333912	Air & gas compressor mfg	1	8	3	e	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	9	1	1	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	54	23	1 748	67 591	1 009	2 056	33 004	138 111	133 936	266 893	5 332
333921	Elevator & moving stairway mfg	3	10	5	205	7 672	170	361	5 361	17 486	13 688	31 810	1 276
333922	Conveyor & conveying equipment mfg	—	30	10	1 025	38 849	524	1 030	17 413	69 776	80 772	147 832	2 650
333923	Overhead traveling crane, hoist, & monorail system mfg	—	8	4	281	13 239	149	307	5 732	36 820	17 442	51 551	674
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	6	4	237	7 831	166	358	4 498	14 029	22 034	35 700	732
33399	All other general-purpose machinery mfg	3	167	57	4 344	183 460	2 312	4 829	77 076	393 771	312 492	698 082	17 656
333992	Welding & soldering equipment mfg	—	7	3	175	6 935	76	156	2 575	14 892	9 083	24 088	657
333993	Packaging machinery mfg	2	43	20	1 227	47 813	576	1 149	18 744	86 874	61 937	149 212	2 274
333994	Industrial process furnace & oven mfg ..	5	29	11	1 112	51 272	559	1 282	21 961	133 263	146 545	270 932	5 663
333995	Fluid power cylinder & actuator mfg	—	5	2	306	9 095	91	229	2 754	14 205	9 469	24 107	901
333999	All other miscellaneous general-purpose machinery mfg	1	74	21	1 457	65 951	968	1 925	29 796	139 593	81 703	221 071	7 931
334	Computer & electronic product mfg	2	640	276	39 058	1 764 314	21 546	42 452	738 789	4 057 699	2 638 580	6 742 332	290 187
3341	Computer & peripheral equipment mfg	2	41	14	1 186	44 832	529	1 185	17 042	100 262	98 772	200 688	4 849
33411	Computer & peripheral equipment mfg	2	41	14	1 186	44 832	529	1 185	17 042	100 262	98 772	200 688	4 849
334111	Electronic computer mfg	3	14	6	286	9 025	111	223	2 963	21 760	47 962	69 937	1 104
334112	Computer storage device mfg	8	5	2	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	20	6	783	29 668	363	817	9 951	63 835	38 184	103 228	1 838
3342	Communications equipment mfg	3	111	58	10 594	527 551	5 038	10 212	184 402	1 124 292	859 254	2 034 405	98 764
33421	Telephone apparatus mfg	—	24	12	1 492	66 301	786	1 384	23 996	207 412	229 820	446 538	15 750
334210	Telephone apparatus mfg	—	24	12	1 492	66 301	786	1 384	23 996	207 412	229 820	446 538	15 750
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	61	42	8 130	423 331	3 762	7 844	148 772	784 752	560 699	1 384 961	78 072
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	61	42	8 130	423 331	3 762	7 844	148 772	784 752	560 699	1 384 961	78 072
33429	Other communications equipment mfg	—	26	4	972	37 919	490	984	11 634	132 128	68 735	202 906	4 942
334290	Other communications equipment mfg	—	26	4	972	37 919	490	984	11 634	132 128	68 735	202 906	4 942
3343	Audio & video equipment mfg	9	15	2	487	13 918	337	726	7 592	15 280	40 173	55 318	1 170
33431	Audio & video equipment mfg	9	15	2	487	13 918	337	726	7 592	15 280	40 173	55 318	1 170
334310	Audio & video equipment mfg	9	15	2	487	13 918	337	726	7 592	15 280	40 173	55 318	1 170
3344	Semiconductor & other electronic component mfg	2	224	111	10 828	377 200	7 542	14 680	192 866	963 129	601 146	1 534 617	105 125

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con. Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg	2	224	111	10 828	377 200	7 542	14 680	192 866	963 129	601 146	1 534 617	105 125
334411	Electron tube mfg	1	12	8	575	17 610	409	657	9 859	35 370	26 648	63 671	1 081
334412	Bare printed circuit board mfg	2	37	12	804	21 601	580	1 015	11 254	42 099	40 265	82 035	5 185
334413	Semiconductor & related device mfg ...	2	41	20	1 994	81 694	1 320	2 476	35 728	247 052	70 651	307 171	74 536
334414	Electronic capacitor mfg	—	5	3	363	11 817	242	542	4 903	23 796	10 780	34 269	1 182
334415	Electronic resistor mfg	1	6	3	374	11 441	289	482	5 708	30 479	10 344	41 134	1 346
334416	Electronic coil, transformer, & other inductor mfg	1	16	8	796	24 421	601	1 267	13 833	48 297	18 951	66 615	1 350
334417	Electronic connector mfg	4	17	11	1 055	30 361	578	1 152	15 422	75 324	71 166	135 185	4 630
334418	Printed circuit assembly (electronic assembly) mfg	4	16	13	815	34 360	471	976	13 699	80 967	93 435	175 230	5 602
334419	Other electronic component mfg	1	74	33	4 052	143 895	3 052	6 113	82 460	379 745	258 906	629 307	10 213
3345	Navigational, measuring, medical, & control instruments mfg	—	216	84	14 738	754 330	7 261	13 872	304 211	1 764 616	980 989	2 768 814	67 450
33451	Navigational, measuring, medical, & control instruments mfg	—	216	84	14 738	754 330	7 261	13 872	304 211	1 764 616	980 989	2 768 814	67 450
334510	Electromedical & electrotherapeutic apparatus mfg	1	25	14	1 688	73 651	604	1 091	18 375	199 325	112 584	310 946	13 092
334511	Search, detection, navigation, & guidance instrument mfg	—	39	17	9 015	501 230	4 906	9 297	229 981	1 169 747	496 106	1 680 172	33 347
334512	Automatic environmental control mfg	7	9	2	121	4 644	59	117	1 791	13 400	5 783	19 259	351
334513	Industrial process control instrument mfg	6	33	6	434	18 161	201	396	5 381	37 325	20 599	59 248	1 312
334515	Electricity measuring & testing instrument mfg	—	36	15	999	43 514	487	979	15 690	118 008	87 139	200 905	8 913
334516	Analytical laboratory instrument mfg	—	31	15	1 434	71 319	476	986	19 224	136 196	201 890	350 564	6 196
334517	Irradiation apparatus mfg	9	7	1	109	4 317	56	86	1 689	10 929	8 075	19 300	579
334519	Other measuring & controlling device mfg	1	27	12	815	31 994	397	774	10 312	65 043	39 124	104 610	2 696
3346	Mfg & reproducing magnetic & optical media .	2	33	7	1 225	46 483	839	1 777	32 676	90 120	58 246	148 490	12 829
33461	Mfg & reproducing magnetic & optical media	2	33	7	1 225	46 483	839	1 777	32 676	90 120	58 246	148 490	12 829
334612	Prerecorded CD (except software), tape, & record reproducing	1	23	6	1 155	44 542	784	1 683	31 488	85 263	54 381	139 705	12 017
335	Electrical equipment, appliance, & component mfg	1	271	120	10 893	345 482	7 867	15 183	204 167	881 697	718 034	1 597 964	37 398
3351	Electric lighting equipment mfg	—	66	32	2 775	77 481	2 117	3 873	46 623	246 929	214 305	461 216	6 658
33511	Electric lamp bulb & part mfg	—	7	3	374	10 883	293	565	7 685	45 246	19 342	66 507	1 200
335110	Electric lamp bulb & part mfg	—	7	3	374	10 883	293	565	7 685	45 246	19 342	66 507	1 200
33512	Lighting fixture mfg	—	59	29	2 401	66 598	1 824	3 308	38 938	201 683	194 963	394 709	5 458
335121	Residential electric lighting fixture mfg ...	1	26	12	1 046	19 916	850	1 259	13 213	45 175	59 380	103 768	1 533
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	—	19	11	984	33 122	740	1 560	19 490	107 660	92 372	199 384	2 173
335129	Other lighting equipment mfg	—	14	6	371	13 560	234	489	6 235	48 848	43 211	91 557	1 752
3352	Household appliance mfg..	2	12	4	326	6 516	275	508	4 208	14 631	17 525	32 191	643
33521	Small electrical appliance mfg	4	7	2	213	3 616	182	346	2 504	12 027	6 869	18 818	D
335211	Electric housewares & household fan mfg ...	1	5	1	c	D	D	D	D	D	D	D	93
33522	Major appliance mfg	—	5	2	113	2 900	93	162	1 704	2 604	10 656	13 373	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW JERSEY—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	2	102	30	2 848	96 232	1 894	3 808	51 266	187 221	143 175	329 245	10 060
33531	Electrical equipment mfg	2	102	30	2 848	96 232	1 894	3 808	51 266	187 221	143 175	329 245	10 060
335311	Power, distribution, & specialty transformer mfg	3	19	7	630	20 383	492	1 108	14 098	46 021	38 047	85 305	3 950
335312	Motor & generator mfg	2	17	5	379	12 617	248	496	6 888	26 921	14 929	40 659	473
335313	Switchgear & switchboard apparatus mfg	1	21	7	1 036	35 464	677	1 243	18 914	63 850	57 204	119 511	4 051
335314	Relay & industrial control mfg	2	45	11	803	27 768	477	961	11 366	50 429	32 995	83 770	1 586
3359	Other electrical equipment & component mfg	1	91	54	4 944	165 253	3 581	6 994	102 070	432 916	343 029	775 312	20 037
33591	Battery mfg	2	7	5	1 134	39 178	918	1 721	30 950	129 480	72 977	202 997	6 766
335911	Storage battery mfg	2	5	3	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	—	2	2	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	1	13	11	775	25 254	510	1 110	13 885	59 212	73 380	130 401	3 426
335921	Fiber optic cable mfg	3	3	3	102	3 850	52	109	1 671	13 120	12 352	25 747	D
335929	Other communication & energy wire mfg	—	10	8	673	21 404	458	1 001	12 214	46 092	61 028	104 654	D
33593	Wiring device mfg	1	31	17	1 290	40 704	1 038	2 178	29 015	118 131	95 134	214 369	4 155
335931	Current-carrying wiring device mfg	1	25	13	833	26 039	668	1 372	18 429	76 927	53 511	131 126	2 664
335932	Noncurrent-carrying wiring device mfg	2	6	4	457	14 665	370	806	10 586	41 204	41 623	83 243	1 491
33599	All other electrical equipment & component mfg	1	40	21	1 745	60 117	1 115	1 985	28 220	126 093	101 538	227 545	5 690
335991	Carbon & graphite product mfg	2	4	4	257	9 139	202	406	5 994	22 608	10 406	33 227	2 322
335999	All other miscellaneous electrical equipment & component mfg	1	36	17	1 488	50 978	913	1 579	22 226	103 485	91 132	194 318	3 368
336	Transportation equipment mfg	—	187	57	10 683	443 387	8 519	17 696	325 293	1 740 905	3 377 172	5 119 326	144 103
3361	Motor vehicle mfg	—	6	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	5	2	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	4	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	17	5	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	17	5	e	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	10	4	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	5	1	c	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	95	24	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	1	22	5	587	19 093	448	804	10 994	42 297	88 066	144 257	4 856
336312	Gasoline engine & engine parts mfg	1	19	5	565	18 459	431	770	10 512	40 963	87 199	142 064	4 743
33632	Motor vehicle electrical & electronic equipment mfg	3	27	6	589	18 748	418	820	11 134	36 096	38 387	77 121	2 968
336322	Other motor vehicle electrical & electronic equipment mfg	4	25	5	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	1	6	3	158	3 896	116	186	1 948	8 013	11 535	20 049	205
336340	Motor vehicle brake system mfg	1	6	3	158	3 896	116	186	1 948	8 013	11 535	20 049	205
33635	Motor vehicle transmission & power train parts mfg	—	3	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	3	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	28	7	405	13 125	270	469	6 999	48 692	47 360	94 215	3 181
336399	All other motor vehicle parts mfg	4	28	7	405	13 125	270	469	6 999	48 692	47 360	94 215	3 181

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	-	26	11	2 166	86 575	1 318	2 750	41 805	191 540	117 471	311 750	12 711
33641	Aerospace product & parts mfg	-	26	11	2 166	86 575	1 318	2 750	41 805	191 540	117 471	311 750	12 711
336412	Aircraft engine & engine parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	20	7	1 373	50 800	864	1 795	21 994	111 436	31 690	142 752	7 919
3366	Ship & boat building	1	37	12	1 671	45 123	1 435	2 949	36 394	86 929	106 709	192 607	D
33661	Ship & boat building	1	37	12	1 671	45 123	1 435	2 949	36 394	86 929	106 709	192 607	D
336611	Ship building & repairing	2	17	7	864	24 449	753	1 600	20 040	23 658	43 163	66 821	D
336612	Boat building	1	20	5	807	20 674	682	1 349	16 354	63 271	63 546	125 786	D
337	Furniture & related product mfg	3	534	113	8 920	262 569	6 883	13 317	166 415	532 523	477 114	1 008 286	24 055
3371	Household & institutional furniture & kitchen cabinet mfg	3	350	46	3 414	94 583	2 797	5 194	66 102	174 645	146 507	321 015	6 994
33711	Wood kitchen cabinet & counter top mfg	2	186	14	1 286	36 331	1 044	1 888	25 166	62 276	49 319	111 074	3 155
337110	Wood kitchen cabinet & counter top mfg ...	2	186	14	1 286	36 331	1 044	1 888	25 166	62 276	49 319	111 074	3 155
33712	Household & institutional furniture mfg	3	164	32	2 128	58 252	1 753	3 306	40 936	112 369	97 188	209 941	3 839
337121	Upholstered household furniture mfg	2	28	6	458	12 263	382	771	9 619	24 810	21 688	46 446	537
337122	Nonupholstered wood household furniture mfg	4	92	11	775	18 842	658	1 130	14 300	34 276	35 695	70 001	1 876
337127	Institutional furniture mfg	4	34	14	785	23 229	623	1 239	14 007	45 626	31 370	77 381	1 244
3372	Office furniture (including fixtures) mfg	3	143	50	3 743	121 764	2 749	5 313	70 545	231 828	181 733	412 284	10 042
33721	Office furniture (including fixtures) mfg	3	143	50	3 743	121 764	2 749	5 313	70 545	231 828	181 733	412 284	10 042
337211	Wood office furniture mfg	3	19	7	353	9 552	284	582	6 743	14 770	9 610	24 386	1 265
337212	Custom architectural woodwork & millwork mfg	1	34	10	576	23 167	416	822	14 020	46 010	25 574	73 228	1 447
337214	Office furniture (except wood) mfg	1	11	1	279	6 743	211	356	4 470	18 933	19 396	38 504	1 064
337215	Showcase, partition, shelving, & locker mfg	4	79	32	2 535	82 302	1 838	3 553	45 312	152 115	127 153	276 166	6 266
3379	Other furniture related product mfg	1	41	17	1 763	46 222	1 337	2 810	29 768	126 050	148 874	274 987	7 019
33791	Mattress mfg	2	18	10	908	25 715	719	1 522	16 731	87 091	88 001	177 112	5 611
337910	Mattress mfg	2	18	10	908	25 715	719	1 522	16 731	87 091	88 001	177 112	5 611
33792	Blind & shade mfg	-	23	7	855	20 507	618	1 288	13 037	38 959	60 873	97 875	1 408
337920	Blind & shade mfg	-	23	7	855	20 507	618	1 288	13 037	38 959	60 873	97 875	1 408
339	Miscellaneous mfg	1	979	224	26 551	982 265	16 647	31 778	397 209	2 416 259	1 468 865	3 876 955	173 571
3391	Medical equipment & supplies mfg	1	428	88	12 756	582 164	7 052	13 346	196 579	1 430 289	602 573	2 032 289	119 076
33911	Medical equipment & supplies mfg	1	428	88	12 756	582 164	7 052	13 346	196 579	1 430 289	602 573	2 032 289	119 076
339111	Laboratory apparatus & furniture mfg	-	23	10	1 477	50 771	804	1 465	18 314	115 198	52 660	166 172	4 260
339112	Surgical & medical instrument mfg	2	58	27	2 110	85 825	1 269	2 440	33 136	253 490	100 313	350 681	17 931
339113	Surgical appliance & supplies mfg	-	53	26	6 521	369 787	3 160	5 949	104 449	893 085	379 188	1 276 888	87 971
339114	Dental equipment & supplies mfg	-	31	9	783	27 207	469	951	10 273	60 192	27 965	86 910	2 279
339115	Ophthalmic goods mfg	9	21	5	663	13 925	432	888	7 467	34 429	16 347	50 954	4 737
339116	Dental laboratories ...	5	242	11	1 202	34 649	918	1 653	22 940	73 895	26 100	100 684	1 898
3399	Other miscellaneous mfg ..	1	551	136	13 795	400 101	9 595	18 432	200 630	985 970	866 292	1 844 666	54 495
33991	Jewelry & silverware mfg	1	98	22	2 082	64 939	1 418	2 642	31 889	157 776	226 598	384 578	4 488
339911	Jewelry (except costume) mfg	2	62	12	1 594	51 055	1 080	1 946	24 289	121 371	186 490	308 107	3 549
339912	Silverware & plated ware mfg	-	7	4	187	5 533	111	249	3 069	17 136	10 683	27 904	310
339913	Jewelers' material & lapidary work mfg ...	1	12	5	192	5 991	146	309	3 280	14 533	26 643	41 115	475
339914	Costume jewelry & novelty mfg	7	17	1	109	2 360	81	138	1 251	4 736	2 782	7 452	154
33992	Sporting & athletic goods mfg	1	37	10	1 253	30 354	985	1 911	18 230	75 597	69 374	142 840	3 433
339920	Sporting & athletic goods mfg	1	37	10	1 253	30 354	985	1 911	18 230	75 597	69 374	142 840	3 433

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW JERSEY—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33993	Doll, toy, & game mfg ...	-	29	10	1 723	39 089	1 402	2 804	21 422	166 084	109 525	275 236	10 634
339932	Game, toy, & children's vehicle mfg	-	24	9	1 637	37 061	1 360	2 727	20 556	154 662	103 549	256 579	D
33994	Office supplies (except paper) mfg	2	62	20	1 774	52 684	1 107	2 147	27 110	132 579	99 044	229 660	7 215
339941	Pen & mechanical pencil mfg	4	17	5	382	10 900	319	622	7 224	27 545	19 249	46 627	1 564
339942	Lead pencil & art good mfg	2	13	7	634	21 476	371	699	8 834	55 843	34 991	90 707	2 756
339943	Marking device mfg ...	1	23	4	324	8 509	215	422	4 451	21 805	17 082	38 407	1 483
339944	Carbon paper & inked ribbon mfg	-	9	4	434	11 799	202	404	6 601	27 386	27 722	53 919	1 412
33995	Sign mfg	1	193	38	3 944	127 025	2 714	5 183	59 131	260 547	195 904	452 376	10 535
339950	Sign mfg	1	193	38	3 944	127 025	2 714	5 183	59 131	260 547	195 904	452 376	10 535
33999	All other miscellaneous mfg	1	132	36	3 019	86 010	1 969	3 745	42 848	193 387	165 847	359 976	18 190
339991	Gasket, packing, & sealing device mfg ...	2	26	8	914	28 006	526	1 116	14 977	58 210	51 587	109 810	4 838
339993	Fastener, button, needle, & pin mfg ...	1	10	3	178	5 410	147	299	3 717	12 617	7 436	20 042	1 002
339994	Broom, brush, & mop mfg	-	15	6	333	9 191	241	448	5 527	26 076	33 079	58 896	1 454
339999	All other miscellaneous mfg	1	66	19	1 509	41 305	990	1 765	17 259	90 638	71 145	162 779	10 793

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; g-500 to 999 employees; i-1,000 to 2,499 employees, h-2,500 to 4,999 employees; j-5,000 to 9,999 employees; k-10,000 to 24,999 employees; l-25,000 to 49,999 employees; m-50,000 to 99,999 employees; n-100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, NY-NJ-CT-PA CMSA												
	Manufacturing	1	29 610	8 242	837 259	29 316 270	556 831	1 099 707	14 974 104	88 559 145	75 447 144	164 000 119	5 662 912
	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA (CT Part)	1	3 136	1 014	126 073	5 105 182	77 123	159 649	2 450 980	15 589 132	10 842 000	26 362 516	999 073
	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA (NJ Part)	1	9 881	3 185	336 041	12 775 550	224 381	456 137	6 591 608	41 940 178	37 053 679	78 851 460	2 605 396
	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA (NY Part)	2	16 565	4 039	374 810	11 425 439	255 150	483 656	5 928 336	31 004 045	27 448 245	58 649 812	2 055 055
	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA (PA Part)	-	28	4	335	10 099	177	265	3 180	25 790	103 220	136 331	3 388
311	Food mfg	2	2 571	447	i	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	100	32	i	D	D	D	D	D	D	D	D
313	Textile mills	3	922	248	j	D	D	D	D	D	D	D	D
314	Textile product mills	2	809	173	j	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.													
	Manufacturing—Con.													
315	Apparel mfg	3	4 418	1 362	m	D	D	D	D	D	D	D	D	
316	Leather & allied product mfg .	1	230	55	i	D	D	D	D	D	D	D	D	
321	Wood product mfg	4	326	66	h	D	D	D	D	D	D	D	D	
322	Paper mfg	1	490	276	k	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	4	3 936	722	l	D	D	D	D	D	D	D	D	
324	Petroleum & coal products mfg	1	118	27	h	D	D	D	D	D	D	D	D	
325	Chemical mfg	1	1 205	587	l	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	2	1 052	540	l	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	2	617	176	j	D	D	D	D	D	D	D	D	
331	Primary metal mfg	—	286	135	j	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	3 722	960		80 405	2 878 544	58 220	121 941	1 709 920	6 078 011	4 482 749	10 584 180	356 089
333	Machinery mfg	1	1 672	489	k	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	1	1 402	576	l	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	637	297	k	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	450	166	k	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	3	1 452	259	j	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	3 195	649	l	D	D	D	D	D	D	D	D	
	Bergen—Passaic, NJ PMSA													
31-33	Manufacturing	1	2 865	964		94 466	3 461 370	63 710	128 291	1 756 486	9 292 632	7 518 070	16 883 899	563 414
311	Food mfg	1	244	58		6 524	226 083	4 494	9 215	127 736	776 831	970 681	1 746 377	45 199
3115	Dairy product mfg	—	13	4		623	19 580	363	888	12 366	64 888	197 588	261 957	5 044
31151	Dairy product (except frozen) mfg	—	8	4	f	D	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
311513	Cheese mfg	1	7	3	e	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	14	9		859	31 300	726	1 639	18 738	93 856	154 531	248 603	4 715
31161	Animal slaughtering & processing.....	3	14	9		859	31 300	726	1 639	18 738	93 856	154 531	248 603	4 715
311612	Meat processed from carcasses	3	11	7		704	29 017	591	1 373	16 921	80 865	138 120	219 244	4 637
3118	Bakeries & tortilla mfg	1	169	28		3 332	110 246	2 284	4 535	65 790	326 305	223 118	548 577	21 267
31181	Bread & bakery product mfg	2	151	18	g	D	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	111	6		677	9 258	394	544	4 573	20 585	12 613	33 460	899
311812	Commercial bakeries .	1	36	11		1 069	37 878	606	1 250	19 756	139 172	59 457	198 629	5 386
31182	Cookie, cracker, & pasta mfg	—	17	9		1 523	61 588	1 237	2 624	40 374	162 433	145 245	306 433	14 680
311821	Cookie & cracker mfg .	—	8	5		1 061	39 238	942	1 922	31 300	96 198	75 808	170 750	D
311823	Dry pasta mfg	—	4	2	e	D	D	D	D	D	D	D	D	D
3119	Other food mfg	—	24	12		1 168	48 662	699	1 302	20 521	196 739	217 395	412 692	10 441
31194	Seasoning & dressing mfg	—	7	3		251	12 869	109	218	3 969	48 701	20 735	69 635	1 409
31199	All other food mfg	—	12	5		670	27 054	417	730	10 344	85 948	66 544	152 573	5 366
311999	All other miscellaneous food mfg	—	9	4	e	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Bergen—Passaic, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	3	165	58	5 295	189 512	4 007	8 875	113 722	443 596	348 163	786 729	25 418
3132	Fabric mills	2	83	20	1 810	54 458	1 335	2 817	30 042	118 363	81 015	198 285	8 132
31321	Broadwoven fabric mills ..	4	12	4	401	12 132	342	665	7 372	20 599	28 129	48 930	2 658
313210	Broadwoven fabric mills	4	12	4	401	12 132	342	665	7 372	20 599	28 129	48 930	2 658
31322	Narrow fabric mills & schiffli machine embroidery	—	46	6	815	23 197	497	978	9 154	50 065	23 387	72 913	D
313221	Narrow fabric mills	—	4	2	321	13 178	165	319	3 101	23 548	9 275	33 002	D
313222	Schiffli machine embroidery	1	42	4	494	10 019	332	659	6 053	26 517	14 112	39 911	D
31324	Knit fabric mills	3	23	10	f	D	D	D	D	D	D	D	3 033
313241	Weft knit fabric mills ..	1	8	4	e	D	D	D	D	D	D	D	1 763
313249	Other knit fabric & lace mills	4	15	6	285	9 877	256	570	7 148	28 513	19 102	47 235	1 270
3133	Textile & fabric finishing & fabric coating mills	4	77	35	3 304	128 464	2 554	5 816	81 449	312 135	234 955	542 902	16 623
31331	Textile & fabric finishing mills	5	63	27	2 612	104 550	2 021	4 699	66 532	233 828	172 064	405 179	13 045
313311	Broadwoven fabric finishing mills	5	51	20	1 892	78 658	1 443	3 384	52 140	190 528	146 073	336 141	10 659
313312	Textile & fabric finishing mills	6	12	7	720	25 892	578	1 315	14 392	43 300	25 991	69 038	2 386
31332	Fabric coating mills	1	14	8	692	23 914	533	1 117	14 917	78 307	62 891	137 723	3 578
313320	Fabric coating mills ...	1	14	8	692	23 914	533	1 117	14 917	78 307	62 891	137 723	3 578
314	Textile product mills	2	75	23	1 540	35 565	1 273	2 589	22 342	78 146	85 439	163 796	3 835
3141	Textile furnishings mills	—	24	11	796	18 511	649	1 331	10 644	31 083	48 477	79 865	1 974
31412	Curtain & linen mills	—	24	11	796	18 511	649	1 331	10 644	31 083	48 477	79 865	1 974
314121	Curtain & drapery mills	—	15	3	387	8 967	313	675	5 269	17 758	15 885	34 520	D
314129	Other household textile product mills	—	9	8	409	9 544	336	656	5 375	13 325	32 592	45 345	D
3149	Other textile product mills ..	4	51	12	744	17 054	624	1 258	11 698	47 063	36 962	83 931	1 861
31499	All other textile product mills	4	46	12	722	16 647	604	1 233	11 448	46 201	36 479	82 587	1 818
314999	All other miscellaneous textile product mills ..	4	46	12	722	16 647	604	1 233	11 448	46 201	36 479	82 587	1 818
315	Apparel mfg	3	141	58	4 898	94 475	4 042	7 870	64 040	212 242	230 742	443 067	D
3152	Cut & sew apparel mfg	3	101	47	4 244	80 390	3 481	6 874	53 818	184 291	211 710	396 256	D
31521	Cut & sew apparel contractors	4	53	25	1 959	29 692	1 781	3 253	23 713	45 663	6 996	52 709	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	50	23	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	7	7	1	279	5 161	90	215	3 585	9 740	10 663	20 787	D
31523	Women's & girls' cut & sew apparel mfg	2	35	20	1 890	42 888	1 527	3 216	24 753	121 378	187 848	309 018	2 150
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	1	10	5	515	10 078	426	817	6 342	25 342	40 077	67 021	430
315234	Women's & girls' cut & sew suit, coat, skirt mfg	5	11	7	320	9 458	229	457	4 535	59 909	65 214	123 444	633
315239	Women's & girls' cut & sew other outerwear mfg	—	7	5	e	D	D	D	D	D	D	D	418
3159	Apparel accessories & other apparel mfg	4	30	6	449	10 694	372	658	7 313	21 717	17 280	38 825	D
31599	Apparel accessories & other apparel mfg	4	30	6	449	10 694	372	658	7 313	21 717	17 280	38 825	D
315999	Other apparel accessories & other apparel mfg	5	26	5	316	7 644	258	452	4 753	17 192	12 890	29 845	D
316	Leather & allied product mfg .	—	18	10	1 592	38 494	1 163	2 461	22 202	89 962	112 181	199 279	4 368
3162	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	2	f	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	2	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	12	6	1 040	20 232	685	1 482	12 654	48 343	49 794	96 592	D
31699	Other leather & allied product mfg	—	12	6	1 040	20 232	685	1 482	12 654	48 343	49 794	96 592	D
316991	Luggage mfg	—	6	3	417	10 629	298	694	5 562	22 193	29 719	50 133	D
316992	Women's handbag & purse mfg	—	3	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Bergen—Passaic, NJ PMSA—Con. Manufacturing—Con.												
321	Wood product mfg	2	27	4	304	12 003	238	480	5 173	30 060	40 486	69 830	D
3219	Other wood product mfg . . .	1	24	4	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	72	43	5 240	203 145	3 936	8 048	122 663	524 842	506 128	1 026 689	41 996
3221	Pulp, paper, & paperboard mills	—	4	4	1 037	52 666	678	1 534	29 644	219 741	163 659	379 528	21 153
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	68	39	4 203	150 479	3 258	6 514	93 019	305 101	342 469	647 161	20 843
32221	Paperboard container mfg	2	32	17	2 267	79 596	1 732	3 287	51 679	162 725	168 558	331 787	14 178
322211	Corrugated & solid fiber box mfg	2	15	7	1 181	41 014	870	1 582	24 108	75 826	96 820	172 554	6 300
322212	Folding paperboard box mfg	2	13	8	1 002	35 915	793	1 569	25 463	80 876	64 956	146 377	7 648
32222	Paper bag & coated & treated paper mfg	—	19	11	967	38 407	726	1 586	19 845	84 939	105 173	188 880	4 537
322222	Coated & laminated paper mfg	—	10	4	e	D	D	D	D	D	D	D	2 046
322224	Uncoated paper & multiwall bag mfg	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	13	9	865	30 170	713	1 512	19 853	51 909	62 063	114 185	1 542
322232	Envelope mfg	—	3	3	488	16 839	412	851	12 666	35 822	46 664	82 716	878
323	Printing & related support activities	3	420	88	7 985	295 255	5 827	11 623	184 828	603 809	351 691	953 893	47 655
3231	Printing & related support activities	3	420	88	7 985	295 255	5 827	11 623	184 828	603 809	351 691	953 893	47 655
32311	Printing	2	338	62	5 516	204 657	3 865	7 528	120 449	423 529	309 342	731 906	39 915
323110	Commercial lithographic printing	3	177	32	2 761	122 796	1 812	3 583	70 385	243 722	201 869	444 788	21 139
323113	Commercial screen printing	—	37	11	1 062	22 983	824	1 631	14 227	44 822	26 084	71 064	1 878
323114	Quick printing	1	59	5	656	22 511	440	723	12 237	45 537	16 375	61 941	10 828
323119	Other commercial printing	5	32	6	471	14 209	347	678	8 242	29 832	18 373	48 386	2 316
32312	Support activities for printing	5	82	26	2 469	90 598	1 962	4 095	64 379	180 280	42 349	221 987	7 740
323121	Tradebinding & related work	2	25	13	1 017	24 269	912	1 901	18 696	49 647	6 872	56 140	2 275
323122	Prepress services	6	57	13	1 452	66 329	1 050	2 194	45 683	130 633	35 477	165 847	5 465
325	Chemical mfg	1	202	111	10 109	410 196	5 938	12 199	188 337	2 243 081	1 535 976	3 789 690	119 966
3251	Basic chemical mfg	1	29	19	1 627	79 973	968	1 984	38 067	260 860	307 186	574 217	19 085
32513	Dye & pigment mfg	—	9	5	423	16 849	273	537	9 986	75 530	87 645	162 943	5 704
325132	Synthetic organic dye & pigment mfg	—	8	5	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	2	15	10	994	53 368	552	1 146	22 539	173 310	199 795	374 774	11 324
325199	All other basic organic chemical mfg	2	13	9	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	33	15	1 734	76 977	1 034	2 115	37 176	869 481	377 524	1 241 009	27 153
32541	Pharmaceutical & medicine mfg	—	33	15	1 734	76 977	1 034	2 115	37 176	869 481	377 524	1 241 009	27 153
325411	Medicinal & botanical mfg	2	9	3	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	22	10	1 167	50 829	701	1 428	23 822	825 852	326 797	1 147 679	19 621
3255	Paint, coating, & adhesive mfg	2	37	14	f	D	D	D	D	D	D	D	9 499
32551	Paint & coating mfg	5	20	7	e	D	D	D	D	D	D	D	1 488
325510	Paint & coating mfg	5	20	7	e	D	D	D	D	D	D	D	1 488
32552	Adhesive mfg	—	17	7	516	21 361	257	522	8 778	81 380	72 861	154 664	8 011
325520	Adhesive mfg	—	17	7	516	21 361	257	522	8 778	81 380	72 861	154 664	8 011
3256	Soap, cleaning compound, & toilet preparation mfg	2	64	41	4 429	164 990	2 677	5 486	73 510	833 378	542 117	1 378 145	56 398
32561	Soap & cleaning compound mfg	3	27	15	1 319	58 272	815	1 990	28 722	307 898	260 394	568 974	22 055
325611	Soap & other detergent mfg	—	12	7	676	30 157	445	1 196	15 742	201 648	127 340	326 217	7 233
325612	Polish & other sanitation good mfg	8	7	4	292	8 433	188	401	3 974	35 199	19 957	57 037	969
325613	Surface active agent mfg	5	8	4	351	19 682	182	393	9 006	71 051	113 097	185 720	13 853
32562	Toilet preparation mfg	1	37	26	3 110	106 718	1 862	3 496	44 788	525 480	281 723	809 171	34 343
325620	Toilet preparation mfg	1	37	26	3 110	106 718	1 862	3 496	44 788	525 480	281 723	809 171	34 343

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Bergen—Passaic, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg.....	2	37	22	1 470	54 288	819	1 754	25 449	166 090	193 732	366 686	D
32591	Printing ink mfg.....	—	15	11	477	20 328	213	469	8 370	64 751	56 633	122 765	D
325910	Printing ink mfg.....	—	15	11	477	20 328	213	469	8 370	64 751	56 633	122 765	D
32599	All other chemical product & preparation mfg.....	4	22	11	993	33 960	606	1 285	17 079	101 339	137 099	243 921	5 921
325991	Custom compounding of purchased resin...	7	9	4	512	15 781	381	866	9 846	41 185	76 970	124 911	3 328
325998	All other miscellaneous chemical product & preparation mfg.....	—	10	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	3	132	78	6 903	204 432	4 974	9 899	121 272	522 704	564 137	1 086 623	36 356
3261	Plastics product mfg.....	3	115	68	6 219	181 224	4 472	8 859	107 578	475 174	525 733	1 000 838	34 145
32611	Unsupported plastics film, sheet, & bag mfg..	4	35	21	2 006	57 676	1 321	2 700	34 314	138 360	216 508	352 818	7 685
326111	Unsupported plastics bag mfg.....	—	8	6	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg.....	7	4	3	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg.....	4	23	12	1 325	36 281	803	1 589	20 735	80 167	133 959	211 977	4 953
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	5	10	6	360	10 003	251	503	5 973	20 620	18 089	38 879	1 530
326121	Unsupported plastics profile shape mfg.....	4	8	4	e	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg.....	3	9	5	510	26 389	427	818	17 634	39 521	46 574	86 687	5 174
326150	Urethane & other foam product (except polystyrene) mfg.....	3	9	5	510	26 389	427	818	17 634	39 521	46 574	86 687	5 174
32619	Other plastics product mfg.....	2	53	35	3 210	83 844	2 366	4 660	47 259	267 054	233 340	501 653	18 137
326199	All other plastics product mfg.....	2	52	34	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	2	17	10	684	23 208	502	1 040	13 694	47 530	38 404	85 785	2 211
32629	Other rubber product mfg.....	2	13	8	554	19 090	453	958	12 488	43 166	32 171	75 236	D
326299	All other rubber product mfg.....	2	9	6	452	15 956	368	775	10 143	38 165	28 750	66 808	1 895
327	Nonmetallic mineral product mfg.....	1	52	19	1 031	35 022	690	1 385	20 800	79 723	64 351	145 102	D
3272	Glass & glass product mfg.....	3	16	4	256	6 911	185	349	4 899	16 330	11 418	27 577	D
32721	Glass & glass product mfg.....	3	16	4	256	6 911	185	349	4 899	16 330	11 418	27 577	D
3273	Cement & concrete product mfg.....	—	18	8	320	12 445	177	369	5 586	26 187	23 895	50 314	D
3279	Other nonmetallic mineral product mfg.....	1	12	4	285	10 252	216	446	6 821	27 600	24 691	52 929	D
331	Primary metal mfg.....	2	24	12	1 067	35 949	803	1 725	21 637	91 951	97 578	187 640	6 377
3312	Steel product mfg from purchased steel.....	—	7	3	479	16 715	386	863	10 613	33 661	43 882	75 559	D
33122	Rolling & drawing of purchased steel.....	—	5	2	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing.....	—	4	2	e	D	D	D	D	D	D	D	D
3315	Foundries.....	—	7	5	326	9 045	249	487	5 473	28 184	8 548	36 488	618
33152	Nonferrous metal foundries.....	—	6	5	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Bergen—Passaic, NJ PMSA—Con. Manufacturing—Con.												
332	Fabricated metal product mfg	1	415	121	8 706	306 327	6 205	12 591	176 121	580 836	509 009	1 114 153	32 227
3321	Forging & stamping	1	24	9	458	18 820	326	676	10 628	41 298	21 829	63 559	976
33211	Forging & stamping	1	24	9	458	18 820	326	676	10 628	41 298	21 829	63 559	976
332116	Metal stamping	2	22	8	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	7	14	7	867	22 249	662	1 307	14 194	58 252	36 920	94 116	2 552
33221	Cutlery & handtool mfg	7	14	7	867	22 249	662	1 307	14 194	58 252	36 920	94 116	2 552
332212	Hand & edge tool mfg	8	11	4	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	86	27	1 727	58 192	1 221	2 344	33 347	117 435	107 430	224 541	4 423
33232	Ornamental & architectural metal products mfg	1	70	23	1 519	49 868	1 076	2 036	28 106	96 031	86 291	181 876	3 822
332321	Metal window & door mfg	1	20	11	770	22 182	547	992	11 936	41 643	34 573	76 275	402
332322	Sheet metal work mfg	1	38	12	679	25 517	484	951	14 792	49 985	49 074	98 560	3 251
3324	Boiler, tank, & shipping container mfg	2	11	5	319	12 523	219	477	6 839	25 983	27 558	53 103	922
3326	Spring & wire product mfg	1	21	9	558	15 926	434	801	8 708	27 667	22 404	50 537	1 413
33261	Spring & wire product mfg	1	21	9	558	15 926	434	801	8 708	27 667	22 404	50 537	1 413
332618	Other fabricated wire product mfg	1	20	9	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	175	32	2 476	100 236	1 745	3 666	57 943	160 827	176 204	357 876	13 567
33271	Machine shops	1	147	23	1 869	78 875	1 279	2 730	44 150	122 998	158 443	302 365	10 995
332710	Machine shops	1	147	23	1 869	78 875	1 279	2 730	44 150	122 998	158 443	302 365	10 995
33272	Turned product & screw, nut, & bolt mfg	3	28	9	607	21 361	466	936	13 793	37 829	17 761	55 511	2 572
332721	Precision turned product mfg	3	19	5	420	15 401	337	704	10 430	27 537	10 732	38 097	1 347
3328	Coating, engraving, heat treating, & allied activities	—	46	20	837	24 014	672	1 277	15 273	45 199	16 911	62 098	2 187
33281	Coating, engraving, heat treating, & allied activities	—	46	20	837	24 014	672	1 277	15 273	45 199	16 911	62 098	2 187
332813	Electroplating, plating, polishing, anodizing, & coloring	1	27	13	455	11 835	364	652	7 631	21 253	9 880	31 191	1 362
3329	Other fabricated metal product mfg	—	35	11	1 430	53 427	901	1 997	28 534	102 724	97 549	204 564	6 120
33291	Metal valve mfg	—	8	4	554	19 789	300	640	8 469	22 868	26 058	49 176	1 549
332911	Industrial valve mfg	—	4	2	300	11 607	147	304	4 532	8 705	8 883	17 442	D
33299	All other fabricated metal product mfg	—	27	7	876	33 638	601	1 357	20 065	79 856	71 491	155 388	4 571
332999	All other miscellaneous fabricated metal product mfg	—	23	5	f	D	D	D	D	D	D	D	4 016
333	Machinery mfg	2	246	81	5 362	216 835	3 127	6 378	101 148	449 444	362 856	813 039	24 827
3332	Industrial machinery mfg	1	64	27	1 608	67 193	924	1 816	32 964	126 552	117 718	247 034	8 038
33329	Other industrial machinery mfg	1	57	26	1 534	64 417	883	1 721	31 609	122 402	112 047	237 325	7 964
333293	Printing machinery & equipment mfg	—	9	5	346	15 854	154	287	7 185	35 940	36 462	72 367	1 925
333298	All other industrial machinery mfg	—	25	14	784	32 550	475	958	15 207	61 161	47 376	108 385	4 790
3333	Commercial & service industry machinery mfg	3	37	16	993	36 861	493	1 036	13 731	101 302	71 030	165 048	5 264
33331	Commercial & service industry machinery mfg	3	37	16	993	36 861	493	1 036	13 731	101 302	71 030	165 048	5 264
333314	Optical instrument & lens mfg	2	7	4	278	9 016	117	267	3 819	30 063	18 252	44 927	1 800
333319	Other commercial & service industry machinery mfg	—	16	6	263	11 614	107	200	3 132	30 403	21 774	48 614	816
3335	Metalworking machinery mfg	3	54	9	735	32 869	529	1 118	20 237	76 312	33 115	109 133	6 385
33351	Metalworking machinery mfg	3	54	9	735	32 869	529	1 118	20 237	76 312	33 115	109 133	6 385
333515	Cutting tool & machine tool accessory mfg	1	15	4	250	10 532	188	407	7 226	36 282	9 360	45 677	4 309

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	Bergen—Passaic, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	77	25	1 641	65 261	924	1 901	27 798	111 688	112 970	230 129	3 523
33391	Pump & compressor mfg	—	4	2	302	13 013	178	412	5 579	23 590	35 053	62 099	986
33392	Material handling equipment mfg	2	18	4	278	11 971	176	388	5 932	19 965	30 483	49 672	551
33399	All other general-purpose machinery mfg	1	55	19	1 061	40 277	570	1 101	16 287	68 133	47 434	118 358	1 986
333993	Packaging machinery mfg	1	18	11	584	21 486	302	617	8 739	35 249	26 088	63 038	985
333999	All other miscellaneous general-purpose machinery mfg	1	25	6	284	10 257	163	279	4 051	17 765	11 231	30 277	660
334	Computer & electronic product mfg	—	142	68	11 602	555 560	5 940	11 277	196 887	1 065 916	770 446	1 896 740	75 323
3342	Communications equipment mfg	1	24	11	1 211	68 382	702	1 546	38 286	109 651	139 933	286 672	35 923
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	16	8	874	53 622	539	1 202	33 651	59 037	65 040	161 409	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	16	8	874	53 622	539	1 202	33 651	59 037	65 040	161 409	D
3343	Audio & video equipment mfg	9	5	2	433	12 173	301	653	6 757	11 638	31 352	42 895	987
33431	Audio & video equipment mfg	9	5	2	433	12 173	301	653	6 757	11 638	31 352	42 895	987
334310	Audio & video equipment mfg	9	5	2	433	12 173	301	653	6 757	11 638	31 352	42 895	987
3344	Semiconductor & other electronic component mfg	—	43	24	2 728	86 637	2 000	3 857	44 817	214 357	166 522	381 704	7 450
33441	Semiconductor & other electronic component mfg	—	43	24	2 728	86 637	2 000	3 857	44 817	214 357	166 522	381 704	7 450
334411	Electron tube mfg	1	6	4	409	10 716	270	404	5 585	17 301	18 033	36 701	389
334413	Semiconductor & related device mfg ...	1	11	5	474	14 581	299	572	6 641	35 668	18 530	53 457	3 239
334416	Electronic coil, transformer, & other inductor mfg	1	3	2	265	7 615	219	442	3 623	17 424	1 753	19 064	D
334419	Other electronic component mfg	—	12	8	1 295	46 257	985	2 006	24 531	130 573	119 883	250 069	2 772
3345	Navigational, measuring, medical, & control instruments mfg	—	54	27	7 028	381 246	2 836	4 910	104 171	716 257	422 760	1 161 533	30 106
33451	Navigational, measuring, medical, & control instruments mfg	—	54	27	7 028	381 246	2 836	4 910	104 171	716 257	422 760	1 161 533	30 106
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	5 158	293 243	2 173	3 567	84 932	534 475	207 846	756 397	18 153
334516	Analytical laboratory instrument mfg	—	6	4	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	7	3	273	10 295	173	347	4 271	19 597	11 877	31 893	732
335	Electrical equipment, appliance, & component mfg	1	72	31	3 125	90 777	2 219	4 695	53 079	246 302	173 491	420 723	8 949
3351	Electric lighting equipment mfg	—	25	12	1 207	35 623	873	1 850	21 446	126 929	63 538	191 702	D
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	24	11	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	—	8	3	297	5 860	216	423	4 107	9 104	10 964	19 276	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	10	5	500	16 749	352	815	9 703	60 430	25 717	85 507	781

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Bergen—Passaic, NJ PMSA—Con. Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	2	22	6	464	16 065	267	616	6 768	31 435	19 366	50 720	936
33531	Electrical equipment mfg	2	22	6	464	16 065	267	616	6 768	31 435	19 366	50 720	936
335314	Relay & industrial control mfg	1	9	2	292	11 347	148	389	4 525	23 759	11 788	35 586	394
3359	Other electrical equipment & component mfg	2	22	13	1 445	38 796	1 072	2 215	24 693	87 651	89 588	176 991	6 109
33591	Battery mfg	4	3	3	663	15 347	480	990	9 546	38 723	39 635	78 499	3 358
335911	Storage battery mfg ...	7	2	2	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	4	4	370	12 060	240	519	7 088	26 337	33 228	58 569	1 992
335929	Other communication & energy wire mfg ...	—	4	4	370	12 060	240	519	7 088	26 337	33 228	58 569	1 992
33593	Wiring device mfg	1	10	5	353	9 264	321	651	7 258	18 522	13 933	33 054	645
335931	Current-carrying wiring device mfg	2	9	4	e	D	D	D	D	D	D	D	645
336	Transportation equipment mfg	2	38	14	g	D	D	D	D	D	D	D	11 982
3363	Motor vehicle parts mfg ...	2	23	9	987	32 411	775	1 671	21 330	61 620	68 702	132 634	D
33632	Motor vehicle electrical & electronic equipment mfg	1	7	3	e	D	D	D	D	D	D	D	1 811
336322	Other motor vehicle electrical & electronic equipment mfg	1	7	3	e	D	D	D	D	D	D	D	1 811
33635	Motor vehicle transmission & power train parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	1	8	3	643	15 190	537	1 139	9 372	32 725	11 329	43 809	4 227
33641	Aerospace product & parts mfg	1	8	3	643	15 190	537	1 139	9 372	32 725	11 329	43 809	4 227
336413	Other aircraft part & auxiliary equipment mfg	1	7	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	131	20	1 561	43 818	1 238	2 226	29 274	91 749	83 323	173 414	4 944
3371	Household & institutional furniture & kitchen cabinet mfg	1	91	13	994	28 881	792	1 388	20 263	55 503	53 616	109 006	2 040
33711	Wood kitchen cabinet & counter top mfg	1	44	5	287	8 846	233	451	5 011	15 434	13 218	28 754	494
337110	Wood kitchen cabinet & counter top mfg ...	1	44	5	287	8 846	233	451	5 011	15 434	13 218	28 754	494
33712	Household & institutional furniture mfg	1	47	8	707	20 035	559	937	15 252	40 069	40 398	80 252	1 546
337122	Nonupholstered wood household furniture mfg	2	25	2	261	5 991	206	232	4 523	10 875	15 395	26 209	790
3372	Office furniture (including fixtures) mfg	2	30	4	317	8 748	261	482	5 800	16 749	11 409	28 022	960
33721	Office furniture (including fixtures) mfg	2	30	4	317	8 748	261	482	5 800	16 749	11 409	28 022	960
3379	Other furniture related product mfg	6	10	3	250	6 189	185	356	3 211	19 497	18 298	36 386	1 944
339	Miscellaneous mfg	1	233	64	9 629	402 513	6 079	11 478	145 780	997 405	516 104	1 504 518	57 830
3391	Medical equipment & supplies mfg	—	100	21	4 771	270 440	2 436	4 522	79 006	668 902	239 019	903 900	39 532
33911	Medical equipment & supplies mfg	—	100	21	4 771	270 440	2 436	4 522	79 006	668 902	239 019	903 900	39 532
339112	Surgical & medical instrument mfg	6	11	5	360	15 504	232	498	7 607	36 139	27 862	61 741	D
339113	Surgical appliance & supplies mfg	—	19	11	3 760	230 940	1 872	3 401	63 148	584 232	187 124	770 171	35 863
339114	Dental equipment & supplies mfg	—	4	3	318	13 159	103	198	2 199	26 072	14 701	39 858	1 036

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	Bergen—Passaic, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ..	1	133	43	4 858	132 073	3 643	6 956	66 774	328 503	277 085	600 618	18 298
33991	Jewelry & silverware mfg ..	—	20	6	655	19 524	445	597	6 827	39 057	66 915	107 119	1 608
339911	Jewelry (except costume) mfg ..	—	10	3	490	15 527	329	355	4 439	27 637	53 780	83 180	D
33992	Sporting & athletic goods mfg ..	1	9	3	402	9 770	319	663	6 050	22 502	11 368	32 580	229
339920	Sporting & athletic goods mfg ..	1	9	3	402	9 770	319	663	6 050	22 502	11 368	32 580	229
33993	Doll, toy, & game mfg ...	1	11	4	1 059	18 088	976	2 046	14 128	92 134	76 796	164 579	9 196
339932	Game, toy, & children's vehicle mfg ..	1	10	4	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg ..	7	15	6	286	9 005	214	400	5 423	21 736	15 024	36 771	1 398
33995	Sign mfg ..	1	43	11	1 559	45 455	1 098	2 141	22 404	96 441	64 117	159 398	3 763
339950	Sign mfg ..	1	43	11	1 559	45 455	1 098	2 141	22 404	96 441	64 117	159 398	3 763
33999	All other miscellaneous mfg ..	—	35	13	897	30 231	591	1 109	11 942	56 633	42 865	100 171	2 104
339999	All other miscellaneous mfg ..	—	14	7	567	18 786	365	641	6 292	31 479	27 045	59 230	1 362
	Jersey City, NJ PMSA												
31-33	Manufacturing	2	979	283	26 470	787 822	18 236	35 676	420 484	2 063 415	2 114 340	4 220 836	94 019
311	Food mfg ..	5	104	24	2 108	62 364	1 482	2 601	36 898	317 780	335 924	655 593	13 737
3118	Bakeries & tortilla mfg ..	—	71	12	1 213	32 751	864	1 380	20 436	115 760	74 490	190 086	5 490
31181	Bread & bakery product mfg ..	1	67	10	f	D	D	D	D	D	D	D	D
311811	Retail bakeries ..	2	48	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	19	7	445	11 270	299	459	5 766	32 928	25 523	58 140	763
31182	Cookie, cracker, & pasta mfg ..	—	4	2	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg ..	6	13	8	485	16 400	316	602	8 036	152 342	148 744	304 464	3 996
31194	Seasoning & dressing mfg ..	7	5	4	e	D	D	D	D	D	D	D	3 214
313	Textile mills ..	6	114	23	1 489	36 324	1 175	2 288	25 158	86 247	56 610	143 625	4 495
3132	Fabric mills ..	6	85	13	997	24 256	802	1 607	17 387	60 169	36 834	97 405	2 887
31322	Narrow fabric mills & schiffli machine embroidery ..	2	71	9	653	14 626	544	1 100	10 698	34 365	17 778	52 203	1 180
313222	Schiffli machine embroidery ..	2	65	7	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills ..	9	10	4	322	9 196	237	478	6 354	25 089	18 108	43 556	D
3133	Textile & fabric finishing & fabric coating mills ..	8	24	8	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills ..	8	22	8	380	9 381	287	521	6 152	22 036	11 384	33 871	D
314	Textile product mills ..	1	77	15	1 204	22 366	877	1 620	11 968	103 595	64 911	167 472	1 396
3141	Textile furnishings mills ..	—	11	4	449	6 534	322	611	2 994	52 701	37 468	89 001	505
31412	Curtain & linen mills ..	—	10	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills ..	—	9	3	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	1	66	11	755	15 832	555	1 009	8 974	50 894	27 443	78 471	891
31499	All other textile product mills ..	2	60	9	609	12 666	433	775	7 167	44 521	15 481	60 097	843
314999	All other miscellaneous textile product mills ..	2	60	9	609	12 666	433	775	7 167	44 521	15 481	60 097	843

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	Jersey City, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	1	257	89	9 413	258 315	5 873	11 212	111 756	473 450	519 120	1 034 936	8 416
3151	Apparel knitting mills	1	27	11	828	14 950	701	1 317	11 216	43 457	55 195	98 307	1 043
31519	Other apparel knitting mills	1	26	11	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	1	25	11	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	211	71	8 210	236 557	4 882	9 370	96 005	413 124	453 970	909 934	7 013
31521	Cut & sew apparel contractors	4	134	42	3 133	44 460	2 568	4 668	33 340	76 818	16 785	93 318	2 005
315212	Women's, girls', & infants' cut & sew apparel contractors	3	129	42	3 085	44 026	2 523	4 619	32 982	75 928	16 654	92 297	1 970
31523	Women's & girls' cut & sew apparel mfg	—	57	25	4 850	188 744	2 138	4 387	60 245	330 730	431 517	805 368	4 823
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	14	3	649	16 001	348	704	5 362	48 299	81 122	174 310	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	15	9	415	12 036	306	542	5 239	24 848	42 311	65 990	D
315239	Women's & girls' cut & sew other outerwear mfg	—	12	8	3 503	149 122	1 305	2 755	45 600	217 658	216 265	435 711	3 780
3159	Apparel accessories & other apparel mfg	1	19	7	375	6 808	290	525	4 535	16 869	9 955	26 695	360
31599	Apparel accessories & other apparel mfg	1	19	7	375	6 808	290	525	4 535	16 869	9 955	26 695	360
316	Leather & allied product mfg	8	10	2	552	11 111	464	993	7 603	33 588	28 673	61 256	D
3162	Footwear mfg	8	2	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	8	2	2	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	9	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	21	17	1 402	46 977	1 055	2 198	30 277	90 493	88 142	178 053	3 654
3222	Converted paper product mfg	2	18	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	10	7	712	25 869	519	1 079	16 738	52 861	44 439	96 636	D
322211	Corrugated & solid fiber box mfg	1	7	4	357	12 827	236	481	8 097	24 429	29 264	53 738	723
322212	Folding paperboard box mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	70	17	2 187	88 818	1 703	3 512	58 331	205 899	118 674	324 643	12 941
3231	Printing & related support activities	3	70	17	2 187	88 818	1 703	3 512	58 331	205 899	118 674	324 643	12 941
32311	Printing	3	61	10	1 727	72 437	1 375	2 813	47 742	174 306	111 989	286 337	11 624
323110	Commercial lithographic printing	3	28	7	1 371	62 590	1 096	2 344	42 068	143 984	94 145	237 949	10 570
32312	Support activities for printing	5	9	7	460	16 381	328	699	10 589	31 593	6 685	38 306	1 317
323121	Tradebinding & related work	9	3	3	250	7 473	210	465	5 889	13 513	2 928	16 472	D
325	Chemical mfg	2	47	26	2 061	76 941	1 147	2 474	34 078	307 595	352 490	658 824	14 962
3251	Basic chemical mfg	—	7	6	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	4	4	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	4	4	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	4	9	3	e	D	D	D	D	D	D	D	2 533
3256	Soap, cleaning compound, & toilet preparation mfg	5	16	8	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	2	11	6	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	1	7	5	332	12 566	195	433	5 541	25 893	99 532	126 612	D
3259	Other chemical product mfg	—	10	4	344	15 804	221	502	8 115	96 611	60 150	157 756	D
32599	All other chemical product & preparation mfg	—	10	4	344	15 804	221	502	8 115	96 611	60 150	157 756	D
325998	All other miscellaneous chemical product & preparation mfg	—	8	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Jersey City, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	29	10	891	23 952	735	1 677	17 746	43 897	61 947	105 771	5 079
3261	Plastics product mfg	2	23	10	f	D	D	D	D	D	D	D	5 005
32619	Other plastics product mfg	3	13	5	571	14 618	466	1 181	10 905	19 857	30 725	50 531	D
326199	All other plastics product mfg	3	13	5	571	14 618	466	1 181	10 905	19 857	30 725	50 531	D
331	Primary metal mfg	-	17	10	1 152	45 223	749	1 651	21 503	130 917	211 226	345 357	15 209
3314	Nonferrous metal (except aluminum) production & processing	-	10	6	812	33 504	500	1 132	15 106	93 568	181 542	278 215	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	2	2	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	7	3	290	11 805	219	444	7 016	36 242	82 520	121 130	D
332	Fabricated metal product mfg	1	60	13	1 007	26 377	799	1 343	17 564	51 726	43 258	94 594	2 122
3323	Architectural & structural metals mfg	-	20	5	303	9 303	219	469	6 216	18 711	26 227	44 520	511
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	14	3	293	6 602	254	270	4 437	13 625	3 663	17 335	700
33271	Machine shops	1	14	3	293	6 602	254	270	4 437	13 625	3 663	17 335	700
332710	Machine shops	1	14	3	293	6 602	254	270	4 437	13 625	3 663	17 335	700
333	Machinery mfg	4	28	6	385	13 088	278	535	7 135	29 115	18 319	48 570	1 337
335	Electrical equipment, appliance, & component mfg	2	8	4	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	29	7	399	9 387	309	630	5 986	20 725	16 097	37 213	926
339	Miscellaneous mfg	3	60	10	1 068	30 146	741	1 336	14 005	76 007	100 879	174 391	5 401
3399	Other miscellaneous mfg ..	3	37	9	969	27 676	667	1 231	12 800	70 062	97 940	165 423	5 206
33995	Sign mfg	-	7	2	e	D	D	D	D	D	D	D	D
339950	Sign mfg	-	7	2	e	D	D	D	D	D	D	D	D
	Middlesex—Somerset—Hunterdon, NJ PMSA												
31-33	Manufacturing	1	1 528	567	71 336	3 002 108	46 041	94 339	1 519 504	9 992 589	9 897 953	19 940 813	829 834
311	Food mfg	-	110	33	4 530	162 711	3 343	6 821	106 991	749 078	647 667	1 400 497	55 301
3113	Sugar & confectionery product mfg	-	7	2	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	4	2	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	5	3	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	4	2	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	3	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	7	4	736	25 827	570	1 167	17 827	158 005	226 288	383 258	9 252
31151	Dairy product (except frozen) mfg	-	5	3	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	2	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	2	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	2	5	2	296	14 099	145	322	5 841	34 844	20 695	55 477	D
31161	Animal slaughtering & processing	2	5	2	296	14 099	145	322	5 841	34 844	20 695	55 477	D
311612	Meat processed from carcasses	1	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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	Middlesex—Somerset—Hunterdon, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	—	66	10	1 366	38 084	1 095	2 172	29 896	227 011	85 039	316 610	1 140
31181	Bread & bakery product mfg	5	63	8	f	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	48	5	e	D	D	D	D	D	D	D	500
31182	Cookie, cracker, & pasta mfg	—	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	16	9	1 142	44 977	824	1 735	29 664	235 954	154 876	390 804	15 524
31199	All other food mfg	—	5	2	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	5	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	7	3	785	32 560	331	739	12 499	221 897	179 323	402 056	D
3121	Beverage mfg	—	7	3	785	32 560	331	739	12 499	221 897	179 323	402 056	D
31211	Soft drink & ice mfg	—	4	3	774	32 268	326	731	12 362	221 033	178 840	400 715	D
312111	Soft drink mfg	—	3	2	f	D	D	D	D	D	D	D	D
313	Textile mills	1	15	5	e	D	D	D	D	D	D	D	989
314	Textile product mills	3	24	5	355	8 209	240	426	4 852	21 027	20 546	41 856	D
315	Apparel mfg	1	24	10	1 904	49 197	1 467	3 224	25 859	97 056	113 920	203 950	5 626
3152	Cut & sew apparel mfg	2	13	7	1 795	46 796	1 400	3 099	24 354	89 155	108 713	190 877	D
31522	Men's & boys' cut & sew apparel mfg	2	4	3	1 363	31 500	1 064	2 456	19 648	68 367	74 635	138 129	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	2	2	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	2	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	8	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	22	6	450	14 428	309	616	9 199	38 524	23 841	62 559	1 328
3219	Other wood product mfg	2	19	4	e	D	D	D	D	D	D	D	D
32191	Millwork	2	11	2	258	8 473	153	293	4 921	27 580	12 111	39 653	D
322	Paper mfg	1	43	31	3 386	129 211	2 585	5 419	85 649	307 211	380 284	692 594	24 762
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	42	30	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	22	18	1 518	54 456	1 159	2 474	34 416	120 517	169 442	292 746	7 958
322211	Corrugated & solid fiber box mfg	2	15	12	913	33 238	679	1 401	18 293	66 646	117 448	184 390	5 180
322212	Folding paperboard box mfg	1	4	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	11	7	857	33 828	567	1 196	18 576	82 326	118 967	203 658	D
322222	Coated & laminated paper mfg	—	8	5	706	27 984	463	975	14 925	68 415	99 955	171 121	3 222
32229	Other converted paper product mfg	1	7	5	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	1	4	3	301	7 556	256	413	5 591	19 855	35 204	55 817	D
323	Printing & related support activities	4	207	28	3 538	156 905	2 456	4 902	108 038	347 239	229 084	574 088	19 179
3231	Printing & related support activities	4	207	28	3 538	156 905	2 456	4 902	108 038	347 239	229 084	574 088	19 179
32311	Printing	4	177	26	3 327	150 856	2 280	4 578	103 840	334 694	225 649	558 235	18 312
323110	Commercial												
323114	lithographic printing	5	78	19	2 608	132 011	1 786	3 674	91 929	284 477	190 736	473 946	15 957
323114	Quick printing	1	52	1	266	6 605	174	313	4 589	21 327	15 922	36 648	754

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Middlesex—Somerset—Hunterdon, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	2	17	7	901	54 481	570	1 329	30 584	272 251	1 212 780	1 500 967	11 967
3241	Petroleum & coal products mfg	2	17	7	901	54 481	570	1 329	30 584	272 251	1 212 780	1 500 967	11 967
32412	Asphalt paving, roofing, & saturated materials mfg	—	10	3	415	22 432	244	517	10 619	63 977	78 541	144 306	D
324121	Asphalt paving mixture & block mfg	—	8	1	e	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	7	5	2	e	D	D	D	D	D	D	D	2 992
324191	Petroleum lubricating oil & grease mfg	7	5	2	e	D	D	D	D	D	D	D	2 992
325	Chemical mfg	1	174	114	18 477	989 161	8 617	17 177	338 548	4 540 315	3 061 599	7 619 055	305 611
3251	Basic chemical mfg	—	35	23	2 201	112 947	1 390	3 000	64 134	444 887	378 578	821 122	62 523
32518	Other basic inorganic chemical mfg	—	11	6	486	23 894	314	708	13 722	123 235	66 303	187 515	14 918
325188	All other basic inorganic chemical mfg	—	11	6	486	23 894	314	708	13 722	123 235	66 303	187 515	14 918
32519	Other basic organic chemical mfg	—	17	14	1 581	83 238	993	2 174	47 679	295 191	298 768	594 373	46 364
325199	All other basic organic chemical mfg	—	16	14	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	5	5	434	21 221	232	525	10 720	72 190	202 304	266 956	11 681
32521	Resin & synthetic rubber mfg	—	5	5	434	21 221	232	525	10 720	72 190	202 304	266 956	11 681
325211	Plastics material & resin mfg	—	5	5	434	21 221	232	525	10 720	72 190	202 304	266 956	11 681
3254	Pharmaceutical & medicine mfg	—	35	27	7 229	455 442	2 586	4 706	109 775	2 036 738	1 036 015	3 065 702	126 284
32541	Pharmaceutical & medicine mfg	—	35	27	7 229	455 442	2 586	4 706	109 775	2 036 738	1 036 015	3 065 702	126 284
325412	Pharmaceutical preparation mfg	—	25	20	5 795	375 508	2 030	3 710	89 883	1 708 139	920 615	2 636 076	91 737
325413	In-vitro diagnostic substance mfg	—	4	3	f	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	3	2	2	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	20	10	833	35 784	410	798	14 295	141 386	224 370	364 763	D
32551	Paint & coating mfg	2	12	5	532	23 111	240	416	8 618	76 509	125 513	200 783	8 774
325510	Paint & coating mfg	2	12	5	532	23 111	240	416	8 618	76 509	125 513	200 783	8 774
32552	Adhesive mfg	1	8	5	301	12 673	170	382	5 677	64 877	98 857	163 980	D
325520	Adhesive mfg	1	8	5	301	12 673	170	382	5 677	64 877	98 857	163 980	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	37	29	6 232	287 442	3 101	6 243	102 029	1 420 620	962 197	2 415 783	67 050
32561	Soap & cleaning compound mfg	2	15	9	1 037	50 129	769	1 734	31 722	606 467	258 325	864 776	16 144
325611	Soap & other detergent mfg	4	11	5	561	31 378	400	819	20 019	277 655	109 020	388 289	8 962
325612	Polish & other sanitation good mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	5	22	20	5 195	237 313	2 332	4 509	70 307	814 153	703 872	1 551 007	50 906
325620	Toilet preparation mfg	5	22	20	5 195	237 313	2 332	4 509	70 307	814 153	703 872	1 551 007	50 906
3259	Other chemical product mfg	—	36	20	1 486	73 796	858	1 813	36 127	412 705	233 176	649 251	26 932
32599	All other chemical product & preparation mfg	—	33	17	1 400	70 520	808	1 714	34 228	394 017	205 415	602 787	26 574
325991	Custom compounding of purchased resin ...	2	12	8	e	D	D	D	D	D	D	D	5 760
325992	Photographic film, paper, plate, & chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	18	6	401	17 464	215	421	6 593	124 714	79 458	203 271	D

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Middlesex—Somerset—Hunterdon, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	97	69	8 302	235 542	6 747	14 142	154 625	570 503	508 006	1 078 323	51 673
3261	Plastics product mfg	1	93	66	8 172	229 980	6 658	13 945	152 393	561 907	504 557	1 066 506	51 570
32611	Unsupported plastics film, sheet, & bag mfg	—	16	12	1 018	26 537	756	1 466	16 934	80 679	120 868	202 908	8 093
326111	Unsupported plastics bag mfg	—	7	6	496	11 860	372	718	7 630	29 237	52 019	82 798	2 652
326113	Unsupported plastics film & sheet (except packaging) mfg	1	9	6	522	14 677	384	748	9 304	51 442	68 849	120 110	5 441
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	9	6	516	19 958	426	796	13 789	55 282	22 910	78 350	2 607
326121	Unsupported plastics profile shape mfg	—	8	6	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	1	3	3	272	8 264	172	337	3 153	14 425	9 417	24 421	445
326150	Urethane & other foam product (except polystyrene) mfg	1	3	3	272	8 264	172	337	3 153	14 425	9 417	24 421	445
32616	Plastics bottle mfg	4	9	9	1 186	39 268	964	2 055	28 774	113 223	99 924	214 036	14 221
326160	Plastics bottle mfg	4	9	9	1 186	39 268	964	2 055	28 774	113 223	99 924	214 036	14 221
32619	Other plastics product mfg	1	50	32	4 773	123 765	3 991	8 543	80 478	263 131	229 960	490 625	25 228
326199	All other plastics product mfg	1	50	32	4 773	123 765	3 991	8 543	80 478	263 131	229 960	490 625	25 228
327	Nonmetallic mineral product mfg	1	39	15	1 404	47 329	1 030	2 160	32 567	129 130	93 208	222 472	8 746
3271	Clay product & refractory mfg	—	12	4	499	17 994	395	879	12 868	53 053	31 995	84 036	D
32712	Clay building material & refractories mfg	—	7	3	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	5	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	5	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	16	9	560	15 846	357	726	9 588	41 426	39 158	81 300	1 901
331	Primary metal mfg	1	32	22	2 754	124 595	1 935	4 344	80 033	256 004	535 510	838 987	42 482
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	4	12	8	1 086	47 720	797	1 685	31 889	43 106	146 484	250 720	6 173
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	4	6	5	837	38 504	604	1 234	25 918	22 511	125 517	209 916	5 507
331491	Other nonferrous metal rolling, drawing, & extruding	4	5	5	f	D	D	D	D	D	D	D	D
3315	Foundries	—	13	8	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	12	7	493	12 117	372	696	7 922	25 328	18 762	43 784	D
332	Fabricated metal product mfg	1	240	66	6 223	229 865	4 375	9 225	137 684	481 466	644 772	1 119 877	27 560
3321	Forging & stamping	—	15	7	513	19 171	395	799	11 654	40 455	41 858	81 944	1 845
33211	Forging & stamping	—	15	7	513	19 171	395	799	11 654	40 455	41 858	81 944	1 845
332116	Metal stamping	—	9	4	396	14 581	303	615	8 656	28 058	20 317	48 363	1 024
3323	Architectural & structural metals mfg	—	50	15	1 657	58 135	1 159	2 571	34 935	132 924	269 712	392 897	4 658
33231	Plate work & fabricated structural product mfg	—	18	4	583	20 699	395	745	11 101	44 244	96 310	142 214	1 891
332312	Fabricated structural metal mfg	—	16	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	32	11	1 074	37 436	764	1 826	23 834	88 680	173 402	250 683	2 767
332322	Sheet metal work mfg	—	19	7	788	29 258	575	1 367	19 758	71 617	158 812	219 305	2 445

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	Middlesex—Somerset—Hunterdon, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	8	7	670	30 235	538	1 130	24 506	67 312	171 723	243 082	5 685
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	5	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	3	3	e	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	1	9	3	507	16 600	363	744	7 949	32 215	25 995	58 484	919
33261	Spring & wire product mfg	1	9	3	507	16 600	363	744	7 949	32 215	25 995	58 484	919
332618	Other fabricated wire product mfg	—	8	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	106	17	1 416	52 096	980	2 025	31 037	99 848	46 214	145 419	8 754
33271	Machine shops	1	93	12	854	30 768	639	1 275	19 412	55 109	22 113	76 579	3 721
332710	Machine shops	1	93	12	854	30 768	639	1 275	19 412	55 109	22 113	76 579	3 721
33272	Turned product & screw, nut, & bolt mfg	8	13	5	562	21 328	341	750	11 625	44 739	24 101	68 840	5 033
332722	Bolt, nut, screw, rivet, & washer mfg	9	5	3	418	17 584	239	550	9 206	36 333	21 952	58 450	4 914
3328	Coating, engraving, heat treating, & allied activities.	—	20	5	290	10 941	192	394	5 875	19 185	7 952	27 147	1 297
33281	Coating, engraving, heat treating, & allied activities	—	20	5	290	10 941	192	394	5 875	19 185	7 952	27 147	1 297
3329	Other fabricated metal product mfg	—	28	11	1 063	39 198	685	1 431	20 455	82 380	73 585	156 402	4 123
33299	All other fabricated metal product mfg	—	24	7	839	28 496	549	1 121	16 435	62 436	47 125	109 381	D
332996	Fabricated pipe & pipe fitting mfg	—	7	3	424	11 780	287	526	6 337	28 026	15 799	44 017	2 497
332999	All other miscellaneous fabricated metal product mfg	—	14	4	390	15 822	241	551	9 406	32 570	30 465	62 664	D
333	Machinery mfg	2	110	33	3 093	120 318	2 178	4 680	71 896	320 552	301 056	622 339	16 394
3332	Industrial machinery mfg . .	3	26	11	705	34 354	410	940	16 897	76 129	76 319	153 865	3 031
33329	Other industrial machinery mfg	5	24	10	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	3	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	7	3	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	2	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	36	5	330	13 969	242	486	9 458	21 940	10 517	32 500	1 273
33351	Metalworking machinery mfg	3	36	5	330	13 969	242	486	9 458	21 940	10 517	32 500	1 273
3339	Other general-purpose machinery mfg	4	33	10	815	33 308	428	972	14 460	82 169	54 821	136 354	3 188
33399	All other general-purpose machinery mfg	4	27	8	711	29 321	371	863	12 830	71 455	44 018	114 999	2 950
333999	All other miscellaneous general-purpose machinery mfg	—	12	3	285	12 472	181	426	6 393	34 174	12 527	47 259	1 481
334	Computer & electronic product mfg	2	95	43	4 441	183 869	2 607	4 939	80 462	410 834	381 833	777 728	75 033
3341	Computer & peripheral equipment mfg	3	11	6	311	11 475	142	353	5 210	28 533	56 328	85 977	2 077
33411	Computer & peripheral equipment mfg	3	11	6	311	11 475	142	353	5 210	28 533	56 328	85 977	2 077

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Middlesex—Somerset—Hunterdon, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	-	10	6	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	2	4	2	325	12 883	211	258	7 421	5 188	20 528	30 369	D
334210	Telephone apparatus mfg	2	4	2	325	12 883	211	258	7 421	5 188	20 528	30 369	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	5	4	f	D	D	D	D	D	D	D	1 839
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	5	4	f	D	D	D	D	D	D	D	1 839
3344	Semiconductor & other electronic component mfg	3	34	17	1 710	75 577	1 054	2 132	33 281	215 355	157 282	352 311	62 957
33441	Semiconductor & other electronic component mfg	3	34	17	1 710	75 577	1 054	2 132	33 281	215 355	157 282	352 311	62 957
334413	Semiconductor & related device mfg ...	-	8	4	575	32 907	348	688	10 966	114 910	19 055	123 964	D
334417	Electronic connector mfg	6	4	3	373	12 427	210	439	7 155	40 394	48 884	77 535	3 062
334419	Other electronic component mfg	9	11	3	321	14 295	234	509	7 544	14 765	24 353	40 553	1 804
3345	Navigational, measuring, medical, & control instruments mfg	1	33	13	1 333	62 273	589	1 089	21 645	118 957	96 882	214 556	D
33451	Navigational, measuring, medical, & control instruments mfg	1	33	13	1 333	62 273	589	1 089	21 645	118 957	96 882	214 556	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	4	498	22 896	248	385	8 154	41 700	39 310	80 131	860
334516	Analytical laboratory instrument mfg	1	10	5	367	17 531	151	297	7 032	34 933	32 377	68 093	1 485
335	Electrical equipment, appliance, & component mfg	-	44	21	1 945	75 003	1 432	2 593	45 701	188 577	122 039	310 276	6 698
3353	Electrical equipment mfg ..	1	24	7	679	24 917	460	990	13 680	47 204	36 218	83 380	2 610
33531	Electrical equipment mfg	1	24	7	679	24 917	460	990	13 680	47 204	36 218	83 380	2 610
335311	Power, distribution, & specialty transformer mfg	1	7	3	331	11 847	255	615	8 051	25 026	22 680	48 367	1 837
3359	Other electrical equipment & component mfg	-	13	11	1 139	46 790	868	1 420	29 610	133 919	79 197	212 861	3 995
33591	Battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	8	6	555	19 422	341	471	6 372	31 963	27 211	60 714	633
335999	All other miscellaneous electrical equipment & component mfg	1	8	6	555	19 422	341	471	6 372	31 963	27 211	60 714	633
336	Transportation equipment mfg	-	23	7	2 055	104 284	1 750	3 494	84 012	391 559	1 043 782	1 419 043	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	5	17	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg.....	2	68	19	1 250	37 910	963	1 919	23 761	84 197	69 643	154 280	3 005
3371	Household & institutional furniture & kitchen cabinet mfg.....	4	46	7	345	8 653	284	550	6 157	16 323	12 791	29 184	815
3372	Office furniture (including fixtures) mfg.....	3	15	9	461	18 405	329	611	9 931	36 328	20 630	57 226	1 110
33721	Office furniture (including fixtures) mfg.....	3	15	9	461	18 405	329	611	9 931	36 328	20 630	57 226	1 110
337215	Showcase, partition, shelving, & locker mfg.....	8	9	5	262	7 879	200	312	3 957	13 643	9 737	23 482	639
3379	Other furniture related product mfg.....	—	7	3	444	10 852	350	758	7 673	31 546	36 222	67 870	1 080
33792	Blind & shade mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	129	28	4 998	227 195	2 659	5 268	73 921	527 551	281 300	812 284	60 500
3391	Medical equipment & supplies mfg.....	—	59	14	3 134	160 955	1 502	3 046	47 855	351 554	190 168	544 631	54 236
33911	Medical equipment & supplies mfg.....	—	59	14	3 134	160 955	1 502	3 046	47 855	351 554	190 168	544 631	54 236
339111	Laboratory apparatus & furniture mfg.....	—	5	2	e	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	—	7	4	593	29 122	310	575	8 486	66 771	13 076	79 879	5 358
339113	Surgical appliance & supplies mfg.....	—	12	5	1 992	113 516	907	1 921	31 473	236 119	162 645	403 705	D
3399	Other miscellaneous mfg ..	—	70	14	1 864	66 240	1 157	2 222	26 066	175 997	91 132	267 653	6 264
33993	Doll, toy, & game mfg ...	—	8	4	508	16 300	316	552	5 075	59 455	18 597	81 753	D
339932	Game, toy, & children's vehicle mfg.....	—	6	3	e	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg.....	—	7	4	613	20 226	354	703	8 036	52 027	37 248	88 428	2 999
339942	Lead pencil & art good mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg.....	—	20	3	392	19 944	216	462	7 172	40 437	18 551	57 051	613
339950	Sign mfg.....	—	20	3	392	19 944	216	462	7 172	40 437	18 551	57 051	613
	Monmouth—Ocean, NJ PMSA												
31-33	Manufacturing	2	896	198	19 994	603 759	14 198	27 445	338 556	1 647 694	1 618 962	3 258 078	98 156
311	Food mfg.....	—	92	10	1 227	32 737	927	1 562	20 750	110 713	147 278	257 446	4 365
3118	Bakeries & tortilla mfg.....	1	67	4	510	9 312	380	595	5 855	28 077	20 776	48 879	D
31181	Bread & bakery product mfg.....	3	62	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg.....	—	5	1	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	45	6	621	12 366	533	980	8 174	21 704	17 609	38 907	1 245
3141	Textile furnishings mills....	—	14	3	394	8 343	350	678	5 454	15 502	11 110	26 257	D
31412	Curtain & linen mills.....	—	14	3	394	8 343	350	678	5 454	15 502	11 110	26 257	D
314129	Other household textile product mills.....	—	6	3	361	7 553	327	631	5 111	13 553	9 935	23 148	D
322	Paper mfg.....	1	11	7	309	8 416	264	498	6 435	28 405	25 913	54 418	2 004
3222	Converted paper product mfg.....	1	11	7	309	8 416	264	498	6 435	28 405	25 913	54 418	2 004
323	Printing & related support activities.....	4	132	11	1 305	36 499	944	1 571	21 912	74 396	44 807	118 951	4 317
3231	Printing & related support activities.....	4	132	11	1 305	36 499	944	1 571	21 912	74 396	44 807	118 951	4 317
32311	Printing.....	5	121	8	1 069	30 262	756	1 279	17 561	62 392	41 946	104 082	3 778
323110	Commercial lithographic printing..	4	53	4	465	15 500	306	601	9 004	28 138	16 218	44 442	1 809
323113	Commercial screen printing.....	4	17	2	279	5 258	211	237	2 262	10 963	8 601	19 343	767

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Monmouth—Ocean, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	41	20	3 968	99 654	3 234	6 691	63 033	443 614	547 593	980 512	26 071
3251	Basic chemical mfg	—	5	4	265	7 589	213	254	4 629	66 733	146 388	207 653	4 584
3254	Pharmaceutical & medicine mfg	1	8	4	1 869	33 540	1 685	3 814	26 460	124 107	116 332	239 718	11 267
32541	Pharmaceutical & medicine mfg	1	8	4	1 869	33 540	1 685	3 814	26 460	124 107	116 332	239 718	11 267
325412	Pharmaceutical preparation mfg	1	6	4	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	9	4	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	8	4	1 334	38 589	1 023	1 868	21 944	161 290	116 793	276 291	4 124
325620	Toilet preparation mfg	—	8	4	1 334	38 589	1 023	1 868	21 944	161 290	116 793	276 291	4 124
3259	Other chemical product mfg	4	10	5	334	13 302	217	524	6 606	72 381	112 396	183 977	3 777
32599	All other chemical product & preparation mfg	4	10	5	334	13 302	217	524	6 606	72 381	112 396	183 977	3 777
326	Plastics & rubber products mfg	1	38	17	1 636	47 683	1 171	2 531	32 259	124 566	99 000	222 290	7 047
3261	Plastics product mfg	1	31	14	1 170	32 334	844	1 913	23 441	77 174	54 126	130 336	5 136
32619	Other plastics product mfg	2	20	10	786	21 912	551	1 312	16 024	55 908	30 845	85 608	3 206
326199	All other plastics product mfg	2	20	10	786	21 912	551	1 312	16 024	55 908	30 845	85 608	3 206
3262	Rubber product mfg	—	7	3	466	15 349	327	618	8 818	47 392	44 874	91 954	1 911
32629	Other rubber product mfg	—	5	3	e	D	D	D	D	D	D	D	1 911
326299	All other rubber product mfg	—	4	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	28	17	954	34 791	707	1 398	23 541	81 668	102 076	182 648	D
3273	Cement & concrete product mfg	5	22	14	854	32 915	635	1 289	22 487	73 591	97 658	170 220	D
32732	Ready-mix concrete mfg	8	8	6	385	17 186	338	693	14 526	31 098	63 195	94 467	D
327320	Ready-mix concrete mfg	8	8	6	385	17 186	338	693	14 526	31 098	63 195	94 467	D
32733	Concrete pipe, brick, & block mfg	—	5	4	286	10 185	158	341	4 319	31 784	27 871	58 603	D
332	Fabricated metal product mfg	1	112	11	1 039	33 691	740	1 456	20 398	78 474	51 623	129 826	3 398
3323	Architectural & structural metals mfg	1	27	2	257	8 886	167	331	4 692	24 430	18 560	42 847	634
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	47	3	309	9 866	247	458	6 916	18 915	6 748	25 847	1 427
333	Machinery mfg	2	60	21	1 994	66 455	1 132	2 389	30 844	138 333	103 350	242 406	6 349
3333	Commercial & service industry machinery mfg	3	11	5	508	13 771	280	556	5 478	31 340	21 134	53 046	1 175
33331	Commercial & service industry machinery mfg	3	11	5	508	13 771	280	556	5 478	31 340	21 134	53 046	1 175
333319	Other commercial & service industry machinery mfg	4	6	4	431	11 110	239	473	4 383	28 888	17 893	47 324	1 060
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	420	13 175	304	700	8 842	23 149	26 440	49 356	1 191
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	420	13 175	304	700	8 842	23 149	26 440	49 356	1 191
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	18	6	722	27 152	347	723	10 454	45 475	34 390	82 265	2 782
33399	All other general-purpose machinery mfg	1	13	4	469	15 609	164	363	5 246	28 717	18 865	48 253	1 641
333995	Fluid power cylinder & actuator mfg	—	2	1	e	D	D	D	D	D	D	D	D

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	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.												
	Monmouth–Ocean, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	68	31	3 201	114 511	1 896	3 553	47 823	268 046	226 462	496 872	21 821
3342	Communications equipment mfg.....	-	16	7	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	7	5	f	D	D	D	D	D	D	D	1 639
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	7	5	f	D	D	D	D	D	D	D	1 639
33429	Other communications equipment mfg.....	-	6	1	384	12 332	230	472	4 984	23 485	17 041	41 332	D
334290	Other communications equipment mfg.....	-	6	1	384	12 332	230	472	4 984	23 485	17 041	41 332	D
3344	Semiconductor & other electronic component mfg.....	4	22	14	1 426	48 464	964	1 833	24 370	102 828	75 689	178 811	12 724
33441	Semiconductor & other electronic component mfg.....	4	22	14	1 426	48 464	964	1 833	24 370	102 828	75 689	178 811	12 724
334412	Bare printed circuit board mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	9	5	4	270	9 588	173	368	4 493	28 283	11 772	40 187	8 026
334419	Other electronic component mfg.....	1	8	3	355	11 207	265	521	6 707	21 737	13 672	35 530	471
3345	Navigational, measuring, medical, & control instruments mfg.....	2	23	10	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	2	23	10	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	2	5	2	264	9 173	91	177	2 434	10 617	20 558	31 567	274
334515	Electricity measuring & testing instrument mfg.....	-	6	3	284	13 929	125	224	3 924	41 121	49 730	89 623	3 766
335	Electrical equipment, appliance, & component mfg.....	3	18	5	479	16 322	343	655	9 885	39 105	36 779	76 087	2 503
3359	Other electrical equipment & component mfg.....	3	7	4	389	13 555	281	554	8 469	32 175	32 200	64 411	2 314
336	Transportation equipment mfg.....	1	22	7	f	D	D	D	D	D	D	D	2 626
3364	Aerospace product & parts mfg.....	1	4	3	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	1	4	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	61	5	512	13 634	392	618	6 609	26 596	25 923	52 503	1 108
3371	Household & institutional furniture & kitchen cabinet mfg.....	2	47	2	332	7 842	266	461	4 893	17 903	13 484	31 436	453
339	Miscellaneous mfg.....	2	95	13	990	29 712	717	1 293	14 883	72 944	42 128	114 687	2 863
3391	Medical equipment & supplies mfg.....	2	52	9	670	21 266	474	885	10 220	54 925	26 134	80 295	D
33911	Medical equipment & supplies mfg.....	2	52	9	670	21 266	474	885	10 220	54 925	26 134	80 295	D
3399	Other miscellaneous mfg..	3	43	4	320	8 446	243	408	4 663	18 019	15 994	34 392	D
	Newark, NJ PMSA												

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newark, NJ PMSA—Con.												
31-33	Manufacturing	1	3 261	1 066	110 238	4 340 778	73 843	153 202	2 264 830	17 628 675	14 817 917	32 134 270	941 207
311	Food mfg.....	2	246	59	6 908	244 872	4 804	9 868	149 537	899 057	1 263 843	2 164 341	32 836
3113	Sugar & confectionery product mfg.....	-	17	4	f	D	D	D	D	D	D	D	838
31133	Confectionery mfg from purchased chocolate...	-	5	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	5	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	4	10	7	607	19 273	522	1 147	13 661	58 621	114 617	173 071	3 158
31141	Frozen food mfg.....	3	7	5	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	4	5	3	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	7	13	6	1 259	55 473	606	1 297	26 238	97 212	289 641	386 384	10 023
31151	Dairy product (except frozen) mfg.....	7	8	5	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	7	3	3	1 142	52 429	521	1 130	24 377	86 007	269 480	355 204	D
3116	Meat product mfg.....	1	22	7	498	18 328	320	581	7 911	57 824	63 290	118 977	3 231
31161	Animal slaughtering & processing.....	1	22	7	498	18 328	320	581	7 911	57 824	63 290	118 977	3 231
311612	Meat processed from carcasses.....	1	14	4	273	10 408	209	387	5 818	26 954	30 767	56 882	980
3118	Bakeries & tortilla mfg.....	3	158	22	2 530	66 383	1 724	3 226	42 593	184 739	109 122	295 611	9 235
31181	Bread & bakery product mfg.....	3	149	18	1 551	33 739	901	1 606	17 967	67 673	41 074	108 924	3 106
311811	Retail bakeries.....	3	109	7	720	11 913	372	524	5 870	23 970	12 889	37 067	906
311812	Commercial bakeries ..	3	35	9	751	19 403	473	950	10 935	39 328	23 175	62 515	2 017
31182	Cookie, cracker, & pasta mfg.....	3	9	4	979	32 644	823	1 620	24 626	117 066	68 048	186 687	6 129
311821	Cookie & cracker mfg ..	2	5	3	889	30 663	746	1 518	23 250	110 746	62 037	174 228	5 864
3119	Other food mfg.....	-	19	9	973	36 717	816	1 790	27 052	139 930	366 680	518 126	5 852
31199	All other food mfg	-	8	3	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	10	2	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	10	2	g	D	D	D	D	D	D	D	D
31212	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
313	Textile mills.....	3	39	15	1 202	37 732	958	1 894	24 167	67 778	80 647	148 206	4 489
3132	Fabric mills.....	2	17	7	520	16 988	436	857	12 429	29 723	32 550	62 055	2 647
31324	Knit fabric mills.....	2	9	5	411	14 417	344	691	10 525	23 389	21 695	44 984	2 262
313241	Wett knit fabric mills ..	1	6	4	340	11 743	290	585	9 375	17 974	14 730	32 679	1 547
3133	Textile & fabric finishing & fabric coating mills.....	3	22	8	682	20 744	522	1 037	11 738	38 055	48 097	86 151	1 842
31331	Textile & fabric finishing mills.....	3	19	8	640	19 174	501	993	11 053	34 784	44 200	78 685	1 651
313311	Broadwoven fabric finishing mills.....	2	13	6	427	13 641	331	731	8 116	23 314	34 153	57 286	768
314	Textile product mills.....	2	54	19	1 551	32 278	1 266	2 293	21 426	65 274	56 019	120 770	2 532
3141	Textile furnishings mills....	2	26	8	498	9 207	408	729	5 990	16 107	21 670	37 759	500
31412	Curtain & linen mills.....	2	24	8	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	2	9	7	384	7 042	320	592	4 587	11 775	18 472	30 248	362
3149	Other textile product mills ..	2	28	11	1 053	23 071	858	1 564	15 436	49 167	34 349	83 011	2 032
31499	All other textile product mills.....	2	21	10	952	20 327	789	1 450	14 223	40 672	28 910	69 753	D
314999	All other miscellaneous textile product mills ..	2	19	10	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	2	110	51	3 816	80 314	3 080	6 028	53 730	239 271	375 685	607 350	5 151
3152	Cut & sew apparel mfg	1	82	42	2 900	61 473	2 295	4 484	39 721	200 708	338 867	532 281	D
31521	Cut & sew apparel contractors.....	6	46	23	1 486	23 335	1 316	2 653	19 586	39 623	6 493	46 109	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	41	20	1 269	19 876	1 113	2 295	16 934	34 520	6 143	40 656	1 227
31522	Men's & boys' cut & sew apparel mfg.....	7	11	7	631	13 045	496	872	8 071	29 752	12 968	40 957	812
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	8	3	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	19	9	669	22 599	383	778	10 287	126 375	313 020	433 936	2 183
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	9	3	3	259	4 768	102	203	2 731	12 474	10 163	22 618	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newark, NJ PMSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	4	20	7	697	14 551	590	1 227	10 811	31 086	25 473	56 211	D
31599	Apparel accessories & other apparel mfg	4	20	7	697	14 551	590	1 227	10 811	31 086	25 473	56 211	D
315999	Other apparel accessories & other apparel mfg	5	16	4	538	10 852	440	880	7 613	25 195	21 742	46 429	451
321	Wood product mfg	4	28	7	366	10 336	293	660	6 707	18 659	16 873	35 326	D
3219	Other wood product mfg ...	4	27	7	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	76	44	4 761	159 798	3 565	7 620	101 024	388 368	482 220	869 467	29 850
3221	Pulp, paper, & paperboard mills	—	6	6	688	29 300	536	1 254	20 847	84 022	97 394	182 092	8 103
32212	Paper mills	—	3	3	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	70	38	4 073	130 498	3 029	6 366	80 177	304 346	384 826	687 375	21 747
32221	Paperboard container mfg	1	31	20	2 125	75 288	1 556	3 171	43 265	165 176	200 143	366 144	11 724
322211	Corrugated & solid fiber box mfg	2	19	11	1 409	54 334	970	1 961	29 547	119 204	149 514	268 897	10 812
322212	Folding paperboard box mfg	2	5	4	310	9 009	253	553	5 924	19 544	12 264	32 205	546
32222	Paper bag & coated & treated paper mfg	1	19	10	1 143	34 899	826	1 898	21 429	95 852	132 202	225 258	7 838
322222	Coated & laminated paper mfg	4	12	6	466	15 180	329	682	8 989	38 416	43 043	80 834	2 620
322224	Uncoated paper & multiwall bag mfg	—	2	1	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	1	12	4	578	14 559	471	947	11 612	28 102	36 544	65 045	971
322232	Envelope mfg	—	2	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	442	97	8 942	332 955	6 223	12 364	192 423	626 400	415 412	1 042 703	51 440
3231	Printing & related support activities	3	442	97	8 942	332 955	6 223	12 364	192 423	626 400	415 412	1 042 703	51 440
32311	Printing	3	388	82	7 695	293 309	5 313	10 499	166 539	556 992	397 404	954 065	48 945
323110	Commercial lithographic printing ..	4	185	42	4 025	172 677	2 715	5 773	96 683	317 563	232 527	550 646	39 080
323112	Commercial flexographic printing ..	—	10	2	257	11 274	177	363	5 305	25 874	25 962	51 586	1 022
323113	Commercial screen printing	7	43	10	860	23 311	673	1 258	14 028	47 860	32 903	80 544	2 160
323114	Quick printing	2	75	3	397	10 893	272	482	6 722	23 785	11 881	35 686	1 166
323116	Manifold business form printing	—	8	6	803	28 819	571	910	16 749	39 565	38 221	78 832	1 041
323117	Book printing	2	11	5	255	10 759	197	414	7 381	24 233	12 200	35 816	316
323119	Other commercial printing	2	41	9	774	26 349	438	843	12 963	56 838	34 328	90 496	3 265
32312	Support activities for printing	2	54	15	1 247	39 646	910	1 865	25 884	69 408	18 008	88 638	2 495
323121	Tradebinding & related work	—	12	5	529	13 380	367	771	8 566	22 151	7 917	31 684	627
323122	Prepress services	2	42	10	718	26 266	543	1 094	17 318	47 257	10 091	56 954	1 868
324	Petroleum & coal products mfg	—	11	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	11	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	3	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	3	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	222	108	19 564	1 104 306	9 864	21 129	399 385	8 432 629	4 119 080	12 572 559	417 622
3251	Basic chemical mfg	1	49	26	2 745	144 638	1 433	3 157	63 245	551 634	637 564	1 200 673	44 133
32513	Dye & pigment mfg	—	12	8	714	33 477	459	966	17 900	99 466	111 979	221 397	6 869
325132	Synthetic organic dye & pigment mfg	—	11	8	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	7	3	424	21 173	282	689	13 909	60 873	50 016	109 877	9 662
325188	All other basic inorganic chemical mfg	—	7	3	424	21 173	282	689	13 909	60 873	50 016	109 877	9 662
32519	Other basic organic chemical mfg	1	25	14	1 547	88 793	671	1 466	30 748	385 168	470 358	858 107	26 932
325199	All other basic organic chemical mfg	1	22	14	g	D	D	D	D	D	D	D	D

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newark, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	7	5	309	11 603	229	400	7 238	42 083	53 859	95 565	D
32521	Resin & synthetic rubber mfg	1	7	5	309	11 603	229	400	7 238	42 083	53 859	95 565	D
325211	Plastics material & resin mfg	1	7	5	309	11 603	229	400	7 238	42 083	53 859	95 565	D
3254	Pharmaceutical & medicine mfg	—	44	28	10 996	729 625	4 781	11 145	221 136	6 123 003	2 343 373	8 476 047	311 111
32541	Pharmaceutical & medicine mfg	—	44	28	10 996	729 625	4 781	11 145	221 136	6 123 003	2 343 373	8 476 047	311 111
325411	Medicinal & botanical mfg	2	9	5	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	31	20	8 418	550 925	3 647	8 273	139 051	5 247 992	1 799 789	7 038 228	183 910
3255	Paint, coating, & adhesive mfg	1	41	17	1 342	58 834	813	1 742	29 721	383 070	305 227	685 615	16 282
32551	Paint & coating mfg	1	27	13	1 022	45 427	606	1 261	22 475	344 156	235 090	576 748	12 517
325510	Paint & coating mfg	1	27	13	1 022	45 427	606	1 261	22 475	344 156	235 090	576 748	12 517
32552	Adhesive mfg	5	14	4	320	13 407	207	481	7 246	38 914	70 137	108 867	3 765
325520	Adhesive mfg	5	14	4	320	13 407	207	481	7 246	38 914	70 137	108 867	3 765
3256	Soap, cleaning compound, & toilet preparation mfg	2	37	18	2 967	118 583	1 839	3 193	57 525	1 130 251	619 049	1 751 080	32 297
32561	Soap & cleaning compound mfg	1	21	8	865	40 045	466	912	15 689	140 052	175 595	313 601	4 198
325611	Soap & other detergent mfg	—	6	3	251	16 342	66	136	2 087	48 084	68 918	114 366	D
325612	Polish & other sanitation good mfg	2	11	3	e	D	D	D	D	D	D	D	1 001
32562	Toilet preparation mfg	2	16	10	2 102	78 538	1 373	2 281	41 836	990 199	443 454	1 437 479	28 099
325620	Toilet preparation mfg	2	16	10	2 102	78 538	1 373	2 281	41 836	990 199	443 454	1 437 479	28 099
3259	Other chemical product mfg	1	43	13	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	1	35	11	916	31 944	564	1 056	15 253	92 708	117 294	210 296	7 882
325991	Custom compounding of purchased resin	1	16	7	535	18 477	352	664	9 510	48 823	81 286	129 441	5 314
326	Plastics & rubber products mfg	2	197	107	9 345	289 668	7 160	14 660	174 078	636 497	581 134	1 210 285	64 656
3261	Plastics product mfg	2	174	99	8 345	253 707	6 475	13 143	154 732	569 854	523 829	1 086 498	60 247
32611	Unsupported plastics film, sheet, & bag mfg	4	29	16	1 231	47 175	904	1 862	26 382	109 928	147 752	256 916	10 121
326111	Unsupported plastics bag mfg	4	9	6	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	4	18	10	901	36 380	660	1 381	20 602	84 517	113 399	197 547	6 490
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	18	13	724	26 102	511	1 051	14 074	48 973	39 600	87 332	5 365
326121	Unsupported plastics profile shape mfg	1	16	11	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	2	11	7	474	12 955	419	910	10 735	33 982	35 964	69 283	8 584
326160	Plastics bottle mfg	2	11	7	474	12 955	419	910	10 735	33 982	35 964	69 283	8 584
32619	Other plastics product mfg	2	101	58	5 619	153 730	4 440	8 870	96 999	329 288	241 004	565 699	33 871
326199	All other plastics product mfg	2	97	58	5 586	152 954	4 419	8 826	96 426	327 513	239 610	562 519	D
3262	Rubber product mfg	1	23	8	1 000	35 961	685	1 517	19 346	66 643	57 305	123 787	4 409
32629	Other rubber product mfg	2	16	6	726	27 357	449	939	12 783	49 966	36 711	86 453	3 857
326291	Rubber product mfg for mechanical use	1	11	3	544	19 845	313	680	9 024	33 171	23 480	56 265	3 067

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	3	90	30	1 905	68 252	1 338	2 862	39 987	201 776	154 821	345 613	14 428
3271	Clay product & refractory mfg	1	12	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	3	23	5	289	10 258	199	364	5 226	24 229	12 882	37 228	D
32721	Glass & glass product mfg	3	23	5	289	10 258	199	364	5 226	24 229	12 882	37 228	D
327215	Glass product mfg made of purchased glass	2	18	5	273	9 653	187	337	4 750	22 487	12 202	34 798	1 787
3273	Cement & concrete product mfg	3	33	8	731	24 040	499	1 164	14 565	80 336	82 845	162 113	6 406
32732	Ready-mix concrete mfg	6	22	6	581	18 072	398	961	11 964	41 962	54 557	96 218	3 670
327320	Ready-mix concrete mfg	6	22	6	581	18 072	398	961	11 964	41 962	54 557	96 218	3 670
3279	Other nonmetallic mineral product mfg	5	20	11	455	18 664	302	629	9 402	48 275	36 200	78 342	D
32799	All other nonmetallic mineral product mfg	7	12	6	297	12 981	190	398	6 018	35 968	29 332	59 479	D
331	Primary metal mfg	—	42	23	2 931	100 499	2 113	4 553	59 822	322 218	299 850	616 733	19 216
3312	Steel product mfg from purchased steel	1	5	4	e	D	D	D	D	D	D	D	6 295
3314	Nonferrous metal (except aluminum) production & processing	—	15	9	1 103	35 233	796	1 637	19 855	129 076	149 610	276 933	6 969
33142	Copper rolling, drawing, extruding, & alloying	—	6	5	734	20 859	554	1 169	12 967	73 328	62 326	138 737	5 444
331421	Copper rolling, drawing, & extruding	—	5	4	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	1	8	3	e	D	D	D	D	D	D	D	1 525
3315	Foundries	—	21	9	1 511	55 011	1 103	2 495	34 634	154 384	94 549	247 685	D
33151	Ferrous metal foundries	—	6	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	4	1	e	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	2	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	15	7	e	D	D	D	D	D	D	D	1 033
332	Fabricated metal product mfg	1	630	173	14 761	552 784	10 377	23 078	312 992	1 171 944	649 901	1 816 765	65 970
3321	Forging & stamping	—	58	24	2 055	80 268	1 564	3 224	49 072	146 704	95 301	237 788	9 190
33211	Forging & stamping	—	58	24	2 055	80 268	1 564	3 224	49 072	146 704	95 301	237 788	9 190
332116	Metal stamping	—	55	23	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	20	7	685	22 066	550	1 126	12 440	59 125	34 127	92 752	3 132
33221	Cutlery & handtool mfg	—	20	7	685	22 066	550	1 126	12 440	59 125	34 127	92 752	3 132
332211	Cutlery & flatware (except precious) mfg	—	4	3	303	7 991	247	486	5 033	26 705	22 008	48 424	1 373
332212	Hand & edge tool mfg	—	16	4	382	14 075	303	640	7 407	32 420	12 119	44 328	1 759
3323	Architectural & structural metals mfg	—	100	28	2 293	78 845	1 685	3 725	48 028	186 570	103 255	283 651	9 597
33231	Plate work & fabricated structural product mfg	1	27	5	298	11 849	209	418	7 124	23 390	18 758	41 986	532
33232	Ornamental & architectural metal products mfg	—	73	23	1 995	66 996	1 476	3 307	40 904	163 180	84 497	241 665	9 065
332322	Sheet metal work mfg	—	48	18	1 683	56 262	1 270	2 863	35 498	130 651	58 918	183 666	8 557
3324	Boiler, tank, & shipping container mfg	1	20	8	900	37 391	628	1 403	21 477	76 231	52 618	131 722	4 379
33242	Metal tank (heavy gauge) mfg	—	8	4	289	13 993	174	356	6 142	14 701	17 867	35 424	404
332420	Metal tank (heavy gauge) mfg	—	8	4	289	13 993	174	356	6 142	14 701	17 867	35 424	404
33243	Metal can, box, & other metal container (light gauge) mfg	2	8	4	573	22 210	427	1 016	14 591	59 737	33 747	93 511	3 873
332431	Metal can mfg	—	4	3	465	19 026	347	867	12 864	53 323	23 924	77 111	3 320
3326	Spring & wire product mfg	1	21	8	425	12 190	321	605	7 748	28 435	15 910	44 351	4 039
33261	Spring & wire product mfg	1	21	8	425	12 190	321	605	7 748	28 435	15 910	44 351	4 039
332618	Other fabricated wire product mfg	1	18	8	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	268	44	3 414	135 102	2 432	6 461	82 945	264 680	116 430	374 602	14 541
33271	Machine shops	1	212	25	2 092	81 429	1 476	2 951	49 991	144 830	54 387	198 020	8 328
332710	Machine shops	1	212	25	2 092	81 429	1 476	2 951	49 991	144 830	54 387	198 020	8 328
33272	Turned product & screw, nut, & bolt mfg	—	56	19	1 322	53 673	956	3 510	32 954	119 850	62 043	176 582	6 213
332721	Precision turned product mfg	1	38	11	679	27 650	538	2 719	18 078	40 185	16 344	57 127	2 510
332722	Bolt, nut, screw, rivet, & washer mfg	—	18	8	643	26 023	418	791	14 876	79 665	45 699	119 455	3 703
3328	Coating, engraving, heat treating, & allied activities.	2	73	24	1 699	57 168	1 249	2 607	31 776	115 368	54 633	169 433	11 271
33281	Coating, engraving, heat treating, & allied activities	2	73	24	1 699	57 168	1 249	2 607	31 776	115 368	54 633	169 433	11 271
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	19	8	667	21 266	491	1 047	13 146	41 383	13 678	54 923	7 540
332813	Electroplating, plating, polishing, anodizing, & coloring	2	47	13	908	31 182	663	1 352	15 644	62 493	33 793	95 929	3 030
3329	Other fabricated metal product mfg	—	66	29	3 207	127 696	1 883	3 808	58 153	291 264	174 551	475 776	9 602
33291	Metal valve mfg	—	18	11	2 027	89 747	998	2 063	35 368	206 818	108 627	325 890	6 943
332911	Industrial valve mfg	—	11	10	1 951	87 239	941	1 954	33 886	202 822	100 791	313 679	6 773
33299	All other fabricated metal product mfg	—	48	18	1 180	37 949	885	1 745	22 785	84 446	65 924	149 886	2 659
332999	All other miscellaneous fabricated metal product mfg	—	31	14	871	27 807	652	1 258	16 652	67 107	54 622	121 356	2 149
333	Machinery mfg	1	308	84	8 020	340 112	4 803	10 216	163 336	694 211	679 903	1 357 172	40 350
3332	Industrial machinery mfg	—	50	15	1 448	65 941	634	1 305	24 842	176 422	265 667	424 871	14 255
33329	Other industrial machinery mfg	—	46	14	1 356	61 689	593	1 210	23 190	167 027	256 319	404 758	14 093
333291	Paper industry machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	3	20	7	556	25 690	306	693	12 527	46 867	37 670	84 942	D
3333	Commercial & service industry machinery mfg	2	33	6	793	32 557	451	1 017	13 163	65 862	59 627	122 526	3 062
33331	Commercial & service industry machinery mfg	2	33	6	793	32 557	451	1 017	13 163	65 862	59 627	122 526	3 062
333319	Other commercial & service industry machinery mfg	1	14	1	291	12 471	188	483	6 174	11 536	29 318	41 429	1 239
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	20	8	718	23 463	574	1 242	15 666	42 035	45 880	93 986	3 151
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	20	8	718	23 463	574	1 242	15 666	42 035	45 880	93 986	3 151
333411	Air purification equipment mfg	—	7	4	250	8 033	195	440	5 179	10 309	20 510	36 969	D
333414	Heating equipment (except warm air furnaces) mfg	1	7	2	275	8 773	238	480	6 227	17 509	7 088	23 989	D
3335	Metalworking machinery mfg	2	119	20	1 727	69 165	1 264	2 792	43 777	113 014	55 061	166 541	7 094
33351	Metalworking machinery mfg	2	119	20	1 727	69 165	1 264	2 792	43 777	113 014	55 061	166 541	7 094
333511	Industrial mold mfg	1	38	7	561	26 125	436	1 012	18 624	42 367	13 019	54 990	3 204
333514	Special die & tool, die set, jig, & fixture mfg	2	57	8	832	29 185	638	1 376	19 209	48 407	20 428	68 367	2 945
3339	Other general-purpose machinery mfg	—	76	32	3 005	134 094	1 672	3 431	57 635	264 282	222 011	483 468	11 009
33391	Pump & compressor mfg	—	8	4	712	32 378	363	719	13 040	50 897	70 321	125 465	2 221
333911	Pump & pumping equipment mfg	—	5	3	675	31 207	345	689	12 553	48 222	67 776	120 228	D
33392	Material handling equipment mfg	—	20	10	944	37 198	515	1 068	18 188	85 041	62 152	143 826	2 439
333922	Conveyor & conveying equipment mfg	—	12	4	617	21 993	325	685	11 184	43 909	43 237	85 975	870

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	1	48	18	1 349	64 518	794	1 644	26 407	128 344	89 538	214 177	6 349
333993	Packaging machinery mfg	4	10	5	317	14 429	113	232	4 504	27 940	14 853	41 573	754
333994	Industrial process furnace & oven mfg ..	—	8	3	265	11 217	149	316	4 675	29 467	21 466	50 345	781
333999	All other miscellaneous general-purpose machinery mfg	—	23	8	660	34 734	476	983	15 443	64 160	49 526	111 663	4 559
334	Computer & electronic product mfg	1	191	72	6 614	252 821	3 979	7 929	112 229	643 483	338 791	979 191	32 818
3342	Communications equipment mfg	1	34	17	1 786	73 052	930	1 904	26 775	164 561	114 383	283 966	9 361
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	17	14	1 156	46 583	665	1 383	20 353	72 301	63 793	140 159	6 346
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	17	14	1 156	46 583	665	1 383	20 353	72 301	63 793	140 159	6 346
33429	Other communications equipment mfg	—	10	1	427	19 275	164	331	4 311	79 932	37 649	118 959	2 444
334290	Other communications equipment mfg	—	10	1	427	19 275	164	331	4 311	79 932	37 649	118 959	2 444
3344	Semiconductor & other electronic component mfg	1	72	35	3 129	105 904	2 239	4 426	58 765	287 661	132 429	410 502	13 696
33441	Semiconductor & other electronic component mfg	1	72	35	3 129	105 904	2 239	4 426	58 765	287 661	132 429	410 502	13 696
334417	Electronic connector mfg	4	8	5	331	8 573	155	296	3 284	15 956	7 684	23 905	566
334419	Other electronic component mfg	—	29	15	1 706	61 661	1 279	2 474	37 202	192 046	88 066	269 949	4 366
3345	Navigational, measuring, medical, & control instruments mfg	1	64	19	1 583	69 777	738	1 460	24 480	181 850	79 955	263 254	8 884
33451	Navigational, measuring, medical, & control instruments mfg	1	64	19	1 583	69 777	738	1 460	24 480	181 850	79 955	263 254	8 884
334510	Electromedical & electrotherapeutic apparatus mfg	1	10	4	397	14 539	165	302	4 435	76 591	17 201	94 774	2 202
334516	Analytical laboratory instrument mfg	—	9	4	385	18 360	132	298	4 729	37 239	31 995	69 360	2 742
335	Electrical equipment, appliance, & component mfg	1	83	44	3 562	112 387	2 537	4 955	66 401	271 644	225 939	497 588	14 023
3351	Electric lighting equipment mfg	—	19	9	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	15	7	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	2	4	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	32	14	1 357	43 356	920	1 712	24 298	89 736	68 718	156 999	5 631
33531	Electrical equipment mfg	1	32	14	1 357	43 356	920	1 712	24 298	89 736	68 718	156 999	5 631
335313	Switchgear & switchboard apparatus mfg	—	10	5	819	27 459	529	950	14 986	55 152	45 147	98 599	3 420
3359	Other electrical equipment & component mfg	1	28	18	1 269	43 310	882	1 806	27 233	108 880	84 736	196 049	5 337
33593	Wiring device mfg	—	9	7	568	19 535	458	990	14 681	55 855	49 239	106 873	D
335931	Current-carrying wiring device mfg	—	7	5	e	D	D	D	D	D	D	D	946
335932	Noncurrent-carrying wiring device mfg	—	2	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	15	9	603	20 422	379	738	11 314	48 560	31 687	80 932	3 174
335991	Carbon & graphite product mfg	2	4	4	257	9 139	202	406	5 994	22 608	10 406	33 227	2 322
335999	All other miscellaneous electrical equipment & component mfg	2	11	5	346	11 283	177	332	5 320	25 952	21 281	47 705	852

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newark, NJ PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	40	13	h	D	D	D	D	D	D	D	29 360
3361	Motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	4	27	6	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	5	4	713	35 850	307	627	12 295	80 262	21 910	102 367	3 535
33641	Aerospace product & parts mfg	-	5	4	713	35 850	307	627	12 295	80 262	21 910	102 367	3 535
336413	Other aircraft part & auxiliary equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	154	44	3 749	110 196	2 905	5 763	72 053	211 420	202 030	413 657	10 983
3371	Household & institutional furniture & kitchen cabinet mfg	4	90	16	1 148	34 138	967	1 815	24 098	52 628	44 407	96 805	2 801
33711	Wood kitchen cabinet & counter top mfg	3	50	4	475	13 641	402	656	10 328	20 340	15 895	35 612	1 709
337110	Wood kitchen cabinet & counter top mfg ...	3	50	4	475	13 641	402	656	10 328	20 340	15 895	35 612	1 709
33712	Household & institutional furniture mfg	5	40	12	673	20 497	565	1 159	13 770	32 288	28 512	61 193	1 092
337127	Institutional furniture mfg	6	10	7	336	9 933	276	548	6 503	16 077	13 833	30 088	522
3372	Office furniture (including fixtures) mfg	5	50	20	1 682	50 696	1 215	2 411	30 626	92 453	73 038	164 644	4 579
33721	Office furniture (including fixtures) mfg	5	50	20	1 682	50 696	1 215	2 411	30 626	92 453	73 038	164 644	4 579
337211	Wood office furniture mfg	4	9	5	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	5	25	11	1 158	35 946	804	1 641	20 911	67 012	54 780	119 175	2 671
3379	Other furniture related product mfg	1	14	8	919	25 362	723	1 537	17 329	66 339	84 585	152 208	3 603
33791	Mattress mfg	1	8	6	566	15 417	438	957	9 840	49 858	52 703	104 251	3 059
337910	Mattress mfg	1	8	6	566	15 417	438	957	9 840	49 858	52 703	104 251	3 059
33792	Blind & shade mfg	-	6	2	353	9 945	285	580	7 489	16 481	31 882	47 957	544
337920	Blind & shade mfg	-	6	2	353	9 945	285	580	7 489	16 481	31 882	47 957	544
339	Miscellaneous mfg	1	277	68	5 948	180 251	3 887	7 199	88 226	483 834	357 417	844 897	25 103
3391	Medical equipment & supplies mfg	1	114	25	2 298	81 654	1 448	2 622	35 519	241 500	99 997	344 613	14 998
33911	Medical equipment & supplies mfg	1	114	25	2 298	81 654	1 448	2 622	35 519	241 500	99 997	344 613	14 998
339111	Laboratory apparatus & furniture mfg	-	6	3	765	25 548	509	861	10 167	52 273	29 059	82 390	D
339112	Surgical & medical instrument mfg	1	26	10	652	26 464	357	732	9 011	105 449	41 296	147 625	7 668
339113	Surgical appliance & supplies mfg	2	10	5	388	15 189	215	364	7 001	56 199	19 398	76 940	D
339116	Dental laboratories ...	4	62	6	405	12 213	307	549	8 188	24 864	6 902	31 260	423
3399	Other miscellaneous mfg ...	1	163	43	3 650	98 597	2 439	4 577	52 707	242 334	257 420	500 284	10 105
33991	Jewelry & silverware mfg	-	42	11	1 092	36 071	733	1 587	19 054	94 539	118 253	213 769	1 926
339911	Jewelry (except costume) mfg	-	32	6	859	28 675	578	1 259	15 451	72 671	93 973	167 403	1 501
33992	Sporting & athletic goods mfg	2	11	3	310	5 893	238	332	3 217	23 957	29 859	52 795	1 054
339920	Sporting & athletic goods mfg	2	11	3	310	5 893	238	332	3 217	23 957	29 859	52 795	1 054
33994	Office supplies (except paper) mfg	2	19	5	e	D	D	D	D	D	D	D	1 049
33995	Sign mfg	2	55	12	740	15 931	573	977	9 023	30 125	18 375	48 360	650
339950	Sign mfg	2	55	12	740	15 931	573	977	9 023	30 125	18 375	48 360	650
33999	All other miscellaneous mfg	-	29	11	1 064	28 827	569	1 061	14 649	61 992	66 324	128 890	5 213
339991	Gasket, packing, & sealing device mfg ...	-	4	1	449	11 077	205	409	6 452	20 052	29 424	49 341	D
339999	All other miscellaneous mfg	2	12	6	403	10 317	216	402	4 111	24 819	26 380	51 907	958

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.												
	Trenton, NJ PMSA												
31-33	Manufacturing	3	352	107	13 537	579 713	8 353	17 184	291 748	1 315 173	1 086 437	2 413 564	78 766
311	Food mfg	3	40	7	614	14 189	379	633	6 764	43 767	39 680	83 764	1 845
3118	Bakeries & tortilla mfg	5	24	2	284	3 747	187	248	2 200	9 865	4 300	14 191	293
31181	Bread & bakery product mfg	5	23	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	70	16	1 266	47 377	943	1 774	28 304	97 801	65 797	163 672	5 474
3231	Printing & related support activities	5	70	16	1 266	47 377	943	1 774	28 304	97 801	65 797	163 672	5 474
32311	Printing	5	60	14	1 144	42 646	873	1 647	26 294	87 138	64 054	151 237	5 093
323110	Commercial lithographic printing ..	6	27	7	446	18 845	326	694	11 797	36 233	26 370	62 630	3 096
323119	Other commercial printing	8	3	2	e	D	D	D	D	D	D	D	96
325	Chemical mfg	2	20	5	483	16 632	348	677	9 911	67 744	72 517	139 062	D
3254	Pharmaceutical & medicine mfg	7	6	2	e	D	D	D	D	D	D	D	341
32541	Pharmaceutical & medicine mfg	7	6	2	e	D	D	D	D	D	D	D	341
325412	Pharmaceutical preparation mfg	7	6	2	e	D	D	D	D	D	D	D	341
326	Plastics & rubber products mfg	4	25	12	1 342	43 041	1 061	2 189	29 638	176 061	96 604	273 582	10 194
3261	Plastics product mfg	5	15	8	1 049	34 999	841	1 761	25 168	160 212	81 997	243 367	9 417
32619	Other plastics product mfg	5	9	5	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	5	2	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	3	10	4	293	8 042	220	428	4 470	15 849	14 607	30 215	777
32629	Other rubber product mfg	3	9	3	e	D	D	D	D	D	D	D	777
327	Nonmetallic mineral product mfg	-	11	7	615	19 592	467	940	14 181	46 738	16 373	63 407	D
3271	Clay product & refractory mfg	-	8	6	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	7	6	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	43	12	1 399	68 135	1 051	2 811	51 940	105 573	172 211	280 150	3 729
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	13	2 208	87 611	1 439	2 454	46 879	168 123	207 705	385 791	13 140
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	g	D	D	D	D	D	D	D	6 793
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	4	3	g	D	D	D	D	D	D	D	6 793
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	8	38	15	4 214	235 650	1 696	3 708	75 846	403 123	287 793	690 398	30 306
3342	Communications equipment mfg	9	6	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	h	D	D	D	D	D	D	D	D

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31-33	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.												
	Trenton, NJ PMSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	2	14	5	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	14	5	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	1	5	3	401	13 912	317	468	8 215	37 043	8 582	45 568	3 358
3345	Navigational, measuring, medical, & control instruments mfg	2	16	7	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	16	7	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	2	4	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	14	4	297	9 973	189	399	4 539	24 162	30 678	53 687	920
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA	1	7 571	2 521	296 009	11 144 543	198 342	402 245	6 246 279	36 032 591	42 854 609	78 627 684	3 154 094
	Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA (DE Part)	–	458	152	22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
	Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA (MD Part)	–	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
	Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA (NJ Part)	1	1 931	643	73 747	2 654 647	51 459	101 322	1 560 504	8 161 513	9 971 460	18 209 340	508 565
	Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD CMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg	1	658	204	26 743	799 864	18 468	36 623	476 156	2 875 491	4 075 170	6 931 087	163 018
312	Beverage & tobacco product mfg	1	41	15	h	D	D	D	D	D	D	D	D
313	Textile mills	2	111	51	h	D	D	D	D	D	D	D	D
314	Textile product mills	1	150	30	h	D	D	D	D	D	D	D	D
315	Apparel mfg	3	300	109	j	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	–	25	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	151	35	2 393	61 337	1 849	3 513	38 878	144 044	231 714	372 912	D
322	Paper mfg	1	167	111	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 071	237	25 080	873 504	17 864	34 229	537 117	1 962 280	1 237 277	3 197 812	134 832
324	Petroleum & coal products mfg	–	69	33	i	D	D	D	D	D	D	D	D
325	Chemical mfg	–	371	205	k	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	350	178	16 562	555 452	12 154	24 588	328 294	1 685 983	1 375 225	3 062 168	151 712
327	Nonmetallic mineral product mfg	1	300	114	12 188	429 542	9 612	20 003	308 463	1 106 394	734 488	1 834 034	D
331	Primary metal mfg	–	91	52	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 270	376	31 121	1 131 270	22 772	45 939	690 784	2 548 013	1 825 591	4 351 565	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	579	200	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	480	205	29 370	1 229 659	15 453	30 789	532 374	3 098 273	1 937 075	5 006 993	D
335	Electrical equipment, appliance, & component mfg	1	165	66	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	176	72	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	356	70	8 035	246 015	6 057	12 131	155 199	632 178	506 362	1 136 678	D
339	Miscellaneous mfg	2	690	154	j	D	D	D	D	D	D	D	D
	Atlantic–Cape May, NJ PMSA												
31-33	Manufacturing	2	242	51	5 740	162 156	4 466	8 371	105 552	390 900	325 574	710 662	17 895
311	Food mfg	2	51	9	678	13 402	500	848	8 588	39 219	45 518	84 961	1 464
3118	Bakeries & tortilla mfg	3	34	4	358	6 137	234	362	3 298	12 858	7 530	20 405	494
31181	Bread & bakery product mfg	3	34	4	358	6 137	234	362	3 298	12 858	7 530	20 405	494
313	Textile mills	—	5	2	349	10 811	229	542	5 162	21 919	54 361	75 633	2 958
3132	Fabric mills	—	4	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	7	3	278	4 277	251	277	3 243	8 471	1 044	9 437	18
323	Printing & related support activities	5	33	2	270	7 509	202	365	5 010	15 130	7 472	22 618	863
3231	Printing & related support activities	5	33	2	270	7 509	202	365	5 010	15 130	7 472	22 618	863
326	Plastics & rubber products mfg	—	15	5	1 155	34 308	870	1 692	19 309	70 615	44 369	115 613	3 610
3261	Plastics product mfg	—	11	5	1 129	33 405	856	1 665	19 021	70 096	42 908	113 670	D
32616	Plastics bottle mfg	—	3	2	e	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	—	3	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	5	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	4	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	19	9	1 358	42 739	1 144	2 224	33 390	105 028	33 642	133 406	D
3271	Clay product & refractory mfg	—	2	2	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	6	3	265	9 967	194	394	7 164	22 414	6 474	29 327	D
32721	Glass & glass product mfg	—	6	3	265	9 967	194	394	7 164	22 414	6 474	29 327	D
327215	Glass product mfg made of purchased glass	—	5	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	11	4	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	9	3	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	2	9	3	e	D	D	D	D	D	D	D	D
336612	Boat building	2	7	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA												
31-33	Manufacturing	1	6 606	2 206	251 908	9 482 996	167 118	338 336	5 228 189	31 229 385	35 557 980	66 607 657	2 582 420
	Philadelphia, PA–NJ PMSA (NJ Part)	–	1 479	502	55 022	2 094 152	36 916	72 808	1 177 749	6 791 149	8 718 987	15 602 552	400 973
	Philadelphia, PA–NJ PMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg	1	543	169	23 115	703 712	15 744	31 442	415 160	2 575 262	3 626 338	6 186 218	145 214
3111	Animal food mfg	–	7	3	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	–	7	3	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	–	2	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	3	44	14	1 575	42 691	1 216	2 473	26 267	123 552	129 711	254 002	7 878
31133	Confectionery mfg from purchased chocolate	2	21	9	1 073	28 697	835	1 739	16 865	89 201	74 413	164 014	5 376
311330	Confectionery mfg from purchased chocolate	2	21	9	1 073	28 697	835	1 739	16 865	89 201	74 413	164 014	5 376
31134	Nonchocolate confectionery mfg	1	15	2	317	7 139	246	447	4 922	19 052	13 801	33 339	972
311340	Nonchocolate confectionery mfg	1	15	2	317	7 139	246	447	4 922	19 052	13 801	33 339	972
3114	Fruit & vegetable preserving & specialty food mfg	–	25	16	1 479	42 428	1 153	2 127	29 144	280 939	223 566	504 508	12 267
31141	Frozen food mfg	–	11	8	889	26 242	780	1 411	20 651	167 369	132 582	299 928	D
311412	Frozen specialty food mfg	–	10	7	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	–	14	8	590	16 186	373	716	8 493	113 570	90 984	204 580	D
311421	Fruit & vegetable canning	–	13	8	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	43	13	1 499	50 305	789	1 618	24 021	155 662	375 626	527 335	16 921
31151	Dairy product (except frozen) mfg	2	22	12	1 390	48 046	711	1 504	22 666	149 391	366 390	511 840	16 431
311511	Fluid milk mfg	2	13	9	1 243	43 761	602	1 302	20 338	128 931	309 403	435 101	15 463
3116	Meat product mfg	–	60	43	7 660	227 962	5 732	12 065	138 323	569 835	2 065 790	2 634 155	43 748
31161	Animal slaughtering & processing	–	60	43	7 660	227 962	5 732	12 065	138 323	569 835	2 065 790	2 634 155	43 748
311611	Animal (except poultry) slaughtering	–	15	10	3 359	108 674	2 278	4 812	63 513	217 666	1 115 055	1 334 175	22 830
311612	Meat processed from carcasses	1	30	22	2 710	81 273	2 095	4 229	51 898	214 879	646 996	861 733	13 901
311615	Poultry processing	–	12	9	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	308	63	9 137	275 399	5 705	10 787	161 771	1 150 076	560 258	1 699 435	49 018
31181	Bread & bakery product mfg	2	276	50	7 219	214 441	4 366	7 957	121 551	825 861	354 081	1 178 644	31 811
311811	Retail bakeries	4	198	19	1 620	22 062	913	1 292	11 561	47 326	26 891	74 390	2 702
311812	Commercial bakeries	2	68	24	4 173	142 769	2 269	4 247	71 240	541 761	191 257	730 868	21 229
311813	Frozen cakes, pies, & other pastries mfg	–	10	7	1 426	49 610	1 184	2 418	38 750	236 774	135 933	373 386	7 880
31182	Cookie, cracker, & pasta mfg	–	31	13	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	–	15	7	g	D	D	D	D	D	D	D	13 848
311822	Flour mixes & dough mfg from purchased flour	2	6	4	346	9 211	205	413	4 995	30 890	35 472	67 700	D
3119	Other food mfg	2	51	16	1 385	51 345	880	1 797	28 072	232 262	202 153	435 142	D
31191	Snack food mfg	–	11	2	327	8 366	205	456	5 400	98 664	96 539	196 495	2 045
311919	Other snack food mfg	–	8	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	4	13	5	450	20 781	245	544	10 199	52 079	34 402	86 964	D
311942	Spice & extract mfg	4	7	4	353	17 363	186	441	8 032	40 571	22 462	63 519	3 707
31199	All other food mfg	3	21	7	542	19 914	395	726	11 494	74 284	63 148	136 602	D
311999	All other miscellaneous food mfg	3	16	6	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	31	12	2 314	87 151	1 127	2 285	36 664	424 039	485 708	915 078	26 004
3121	Beverage mfg	1	30	11	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	19	7	1 785	70 552	715	1 480	24 359	309 228	438 886	753 024	19 594
312111	Soft drink mfg	1	9	6	1 721	68 712	686	1 420	23 719	305 860	436 486	747 212	19 029
3122	Tobacco mfg	–	1	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	–	1	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	–	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	2	96	44	3 218	87 010	2 528	5 220	58 333	181 138	220 207	404 570	13 111
3131	Fiber, yarn, & thread mills .	2	12	8	416	8 036	367	687	6 174	17 305	26 650	43 763	1 481
31311	Fiber, yarn, & thread mills	2	12	8	416	8 036	367	687	6 174	17 305	26 650	43 763	1 481
3132	Fabric mills	2	48	24	2 006	53 955	1 593	3 298	35 775	105 333	82 940	189 869	8 475
31321	Broadwoven fabric mills .	6	14	7	502	13 520	417	863	10 074	28 900	27 980	56 414	3 325
313210	Broadwoven fabric mills	6	14	7	502	13 520	417	863	10 074	28 900	27 980	56 414	3 325
31322	Narrow fabric mills & schiffli machine embroidery	—	17	8	1 101	28 787	858	1 763	17 671	54 552	26 719	81 228	3 543
313221	Narrow fabric mills	1	13	7	f	D	D	D	D	D	D	D	D
313222	Schiffli machine embroidery	—	4	1	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	1	10	7	310	8 381	237	472	5 393	18 183	23 262	43 575	D
313230	Nonwoven fabric mills .	1	10	7	310	8 381	237	472	5 393	18 183	23 262	43 575	D
3133	Textile & fabric finishing & fabric coating mills	3	36	12	796	25 019	568	1 235	16 384	58 500	110 617	170 938	3 155
31331	Textile & fabric finishing mills	3	29	10	613	18 516	443	970	11 812	45 388	96 195	143 708	2 493
313311	Broadwoven fabric finishing mills	4	18	5	378	10 592	237	528	6 851	29 460	88 821	120 457	1 137
314	Textile product mills	1	122	26	2 030	47 467	1 567	2 969	28 729	93 408	87 153	179 560	D
3141	Textile furnishings mills	1	53	7	610	13 625	512	947	9 083	30 846	27 458	57 977	D
31412	Curtain & linen mills	1	49	6	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	15	4	315	8 001	264	501	5 531	20 255	19 907	39 770	D
3149	Other textile product mills ...	1	69	19	1 420	33 842	1 055	2 022	19 646	62 562	59 695	121 583	D
31491	Textile bag & canvas mills	1	27	7	540	12 451	432	780	7 667	22 939	23 182	45 107	D
314912	Canvas & related product mills	1	22	5	342	9 705	253	465	5 459	18 566	19 143	36 821	D
31499	All other textile product mills	2	42	12	880	21 391	623	1 242	11 979	39 623	36 513	76 476	D
314999	All other miscellaneous textile product mills ..	1	34	8	673	16 097	525	1 034	9 716	28 024	21 946	50 846	D
315	Apparel mfg	3	277	99	11 080	253 592	8 429	15 374	152 162	710 833	748 705	1 389 216	D
3151	Apparel knitting mills	3	19	6	466	9 833	425	798	6 189	20 486	19 091	38 828	D
31519	Other apparel knitting mills	3	11	4	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	205	79	9 592	225 098	7 241	13 342	135 273	660 195	686 261	1 277 195	11 271
31521	Cut & sew apparel contractors	3	102	37	2 054	31 498	1 925	3 359	25 724	62 532	9 296	71 541	1 481
315211	Men's & boys' cut & sew apparel contractors	2	15	8	407	7 543	369	644	5 584	22 119	3 543	25 429	444
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	87	29	1 647	23 955	1 556	2 715	20 140	40 413	5 753	46 112	1 037
31522	Men's & boys' cut & sew apparel mfg	6	35	17	3 020	75 308	2 426	4 890	48 961	245 267	239 980	475 159	5 238
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	9	8	g	D	D	D	D	D	D	D	1 971
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	9	6	2	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	7	6	3	548	12 176	497	1 027	10 096	31 084	22 175	52 883	D
31523	Women's & girls' cut & sew apparel mfg	1	50	20	4 155	111 144	2 707	4 756	57 588	331 400	418 345	691 598	4 243
315232	Women's & girls' cut & sew blouse & shirt mfg	4	12	5	1 002	18 544	852	1 616	14 018	66 398	49 477	114 374	634
315233	Women's & girls' cut & sew dress mfg	—	11	5	919	11 621	745	1 540	9 874	23 782	51 767	75 409	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	12	5	1 916	73 928	844	1 161	28 433	225 245	302 017	469 784	D
315239	Women's & girls' cut & sew other outerwear mfg	5	13	5	e	D	D	D	D	D	D	D	385
31529	Other cut & sew apparel mfg	2	18	5	363	7 148	183	337	3 000	20 996	18 640	38 897	309
315299	All other cut & sew apparel mfg	2	13	4	317	6 597	158	296	2 655	20 053	17 920	37 202	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	53	14	1 022	18 661	763	1 234	10 700	30 152	43 353	73 193	1 627
31599	Apparel accessories & other apparel mfg	1	53	14	1 022	18 661	763	1 234	10 700	30 152	43 353	73 193	1 627
315999	Other apparel accessories & other apparel mfg	1	41	11	810	15 992	608	1 009	8 949	24 284	39 526	63 526	D
316	Leather & allied product mfg	2	23	3	269	5 328	194	363	3 613	16 009	16 012	33 946	292
321	Wood product mfg	2	125	33	2 080	53 993	1 596	3 045	33 892	123 908	208 532	328 825	D
3212	Veneer, plywood, & engineered wood product mfg	1	11	6	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	1	11	6	e	D	D	D	D	D	D	D	D
321214	Truss mfg	1	6	5	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	106	26	1 547	35 874	1 221	2 276	25 206	71 711	99 465	171 840	D
32191	Millwork	6	40	6	441	10 609	323	593	7 544	18 664	20 575	39 675	D
321911	Wood window & door mfg	8	17	5	307	6 766	219	396	4 694	11 909	14 332	26 695	D
32192	Wood container & pallet mfg	3	36	12	614	13 516	496	903	9 362	23 396	37 389	60 878	D
321920	Wood container & pallet mfg	3	36	12	614	13 516	496	903	9 362	23 396	37 389	60 878	D
32199	All other wood product mfg	1	30	8	492	11 749	402	780	8 300	29 651	41 501	71 287	D
321999	All other miscellaneous wood product mfg	1	22	5	341	7 722	274	538	5 171	19 125	27 290	46 473	D
322	Paper mfg	1	150	99	11 236	449 189	8 241	17 384	277 145	1 450 721	1 414 585	2 845 499	138 630
3221	Pulp, paper, & paperboard mills	—	10	10	1 889	92 955	1 619	3 472	74 417	524 105	256 454	757 977	51 413
32212	Paper mills	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	140	89	9 347	356 234	6 622	13 912	202 728	926 616	1 158 131	2 087 522	87 217
32221	Paperboard container mfg	1	65	46	4 185	152 353	3 115	6 819	90 923	370 650	490 254	861 500	31 020
322211	Corrugated & solid fiber box mfg	1	30	21	2 160	84 261	1 548	3 205	47 103	198 213	292 509	491 909	18 558
322212	Folding paperboard box mfg	1	22	15	g	D	D	D	D	D	D	D	8 763
322213	Setup paperboard box mfg	3	7	5	253	7 002	199	393	4 565	12 528	9 852	22 135	23
322215	Nonfolding sanitary food container mfg	—	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	1	33	18	2 395	99 724	1 646	3 573	57 980	326 947	334 878	659 370	19 934
322222	Coated & laminated paper mfg	1	23	11	1 294	57 420	834	1 831	31 707	227 422	187 938	414 056	12 677
322223	Plastics, foil, & coated paper bag mfg	—	3	3	f	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	22	11	895	30 392	557	1 152	15 627	51 391	71 059	124 796	2 120
322232	Envelope mfg	—	4	4	578	21 283	337	725	10 379	34 432	57 907	94 456	1 304
32229	Other converted paper product mfg	2	20	14	1 872	73 765	1 304	2 368	38 198	177 628	261 940	441 856	34 143
322291	Sanitary paper product mfg	—	5	4	926	42 456	658	1 402	26 839	103 227	129 023	228 166	D
322299	All other converted paper product mfg	3	15	10	946	31 309	646	966	11 359	74 401	132 917	213 690	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	945	221	23 739	833 074	16 899	32 463	511 473	1 886 194	1 195 681	3 079 569	129 173
3231	Printing & related support activities.....	2	945	221	23 739	833 074	16 899	32 463	511 473	1 886 194	1 195 681	3 079 569	129 173
32311	Printing.....	2	819	186	20 063	693 165	14 063	26 693	420 723	1 619 610	1 124 726	2 741 694	114 464
323110	Commercial lithographic printing ..	2	406	110	12 503	443 183	8 947	16 756	275 076	963 451	614 448	1 574 946	72 161
323111	Commercial gravure printing.....	5	7	5	476	20 739	357	836	13 941	48 521	49 316	96 748	7 284
323112	Commercial flexographic printing .	2	19	7	613	24 850	439	928	15 433	64 029	46 496	110 730	2 332
323113	Commercial screen printing.....	3	65	13	881	21 441	637	1 111	12 473	42 475	23 181	65 723	3 058
323114	Quick printing.....	2	166	7	856	22 094	559	970	13 373	51 750	27 554	79 094	2 826
323116	Manifold business form printing.....	3	38	21	2 355	75 787	1 427	2 984	41 681	257 500	239 406	498 508	12 416
323117	Book printing.....	—	8	2	514	19 132	392	679	9 781	36 796	27 860	64 238	D
323119	Other commercial printing.....	5	87	13	1 419	53 990	1 014	1 902	32 607	128 446	82 323	210 720	8 961
32312	Support activities for printing.....	1	126	35	3 676	139 909	2 836	5 770	90 750	266 584	70 955	337 875	14 709
323121	Tradebinding & related work.....	—	40	15	983	32 293	802	1 811	22 253	60 899	18 180	80 555	3 416
323122	Prepress services.....	1	86	20	2 693	107 616	2 034	3 959	68 497	205 685	52 775	257 320	11 293
324	Petroleum & coal products mfg.....	—	55	28	4 707	267 418	3 050	7 145	166 823	1 786 726	9 093 063	10 971 541	576 185
3241	Petroleum & coal products mfg.....	—	55	28	4 707	267 418	3 050	7 145	166 823	1 786 726	9 093 063	10 971 541	576 185
32411	Petroleum refineries.....	—	8	8	3 354	211 053	2 213	5 353	138 290	1 549 304	8 363 886	10 005 177	563 565
324110	Petroleum refineries ..	—	8	8	3 354	211 053	2 213	5 353	138 290	1 549 304	8 363 886	10 005 177	563 565
32412	Asphalt paving, roofing, & saturated materials mfg.....	3	28	6	e	D	D	D	D	D	D	D	6 679
324122	Asphalt shingle & coating materials mfg.....	4	5	4	e	D	D	D	D	D	D	D	2 427
32419	Other petroleum & coal products mfg.....	—	19	14	f	D	D	D	D	D	D	D	5 941
324191	Petroleum lubricating oil & grease mfg.....	—	17	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	314	172	21 387	1 142 420	11 766	24 504	523 796	8 690 369	6 898 935	15 672 003	700 990
3251	Basic chemical mfg.....	—	52	27	4 265	239 488	2 102	4 055	108 187	1 389 936	1 581 863	2 981 008	104 063
32511	Petrochemical mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg.....	—	11	3	2 210	126 680	962	1 762	56 118	242 094	181 328	440 709	25 915
325120	Industrial gas mfg.....	—	11	3	2 210	126 680	962	1 762	56 118	242 094	181 328	440 709	25 915
32513	Dye & pigment mfg.....	2	10	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	2	10	2	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	13	9	549	28 623	356	760	14 920	359 559	500 191	857 022	11 536
325188	All other basic inorganic chemical mfg.....	—	13	9	549	28 623	356	760	14 920	359 559	500 191	857 022	11 536
32519	Other basic organic chemical mfg.....	—	16	11	781	47 976	405	840	19 208	560 919	566 921	1 134 902	28 818
325199	All other basic organic chemical mfg.....	1	15	10	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	25	21	3 183	183 897	1 781	3 973	89 671	623 667	1 116 311	1 733 703	D
32521	Resin & synthetic rubber mfg.....	—	24	21	h	D	D	D	D	D	D	D	96 379
325211	Plastics material & resin mfg.....	—	21	19	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	54	38	8 961	527 975	5 037	10 695	237 322	5 919 099	3 352 981	9 362 871	451 833
32541	Pharmaceutical & medicine mfg.....	—	54	38	8 961	527 975	5 037	10 695	237 322	5 919 099	3 352 981	9 362 871	451 833
325411	Medicinal & botanical mfg.....	3	6	4	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	29	20	7 553	455 767	4 239	9 133	209 497	5 761 192	3 193 900	9 046 541	417 828
325413	In-vitro diagnostic substance mfg.....	1	8	7	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	7	11	7	592	36 597	350	763	13 267	84 391	107 193	190 976	6 255

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg.....	3	58	27	1 841	68 708	976	1 920	29 179	295 904	309 608	612 821	15 675
32551	Paint & coating mfg.....	2	36	18	1 269	45 539	684	1 291	19 820	205 992	207 495	418 742	8 406
325510	Paint & coating mfg....	2	36	18	1 269	45 539	684	1 291	19 820	205 992	207 495	418 742	8 406
32552	Adhesive mfg.....	3	22	9	572	23 169	292	629	9 359	89 912	102 113	194 079	7 269
325520	Adhesive mfg.....	3	22	9	572	23 169	292	629	9 359	89 912	102 113	194 079	7 269
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	56	22	1 173	44 569	707	1 394	21 131	128 088	176 189	304 514	14 632
32561	Soap & cleaning compound mfg.....	4	49	22	1 117	43 063	668	1 326	20 263	122 094	171 887	294 200	14 241
325611	Soap & other detergent mfg.....	2	21	9	478	16 930	287	561	8 396	34 673	56 985	91 914	2 437
325612	Polish & other sanitation good mfg...	5	19	7	396	13 384	248	433	4 929	28 757	31 932	60 913	1 312
3259	Other chemical product mfg.....	3	62	35	1 806	71 349	1 089	2 306	36 338	320 065	346 622	649 154	D
32591	Printing ink mfg.....	3	16	11	474	21 291	253	584	9 424	81 163	45 244	122 598	D
325910	Printing ink mfg.....	3	16	11	474	21 291	253	584	9 424	81 163	45 244	122 598	D
32599	All other chemical product & preparation mfg.....	3	46	24	1 332	50 058	836	1 722	26 914	238 902	301 378	526 556	14 971
325991	Custom compounding of purchased resin...	1	15	7	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	5	28	15	779	29 354	438	888	14 699	146 156	141 951	280 013	10 083
326	Plastics & rubber products mfg.....	2	277	137	11 455	386 427	8 435	17 147	231 743	1 098 954	888 212	1 978 298	89 583
3261	Plastics product mfg.....	2	233	117	10 393	352 113	7 653	15 572	211 213	1 028 921	832 750	1 853 129	85 499
32611	Unsupported plastics film, sheet, & bag mfg..	4	30	15	1 210	39 529	891	1 711	24 390	96 082	116 016	212 532	14 971
326111	Unsupported plastics bag mfg.....	3	11	6	420	13 612	319	703	8 588	35 169	39 698	74 877	3 402
326112	Unsupported plastics packaging film & sheet mfg.....	—	5	3	382	11 499	304	479	7 614	20 943	26 515	47 402	2 318
326113	Unsupported plastics film & sheet (except packaging) mfg.....	7	14	6	408	14 418	268	529	8 188	39 970	49 803	90 253	9 251
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	4	19	11	911	32 535	681	1 534	20 593	87 346	70 476	157 664	7 182
326121	Unsupported plastics profile shape mfg....	4	17	10	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg.....	5	13	9	694	21 272	525	1 004	11 474	63 936	74 601	138 390	4 331
326150	Urethane & other foam product (except polystyrene) mfg....	5	13	9	694	21 272	525	1 004	11 474	63 936	74 601	138 390	4 331
32616	Plastics bottle mfg.....	—	6	5	324	10 299	277	533	8 060	45 009	37 914	80 537	1 339
326160	Plastics bottle mfg....	—	6	5	324	10 299	277	533	8 060	45 009	37 914	80 537	1 339
32619	Other plastics product mfg.....	1	151	72	6 920	236 654	5 027	10 177	138 383	700 297	491 972	1 186 069	55 121
326192	Resilient floor covering mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	146	68	5 584	177 060	4 224	8 410	104 173	371 959	337 830	706 427	D
3262	Rubber product mfg.....	2	44	20	1 062	34 314	782	1 575	20 530	70 033	55 462	125 169	4 084
32629	Other rubber product mfg.....	2	35	16	877	29 320	663	1 343	17 667	60 344	42 598	102 837	3 498
326291	Rubber product mfg for mechanical use.....	4	13	5	255	8 268	192	377	4 874	14 606	8 563	23 146	989
326299	All other rubber product mfg.....	1	22	11	622	21 052	471	966	12 793	45 738	34 035	79 691	2 509

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	209	68	4 955	183 217	3 734	7 912	121 667	535 467	406 537	940 719	D
3271	Clay product & refractory mfg	3	22	6	418	11 550	354	634	8 523	32 290	14 865	47 872	531
32711	Pottery, ceramics, & plumbing fixture mfg	—	13	4	e	D	D	D	D	D	D	D	289
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	12	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	38	13	1 267	49 859	967	2 059	33 733	132 498	98 140	227 544	D
32721	Glass & glass product mfg	—	38	13	1 267	49 859	967	2 059	33 733	132 498	98 140	227 544	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	29	11	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	102	36	2 123	79 184	1 555	3 381	49 453	203 698	187 574	391 063	D
32732	Ready-mix concrete mfg	1	49	17	888	36 688	653	1 423	23 916	99 399	91 908	191 779	8 190
327320	Ready-mix concrete mfg	1	49	17	888	36 688	653	1 423	23 916	99 399	91 908	191 779	8 190
32733	Concrete pipe, brick, & block mfg	—	18	6	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	33	13	863	27 320	630	1 288	16 590	65 945	56 072	121 675	D
327390	Other concrete product mfg	1	33	13	863	27 320	630	1 288	16 590	65 945	56 072	121 675	D
3274	Lime & gypsum product mfg	—	7	3	255	10 873	207	497	8 203	54 440	46 836	101 400	D
3279	Other nonmetallic mineral product mfg	—	40	10	892	31 751	651	1 341	21 755	112 541	59 122	172 840	D
32799	All other nonmetallic mineral product mfg	—	32	6	708	25 230	524	1 081	18 225	94 348	48 140	143 664	D
327993	Mineral wool mfg	—	7	2	306	12 129	252	517	9 879	45 584	25 554	72 060	D
331	Primary metal mfg	—	86	48	9 586	414 030	7 156	14 709	280 222	895 417	1 619 209	2 530 925	92 877
3311	Iron & steel mills & ferroalloy mfg	—	10	9	3 815	198 541	2 713	5 869	139 778	363 962	965 863	1 335 325	31 595
33111	Iron & steel mills & ferroalloy mfg	—	10	9	3 815	198 541	2 713	5 869	139 778	363 962	965 863	1 335 325	31 595
331111	Iron & steel mills	—	9	8	h	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	11	11	1 287	42 768	1 016	2 103	30 479	105 105	152 757	262 406	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	744	25 583	591	1 206	17 829	49 307	64 146	116 806	7 246
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	744	25 583	591	1 206	17 829	49 307	64 146	116 806	7 246
33122	Rolling & drawing of purchased steel	—	7	7	543	17 185	425	897	12 650	55 798	88 611	145 600	D
331221	Cold-rolled steel shape mfg	—	3	3	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	5	4	1 296	41 997	1 148	1 834	27 261	98 555	189 605	284 253	9 641
33131	Alumina & aluminum production & processing	—	5	4	1 296	41 997	1 148	1 834	27 261	98 555	189 605	284 253	9 641
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	21	12	1 271	62 351	786	1 784	33 758	157 096	186 872	357 301	29 313
33141	Nonferrous metal (except aluminum) smelting & refining	—	5	2	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	5	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	1	4	4	e	D	D	D	D	D	D	D	D

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing—Con.												
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	12	6	491	22 774	258	622	9 993	54 244	77 480	132 014	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	2	9	5	e	D	D	D	D	D	D	D	5 034
3315	Foundries	—	39	12	1 917	68 373	1 493	3 119	48 946	170 699	124 112	291 640	D
33151	Ferrous metal foundries	—	16	7	898	31 924	709	1 483	22 119	104 251	72 634	173 931	D
331511	Iron foundries	—	10	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	23	5	1 019	36 449	784	1 636	26 827	66 448	51 478	117 709	6 811
331521	Aluminum die-casting foundries	1	3	3	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	5	1	e	D	D	D	D	D	D	D	505
332	Fabricated metal product mfg	1	1 154	346	28 785	1 049 019	21 056	42 235	639 919	2 378 504	1 705 280	4 060 987	150 287
3321	Forging & stamping	1	55	31	1 721	60 943	1 232	2 581	34 410	121 410	123 288	245 236	6 625
33211	Forging & stamping	1	55	31	1 721	60 943	1 232	2 581	34 410	121 410	123 288	245 236	6 625
332111	Iron & steel forging ...	—	8	6	297	10 757	217	488	6 647	21 030	19 299	40 511	1 103
332114	Custom roll forming	—	12	5	315	12 949	197	434	5 480	29 357	30 257	59 384	1 028
332116	Metal stamping	2	30	18	969	34 057	712	1 492	19 826	62 808	70 012	133 094	4 027
3322	Cutlery & handtool mfg. ...	3	39	10	839	27 846	581	1 114	15 065	70 535	49 971	118 868	3 042
33221	Cutlery & handtool mfg. ...	3	39	10	839	27 846	581	1 114	15 065	70 535	49 971	118 868	3 042
332212	Hand & edge tool mfg. ...	2	28	5	455	15 845	314	614	8 463	32 134	19 606	51 256	1 252
3323	Architectural & structural metals mfg	1	240	84	6 048	212 746	4 403	9 166	118 941	474 880	400 902	863 464	19 926
33231	Plate work & fabricated structural product mfg. ...	1	57	22	1 349	54 717	948	2 063	30 567	138 593	111 276	245 484	4 847
332312	Fabricated structural metal mfg	1	31	12	688	28 851	481	1 111	17 405	69 654	74 910	145 245	2 893
332313	Plate work mfg	1	22	9	573	22 783	409	827	11 680	61 350	29 445	85 484	D
33232	Ornamental & architectural metal products mfg.	1	183	62	4 699	158 029	3 455	7 103	88 374	336 287	289 626	617 980	15 079
332321	Metal window & door mfg	1	29	12	719	20 204	512	958	11 831	42 038	68 530	110 583	1 180
332322	Sheet metal work mfg. ...	1	110	41	3 167	105 558	2 424	5 019	61 325	232 465	172 570	396 286	12 220
332323	Ornamental & architectural metal work mfg	—	44	9	813	32 267	519	1 126	15 218	61 784	48 526	111 111	1 679
3324	Boiler, tank, & shipping container mfg	1	35	20	1 393	47 713	953	1 892	27 284	133 255	200 082	333 601	5 139
33241	Power boiler & heat exchanger mfg.	2	10	7	e	D	D	D	D	D	D	D	2 102
332410	Power boiler & heat exchanger mfg	2	10	7	e	D	D	D	D	D	D	D	2 102
33243	Metal can, box, & other metal container (light gauge) mfg	—	18	9	792	25 416	641	1 285	18 616	86 121	150 139	236 889	2 463
332431	Metal can mfg	—	5	2	291	10 925	237	515	8 761	38 611	91 284	130 101	D
332439	Other metal container mfg	1	13	7	501	14 491	404	770	9 855	47 510	58 855	106 788	D
3325	Hardware mfg	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
33251	Hardware mfg	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
332510	Hardware mfg	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
3326	Spring & wire product mfg. ...	1	36	13	1 016	35 200	703	1 365	18 354	87 989	61 829	151 358	3 928
33261	Spring & wire product mfg	1	36	13	1 016	35 200	703	1 365	18 354	87 989	61 829	151 358	3 928
332612	Spring (light gauge) mfg	—	6	4	391	14 624	238	446	7 207	45 191	24 440	70 979	2 145
332618	Other fabricated wire product mfg	2	26	7	e	D	D	D	D	D	D	D	1 352
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	498	96	9 365	373 826	7 226	14 894	256 662	776 251	322 735	1 105 251	69 904
33271	Machine shops	2	428	68	5 405	206 394	4 152	8 086	134 737	395 841	172 612	575 351	30 626
332710	Machine shops	2	428	68	5 405	206 394	4 152	8 086	134 737	395 841	172 612	575 351	30 626
33272	Turned product & screw, nut, & bolt mfg	—	70	28	3 960	167 432	3 074	6 808	121 925	380 410	150 123	529 900	39 278
332721	Precision turned product mfg	—	45	17	1 370	46 453	1 146	2 506	34 555	111 457	52 186	162 952	13 753
332722	Bolt, nut, screw, rivet, & washer mfg	—	25	11	2 590	120 979	1 928	4 302	87 370	268 953	97 937	366 948	25 525

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	2	121	30	1 810	62 134	1 380	2 801	39 379	130 998	56 083	184 627	9 112
33281	Coating, engraving, heat treating, & allied activities.....	2	121	30	1 810	62 134	1 380	2 801	39 379	130 998	56 083	184 627	9 112
332811	Metal heat treating....	—	17	6	340	12 204	245	485	6 867	32 229	9 512	40 661	2 582
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	2	47	14	736	24 980	581	1 246	17 487	54 184	32 331	84 995	4 044
332813	Electroplating, plating, polishing, anodizing, & coloring.....	3	57	10	734	24 950	554	1 070	15 025	44 585	14 240	58 971	2 486
3329	Other fabricated metal product mfg.....	—	121	58	6 253	220 045	4 362	8 009	124 596	558 296	470 196	1 013 302	31 973
33291	Metal valve mfg.....	—	31	19	2 314	89 898	1 458	2 883	44 390	231 556	209 012	429 487	15 613
332911	Industrial valve mfg...	1	17	10	937	43 656	522	1 080	19 942	111 043	61 347	167 207	D
332913	Plumbing fixture fitting & trim mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	90	39	3 939	130 147	2 904	5 126	80 206	326 740	261 184	583 815	16 360
332991	Ball & roller bearing mfg.....	—	4	4	503	19 834	346	686	12 053	59 606	23 360	80 959	D
332996	Fabricated pipe & pipe fitting mfg.....	—	17	8	736	24 617	546	871	14 882	54 798	20 970	74 391	2 698
332998	Enameled iron & metal sanitary ware mfg...	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	—	49	23	1 800	63 895	1 293	2 525	37 978	159 783	186 183	347 582	6 582
333	Machinery mfg.....	1	524	186	18 207	706 910	10 125	21 066	337 222	1 508 844	1 523 451	3 032 378	89 140
3332	Industrial machinery mfg ..	—	99	33	5 531	199 288	2 530	5 272	80 552	500 590	537 638	1 023 200	23 855
33322	Plastics & rubber industry machinery mfg.....	—	11	4	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	11	4	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	—	87	29	5 262	178 320	2 382	4 950	70 254	473 834	483 709	948 077	D
333291	Paper industry machinery mfg.....	—	12	6	796	41 388	481	1 114	24 408	74 112	81 898	154 611	3 809
333295	Semiconductor machinery mfg.....	—	6	3	h	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	2	45	11	1 321	55 427	641	1 324	20 008	118 376	110 364	228 665	6 865
3333	Commercial & service industry machinery mfg ..	1	53	21	1 855	65 567	929	1 794	25 310	109 823	108 749	218 970	6 276
33331	Commercial & service industry machinery mfg.....	1	53	21	1 855	65 567	929	1 794	25 310	109 823	108 749	218 970	6 276
333313	Office machinery mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg.....	7	12	5	337	9 319	232	377	5 028	19 114	13 248	33 374	1 816
333319	Other commercial & service industry machinery mfg.....	—	24	8	513	19 123	275	579	8 368	43 908	40 885	84 652	1 150
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	37	20	1 490	48 199	1 013	2 016	24 901	124 494	114 060	236 285	5 646
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	37	20	1 490	48 199	1 013	2 016	24 901	124 494	114 060	236 285	5 646
333414	Heating equipment (except warm air furnaces) mfg.....	2	10	4	295	10 705	148	329	4 108	36 931	19 833	56 552	621
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	15	10	858	26 121	658	1 325	15 871	53 840	63 881	116 111	1 828
3335	Metalworking machinery mfg.....	3	145	25	1 834	71 638	1 367	2 725	47 925	131 225	53 890	183 140	8 600
33351	Metalworking machinery mfg.....	3	145	25	1 834	71 638	1 367	2 725	47 925	131 225	53 890	183 140	8 600
333511	Industrial mold mfg...	2	28	4	269	12 444	225	484	9 484	22 007	8 989	30 467	1 361
333514	Special die & tool, die set, jig, & fixture mfg ..	3	74	15	1 056	40 786	819	1 612	28 475	72 065	23 379	94 593	3 535
333515	Cutting tool & machine tool accessory mfg ..	4	28	1	270	9 918	169	336	5 217	21 680	6 866	27 887	1 338

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	1	20	9	1 108	54 441	710	1 704	29 731	107 120	70 058	179 493	9 993
33361	Engine, turbine, & power transmission equipment mfg	1	20	9	1 108	54 441	710	1 704	29 731	107 120	70 058	179 493	9 993
333612	Speed changer, industrial high-speed drive, & gear mfg	—	8	4	658	35 676	419	1 103	18 949	70 713	51 689	124 912	8 676
333613	Mechanical power transmission equipment mfg	—	5	2	e	D	D	D	D	D	D	D	505
3339	Other general-purpose machinery mfg	1	162	75	6 161	259 187	3 411	7 233	123 434	520 814	614 601	1 153 246	33 688
33391	Pump & compressor mfg	1	25	15	1 655	72 305	951	2 155	37 945	151 310	126 690	281 595	11 167
333911	Pump & pumping equipment mfg	3	16	8	f	D	D	D	D	D	D	D	3 498
333912	Air & gas compressor mfg	—	8	6	536	22 907	307	745	11 391	55 220	37 597	92 263	D
333913	Measuring & dispensing pump mfg	—	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	31	20	1 405	47 480	848	1 630	24 711	76 782	103 146	181 381	5 991
333922	Conveyor & conveying equipment mfg	—	13	9	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	8	6	525	18 316	364	731	10 610	28 953	36 325	67 106	3 497
33399	All other general-purpose machinery mfg	2	106	40	3 101	139 402	1 612	3 448	60 778	292 722	384 765	690 270	16 530
333993	Packaging machinery mfg	—	26	14	667	30 107	399	806	15 276	65 463	46 439	111 622	1 985
333994	Industrial process furnace & oven mfg ..	4	18	7	755	35 268	315	753	13 611	101 880	128 520	223 114	4 777
333999	All other miscellaneous general-purpose machinery mfg	—	44	15	1 357	61 764	700	1 478	25 174	99 337	179 387	298 349	8 840
334	Computer & electronic product mfg	2	448	191	27 385	1 146 916	14 501	28 882	500 775	2 832 446	1 747 715	4 552 369	146 204
3341	Computer & peripheral equipment mfg	1	49	24	3 330	132 188	1 299	2 753	42 661	326 597	313 962	635 540	14 604
33411	Computer & peripheral equipment mfg	1	49	24	3 330	132 188	1 299	2 753	42 661	326 597	313 962	635 540	14 604
334111	Electronic computer mfg	2	9	3	426	18 476	157	325	6 388	57 577	48 319	102 525	D
334119	Other computer peripheral equipment mfg	1	33	17	2 693	104 729	1 070	2 239	30 737	249 793	246 877	494 719	D
3342	Communications equipment mfg	3	66	35	7 177	343 680	3 031	5 490	108 338	850 716	538 619	1 369 581	43 170
33421	Telephone apparatus mfg	—	13	7	798	36 219	404	708	11 877	162 743	134 702	303 787	10 131
334210	Telephone apparatus mfg	—	13	7	798	36 219	404	708	11 877	162 743	134 702	303 787	10 131
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	41	25	6 210	301 893	2 546	4 627	94 744	672 430	397 111	1 043 394	32 423
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	41	25	6 210	301 893	2 546	4 627	94 744	672 430	397 111	1 043 394	32 423
3344	Semiconductor & other electronic component mfg	2	139	60	5 087	158 834	3 384	6 621	74 956	324 928	191 527	510 774	35 976
33441	Semiconductor & other electronic component mfg	2	139	60	5 087	158 834	3 384	6 621	74 956	324 928	191 527	510 774	35 976
334412	Bare printed circuit board mfg	4	32	6	448	12 896	323	610	7 308	25 557	16 052	41 379	2 603
334413	Semiconductor & related device mfg ...	1	27	12	1 176	44 393	764	1 497	21 025	83 090	45 559	127 581	23 724
334416	Electronic coil, transformer, & other inductor mfg	2	9	4	500	16 527	349	785	9 553	33 735	15 858	49 175	1 300
334417	Electronic connector mfg	2	15	10	705	20 462	430	832	7 633	37 797	32 545	70 643	2 123

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg—Con.												
334418	Printed circuit assembly (electronic assembly) mfg	3	17	11	763	23 697	421	806	9 126	47 496	19 896	64 102	2 428
334419	Other electronic component mfg	1	35	14	1 076	30 125	787	1 518	15 570	75 102	44 416	118 233	2 759
3345	Navigational, measuring, medical, & control instruments mfg	1	159	63	10 449	462 395	5 860	12 151	240 073	1 226 532	637 134	1 866 121	37 359
33451	Navigational, measuring, medical, & control instruments mfg	1	159	63	10 449	462 395	5 860	12 151	240 073	1 226 532	637 134	1 866 121	37 359
334510	Electromedical & electrotherapeutic apparatus mfg	2	12	7	753	30 460	276	506	8 326	55 664	54 569	116 243	3 961
334511	Search, detection, navigation, & guidance instrument mfg	—	18	8	h	D	D	D	D	D	D	D	14 152
334513	Industrial process control instrument mfg	3	36	15	3 312	139 537	1 376	2 883	48 554	360 524	187 147	547 331	11 776
334515	Electricity measuring & testing instrument mfg	1	21	10	645	24 517	364	706	9 729	58 939	37 976	98 132	2 293
334516	Analytical laboratory instrument mfg	3	22	5	439	16 039	244	542	7 787	40 588	19 514	59 364	804
334519	Other measuring & controlling device mfg	1	27	10	1 215	48 107	727	1 512	22 401	46 365	43 155	90 161	3 256
3346	Mfg & reproducing magnetic & optical media	3	28	9	1 303	48 931	899	1 811	34 249	102 050	63 273	165 502	14 990
33461	Mfg & reproducing magnetic & optical media	3	28	9	1 303	48 931	899	1 811	34 249	102 050	63 273	165 502	14 990
334612	Prerecorded CD (except software), tape, & record reproducing	2	16	5	1 090	42 736	734	1 486	30 335	84 691	53 439	138 133	11 874
335	Electrical equipment, appliance, & component mfg	1	155	61	7 227	234 995	5 041	10 102	136 084	740 950	674 536	1 424 082	28 298
3351	Electric lighting equipment mfg	—	40	20	2 570	61 409	1 982	3 626	38 529	185 482	276 297	464 969	7 728
33512	Lighting fixture mfg	—	40	20	2 570	61 409	1 982	3 626	38 529	185 482	276 297	464 969	7 728
335121	Residential electric lighting fixture mfg	—	21	8	1 306	25 861	1 063	1 751	16 835	79 575	120 515	204 725	2 828
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	13	7	976	26 737	753	1 554	17 488	80 424	131 800	210 610	3 884
335129	Other lighting equipment mfg	—	6	5	288	8 811	166	321	4 206	25 483	23 982	49 634	1 016
3352	Household appliance mfg	—	5	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	54	12	1 747	77 882	1 011	2 185	41 961	179 390	101 105	286 785	D
33531	Electrical equipment mfg	1	54	12	1 747	77 882	1 011	2 185	41 961	179 390	101 105	286 785	D
335312	Motor & generator mfg	3	12	3	549	20 148	376	844	11 395	52 603	26 553	78 638	1 799
335313	Switchgear & switchboard apparatus mfg	—	13	6	895	45 612	449	970	24 816	89 253	52 775	148 136	D
3359	Other electrical equipment & component mfg	1	56	26	h	D	D	D	D	D	D	D	13 194
33592	Communication & energy wire & cable mfg	—	4	4	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	3	3	e	D	D	D	D	D	D	D	2 401
33593	Wiring device mfg	1	25	9	1 268	42 238	1 005	2 123	29 750	143 864	153 810	298 065	5 871
335931	Current-carrying wiring device mfg	1	19	6	674	20 379	564	1 213	15 377	67 529	39 108	105 804	2 614
335932	Noncurrent-carrying wiring device mfg	1	6	3	594	21 859	441	910	14 373	76 335	114 702	192 261	3 257

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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33599	All other electrical equipment & component mfg	1	25	12	900	30 071	550	1 112	12 782	95 802	88 827	182 661	4 322
335999	All other miscellaneous electrical equipment & component mfg	2	24	11	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	146	57	18 157	789 903	11 575	26 087	425 749	1 694 228	1 786 397	3 280 544	D
3362	Motor vehicle body & trailer mfg	2	20	5	401	10 775	283	535	6 097	22 047	38 682	60 999	D
33621	Motor vehicle body & trailer mfg	2	20	5	401	10 775	283	535	6 097	22 047	38 682	60 999	D
3363	Motor vehicle parts mfg . . .	—	83	39	10 455	383 622	7 486	17 479	251 535	1 172 913	1 095 528	2 290 724	107 314
33631	Motor vehicle gasoline engine & engine parts mfg	2	13	5	625	18 719	494	811	11 629	44 828	100 199	159 210	D
336312	Gasoline engine & engine parts mfg	2	9	4	587	17 681	464	762	10 930	42 821	98 895	155 910	D
33632	Motor vehicle electrical & electronic equipment mfg	—	29	13	2 469	97 991	1 921	3 943	68 542	376 964	384 281	776 400	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	28	13	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg . . .	—	3	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	8	6	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	8	6	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	4	3	g	D	D	D	D	D	D	D	2 528
336370	Motor vehicle metal stamping	—	4	3	g	D	D	D	D	D	D	D	2 528
33639	Other motor vehicle parts mfg	1	19	8	1 081	37 649	833	1 474	18 353	111 253	194 398	304 604	6 415
336399	All other motor vehicle parts mfg	1	19	8	1 081	37 649	833	1 474	18 353	111 253	194 398	304 604	6 415
3364	Aerospace product & parts mfg	—	17	7	6 167	364 687	2 872	6 144	144 060	454 077	577 423	808 990	17 956
33641	Aerospace product & parts mfg	—	17	7	6 167	364 687	2 872	6 144	144 060	454 077	577 423	808 990	17 956
336411	Aircraft mfg	—	5	2	i	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	12	5	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	14	2	821	22 097	741	1 654	19 039	22 946	38 934	61 883	D
33661	Ship & boat building	—	14	2	821	22 097	741	1 654	19 039	22 946	38 934	61 883	D
336611	Ship building & repairing	—	9	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	311	65	7 671	236 560	5 753	11 543	148 065	610 543	489 189	1 097 904	31 634
3371	Household & institutional furniture & kitchen cabinet mfg	3	193	19	2 920	74 710	2 403	4 638	51 551	149 534	166 223	316 142	8 018
33711	Wood kitchen cabinet & counter top mfg	2	93	7	721	19 458	579	1 200	14 042	39 584	28 041	67 634	1 133
337110	Wood kitchen cabinet & counter top mfg ...	2	93	7	721	19 458	579	1 200	14 042	39 584	28 041	67 634	1 133
33712	Household & institutional furniture mfg	3	100	12	2 199	55 252	1 824	3 438	37 509	109 950	138 182	248 508	6 885
337122	Nonupholstered wood household furniture mfg	3	45	2	252	5 607	218	444	4 529	11 329	10 601	21 257	374
337124	Metal household furniture mfg	5	9	6	1 430	33 209	1 254	2 294	24 516	72 867	67 255	140 673	5 438
337127	Institutional furniture mfg	—	15	2	312	11 606	175	338	4 755	16 759	52 885	70 134	813
3372	Office furniture (including fixtures) mfg	1	99	42	4 529	156 627	3 196	6 605	93 693	437 379	308 818	743 899	23 354
33721	Office furniture (including fixtures) mfg	1	99	42	4 529	156 627	3 196	6 605	93 693	437 379	308 818	743 899	23 354
337211	Wood office furniture mfg	7	10	4	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	29	12	773	28 588	525	1 074	15 941	60 543	40 731	101 617	2 337
337214	Office furniture (except wood) mfg	—	6	3	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	54	23	1 821	58 050	1 329	2 657	34 704	108 676	104 289	211 642	4 390
339	Miscellaneous mfg	2	615	141	13 305	404 665	8 601	16 459	198 953	995 425	722 535	1 703 426	45 476
3391	Medical equipment & supplies mfg	2	288	69	6 097	184 071	3 852	7 066	85 313	473 422	205 511	668 636	23 560
33911	Medical equipment & supplies mfg	2	288	69	6 097	184 071	3 852	7 066	85 313	473 422	205 511	668 636	23 560
339111	Laboratory apparatus & furniture mfg	—	20	10	680	20 940	466	819	9 739	45 422	24 995	69 558	1 681
339112	Surgical & medical instrument mfg	1	59	20	2 258	77 004	1 231	2 317	31 783	262 319	93 387	345 752	11 110
339113	Surgical appliance & supplies mfg	1	35	17	933	25 237	530	851	10 003	47 998	25 875	73 329	3 593
339114	Dental equipment & supplies mfg	2	28	11	873	29 680	615	1 192	14 613	53 867	29 152	82 747	1 910
339115	Ophthalmic goods mfg	8	15	6	607	11 905	432	851	7 126	27 370	16 385	43 826	3 990
339116	Dental laboratories ...	6	131	5	746	19 305	578	1 036	12 049	36 446	15 717	53 424	1 276
3399	Other miscellaneous mfg ..	2	327	72	7 208	220 594	4 749	9 393	113 640	522 003	517 024	1 034 790	21 916
33991	Jewelry & silverware mfg	2	59	7	848	21 013	470	863	9 740	48 678	83 423	133 276	1 090
339911	Jewelry (except costume) mfg	2	40	5	694	17 804	385	726	8 225	42 552	77 032	120 926	961
33992	Sporting & athletic goods mfg	1	20	7	828	26 034	659	1 469	17 568	55 086	76 982	136 293	4 439
339920	Sporting & athletic goods mfg	1	20	7	828	26 034	659	1 469	17 568	55 086	76 982	136 293	4 439
33993	Doll, toy, & game mfg ...	3	21	6	280	8 000	202	334	4 160	26 449	20 483	45 176	745
33994	Office supplies (except paper) mfg	—	23	5	669	18 829	374	780	10 765	46 308	37 334	82 269	1 745
339944	Carbon paper & inked ribbon mfg	—	6	2	354	10 552	148	337	5 715	24 335	24 733	47 905	1 093
33995	Sign mfg	2	114	21	1 707	61 480	1 128	2 227	29 913	129 571	85 540	213 049	3 786
339950	Sign mfg	2	114	21	1 707	61 480	1 128	2 227	29 913	129 571	85 540	213 049	3 786
33999	All other miscellaneous mfg	3	90	26	2 876	85 238	1 916	3 720	41 494	215 911	213 262	424 727	10 111
339991	Gasket, packing, & sealing device mfg ...	6	21	8	1 012	34 784	626	1 272	15 280	74 494	48 371	122 624	4 765
339994	Broom, brush, & mop mfg	2	6	3	267	7 850	209	418	5 269	24 533	36 148	59 198	1 546
339999	All other miscellaneous mfg	1	47	10	1 318	34 214	903	1 666	16 789	95 570	110 735	202 888	2 845

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Vineland–Millville–Bridgeton, NJ PMSA												
31-33	Manufacturing	1	210	90	12 985	398 339	10 077	20 143	277 203	979 464	926 899	1 896 126	89 697
311	Food mfg	1	30	19	2 431	69 438	1 944	3 868	46 758	221 972	321 279	541 062	14 337
3114	Fruit & vegetable preserving & specialty food mfg	—	9	9	1 598	53 207	1 331	2 781	36 943	187 094	246 258	431 901	10 782
31141	Frozen food mfg	—	3	3	667	19 141	573	1 216	12 227	50 368	72 323	122 638	D
311411	Frozen fruit, juice, & vegetable mfg	1	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	6	6	931	34 066	758	1 565	24 716	136 726	173 935	309 263	D
311421	Fruit & vegetable canning	3	2	2	e	D	D	D	D	D	D	D	D
311422	Specialty canning	—	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	5	4	520	9 033	363	607	4 979	16 865	26 664	42 800	1 415
31161	Animal slaughtering & processing	5	5	4	520	9 033	363	607	4 979	16 865	26 664	42 800	1 415
311615	Poultry processing	4	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	3	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	3	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	5	2	e	D	D	D	D	D	D	D	331
3149	Other textile product mills	—	4	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	1	1	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	—	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	7	5	637	11 046	580	1 072	8 573	26 757	9 843	35 283	D
3152	Cut & sew apparel mfg	—	7	5	637	11 046	580	1 072	8 573	26 757	9 843	35 283	D
31521	Cut & sew apparel contractors	1	3	3	260	3 742	246	431	3 379	6 735	321	7 052	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	9	5	355	8 837	291	519	6 252	24 269	49 249	73 438	1 411
3222	Converted paper product mfg	—	9	5	355	8 837	291	519	6 252	24 269	49 249	73 438	1 411
323	Printing & related support activities	4	21	3	331	7 890	257	390	5 504	16 599	10 070	27 077	730
3231	Printing & related support activities	4	21	3	331	7 890	257	390	5 504	16 599	10 070	27 077	730
32311	Printing	4	21	3	331	7 890	257	390	5 504	16 599	10 070	27 077	730
326	Plastics & rubber products mfg	1	7	5	484	13 108	362	655	8 535	30 688	26 755	58 471	2 280
3261	Plastics product mfg	1	6	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	5	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	5	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	44	24	5 119	177 643	4 140	8 594	135 092	394 278	205 776	599 827	50 002
3272	Glass & glass product mfg	—	35	20	4 927	169 743	3 998	8 302	130 903	377 947	194 721	572 584	49 262
32721	Glass & glass product mfg	—	35	20	4 927	169 743	3 998	8 302	130 903	377 947	194 721	572 584	49 262
327212	Other pressed & blown glass & glassware mfg	—	8	2	g	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	3	3	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	24	15	1 644	51 663	1 234	2 392	33 532	111 784	80 835	191 746	D
333	Machinery mfg	7	14	6	1 050	30 910	653	1 308	15 878	52 436	44 014	94 482	2 810
3333	Commercial & service industry machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con. Vineland–Millville–Bridgeton, NJ PMSA—Con. Manufacturing—Con.												
336	Transportation equipment mfg	-	7	4	855	29 759	621	1 250	21 068	67 575	81 281	149 033	D
3364	Aerospace product & parts mfg	-	3	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	3	3	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	3	e	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	14	6	347	9 294	199	419	4 212	21 365	12 492	33 440	8 092

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ATLANTIC COUNTY, NJ Manufacturing	2	160	41	4 927	143 048	3 801	7 151	91 804	338 332	267 650	600 298	15 267
326	Plastics & rubber products mfg	-	11	4	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	9	4	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	17	9	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	2	2	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERGEN COUNTY, NJ													
31-33	Manufacturing	1	1 806	595	59 877	2 223 728	39 181	79 931	1 087 573	5 527 708	4 851 637	10 419 668	361 084
311	Food mfg	1	159	38	4 273	142 620	3 114	6 231	90 247	493 295	722 613	1 214 381	33 114
3115	Dairy product mfg	—	7	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	7	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	108	16	2 012	63 901	1 536	2 914	44 644	159 999	124 513	283 456	14 486
31181	Bread & bakery product mfg	6	98	10	814	17 576	497	788	9 508	43 584	26 254	70 064	D
31182	Cookie, cracker, & pasta mfg	—	10	6	1 198	46 325	1 039	2 126	35 136	116 415	98 259	213 392	D
311821	Cookie & cracker mfg ..	—	5	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	19	10	f	D	D	D	D	D	D	D	D
313	Textile mills	3	93	27	2 355	78 981	1 666	3 563	39 964	164 393	144 736	308 256	12 587
3132	Fabric mills	1	57	12	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	43	5	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	5	32	12	1 221	42 397	911	1 971	23 789	83 294	71 812	155 155	6 874
31331	Textile & fabric finishing mills	6	26	7	913	33 962	700	1 585	19 207	63 926	51 548	115 731	5 181
314	Textile product mills	2	52	14	982	22 761	796	1 599	13 869	44 279	51 030	95 240	2 919
3141	Textile furnishings mills	—	17	6	511	12 155	412	858	6 764	16 326	27 968	44 293	1 697
31412	Curtain & linen mills	—	17	6	511	12 155	412	858	6 764	16 326	27 968	44 293	1 697
315	Apparel mfg	3	80	27	2 685	53 992	2 071	4 242	35 412	137 839	177 583	315 218	2 979
3152	Cut & sew apparel mfg	3	56	22	2 376	48 269	1 801	3 725	31 020	125 075	169 914	294 868	D
31521	Cut & sew apparel contractors	3	29	10	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	28	10	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	19	10	1 381	30 747	1 110	2 441	18 787	90 702	152 236	242 396	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	—	13	8	g	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	9	4	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	9	4	f	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	—	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	44	28	3 717	145 169	2 770	5 538	90 919	422 927	385 782	804 421	32 085
3221	Pulp, paper, & paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	41	25	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	23	14	1 805	64 321	1 385	2 594	42 023	139 871	138 444	278 837	8 993
322211	Corrugated & solid fiber box mfg	2	11	7	1 132	39 935	832	1 523	23 469	72 843	91 812	164 536	D
322212	Folding paperboard box mfg	2	10	6	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	5	4	f	D	D	D	D	D	D	D	992
323	Printing & related support activities	2	307	62	5 756	216 519	4 146	8 231	137 433	437 415	233 410	670 721	33 407
3231	Printing & related support activities	2	307	62	5 756	216 519	4 146	8 231	137 433	437 415	233 410	670 721	33 407
32311	Printing	2	249	41	3 651	136 570	2 465	4 641	79 317	280 458	196 053	476 500	26 668
323110	Commercial lithographic printing ..	1	127	22	1 815	76 990	1 145	2 205	43 510	147 518	114 502	262 220	9 534
323114	Quick printing	1	45	3	563	18 698	369	588	9 390	38 915	12 869	51 795	10 555
32312	Support activities for printing	5	58	21	2 105	79 949	1 681	3 590	58 116	156 957	37 357	194 221	6 739
323121	Tradebinding & related work	1	18	11	795	19 195	726	1 564	15 712	39 334	5 832	45 429	2 143
323122	Prepress services	6	40	10	1 310	60 754	955	2 026	42 404	117 623	31 525	148 792	4 596

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BERGEN COUNTY, NJ —Con.												
31-33	Manufacturing— Con.												
325	Chemical mfg	2	127	73	6 593	256 418	3 649	7 449	109 743	949 414	826 681	1 778 349	77 301
3251	Basic chemical mfg	3	16	12	752	39 947	356	769	14 458	155 297	160 093	311 714	D
32519	Other basic organic chemical mfg	3	10	8	532	29 712	206	454	8 616	140 797	135 374	267 800	D
3254	Pharmaceutical & medicine mfg	2	18	9	1 034	42 584	608	1 238	21 057	127 993	85 704	213 610	12 741
32541	Pharmaceutical & medicine mfg	2	18	9	1 034	42 584	608	1 238	21 057	127 993	85 704	213 610	12 741
325412	Pharmaceutical preparation mfg	2	11	5	f	D	D	D	D	D	D	D	6 089
3255	Paint, coating, & adhesive mfg	2	23	8	f	D	D	D	D	D	D	D	8 385
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	42	29	3 156	111 943	1 731	3 456	43 454	451 027	345 265	794 402	40 391
32561	Soap & cleaning compound mfg	3	13	9	698	27 118	394	857	12 059	117 537	114 641	235 087	11 497
32562	Toilet preparation mfg ...	2	29	20	2 458	84 825	1 337	2 599	31 395	333 490	230 624	559 315	28 894
325620	Toilet preparation mfg .	2	29	20	2 458	84 825	1 337	2 599	31 395	333 490	230 624	559 315	28 894
3259	Other chemical product mfg	3	26	15	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	4	15	7	741	25 806	469	1 012	14 153	76 603	116 585	198 767	D
326	Plastics & rubber products mfg	3	67	42	3 759	115 574	2 692	5 459	73 059	262 352	291 930	551 465	17 704
3261	Plastics product mfg	3	57	36	3 256	98 725	2 330	4 740	63 208	229 856	262 788	490 001	16 058
32611	Unsupported plastics film, sheet, & bag mfg ..	3	18	12	1 343	36 684	809	1 737	21 612	84 472	130 489	213 206	D
326113	Unsupported plastics film & sheet (except packaging) mfg	4	12	7	1 001	26 720	544	1 136	14 876	57 298	100 061	155 501	D
32619	Other plastics product mfg	2	25	16	1 204	30 962	943	1 893	19 941	93 819	70 542	163 188	5 035
326199	All other plastics product mfg	2	25	16	1 204	30 962	943	1 893	19 941	93 819	70 542	163 188	5 035
3262	Rubber product mfg	2	10	6	503	16 849	362	719	9 851	32 496	29 142	61 464	1 646
327	Nonmetallic mineral product mfg	1	32	13	607	19 635	405	794	11 453	47 071	39 048	86 674	D
331	Primary metal mfg	2	12	7	631	21 302	493	1 049	12 949	57 487	51 177	108 495	D
332	Fabricated metal product mfg	2	225	66	4 841	173 475	3 330	6 878	94 734	312 720	300 585	633 379	20 393
3322	Cutlery & handtool mfg ...	7	9	5	f	D	D	D	D	D	D	D	2 418
33221	Cutlery & handtool mfg ..	7	9	5	f	D	D	D	D	D	D	D	2 418
332212	Hand & edge tool mfg .	8	8	4	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	39	13	803	26 726	568	1 173	16 104	55 655	38 861	94 364	2 543
33232	Ornamental & architectural metal products mfg	2	31	11	706	22 174	499	1 012	13 104	42 385	27 437	69 592	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	104	21	1 669	70 311	1 115	2 367	37 493	106 143	144 106	270 389	10 714
33271	Machine shops	1	86	14	1 205	53 350	768	1 669	26 734	75 676	129 574	225 503	8 362
332710	Machine shops	1	86	14	1 205	53 350	768	1 669	26 734	75 676	129 574	225 503	8 362
333	Machinery mfg	2	161	56	3 836	155 966	2 177	4 466	71 550	335 474	258 804	593 895	19 694
3332	Industrial machinery mfg ..	1	36	18	1 076	46 537	603	1 183	23 435	89 582	82 413	173 500	5 291
33329	Other industrial machinery mfg	1	32	17	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	4	30	13	865	31 932	416	865	11 395	90 769	61 322	145 099	4 942
33331	Commercial & service industry machinery mfg	4	30	13	865	31 932	416	865	11 395	90 769	61 322	145 099	4 942
3339	Other general-purpose machinery mfg	1	52	16	1 122	43 703	610	1 291	17 783	76 361	78 076	159 708	2 783
33399	All other general-purpose machinery mfg	1	40	13	728	26 944	379	767	10 332	45 988	36 128	84 569	1 612

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BERGEN COUNTY, NJ —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg	1	95	42	5 559	281 373	2 371	5 118	76 558	530 667	466 274	1 034 720	26 781
3342	Communications equipment mfg	2	18	9	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	20	9	1 040	35 290	793	1 692	19 532	66 814	28 359	94 770	D
33441	Semiconductor & other electronic component mfg	1	20	9	1 040	35 290	793	1 692	19 532	66 814	28 359	94 770	D
334419	Other electronic component mfg	—	7	4	586	22 722	467	1 101	13 406	37 401	12 691	50 365	D
3345	Navigational, measuring, medical, & control instruments mfg	—	37	18	3 208	196 602	908	1 914	39 380	381 786	280 653	692 935	16 670
33451	Navigational, measuring, medical, & control instruments mfg	—	37	18	3 208	196 602	908	1 914	39 380	381 786	280 653	692 935	16 670
334510	Electromedical & electrotherapeutic apparatus mfg	—	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	8	4	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	43	21	2 199	63 254	1 494	3 210	34 099	152 628	96 931	250 104	4 863
3351	Electric lighting equipment mfg	—	14	8	768	24 030	519	1 156	12 959	83 240	40 834	123 384	1 304
33512	Lighting fixture mfg	—	14	8	768	24 030	519	1 156	12 959	83 240	40 834	123 384	1 304
3359	Other electrical equipment & component mfg	—	14	8	1 046	25 351	754	1 521	15 285	45 495	40 384	87 307	2 829
33591	Battery mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	27	12	g	D	D	D	D	D	D	D	10 851
3363	Motor vehicle parts mfg	2	14	7	865	28 177	680	1 489	18 698	56 213	61 166	119 484	D
3364	Aerospace product & parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	3	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	78	10	784	23 106	631	1 233	14 745	46 771	45 044	89 672	1 514
339	Miscellaneous mfg	—	166	45	7 818	350 901	4 785	9 313	121 762	876 907	452 168	1 321 484	52 880
3391	Medical equipment & supplies mfg	—	72	16	3 910	241 566	1 868	3 733	68 376	599 964	206 534	802 569	36 359
33911	Medical equipment & supplies mfg	—	72	16	3 910	241 566	1 868	3 733	68 376	599 964	206 534	802 569	36 359
339113	Surgical appliance & supplies mfg	—	12	7	3 028	206 210	1 377	2 738	54 236	523 498	158 863	681 448	33 009
3399	Other miscellaneous mfg	1	94	29	3 908	109 335	2 917	5 580	53 386	276 943	245 634	518 915	16 521
33991	Jewelry & silverware mfg	—	15	4	576	18 107	394	510	5 968	33 605	63 942	98 567	1 539
33993	Doll, toy, & game mfg	—	9	3	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	8	3	f	D	D	D	D	D	D	D	D
33995	Sign mfg	1	28	7	1 340	39 813	930	1 825	18 990	85 711	60 046	144 675	3 424
339950	Sign mfg	1	28	7	1 340	39 813	930	1 825	18 990	85 711	60 046	144 675	3 424
33999	All other miscellaneous mfg	—	23	8	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BURLINGTON COUNTY, NJ												
31-33	Manufacturing	1	464	174	18 766	740 741	12 947	26 297	445 736	2 082 711	1 859 666	3 945 884	109 371
311	Food mfg	1	24	6	586	16 802	346	727	8 514	60 419	118 687	178 548	D
315	Apparel mfg	—	15	8	645	12 236	426	748	6 757	32 072	35 138	65 870	D
3152	Cut & sew apparel mfg	—	15	8	645	12 236	426	748	6 757	32 072	35 138	65 870	D
323	Printing & related support activities.....	4	69	22	1 932	69 001	1 390	2 910	46 006	147 351	135 403	284 623	D
3231	Printing & related support activities.....	4	69	22	1 932	69 001	1 390	2 910	46 006	147 351	135 403	284 623	D
32311	Printing	4	59	18	1 691	59 400	1 213	2 511	39 529	130 398	130 145	262 395	D
323110	Commercial lithographic printing ..	1	27	11	1 002	33 303	691	1 516	21 976	71 671	39 559	110 903	D
325	Chemical mfg	3	25	14	1 035	52 815	590	1 304	27 408	163 716	254 705	416 963	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	2	4	4	539	30 991	308	708	16 257	86 026	106 697	191 839	D
32521	Resin & synthetic rubber mfg	2	4	4	539	30 991	308	708	16 257	86 026	106 697	191 839	D
325211	Plastics material & resin mfg	2	4	4	539	30 991	308	708	16 257	86 026	106 697	191 839	D
326	Plastics & rubber products mfg	3	19	11	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	2	16	11	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	17	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	8	6	1 014	42 470	731	1 504	27 060	112 359	141 265	255 021	D
3315	Foundries	—	3	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	95	34	1 993	72 993	1 432	2 923	42 871	147 854	88 767	237 716	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	49	10	584	19 508	454	919	13 434	38 498	13 385	51 539	D
333	Machinery mfg	4	42	14	1 586	64 737	728	1 463	24 834	119 535	154 218	265 996	D
3333	Commercial & service industry machinery mfg ..	—	4	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	4	3	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	6	15	7	636	29 628	337	734	14 392	82 787	109 909	185 561	4 210
33399	All other general-purpose machinery mfg	6	14	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	39	19	4 782	244 438	3 270	6 793	156 908	745 374	399 469	1 158 027	D
3342	Communications equipment mfg	—	8	6	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	15	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	15	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	8	4	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	8	4	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	3	8	6	602	11 829	466	573	7 642	37 497	50 291	87 487	1 491

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BURLINGTON COUNTY, NJ—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	3	14	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	6	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	6	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	30	8	888	28 446	697	1 386	17 216	91 025	53 371	141 728	D
3399	Other miscellaneous mfg ..	—	21	5	653	21 203	511	1 029	12 030	63 281	45 310	106 654	2 525
CAMDEN COUNTY, NJ													
31-33	Manufacturing	1	677	205	21 055	729 468	14 193	28 037	392 334	1 916 712	1 712 645	3 617 589	112 880
311	Food mfg	—	64	25	2 518	65 600	1 646	3 300	37 675	314 636	272 368	585 529	12 177
3118	Bakeries & tortilla mfg	—	40	11	1 144	21 926	630	1 180	10 938	70 526	77 413	148 055	D
31181	Bread & bakery product mfg	1	34	7	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	6	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	14	9	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	12	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	6	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	142	35	2 887	110 683	2 072	4 073	69 763	202 040	143 696	345 042	D
3231	Printing & related support activities	1	142	35	2 887	110 683	2 072	4 073	69 763	202 040	143 696	345 042	D
32311	Printing	1	114	27	2 250	82 904	1 612	3 037	52 977	149 674	132 076	281 576	D
323110	Commercial lithographic printing ..	1	62	22	1 792	69 215	1 305	2 476	44 466	124 185	114 004	237 920	D
32312	Support activities for printing	—	28	8	637	27 779	460	1 036	16 786	52 366	11 620	63 466	D
325	Chemical mfg	1	22	13	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	3	3	913	33 466	635	1 196	17 884	84 820	75 908	158 497	D
32541	Pharmaceutical & medicine mfg	—	3	3	913	33 466	635	1 196	17 884	84 820	75 908	158 497	D
325412	Pharmaceutical preparation mfg	—	3	3	913	33 466	635	1 196	17 884	84 820	75 908	158 497	D
326	Plastics & rubber products mfg	1	25	11	887	26 051	697	1 375	16 893	61 616	71 325	132 146	D
3261	Plastics product mfg	1	22	10	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	18	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	17	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	24	10	687	26 780	553	1 190	19 987	99 242	70 750	170 472	D
331	Primary metal mfg	—	5	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	2	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	117	32	2 199	75 491	1 549	3 069	44 804	167 258	124 383	286 014	D
3323	Architectural & structural metals mfg	—	30	10	669	27 297	433	941	14 140	52 616	36 505	86 442	D
33232	Ornamental & architectural metal products mfg	—	23	8	561	23 583	348	762	11 544	44 368	28 379	70 307	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	46	7	534	19 077	401	840	13 088	43 297	18 691	60 556	2 488
333	Machinery mfg	—	41	11	1 459	62 144	949	2 056	36 028	117 854	127 522	244 314	8 127
3332	Industrial machinery mfg ..	—	7	2	664	35 100	389	927	20 391	71 967	80 133	150 479	D
33329	Other industrial machinery mfg	—	6	2	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMDEN COUNTY, NJ													
—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	1	38	19	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	8	7	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	6	5	1 216	64 658	394	691	11 829	178 822	62 459	238 280	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	6	5	1 216	64 658	394	691	11 829	178 822	62 459	238 280	D
337	Furniture & related product mfg	5	27	7	596	20 585	448	1 020	12 892	35 598	29 211	64 430	1 375
339	Miscellaneous mfg	4	73	13	1 423	34 474	1 026	2 090	20 375	72 322	46 517	118 589	6 962
3391	Medical equipment & supplies mfg	6	41	8	906	18 883	635	1 195	10 463	43 931	21 399	64 900	5 013
33911	Medical equipment & supplies mfg	6	41	8	906	18 883	635	1 195	10 463	43 931	21 399	64 900	5 013
3399	Other miscellaneous mfg ..	1	32	5	517	15 591	391	895	9 912	28 391	25 118	53 689	1 949
CAPE MAY COUNTY, NJ													
31-33	Manufacturing	1	82	10	813	19 108	665	1 220	13 748	52 568	57 924	110 364	2 628
CUMBERLAND COUNTY, NJ													
31-33	Manufacturing	1	210	90	12 985	398 339	10 077	20 143	277 203	979 464	926 899	1 896 126	89 697
311	Food mfg	1	30	19	2 431	69 438	1 944	3 868	46 758	221 972	321 279	541 062	14 337
3114	Fruit & vegetable preserving & specialty food mfg	—	9	9	1 598	53 207	1 331	2 781	36 943	187 094	246 258	431 901	10 782
31141	Frozen food mfg	—	3	3	667	19 141	573	1 216	12 227	50 368	72 323	122 638	D
31142	Fruit & vegetable canning, pickling, & drying	—	6	6	931	34 066	758	1 565	24 716	136 726	173 935	309 263	D
311422	Specialty canning	—	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	5	4	520	9 033	363	607	4 979	16 865	26 664	42 800	1 415
31161	Animal slaughtering & processing	5	5	4	520	9 033	363	607	4 979	16 865	26 664	42 800	1 415
315	Apparel mfg	—	7	5	637	11 046	580	1 072	8 573	26 757	9 843	35 283	D
3152	Cut & sew apparel mfg	—	7	5	637	11 046	580	1 072	8 573	26 757	9 843	35 283	D
327	Nonmetallic mineral product mfg	—	44	24	5 119	177 643	4 140	8 594	135 092	394 278	205 776	599 827	50 002
3272	Glass & glass product mfg .	—	35	20	4 927	169 743	3 998	8 302	130 903	377 947	194 721	572 584	49 262
32721	Glass & glass product mfg	—	35	20	4 927	169 743	3 998	8 302	130 903	377 947	194 721	572 584	49 262
327212	Other pressed & blown glass & glassware mfg	—	8	2	g	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	3	3	g	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	24	15	1 644	51 663	1 234	2 392	33 532	111 784	80 835	191 746	D
333	Machinery mfg	7	14	6	1 050	30 910	653	1 308	15 878	52 436	44 014	94 482	2 810
3333	Commercial & service industry machinery mfg ..	9	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	9	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	4	855	29 759	621	1 250	21 068	67 575	81 281	149 033	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ESSEX COUNTY, NJ													
31-33	Manufacturing	1	1 206	405	35 578	1 359 883	23 210	46 639	654 973	5 014 013	3 520 106	8 416 358	325 693
311	Food mfg.....	3	98	30	2 600	78 016	1 747	3 464	43 724	219 244	328 956	546 328	12 553
3118	Bakeries & tortilla mfg.....	5	61	13	1 260	32 619	830	1 553	19 631	71 226	46 390	118 125	4 946
31181	Bread & bakery product mfg.....	1	56	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	17	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	g	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	3	16	6	558	17 961	454	955	12 210	29 188	35 739	64 271	D
314	Textile product mills.....	3	26	13	g	D	D	D	D	D	D	D	D
3149	Other textile product mills..	3	16	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	3	13	8	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	3	11	8	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	69	31	1 861	32 936	1 607	3 332	25 485	58 289	30 719	86 830	D
3152	Cut & sew apparel mfg	5	51	26	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	7	32	18	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	29	17	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	41	20	1 818	66 501	1 253	2 809	36 514	152 036	155 744	308 189	D
3222	Converted paper product mfg	1	40	19	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	20	12	1 072	42 716	738	1 689	22 662	91 052	87 234	178 645	8 150
322211	Corrugated & solid fiber box mfg.....	-	11	5	719	32 044	465	1 114	16 632	65 436	74 888	140 375	D
32222	Paper bag & coated & treated paper mfg	-	11	5	574	18 459	382	838	9 877	43 918	59 995	103 835	D
323	Printing & related support activities.....	2	174	39	3 332	117 251	2 340	4 491	70 387	210 491	139 018	349 399	D
3231	Printing & related support activities.....	2	174	39	3 332	117 251	2 340	4 491	70 387	210 491	139 018	349 399	D
32311	Printing	2	154	34	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	69	15	1 040	46 110	661	1 453	26 576	86 932	54 956	141 938	D
323116	Manifold business form printing.....	-	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	102	52	6 870	412 601	2 988	6 145	115 510	2 401 320	1 414 892	3 733 691	157 173
3251	Basic chemical mfg	2	27	17	1 302	58 844	693	1 456	28 293	217 222	238 252	464 306	D
32519	Other basic organic chemical mfg	3	15	9	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	4	12	9	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	16	11	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	16	11	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	11	7	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	27	10	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	1	17	8	575	26 789	368	803	14 279	90 656	143 411	232 707	7 009
325510	Paint & coating mfg	1	17	8	575	26 789	368	803	14 279	90 656	143 411	232 707	7 009
326	Plastics & rubber products mfg	4	53	19	1 567	44 197	1 140	2 281	23 196	106 752	97 874	204 358	8 075
3261	Plastics product mfg	4	43	17	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	28	10	905	18 743	651	1 233	10 045	42 703	26 448	68 661	2 725
326199	All other plastics product mfg.....	3	28	10	905	18 743	651	1 233	10 045	42 703	26 448	68 661	2 725
327	Nonmetallic mineral product mfg	1	20	9	549	20 368	407	820	13 264	80 736	55 449	132 342	D
331	Primary metal mfg	1	16	10	948	28 402	704	1 479	16 761	69 573	70 396	136 381	D
3314	Nonferrous metal (except aluminum) production & processing.....	1	6	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ESSEX COUNTY, NJ—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	219	61	4 228	139 690	3 203	6 348	86 504	287 200	172 901	455 338	14 022
3321	Forging & stamping	—	24	9	506	18 466	380	795	11 316	38 892	27 810	65 904	D
33211	Forging & stamping	—	24	9	506	18 466	380	795	11 316	38 892	27 810	65 904	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	71	12	956	36 308	722	1 436	22 528	77 589	31 756	104 508	D
33271	Machine shops	1	59	10	780	31 202	588	1 177	19 636	56 127	23 731	80 123	3 244
332710	Machine shops	1	59	10	780	31 202	588	1 177	19 636	56 127	23 731	80 123	3 244
3328	Coating, engraving, heat treating, & allied activities	4	36	8	539	15 869	419	822	9 934	32 356	9 768	42 219	2 754
33281	Coating, engraving, heat treating, & allied activities	4	36	8	539	15 869	419	822	9 934	32 356	9 768	42 219	2 754
3329	Other fabricated metal product mfg	1	18	14	722	21 523	578	1 102	13 375	39 309	20 569	59 863	1 821
33299	All other fabricated metal product mfg	—	15	12	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	96	25	2 121	93 013	1 060	2 215	36 262	199 451	313 221	493 045	16 267
3332	Industrial machinery mfg ..	—	26	8	918	41 737	316	584	11 567	108 415	230 519	319 793	12 034
33329	Other industrial machinery mfg	—	24	7	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	28	12	573	24 990	321	636	10 246	51 768	37 666	88 323	1 344
334	Computer & electronic product mfg	2	53	19	1 295	46 009	741	1 429	20 647	93 520	46 277	141 362	5 391
3344	Semiconductor & other electronic component mfg	—	17	10	618	17 229	393	758	8 768	33 349	13 890	47 805	D
33441	Semiconductor & other electronic component mfg	—	17	10	618	17 229	393	758	8 768	33 349	13 890	47 805	D
335	Electrical equipment, appliance, & component mfg	1	26	13	944	26 164	699	1 355	16 012	61 606	59 723	121 572	D
336	Transportation equipment mfg	1	20	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	6	59	20	1 504	45 176	1 132	2 352	27 752	92 463	70 595	160 314	D
3371	Household & institutional furniture & kitchen cabinet mfg	5	32	8	514	14 891	429	840	10 419	23 956	21 066	45 452	D
3372	Office furniture (including fixtures) mfg	6	19	9	796	24 934	570	1 151	14 061	60 717	37 101	94 433	D
33721	Office furniture (including fixtures) mfg	6	19	9	796	24 934	570	1 151	14 061	60 717	37 101	94 433	D
337215	Showcase, partition, shelving, & locker mfg	6	9	5	637	20 396	446	888	10 701	51 717	31 711	80 254	D
339	Miscellaneous mfg	—	100	27	2 444	72 859	1 498	2 901	34 302	203 388	158 639	364 838	11 875
3391	Medical equipment & supplies mfg	—	40	9	634	24 785	339	678	8 263	101 128	36 685	140 076	6 656
33911	Medical equipment & supplies mfg	—	40	9	634	24 785	339	678	8 263	101 128	36 685	140 076	6 656
3399	Other miscellaneous mfg ..	—	60	18	1 810	48 074	1 159	2 223	26 039	102 260	121 954	224 762	5 219
33991	Jewelry & silverware mfg	—	21	5	652	18 649	436	891	9 926	42 018	59 826	102 490	893
339911	Jewelry (except costume) mfg	—	16	4	f	D	D	D	D	D	D	D	D
33995	Sign mfg	2	21	8	501	10 220	375	620	5 540	20 012	12 805	32 763	D
339950	Sign mfg	2	21	8	501	10 220	375	620	5 540	20 012	12 805	32 763	D
33999	All other miscellaneous mfg	—	11	4	582	16 201	298	590	9 341	31 994	36 922	68 900	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GLOUCESTER COUNTY, NJ													
31-33	Manufacturing	—	290	109	11 013	416 457	7 301	13 654	231 444	2 187 421	4 615 344	6 882 840	128 478
311	Food mfg	4	26	11	995	26 810	666	1 262	14 113	74 949	89 499	166 457	D
323	Printing & related support activities.....	6	53	12	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	6	53	12	g	D	D	D	D	D	D	D	D
32311	Printing	6	49	9	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	4	24	3	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	6	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	6	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	3	3	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	19	14	1 309	74 034	702	1 358	30 066	864 997	954 931	1 823 055	D
3251	Basic chemical mfg	—	7	6	617	41 923	322	648	14 798	745 114	812 484	1 565 686	25 762
326	Plastics & rubber products mfg	2	20	11	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	2	19	11	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	45	14	1 237	39 220	942	1 775	25 350	98 662	54 643	152 351	D
333	Machinery mfg	1	22	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	—	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	27	7	f	D	D	D	D	D	D	D	1 745
3399	Other miscellaneous mfg ..	2	16	5	f	D	D	D	D	D	D	D	D
HUDSON COUNTY, NJ													
31-33	Manufacturing	2	979	283	26 470	787 822	18 236	35 676	420 484	2 063 415	2 114 340	4 220 836	94 019
311	Food mfg	5	104	24	2 108	62 364	1 482	2 601	36 898	317 780	335 924	655 593	13 737
3118	Bakeries & tortilla mfg	—	71	12	1 213	32 751	864	1 380	20 436	115 760	74 490	190 086	5 490
31181	Bread & bakery product mfg	1	67	10	f	D	D	D	D	D	D	D	D
313	Textile mills	6	114	23	1 489	36 324	1 175	2 288	25 158	86 247	56 610	143 625	4 495
3132	Fabric mills	6	85	13	997	24 256	802	1 607	17 387	60 169	36 834	97 405	2 887
31322	Narrow fabric mills & schiffli machine embroidery	2	71	9	653	14 626	544	1 100	10 698	34 365	17 778	52 203	1 180
313222	Schiffli machine embroidery	2	65	7	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	77	15	1 204	22 366	877	1 620	11 968	103 595	64 911	167 472	1 396
3149	Other textile product mills ..	1	66	11	755	15 832	555	1 009	8 974	50 894	27 443	78 471	891
31499	All other textile product mills	2	60	9	609	12 666	433	775	7 167	44 521	15 481	60 097	843
314999	All other miscellaneous textile product mills ..	2	60	9	609	12 666	433	775	7 167	44 521	15 481	60 097	843
315	Apparel mfg	1	257	89	9 413	258 315	5 873	11 212	111 756	473 450	519 120	1 034 936	8 416
3151	Apparel knitting mills	1	27	11	828	14 950	701	1 317	11 216	43 457	55 195	98 307	1 043
31519	Other apparel knitting mills	1	26	11	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	1	25	11	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HUDSON COUNTY, NJ —Con.												
31-33	Manufacturing— Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	1	211	71	8 210	236 557	4 882	9 370	96 005	413 124	453 970	909 934	7 013
31521	Cut & sew apparel contractors	4	134	42	3 133	44 460	2 568	4 668	33 340	76 818	16 785	93 318	2 005
315212	Women's, girls', & infants' cut & sew apparel contractors . .	3	129	42	3 085	44 026	2 523	4 619	32 982	75 928	16 654	92 297	1 970
31523	Women's & girls' cut & sew apparel mfg	—	57	25	4 850	188 744	2 138	4 387	60 245	330 730	431 517	805 368	4 823
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	1	14	3	649	16 001	348	704	5 362	48 299	81 122	174 310	D
315239	Women's & girls' cut & sew other outerwear mfg	—	12	8	3 503	149 122	1 305	2 755	45 600	217 658	216 265	435 711	3 780
316	Leather & allied product mfg .	8	10	2	552	11 111	464	993	7 603	33 588	28 673	61 256	D
3162	Footwear mfg	8	2	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	8	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	21	17	1 402	46 977	1 055	2 198	30 277	90 493	88 142	178 053	3 654
3222	Converted paper product mfg	2	18	14	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	10	7	712	25 869	519	1 079	16 738	52 861	44 439	96 636	D
323	Printing & related support activities	3	70	17	2 187	88 818	1 703	3 512	58 331	205 899	118 674	324 643	12 941
3231	Printing & related support activities	3	70	17	2 187	88 818	1 703	3 512	58 331	205 899	118 674	324 643	12 941
32311	Printing	3	61	10	1 727	72 437	1 375	2 813	47 742	174 306	111 989	286 337	11 624
323110	Commercial lithographic printing . .	3	28	7	1 371	62 590	1 096	2 344	42 068	143 984	94 145	237 949	10 570
325	Chemical mfg	2	47	26	2 061	76 941	1 147	2 474	34 078	307 595	352 490	658 824	14 962
3256	Soap, cleaning compound, & toilet preparation mfg . .	5	16	8	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	29	10	891	23 952	735	1 677	17 746	43 897	61 947	105 771	5 079
3261	Plastics product mfg	2	23	10	f	D	D	D	D	D	D	D	5 005
32619	Other plastics product mfg	3	13	5	571	14 618	466	1 181	10 905	19 857	30 725	50 531	D
326199	All other plastics product mfg	3	13	5	571	14 618	466	1 181	10 905	19 857	30 725	50 531	D
331	Primary metal mfg	—	17	10	1 152	45 223	749	1 651	21 503	130 917	211 226	345 357	15 209
3314	Nonferrous metal (except aluminum) production & processing	—	10	6	812	33 504	500	1 132	15 106	93 568	181 542	278 215	D
332	Fabricated metal product mfg	1	60	13	1 007	26 377	799	1 343	17 564	51 726	43 258	94 594	2 122
339	Miscellaneous mfg	3	60	10	1 068	30 146	741	1 336	14 005	76 007	100 879	174 391	5 401
3399	Other miscellaneous mfg . .	3	37	9	969	27 676	667	1 231	12 800	70 062	97 940	165 423	5 206
	HUNTERDON COUNTY, NJ												
31-33	Manufacturing	1	175	49	5 064	194 827	3 434	7 242	110 415	562 796	542 440	1 104 440	35 674
311	Food mfg	—	14	6	1 354	54 655	1 044	2 245	38 434	252 382	265 849	518 116	17 009
3119	Other food mfg	—	3	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	30	9	713	27 187	473	1 030	15 954	57 955	53 692	110 820	4 583
	MERCER COUNTY, NJ												

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MERCER COUNTY, NJ —Con.												
31-33	Manufacturing	3	352	107	13 537	579 713	8 353	17 184	291 748	1 315 173	1 086 437	2 413 564	78 766
311	Food mfg	3	40	7	614	14 189	379	633	6 764	43 767	39 680	83 764	1 845
323	Printing & related support activities	5	70	16	1 266	47 377	943	1 774	28 304	97 801	65 797	163 672	5 474
3231	Printing & related support activities	5	70	16	1 266	47 377	943	1 774	28 304	97 801	65 797	163 672	5 474
32311	Printing	5	60	14	1 144	42 646	873	1 647	26 294	87 138	64 054	151 237	5 093
326	Plastics & rubber products mfg	4	25	12	1 342	43 041	1 061	2 189	29 638	176 061	96 604	273 582	10 194
3261	Plastics product mfg	5	15	8	1 049	34 999	841	1 761	25 168	160 212	81 997	243 367	9 417
32619	Other plastics product mfg	5	9	5	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	5	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	11	7	615	19 592	467	940	14 181	46 738	16 373	63 407	D
3271	Clay product & refractory mfg	—	8	6	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	7	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	43	12	1 399	68 135	1 051	2 811	51 940	105 573	172 211	280 150	3 729
3325	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	29	13	2 208	87 611	1 439	2 454	46 879	168 123	207 705	385 791	13 140
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	g	D	D	D	D	D	D	D	6 793
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	g	D	D	D	D	D	D	D	6 793
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	2	2	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	8	38	15	4 214	235 650	1 696	3 708	75 846	403 123	287 793	690 398	30 306
3342	Communications equipment mfg	9	6	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	4	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	14	5	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	14	5	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	16	7	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	16	7	f	D	D	D	D	D	D	D	D
	MIDDLESEX COUNTY, NJ												

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MIDDLESEX COUNTY, NJ—Con.												
31-33	Manufacturing	1	977	384	49 983	1 950 583	34 434	70 647	1 123 596	6 290 463	7 309 830	13 687 980	539 017
311	Food mfg	-	71	22	2 679	88 443	2 064	4 120	59 654	433 660	355 751	793 278	35 240
3115	Dairy product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	45	9	1 243	36 050	1 038	2 085	29 059	222 531	82 866	309 954	D
31182	Cookie, cracker, & pasta mfg	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	21	10	1 899	49 120	1 462	3 217	25 799	96 876	113 838	203 691	D
3152	Cut & sew apparel mfg	2	13	7	1 795	46 796	1 400	3 099	24 354	89 155	108 713	190 877	D
31522	Men's & boys' cut & sew apparel mfg	2	4	3	1 363	31 500	1 064	2 456	19 648	68 367	74 635	138 129	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	2	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	37	27	2 968	117 251	2 228	4 752	76 152	275 924	342 643	624 018	23 808
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	36	26	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	19	16	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	2	12	10	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	9	6	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	7	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	143	24	2 999	134 883	2 103	4 238	96 487	301 524	195 866	496 152	16 611
3231	Printing & related support activities	5	143	24	2 999	134 883	2 103	4 238	96 487	301 524	195 866	496 152	16 611
32311	Printing	5	121	22	2 816	129 740	1 953	3 961	92 938	290 532	193 618	483 038	D
323110	Commercial lithographic printing ..	5	52	16	2 276	115 763	1 577	3 277	84 299	256 447	170 751	426 539	D
324	Petroleum & coal products mfg	2	11	7	f	D	D	D	D	D	D	D	11 022
3241	Petroleum & coal products mfg	2	11	7	f	D	D	D	D	D	D	D	11 022
325	Chemical mfg	2	119	79	11 529	535 465	6 138	12 443	234 420	2 345 585	1 679 204	4 060 873	171 136
3251	Basic chemical mfg	-	30	20	2 019	103 615	1 255	2 741	58 288	422 594	353 673	773 422	D
32519	Other basic organic chemical mfg	-	15	12	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	14	12	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	21	17	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	21	17	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	1	15	13	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	5	30	23	i	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	4	12	7	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	4	9	4	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	5	18	16	4 451	211 518	1 884	3 809	58 337	746 221	592 060	1 378 827	D
325620	Toilet preparation mfg ..	5	18	16	4 451	211 518	1 884	3 809	58 337	746 221	592 060	1 378 827	D
3259	Other chemical product mfg	1	19	11	899	44 444	556	1 166	24 063	299 449	140 932	443 924	18 045
32599	All other chemical product & preparation mfg	1	17	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MIDDLESEX COUNTY, NJ—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	72	51	6 898	187 411	5 651	11 965	124 759	445 881	407 531	852 844	44 865
3261	Plastics product mfg	2	69	49	i	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	11	8	694	15 317	514	934	9 954	47 672	67 620	116 617	5 963
32616	Plastics bottle mfg	3	7	7	g	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	3	7	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	37	25	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	37	25	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	19	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	16	11	2 075	98 568	1 519	3 474	66 803	202 336	474 391	725 607	D
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	4	6	5	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	4	4	4	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	4	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	139	38	3 748	136 211	2 729	5 751	86 221	292 446	487 611	775 526	13 150
3323	Architectural & structural metals mfg	—	35	10	1 312	44 515	964	2 168	27 922	105 647	233 052	329 164	3 355
33232	Ornamental & architectural metal products mfg	—	24	8	920	31 857	703	1 695	21 589	77 549	163 465	229 821	D
332322	Sheet metal work mfg ..	—	14	5	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	7	6	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	58	8	504	14 842	363	692	9 626	28 445	9 686	38 284	1 273
333	Machinery mfg	1	57	14	1 859	65 768	1 475	3 066	45 524	196 745	209 019	406 346	10 425
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	5	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	60	30	2 940	110 842	1 774	3 252	49 625	214 961	259 574	475 909	D
3342	Communications equipment mfg	—	4	3	791	18 300	599	996	11 250	34 387	46 856	82 294	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	21	13	934	35 958	612	1 241	17 163	77 398	99 215	177 791	D
33441	Semiconductor & other electronic component mfg	2	21	13	934	35 958	612	1 241	17 163	77 398	99 215	177 791	D
3345	Navigational, measuring, medical, & control instruments mfg	1	22	11	1 041	49 170	483	842	17 917	86 109	70 109	154 814	D
33451	Navigational, measuring, medical, & control instruments mfg	1	22	11	1 041	49 170	483	842	17 917	86 109	70 109	154 814	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MIDDLESEX COUNTY, NJ—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	24	13	1 271	48 306	966	1 559	33 022	136 154	76 660	211 502	4 164
3359	Other electrical equipment & component mfg	-	7	6	820	33 757	678	1 049	25 593	111 355	59 809	170 671	D
336	Transportation equipment mfg	-	15	3	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	44	14	f	D	D	D	D	D	D	D	2 434
339	Miscellaneous mfg	-	83	22	3 069	115 140	1 889	3 600	49 006	304 924	148 171	453 063	24 994
3391	Medical equipment & supplies mfg	-	33	10	1 730	69 236	1 021	1 945	29 928	163 297	81 644	244 353	D
33911	Medical equipment & supplies mfg	-	33	10	1 730	69 236	1 021	1 945	29 928	163 297	81 644	244 353	D
339112	Surgical & medical instrument mfg	-	4	3	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	8	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	50	12	1 339	45 904	868	1 655	19 078	141 627	66 527	208 710	D
	MONMOUTH COUNTY, NJ												
31-33	Manufacturing	2	587	128	12 820	402 706	8 814	17 234	218 764	1 136 837	1 183 844	2 318 283	66 286
311	Food mfg	-	60	7	935	25 277	696	1 205	17 171	88 040	105 762	193 088	D
323	Printing & related support activities	4	89	8	977	30 154	698	1 209	17 876	61 709	35 844	97 317	3 439
3231	Printing & related support activities	4	89	8	977	30 154	698	1 209	17 876	61 709	35 844	97 317	3 439
32311	Printing	4	82	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	30	15	1 935	54 732	1 531	3 427	33 396	315 254	452 707	759 628	16 695
3254	Pharmaceutical & medicine mfg	2	5	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	2	5	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	2	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	26	9	1 155	35 906	877	1 833	24 725	91 000	71 232	162 405	5 061
3261	Plastics product mfg	2	20	6	f	D	D	D	D	D	D	D	3 150
332	Fabricated metal product mfg	1	72	7	708	23 258	523	1 048	14 255	55 286	38 626	93 623	2 266
333	Machinery mfg	2	38	12	1 255	40 588	659	1 435	18 686	70 737	59 550	131 240	3 692
334	Computer & electronic product mfg	2	52	26	2 812	102 844	1 663	3 110	41 697	242 811	209 881	454 783	19 879
3342	Communications equipment mfg	-	14	7	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	6	5	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	16	11	1 163	41 831	786	1 506	19 765	88 690	67 708	156 553	D
33441	Semiconductor & other electronic component mfg	4	16	11	1 163	41 831	786	1 506	19 765	88 690	67 708	156 553	D
3345	Navigational, measuring, medical, & control instruments mfg	2	18	8	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	18	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	62	7	518	16 150	369	662	7 438	37 205	25 789	62 629	1 238

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORRIS COUNTY, NJ													
31-33	Manufacturing	1	749	217	24 461	979 607	15 757	33 543	490 325	4 780 533	2 783 519	7 531 474	203 250
311	Food mfg	1	49	8	f	D	D	D	D	D	D	D	3 285
322	Paper mfg	4	11	8	1 064	28 150	829	1 532	19 513	68 689	101 933	170 400	D
3222	Converted paper product mfg	4	11	8	1 064	28 150	829	1 532	19 513	68 689	101 933	170 400	D
32221	Paperboard container mfg	4	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	109	25	2 202	95 501	1 601	3 265	53 816	177 825	113 055	289 485	23 546
3231	Printing & related support activities	4	109	25	2 202	95 501	1 601	3 265	53 816	177 825	113 055	289 485	23 546
32311	Printing	4	95	21	g	D	D	D	D	D	D	D	23 102
323110	Commercial lithographic printing	5	46	13	1 310	63 517	925	1 987	33 382	111 014	87 100	196 903	21 658
325	Chemical mfg	1	43	16	3 071	158 608	1 628	3 176	64 047	2 712 423	1 035 474	3 715 674	86 045
3254	Pharmaceutical & medicine mfg	-	14	7	1 591	85 157	872	1 900	36 254	2 060 682	662 501	2 707 348	D
32541	Pharmaceutical & medicine mfg	-	14	7	1 591	85 157	872	1 900	36 254	2 060 682	662 501	2 707 348	D
325412	Pharmaceutical preparation mfg	-	10	5	g	D	D	D	D	D	D	D	63 985
3256	Soap, cleaning compound, & toilet preparation mfg	2	9	4	g	D	D	D	D	D	D	D	11 204
32562	Toilet preparation mfg	3	4	3	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	3	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	41	28	2 203	72 624	1 617	3 225	41 401	169 793	141 252	311 464	12 377
3261	Plastics product mfg	1	38	26	2 084	68 920	1 517	3 032	39 047	162 652	135 431	298 246	D
32619	Other plastics product mfg	1	21	16	1 476	43 457	1 088	2 083	26 291	89 782	67 117	158 295	6 657
326199	All other plastics product mfg	1	21	16	1 476	43 457	1 088	2 083	26 291	89 782	67 117	158 295	6 657
327	Nonmetallic mineral product mfg	5	32	9	620	21 753	425	990	11 916	41 180	42 218	83 497	4 068
331	Primary metal mfg	-	5	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	136	31	4 407	179 863	2 674	7 136	89 902	413 815	238 778	656 968	27 590
3321	Forging & stamping	-	9	5	610	25 315	461	885	15 573	46 381	37 592	81 923	3 162
33211	Forging & stamping	-	9	5	610	25 315	461	885	15 573	46 381	37 592	81 923	3 162
332116	Metal stamping	-	8	4	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	14	5	512	18 276	375	871	10 567	53 289	24 109	75 615	3 410
33232	Ornamental & architectural metal products mfg	-	11	5	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	82	9	857	33 837	477	2 451	17 006	70 207	33 972	102 701	3 821
33271	Machine shops	2	62	4	559	20 660	315	602	10 696	36 300	13 072	48 738	2 569
332710	Machine shops	2	62	4	559	20 660	315	602	10 696	36 300	13 072	48 738	2 569
3329	Other fabricated metal product mfg	-	17	8	1 794	80 035	931	1 938	34 062	197 595	119 390	326 907	6 579
33291	Metal valve mfg	-	8	6	1 642	73 328	827	1 696	29 783	174 406	89 275	273 652	6 153
332911	Industrial valve mfg	-	7	6	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	71	16	1 475	59 328	922	2 016	30 382	140 146	96 345	234 493	5 397
334	Computer & electronic product mfg	-	87	35	4 008	165 458	2 417	4 937	73 109	453 733	242 213	691 788	18 868
3342	Communications equipment mfg	-	15	9	1 362	57 046	672	1 407	18 373	129 331	96 945	231 600	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	7	7	816	33 144	453	969	12 955	42 621	50 232	97 044	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	7	7	816	33 144	453	969	12 955	42 621	50 232	97 044	D
3344	Semiconductor & other electronic component mfg	-	34	15	1 665	62 925	1 283	2 609	38 052	196 008	90 734	276 413	5 457
33441	Semiconductor & other electronic component mfg	-	34	15	1 665	62 925	1 283	2 609	38 052	196 008	90 734	276 413	5 457
334419	Other electronic component mfg	-	16	9	1 158	44 922	936	1 850	29 874	160 827	73 980	224 660	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MORRIS COUNTY, NJ—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	27	10	920	43 630	432	865	15 812	123 760	48 156	172 792	6 324
33451	Navigational, measuring, medical, & control instruments mfg	—	27	10	920	43 630	432	865	15 812	123 760	48 156	172 792	6 324
335	Electrical equipment, appliance, & component mfg	1	22	11	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	10	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	34	6	778	21 554	621	1 144	15 021	29 737	49 474	78 711	D
339	Miscellaneous mfg	1	69	12	1 297	43 366	867	1 556	20 060	108 736	73 076	182 995	5 143
3391	Medical equipment & supplies mfg	2	34	7	965	32 187	678	1 182	15 409	67 705	35 625	103 685	D
33911	Medical equipment & supplies mfg	2	34	7	965	32 187	678	1 182	15 409	67 705	35 625	103 685	D
339111	Laboratory apparatus & furniture mfg	—	2	2	f	D	D	D	D	D	D	D	D
	OCEAN COUNTY, NJ												
31-33	Manufacturing	2	309	70	7 174	201 053	5 384	10 211	119 792	510 857	435 118	939 795	31 870
325	Chemical mfg	1	11	5	2 033	44 922	1 703	3 264	29 637	128 360	94 886	220 884	9 376
3254	Pharmaceutical & medicine mfg	—	3	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	3	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	2	2	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	2	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	14	8	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	9	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	22	9	739	25 867	473	954	12 158	67 596	43 800	111 166	2 657
	PASSAIC COUNTY, NJ												
31-33	Manufacturing	1	1 059	369	34 589	1 237 642	24 529	48 360	668 913	3 764 924	2 666 433	6 464 231	202 330
311	Food mfg	3	85	20	2 251	83 463	1 380	2 984	37 489	283 536	248 068	531 996	12 085
3116	Meat product mfg	5	8	5	528	18 384	441	1 023	10 790	62 082	78 258	140 382	2 276
31161	Animal slaughtering & processing	5	8	5	528	18 384	441	1 023	10 790	62 082	78 258	140 382	2 276
3118	Bakeries & tortilla mfg	1	61	12	1 320	46 345	748	1 621	21 146	166 306	98 605	265 121	6 781
31181	Bread & bakery product mfg	—	53	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	12	6	747	27 580	413	875	13 940	111 608	43 679	155 290	D
313	Textile mills	3	72	31	2 940	110 531	2 341	5 312	73 758	279 203	203 427	478 473	12 831
3132	Fabric mills	3	26	8	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	3	45	23	2 083	86 067	1 643	3 845	57 660	228 841	163 143	387 747	9 749
31331	Textile & fabric finishing mills	5	37	20	1 699	70 588	1 321	3 114	47 325	169 902	120 516	289 448	7 864
313311	Broadwoven fabric finishing mills	5	30	15	1 417	60 471	1 110	2 640	41 072	153 123	107 743	259 833	D
314	Textile product mills	2	23	9	558	12 804	477	990	8 473	33 867	34 409	68 556	916
315	Apparel mfg	2	61	31	2 213	40 483	1 971	3 628	28 628	74 403	53 159	127 849	D
3152	Cut & sew apparel mfg	1	45	25	1 868	32 121	1 680	3 149	22 798	59 216	41 796	101 388	D
31521	Cut & sew apparel contractors	5	24	15	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	6	22	13	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	16	10	509	12 141	417	775	5 966	30 676	35 612	66 622	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PASSAIC COUNTY, NJ —Con.												
	Manufacturing—Con.												
322	Paper mfg	1	28	15	1 523	57 976	1 166	2 510	31 744	101 915	120 346	222 268	9 911
3222	Converted paper product mfg	1	27	14	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	8	5	542	24 559	434	992	11 475	49 547	66 337	115 861	D
323	Printing & related support activities.....	4	113	26	2 229	78 736	1 681	3 392	47 395	166 394	118 281	283 172	14 248
3231	Printing & related support activities.....	4	113	26	2 229	78 736	1 681	3 392	47 395	166 394	118 281	283 172	14 248
32311	Printing	4	89	21	1 865	68 087	1 400	2 887	41 132	143 071	113 289	255 406	13 247
323110	Commercial lithographic printing ..	5	50	10	946	45 806	667	1 378	26 875	96 204	87 367	182 568	11 605
323113	Commercial screen printing.....	—	11	6	571	12 521	458	967	7 676	19 582	12 683	32 573	501
325	Chemical mfg	—	75	38	3 516	153 778	2 289	4 750	78 594	1 293 667	709 295	2 011 341	42 665
3251	Basic chemical mfg	—	13	7	875	40 026	612	1 215	23 609	105 563	147 093	262 503	D
3254	Pharmaceutical & medicine mfg	—	15	6	700	34 393	426	877	16 119	741 488	291 820	1 027 399	14 412
32541	Pharmaceutical & medicine mfg	—	15	6	700	34 393	426	877	16 119	741 488	291 820	1 027 399	14 412
325412	Pharmaceutical preparation mfg	—	11	5	f	D	D	D	D	D	D	D	13 532
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	22	12	1 273	53 047	946	2 030	30 056	382 351	196 852	583 743	16 007
32561	Soap & cleaning compound mfg	3	14	6	621	31 154	421	1 133	16 663	190 361	145 753	333 887	10 558
32562	Toilet preparation mfg ...	—	8	6	652	21 893	525	897	13 393	191 990	51 099	249 856	5 449
325620	Toilet preparation mfg ..	—	8	6	652	21 893	525	897	13 393	191 990	51 099	249 856	5 449
326	Plastics & rubber products mfg	3	65	36	3 144	88 858	2 282	4 440	48 213	260 352	272 207	535 158	18 652
3261	Plastics product mfg	3	58	32	2 963	82 499	2 142	4 119	44 370	245 318	262 945	510 837	18 087
32611	Unsupported plastics film, sheet, & bag mfg ..	5	17	9	663	20 992	512	963	12 702	53 888	86 019	139 612	D
32619	Other plastics product mfg	2	28	19	2 006	52 882	1 423	2 767	27 318	173 235	162 798	338 465	13 102
326199	All other plastics product mfg	2	27	18	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	190	55	3 865	132 852	2 875	5 713	81 387	268 116	208 424	480 774	11 834
3323	Architectural & structural metals mfg	—	47	14	924	31 466	653	1 171	17 243	61 780	68 569	130 177	1 880
33232	Ornamental & architectural metal products mfg.....	—	39	12	813	27 694	577	1 024	15 002	53 646	58 854	112 284	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	71	11	807	29 925	630	1 299	20 450	54 684	32 098	87 487	2 853
33271	Machine shops.....	1	61	9	664	25 525	511	1 061	17 416	47 322	28 869	76 862	2 633
332710	Machine shops.....	1	61	9	664	25 525	511	1 061	17 416	47 322	28 869	76 862	2 633
3329	Other fabricated metal product mfg	—	23	8	956	36 093	648	1 461	21 094	83 922	71 821	160 073	4 864
33299	All other fabricated metal product mfg	—	17	6	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	14	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	85	25	1 526	60 869	950	1 912	29 598	113 970	104 052	219 144	5 133
3332	Industrial machinery mfg ..	1	28	9	532	20 656	321	633	9 529	36 970	35 305	73 534	2 747
33329	Other industrial machinery mfg	1	25	9	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	25	9	519	21 558	314	610	10 015	35 327	34 894	70 421	740
334	Computer & electronic product mfg	—	47	26	6 043	274 187	3 569	6 159	120 329	535 249	304 172	862 020	48 542
3342	Communications equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	23	15	1 688	51 347	1 207	2 165	25 285	147 543	138 163	286 934	D
33441	Semiconductor & other electronic component mfg	—	23	15	1 688	51 347	1 207	2 165	25 285	147 543	138 163	286 934	D
334419	Other electronic component mfg	—	5	4	709	23 535	518	905	11 125	93 172	107 192	199 704	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PASSAIC COUNTY, NJ—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	17	9	3 820	184 644	1 928	2 996	64 791	334 471	142 107	468 598	13 436
33451	Navigational, measuring, medical, & control instruments mfg	—	17	9	3 820	184 644	1 928	2 996	64 791	334 471	142 107	468 598	13 436
334511	Search, detection, navigation, & guidance instrument mfg	—	6	4	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	29	10	926	27 523	725	1 485	18 980	93 674	76 560	170 619	4 086
337	Furniture & related product mfg	4	53	10	777	20 712	607	993	14 529	44 978	38 279	83 742	3 430
3371	Household & institutional furniture & kitchen cabinet mfg	2	39	8	560	14 538	433	686	11 361	28 331	25 200	53 715	1 409
339	Miscellaneous mfg	1	67	19	1 811	51 612	1 294	2 165	24 018	120 498	63 936	183 034	4 950
3391	Medical equipment & supplies mfg	—	28	5	861	28 874	568	789	10 630	68 938	32 485	101 331	3 173
33911	Medical equipment & supplies mfg	—	28	5	861	28 874	568	789	10 630	68 938	32 485	101 331	3 173
339113	Surgical appliance & supplies mfg	—	7	4	732	24 730	495	663	8 912	60 734	28 261	88 723	2 854
3399	Other miscellaneous mfg	2	39	14	950	22 738	726	1 376	13 388	51 560	31 451	81 703	1 777
	SALEM COUNTY, NJ												
31-33	Manufacturing	—	48	14	4 188	207 486	2 475	4 820	108 235	604 305	531 332	1 156 239	50 244
325	Chemical mfg	—	10	6	g	D	D	D	D	D	D	D	38 781
3251	Basic chemical mfg	—	2	1	g	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	—	2	1	g	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	3	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	—	1	1	f	D	D	D	D	D	D	D	D
	SOMERSET COUNTY, NJ												
31-33	Manufacturing	—	376	134	16 289	856 698	8 173	16 450	285 493	3 139 330	2 045 683	5 148 393	255 143
325	Chemical mfg	—	45	31	6 697	439 613	2 308	4 383	96 668	2 163 028	1 341 201	3 484 516	130 483
3254	Pharmaceutical & medicine mfg	—	13	10	4 436	346 866	1 044	1 867	53 670	1 607 246	823 153	2 421 804	D
32541	Pharmaceutical & medicine mfg	—	13	10	4 436	346 866	1 044	1 867	53 670	1 607 246	823 153	2 421 804	D
325412	Pharmaceutical preparation mfg	—	9	7	h	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	7	6	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	4	4	744	25 795	448	700	11 970	67 932	111 812	172 180	D
325620	Toilet preparation mfg	—	4	4	744	25 795	448	700	11 970	67 932	111 812	172 180	D
326	Plastics & rubber products mfg	1	19	14	1 036	34 768	866	1 723	23 730	99 854	68 139	167 621	5 398
3261	Plastics product mfg	1	18	13	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	71	19	1 762	66 467	1 173	2 444	35 509	131 065	103 469	233 531	9 827
3327	Machine shops, turned product, & screw, nut, & bolt mfg	6	33	7	742	31 127	478	1 038	17 037	60 644	31 346	91 854	6 304
333	Machinery mfg	4	33	14	985	44 346	556	1 307	21 365	94 819	75 222	171 070	5 316
334	Computer & electronic product mfg	2	26	12	1 416	70 164	802	1 620	29 868	186 497	116 239	286 318	D
3344	Semiconductor & other electronic component mfg	3	8	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	3	8	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOMERSET COUNTY, NJ—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	—	31	4	1 442	92 173	475	1 055	16 822	179 926	109 661	293 968	D
3391	Medical equipment & supplies mfg.....	—	22	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	22	3	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	—	3	1	g	D	D	D	D	D	D	D	D
	SUSSEX COUNTY, NJ												
31-33	Manufacturing	3	146	29	2 854	87 171	1 956	3 638	45 587	194 707	127 017	320 844	16 774
315	Apparel mfg.....	9	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	12	6	726	27 569	443	963	13 096	46 157	39 861	85 649	6 010
3262	Rubber product mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
	UNION COUNTY, NJ												
31-33	Manufacturing	1	996	353	40 157	1 619 705	28 056	59 261	888 941	6 438 336	7 587 490	13 883 335	298 250
311	Food mfg.....	3	81	18	2 964	106 525	2 036	4 269	63 981	262 266	575 420	838 686	16 776
3115	Dairy product mfg.....	9	4	2	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	52	6	1 004	29 159	741	1 424	20 465	102 174	55 373	158 758	3 768
31182	Cookie, cracker, & pasta mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg..	—	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	—	11	5	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	—	7	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	4	28	15	1 044	21 972	784	1 470	14 785	40 455	46 481	87 591	D
3152	Cut & sew apparel mfg....	5	23	12	804	17 237	567	1 113	11 290	33 126	30 759	64 502	D
322	Paper mfg.....	—	15	10	1 210	38 123	980	2 174	26 674	98 805	120 266	217 130	D
3222	Converted paper product mfg.....	—	13	8	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	129	31	3 199	113 934	2 137	4 346	64 443	225 474	157 731	385 746	13 650
3231	Printing & related support activities.....	3	129	31	3 199	113 934	2 137	4 346	64 443	225 474	157 731	385 746	13 650
32311	Printing.....	3	111	25	2 691	98 424	1 814	3 644	55 612	199 174	151 420	351 848	12 274
323110	Commercial lithographic printing..	4	59	13	1 606	60 757	1 080	2 240	35 326	115 881	88 102	205 711	9 704
32312	Support activities for printing.....	2	18	6	508	15 510	323	702	8 831	26 300	6 311	33 898	1 376
324	Petroleum & coal products mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries....	—	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	61	31	8 048	456 520	4 461	9 993	171 157	2 850 672	1 446 201	4 435 442	115 197
3251	Basic chemical mfg.....	—	14	6	1 121	69 792	579	1 355	27 625	274 589	360 600	639 898	20 820
32519	Other basic organic chemical mfg.....	—	6	3	f	D	D	D	D	D	D	D	11 361
325199	All other basic organic chemical mfg.....	—	6	3	f	D	D	D	D	D	D	D	11 361
3254	Pharmaceutical & medicine mfg.....	—	10	8	i	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	10	8	i	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	—	3	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	7	7	h	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg..	1	11	4	988	31 224	694	1 144	18 506	417 239	140 087	579 597	D
32562	Toilet preparation mfg....	1	3	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg..	1	3	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	1	17	7	529	19 615	329	625	8 901	57 766	71 090	130 651	3 509

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	UNION COUNTY, NJ—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	3	82	48	3 943	111 892	3 181	6 525	69 065	238 132	247 514	480 978	23 631
3261	Plastics product mfg	3	76	46	3 717	103 409	2 990	6 037	62 815	220 374	227 182	442 963	23 093
32611	Unsupported plastics film, sheet, & bag mfg . .	4	13	8	678	23 688	520	1 013	14 124	52 252	71 712	123 051	D
326113	Unsupported plastics film & sheet (except packaging) mfg	4	9	5	558	21 292	424	872	12 325	46 304	63 005	108 666	3 493
32619	Other plastics product mfg	2	44	27	2 505	62 654	2 096	4 277	38 794	135 695	108 934	240 975	14 595
326199	All other plastics product mfg	2	41	27	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	17	9	678	20 798	498	1 009	11 827	83 184	75 587	159 910	8 624
332	Fabricated metal product mfg	—	212	67	5 338	205 829	3 900	8 504	120 068	419 116	213 325	628 050	20 940
3321	Forging & stamping	—	21	8	783	31 150	604	1 327	18 994	51 460	23 930	74 345	3 103
33211	Forging & stamping	—	21	8	783	31 150	604	1 327	18 994	51 460	23 930	74 345	3 103
332116	Metal stamping	—	21	8	783	31 150	604	1 327	18 994	51 460	23 930	74 345	3 103
3323	Architectural & structural metals mfg	—	36	15	1 165	38 053	911	2 096	25 321	82 565	54 817	135 055	4 483
33232	Ornamental & architectural metal products mfg	—	26	12	1 034	32 325	810	1 856	21 311	72 905	44 465	115 115	D
332322	Sheet metal work mfg	—	18	10	914	27 875	726	1 663	18 946	64 740	35 870	98 253	3 966
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	87	19	1 387	57 265	1 066	2 256	38 256	105 026	46 148	151 005	6 167
33271	Machine shops	2	66	8	572	22 834	435	912	15 248	42 307	13 782	55 311	1 732
332710	Machine shops	2	66	8	572	22 834	435	912	15 248	42 307	13 782	55 311	1 732
33272	Turned product & screw, nut, & bolt mfg	—	21	11	815	34 431	631	1 344	23 008	62 719	32 366	95 694	4 435
3328	Coating, engraving, heat treating, & allied activities .	1	27	11	626	24 297	444	924	11 455	51 171	33 266	84 075	D
33281	Coating, engraving, heat treating, & allied activities	1	27	11	626	24 297	444	924	11 455	51 171	33 266	84 075	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	21	8	506	20 069	350	700	8 681	42 500	26 821	69 026	D
3329	Other fabricated metal product mfg	—	23	5	583	22 825	295	638	9 135	47 534	31 046	78 577	1 022
333	Machinery mfg	1	113	37	3 448	146 167	2 278	4 938	77 945	281 154	192 321	475 320	15 168
3335	Metalworking machinery mfg	1	60	15	1 218	48 256	913	2 053	31 206	77 535	36 095	112 096	5 075
33351	Metalworking machinery mfg	1	60	15	1 218	48 256	913	2 053	31 206	77 535	36 095	112 096	5 075
333514	Special die & tool, die set, jig, & fixture mfg . .	1	25	6	593	20 621	465	1 029	13 168	32 906	14 953	47 511	1 836
3339	Other general-purpose machinery mfg	—	23	12	1 368	62 510	780	1 662	27 222	118 655	91 875	205 965	5 444
33392	Material handling equipment mfg	—	5	3	640	25 289	335	725	12 795	58 933	41 738	98 734	D
33399	All other general-purpose machinery mfg	1	15	7	f	D	D	D	D	D	D	D	4 545
334	Computer & electronic product mfg	4	30	11	907	25 841	577	1 104	12 257	57 805	29 334	86 884	D
3344	Semiconductor & other electronic component mfg	4	14	6	594	17 378	398	772	8 069	38 389	16 860	54 864	D
33441	Semiconductor & other electronic component mfg	4	14	6	594	17 378	398	772	8 069	38 389	16 860	54 864	D
335	Electrical equipment, appliance, & component mfg	1	26	14	1 206	39 137	931	1 863	25 009	108 035	87 495	195 854	D
3359	Other electrical equipment & component mfg	1	8	6	556	20 377	450	911	14 478	52 646	36 191	89 888	D
336	Transportation equipment mfg	—	7	2	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	49	17	1 374	40 942	1 086	2 138	27 601	85 113	79 233	167 768	D
3372	Office furniture (including fixtures) mfg	5	20	8	545	16 630	391	771	10 566	22 904	20 984	46 017	D
33721	Office furniture (including fixtures) mfg	5	20	8	545	16 630	391	771	10 566	22 904	20 984	46 017	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UNION COUNTY, NJ—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	77	21	1 740	52 129	1 208	2 232	27 883	141 553	106 958	247 651	D
3391	Medical equipment & supplies mfg	2	29	6	517	20 186	300	569	9 537	61 721	23 034	85 115	4 092
33911	Medical equipment & supplies mfg	2	29	6	517	20 186	300	569	9 537	61 721	23 034	85 115	4 092
3399	Other miscellaneous mfg	1	48	15	1 223	31 943	908	1 663	18 346	79 832	83 924	162 536	D
	WARREN COUNTY, NJ												
31-33	Manufacturing	1	164	62	7 188	294 412	4 864	10 121	185 004	1 201 086	799 785	1 982 259	97 240
311	Food mfg	—	10	3	f	D	D	D	D	D	D	D	184
3113	Sugar & confectionery product mfg	—	2	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	—	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	5	597	24 790	451	1 016	17 063	63 285	98 401	162 432	D
325	Chemical mfg	3	8	7	1 439	72 233	695	1 644	46 369	458 931	211 725	667 226	58 814
3254	Pharmaceutical & medicine mfg	9	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	9	2	2	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	9	6	906	33 386	779	1 666	27 320	75 663	54 633	127 836	14 563
3261	Plastics product mfg	—	9	6	906	33 386	779	1 666	27 320	75 663	54 633	127 836	14 563
32619	Other plastics product mfg	—	4	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	15	5	868	38 098	470	920	16 782	65 132	72 748	140 174	2 924
3339	Other general-purpose machinery mfg	—	3	3	694	31 493	356	688	12 750	53 332	64 623	120 254	D
33391	Pump & compressor mfg	—	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	7	5	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALLEDALE, NJ													
31-33	Manufacturing	-	7	5	792	50 904	291	614	10 056	124 317	81 477	197 418	D
339	Miscellaneous mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
BAYONNE, NJ													
31-33	Manufacturing	4	52	19	1 747	60 601	1 038	2 190	28 349	243 949	263 513	556 130	10 329
325	Chemical mfg.....	1	7	5	523	23 879	300	723	11 622	66 339	71 466	138 675	5 614
BELLEVILLE TOWNSHIP, NJ													
31-33	Manufacturing	-	70	13	1 369	51 224	1 013	2 060	32 830	219 662	160 994	375 373	23 109
BELLMAWR, NJ													
31-33	Manufacturing	-	25	8	797	23 064	650	1 283	16 313	51 277	54 962	106 277	3 882
BELVIDERE, NJ													
31-33	Manufacturing	4	13	5	1 091	56 214	533	1 337	36 885	382 665	116 339	496 002	60 131
325	Chemical mfg.....	5	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
BERKELEY HEIGHTS TOWNSHIP, NJ													
31-33	Manufacturing	2	20	7	646	27 405	478	1 091	17 884	55 216	35 500	91 057	9 459
BLOOMFIELD TOWNSHIP, NJ													
31-33	Manufacturing	6	60	17	1 479	38 021	1 062	2 223	24 254	163 327	68 443	230 919	5 477
BOONTON, NJ													
31-33	Manufacturing	1	28	9	600	21 200	384	813	9 563	46 589	30 552	77 274	5 756
BORDENTOWN, NJ													
31-33	Manufacturing	-	9	5	834	34 828	652	1 499	22 985	191 199	173 005	369 659	D
BRANCBURG TOWNSHIP, NJ													
31-33	Manufacturing	-	44	22	1 778	66 497	1 171	2 191	33 871	225 495	145 969	371 179	11 878
BRIDGETON, NJ													
31-33	Manufacturing	2	27	8	801	19 417	591	1 086	12 135	53 070	73 591	127 044	D
BRIDGEWATER TOWNSHIP, NJ													
31-33	Manufacturing	-	28	12	2 532	150 981	1 064	2 188	49 837	609 867	287 285	904 788	39 132
325	Chemical mfg.....	-	3	3	f	D	D	D	D	D	D	D	1 066
339	Miscellaneous mfg.....	-	4	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
BUENA, NJ													
31-33	Manufacturing	1	10	7	739	23 969	530	935	14 364	61 502	52 632	113 847	3 270

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BURLINGTON, NJ													
31-33	Manufacturing	1	23	9	1 439	54 825	904	2 049	33 728	181 828	254 540	430 255	D
BURLINGTON TOWNSHIP, NJ													
31-33	Manufacturing	5	25	20	1 067	40 160	730	1 628	22 470	112 060	198 974	312 941	6 816
CAMDEN, NJ													
31-33	Manufacturing	1	81	27	2 757	117 580	1 533	3 067	46 424	340 536	222 114	557 803	14 689
332	Fabricated metal product mfg	-	21	9	578	21 954	393	772	12 217	44 237	50 700	93 791	1 538
334	Computer & electronic product mfg	-	7	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
CARLSTADT, NJ													
31-33	Manufacturing	2	105	57	5 635	196 091	4 093	8 564	122 344	451 732	391 323	845 266	20 098
315	Apparel mfg	-	5	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	2	2	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	1	1	f	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	19	11	1 523	71 241	1 125	2 345	48 358	144 501	50 967	195 602	3 976
3231	Printing & related support activities	3	19	11	1 523	71 241	1 125	2 345	48 358	144 501	50 967	195 602	3 976
32312	Support activities for printing	6	6	6	1 058	45 916	808	1 776	34 100	94 133	20 544	114 520	2 566
323122	Prepress services	6	5	5	f	D	D	D	D	D	D	D	D
CARTERET, NJ													
31-33	Manufacturing	-	25	11	1 153	44 773	900	1 729	31 644	105 815	85 284	252 377	11 075
CEDAR GROVE TOWNSHIP, NJ													
31-33	Manufacturing	1	31	12	850	30 547	495	1 061	13 827	65 357	37 643	103 813	2 021
CHERRY HILL TOWNSHIP, NJ													
31-33	Manufacturing	1	94	27	3 924	157 253	2 530	5 057	81 609	468 629	339 625	794 712	22 461
325	Chemical mfg	-	6	4	963	32 994	644	1 208	16 696	87 618	84 952	170 095	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	882	42 409	549	1 284	24 935	82 371	94 443	176 672	4 433
3332	Industrial machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	5	586	26 128	331	544	9 725	168 152	66 395	226 238	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CINNAMINSON TOWNSHIP, NJ												
	Manufacturing	-	54	17	1 175	42 942	853	1 705	25 680	130 734	86 247	208 713	3 783
31-33	CITY OF ORANGE TOWNSHIP, NJ												
	Manufacturing	2	40	9	544	17 935	375	756	10 617	35 818	23 859	59 441	739
31-33	CLARK TOWNSHIP, NJ												
	Manufacturing	-	22	6	867	34 456	590	1 079	19 988	419 331	149 683	591 896	14 917
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
31-33	CLIFTON, NJ												
	Manufacturing	2	211	88	9 631	374 891	6 761	13 604	205 480	932 625	827 735	1 780 508	79 270
313	Textile mills	5	14	8	920	33 209	713	1 518	20 815	110 069	94 097	202 348	5 281
3133	Textile & fabric finishing & fabric coating mills	6	8	5	581	25 813	404	917	14 868	91 908	78 212	168 525	4 380
322	Paper mfg	-	9	6	804	33 356	612	1 368	17 900	51 254	44 625	95 357	2 940
3222	Converted paper product mfg	-	8	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	6	35	11	871	39 327	634	1 293	22 812	87 092	81 993	168 251	8 380
3231	Printing & related support activities.....	6	35	11	871	39 327	634	1 293	22 812	87 092	81 993	168 251	8 380
32311	Printing	6	28	9	804	36 384	586	1 195	20 864	81 301	80 555	161 028	8 029
323110	Commercial lithographic printing ..	7	16	5	576	30 602	410	854	17 463	63 550	71 649	134 181	7 407
325	Chemical mfg	-	17	9	1 053	48 616	746	1 790	28 014	214 943	187 649	407 787	10 372
3251	Basic chemical mfg	-	4	4	624	29 235	440	875	16 462	67 694	108 410	184 534	7 222
326	Plastics & rubber products mfg	5	12	9	863	26 882	644	1 337	15 203	68 518	70 839	139 489	6 554
3261	Plastics product mfg	5	11	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	37	15	971	34 808	735	1 471	23 206	70 068	39 769	108 563	1 376
334	Computer & electronic product mfg	-	11	7	2 321	105 726	1 349	2 269	46 697	189 116	171 391	377 367	D
3344	Semiconductor & other electronic component mfg	-	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	4	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
31-33	CRANFORD TOWNSHIP, NJ												
	Manufacturing	2	39	14	1 530	49 757	976	2 131	26 412	104 462	68 224	171 745	7 627
323	Printing & related support activities.....	-	6	3	501	18 693	277	595	9 545	39 513	21 940	61 023	1 474
3231	Printing & related support activities.....	-	6	3	501	18 693	277	595	9 545	39 513	21 940	61 023	1 474
31-33	CRESSKILL, NJ												
	Manufacturing	2	5	3	557	20 341	295	693	8 590	27 754	21 147	48 081	2 060
31-33	DENVILLE TOWNSHIP, NJ												
	Manufacturing	4	41	9	630	20 568	443	737	10 823	41 463	26 214	66 193	3 414

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DEPTFORD TOWNSHIP, NJ												
	Manufacturing	4	32	11	664	19 974	534	1 019	12 770	43 727	27 910	70 968	1 671
31-33	DOVER, NJ (MORRIS COUNTY)												
	Manufacturing	1	32	6	516	19 854	339	597	9 952	61 647	87 188	144 409	2 029
31-33	DOVER, NJ (OCEAN COUNTY)												
	Manufacturing	1	60	8	653	18 461	408	904	10 707	53 097	29 987	81 637	4 343
31-33	EAST BRUNSWICK TOWNSHIP, NJ												
	Manufacturing	2	44	16	1 085	32 448	723	1 273	19 788	70 733	71 806	142 264	5 252
31-33	EAST HANOVER TOWNSHIP, NJ												
	Manufacturing	-	64	12	1 751	75 046	1 169	2 342	40 702	1 584 232	702 117	2 285 838	45 820
325	Chemical mfg	-	8	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
31-33	EAST RUTHERFORD, NJ												
	Manufacturing	1	55	22	2 553	95 199	1 820	3 730	50 736	241 888	203 275	446 897	11 230
325	Chemical mfg	-	9	7	511	20 450	290	580	7 744	74 769	52 093	126 194	2 230
326	Plastics & rubber products mfg	1	4	4	593	16 842	520	995	11 202	41 152	47 602	89 190	2 056
31-33	EAST WINDSOR TOWNSHIP, NJ												
	Manufacturing	8	13	3	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	2	1	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	1	1	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	h	D	D	D	D	D	D	D	D
31-33	EATONTOWN, NJ												
	Manufacturing	2	32	17	1 656	61 841	922	1 978	27 390	154 367	111 182	269 351	10 508
334	Computer & electronic product mfg	4	9	9	593	25 322	346	697	9 563	64 015	35 588	99 307	4 948

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EDISON TOWNSHIP, NJ													
31-33	Manufacturing	1	136	62	9 446	431 270	6 978	14 270	284 559	1 317 847	2 000 531	3 300 539	168 315
323	Printing & related support activities	8	24	5	1 204	86 152	997	1 936	67 491	163 373	117 957	281 289	5 592
3231	Printing & related support activities	8	24	5	1 204	86 152	997	1 936	67 491	163 373	117 957	281 289	5 592
323110	Printing	8	22	5	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	8	12	4	1 077	81 911	905	1 748	64 630	152 342	108 475	261 196	5 029
325	Chemical mfg	3	16	12	1 404	64 245	881	1 851	34 539	272 238	302 224	565 948	29 629
332	Fabricated metal product mfg	—	8	5	589	21 708	435	881	13 027	49 599	73 253	126 297	3 044
333	Machinery mfg	—	8	4	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	14	7	750	31 988	402	812	12 620	71 927	77 279	149 732	5 419
336	Transportation equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	12	5	924	38 401	474	974	14 148	114 674	42 542	153 292	3 503
3391	Medical equipment & supplies mfg	—	6	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	6	2	f	D	D	D	D	D	D	D	D
ELIZABETH, NJ													
31-33	Manufacturing	1	129	46	5 983	191 038	4 646	10 477	123 096	544 705	601 752	1 143 577	41 609
311	Food mfg	—	22	5	1 264	41 142	1 071	2 329	31 817	146 630	288 724	436 546	6 601
3118	Bakeries & tortilla mfg	—	15	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	4	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	4	12	6	1 601	55 399	1 106	3 108	32 492	171 005	93 659	263 133	20 102
3254	Pharmaceutical & medicine mfg	5	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	5	2	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	5	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	24	8	698	23 972	539	1 128	15 412	62 869	27 091	90 451	2 601
ELMWOOD PARK, NJ													
31-33	Manufacturing	—	40	24	2 226	79 392	1 490	3 029	39 266	292 430	205 836	491 738	21 858
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
ENGLEWOOD, NJ													
31-33	Manufacturing	1	83	34	2 143	78 781	1 566	3 161	45 129	181 081	243 836	425 649	9 908
339	Miscellaneous mfg	2	19	9	542	15 705	372	645	7 580	35 241	45 416	80 428	1 300

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EWING TOWNSHIP, NJ													
31-33	Manufacturing	-	65	20	1 965	88 657	1 461	3 514	63 652	161 663	219 174	380 908	9 352
332	Fabricated metal product mfg	-	11	4	f	D	D	D	D	D	D	D	1 332
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
FAIR LAWN, NJ													
31-33	Manufacturing	2	62	30	3 146	116 397	2 319	4 441	70 048	346 422	244 923	589 280	32 918
311	Food mfg	-	8	5	1 203	48 028	995	1 988	35 015	146 328	104 486	249 446	D
3118	Bakeries & tortilla mfg	-	7	4	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	3	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	f	D	D	D	D	D	D	D	D
FAIRVIEW, NJ													
31-33	Manufacturing	1	74	13	986	23 125	724	1 403	14 073	49 056	52 091	102 024	1 960
FLEMINGTON, NJ													
31-33	Manufacturing	-	31	15	1 846	72 401	1 368	2 914	48 042	297 403	250 447	546 262	19 973
311	Food mfg	-	7	4	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
FLORHAM PARK, NJ													
31-33	Manufacturing	-	11	7	2 058	95 698	1 060	2 110	39 140	215 127	109 522	332 662	7 055
332	Fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	2	2	g	D	D	D	D	D	D	D	D
FRANKLIN, NJ													
31-33	Manufacturing	8	16	3	f	D	D	D	D	D	D	D	1 031
315	Apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
FRANKLIN TOWNSHIP, NJ (SOMERSET COUNTY)													
31-33	Manufacturing	2	86	45	3 874	157 238	2 188	4 476	71 352	368 354	446 869	804 799	31 567
325	Chemical mfg	-	16	9	1 166	43 753	605	1 024	17 665	123 850	236 391	351 452	15 351
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	5	13	8	765	34 038	461	1 025	17 068	63 894	44 828	108 370	7 413
FREEHOLD TOWNSHIP, NJ													
31-33	Manufacturing	2	26	8	1 593	37 160	1 371	3 128	27 191	143 750	203 331	344 342	10 488
325	Chemical mfg	4	4	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GALLOWAY TOWNSHIP, NJ													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	2 833
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
GARFIELD, NJ													
31-33	Manufacturing	1	105	33	3 293	90 754	2 627	5 153	58 368	293 514	232 580	521 372	24 121
339	Miscellaneous mfg	-	11	3	952	17 414	886	1 867	12 851	85 619	70 015	151 096	D
3399	Other miscellaneous mfg ..	-	10	3	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
GARWOOD, NJ													
31-33	Manufacturing	-	22	13	976	30 301	783	1 543	18 774	71 218	55 632	123 972	4 333
GLASSBORO, NJ													
31-33	Manufacturing	5	17	5	616	18 278	297	556	9 242	30 582	38 661	68 716	1 521
GLOUCESTER TOWNSHIP, NJ													
31-33	Manufacturing	2	46	13	1 528	40 073	1 162	2 423	23 989	95 649	84 057	180 691	3 865
HACKENSACK, NJ													
31-33	Manufacturing	1	140	27	2 551	85 193	1 842	3 765	45 963	191 180	205 300	391 677	10 831
HACKETTSTOWN, NJ													
31-33	Manufacturing	-	27	8	1 248	58 865	962	2 100	39 352	374 955	228 702	593 392	3 919
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
HAMBURG, NJ													
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
HAMILTON TOWNSHIP, NJ (ATLANTIC COUNTY)													
31-33	Manufacturing	4	12	5	591	21 290	370	751	11 591	46 810	50 188	96 733	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMILTON TOWNSHIP, NJ (MERCER COUNTY)													
31-33	Manufacturing	2	88	26	3 106	107 691	2 209	4 187	65 027	338 838	246 940	596 275	15 451
326	Plastics & rubber products mfg	5	9	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	6	6	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	4	3	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	5	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	5	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
HAMMONTON, NJ													
31-33	Manufacturing	-	21	7	1 054	25 989	877	1 667	15 917	51 443	46 371	98 197	2 378
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
HANOVER TOWNSHIP, NJ													
31-33	Manufacturing	-	35	14	1 695	70 140	964	3 504	32 632	385 300	128 243	506 746	13 014
334	Computer & electronic product mfg	-	6	4	891	35 674	441	929	12 726	110 825	65 350	177 383	3 024
3342	Communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
HARRISON, NJ													
31-33	Manufacturing	3	22	11	1 030	27 737	781	1 746	16 794	66 306	48 798	114 344	3 418
HAWTHORNE, NJ													
31-33	Manufacturing	1	85	24	1 606	53 851	1 166	2 361	30 931	118 832	125 328	244 166	13 634
HILLSBOROUGH TOWNSHIP, NJ													
31-33	Manufacturing	-	60	14	1 089	38 400	855	1 896	27 117	363 691	167 318	527 772	8 698
HILLSIDE TOWNSHIP, NJ													
31-33	Manufacturing	3	66	28	2 276	75 019	1 705	3 561	41 676	173 078	183 168	354 517	15 737
326	Plastics & rubber products mfg	7	7	4	700	15 598	547	1 141	10 304	30 945	30 650	61 179	4 687
3261	Plastics product mfg	7	7	4	700	15 598	547	1 141	10 304	30 945	30 650	61 179	4 687
32619	Other plastics product mfg	9	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	2	1	f	D	D	D	D	D	D	D	D
HOBOKEN, NJ													
31-33	Manufacturing	-	69	24	1 655	47 507	1 252	2 317	25 816	120 572	189 313	310 999	3 302
315	Apparel mfg	-	23	11	737	14 508	580	1 029	8 013	50 118	60 125	110 154	415
3152	Cut & sew apparel mfg	-	20	11	703	13 573	552	973	7 293	48 084	58 695	106 711	D
HOWELL TOWNSHIP, NJ													
31-33	Manufacturing	2	53	14	1 297	38 017	763	1 363	15 728	73 223	115 537	188 615	4 131

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IRVINGTON TOWNSHIP, NJ													
31-33	Manufacturing	2	61	25	1 428	40 090	1 073	2 171	24 233	94 478	76 791	166 475	5 179
JERSEY CITY, NJ													
31-33	Manufacturing	1	190	70	5 770	179 752	4 276	8 321	110 228	534 551	508 581	1 039 183	30 625
311	Food mfg	-	25	5	724	26 741	538	932	17 384	105 042	73 892	177 712	5 447
3118	Bakeries & tortilla mfg	-	19	3	647	23 865	487	825	15 808	95 666	60 646	156 028	4 625
315	Apparel mfg	1	40	18	1 079	25 452	915	1 856	18 721	89 654	112 786	200 479	999
3152	Cut & sew apparel mfg	2	30	13	837	20 727	706	1 382	14 957	70 814	93 852	162 857	841
322	Paper mfg	-	11	9	696	22 680	500	1 038	14 998	40 360	35 392	76 406	D
3222	Converted paper product mfg	-	8	6	f	D	D	D	D	D	D	D	618
323	Printing & related support activities	1	25	5	728	24 965	581	1 138	18 068	53 413	21 047	74 401	3 201
3231	Printing & related support activities	1	25	5	728	24 965	581	1 138	18 068	53 413	21 047	74 401	3 201
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
KEARNY, NJ													
31-33	Manufacturing	-	69	27	2 068	62 707	1 485	2 861	35 651	180 388	180 057	361 915	5 663
KENILWORTH, NJ													
31-33	Manufacturing	-	87	30	4 606	244 382	2 691	5 506	87 776	1 340 647	385 023	1 796 979	18 797
325	Chemical mfg	-	4	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	19	8	816	31 488	529	1 185	20 287	48 159	44 809	91 363	1 438
LAKEWOOD TOWNSHIP, NJ													
31-33	Manufacturing	2	95	50	5 375	147 573	4 153	7 811	89 815	364 429	320 455	681 378	22 476
325	Chemical mfg	1	9	5	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	3	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	3	8	6	519	17 652	349	698	8 148	48 134	32 462	80 311	1 320
LAWRENCE TOWNSHIP, NJ													
31-33	Manufacturing	3	27	8	583	15 691	466	769	10 215	37 003	12 462	49 861	2 602
LINCOLN PARK, NJ													
31-33	Manufacturing	5	18	9	795	26 051	537	911	12 737	58 514	47 592	104 579	7 585

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINDEN, NJ													
31-33	Manufacturing	-	164	65	8 202	364 132	6 059	12 729	235 978	1 951 317	4 654 117	6 332 539	73 325
315	Apparel mfg	7	10	6	561	10 576	364	671	6 872	20 565	16 562	36 885	D
324	Petroleum & coal products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	2	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	17	10	1 001	54 487	539	1 075	19 706	261 201	346 748	613 914	D
3251	Basic chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	17	10	644	21 317	469	1 005	12 834	49 050	66 282	114 944	D
332	Fabricated metal product mfg	1	39	12	740	26 388	562	1 110	14 243	51 058	13 768	64 493	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
LITTLE FALLS TOWNSHIP, NJ													
31-33	Manufacturing	1	32	12	821	26 093	626	1 333	15 706	71 120	28 393	98 301	2 391
LITTLE FERRY, NJ													
31-33	Manufacturing	1	40	14	835	30 231	575	1 194	17 107	78 855	82 361	166 436	4 417
LIVINGSTON TOWNSHIP, NJ													
31-33	Manufacturing	3	33	7	658	21 652	469	1 034	10 916	43 463	25 754	68 709	2 839
LODI, NJ													
31-33	Manufacturing	4	47	21	1 469	39 308	899	1 785	21 148	112 213	82 597	193 312	3 849
LONG BRANCH, NJ													
31-33	Manufacturing	2	24	3	505	15 179	337	627	7 006	31 106	26 496	58 543	2 545
LYNDHURST TOWNSHIP, NJ													
31-33	Manufacturing	2	43	14	1 740	54 409	1 187	2 375	29 741	151 333	90 938	240 997	20 654
MAHWAH TOWNSHIP, NJ													
31-33	Manufacturing	1	38	18	2 101	81 012	1 065	2 178	27 522	200 432	236 134	444 182	10 018
334	Computer & electronic product mfg	-	6	3	529	30 662	79	176	3 534	63 827	132 420	205 713	2 020
MARLBORO TOWNSHIP, NJ													
31-33	Manufacturing	2	36	10	747	24 034	470	862	10 692	76 189	61 919	140 086	3 101
MAYWOOD, NJ													
31-33	Manufacturing	-	13	6	1 168	37 037	761	1 530	16 520	85 142	66 217	152 394	10 109
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
339950	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
MENDHAM, NJ													
31-33	Manufacturing	1	19	8	650	27 054	357	740	11 466	61 857	36 338	99 594	3 178

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
METUCHEN, NJ													
31-33	Manufacturing	1	33	14	795	24 747	599	1 173	16 065	51 634	30 141	81 014	2 953
MIDDLESEX, NJ													
31-33	Manufacturing	3	79	20	1 317	41 174	1 002	2 010	25 274	96 788	66 376	164 583	5 687
MIDLAND PARK, NJ													
31-33	Manufacturing	-	18	5	527	17 229	366	683	7 618	40 221	15 050	55 429	1 311
MILLVILLE, NJ													
31-33	Manufacturing	-	52	22	4 684	154 393	3 667	7 284	113 772	344 652	269 521	609 518	39 800
327	Nonmetallic mineral product mfg	1	9	6	2 682	91 826	2 129	4 413	71 704	202 610	121 076	321 621	32 120
3272	Glass & glass product mfg .	1	9	6	2 682	91 826	2 129	4 413	71 704	202 610	121 076	321 621	32 120
32721	Glass & glass product mfg	1	9	6	2 682	91 826	2 129	4 413	71 704	202 610	121 076	321 621	32 120
327212	Other pressed & blown glass & glassware mfg	-	3	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
MONROE TOWNSHIP, NJ (GLOUCESTER COUNTY)													
31-33	Manufacturing	1	39	10	908	23 625	655	1 151	13 409	54 788	52 325	106 910	4 297
MONROE TOWNSHIP, NJ (MIDDLESEX COUNTY)													
31-33	Manufacturing	4	11	5	904	24 350	743	1 573	17 530	80 316	69 721	149 942	3 922
326	Plastics & rubber products mfg	-	3	3	f	D	D	D	D	D	D	D	1 979
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	1 979
MONTVILLE TOWNSHIP, NJ													
31-33	Manufacturing	-	44	13	1 153	39 171	806	1 643	20 746	97 370	71 314	170 059	4 306
MOONACHIE, NJ													
31-33	Manufacturing	2	57	36	3 292	105 212	2 136	4 438	59 581	190 660	335 593	526 068	13 374
322	Paper mfg	-	5	5	734	23 866	499	832	14 069	49 164	40 767	89 991	1 704
3222	Converted paper product mfg	-	5	5	734	23 866	499	832	14 069	49 164	40 767	89 991	1 704
32221	Paperboard container mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	11	8	601	19 515	336	692	10 056	35 728	40 694	76 832	1 638
3231	Printing & related support activities.....	2	11	8	601	19 515	336	692	10 056	35 728	40 694	76 832	1 638
32311	Printing	2	9	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	7	6	597	21 834	331	795	11 958	32 007	61 299	94 204	4 312
3261	Plastics product mfg	8	6	5	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MOORESTOWN TOWNSHIP, NJ													
31-33	Manufacturing	-	51	26	5 248	258 060	3 515	7 519	168 587	742 519	403 712	1 142 856	22 999
323	Printing & related support activities.....	1	17	7	504	21 036	363	814	13 629	42 729	24 228	66 532	D
3231	Printing & related support activities.....	1	17	7	504	21 036	363	814	13 629	42 729	24 228	66 532	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	5	5	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	h	D	D	D	D	D	D	D	D
MORRISTOWN, NJ													
31-33	Manufacturing	9	23	3	567	23 178	391	876	15 211	182 698	88 823	269 361	7 030
MOUNTAINSIDE, NJ													
31-33	Manufacturing	-	25	10	1 006	44 746	745	1 696	27 447	81 708	39 807	120 375	5 612
332	Fabricated metal product mfg	-	6	4	572	28 444	420	985	18 475	51 803	23 464	74 877	4 731
MOUNT HOLLY TOWNSHIP, NJ													
31-33	Manufacturing	-	19	8	543	17 915	407	783	11 871	52 353	28 139	79 627	2 112
MOUNT LAUREL TOWNSHIP, NJ													
31-33	Manufacturing	1	31	15	1 449	63 218	906	1 563	28 591	162 553	104 048	266 659	D
MOUNT OLIVE TOWNSHIP, NJ													
31-33	Manufacturing	-	32	12	1 327	64 962	683	1 084	22 691	506 590	315 893	805 543	9 106
325	Chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
NEWARK, NJ													

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWARK, NJ—Con.													
31-33	Manufacturing	1	439	172	14 960	491 931	10 693	21 463	290 902	1 817 277	1 547 475	3 353 066	124 046
311	Food mfg	2	48	21	1 786	58 673	1 179	2 520	31 880	171 986	251 755	421 686	9 465
3118	Bakeries & tortilla mfg	4	22	7	755	23 565	502	1 102	14 421	49 860	31 386	81 511	3 597
31181	Bread & bakery product mfg	—	21	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	3	1	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	3	1	g	D	D	D	D	D	D	D	D
31212	Breweries	—	1	1	g	D	D	D	D	D	D	D	D
312120	Breweries	—	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	4	42	25	1 509	26 342	1 297	2 656	19 779	47 697	24 572	69 959	D
3152	Cut & sew apparel mfg	5	37	22	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	7	22	14	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	20	13	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	21	13	1 513	57 929	1 029	2 346	31 211	128 537	131 684	259 993	D
3222	Converted paper product mfg	—	20	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	11	9	945	39 115	643	1 496	20 480	79 913	76 680	156 664	7 691
322211	Corrugated & solid fiber box mfg	—	6	4	661	30 464	424	1 045	15 747	62 742	69 178	131 937	D
323	Printing & related support activities.....	5	31	6	522	12 503	390	659	8 200	28 846	14 168	42 881	1 329
3231	Printing & related support activities.....	5	31	6	522	12 503	390	659	8 200	28 846	14 168	42 881	1 329
325	Chemical mfg	2	59	28	2 163	94 364	1 269	2 597	47 643	346 169	443 163	795 537	24 174
3251	Basic chemical mfg	3	24	14	1 114	51 915	580	1 250	24 654	193 530	220 692	422 728	13 077
32519	Other basic organic chemical mfg	3	14	8	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	4	11	8	686	33 929	318	678	13 180	116 304	140 827	255 110	D
3255	Paint, coating, & adhesive mfg	—	19	6	540	24 566	356	742	13 317	88 982	133 348	220 380	6 811
326	Plastics & rubber products mfg	1	23	10	822	19 785	635	1 190	10 034	45 744	44 669	89 980	3 641
3261	Plastics product mfg	1	19	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	95	21	1 647	46 545	1 263	2 247	29 334	108 683	71 039	179 585	6 701
337	Furniture & related product mfg	6	22	12	1 042	31 915	751	1 572	17 728	68 847	51 973	117 601	D
3372	Office furniture (including fixtures) mfg	6	10	5	633	20 295	440	885	10 743	51 858	31 502	80 094	D
33721	Office furniture (including fixtures) mfg	6	10	5	633	20 295	440	885	10 743	51 858	31 502	80 094	D
337215	Showcase, partition, shelving, & locker mfg	6	7	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	15	6	1 059	25 805	636	1 229	14 708	52 245	67 566	120 399	4 123
3399	Other miscellaneous mfg ..	1	12	6	1 036	25 281	620	1 207	14 433	51 171	67 350	119 174	D
NEW BRUNSWICK, NJ													
31-33	Manufacturing	1	78	23	2 689	113 975	2 008	3 591	71 605	497 120	193 558	689 935	32 969
325	Chemical mfg	1	10	7	913	50 134	621	1 037	28 859	285 697	84 472	369 458	24 319
3254	Pharmaceutical & medicine mfg	1	5	4	738	40 482	524	829	24 484	255 468	52 405	307 196	D
32541	Pharmaceutical & medicine mfg	1	5	4	738	40 482	524	829	24 484	255 468	52 405	307 196	D
325412	Pharmaceutical preparation mfg	1	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH BERGEN TOWNSHIP, NJ													
31-33	Manufacturing	3	143	46	6 662	218 835	3 439	6 937	85 521	358 769	340 369	693 321	11 538
313	Textile mills	7	23	7	569	15 977	454	856	11 198	41 957	21 199	63 613	1 481
315	Apparel mfg	-	33	16	4 100	151 081	1 561	3 206	45 133	157 220	181 365	336 936	3 569
3152	Cut & sew apparel mfg	-	26	12	3 921	146 471	1 463	2 976	43 156	137 923	146 863	283 182	3 385
31521	Cut & sew apparel contractors	7	15	7	f	D	D	D	D	D	D	D	D
315212	Women's, girls' & infants' cut & sew apparel contractors ..	7	15	7	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	8	4	3 015	133 480	919	2 072	35 630	119 301	143 974	261 650	D
315239	Women's & girls' cut & sew other outerwear mfg	-	3	2	h	D	D	D	D	D	D	D	D
NORTH BRUNSWICK TOWNSHIP, NJ													
31-33	Manufacturing	1	43	14	4 258	118 556	3 211	7 377	73 873	256 716	271 708	532 984	33 137
323	Printing & related support activities	-	8	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	8	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	8	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	1	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	g	D	D	D	D	D	D	D	D
NORTHVALE, NJ													
31-33	Manufacturing	2	50	21	1 673	66 920	1 026	2 317	29 705	173 228	214 811	387 244	7 981
325	Chemical mfg	1	8	4	518	20 143	272	609	8 237	75 198	101 380	170 539	1 994
NUTLEY TOWNSHIP, NJ													
31-33	Manufacturing	-	27	7	h	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	h	D	D	D	D	D	D	D	D
OAKLAND, NJ													
31-33	Manufacturing	1	30	18	1 981	97 327	919	1 938	27 604	174 118	142 500	313 961	16 365
333	Machinery mfg	1	8	7	560	21 810	313	663	9 789	43 991	52 397	99 569	1 406
339	Miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
OLD BRIDGE TOWNSHIP, NJ													
31-33	Manufacturing	-	40	15	1 346	42 426	977	1 845	23 618	159 870	112 520	272 632	4 824
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PALISADES PARK, NJ													
31-33	Manufacturing	1	39	5	554	19 623	418	832	12 179	82 197	82 582	165 376	5 166
PALMYRA, NJ													
31-33	Manufacturing	1	12	7	551	20 152	408	789	10 055	42 494	15 001	57 573	1 468
PARAMUS, NJ													
31-33	Manufacturing	3	32	7	1 541	70 797	687	1 444	24 672	124 562	115 950	238 227	14 061
334	Computer & electronic product mfg.....	2	5	4	1 014	42 703	409	867	10 211	81 246	79 338	157 446	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
PARSIPPANY-TROY HILLS TOWNSHIP, NJ													
31-33	Manufacturing	1	69	27	3 147	148 228	1 929	4 259	69 980	693 569	508 848	1 197 037	32 024
323	Printing & related support activities.....	6	17	6	972	50 916	733	1 642	28 437	90 840	60 618	151 456	6 874
3231	Printing & related support activities.....	6	17	6	972	50 916	733	1 642	28 437	90 840	60 618	151 456	6 874
32311	Printing	6	14	4	793	44 183	596	1 370	23 709	81 026	59 375	140 327	6 634
323110	Commercial lithographic printing ..	8	5	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	614	25 332	289	703	11 262	58 636	32 252	89 061	2 622
PASSAIC, NJ													
31-33	Manufacturing	2	144	54	4 687	108 598	3 715	7 219	71 155	237 872	199 312	433 194	8 087
313	Textile mills.....	5	17	8	619	19 804	471	967	13 676	41 573	25 608	67 259	2 527
3133	Textile & fabric finishing & fabric coating mills.....	4	12	7	531	17 379	426	848	12 228	37 108	22 105	59 359	2 147
315	Apparel mfg	3	30	18	1 414	21 803	1 304	2 466	18 519	34 445	25 130	58 585	D
3152	Cut & sew apparel mfg	3	25	17	1 278	18 607	1 188	2 256	15 856	28 037	18 671	45 824	D
31521	Cut & sew apparel contractors	5	13	9	873	12 072	816	1 577	10 785	17 398	1 925	19 323	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	12	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	13	5	555	13 891	450	970	8 673	26 035	14 151	40 616	928
3231	Printing & related support activities.....	-	13	5	555	13 891	450	970	8 673	26 035	14 151	40 616	928
32311	Printing	-	11	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	3	577	11 897	352	614	4 846	40 856	43 752	81 708	1 106
3261	Plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
PATERSON, NJ													

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PATERSON, NJ—Con.												
	Manufacturing	2	340	114	8 436	277 214	6 219	12 111	155 632	929 443	817 673	1 748 423	49 933
311	Food mfg	7	21	8	652	17 952	527	1 213	11 630	66 596	65 372	132 131	1 998
313	Textile mills	2	30	12	960	37 418	759	1 827	24 842	62 462	46 948	110 176	3 097
3133	Textile & fabric finishing & fabric coating mills	2	19	9	642	26 938	515	1 322	19 291	45 356	31 717	77 453	D
31331	Textile & fabric finishing mills	2	18	9	f	D	D	D	D	D	D	D	2 036
325	Chemical mfg	1	30	15	1 135	47 664	724	1 339	24 085	373 529	366 458	735 078	19 899
3256	Soap, cleaning compound, & toilet preparation mfg ..	6	10	5	504	23 855	343	602	11 733	74 135	103 193	177 581	12 585
326	Plastics & rubber products mfg	4	20	12	879	25 923	598	1 194	11 841	83 031	99 373	185 003	6 640
3261	Plastics product mfg	4	20	12	879	25 923	598	1 194	11 841	83 031	99 373	185 003	6 640
32619	Other plastics product mfg	4	12	9	734	20 992	493	979	9 580	71 678	77 736	152 006	6 121
326199	All other plastics product mfg	4	11	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	61	12	847	28 277	608	1 240	16 755	69 424	40 421	110 690	4 545
333	Machinery mfg	2	29	11	658	23 457	428	827	12 427	55 119	49 491	106 196	1 933
334	Computer & electronic product mfg	2	12	8	653	19 829	479	852	9 320	42 699	14 123	57 647	1 827
3344	Semiconductor & other electronic component mfg	1	8	8	613	18 591	459	823	8 866	40 030	12 504	53 290	1 713
33441	Semiconductor & other electronic component mfg	1	8	8	613	18 591	459	823	8 866	40 030	12 504	53 290	1 713
31-33	PAULSBORO, NJ												
	Manufacturing	—	12	8	509	20 190	337	681	11 724	276 004	812 527	1 094 565	23 306
31-33	PENNSAUKEN TOWNSHIP, NJ												
	Manufacturing	1	159	76	7 608	251 321	5 137	9 918	138 324	601 437	660 299	1 271 973	46 719
311	Food mfg	—	14	11	1 204	29 687	759	1 503	16 602	172 667	156 010	328 291	7 547
3118	Bakeries & tortilla mfg	—	7	5	640	12 461	328	620	5 229	35 134	42 142	76 923	3 254
31182	Cookie, cracker, & pasta mfg	—	4	3	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	5	599	20 885	435	924	9 137	47 561	46 708	94 262	4 756
3222	Converted paper product mfg	—	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	47	21	1 560	64 458	1 081	2 212	39 826	113 592	92 570	206 213	9 781
3231	Printing & related support activities	1	47	21	1 560	64 458	1 081	2 212	39 826	113 592	92 570	206 213	9 781
32311	Printing	1	33	16	1 175	49 240	786	1 535	30 570	84 711	85 620	170 556	8 566
323110	Commercial lithographic printing ..	—	22	13	968	41 816	649	1 260	25 773	71 657	76 956	148 810	8 040
331	Primary metal mfg	—	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	5	11	5	715	23 559	256	532	6 211	46 365	21 138	67 171	D
339	Miscellaneous mfg	3	19	6	731	19 244	523	1 171	11 986	39 019	30 641	69 878	4 022
31-33	PENNSVILLE TOWNSHIP, NJ												
	Manufacturing	—	5	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	3	3	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	—	1	1	g	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PEQUANNOCK TOWNSHIP, NJ													
31-33	Manufacturing	-	12	2	539	14 958	421	848	8 065	31 666	20 152	51 926	1 931
PERTH AMBOY, NJ													
31-33	Manufacturing	3	53	18	2 408	85 932	1 823	4 017	57 289	220 395	649 556	865 632	46 383
315	Apparel mfg	4	8	6	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	4	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	5	2	2	f	D	D	D	D	D	D	D	D
PHILLIPSBURG, NJ													
31-33	Manufacturing	-	33	15	1 946	72 285	1 252	2 434	38 197	167 991	187 173	358 515	7 765
333	Machinery mfg	-	5	2	f	D	D	D	D	D	D	D	2 374
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
PISCATAWAY TOWNSHIP, NJ													
31-33	Manufacturing	4	76	39	6 434	255 242	3 192	6 273	96 925	879 274	610 706	1 521 194	56 004
325	Chemical mfg	6	13	10	3 044	129 067	1 151	2 309	36 025	568 393	261 128	860 999	28 856
3256	Soap, cleaning compound, & toilet preparation mfg ..	6	7	7	h	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	6	6	6	2 473	105 695	802	1 712	26 205	529 070	193 411	745 778	D
325620	Toilet preparation mfg .	6	6	6	2 473	105 695	802	1 712	26 205	529 070	193 411	745 778	D
326	Plastics & rubber products mfg	5	9	7	867	29 473	659	1 241	18 408	68 640	64 638	133 851	12 008
3261	Plastics product mfg	5	9	7	867	29 473	659	1 241	18 408	68 640	64 638	133 851	12 008
32616	Plastics bottle mfg	7	3	3	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	7	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	6	524	21 906	364	793	12 848	42 336	66 849	109 184	1 862
334	Computer & electronic product mfg	1	8	5	543	24 824	257	385	8 403	39 158	32 578	70 361	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	4	517	24 259	237	355	8 065	38 013	31 657	68 281	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	4	517	24 259	237	355	8 065	38 013	31 657	68 281	D
PITMAN, NJ													
31-33	Manufacturing	-	20	10	1 045	42 398	823	1 590	32 464	79 380	50 234	129 692	D
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	-	1	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	1	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	1	1	f	D	D	D	D	D	D	D	D
PLAINFIELD, NJ													
31-33	Manufacturing	4	42	11	1 128	30 926	836	1 789	18 176	64 566	90 516	154 870	6 749
RAHWAY, NJ													
31-33	Manufacturing	1	68	26	3 316	167 414	1 954	3 975	73 562	636 130	496 795	1 153 842	50 256
325	Chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	g	D	D	D	D	D	D	D	D
RAMSEY, NJ													
31-33	Manufacturing	2	17	8	731	37 104	281	655	10 503	51 473	142 435	215 047	8 476

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RANDOLPH TOWNSHIP, NJ													
31-33	Manufacturing	-	33	12	1 672	67 976	1 093	2 530	37 932	151 700	97 216	250 330	8 485
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
RARITAN, NJ													
31-33	Manufacturing	-	15	6	h	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	f	D	D	D	D	D	D	D	D
READINGTON TOWNSHIP, NJ													
31-33	Manufacturing	-	28	11	1 110	43 365	675	1 398	20 315	94 981	146 310	241 459	2 591
RIDGEFIELD, NJ													
31-33	Manufacturing	5	67	28	2 217	74 125	1 340	2 718	35 485	222 901	229 961	458 598	10 207
325	Chemical mfg	6	10	6	1 006	37 289	533	1 160	15 129	103 486	123 450	234 937	6 425
ROCKAWAY TOWNSHIP, NJ													
31-33	Manufacturing	-	43	20	2 075	78 585	1 439	3 149	44 034	192 488	143 734	334 793	14 593
332	Fabricated metal product mfg	-	11	3	504	20 562	336	741	11 581	38 952	29 221	68 165	7 950
ROSELAND, NJ													
31-33	Manufacturing	1	11	7	817	36 881	312	669	11 466	105 853	248 128	334 994	13 151
ROSELLE, NJ													
31-33	Manufacturing	3	51	16	1 254	41 238	974	2 044	27 918	101 563	67 951	170 775	6 952
ROXBURY TOWNSHIP, NJ													
31-33	Manufacturing	5	26	7	726	24 844	498	1 129	13 428	52 981	56 513	108 989	3 315
RUTHERFORD, NJ													
31-33	Manufacturing	-	18	4	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	1	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	1	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	g	D	D	D	D	D	D	D	D
SADDLE BROOK TOWNSHIP, NJ													
31-33	Manufacturing	4	27	13	1 515	48 214	1 104	2 217	27 914	109 348	70 718	178 541	4 629
332	Fabricated metal product mfg	8	5	2	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	9	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	9	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAYREVILLE, NJ													
31-33	Manufacturing	-	24	7	2 272	101 157	1 777	3 964	71 930	540 416	319 504	860 722	31 565
311	Food mfg	-	4	1	f	D	D	D	D	D	D	D	14
31182	Bakeries & tortilla mfg	-	4	1	f	D	D	D	D	D	D	D	14
	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	826	48 232	574	1 307	31 630	246 085	100 106	348 479	D
SECAUCUS, NJ													
31-33	Manufacturing	4	38	15	2 142	80 358	1 618	3 497	47 554	280 395	294 935	575 928	12 594
323	Printing & related support activities	3	9	4	897	42 673	682	1 528	27 161	112 353	79 350	191 751	8 450
3231	Printing & related support activities	3	9	4	897	42 673	682	1 528	27 161	112 353	79 350	191 751	8 450
32311	Printing	3	9	4	897	42 673	682	1 528	27 161	112 353	79 350	191 751	8 450
323110	Commercial lithographic printing ..	4	3	2	f	D	D	D	D	D	D	D	D
SOMERVILLE, NJ													
31-33	Manufacturing	1	25	10	1 366	76 125	769	1 283	26 791	400 495	290 614	685 996	4 447
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
SOUTH BRUNSWICK TOWNSHIP, NJ													
31-33	Manufacturing	-	44	22	2 314	108 129	1 509	3 134	55 461	435 944	358 645	795 215	30 664
325	Chemical mfg	1	9	7	837	39 776	505	978	18 367	174 656	139 668	315 642	8 697
SOUTH PLAINFIELD, NJ													
31-33	Manufacturing	2	106	52	4 991	165 457	3 326	6 804	87 578	391 340	455 218	835 006	22 353
325	Chemical mfg	-	14	11	1 060	31 784	476	934	11 269	113 998	83 868	193 708	4 864
3254	Pharmaceutical & medicine mfg	-	5	5	726	17 924	280	597	6 293	65 544	44 884	108 660	2 973
32541	Pharmaceutical & medicine mfg	-	5	5	726	17 924	280	597	6 293	65 544	44 884	108 660	2 973
325412	Pharmaceutical preparation mfg	-	4	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	11	9	1 169	35 395	906	1 945	21 717	70 930	57 721	129 200	2 764
3261	Plastics product mfg	2	10	8	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	6	4	669	19 854	524	1 176	12 791	39 399	33 627	72 982	1 488
326199	All other plastics product mfg	3	6	4	669	19 854	524	1 176	12 791	39 399	33 627	72 982	1 488
332	Fabricated metal product mfg	-	18	8	639	22 938	472	906	13 507	63 030	118 380	170 953	2 084
SPOTSWOOD, NJ													
31-33	Manufacturing	-	8	3	671	33 862	527	1 214	26 259	77 898	62 460	140 151	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
SPRINGFIELD TOWNSHIP, NJ													
31-33	Manufacturing	1	41	11	1 424	49 796	983	2 061	26 490	111 413	61 812	170 417	5 713
332	Fabricated metal product mfg	-	10	3	803	27 917	546	1 250	14 870	60 896	22 949	81 282	1 922
3323	Architectural & structural metals mfg	-	3	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUMMIT, NJ													
31-33	Manufacturing	-	20	6	543	27 209	341	718	12 280	244 006	126 752	389 332	8 795
TINTON FALLS, NJ													
31-33	Manufacturing	-	17	3	562	21 936	387	806	11 545	46 821	68 271	114 092	2 142
TOTOWA, NJ													
31-33	Manufacturing	-	44	23	2 900	133 887	1 829	3 826	61 304	908 764	306 436	1 224 172	20 902
311	Food mfg	-	8	3	737	41 152	300	633	12 061	148 973	80 266	229 167	5 065
325	Chemical mfg	-	5	5	657	33 609	407	760	16 620	624 830	96 544	730 095	9 236
TRENTON, NJ													
31-33	Manufacturing	1	89	31	2 790	104 700	1 898	3 621	59 669	185 692	183 820	370 750	14 339
333	Machinery mfg	-	8	4	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	f	D	D	D	D	D	D	D	D
UNION TOWNSHIP, NJ													
31-33	Manufacturing	4	121	46	4 952	189 374	3 358	7 027	103 063	433 782	477 902	916 666	21 040
311	Food mfg	9	14	4	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	9	1	1	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	7	636	27 932	483	1 119	16 132	50 540	24 840	75 370	D
333	Machinery mfg	-	13	8	715	25 714	458	1 004	12 435	49 557	29 383	84 138	1 321
UNION CITY, NJ													
31-33	Manufacturing	4	133	21	1 563	29 439	1 304	2 422	20 092	61 780	40 388	102 328	2 375
315	Apparel mfg	4	46	10	777	10 487	718	1 350	8 841	16 623	5 541	22 032	376
3152	Cut & sew apparel mfg	4	38	9	700	9 067	652	1 184	7 683	14 318	4 622	18 808	329
VINELAND, NJ													
31-33	Manufacturing	1	105	52	6 223	186 852	4 788	9 512	124 824	494 402	422 285	913 016	40 226
311	Food mfg	-	15	10	1 199	37 126	929	1 738	24 315	157 694	195 601	353 369	D
3114	Fruit & vegetable preserving & specialty food mfg	-	6	6	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	4	4	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	28	18	2 397	84 663	1 984	4 139	62 743	188 783	83 577	274 311	D
3272	Glass & glass product mfg	-	21	14	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	21	14	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	19	12	g	D	D	D	D	D	D	D	D
333	Machinery mfg	8	5	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	1	1	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	9	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WALL TOWNSHIP, NJ												
	Manufacturing	2	57	19	1 874	63 606	1 272	2 708	38 456	153 701	132 910	285 528	8 599
	WALLINGTON, NJ												
31-33	Manufacturing	-	26	10	909	29 897	586	1 248	18 008	69 397	160 568	229 135	4 136
	WARREN TOWNSHIP, NJ												
31-33	Manufacturing	-	18	9	789	41 864	482	1 006	16 240	130 768	39 552	160 732	D
	WASHINGTON, NJ												
31-33	Manufacturing	-	18	7	718	30 488	553	1 139	22 101	86 593	71 855	156 719	9 394
	WASHINGTON TOWNSHIP, NJ (MORRIS COUNTY)												
31-33	Manufacturing	-	16	4	918	27 692	752	1 457	20 496	80 375	75 916	149 312	2 493
334	Computer & electronic product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
	WAYNE TOWNSHIP, NJ												
31-33	Manufacturing	-	62	23	4 140	186 163	2 501	4 720	87 411	419 140	229 180	652 460	17 159
334	Computer & electronic product mfg.....	-	8	6	2 761	138 704	1 542	2 715	59 768	279 309	104 337	387 943	9 129
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
	WEST CALDWELL TOWNSHIP, NJ												
31-33	Manufacturing	4	40	21	2 269	88 912	1 505	2 984	47 816	174 895	156 133	330 866	25 253
323	Printing & related support activities.....	-	6	4	610	21 556	402	591	11 132	18 039	32 055	51 244	995
3231	Printing & related support activities.....	-	6	4	610	21 556	402	591	11 132	18 039	32 055	51 244	995
32311	Printing.....	-	6	4	610	21 556	402	591	11 132	18 039	32 055	51 244	995
323116	Manifold business form printing.....	-	3	3	579	20 434	384	567	10 903	17 059	30 762	48 972	D
	WEST DEPTFORD TOWNSHIP, NJ												
31-33	Manufacturing	-	29	13	1 924	80 708	1 034	2 074	32 877	781 817	794 917	1 575 422	14 918
323	Printing & related support activities.....	9	5	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	9	5	2	f	D	D	D	D	D	D	D	D
32311	Printing.....	9	5	2	f	D	D	D	D	D	D	D	D
	WEST NEW YORK, NJ												
31-33	Manufacturing	6	172	27	1 970	34 293	1 590	2 666	23 648	73 110	70 153	142 236	3 960
315	Apparel mfg.....	3	74	16	1 092	15 689	963	1 525	11 853	31 876	11 988	43 561	1 392
3152	Cut & sew apparel mfg....	3	63	12	772	11 586	677	1 166	8 493	25 574	6 955	32 302	D
31521	Cut & sew apparel contractors.....	2	45	8	605	9 077	533	926	6 812	21 271	3 166	24 278	647
315212	Women's, girls', & infants' cut & sew apparel contractors..	2	40	8	557	8 643	488	877	6 454	20 381	3 035	23 257	612

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEST ORANGE TOWNSHIP, NJ												
31-33	Manufacturing	-	43	10	860	29 581	591	1 166	18 041	302 909	107 308	400 952	7 030
	WEST PATERSON, NJ												
31-33	Manufacturing	1	30	9	553	17 611	387	629	7 510	38 767	30 693	68 966	1 078
	WESTVILLE, NJ												
31-33	Manufacturing	-	19	6	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	1	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	1	3	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	2	1	f	D	D	D	D	D	D	D	D
	WOODBRIIDGE TOWNSHIP, NJ												
31-33	Manufacturing	1	85	32	4 431	163 237	3 211	6 909	105 589	753 472	1 457 564	2 218 071	36 538
315	Apparel mfg	-	5	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	10	865	36 311	600	1 367	26 759	250 255	280 857	531 478	13 382

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEW JERSEY		NEW JERSEY—Con.	
Companies ¹	number.. 11 321	Quantity of electricity purchased for heat and power	1,000 kWh.. 12 364 352
All establishments	number.. 11 812	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 868 996
Establishments with 1 to 19 employees	number.. 7 984	Total value of shipments	\$1,000.. 97 060 800
Establishments with 20 to 99 employees	number.. 2 942	Value of resales	\$1,000.. 7 227 543
Establishments with 100 employees or more	number.. 886	Value added	\$1,000.. 50 101 691
All employees	number.. 409 788	Total inventories, beginning of year	\$1,000.. 11 315 115
Total compensation ²	\$1,000.. 19 221 402	Finished goods inventories, beginning of year	\$1,000.. 4 657 621
Annual payroll	\$1,000.. 15 430 197	Work-in-process inventories, beginning of year	\$1,000.. 2 796 913
Total fringe benefits	\$1,000.. 3 791 205	Materials and supplies inventories, beginning of year	\$1,000.. 3 860 581
Production workers, average for year	number.. 275 840	Total inventories, end of year	\$1,000.. 11 480 299
Production workers on March 12	number.. 275 235	Finished goods inventories, end of year	\$1,000.. 4 621 754
Production workers on May 12	number.. 276 343	Work-in-process inventories, end of year	\$1,000.. 2 902 801
Production workers on August 12	number.. 275 547	Materials and supplies inventories, end of year	\$1,000.. 3 955 744
Production workers on November 12	number.. 276 235	Gross book value of total assets at beginning of year	\$1,000.. 32 847 090
Production-worker hours	1,000.. 557 459	Total capital expenditures (new and used)	\$1,000.. 3 113 961
Production-worker wages	\$1,000.. 8 152 112	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 583 613
Total cost of materials	\$1,000.. 47 025 139	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 2 530 348
Cost of materials, parts, containers, etc., consumed	\$1,000.. 39 479 254	Total retirements ²	\$1,000.. 1 071 746
Cost of resales	\$1,000.. 4 399 886	Gross book value of total assets at end of year	\$1,000.. 34 889 305
Cost of fuels	\$1,000.. 541 978	Total depreciation during year ²	\$1,000.. 2 185 297
Cost of purchased electricity	\$1,000.. 977 290	Total rental payments ²	\$1,000.. 849 847
Cost of contract work	\$1,000.. 1 626 731	Buildings and other structures rental payments ²	\$1,000.. 454 995
		Machinery and equipment rental payments ²	\$1,000.. 394 852

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NEW JERSEY

Glen Ridge was incorporated in May 1993.

North Caldwell was incorporated in January 1992.

Appendix E. Metropolitan Areas

NEW JERSEY

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ

Cape May County, NJ

Bergen—Passaic, NJ PMSA

Bergen County, NJ

Passaic County, NJ

Jersey City, NJ PMSA

Hudson County, NJ

Middlesex—Somerset—Hunterdon, NJ PMSA

Hunterdon County, NJ

Middlesex County, NJ

Somerset County, NJ

Monmouth—Ocean, NJ PMSA

Monmouth County, NJ

Ocean County, NJ

New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Bergen—Passaic, NJ PMSA

Bergen County, NJ

Passaic County, NJ

Bridgeport, CT PMSA

Fairfield County, CT (Part)

Bridgeport city, CT

Fairfield town, CT

Monroe town, CT

Shelton city, CT

Stratford town, CT

Trumbull town, CT

New Haven County, CT (Part)

Ansonia city, CT

Derby city, CT

Milford city, CT

Seymour town, CT

New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA—Con.

Danbury, CT PMSA

Fairfield County, CT (Part)

Bethel town, CT

Brookfield town, CT

Danbury city, CT

New Fairfield town, CT

Newtown town, CT

Ridgefield town, CT

Litchfield County, CT (Part)

New Milford town, CT

Dutchess County, NY PMSA

Dutchess County, NY

Jersey City, NJ PMSA

Hudson County, NJ

Middlesex—Somerset—Hunterdon, NJ PMSA

Hunterdon County, NJ

Middlesex County, NJ

Somerset County, NJ

Monmouth—Ocean, NJ PMSA

Monmouth County, NJ

Ocean County, NJ

Nassau—Suffolk, NY PMSA

Nassau County, NY

Suffolk County, NY

New Haven—Meriden, CT PMSA

Middlesex County, CT (Part)

Clinton town, CT

New Haven County, CT (Part)

Branford town, CT

Cheshire town, CT

East Haven town, CT

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

New Haven—Meriden, CT PMSA—Con.

New Haven County, CT (Part)—Con.

Guilford town, CT

Hamden town, CT

Madison town, CT

Meriden city, CT

New Haven city, CT

North Branford town, CT

North Haven town, CT

Orange town, CT

Wallingford town, CT

West Haven city, CT

New York, NY PMSA

Bronx County, NY

Kings County, NY

New York County, NY

Putnam County, NY

Queens County, NY

Richmond County, NY

Rockland County, NY

Westchester County, NY

Newark, NJ PMSA

Essex County, NJ

Morris County, NJ

Sussex County, NJ

Union County, NJ

Warren County, NJ

Newburgh, NY—PA PMSA

Orange County, NY

Pike County, PA

Stamford—Norwalk, CT PMSA

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

Stamford—Norwalk, CT PMSA—Con.

Fairfield County, CT (Part)—Con.

Stamford city, CT

Westport town, CT

Wilton town, CT

Trenton, NJ PMSA

Mercer County, NJ

Waterbury, CT PMSA

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

Newark, NJ PMSA

Essex County, NJ

Morris County, NJ

Sussex County, NJ

Union County, NJ

Warren County, NJ

Philadelphia, PA—NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Salem County, NJ

Bucks County, PA

Chester County, PA

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

**Philadelphia—Wilmington—Atlantic City,
PA—NJ—DE—MD CMSA**

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ

Cape May County, NJ

**Philadelphia—Wilmington—Atlantic City,
PA—NJ—DE—MD CMSA—Con.**

Philadelphia, PA—NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Salem County, NJ

Bucks County, PA

Chester County, PA

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

**Philadelphia—Wilmington—Atlantic City,
PA—NJ—DE—MD CMSA—Con.**

Vineland—Millville—Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington—Newark, DE—MD PMSA

New Castle County, DE

Cecil County, MD

Trenton, NJ PMSA

Mercer County, NJ

Vineland—Millville—Bridgeton, NJ PMSA

Cumberland County, NJ

New Mexico

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW MEXICO													
31-33	Manufacturing	-	1 593	293	39 664	1 135 818	29 334	57 194	721 360	13 440 222	4 522 519	17 906 091	573 401
311	Food mfg.....	2	136	32	4 084	85 185	3 045	5 654	55 501	383 234	613 915	977 047	37 205
3112	Grain & oilseed milling	-	2	1	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	-	1	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	13	2	353	7 342	314	562	4 199	17 526	11 997	29 643	1 227
31134	Nonchocolate confectionery mfg.....	-	5	2	311	6 913	278	521	3 894	16 467	11 142	27 585	1 149
311340	Nonchocolate confectionery mfg...	-	5	2	311	6 913	278	521	3 894	16 467	11 142	27 585	1 149
3114	Fruit & vegetable preserving & specialty food mfg.....	3	18	7	1 279	20 442	990	1 569	14 452	43 604	42 901	86 357	3 144
31141	Frozen food mfg.....	6	3	2	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	9	1	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	2	15	5	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	1	8	3	752	10 044	548	800	7 119	22 459	24 895	47 365	1 380
3115	Dairy product mfg.....	1	11	7	748	21 701	497	1 125	14 270	73 071	313 926	388 711	15 219
31151	Dairy product (except frozen) mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	1	3	3	224	6 552	117	333	3 958	14 317	55 280	69 606	D
311513	Cheese mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	5	3	2	c	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	5	3	2	c	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	9	12	1	427	7 642	322	710	4 843	13 488	83 040	82 681	2 184
31161	Animal slaughtering & processing.....	9	12	1	427	7 642	322	710	4 843	13 488	83 040	82 681	2 184
311612	Meat processed from carcasses.....	9	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	2	52	7	676	12 337	446	770	7 250	46 081	34 163	80 382	1 872
31181	Bread & bakery product mfg.....	2	41	5	493	9 938	302	567	5 722	38 919	27 945	66 821	1 232
311811	Retail bakeries.....	4	27	2	152	1 623	89	103	855	3 645	1 513	5 158	205
311812	Commercial bakeries..	2	14	3	341	8 315	213	464	4 867	35 274	26 432	61 663	1 027
31183	Tortilla mfg.....	2	8	2	160	2 003	125	181	1 231	5 659	5 045	10 874	514
311830	Tortilla mfg.....	2	8	2	160	2 003	125	181	1 231	5 659	5 045	10 874	514
3119	Other food mfg.....	3	20	5	343	6 009	277	510	3 852	40 362	33 060	65 274	2 553
31191	Snack food mfg.....	2	5	2	115	1 997	88	193	1 324	8 218	11 386	19 710	249
31194	Seasoning & dressing mfg.....	2	7	2	138	2 473	117	180	1 466	26 273	18 662	36 741	2 133
311942	Spice & extract mfg...	2	3	1	107	1 965	93	158	1 181	24 510	13 284	29 600	D
312	Beverage & tobacco product mfg.....	1	21	2	223	4 838	158	274	2 774	19 413	79 513	99 104	3 676
3121	Beverage mfg.....	1	21	2	223	4 838	158	274	2 774	19 413	79 513	99 104	3 676
31211	Soft drink & ice mfg.....	-	8	1	c	D	D	D	D	D	D	D	3 248
312111	Soft drink mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	31	8	1 816	37 154	1 671	3 111	33 879	156 932	134 768	292 132	4 871
3151	Apparel knitting mills.....	-	3	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills....	-	2	1	e	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills...	-	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	22	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	4	81	22	1 502	33 203	1 249	2 286	23 105	79 461	112 635	193 120	3 469
3211	Sawmills & wood preservation.....	5	18	4	324	7 347	268	527	5 708	22 152	30 768	52 416	1 350
32111	Sawmills & wood preservation.....	5	18	4	324	7 347	268	527	5 708	22 152	30 768	52 416	1 350
321113	Sawmills.....	6	17	3	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	1	14	4	277	7 164	211	412	3 780	17 186	16 280	33 238	468
32121	Veneer, plywood, & engineered wood product mfg.....	1	14	4	277	7 164	211	412	3 780	17 186	16 280	33 238	468
321214	Truss mfg.....	1	12	3	c	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	2	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW MEXICO—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg ...	4	49	14	901	18 692	770	1 347	13 617	40 123	65 587	107 466	1 651
32191	Millwork	2	28	8	456	10 060	392	716	7 471	21 597	40 986	63 216	957
321918	Other millwork (including flooring) ...	2	15	7	382	8 419	332	614	6 247	18 590	37 631	56 870	824
32199	All other wood product mfg	7	18	6	419	8 194	359	595	5 880	17 738	23 826	42 623	D
321991	Manufactured home (mobile home) mfg ..	9	1	1	c	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	3	4	3	121	2 212	107	181	1 526	5 648	4 605	10 626	34
321999	All other miscellaneous wood product mfg ...	1	13	2	c	D	D	D	D	D	D	D	D
322	Paper mfg	3	12	4	517	15 642	444	657	10 996	34 439	44 791	80 235	7 220
3222	Converted paper product mfg	—	11	3	e	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	6	2	298	6 417	265	332	4 770	10 593	16 490	27 088	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	1	3	1	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	183	17	1 420	30 420	1 020	1 632	19 252	64 874	53 905	119 559	4 888
3231	Printing & related support activities	3	183	17	1 420	30 420	1 020	1 632	19 252	64 874	53 905	119 559	4 888
32311	Printing	3	173	17	1 349	28 722	960	1 521	17 955	61 574	53 200	115 559	4 697
323110	Commercial lithographic printing ..	3	85	15	924	20 251	650	1 030	12 503	44 216	40 093	84 923	3 332
323114	Quick printing	4	41	—	174	2 844	122	157	1 802	5 251	3 588	8 861	325
324	Petroleum & coal products mfg	—	13	5	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	13	5	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries ...	—	4	4	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	4	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	41	12	1 038	32 936	659	1 253	19 717	107 898	81 224	197 824	26 154
3251	Basic chemical mfg	—	10	5	523	20 043	309	601	11 811	69 200	47 303	123 408	20 754
32518	Other basic inorganic chemical mfg	—	3	3	311	12 829	251	499	10 203	14 762	28 073	50 031	D
325188	All other basic inorganic chemical mfg	—	3	3	311	12 829	251	499	10 203	14 762	28 073	50 031	D
32519	Other basic organic chemical mfg	1	2	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	2	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	2	6	4	167	4 681	108	191	2 970	12 004	5 651	19 662	3 535
32541	Pharmaceutical & medicine mfg	2	6	4	167	4 681	108	191	2 970	12 004	5 651	19 662	3 535
325412	Pharmaceutical preparation mfg	—	3	2	c	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	7	10	2	217	4 631	171	326	3 128	13 688	13 369	27 114	950
32599	All other chemical product & preparation mfg	7	9	2	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	7	5	2	204	4 190	161	305	2 838	12 517	12 373	24 947	865
326	Plastics & rubber products mfg	3	31	8	624	15 756	482	863	9 438	39 056	42 375	81 950	D
3261	Plastics product mfg	3	29	8	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	9	2	1	c	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	9	2	1	c	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	19	4	369	9 683	275	536	5 881	20 893	19 093	40 223	D
326199	All other plastics product mfg	—	17	4	e	D	D	D	D	D	D	D	D

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31-33	NEW MEXICO—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	136	35	2 529	71 709	1 915	3 724	51 212	202 853	178 358	378 451	17 851
3271	Clay product & refractory mfg	4	37	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	5	13	1	105	2 086	86	148	1 415	4 456	1 908	6 087	D
3272	Glass & glass product mfg	—	15	3	277	6 690	228	333	5 522	18 178	8 718	27 052	1 203
32721	Glass & glass product mfg	—	15	3	277	6 690	228	333	5 522	18 178	8 718	27 052	1 203
327212	Other pressed & blown glass & glassware mfg	—	5	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	10	2	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	66	24	1 316	39 109	1 023	2 043	28 348	98 202	108 267	204 359	8 189
32732	Ready-mix concrete mfg	3	42	16	873	26 899	690	1 384	20 808	64 781	87 510	152 240	7 050
327320	Ready-mix concrete mfg	3	42	16	873	26 899	690	1 384	20 808	64 781	87 510	152 240	7 050
32733	Concrete pipe, brick, & block mfg	1	9	4	203	4 706	139	287	3 387	16 303	9 371	25 474	385
327331	Concrete block & brick mfg	1	5	2	c	D	D	D	D	D	D	D	268
32739	Other concrete product mfg	1	15	4	240	7 504	194	372	4 153	17 118	11 386	26 645	754
327390	Other concrete product mfg	1	15	4	240	7 504	194	372	4 153	17 118	11 386	26 645	754
3274	Lime & gypsum product mfg	—	4	1	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	—	3	1	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	3	1	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	14	5	472	13 392	309	648	9 148	32 342	22 747	54 953	4 528
32799	All other nonmetallic mineral product mfg	1	14	5	472	13 392	309	648	9 148	32 342	22 747	54 953	4 528
327992	Ground or treated mineral & earth mfg	—	4	1	c	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg	3	4	3	252	7 566	143	289	5 088	11 333	11 860	23 213	698
331	Primary metal mfg	2	24	6	1 314	45 350	998	1 983	33 301	50 091	645 672	694 683	23 461
3314	Nonferrous metal (except aluminum) production & processing	2	8	4	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	2	4	3	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	3	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	3	14	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	3	12	2	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	2	1	e	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting)	7	8	1	102	2 272	92	163	1 835	3 652	1 752	5 410	D
332	Fabricated metal product mfg	1	234	41	2 924	79 012	2 271	4 018	51 307	154 824	110 842	261 503	10 193
3321	Forging & stamping	—	9	2	112	3 250	83	179	2 092	7 275	3 851	11 043	436
33211	Forging & stamping	—	9	2	112	3 250	83	179	2 092	7 275	3 851	11 043	436
332116	Metal stamping	—	7	2	c	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	3	6	2	117	2 503	90	129	1 645	5 047	3 964	9 028	348
33221	Cutlery & handtool mfg	3	6	2	117	2 503	90	129	1 645	5 047	3 964	9 028	348
3323	Architectural & structural metals mfg	1	77	16	974	25 088	757	1 522	16 156	55 449	50 956	106 841	1 641
33231	Plate work & fabricated structural product mfg	1	31	8	438	10 940	323	628	7 084	26 697	28 871	55 407	813
332312	Fabricated structural metal mfg	2	20	7	309	7 043	226	443	4 508	17 336	15 446	32 714	390
33232	Ornamental & architectural metal products mfg	2	46	8	536	14 148	434	894	9 072	28 752	22 085	51 434	828
332321	Metal window & door mfg	1	8	3	114	2 725	91	182	1 800	4 442	4 889	9 634	119
332322	Sheet metal work mfg	1	18	3	293	8 559	249	542	5 434	17 200	13 017	30 412	464
332323	Ornamental & architectural metal work mfg	4	20	2	129	2 864	94	170	1 838	7 110	4 179	11 388	245

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW MEXICO—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	9	5	374	10 646	295	487	7 118	27 494	18 009	41 782	2 914
33241	Power boiler & heat exchanger mfg	—	1	1	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	1	1	c	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	5	4	235	6 269	186	309	3 868	12 606	10 397	22 962	D
332420	Metal tank (heavy gauge) mfg	—	5	4	235	6 269	186	309	3 868	12 606	10 397	22 962	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	96	9	908	26 905	703	1 093	17 565	45 049	20 140	64 712	3 644
33271	Machine shops	1	92	8	858	25 168	667	1 012	16 393	42 125	18 965	60 855	3 237
332710	Machine shops	1	92	8	858	25 168	667	1 012	16 393	42 125	18 965	60 855	3 237
3328	Coating, engraving, heat treating, & allied activities.	1	14	5	208	4 809	176	296	3 057	8 007	7 188	14 842	571
33281	Coating, engraving, heat treating, & allied activities	1	14	5	208	4 809	176	296	3 057	8 007	7 188	14 842	571
3329	Other fabricated metal product mfg	3	18	2	209	5 439	149	290	3 429	5 673	5 896	11 580	578
33299	All other fabricated metal product mfg	3	17	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	10	2	170	4 630	119	246	2 884	3 674	4 565	8 237	436
333	Machinery mfg	4	59	13	1 050	31 232	737	1 361	19 169	74 895	63 327	135 640	4 361
3331	Agriculture, construction, & mining machinery mfg.	4	18	7	444	13 579	323	645	8 680	30 553	29 859	60 423	1 782
33312	Construction machinery mfg	1	6	3	159	4 212	113	234	2 361	10 747	12 943	23 987	774
333120	Construction machinery mfg	1	6	3	159	4 212	113	234	2 361	10 747	12 943	23 987	774
33313	Mining & oil & gas field machinery mfg	6	9	4	252	8 483	192	377	5 955	18 322	15 329	33 381	D
333132	Oil & gas field machinery & equipment mfg	5	6	3	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	8	13	1	109	4 057	58	119	1 730	8 370	6 097	13 274	620
33329	Other industrial machinery mfg	8	12	1	c	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	1	6	1	168	6 159	131	272	4 119	17 710	8 715	26 351	541
33331	Commercial & service industry machinery mfg	1	6	1	168	6 159	131	272	4 119	17 710	8 715	26 351	541
333314	Optical instrument & lens mfg	—	3	1	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	8	9	2	c	D	D	D	D	D	D	D	500
33399	All other general-purpose machinery mfg	9	6	1	152	2 448	89	82	1 247	4 678	5 009	9 956	338
333997	Scale & balance (except laboratory) mfg	9	2	1	c	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	70	25	10 961	404 472	7 641	16 970	240 967	11 084 873	891 573	11 949 193	354 398
3341	Computer & peripheral equipment mfg	8	7	2	100	3 306	64	132	1 720	4 591	5 679	10 241	D
33411	Computer & peripheral equipment mfg	8	7	2	100	3 306	64	132	1 720	4 591	5 679	10 241	D
3342	Communications equipment mfg	5	4	3	e	D	D	D	D	D	D	D	2 174
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	2	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	2	2	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	9	2	1	c	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	9	2	1	c	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	2	3	1	c	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	2	3	1	c	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	2	3	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	NEW MEXICO—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3344	Semiconductor & other electronic component mfg	-	34	13	i	D	D	D	D	D	D	D	339 103	
33441	Semiconductor & other electronic component mfg	-	34	13	i	D	D	D	D	D	D	D	339 103	
334412	Bare printed circuit board mfg	-	5	3	e	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg ...	-	16	6	i	D	D	D	D	D	D	D	330 143	
334419	Other electronic component mfg	-	10	3	g	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	1	20	6	g	D	D	D	D	D	D	D	11 317	
33451	Navigational, measuring, medical, & control instruments mfg	1	20	6	g	D	D	D	D	D	D	D	11 317	
334511	Search, detection, navigation, & guidance instrument mfg	1	4	2	g	D	D	D	D	D	D	D	D	
334512	Automatic environmental control mfg	-	3	1	e	D	D	D	D	D	D	D	D	
334519	Other measuring & controlling device mfg	1	6	2		134	5 091	77	165	1 872	11 611	9 937	21 353	1 013
335	Electrical equipment, appliance, & component mfg	-	26	7		1 035	29 740	754	1 631	17 882	83 654	94 602	178 450	D
3352	Household appliance mfg ..	-	1	1	e		D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	e		D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	e		D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	8	2	e		D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	8	2	e		D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	e		D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	13	4	e		D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	8	3		310	11 921	135	291	3 399	30 375	19 655	49 936	D
335999	All other miscellaneous electrical equipment & component mfg	1	8	3		310	11 921	135	291	3 399	30 375	19 655	49 936	D
336	Transportation equipment mfg	-	37	9		2 286	63 434	1 694	3 379	38 424	205 894	205 890	402 138	16 252
3361	Motor vehicle mfg	-	2	1	f		D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	2	1	f		D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg ..	-	2	1	f		D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	11	2		165	4 468	126	277	2 709	6 037	25 168	30 705	D
33621	Motor vehicle body & trailer mfg	1	11	2		165	4 468	126	277	2 709	6 037	25 168	30 705	D
336211	Motor vehicle body mfg	-	5	2	c		D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	4	14	2		134	3 985	95	160	2 179	7 003	4 484	11 414	D
3364	Aerospace product & parts mfg	-	8	3	f		D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	8	3	f		D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	1	f		D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	c		D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	c		D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	c		D	D	D	D	D	D	D	D

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31-33	NEW MEXICO—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	4	129	7	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	4	106	3	721	11 763	588	932	8 566	20 168	16 111	36 424	D
33711	Wood kitchen cabinet & counter top mfg	3	47	2	306	4 521	250	349	3 350	8 595	5 781	14 422	D
337110	Wood kitchen cabinet & counter top mfg ...	3	47	2	306	4 521	250	349	3 350	8 595	5 781	14 422	D
33712	Household & institutional furniture mfg	5	59	1	415	7 242	338	583	5 216	11 573	10 330	22 002	D
337121	Upholstered household furniture mfg	3	8	1	124	2 046	92	170	1 326	2 884	2 417	5 214	D
337122	Nonupholstered wood household furniture mfg	5	42	—	231	3 964	199	341	2 968	6 705	6 089	12 766	D
3372	Office furniture (including fixtures) mfg	2	17	4	c	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	17	4	c	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	10	2	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	289	38	4 404	95 891	3 168	5 703	57 909	241 185	299 042	539 047	12 059
3391	Medical equipment & supplies mfg	—	68	6	1 521	38 333	1 107	2 319	24 663	103 097	200 326	305 537	8 454
33911	Medical equipment & supplies mfg	—	68	6	1 521	38 333	1 107	2 319	24 663	103 097	200 326	305 537	8 454
339112	Surgical & medical instrument mfg	—	3	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	3	4	3	222	5 446	167	322	3 180	18 528	12 527	30 817	D
339115	Ophthalmic goods mfg	—	4	1	e	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	6	49	1	c	D	D	D	D	D	D	D	838
3399	Other miscellaneous mfg ...	5	221	32	2 883	57 558	2 061	3 384	33 246	138 088	98 716	233 510	3 605
33991	Jewelry & silverware mfg	5	142	24	2 221	40 108	1 655	2 687	24 467	102 272	73 696	172 692	1 712
339911	Jewelry (except costume) mfg	4	104	19	1 789	31 874	1 343	2 112	19 431	77 176	59 924	134 616	1 254
339913	Jewelers' material & lapidary work mfg ...	3	10	1	c	D	D	D	D	D	D	D	D
339914	Costume jewelry & novelty mfg	7	26	4	313	5 943	220	412	3 541	20 938	9 846	29 910	325
33995	Sign mfg	4	28	3	266	6 332	141	240	2 781	9 729	8 169	17 894	496
339950	Sign mfg	4	28	3	266	6 332	141	240	2 781	9 729	8 169	17 894	496
33999	All other miscellaneous mfg	7	35	5	363	10 546	240	419	5 644	24 531	15 674	40 195	1 288
339999	All other miscellaneous mfg	7	23	4	273	8 274	182	311	4 458	19 717	13 222	32 636	1 068

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALBUQUERQUE, NM MSA												
31-33	Manufacturing	-	800	175	25 743	787 625	18 683	37 889	489 631	12 240 727	1 959 601	14 170 811	434 056
311	Food mfg.....	1	50	12	1 387	33 965	995	1 973	22 530	214 334	161 263	375 729	14 671
3114	Fruit & vegetable preserving & specialty food mfg.....	6	4	2	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	6	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	22	4	415	7 786	274	518	4 843	33 735	25 852	59 743	1 108
31181	Bread & bakery product mfg.....	-	21	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	18	5	799	15 001	722	1 253	13 577	54 518	40 055	93 703	D
3152	Cut & sew apparel mfg....	-	14	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	3	30	13	817	19 981	664	1 266	12 898	48 130	66 496	114 478	1 734
3219	Other wood product mfg....	5	21	8	555	12 663	472	869	9 087	29 590	45 691	76 068	1 184
32199	All other wood product mfg.....	6	8	5	333	7 034	276	475	4 851	15 508	21 142	37 329	582
322	Paper mfg.....	4	9	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	1	8	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	97	13	906	21 587	646	1 149	13 451	46 144	41 424	88 216	3 386
3231	Printing & related support activities.....	3	97	13	906	21 587	646	1 149	13 451	46 144	41 424	88 216	3 386
32311	Printing.....	3	89	13	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	3	46	11	604	14 793	422	750	8 906	33 336	33 116	66 923	2 341
325	Chemical mfg.....	3	18	5	310	9 483	167	319	4 739	29 971	21 604	53 402	D
326	Plastics & rubber products mfg.....	2	21	5	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	2	20	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	13	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	13	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	58	21	1 562	50 563	1 172	2 508	36 050	147 902	127 187	272 241	12 874
3273	Cement & concrete product mfg.....	1	24	12	679	24 624	552	1 210	18 299	66 768	65 443	130 119	4 917
32732	Ready-mix concrete mfg.	1	13	5	340	14 884	296	689	12 396	38 411	49 921	88 253	4 197
327320	Ready-mix concrete mfg.....	1	13	5	340	14 884	296	689	12 396	38 411	49 921	88 253	4 197
3274	Lime & gypsum product mfg.....	-	4	1	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg....	-	3	1	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg..	-	3	1	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg.....	1	9	5	449	12 796	291	607	8 639	29 879	21 549	51 270	4 270
32799	All other nonmetallic mineral product mfg....	1	9	5	449	12 796	291	607	8 639	29 879	21 549	51 270	4 270
332	Fabricated metal product mfg.....	1	118	25	1 827	50 871	1 404	2 614	31 987	94 721	60 552	154 880	5 548
3323	Architectural & structural metals mfg.....	2	42	6	528	14 025	412	903	8 525	30 492	25 605	56 271	866
33232	Ornamental & architectural metal products mfg.....	2	32	4	368	10 373	294	628	6 308	23 053	17 400	40 583	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	40	7	f	D	D	D	D	D	D	D	D
33271	Machine shops.....	1	37	6	577	17 670	442	688	11 236	29 635	12 140	41 685	1 890
332710	Machine shops.....	1	37	6	577	17 670	442	688	11 236	29 635	12 140	41 685	1 890
333	Machinery mfg.....	3	29	6	503	17 116	360	758	10 555	42 257	32 025	73 496	2 129

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBUQUERQUE, NM MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	44	18	j	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	2	2	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	2	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	2	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	23	10	i	D	D	D	D	D	D	D	337 800
33441	Semiconductor & other electronic component mfg	—	23	10	i	D	D	D	D	D	D	D	337 800
334412	Bare printed circuit board mfg	—	4	3	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	14	5	i	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	4	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	11	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	11	4	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	1	3	2	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	11	4	617	21 067	374	824	11 038	40 924	60 058	100 848	D
3353	Electrical equipment mfg ..	—	5	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	5	1	e	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	3	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	4	2	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	4	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	18	6	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	7	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	7	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	69	6	633	13 070	482	833	8 367	21 760	15 369	37 265	D
3371	Household & institutional furniture & kitchen cabinet mfg	4	52	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	177	29	3 598	80 614	2 625	4 937	50 004	207 284	270 860	477 203	11 009
3391	Medical equipment & supplies mfg	—	50	6	1 476	37 416	1 075	2 282	24 218	100 642	199 042	301 758	8 343
33911	Medical equipment & supplies mfg	—	50	6	1 476	37 416	1 075	2 282	24 218	100 642	199 042	301 758	8 343
339112	Surgical & medical instrument mfg	—	2	1	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	5	127	23	2 122	43 198	1 550	2 655	25 786	106 642	71 818	175 445	2 666
33991	Jewelry & silverware mfg	4	89	17	1 720	31 277	1 309	2 222	19 938	81 910	54 656	133 754	1 341
339911	Jewelry (except costume) mfg	4	61	12	1 348	24 074	1 042	1 708	15 464	58 808	42 645	99 402	913
339914	Costume jewelry & novelty mfg	7	21	4	292	5 576	203	386	3 310	20 200	9 428	28 753	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAS CRUCES, NM MSA													
31-33	Manufacturing	4	111	24	2 290	46 898	1 849	3 284	31 856	153 520	262 761	395 483	14 462
311	Food mfg	4	25	6	787	13 521	651	1 234	8 960	55 280	151 962	185 892	4 702
3116	Meat product mfg	9	2	1	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	2	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	1	e	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
315111	Sheer hosiery mills	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	8	7	4	276	5 280	178	217	2 810	13 302	9 187	20 870	1 138
SANTA FE, NM MSA													
31-33	Manufacturing	5	177	14	1 501	34 056	1 088	1 786	21 085	76 742	54 972	132 287	4 987
331	Primary metal mfg	3	6	2	e	D	D	D	D	D	D	D	D
3315	Foundries	2	5	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	2	5	2	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	7	46	2	254	6 102	165	260	3 063	14 865	10 972	26 107	291

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERNALILLO COUNTY, NM													
31-33	Manufacturing	1	703	153	j	D	D	D	D	D	D	D	D
311	Food mfg	1	45	12	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	16	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	13	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	11	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	91	12	866	21 036	628	1 130	13 090	45 115	40 761	86 530	3 296
3231	Printing & related support activities	3	91	12	866	21 036	628	1 130	13 090	45 115	40 761	86 530	3 296
32311	Printing	3	83	12	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	43	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	45	16	1 160	39 979	887	1 924	29 194	112 350	107 149	217 563	D
3273	Cement & concrete product mfg	-	18	10	558	21 637	450	1 015	15 956	54 738	58 053	111 437	4 708
332	Fabricated metal product mfg	1	103	19	1 486	41 011	1 112	2 123	25 453	77 667	51 700	128 797	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	35	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERNALILLO COUNTY, NM—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	34	14	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	19	8	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	19	8	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	12	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	1	10	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	1	10	4	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	1	3	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	11	4	617	21 067	374	824	11 038	40 924	60 058	100 848	D
336	Transportation equipment mfg.....	-	15	6	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	6	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	55	6	591	12 429	448	789	7 896	20 666	14 378	35 176	D
339	Miscellaneous mfg.....	2	164	27	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	47	4	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	47	4	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	5	117	23	g	D	D	D	D	D	D	D	2 623
33991	Jewelry & silverware mfg.....	4	84	17	g	D	D	D	D	D	D	D	1 326
339911	Jewelry (except costume) mfg.....	4	57	12	g	D	D	D	D	D	D	D	898
CHAVES COUNTY, NM													
31-33	Manufacturing	-	51	12	h	D	D	D	D	D	D	D	16 601
311	Food mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg....	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg....	-	1	1	f	D	D	D	D	D	D	D	D
DONA ANA COUNTY, NM													
31-33	Manufacturing	4	111	24	2 290	46 898	1 849	3 284	31 856	153 520	262 761	395 483	14 462
311	Food mfg.....	4	25	6	787	13 521	651	1 234	8 960	55 280	151 962	185 892	4 702
EDDY COUNTY, NM													
31-33	Manufacturing	-	41	8	1 057	43 863	709	1 416	26 237	342 701	297 701	641 423	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HIDALGO COUNTY, NM													
31-33	Manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining.....	-	1	1	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper.....	-	1	1	f	D	D	D	D	D	D	D	D
LEA COUNTY, NM													
31-33	Manufacturing	-	45	6	524	14 848	315	547	8 246	98 490	278 712	379 721	1 813
LUNA COUNTY, NM													
31-33	Manufacturing	-	16	4	776	10 675	564	860	7 795	23 190	26 240	49 516	1 206
311	Food mfg	-	5	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D
OTERO COUNTY, NM													
31-33	Manufacturing	2	26	5	593	10 534	547	1 008	8 962	46 928	45 561	93 760	1 421
SANDOVAL COUNTY, NM													
31-33	Manufacturing	-	57	17	i	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	8	4	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	2	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	2	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	1	h	D	D	D	D	D	D	D	D
SAN JUAN COUNTY, NM													
31-33	Manufacturing	1	71	12	1 147	30 251	883	1 553	19 156	90 314	166 491	257 814	10 888
SANTA FE COUNTY, NM													
31-33	Manufacturing	5	162	14	1 436	31 688	1 038	1 686	19 651	72 772	51 513	124 766	4 570
VALENCIA COUNTY, NM													
31-33	Manufacturing	3	40	5	967	22 263	779	1 253	15 447	55 501	56 041	110 316	6 154

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALAMOGORDO, NM												
	Manufacturing	2	18	5	562	10 070	520	981	8 604	45 990	44 849	92 111	1 318
	ALBUQUERQUE, NM												
31-33	Manufacturing	1	592	129	j	D	D	D	D	D	D	D	D
311	Food mfg	2	38	9	1 090	28 135	786	1 606	18 791	188 597	137 848	326 460	13 332
323	Printing & related support activities	3	85	12	846	20 726	613	1 115	12 894	44 415	40 295	85 363	3 243
3231	Printing & related support activities	3	85	12	846	20 726	613	1 115	12 894	44 415	40 295	85 363	3 243
32311	Printing	3	77	12	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	3	41	10	f	D	D	D	D	D	D	D	2 236
327	Nonmetallic mineral product mfg	-	31	11	702	25 579	553	1 173	17 787	85 826	71 918	156 086	6 325
332	Fabricated metal product mfg	2	79	15	1 192	32 137	886	1 707	20 099	60 024	41 471	100 888	3 919
334	Computer & electronic product mfg	-	34	14	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	19	8	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	19	8	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	12	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	10	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	10	4	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	1	3	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	5	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	153	26	3 257	73 091	2 369	4 513	45 636	185 523	255 914	440 602	D
3391	Medical equipment & supplies mfg	-	45	4	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	45	4	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	5	108	22	g	D	D	D	D	D	D	D	2 420
33991	Jewelry & silverware mfg	4	79	17	1 661	30 324	1 262	2 169	19 430	79 985	53 071	130 265	D
339911	Jewelry (except costume) mfg	4	55	12	1 305	23 440	1 006	1 671	15 126	57 604	41 542	97 110	D
	BELEN, NM												
31-33	Manufacturing	4	18	4	688	14 973	575	879	11 155	38 983	42 464	81 341	D
	DEMING, NM												
31-33	Manufacturing	-	13	3	f	D	D	D	D	D	D	D	D
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FARMINGTON, NM													
31-33	Manufacturing	4	47	7	695	16 925	552	997	11 048	46 426	28 132	74 129	D
LAS CRUCES, NM													
31-33	Manufacturing	1	65	14	1 433	28 622	1 196	2 021	21 257	106 241	149 503	253 380	7 366
RIO RANCHO, NM *													
31-33	Manufacturing	-	30	13	i	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	7	4	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	2	1	h	D	D	D	D	D	D	D	D
ROSWELL, NM													
31-33	Manufacturing	-	40	10	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg....	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg....	-	1	1	f	D	D	D	D	D	D	D	D
SANTA FE, NM													
31-33	Manufacturing	6	136	11	1 155	23 667	834	1 309	15 324	55 489	39 382	95 231	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEW MEXICO		NEW MEXICO—Con.	
Companies ¹ number..	1 561	Quantity of electricity purchased for heat and power 1,000 kWh..	1 981 201
All establishments number..	1 593	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	122 652
Establishments with 1 to 19 employees number..	1 300	Total value of shipments \$1,000..	17 906 091
Establishments with 20 to 99 employees number..	230	Value of resales \$1,000..	179 586
Establishments with 100 employees or more number..	63	Value added \$1,000..	13 440 222
All employees number..	39 664	Total inventories, beginning of year \$1,000..	821 710
Total compensation ² \$1,000..	1 423 421	Finished goods inventories, beginning of year \$1,000..	233 809
Annual payroll \$1,000..	1 135 818	Work-in-process inventories, beginning of year \$1,000..	319 121
Total fringe benefits \$1,000..	287 603	Materials and supplies inventories, beginning of year \$1,000..	268 780
Production workers, average for year number..	29 334	Total inventories, end of year \$1,000..	880 916
Production workers on March 12 number..	28 554	Finished goods inventories, end of year \$1,000..	240 565
Production workers on May 12 number..	28 599	Work-in-process inventories, end of year \$1,000..	359 073
Production workers on August 12 number..	30 458	Materials and supplies inventories, end of year \$1,000..	281 278
Production workers on November 12 number..	29 725	Gross book value of total assets at beginning of year \$1,000..	11 859 761
Production-worker hours 1,000..	57 194	Total capital expenditures (new and used) \$1,000..	573 401
Production-worker wages \$1,000..	721 360	Capital expenditures for buildings and other structures (new and used) \$1,000..	88 160
Total cost of materials \$1,000..	4 522 519	Capital expenditures for machinery and equipment (new and used) \$1,000..	485 241
Cost of materials, parts, containers, etc., consumed \$1,000..	4 084 585	Total retirements ² \$1,000..	671 994
Cost of resales \$1,000..	147 183	Gross book value of total assets at end of year \$1,000..	11 761 168
Cost of fuels \$1,000..	87 761	Total depreciation during year ² \$1,000..	1 035 925
Cost of purchased electricity \$1,000..	108 519	Total rental payments ² \$1,000..	89 842
Cost of contract work \$1,000..	94 471	Buildings and other structures rental payments ² \$1,000..	40 896
		Machinery and equipment rental payments ² \$1,000..	48 946

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NEW MEXICO

Corrales is in Bernalillo and Sandoval Counties.

Espanola is in Rio Arriba and Sante Fe Counties.

Rio Rancho is in Bernalillo and Sandoval Counties;
it annexed into Bernalillo County in January 1994.

Appendix E. Metropolitan Areas

NEW MEXICO

Albuquerque, NM MSA

Bernalillo County, NM

Sandoval County, NM

Valencia County, NM

Las Cruces, NM MSA

Dona Ana County, NM

Santa Fe, NM MSA

Los Alamos County, NM

Santa Fe County, NM

Nevada

1997

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Geographic Area Series



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1997 Economic Census *Manufacturing* Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NEVADA													
31-33	Manufacturing	1	1 615	408	37 849	1 178 047	26 247	52 040	677 153	3 298 077	3 058 737	6 361 782	316 052
311	Food mfg	1	94	26	2 917	83 204	1 938	4 159	46 310	392 457	302 931	696 230	16 311
3112	Grain & oilseed milling	-	1	1	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	c	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	1	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	10	2	670	14 872	373	1 109	6 299	56 225	39 846	97 745	1 530
31133	Confectionery mfg from purchased chocolate	-	4	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	4	1	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	1	6	1	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	1	6	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	8	4	865	29 253	618	1 367	17 680	141 669	141 284	282 751	6 255
31151	Dairy product (except frozen) mfg	1	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	3	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	3	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	3	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	9	3	112	2 831	81	120	1 522	9 347	13 952	23 393	509
31161	Animal slaughtering & processing	5	9	3	112	2 831	81	120	1 522	9 347	13 952	23 393	509
3118	Bakeries & tortilla mfg	4	46	8	644	15 703	419	756	8 541	33 085	19 395	52 485	3 989
31181	Bread & bakery product mfg	5	41	7	540	12 048	332	546	5 855	27 271	14 715	41 989	D
311811	Retail bakeries	5	26	1	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries	5	14	6	389	9 871	254	438	4 883	23 223	12 013	35 233	2 656
3119	Other food mfg	2	11	7	412	12 321	294	599	6 900	101 757	47 496	149 005	3 257
31199	All other food mfg	7	6	4	285	7 595	197	391	4 063	19 899	22 106	42 045	1 232
311999	All other miscellaneous food mfg	7	6	4	285	7 595	197	391	4 063	19 899	22 106	42 045	1 232
312	Beverage & tobacco product mfg	-	16	6	526	15 644	318	668	7 683	115 094	87 146	195 690	3 499
3121	Beverage mfg	-	14	5	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	9	4	404	13 268	228	509	6 225	107 507	83 819	184 821	3 246
312111	Soft drink mfg	-	3	2	e	D	D	D	D	D	D	D	2 967
312112	Bottled water mfg	3	3	2	c	D	D	D	D	D	D	D	D
314	Textile product mills	3	31	5	350	5 884	282	508	4 363	13 599	8 544	22 276	1 372
3141	Textile furnishings mills	4	18	1	115	1 944	96	164	1 315	4 063	3 628	7 682	173
31412	Curtain & linen mills	3	17	1	c	D	D	D	D	D	D	D	D
3149	Other textile product mills . .	2	13	4	235	3 940	186	344	3 048	9 536	4 916	14 594	1 199
31499	All other textile product mills	5	10	3	c	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills . .	5	9	3	c	D	D	D	D	D	D	D	D
315	Apparel mfg	6	27	4	263	3 965	214	388	2 781	6 661	6 755	13 357	D
3152	Cut & sew apparel mfg	6	14	3	c	D	D	D	D	D	D	D	D
321	Wood product mfg	3	47	13	1 118	26 659	895	1 734	18 379	67 690	72 365	140 597	2 563
3212	Veneer, plywood, & engineered wood product mfg	2	11	7	673	17 250	550	1 097	12 341	48 788	48 446	97 541	1 361
32121	Veneer, plywood, & engineered wood product mfg	2	11	7	673	17 250	550	1 097	12 341	48 788	48 446	97 541	1 361
321213	Engineered wood member (except truss) mfg	-	1	1	c	D	D	D	D	D	D	D	D
321214	Truss mfg	3	10	6	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	5	35	5	e	D	D	D	D	D	D	D	D
32191	Millwork	6	16	2	136	3 619	106	189	2 166	6 738	9 312	16 329	400
32192	Wood container & pallet mfg	7	8	2	154	2 887	116	213	1 897	5 682	8 051	13 719	342
321920	Wood container & pallet mfg	7	8	2	154	2 887	116	213	1 897	5 682	8 051	13 719	342
32199	All other wood product mfg	3	11	1	c	D	D	D	D	D	D	D	D
322	Paper mfg	-	17	8	595	21 672	435	928	13 099	87 776	84 207	164 133	10 935
3222	Converted paper product mfg	-	17	8	595	21 672	435	928	13 099	87 776	84 207	164 133	10 935
32222	Paper bag & coated & treated paper mfg	-	9	5	369	12 486	269	554	7 304	40 258	58 517	97 412	5 858
322222	Coated & laminated paper mfg	-	8	4	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	4	2	c	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEVADA—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities	5	208	32	2 935	84 916	2 211	4 104	55 418	234 477	209 443	444 413	23 742
3231	Printing & related support activities	5	208	32	2 935	84 916	2 211	4 104	55 418	234 477	209 443	444 413	23 742
32311	Printing	5	185	29	2 714	76 685	2 027	3 742	50 321	179 090	200 294	379 891	23 194
323110	Commercial lithographic printing ..	1	74	14	1 225	36 045	926	1 626	23 068	76 581	58 475	136 255	12 028
323111	Commercial gravure printing	9	5	1	e	D	D	D	D	D	D	D	D
323113	Commercial screen printing	1	24	7	446	9 769	312	588	5 200	18 505	13 930	32 594	685
323114	Quick printing	3	56	3	295	7 100	196	287	3 996	15 214	7 708	22 721	1 256
323116	Manifold business form printing	7	7	2	122	3 493	89	160	2 280	9 390	8 407	17 763	409
32312	Support activities for printing	1	23	3	221	8 231	184	362	5 097	55 387	9 149	64 522	548
323122	Prepress services	7	18	2	c	D	D	D	D	D	D	D	465
325	Chemical mfg	1	69	16	1 241	46 046	842	1 669	29 175	195 483	204 103	409 271	26 643
3251	Basic chemical mfg	—	13	4	610	25 846	420	861	18 232	104 644	71 112	184 695	21 383
32518	Other basic inorganic chemical mfg	—	6	4	570	23 780	390	792	16 809	92 196	64 245	165 545	D
325181	Alkalies & chlorine mfg	—	1	1	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	5	3	e	D	D	D	D	D	D	D	13 190
3254	Pharmaceutical & medicine mfg	8	13	2	100	4 050	51	99	1 907	11 717	8 845	20 527	1 543
32541	Pharmaceutical & medicine mfg	8	13	2	100	4 050	51	99	1 907	11 717	8 845	20 527	1 543
3255	Paint, coating, & adhesive mfg	—	11	3	c	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	9	2	121	3 740	81	147	1 991	13 228	21 094	33 671	347
325510	Paint & coating mfg	—	9	2	121	3 740	81	147	1 991	13 228	21 094	33 671	347
3259	Other chemical product mfg	1	15	5	239	7 478	159	314	3 795	40 138	65 612	106 999	2 659
32599	All other chemical product & preparation mfg	2	10	3	166	4 742	120	228	2 668	14 827	31 586	47 908	2 421
325991	Custom compounding of purchased resin...	2	7	2	111	3 528	82	164	2 078	13 229	28 296	42 780	1 716
326	Plastics & rubber products mfg	2	98	41	3 049	83 765	2 406	4 992	58 979	224 822	293 526	513 626	20 376
3261	Plastics product mfg	1	90	38	2 819	75 408	2 235	4 571	53 365	203 271	274 939	473 401	18 720
32611	Unsupported plastics film, sheet, & bag mfg ..	1	7	7	535	15 371	419	886	9 926	50 627	91 312	141 448	4 087
326113	Unsupported plastics film & sheet (except packaging) mfg	1	6	6	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	11	4	214	5 494	163	337	4 035	20 284	59 714	79 111	D
326122	Plastics pipe & pipe fitting mfg	—	5	4	188	4 937	141	306	3 657	18 960	58 623	76 690	1 046
32615	Urethane & other foam product (except polystyrene) mfg	—	6	4	c	D	D	D	D	D	D	D	778
326150	Urethane & other foam product (except polystyrene) mfg	—	6	4	c	D	D	D	D	D	D	D	778
32619	Other plastics product mfg	2	63	22	1 818	47 162	1 454	2 963	34 656	116 036	100 785	212 988	12 661
326191	Plastics plumbing fixture mfg	—	2	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	61	21	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	7	8	3	230	8 357	171	421	5 614	21 551	18 587	40 225	1 656
32622	Rubber & plastics hoses & belting mfg	9	1	1	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	9	1	1	c	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	103	50	3 895	139 372	2 959	6 287	102 742	436 810	342 940	779 329	30 857
3271	Clay product & refractory mfg	1	6	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	2	1	c	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	2	1	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	6	7	2	251	4 934	197	356	3 514	9 874	8 339	18 316	787
32721	Glass & glass product mfg	6	7	2	251	4 934	197	356	3 514	9 874	8 339	18 316	787
327215	Glass product mfg made of purchased glass	6	5	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEVADA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg.....	2	63	32	2 339	84 550	1 713	3 665	61 387	245 682	191 258	436 850	16 293
32731	Cement mfg.....	1	5	2	c	D	D	D	D	D	D	D	1 307
327310	Cement mfg.....	1	5	2	c	D	D	D	D	D	D	D	1 307
32732	Ready-mix concrete mfg.	1	34	15	1 382	54 220	1 132	2 443	45 516	151 604	118 025	269 961	7 566
327320	Ready-mix concrete mfg.....	1	34	15	1 382	54 220	1 132	2 443	45 516	151 604	118 025	269 961	7 566
32733	Concrete pipe, brick, & block mfg.....	2	11	8	e	D	D	D	D	D	D	D	5 878
327331	Concrete block & brick mfg.....	2	7	5	227	8 003	135	308	3 864	19 571	21 437	39 577	5 612
32739	Other concrete product mfg.....	4	13	7	444	11 987	234	439	5 195	35 436	24 046	60 394	1 542
327390	Other concrete product mfg.....	4	13	7	444	11 987	234	439	5 195	35 436	24 046	60 394	1 542
3274	Lime & gypsum product mfg.....	—	11	7	f	D	D	D	D	D	D	D	D
32741	Lime mfg.....	—	3	3	c	D	D	D	D	D	D	D	D
327410	Lime mfg.....	—	3	3	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg....	—	8	4	469	20 102	353	821	13 742	93 236	69 469	162 930	9 041
327420	Gypsum product mfg..	—	8	4	469	20 102	353	821	13 742	93 236	69 469	162 930	9 041
3279	Other nonmetallic mineral product mfg.....	—	16	7	480	17 512	425	878	15 623	34 849	49 162	84 058	2 395
32799	All other nonmetallic mineral product mfg ...	—	16	7	480	17 512	425	878	15 623	34 849	49 162	84 058	2 395
327999	All other miscellaneous nonmetallic mineral product mfg.....	—	8	3	351	14 515	325	706	13 420	28 880	45 780	74 673	D
331	Primary metal mfg.....	—	17	8	1 461	48 988	1 127	2 259	32 565	258 957	233 383	493 332	10 518
3314	Nonferrous metal (except aluminum) production & processing.....	—	7	5	967	37 631	712	1 456	24 358	223 740	202 083	426 969	8 949
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	4	4	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	—	2	2	f	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	2	2	c	D	D	D	D	D	D	D	D
3315	Foundries.....	—	8	1	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	1	1	e	D	D	D	D	D	D	D	D
331512	Steel investment foundries.....	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	254	58	4 309	131 088	3 203	6 226	78 175	290 779	229 180	517 308	21 558
3321	Forging & stamping.....	—	13	3	302	14 501	225	514	9 010	53 274	44 781	94 670	7 599
33211	Forging & stamping.....	—	13	3	302	14 501	225	514	9 010	53 274	44 781	94 670	7 599
332112	Nonferrous forging....	—	3	1	171	8 215	128	317	5 678	38 529	32 191	66 898	D
3323	Architectural & structural metals mfg.....	2	75	23	1 592	47 965	1 194	2 352	29 221	99 058	97 610	196 227	4 519
33231	Plate work & fabricated structural product mfg..	1	21	4	441	15 552	332	687	9 356	33 429	38 071	71 493	1 251
332311	Prefabricated metal building & component mfg.....	—	6	2	c	D	D	D	D	D	D	D	474
332312	Fabricated structural metal mfg.....	3	11	2	168	7 532	81	174	2 186	13 193	13 551	27 008	664
33232	Ornamental & architectural metal products mfg.....	2	54	19	1 151	32 413	862	1 665	19 865	65 629	59 539	124 734	3 268
332321	Metal window & door mfg.....	3	9	2	131	3 379	95	193	2 132	7 029	8 417	15 635	150
332322	Sheet metal work mfg .	3	34	14	878	25 149	668	1 260	15 375	48 689	39 924	87 866	2 772
332323	Ornamental & architectural metal work mfg.....	—	11	3	142	3 885	99	212	2 358	9 911	11 198	21 233	346
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	97	11	1 091	29 095	835	1 379	19 527	55 214	30 228	85 661	4 547
33271	Machine shops.....	4	82	6	577	14 808	443	718	10 273	28 048	10 214	38 224	2 004
332710	Machine shops.....	4	82	6	577	14 808	443	718	10 273	28 048	10 214	38 224	2 004
33272	Turned product & screw, nut, & bolt mfg.....	—	15	5	514	14 287	392	661	9 254	27 166	20 014	47 437	2 543
332721	Precision turned product mfg.....	1	9	2	150	5 028	122	260	3 019	8 308	4 165	12 470	575
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	6	3	364	9 259	270	401	6 235	18 858	15 849	34 967	1 968

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEVADA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities	4	24	8	362	10 556	282	540	5 623	19 135	5 110	24 315	1 457
33281	Coating, engraving, heat treating, & allied activities	4	24	8	362	10 556	282	540	5 623	19 135	5 110	24 315	1 457
332813	Electroplating, plating, polishing, anodizing, & coloring	3	18	7	316	9 531	240	468	4 858	16 359	4 524	20 969	1 323
3329	Other fabricated metal product mfg	1	30	10	807	24 282	540	1 195	11 789	53 740	42 915	97 270	3 192
33291	Metal valve mfg	—	8	3	332	11 574	211	435	5 204	20 942	15 923	38 622	1 612
332911	Industrial valve mfg	—	4	2	266	9 664	172	367	4 226	15 383	12 524	29 659	1 321
33299	All other fabricated metal product mfg	1	22	7	475	12 708	329	760	6 585	32 798	26 992	58 648	1 580
332998	Enameled iron & metal sanitary ware mfg	—	2	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	12	3	151	4 902	100	201	2 840	10 594	7 347	18 081	461
333	Machinery mfg	1	86	19	1 350	44 408	897	1 551	22 948	88 980	76 044	165 372	7 325
3332	Industrial machinery mfg	6	13	2	115	3 635	62	116	1 949	6 693	6 548	13 206	346
33329	Other industrial machinery mfg	6	11	2	c	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	18	5	660	20 588	448	673	9 905	38 106	38 800	77 265	1 236
33331	Commercial & service industry machinery mfg	—	18	5	660	20 588	448	673	9 905	38 106	38 800	77 265	1 236
333319	Other commercial & service industry machinery mfg	—	12	5	637	20 039	435	650	9 661	36 898	37 790	75 056	1 191
3335	Metalworking machinery mfg	3	16	2	117	3 766	85	148	2 386	7 125	2 609	9 703	D
33351	Metalworking machinery mfg	3	16	2	117	3 766	85	148	2 386	7 125	2 609	9 703	D
3336	Engine, turbine, & power transmission equipment mfg	—	4	4	125	4 092	81	173	2 626	10 370	6 169	16 363	1 026
33361	Engine, turbine, & power transmission equipment mfg	—	4	4	125	4 092	81	173	2 626	10 370	6 169	16 363	1 026
3339	Other general-purpose machinery mfg	1	20	5	225	8 402	147	284	4 048	18 497	15 007	33 692	1 040
33399	All other general-purpose machinery mfg	1	12	3	149	5 768	103	203	2 947	12 682	10 415	23 089	736
334	Computer & electronic product mfg	1	94	29	3 344	122 711	1 801	3 521	44 780	226 894	225 003	456 800	D
3341	Computer & peripheral equipment mfg	2	14	5	427	16 338	179	340	5 135	16 436	48 971	69 632	D
33411	Computer & peripheral equipment mfg	2	14	5	427	16 338	179	340	5 135	16 436	48 971	69 632	D
334111	Electronic computer mfg	—	6	2	184	6 952	102	188	2 106	9 793	28 612	38 457	D
334112	Computer storage device mfg	—	2	2	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	9	6	1	c	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	5	11	2	c	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	35	10	1 008	30 436	799	1 471	17 512	51 527	76 171	128 419	D
33441	Semiconductor & other electronic component mfg	1	35	10	1 008	30 436	799	1 471	17 512	51 527	76 171	128 419	D
334412	Bare printed circuit board mfg	1	7	3	258	7 644	221	416	5 256	14 625	18 224	33 012	D
334419	Other electronic component mfg	—	15	3	477	14 371	378	725	8 296	19 405	47 351	67 442	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEVADA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	26	12	1 774	70 819	757	1 612	20 363	144 452	88 052	232 243	D
33451	Navigational, measuring, medical, & control instruments mfg	1	26	12	1 774	70 819	757	1 612	20 363	144 452	88 052	232 243	D
334511	Search, detection, navigation, & guidance instrument mfg	1	3	1	155	6 710	26	44	846	10 856	6 813	17 897	292
334513	Industrial process control instrument mfg	1	4	3	134	4 859	62	110	1 461	7 321	8 608	15 931	207
334515	Electricity measuring & testing instrument mfg	—	6	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	2	4	1	123	3 737	88	151	2 932	9 613	2 815	12 422	D
335	Electrical equipment, appliance, & component mfg	1	31	7	832	23 644	477	1 003	12 041	10 694	105 538	121 336	9 450
3352	Household appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	7	12	2	c	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	7	12	2	c	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	14	4	381	12 437	168	371	5 013	21 269	36 618	59 417	7 004
33593	Wiring device mfg	—	4	2	158	5 820	101	222	3 133	6 987	25 896	34 499	D
335932	Noncurrent-carrying wiring device mfg	—	2	2	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	7	2	216	6 427	61	139	1 737	13 808	10 188	23 913	D
335999	All other miscellaneous electrical equipment & component mfg	—	7	2	216	6 427	61	139	1 737	13 808	10 188	23 913	D
336	Transportation equipment mfg	3	59	13	1 608	44 609	1 224	2 132	30 195	96 110	54 493	150 225	5 440
3363	Motor vehicle parts mfg	3	25	7	f	D	D	D	D	D	D	D	2 962
33631	Motor vehicle gasoline engine & engine parts mfg	4	8	4	f	D	D	D	D	D	D	D	2 559
336311	Carburetor, piston, piston ring, & valve mfg	—	2	2	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	7	6	2	306	7 307	236	339	4 432	17 240	16 337	35 088	D
33632	Motor vehicle electrical & electronic equipment mfg	2	5	2	e	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	—	2	1	c	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	16	4	e	D	D	D	D	D	D	D	2 106
33641	Aerospace product & parts mfg	2	16	4	e	D	D	D	D	D	D	D	2 106
336412	Aircraft engine & engine parts mfg	1	4	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	109	21	1 626	43 262	1 324	2 536	30 025	112 823	86 123	198 850	4 198
3371	Household & institutional furniture & kitchen cabinet mfg	1	74	10	905	20 696	775	1 494	15 869	54 116	47 390	101 226	1 760
33711	Wood kitchen cabinet & counter top mfg	—	42	8	700	16 858	601	1 199	12 891	46 669	41 018	87 402	1 289
337110	Wood kitchen cabinet & counter top mfg	—	42	8	700	16 858	601	1 199	12 891	46 669	41 018	87 402	1 289
33712	Household & institutional furniture mfg	5	32	2	205	3 838	174	295	2 978	7 447	6 372	13 824	471
3372	Office furniture (including fixtures) mfg	1	26	10	571	19 627	414	792	12 727	37 606	21 267	59 230	1 477
33721	Office furniture (including fixtures) mfg	1	26	10	571	19 627	414	792	12 727	37 606	21 267	59 230	1 477
337212	Custom architectural woodwork & millwork mfg	—	13	7	432	15 678	306	593	10 437	30 914	16 824	47 710	1 240
3379	Other furniture related product mfg	1	9	1	150	2 939	135	250	1 429	21 101	17 466	38 394	961
33792	Blind & shade mfg	—	4	1	c	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	4	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEVADA—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	2	238	50	6 317	204 628	3 596	7 183	84 836	415 773	403 036	823 339	89 709
3391	Medical equipment & supplies mfg.....	5	87	7	786	20 241	543	948	11 138	48 033	26 323	73 910	3 200
33911	Medical equipment & supplies mfg.....	5	87	7	786	20 241	543	948	11 138	48 033	26 323	73 910	3 200
339112	Surgical & medical instrument mfg.....	2	10	1	128	4 688	70	138	1 792	10 741	6 341	17 305	643
339113	Surgical appliance & supplies mfg.....	2	9	2	239	4 967	202	343	3 390	11 769	8 248	19 768	308
339115	Ophthalmic goods mfg.....	8	4	2	124	2 497	79	157	1 441	6 658	3 476	9 446	842
339116	Dental laboratories ...	7	53	1	219	6 148	155	250	3 782	14 040	5 175	19 394	1 027
3399	Other miscellaneous mfg ..	1	151	43	5 531	184 387	3 053	6 235	73 698	367 740	376 713	749 429	86 509
33991	Jewelry & silverware mfg.....	1	16	2	137	4 004	80	158	1 557	8 569	10 641	19 471	3 251
33992	Sporting & athletic goods mfg.....	8	14	2	222	4 486	187	300	3 254	11 446	7 990	19 250	492
339920	Sporting & athletic goods mfg.....	8	14	2	222	4 486	187	300	3 254	11 446	7 990	19 250	492
33993	Doll, toy, & game mfg ...	-	10	5	258	7 947	189	361	4 591	17 542	15 220	32 786	1 308
339932	Game, toy, & children's vehicle mfg.....	-	10	5	258	7 947	189	361	4 591	17 542	15 220	32 786	1 308
33994	Office supplies (except paper) mfg.....	2	13	2	188	4 719	115	218	3 101	11 695	6 881	18 850	520
339941	Pen & mechanical pencil mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
33995	Sign mfg.....	3	53	17	1 616	61 315	1 043	2 220	34 801	97 632	54 969	157 027	8 481
339950	Sign mfg.....	3	53	17	1 616	61 315	1 043	2 220	34 801	97 632	54 969	157 027	8 481
33999	All other miscellaneous mfg.....	1	45	15	3 110	101 916	1 439	2 978	26 394	220 856	281 012	502 045	72 457
339999	All other miscellaneous mfg.....	-	37	13	2 954	98 139	1 328	2 739	24 056	208 802	273 188	482 547	71 751

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAS VEGAS, NV-AZ MSA												
	Manufacturing	1	990	225	21 588	636 554	16 072	31 538	410 832	2 035 961	1 872 078	3 923 949	131 869
	Las Vegas, NV-AZ MSA (AZ Part).....	-	156	33	3 807	85 202	3 166	5 735	60 768	343 952	398 925	760 367	17 181
	Las Vegas, NV-AZ MSA (NV Part).....	1	834	192	17 781	551 352	12 906	25 803	350 064	1 692 009	1 473 153	3 163 582	114 688
311	Food mfg.....	-	60	16	1 981	54 403	1 325	3 055	29 553	220 765	164 602	386 505	10 919
3113	Sugar & confectionery product mfg.....	-	6	2	f	D	D	D	D	D	D	D	1 453
31133	Confectionery mfg from purchased chocolate...	-	3	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	3	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	2	34	6	422	11 062	295	563	6 348	20 839	12 115	32 972	3 363
31181	Bread & bakery product mfg.....	3	31	5	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LAS VEGAS, NV—AZ MSA—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	-	12	3	374	11 966	241	563	6 795	104 459	76 640	174 499	3 083
3121	Beverage mfg	-	10	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	8	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	34	8	784	17 521	644	1 237	11 875	42 749	43 397	86 810	1 288
3212	Veneer, plywood, & engineered wood product mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
32121	Veneer, plywood, & engineered wood product mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
321214	Truss mfg	3	12	5	538	12 172	446	886	8 453	33 146	29 496	63 028	827
322	Paper mfg	-	10	3	300	11 389	234	528	8 325	75 402	67 491	136 860	D
3222	Converted paper product mfg	-	10	3	300	11 389	234	528	8 325	75 402	67 491	136 860	D
323	Printing & related support activities	2	138	18	1 653	44 218	1 219	2 130	27 884	91 713	64 482	156 472	6 689
3231	Printing & related support activities	2	138	18	1 653	44 218	1 219	2 130	27 884	91 713	64 482	156 472	6 689
32311	Printing	2	123	17	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	45	8	772	23 002	593	1 059	15 139	51 002	38 168	89 707	D
323113	Commercial screen printing	1	21	6	412	9 126	283	519	4 753	16 985	13 604	30 741	D
325	Chemical mfg	1	41	8	774	28 841	482	946	17 532	111 855	82 633	203 986	19 283
3251	Basic chemical mfg	-	7	3	508	20 672	321	654	13 573	75 647	53 783	138 557	16 521
32518	Other basic inorganic chemical mfg	-	3	2	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	52	19	1 928	49 684	1 578	3 424	36 305	162 220	188 619	345 677	11 590
3261	Plastics product mfg	2	49	18	1 860	47 614	1 527	3 289	35 038	153 738	184 724	333 185	10 973
32611	Unsupported plastics film, sheet, & bag mfg ..	1	5	5	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	4	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	37	11	1 289	30 793	1 066	2 348	23 988	101 209	97 122	193 577	7 225
326199	All other plastics product mfg	2	34	10	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	84	44	3 153	115 312	2 521	5 294	89 291	354 837	288 867	643 256	21 583
3273	Cement & concrete product mfg	2	49	28	1 876	68 221	1 494	3 133	53 498	194 608	147 798	342 222	14 362
32732	Ready-mix concrete mfg	1	24	15	1 261	49 390	1 116	2 368	44 225	138 944	103 713	243 000	7 199
327320	Ready-mix concrete mfg	1	24	15	1 261	49 390	1 116	2 368	44 225	138 944	103 713	243 000	7 199
32739	Other concrete product mfg	4	12	6	345	10 171	193	362	4 432	31 483	20 003	52 298	1 037
327390	Other concrete product mfg	4	12	6	345	10 171	193	362	4 432	31 483	20 003	52 298	1 037
3274	Lime & gypsum product mfg	-	8	6	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	5	3	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg ..	-	5	3	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	14	6	450	16 326	401	837	14 792	33 582	47 800	81 362	D
32799	All other nonmetallic mineral product mfg ...	-	14	6	450	16 326	401	837	14 792	33 582	47 800	81 362	D
327999	All other miscellaneous nonmetallic mineral product mfg	-	8	3	344	14 206	318	688	13 227	28 571	45 663	74 245	D
331	Primary metal mfg	-	7	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LAS VEGAS, NV—AZ MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	2	126	20	1 639	45 270	1 244	2 262	27 714	95 544	87 199	182 688	6 363
3323	Architectural & structural metals mfg	2	47	9	725	17 947	560	1 033	11 302	43 599	44 640	87 460	1 555
33232	Ornamental & architectural metal products mfg	1	38	8	660	16 096	512	947	10 128	39 754	39 593	78 552	1 369
332321	Metal window & door mfg	1	7	3	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	2	23	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	40	2	e	D	D	D	D	D	D	D	3 016
333	Machinery mfg	—	35	7	1 062	22 719	901	1 233	13 170	84 356	84 686	175 275	D
3339	Other general-purpose machinery mfg	—	9	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	5	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	42	12	1 127	33 610	788	1 464	19 461	54 760	83 073	139 943	5 610
3344	Semiconductor & other electronic component mfg	1	15	5	627	16 121	533	1 023	10 954	18 573	54 349	74 333	2 467
33441	Semiconductor & other electronic component mfg	1	15	5	627	16 121	533	1 023	10 954	18 573	54 349	74 333	2 467
334419	Other electronic component mfg	—	6	2	356	10 311	292	563	6 535	6 673	41 036	49 017	D
3345	Navigational, measuring, medical, & control instruments mfg	4	13	5	317	10 685	173	304	5 129	18 513	12 901	31 675	1 423
33451	Navigational, measuring, medical, & control instruments mfg	4	13	5	317	10 685	173	304	5 129	18 513	12 901	31 675	1 423
335	Electrical equipment, appliance, & component mfg	—	14	1	339	9 555	279	556	7 085	48 424	126 991	182 786	D
3359	Other electrical equipment & component mfg	—	7	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	6	37	7	e	D	D	D	D	D	D	D	2 016
337	Furniture & related product mfg	—	75	16	1 317	29 326	1 104	2 064	22 202	114 447	61 927	176 053	2 619
3371	Household & institutional furniture & kitchen cabinet mfg	—	54	11	1 007	21 555	872	1 681	16 778	94 382	50 192	144 138	1 892
33711	Wood kitchen cabinet & counter top mfg	—	31	9	847	18 484	738	1 450	14 407	88 298	45 347	133 207	1 490
337110	Wood kitchen cabinet & counter top mfg	—	31	9	847	18 484	738	1 450	14 407	88 298	45 347	133 207	1 490
3372	Office furniture (including fixtures) mfg	—	17	5	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	17	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	171	35	3 317	109 368	2 052	4 086	56 808	221 000	198 473	423 242	22 019
3391	Medical equipment & supplies mfg	5	62	4	489	12 985	366	650	8 717	29 640	13 238	42 846	1 529
33911	Medical equipment & supplies mfg	5	62	4	489	12 985	366	650	8 717	29 640	13 238	42 846	1 529
3399	Other miscellaneous mfg	2	109	31	2 828	96 383	1 686	3 436	48 091	191 360	185 235	380 396	20 490
33993	Doll, toy, & game mfg	1	8	5	263	7 863	196	376	4 453	17 625	15 945	33 581	D
339932	Game, toy, & children's vehicle mfg	1	8	5	263	7 863	196	376	4 453	17 625	15 945	33 581	D
33995	Sign mfg	3	40	13	1 302	50 281	850	1 811	29 415	79 484	47 671	131 094	7 048
339950	Sign mfg	3	40	13	1 302	50 281	850	1 811	29 415	79 484	47 671	131 094	7 048
33999	All other miscellaneous mfg	1	31	9	915	30 508	421	865	9 551	74 440	106 708	181 282	10 969
339999	All other miscellaneous mfg	1	29	9	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RENO, NV MSA													
31-33	Manufacturing	2	418	123	11 522	361 859	7 519	14 668	184 042	922 268	1 005 016	1 931 311	131 911
311	Food mfg	1	24	6	649	21 926	409	734	12 510	149 796	110 875	260 280	3 599
322	Paper mfg	-	5	4	260	9 438	182	381	4 619	21 046	24 358	44 172	D
3222	Converted paper product mfg	-	5	4	260	9 438	182	381	4 619	21 046	24 358	44 172	D
323	Printing & related support activities.....	6	65	14	1 274	40 767	992	2 008	27 696	142 599	146 523	289 124	17 189
3231	Printing & related support activities.....	6	65	14	1 274	40 767	992	2 008	27 696	142 599	146 523	289 124	17 189
323110	Printing	7	58	12	g	D	D	D	D	D	D	D	16 988
323110	Commercial lithographic printing ..	-	25	6	397	12 322	294	532	7 511	24 078	19 437	44 184	D
323111	Commercial gravure printing.....	9	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	34	17	1 142	31 196	928	1 867	22 941	79 495	89 477	170 461	9 743
3261	Plastics product mfg	2	30	15	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	22	12	862	22 598	718	1 380	16 858	52 186	45 904	99 683	D
326199	All other plastics product mfg.....	2	22	12	862	22 598	718	1 380	16 858	52 186	45 904	99 683	D
327	Nonmetallic mineral product mfg	-	14	6	618	16 528	410	834	10 777	35 916	37 027	72 800	D
3273	Cement & concrete product mfg	-	8	4	314	8 577	167	331	4 908	19 878	21 124	40 738	D
332	Fabricated metal product mfg	1	67	25	1 719	58 279	1 188	2 396	32 047	131 745	97 840	225 458	12 218
3323	Architectural & structural metals mfg	2	24	12	764	24 689	514	1 061	12 551	43 378	35 317	78 520	2 518
33232	Ornamental & architectural metal products mfg.....	3	16	10	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	3	11	9	549	16 044	404	825	9 774	27 779	21 261	48 927	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	20	5	368	10 135	264	467	7 017	19 195	9 922	29 124	1 287
333	Machinery mfg	1	26	7	631	20 072	398	522	9 104	38 623	40 856	80 314	1 736
3333	Commercial & service industry machinery mfg ..	-	7	3	462	14 816	293	338	6 167	24 465	29 294	54 506	901
33331	Commercial & service industry machinery mfg	-	7	3	462	14 816	293	338	6 167	24 465	29 294	54 506	901
333319	Other commercial & service industry machinery mfg	-	7	3	462	14 816	293	338	6 167	24 465	29 294	54 506	901
334	Computer & electronic product mfg.....	1	27	9	642	26 338	309	588	8 556	41 619	40 556	85 400	D
3344	Semiconductor & other electronic component mfg	1	11	4	267	10 223	200	394	5 629	23 953	14 943	38 483	D
33441	Semiconductor & other electronic component mfg	1	11	4	267	10 223	200	394	5 629	23 953	14 943	38 483	D
335	Electrical equipment, appliance, & component mfg	-	9	3	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	25	7	531	16 810	415	774	10 231	42 464	30 433	72 928	1 660
3372	Office furniture (including fixtures) mfg	1	7	5	282	11 695	198	399	7 295	17 932	10 449	28 607	701
33721	Office furniture (including fixtures) mfg	1	7	5	282	11 695	198	399	7 295	17 932	10 449	28 607	701
339	Miscellaneous mfg.....	1	56	12	2 740	87 027	1 379	2 795	25 438	177 816	192 930	371 056	63 701
3399	Other miscellaneous mfg ..	1	33	10	2 548	82 034	1 240	2 547	22 509	166 691	185 711	352 552	62 970
33999	All other miscellaneous mfg	-	11	6	2 186	71 276	1 013	2 103	16 759	146 061	174 046	320 164	D
339999	All other miscellaneous mfg	-	7	4	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	CLARK COUNTY, NV													
31-33	Manufacturing	1	814	189		D	D	D	D	D	D	D	113 669	
311	Food mfg	-	57	16	g	D	D	D	D	D	D	D	D	
3113	Sugar & confectionery product mfg	-	6	2	f	D	D	D	D	D	D	D	1 453	
3115	Dairy product mfg	-	5	2	f	D	D	D	D	D	D	D	D	
321	Wood product mfg	4	24	6	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	2	117	17		1 496	41 347	1 094	1 941	25 965	85 714	59 078	145 292	6 226
3231	Printing & related support activities	2	117	17		1 496	41 347	1 094	1 941	25 965	85 714	59 078	145 292	6 226
32311	Printing	2	102	16	g	D	D	D	D	D	D	D	D	
323110	Commercial lithographic printing	1	38	7		728	22 133	554	1 002	14 584	49 313	36 804	86 649	D
325	Chemical mfg	1	29	7		677	25 685	440	868	16 372	95 197	72 871	177 315	D
326	Plastics & rubber products mfg	1	46	16		1 464	39 375	1 153	2 447	27 582	113 703	141 459	249 215	D
3261	Plastics product mfg	1	44	16	g	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	32	9	f	D	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	31	8	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	64	35	h	D	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	37	22	g	D	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	1	16	10	g	D	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	1	16	10	g	D	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	101	17	g	D	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	3	41	8	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	38	11	g	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	14	4	f	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	14	4	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	64	13	g	D	D	D	D	D	D	D	D	2 337
3371	Household & institutional furniture & kitchen cabinet mfg	-	44	9	f	D	D	D	D	D	D	D	D	1 610
33711	Wood kitchen cabinet & counter top mfg	-	22	7	f	D	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	-	22	7	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	148	31	h	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	2	95	29	h	D	D	D	D	D	D	D	D	D
33995	Sign mfg	3	34	13	g	D	D	D	D	D	D	D	D	D
339950	Sign mfg	3	34	13	g	D	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	29	9	f	D	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	27	9	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DOUGLAS COUNTY, NV													
31-33	Manufacturing	-	65	11	1 897	66 291	905	1 859	21 510	143 053	98 942	241 754	D
334	Computer & electronic product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
LYON COUNTY, NV													
31-33	Manufacturing	-	50	23	1 561	47 884	1 201	2 382	30 011	135 577	143 042	280 416	D
WASHOE COUNTY, NV													
31-33	Manufacturing	2	418	123	11 522	361 859	7 519	14 668	184 042	922 268	1 005 016	1 931 311	131 911
311	Food mfg	1	24	6	649	21 926	409	734	12 510	149 796	110 875	260 280	3 599
323	Printing & related support activities	6	65	14	1 274	40 767	992	2 008	27 696	142 599	146 523	289 124	17 189
3231	Printing & related support activities	6	65	14	1 274	40 767	992	2 008	27 696	142 599	146 523	289 124	17 189
32311	Printing	7	58	12	g	D	D	D	D	D	D	D	16 988
326	Plastics & rubber products mfg	3	34	17	1 142	31 196	928	1 867	22 941	79 495	89 477	170 461	9 743
3261	Plastics product mfg	2	30	15	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	22	12	862	22 598	718	1 380	16 858	52 186	45 904	99 683	D
326199	All other plastics product mfg	2	22	12	862	22 598	718	1 380	16 858	52 186	45 904	99 683	D
327	Nonmetallic mineral product mfg	-	14	6	618	16 528	410	834	10 777	35 916	37 027	72 800	D
332	Fabricated metal product mfg	1	67	25	1 719	58 279	1 188	2 396	32 047	131 745	97 840	225 458	12 218
3323	Architectural & structural metals mfg	2	24	12	764	24 689	514	1 061	12 551	43 378	35 317	78 520	2 518
33232	Ornamental & architectural metal products mfg	3	16	10	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	3	11	9	549	16 044	404	825	9 774	27 779	21 261	48 927	D
333	Machinery mfg	1	26	7	631	20 072	398	522	9 104	38 623	40 856	80 314	1 736
334	Computer & electronic product mfg	1	27	9	642	26 338	309	588	8 556	41 619	40 556	85 400	D
337	Furniture & related product mfg	1	25	7	531	16 810	415	774	10 231	42 464	30 433	72 928	1 660
339	Miscellaneous mfg	1	56	12	2 740	87 027	1 379	2 795	25 438	177 816	192 930	371 056	63 701
3399	Other miscellaneous mfg ..	1	33	10	2 548	82 034	1 240	2 547	22 509	166 691	185 711	352 552	62 970
33999	All other miscellaneous mfg	-	11	6	2 186	71 276	1 013	2 103	16 759	146 061	174 046	320 164	D
339999	All other miscellaneous mfg	-	7	4	g	D	D	D	D	D	D	D	D
CARSON CITY, NV (IC)													
31-33	Manufacturing	2	186	47	4 157	120 767	3 011	5 939	70 465	297 324	217 226	514 454	D
332	Fabricated metal product mfg	-	43	10	945	26 358	784	1 695	18 418	64 996	55 052	121 410	3 139
334	Computer & electronic product mfg	2	21	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	13	7	f	D	D	D	D	D	D	D	4 178
3363	Motor vehicle parts mfg ...	4	7	4	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	4	3	3	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARSON CITY, NV (IC)													
31-33	Manufacturing	2	186	47	4 157	120 767	3 011	5 939	70 465	297 324	217 226	514 454	D
332	Fabricated metal product mfg	-	43	10	945	26 358	784	1 695	18 418	64 996	55 052	121 410	3 139
334	Computer & electronic product mfg	2	21	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	13	7	f	D	D	D	D	D	D	D	4 178
3363	Motor vehicle parts mfg ...	4	7	4	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	4	3	3	f	D	D	D	D	D	D	D	D
HENDERSON, NV													
31-33	Manufacturing	-	60	21	3 131	96 776	2 380	5 512	66 684	544 072	402 922	939 050	19 762
311	Food mfg	-	5	3	1 088	28 229	775	2 104	18 679	149 136	92 522	242 833	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
LAS VEGAS, NV													
31-33	Manufacturing	3	274	49	3 884	114 130	2 748	4 799	65 860	272 972	220 003	493 790	17 009
311	Food mfg	1	25	8	600	19 250	377	706	7 935	48 533	52 604	100 981	D
323	Printing & related support activities	2	57	8	959	26 979	729	1 277	17 203	58 642	44 691	103 776	1 986
3231	Printing & related support activities	2	57	8	959	26 979	729	1 277	17 203	58 642	44 691	103 776	1 986
32311	Printing	2	49	8	913	25 639	694	1 225	16 274	56 123	44 031	100 600	1 900
323110	Commercial lithographic printing ..	1	19	6	603	19 193	470	856	12 695	42 813	32 714	76 051	1 332
339	Miscellaneous mfg	2	51	10	651	20 404	429	777	11 484	49 302	26 618	76 186	2 563
3399	Other miscellaneous mfg ..	1	27	10	512	16 755	341	647	9 618	39 459	21 968	61 556	2 111
NORTH LAS VEGAS, NV													
31-33	Manufacturing	1	74	24	2 071	62 980	1 583	3 291	40 516	195 723	177 542	363 630	16 077
RENO, NV													
31-33	Manufacturing	2	192	48	6 086	191 616	3 700	7 416	86 742	446 658	620 755	1 076 347	93 549
323	Printing & related support activities	8	30	6	851	28 132	672	1 393	20 146	77 389	125 956	203 321	15 805
3231	Printing & related support activities	8	30	6	851	28 132	672	1 393	20 146	77 389	125 956	203 321	15 805
32311	Printing	8	27	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	29	10	f	D	D	D	D	D	D	D	2 792
3323	Architectural & structural metals mfg	3	12	7	530	18 084	346	730	8 604	31 099	23 593	54 650	1 995
339	Miscellaneous mfg	-	30	6	2 296	74 656	1 101	2 277	19 030	148 842	177 646	326 593	D
3399	Other miscellaneous mfg ..	-	19	6	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	8	5	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	5	3	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SPARKS, NV												
31-33	Manufacturing	1	182	66	4 477	136 183	3 120	5 999	77 814	390 132	295 905	684 623	22 168
326	Plastics & rubber products mfg	3	20	11	820	22 183	664	1 364	16 277	57 673	58 667	117 433	D
3261	Plastics product mfg	2	18	10	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	14	8	622	16 233	518	1 025	12 103	39 413	37 002	77 368	5 306
326199	All other plastics product mfg	1	14	8	622	16 233	518	1 025	12 103	39 413	37 002	77 368	5 306
332	Fabricated metal product mfg	—	36	14	812	27 035	552	1 084	14 317	53 347	41 391	94 476	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEVADA		NEVADA—Con.	
Companies ¹	number.. 1 569	Quantity of electricity purchased for heat and power	1,000 kWh.. 1 552 203
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 7 555
All establishments	number.. 1 615	Total value of shipments	\$1,000.. 6 361 782
Establishments with 1 to 19 employees	number.. 1 207	Value of resales	\$1,000.. 192 230
Establishments with 20 to 99 employees	number.. 338	Value added	\$1,000.. 3 298 077
Establishments with 100 employees or more	number.. 70	Total inventories, beginning of year	\$1,000.. 774 470
All employees	number.. 37 849	Finished goods inventories, beginning of year	\$1,000.. 289 368
Total compensation ²	\$1,000.. 1 460 017	Work-in-process inventories, beginning of year	\$1,000.. 137 325
Annual payroll	\$1,000.. 1 178 047	Materials and supplies inventories, beginning of year	\$1,000.. 347 777
Total fringe benefits	\$1,000.. 281 970	Total inventories, end of year	\$1,000.. 809 236
Production workers, average for year	number.. 26 247	Finished goods inventories, end of year	\$1,000.. 290 964
Production workers on March 12	number.. 26 042	Work-in-process inventories, end of year	\$1,000.. 132 394
Production workers on May 12	number.. 26 037	Materials and supplies inventories, end of year	\$1,000.. 385 878
Production workers on August 12	number.. 26 521	Gross book value of total assets at beginning of year	\$1,000.. 3 201 452
Production workers on November 12	number.. 26 388	Total capital expenditures (new and used)	\$1,000.. 316 052
Production-worker hours	1,000.. 52 040	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 63 990
Production-worker wages	\$1,000.. 677 153	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 252 062
Total cost of materials	\$1,000.. 3 058 737	Total retirements ²	\$1,000.. 120 922
Cost of materials, parts, containers, etc., consumed	\$1,000.. 2 700 335	Gross book value of total assets at end of year	\$1,000.. 3 396 582
Cost of resales	\$1,000.. 144 978	Total depreciation during year ²	\$1,000.. 245 835
Cost of fuels	\$1,000.. 45 201	Total rental payments ²	\$1,000.. 84 518
Cost of purchased electricity	\$1,000.. 75 924	Buildings and other structures rental payments ²	\$1,000.. 41 252
Cost of contract work	\$1,000.. 92 299	Machinery and equipment rental payments ²	\$1,000.. 43 266

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

NEVADA

West Wendover was incorporated in July 1991, but this change was not submitted to the Census Bureau until May 1992.

Appendix E. Metropolitan Areas

NEVADA

Las Vegas, NV—AZ MSA

Mohave County, AZ

Clark County, NV

Nye County, NV

Reno, NV MSA

Washoe County, NV

New York

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NEW YORK													
31-33	Manufacturing	1	23 908	6 689	785 891	26 515 818	538 186	1 057 483	14 695 767	76 999 763	69 255 045	146 720 195	5 724 553
311	Food mfg.	1	2 198	436	49 103	1 376 928	33 795	65 699	796 490	6 012 317	7 693 570	13 717 789	344 903
3111	Animal food mfg.	1	52	24	1 677	59 174	1 079	2 215	34 359	472 916	524 138	997 115	25 763
31111	Animal food mfg.	1	52	24	1 677	59 174	1 079	2 215	34 359	472 916	524 138	997 115	25 763
311111	Dog & cat food mfg.	-	6	4	622	25 169	482	918	18 162	357 557	244 252	602 075	19 904
311119	Other animal food mfg.	3	46	20	1 055	34 005	597	1 297	16 197	115 559	279 886	395 040	5 859
3112	Grain & oilseed milling	1	33	11	1 335	57 016	1 036	2 448	43 094	531 318	580 911	1 113 788	16 758
31121	Flour milling & malt mfg.	-	23	7	537	21 303	403	953	15 711	101 953	458 037	560 465	7 446
311211	Flour milling	-	21	6	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg.	1	3	3	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg.	1	3	3	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.	-	109	31	3 678	118 918	2 817	5 799	79 722	467 967	754 800	1 226 991	22 917
31131	Sugar mfg.	-	5	3	802	42 431	596	1 352	28 160	100 209	509 295	611 777	D
311312	Cane sugar refining	-	4	2	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	20	2	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans	-	20	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	2	43	15	1 341	31 265	1 095	2 091	21 318	81 907	52 569	135 447	4 138
311330	Confectionery mfg from purchased chocolate	2	43	15	1 341	31 265	1 095	2 091	21 318	81 907	52 569	135 447	4 138
31134	Nonchocolate confectionery mfg	-	41	11	f	D	D	D	D	D	D	D	4 685
311340	Nonchocolate confectionery mfg	-	41	11	f	D	D	D	D	D	D	D	4 685
3114	Fruit & vegetable preserving & specialty food mfg.	2	111	63	7 590	208 869	5 925	11 717	129 724	1 245 101	1 152 129	2 398 074	62 255
31141	Frozen food mfg.	3	43	28	3 076	77 066	2 581	4 745	48 736	575 731	325 727	901 226	27 005
311411	Frozen fruit, juice, & vegetable mfg.	6	14	10	928	23 256	800	1 729	18 245	163 623	110 202	273 426	11 924
311412	Frozen specialty food mfg.	1	29	18	2 148	53 810	1 781	3 016	30 491	412 108	215 525	627 800	15 081
31142	Fruit & vegetable canning, pickling, & drying	2	68	35	4 514	131 803	3 344	6 972	80 988	669 370	826 402	1 496 848	35 250
311421	Fruit & vegetable canning	2	57	31	3 863	108 715	2 846	6 096	68 338	562 358	749 927	1 313 693	31 398
311422	Specialty canning	-	6	2	e	D	D	D	D	D	D	D	3 062
311423	Dried & dehydrated food mfg.	8	5	2	c	D	D	D	D	D	D	D	790
3115	Dairy product mfg.	1	122	59	6 916	198 920	4 863	10 065	127 222	679 407	2 282 651	2 962 475	80 150
31151	Dairy product (except frozen) mfg.	-	83	51	5 808	173 620	4 090	8 519	112 269	605 281	2 158 144	2 764 189	74 069
311511	Fluid milk mfg.	1	39	26	3 061	100 050	1 908	4 136	57 110	306 365	936 439	1 242 394	D
311513	Cheese mfg.	-	36	21	2 387	62 177	1 948	3 889	46 533	259 202	1 072 608	1 331 619	43 426
311514	Dry, condensed, & evaporated dairy product mfg.	-	8	4	360	11 393	234	494	8 626	39 714	149 097	190 176	D
31152	Ice cream & frozen dessert mfg.	8	39	8	1 108	25 300	773	1 546	14 953	74 126	124 507	198 286	6 081
311520	Ice cream & frozen dessert mfg.	8	39	8	1 108	25 300	773	1 546	14 953	74 126	124 507	198 286	6 081
3116	Meat product mfg.	2	151	45	3 226	90 983	2 417	4 888	56 631	451 362	934 083	1 387 295	27 740
31161	Animal slaughtering & processing	2	151	45	3 226	90 983	2 417	4 888	56 631	451 362	934 083	1 387 295	27 740
311611	Animal (except poultry) slaughtering	6	37	4	410	8 513	343	644	6 510	26 228	75 005	101 281	1 204
311612	Meat processed from carcasses	2	96	34	2 419	74 435	1 744	3 619	44 350	397 776	810 223	1 209 648	25 232
311615	Poultry processing	-	14	6	323	6 335	290	556	4 934	22 459	40 364	63 018	586
3117	Seafood product preparation & packaging	2	12	3	293	13 297	219	501	5 729	23 316	44 779	67 905	1 340
31171	Seafood product preparation & packaging	2	12	3	293	13 297	219	501	5 729	23 316	44 779	67 905	1 340
311711	Seafood canning	1	6	2	245	12 091	179	413	4 909	19 846	36 877	56 533	1 127
3118	Bakeries & tortilla mfg.	2	1 449	148	19 185	481 131	11 928	21 482	241 352	1 513 547	812 270	2 325 482	78 831
31181	Bread & bakery product mfg.	2	1 368	124	16 473	401 743	9 936	17 700	193 329	1 158 710	598 462	1 758 859	60 931
311811	Retail bakeries	5	978	28	4 927	70 339	3 060	4 110	35 686	161 364	98 088	260 096	7 736
311812	Commercial bakeries	2	374	89	11 148	322 101	6 581	13 057	151 909	968 934	477 470	1 447 753	51 754
311813	Frozen cakes, pies, & other pastries mfg.	2	16	7	398	9 303	295	533	5 734	28 412	22 904	51 010	1 441
31182	Cookie, cracker, & pasta mfg.	2	80	24	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	1	31	17	2 107	61 954	1 605	3 046	37 994	281 654	111 027	390 723	13 379
311822	Flour mixes & dough mfg from purchased flour	4	15	6	438	13 592	263	543	7 226	54 376	89 393	143 657	3 755
311823	Dry pasta mfg.	6	34	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	159	52	5 203	148 620	3 511	6 584	78 657	627 383	607 809	1 238 664	29 149
31191	Snack food mfg	—	17	5	1 088	32 091	944	1 818	19 806	178 928	135 296	314 467	3 545
311911	Roasted nuts & peanut butter mfg	2	7	1	123	2 783	79	167	1 508	9 198	20 052	29 879	738
311919	Other snack food mfg	—	10	4	965	29 308	865	1 651	18 298	169 730	115 244	284 588	2 807
31192	Coffee & tea mfg	1	15	11	841	28 944	408	909	13 914	130 189	163 803	296 859	8 492
311920	Coffee & tea mfg	1	15	11	841	28 944	408	909	13 914	130 189	163 803	296 859	8 492
31193	Flavoring syrup & concentrate mfg	4	12	3	219	7 951	99	217	3 051	24 790	21 525	48 236	1 142
311930	Flavoring syrup & concentrate mfg	4	12	3	219	7 951	99	217	3 051	24 790	21 525	48 236	1 142
31194	Seasoning & dressing mfg	2	39	11	944	29 528	678	1 277	15 453	101 109	104 585	205 198	4 905
311941	Mayonnaise, dressing, & other prepared sauce mfg	3	24	7	568	15 684	454	809	9 790	78 160	75 688	153 691	3 075
311942	Spice & extract mfg	—	15	4	376	13 844	224	468	5 663	22 949	28 897	51 507	1 830
31199	All other food mfg	2	76	22	2 111	50 106	1 382	2 363	26 433	192 367	182 600	373 904	11 065
311991	Perishable prepared food mfg	—	29	10	1 183	27 616	729	1 286	14 379	91 417	85 996	176 967	5 387
311999	All other miscellaneous food mfg	3	47	12	928	22 490	653	1 077	12 054	100 950	96 604	196 937	5 678
312	Beverage & tobacco product mfg	2	139	46	8 042	260 647	4 804	10 951	139 627	1 350 416	1 383 410	2 732 789	103 798
3121	Beverage mfg	2	138	46	i	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	4	85	30	4 531	130 323	2 528	7 511	71 818	606 645	876 813	1 485 657	36 549
312111	Soft drink mfg	4	45	24	4 099	120 570	2 346	7 187	68 080	577 688	857 459	1 437 498	32 728
312112	Bottled water mfg	7	10	1	100	2 460	47	78	1 005	10 817	12 764	23 534	787
312113	Ice mfg	1	30	5	332	7 293	135	246	2 733	18 140	6 590	24 625	3 034
31212	Breweries	—	18	8	2 419	92 386	1 748	2 522	57 690	645 409	394 788	1 041 573	D
312120	Breweries	—	18	8	2 419	92 386	1 748	2 522	57 690	645 409	394 788	1 041 573	D
31213	Wineries	1	35	8	g	D	D	D	D	D	D	D	D
312130	Wineries	1	35	8	g	D	D	D	D	D	D	D	D
313	Textile mills	2	610	160	14 885	495 921	11 213	23 147	263 013	1 315 035	1 637 557	2 985 980	93 086
3131	Fiber, yarn, & thread mills	3	34	7	407	7 094	381	694	5 696	14 078	31 377	44 976	1 949
31311	Fiber, yarn, & thread mills	3	34	7	407	7 094	381	694	5 696	14 078	31 377	44 976	1 949
313111	Yarn spinning mills	3	21	3	176	3 327	164	276	2 621	7 747	12 848	20 650	1 352
313113	Thread mills	2	7	3	163	2 682	155	300	2 185	3 493	11 126	14 102	252
3132	Fabric mills	2	204	62	6 771	203 653	5 483	11 217	123 918	496 118	530 805	1 029 257	53 166
31321	Broadwoven fabric mills	5	60	15	1 486	56 719	1 217	2 475	28 858	123 616	201 101	323 772	9 801
313210	Broadwoven fabric mills	5	60	15	1 486	56 719	1 217	2 475	28 858	123 616	201 101	323 772	9 801
31322	Narrow fabric mills & schiffli machine embroidery	2	32	4	431	10 658	318	624	5 294	22 718	12 911	36 035	973
313221	Narrow fabric mills	3	18	1	203	5 433	130	248	2 180	12 787	8 112	21 008	500
313222	Schiffli machine embroidery	—	14	3	228	5 225	188	376	3 114	9 931	4 799	15 027	473
31323	Nonwoven fabric mills	1	33	15	1 290	39 506	973	1 654	18 477	72 151	102 697	176 670	11 819
313230	Nonwoven fabric mills	1	33	15	1 290	39 506	973	1 654	18 477	72 151	102 697	176 670	11 819
31324	Knit fabric mills	1	79	28	3 564	96 770	2 975	6 464	71 289	277 633	214 096	492 780	30 573
313241	Weft knit fabric mills	5	44	12	901	23 219	753	1 619	18 516	46 536	55 232	100 620	3 290
313249	Other knit fabric & lace mills	—	35	16	2 663	73 551	2 222	4 845	52 773	231 097	158 864	392 160	27 283
3133	Textile & fabric finishing & fabric coating mills	2	372	91	7 707	285 174	5 349	11 236	133 399	804 839	1 075 375	1 911 747	37 971
31331	Textile & fabric finishing mills	3	354	83	6 986	262 016	4 820	10 250	120 694	750 948	992 539	1 774 559	35 779
313311	Broadwoven fabric finishing mills	3	284	64	5 506	210 217	3 803	8 137	96 627	586 071	814 757	1 429 028	28 702
313312	Textile & fabric finishing mills	2	70	19	1 480	51 799	1 017	2 113	24 067	164 877	177 782	345 531	7 077
31332	Fabric coating mills	1	18	8	721	23 158	529	986	12 705	53 891	82 836	137 188	2 192
313320	Fabric coating mills	1	18	8	721	23 158	529	986	12 705	53 891	82 836	137 188	2 192

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW YORK—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills.....	2	593	126	11 111	231 669	8 565	14 862	132 898	478 879	593 040	1 066 794	24 802
3141	Textile furnishings mills....	1	213	44	4 518	97 588	3 551	6 269	54 166	209 985	348 245	550 673	8 710
31411	Carpet & rug mills	5	10	3	187	5 727	149	319	4 247	9 938	20 078	29 557	905
314110	Carpet & rug mills	5	10	3	187	5 727	149	319	4 247	9 938	20 078	29 557	905
31412	Curtain & linen mills.....	1	203	41	4 331	91 861	3 402	5 950	49 919	200 047	328 167	521 116	7 805
314121	Curtain & drapery mills	1	125	18	2 799	55 854	2 209	3 965	34 196	107 046	142 578	242 522	6 094
314129	Other household textile product mills	1	78	23	1 532	36 007	1 193	1 985	15 723	93 001	185 589	278 594	1 711
3149	Other textile product mills..	2	380	82	6 593	134 081	5 014	8 593	78 732	268 894	244 795	516 121	16 092
31491	Textile bag & canvas mills	2	154	24	1 756	39 389	1 366	2 343	22 573	81 459	78 338	159 726	4 681
314911	Textile bag mills	1	36	9	662	12 863	535	962	7 293	26 645	19 094	45 404	2 143
314912	Canvas & related product mills	2	118	15	1 094	26 526	831	1 381	15 280	54 814	59 244	114 322	2 538
31499	All other textile product mills	3	226	58	4 837	94 692	3 648	6 250	56 159	187 435	166 457	356 395	11 411
314991	Rope, cordage, & twine mills	-	8	4	e	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	3	217	53	4 294	81 958	3 225	5 495	48 546	160 303	146 065	309 341	9 683
315	Apparel mfg	3	3 939	1 174	91 516	1 816 127	68 492	118 081	1 064 818	4 465 493	5 168 642	9 644 864	108 470
3151	Apparel knitting mills	5	291	115	8 953	172 547	7 631	14 497	128 864	358 708	384 452	754 913	18 679
31511	Hosiery & sock mills	9	29	3	561	9 008	506	918	7 142	17 995	20 629	38 919	1 129
315111	Sheer hosiery mills	9	14	1	c	D	D	D	D	D	D	D	227
315119	Other hosiery & sock mills	8	15	2	e	D	D	D	D	D	D	D	902
31519	Other apparel knitting mills	5	262	112	8 392	163 539	7 125	13 579	121 722	340 713	363 823	715 994	17 550
315191	Outerwear knitting mills	5	257	110	i	D	D	D	D	D	D	D	16 673
315192	Underwear & nightwear knitting mills	8	5	2	e	D	D	D	D	D	D	D	877
3152	Cut & sew apparel mfg	4	3 216	967	73 916	1 460 888	53 878	90 844	819 108	3 714 643	4 448 067	8 152 815	79 183
31521	Cut & sew apparel contractors	7	2 072	552	36 852	486 385	31 388	51 028	381 239	772 363	240 809	1 004 028	31 761
315211	Men's & boys' cut & sew apparel contractors	5	57	25	1 485	21 976	1 357	2 339	17 931	38 732	5 489	44 190	960
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	2 015	527	35 367	464 409	30 031	48 689	363 308	733 631	235 320	959 838	30 801
31522	Men's & boys' cut & sew apparel mfg	2	190	68	7 559	161 239	5 812	10 762	106 794	522 267	538 258	1 061 921	9 930
315221	Men's & boys' cut & sew underwear & nightwear mfg	9	4	3	203	2 878	84	166	1 225	7 151	5 953	13 102	161
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	1	47	22	3 520	78 511	2 793	5 616	53 034	263 846	165 742	419 995	2 320
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	29	7	1 046	30 711	625	983	19 638	136 896	174 165	322 148	1 720
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	18	2	276	8 582	170	372	4 614	19 201	91 044	106 623	325
315225	Men's & boys' cut & sew work clothing mfg	7	14	2	341	3 818	325	441	3 359	9 061	5 742	14 903	890
315228	Men's & boys' cut & sew other outerwear mfg	5	78	32	2 173	36 739	1 815	3 184	24 924	86 112	95 612	185 150	4 514
31523	Women's & girls' cut & sew apparel mfg	3	763	323	27 556	767 893	15 155	26 331	302 450	2 291 737	3 528 068	5 817 399	34 933
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	2	67	23	1 844	39 481	1 443	3 089	23 311	130 236	181 428	315 772	2 847
315232	Women's & girls' cut & sew blouse & shirt mfg	4	154	56	4 160	90 336	2 805	4 768	44 331	333 026	554 762	882 415	5 351
315233	Women's & girls' cut & sew dress mfg	3	259	116	10 245	284 785	5 361	8 841	119 288	853 022	1 354 740	2 186 288	13 471
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	144	67	6 010	177 526	3 197	5 715	73 722	554 280	869 132	1 434 235	5 586
315239	Women's & girls' cut & sew other outerwear mfg	5	139	61	5 297	175 765	2 349	3 918	41 798	421 173	568 006	998 689	7 678
31529	Other cut & sew apparel mfg	4	191	24	1 949	45 371	1 523	2 723	28 625	128 276	140 932	269 467	2 559
315292	Fur & leather apparel mfg	6	130	8	692	17 592	460	834	9 277	47 616	77 227	123 760	1 606
315299	All other cut & sew apparel mfg	4	59	15	g	D	D	D	D	D	D	D	D

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31-33	NEW YORK—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	432	92	8 647	182 692	6 983	12 740	116 846	392 142	336 123	737 136	10 608
31599	Apparel accessories & other apparel mfg	1	432	92	8 647	182 692	6 983	12 740	116 846	392 142	336 123	737 136	10 608
315991	Hat, cap, & millinery mfg	5	86	19	2 561	57 704	2 228	3 939	43 691	114 403	58 333	179 861	4 566
315992	Glove & mitten mfg	5	17	6	432	7 151	367	606	4 748	14 562	14 763	29 660	419
315993	Men's & boys' neckwear mfg	1	53	21	1 599	38 799	1 270	2 337	21 052	107 673	87 885	197 543	940
315999	Other apparel accessories & other apparel mfg	2	276	46	4 055	79 038	3 118	5 858	47 355	155 504	175 142	330 072	4 683
316	Leather & allied product mfg .	1	229	59	5 699	124 763	4 162	8 546	76 291	326 940	305 723	625 243	7 024
3161	Leather & hide tanning & finishing	4	72	21	1 156	30 654	874	1 864	21 347	59 941	77 171	136 578	3 021
31611	Leather & hide tanning & finishing	4	72	21	1 156	30 654	874	1 864	21 347	59 941	77 171	136 578	3 021
316110	Leather & hide tanning & finishing	4	72	21	1 156	30 654	874	1 864	21 347	59 941	77 171	136 578	3 021
3162	Footwear mfg	—	25	10	1 935	39 249	1 469	3 265	24 152	113 255	115 468	216 309	1 025
31621	Footwear mfg	—	25	10	1 935	39 249	1 469	3 265	24 152	113 255	115 468	216 309	1 025
316211	Rubber & plastics footwear mfg	—	2	2	e	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	4	2	875	16 745	700	1 786	11 560	52 187	27 553	70 238	D
316213	Men's footwear (except athletic) mfg .	—	2	2	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	—	11	3	471	11 386	257	482	3 820	22 091	16 147	37 785	278
3169	Other leather & allied product mfg	1	132	28	2 608	54 860	1 819	3 417	30 792	153 744	113 084	272 356	2 978
31699	Other leather & allied product mfg	1	132	28	2 608	54 860	1 819	3 417	30 792	153 744	113 084	272 356	2 978
316991	Luggage mfg	1	32	10	928	17 691	559	1 018	8 276	71 155	50 539	120 803	899
316992	Women's handbag & purse mfg	2	49	7	706	19 070	524	1 016	10 602	41 795	35 732	80 001	1 431
316993	Personal leather good (except women's handbag & purse) mfg	1	27	7	537	9 201	403	722	6 328	14 559	9 340	24 343	309
316999	All other leather good mfg	—	24	4	437	8 898	333	661	5 586	26 235	17 473	47 209	339
321	Wood product mfg	3	575	152	10 375	250 226	8 357	16 387	174 942	571 216	762 086	1 333 633	43 557
3211	Sawmills & wood preservation	4	147	38	2 689	71 026	2 192	4 673	51 892	196 225	340 285	537 494	22 042
32111	Sawmills & wood preservation	4	147	38	2 689	71 026	2 192	4 673	51 892	196 225	340 285	537 494	22 042
321113	Sawmills	4	138	38	2 627	69 638	2 144	4 584	50 959	189 932	311 711	503 668	21 376
3212	Veneer, plywood, & engineered wood product mfg	1	34	15	891	22 769	697	1 395	15 643	47 835	69 162	116 331	4 497
32121	Veneer, plywood, & engineered wood product mfg	1	34	15	891	22 769	697	1 395	15 643	47 835	69 162	116 331	4 497
321211	Hardwood veneer & plywood mfg	1	8	2	c	D	D	D	D	D	D	D	D
321214	Truss mfg	3	20	9	378	9 694	275	541	5 987	20 373	26 783	47 215	987
321219	Reconstituted wood product mfg	—	4	3	198	5 645	146	284	3 722	14 889	22 575	36 731	3 161
3219	Other wood product mfg	3	394	99	6 795	156 431	5 468	10 319	107 407	327 156	352 639	679 808	17 018
32191	Millwork	3	169	34	2 294	57 595	1 851	3 545	41 280	114 341	133 663	247 554	8 398
321911	Wood window & door mfg	6	51	12	704	19 841	548	1 011	14 253	39 659	39 620	78 917	2 595
321912	Cut stock, resawing lumber, & planing	2	52	14	890	18 454	766	1 501	13 458	39 367	54 768	94 135	4 321
321918	Other millwork (including flooring)	2	66	8	700	19 300	537	1 033	13 569	35 315	39 275	74 502	1 482
32192	Wood container & pallet mfg	2	105	28	1 731	32 791	1 457	2 573	23 683	66 891	74 467	140 849	3 726
321920	Wood container & pallet mfg	2	105	28	1 731	32 791	1 457	2 573	23 683	66 891	74 467	140 849	3 726
32199	All other wood product mfg	3	120	37	2 770	66 045	2 160	4 201	42 444	145 924	144 509	291 405	4 894
321991	Manufactured home (mobile home) mfg	—	1	1	c	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	2	24	12	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	4	95	24	1 701	36 752	1 428	2 734	26 249	74 944	61 563	137 387	3 238

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW YORK—Con.													
31-33	Manufacturing—Con.												
322	Paper mfg	1	405	239	27 055	972 164	20 645	42 571	628 717	2 364 714	2 771 584	5 139 652	313 910
3221	Pulp, paper, & paperboard mills	—	50	48	8 829	384 070	6 679	14 679	262 872	1 032 170	1 226 733	2 258 199	186 417
32212	Paper mills	—	34	33	7 498	330 713	5 706	12 364	227 019	904 220	1 068 096	1 970 182	D
322121	Paper (except newsprint) mills	—	32	31	i	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	1	15	14	g	D	D	D	D	D	D	D	64 447
322130	Paperboard mills	1	15	14	g	D	D	D	D	D	D	D	64 447
3222	Converted paper product mfg	2	355	191	18 226	588 094	13 966	27 892	365 845	1 332 544	1 544 851	2 881 453	127 493
32221	Paperboard container mfg	2	163	105	10 089	333 344	7 720	15 642	201 178	736 272	871 456	1 604 737	60 093
322211	Corrugated & solid fiber box mfg	2	84	57	4 847	163 314	3 433	6 948	91 357	341 488	527 077	871 924	30 342
322212	Folding paperboard box mfg	1	41	30	3 217	112 364	2 571	5 453	70 685	244 682	220 262	464 004	21 568
322213	Setup paperboard box mfg	3	21	9	1 020	24 248	857	1 365	14 273	47 464	33 069	80 201	3 066
322214	Fiber can, tube, drum, & similar products mfg	3	11	6	389	13 312	318	622	8 348	32 787	39 985	72 351	D
322215	Nonfolding sanitary food container mfg	—	6	3	616	20 106	541	1 254	16 515	69 851	51 063	116 257	D
32222	Paper bag & coated & treated paper mfg	1	59	20	2 565	83 942	1 899	3 896	57 888	201 068	265 691	474 239	12 771
322222	Coated & laminated paper mfg	—	40	13	1 723	55 535	1 205	2 393	37 215	138 503	177 090	323 634	9 015
322224	Uncoated paper & multiwall bag mfg	—	6	2	460	12 624	410	907	10 894	24 125	38 392	62 107	D
322225	Laminated aluminum foil mfg for flexible packaging uses	9	2	1	c	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	—	5	3	179	6 767	135	274	3 504	15 223	11 674	26 724	495
32223	Stationery product mfg	1	79	36	3 388	99 036	2 709	5 063	65 454	206 386	182 731	390 997	20 721
322231	Die-cut paper & paperboard office supplies mfg	3	39	16	1 142	26 137	927	1 679	17 590	53 736	31 251	85 297	2 240
322232	Envelope mfg	—	22	15	1 890	63 880	1 510	2 859	42 180	132 409	137 050	270 673	14 277
322233	Stationery, tablet, & related product mfg	1	18	5	356	9 019	272	525	5 684	20 241	14 430	35 027	4 204
32229	Other converted paper product mfg	6	54	30	2 184	71 772	1 638	3 291	41 325	188 818	224 973	411 480	33 908
322291	Sanitary paper product mfg	8	13	8	706	21 177	576	1 227	15 974	99 574	124 261	223 533	25 768
322299	All other converted paper product mfg	4	41	22	1 478	50 595	1 062	2 064	25 351	89 244	100 712	187 947	8 140
323	Printing & related support activities	3	3 005	562	50 284	1 682 982	36 630	71 735	1 060 269	4 139 181	2 221 445	6 348 282	589 024
3231	Printing & related support activities	3	3 005	562	50 284	1 682 982	36 630	71 735	1 060 269	4 139 181	2 221 445	6 348 282	589 024
32311	Printing	3	2 577	474	43 368	1 436 442	31 349	61 233	896 067	3 668 453	2 110 108	5 766 710	566 834
323110	Commercial lithographic printing	3	1 351	279	25 428	928 196	18 196	35 942	579 525	2 455 987	1 317 529	3 770 393	478 262
323111	Commercial gravure printing	3	26	6	382	14 040	280	613	9 102	36 148	37 651	75 162	3 586
323112	Commercial flexographic printing	2	55	16	1 053	34 271	696	1 306	19 259	80 360	70 197	149 171	8 402
323113	Commercial screen printing	5	241	40	3 500	88 016	2 724	4 921	53 009	192 748	141 792	324 696	18 860
323114	Quick printing	3	419	20	2 362	62 913	1 656	2 756	39 586	123 163	81 419	204 490	10 411
323115	Digital printing	3	34	7	398	13 912	275	525	6 996	29 166	13 813	42 905	1 498
323116	Manifold business form printing	1	60	23	2 369	67 178	1 498	2 825	39 901	232 472	115 026	348 086	15 370
323117	Book printing	2	64	26	2 788	94 108	2 298	4 647	67 516	176 004	120 998	297 083	16 196
323118	Blankbook, looseleaf binder, & device mfg	2	37	24	2 202	52 497	1 783	4 053	34 967	175 716	97 162	273 521	5 038
323119	Other commercial printing	4	290	33	2 886	81 311	1 943	3 645	46 206	166 689	114 521	281 203	9 211
32312	Support activities for printing	3	428	88	6 916	246 540	5 281	10 502	164 202	470 728	111 337	581 572	22 190
323121	Tradebinding & related work	3	109	39	2 489	63 557	2 095	3 921	44 288	122 878	25 078	147 450	7 420
323122	Prepress services	3	319	49	4 427	182 983	3 186	6 581	119 914	347 850	86 259	434 122	14 770
324	Petroleum & coal products mfg	1	152	25	1 742	80 433	1 229	2 540	49 393	291 757	512 405	800 619	22 490
3241	Petroleum & coal products mfg	1	152	25	1 742	80 433	1 229	2 540	49 393	291 757	512 405	800 619	22 490
32412	Asphalt paving, roofing, & saturated materials mfg	1	133	20	1 474	70 709	1 068	2 260	44 544	259 612	443 810	702 258	20 496
324121	Asphalt paving mixture & block mfg	1	125	18	1 364	67 319	983	2 084	42 116	244 583	415 104	658 481	19 616
324122	Asphalt shingle & coating materials mfg	2	8	2	110	3 390	85	176	2 428	15 029	28 706	43 777	880

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
NEW YORK—Con.														
31-33	Manufacturing—Con.													
324	Petroleum & coal products mfg—Con.													
3241	Petroleum & coal products mfg—Con.													
32419	Other petroleum & coal products mfg	2	17	5	e	D	D	D	D	D	D	D	D	
324191	Petroleum lubricating oil & grease mfg	2	12	5		230	7 893	136	222	3 639	22 488	38 239	58 191	936
325	Chemical mfg	1	634	257		65 298	2 849 627	36 064	80 607	1 305 188	12 668 191	7 821 666	20 544 485	1 119 411
3251	Basic chemical mfg	1	88	45		5 995	302 423	3 627	8 025	167 270	1 179 774	1 106 202	2 284 090	186 541
32512	Industrial gas mfg	1	16	5	e	D	D	D	D	D	D	D	D	8 690
325120	Industrial gas mfg	1	16	5	e	D	D	D	D	D	D	D	D	8 690
32513	Dye & pigment mfg	—	7	1		1 120	48 821	588	1 252	27 272	166 992	126 624	299 836	D
325131	Inorganic dye & pigment mfg	1	3	1	e	D	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	4	4	f	D	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	27	14		1 755	91 924	1 201	2 630	57 911	376 759	322 090	687 518	99 285
325181	Alkalies & chlorine mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	23	12	f	D	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	36	20		2 752	144 477	1 689	3 859	76 013	522 156	602 829	1 128 619	60 446
325192	Cyclic crude & intermediate mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	2	31	19	g	D	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	18	9		2 707	153 955	1 757	3 725	85 666	601 015	542 247	1 137 866	104 333
32521	Resin & synthetic rubber mfg	1	16	8	h	D	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	2	10	6	f	D	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	—	6	2	g	D	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	2	1	c	D	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	1	c	D	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	5	27	8		920	26 496	698	1 460	18 332	278 014	265 365	552 428	8 065
32531	Fertilizer mfg	2	21	6	f	D	D	D	D	D	D	D	D	6 054
325312	Phosphatic fertilizer mfg	9	2	1	c	D	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	1	18	4		500	11 245	373	771	7 127	39 300	122 705	162 539	D
32532	Pesticide & other agricultural chemical mfg	9	6	2	c	D	D	D	D	D	D	D	D	2 011
325320	Pesticide & other agricultural chemical mfg	9	6	2	c	D	D	D	D	D	D	D	D	2 011
3254	Pharmaceutical & medicine mfg	—	126	66		18 825	793 840	9 937	19 855	348 307	4 301 479	1 728 885	6 023 483	401 680
32541	Pharmaceutical & medicine mfg	—	126	66		18 825	793 840	9 937	19 855	348 307	4 301 479	1 728 885	6 023 483	401 680
325411	Medicinal & botanical mfg	6	25	5	f	D	D	D	D	D	D	D	D	20 462
325412	Pharmaceutical preparation mfg	—	86	52		15 420	640 199	8 705	17 453	291 278	3 896 502	1 374 294	5 242 240	365 840
325413	In-vitro diagnostic substance mfg	—	9	6		2 355	114 490	678	1 293	38 292	342 723	166 284	526 550	14 768
325414	Biological product (except diagnostic) mfg	—	6	3	e	D	D	D	D	D	D	D	D	610
3255	Paint, coating, & adhesive mfg	3	91	27		2 098	77 115	1 222	2 430	31 324	252 034	258 032	513 126	11 396
32551	Paint & coating mfg	3	62	18		1 308	46 882	715	1 355	18 318	110 640	136 765	246 808	6 305
325510	Paint & coating mfg	3	62	18		1 308	46 882	715	1 355	18 318	110 640	136 765	246 808	6 305
32552	Adhesive mfg	2	29	9		790	30 233	507	1 075	13 006	141 394	121 267	266 318	5 091
325520	Adhesive mfg	2	29	9		790	30 233	507	1 075	13 006	141 394	121 267	266 318	5 091
3256	Soap, cleaning compound, & toilet preparation mfg	1	175	55		10 559	307 804	6 749	14 066	136 629	2 089 060	1 270 266	3 345 386	63 975
32561	Soap & cleaning compound mfg	4	93	23		2 340	73 267	1 584	3 110	39 540	250 377	227 402	480 166	11 091
325611	Soap & other detergent mfg	5	36	6		992	29 036	741	1 503	18 146	98 191	87 479	187 296	6 932
325612	Polish & other sanitation good mfg	4	50	14		1 121	31 394	715	1 343	15 105	104 554	86 220	192 612	2 047
325613	Surface active agent mfg	3	7	3		227	12 837	128	264	6 289	47 632	53 703	100 258	2 112
32562	Toilet preparation mfg	1	82	32		8 219	234 537	5 165	10 956	97 089	1 838 683	1 042 864	2 865 220	52 884
325620	Toilet preparation mfg	1	82	32		8 219	234 537	5 165	10 956	97 089	1 838 683	1 042 864	2 865 220	52 884

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg.....	—	109	47	24 194	1 187 994	12 074	31 046	517 660	3 966 815	2 650 669	6 688 106	343 421
32591	Printing ink mfg.....	—	16	4	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg.....	—	16	4	e	D	D	D	D	D	D	D	D
32592	Explosives mfg.....	3	2	2	e	D	D	D	D	D	D	D	D
325920	Explosives mfg.....	3	2	2	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	—	91	41	23 403	1 160 683	11 579	29 917	502 354	3 889 740	2 566 557	6 528 875	337 295
325991	Custom compounding of purchased resin...	2	16	6	626	23 492	344	678	11 872	57 964	85 739	144 288	D
325992	Photographic film, paper, plate, & chemical mfg.....	—	23	12	21 175	1 074 929	10 364	27 497	461 766	3 656 601	2 255 620	5 982 913	D
325998	All other miscellaneous chemical product & preparation mfg.....	2	52	23	1 602	62 262	871	1 742	28 716	175 175	225 198	401 674	D
326	Plastics & rubber products mfg.....	2	740	371	37 810	1 059 864	28 978	55 218	658 734	2 774 214	2 408 666	5 178 793	237 429
3261	Plastics product mfg.....	2	663	341	34 197	938 993	26 238	49 705	573 876	2 437 293	2 069 852	4 501 752	210 692
32611	Unsupported plastics film, sheet, & bag mfg..	2	98	52	4 853	151 382	3 628	7 518	95 710	387 695	461 443	849 681	45 360
326111	Unsupported plastics bag mfg.....	1	52	27	2 901	86 935	2 242	4 634	58 001	228 497	225 893	453 072	14 679
326112	Unsupported plastics packaging film & sheet mfg.....	2	11	7	654	18 202	492	1 076	12 707	40 314	53 216	93 761	20 198
326113	Unsupported plastics film & sheet (except packaging) mfg.....	3	35	18	1 298	46 245	894	1 808	25 002	118 884	182 334	302 848	10 483
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	—	56	22	2 299	79 401	1 650	3 187	44 325	299 558	201 778	501 634	25 434
326121	Unsupported plastics profile shape mfg....	—	46	16	1 688	62 929	1 150	2 298	34 347	242 018	133 439	378 139	20 472
326122	Plastics pipe & pipe fitting mfg.....	—	10	6	611	16 472	500	889	9 978	57 540	68 339	123 495	4 962
32613	Laminated plastics plate, sheet, & shape mfg....	7	21	5	264	8 241	208	334	6 178	22 750	18 177	41 167	2 214
326130	Laminated plastics plate, sheet, & shape mfg.....	7	21	5	264	8 241	208	334	6 178	22 750	18 177	41 167	2 214
32614	Polystyrene foam product mfg.....	1	20	10	1 299	33 678	965	2 144	21 928	158 100	91 536	247 986	9 827
326140	Polystyrene foam product mfg.....	1	20	10	1 299	33 678	965	2 144	21 928	158 100	91 536	247 986	9 827
32615	Urethane & other foam product (except polystyrene) mfg.....	2	14	9	1 201	39 003	846	1 665	21 920	117 073	92 692	206 610	10 199
326150	Urethane & other foam product (except polystyrene) mfg....	2	14	9	1 201	39 003	846	1 665	21 920	117 073	92 692	206 610	10 199
32616	Plastics bottle mfg.....	—	13	8	853	20 301	622	1 215	12 532	53 363	52 106	104 956	12 426
326160	Plastics bottle mfg....	—	13	8	853	20 301	622	1 215	12 532	53 363	52 106	104 956	12 426
32619	Other plastics product mfg.....	2	441	235	23 428	606 987	18 319	33 642	371 283	1 398 754	1 152 120	2 549 718	105 232
326192	Resilient floor covering mfg.....	1	5	2	383	12 383	331	637	9 087	36 475	30 557	65 466	D
326199	All other plastics product mfg.....	2	428	233	23 009	593 826	17 959	32 951	361 672	1 360 495	1 120 198	2 481 096	103 941
3262	Rubber product mfg.....	1	77	30	3 613	120 871	2 740	5 513	84 858	336 921	338 814	677 041	26 737
32621	Tire mfg.....	—	25	6	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	—	7	2	g	D	D	D	D	D	D	D	D
326212	Tire retreading.....	5	18	4	c	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	—	5	3	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	4	47	21	1 792	44 615	1 295	2 708	27 126	116 805	103 970	221 109	7 882
326291	Rubber product mfg for mechanical use.....	3	17	7	568	13 418	442	928	9 194	43 081	36 012	78 833	3 623
326299	All other rubber product mfg.....	4	30	14	1 224	31 197	853	1 780	17 932	73 724	67 958	142 276	4 259

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NEW YORK—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	712	204	20 475	711 402	15 117	30 689	462 980	2 195 707	1 406 990	3 611 391	270 569
3271	Clay product & refractory mfg	—	69	28	5 306	168 411	3 879	7 813	107 098	490 355	189 670	675 968	36 756
32711	Pottery, ceramics, & plumbing fixture mfg	—	48	17	3 799	114 607	2 748	5 335	70 673	350 605	107 341	456 277	22 621
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	33	8	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	—	12	8	2 254	74 667	1 651	3 227	45 765	254 528	76 497	328 987	17 347
32712	Clay building material & refractories mfg	—	21	11	1 507	53 804	1 131	2 478	36 425	139 750	82 329	219 691	14 135
327122	Ceramic wall & floor tile mfg	—	5	1	e	D	D	D	D	D	D	D	D
327124	Clay refractory mfg	—	3	2	c	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	9	6	785	31 217	557	1 149	19 616	81 775	50 625	130 985	D
3272	Glass & glass product mfg	—	164	35	4 195	146 204	3 232	6 651	100 061	469 977	268 632	738 560	131 969
32721	Glass & glass product mfg	—	164	35	4 195	146 204	3 232	6 651	100 061	469 977	268 632	738 560	131 969
327212	Other pressed & blown glass & glassware mfg	—	45	7	1 494	55 290	1 155	2 383	36 600	219 976	68 192	282 729	D
327213	Glass container mfg	—	3	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	2	115	25	g	D	D	D	D	D	D	D	8 559
3273	Cement & concrete product mfg	2	326	86	5 417	193 664	3 896	7 565	124 552	543 267	456 307	1 000 367	62 865
32731	Cement mfg	—	10	4	523	24 978	382	869	17 038	127 203	65 360	193 530	18 380
327310	Cement mfg	—	10	4	523	24 978	382	869	17 038	127 203	65 360	193 530	18 380
32732	Ready-mix concrete mfg	2	171	45	2 634	100 985	1 974	3 808	69 655	240 398	270 821	512 204	22 316
327320	Ready-mix concrete mfg	2	171	45	2 634	100 985	1 974	3 808	69 655	240 398	270 821	512 204	22 316
32733	Concrete pipe, brick, & block mfg	1	58	19	956	30 321	575	1 152	14 772	81 531	66 524	148 776	8 845
327331	Concrete block & brick mfg	2	48	16	711	23 242	389	801	10 297	64 034	52 611	117 397	7 735
327332	Concrete pipe mfg	—	10	3	245	7 079	186	351	4 475	17 497	13 913	31 379	1 110
32739	Other concrete product mfg	1	87	18	1 304	37 380	965	1 736	23 087	94 135	53 602	145 857	13 324
327390	Other concrete product mfg	1	87	18	1 304	37 380	965	1 736	23 087	94 135	53 602	145 857	13 324
3274	Lime & gypsum product mfg	—	14	5	660	26 453	521	1 265	20 044	64 703	88 194	152 754	5 431
32742	Gypsum product mfg	—	13	5	f	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	13	5	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	139	50	4 897	176 670	3 589	7 395	111 225	627 405	404 187	1 043 742	33 548
32791	Abrasive product mfg	—	32	21	2 571	94 295	1 871	3 877	55 183	352 220	246 346	607 445	18 817
327910	Abrasive product mfg	—	32	21	2 571	94 295	1 871	3 877	55 183	352 220	246 346	607 445	18 817
32799	All other nonmetallic mineral product mfg	1	107	29	2 326	82 375	1 718	3 518	56 042	275 185	157 841	436 297	14 731
327991	Cut stone & stone product mfg	4	68	11	762	21 686	600	1 198	15 365	45 026	31 941	76 029	2 743
327992	Ground or treated mineral & earth mfg	—	12	4	447	18 216	302	633	10 887	54 153	31 410	82 580	4 815
327993	Mineral wool mfg	—	11	5	541	22 294	444	916	17 393	126 271	42 791	175 935	5 215
327999	All other miscellaneous nonmetallic mineral product mfg	—	16	9	576	20 179	372	771	12 397	49 735	51 699	101 753	1 958
331	Primary metal mfg	—	208	104	16 849	678 459	12 279	26 564	455 532	1 655 819	3 862 918	5 545 987	212 332
3311	Iron & steel mills & ferroalloy mfg	—	14	12	2 556	124 079	1 755	3 924	86 336	595 495	359 912	994 935	39 899
33111	Iron & steel mills & ferroalloy mfg	—	14	12	2 556	124 079	1 755	3 924	86 336	595 495	359 912	994 935	39 899
331111	Iron & steel mills	—	12	10	g	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	2	2	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	16	9	1 431	57 315	1 026	2 107	33 984	133 311	270 276	402 515	14 418
33121	Iron & steel pipes & tubes mfg from purchased steel	—	6	3	388	11 158	315	664	7 909	26 287	49 240	76 051	5 152
331210	Iron & steel pipes & tubes mfg from purchased steel	—	6	3	388	11 158	315	664	7 909	26 287	49 240	76 051	5 152
33122	Rolling & drawing of purchased steel	—	10	6	1 043	46 157	711	1 443	26 075	107 024	221 036	326 464	9 266
331221	Cold-rolled steel shape mfg	—	3	3	776	37 967	514	1 052	20 265	85 123	180 881	265 501	7 569
331222	Steel wire drawing	1	7	3	267	8 190	197	391	5 810	21 901	40 155	60 963	1 697

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3313	Alumina & aluminum production & processing . . .	-	10	10	3 799	171 805	2 935	6 514	118 838	260 603	1 963 310	2 221 114	86 399
33131	Alumina & aluminum production & processing	-	10	10	3 799	171 805	2 935	6 514	118 838	260 603	1 963 310	2 221 114	86 399
331312	Primary aluminum production	-	2	2	g	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum . . .	-	2	2	c	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	5	5	1 764	72 105	1 381	3 064	50 339	173 379	413 608	585 852	16 295
3314	Nonferrous metal (except aluminum) production & processing	-	60	26	4 716	182 035	3 141	6 713	116 781	420 637	1 050 532	1 468 234	46 106
33141	Nonferrous metal (except aluminum) smelting & refining	-	21	4	344	13 394	184	406	6 941	43 090	118 407	159 941	4 102
331419	Other nonferrous metal primary smelting & refining	-	21	4	344	13 394	184	406	6 941	43 090	118 407	159 941	4 102
33142	Copper rolling, drawing, extruding, & alloying . . .	-	12	8	2 775	102 890	1 972	4 132	71 361	215 402	533 475	755 778	24 122
331421	Copper rolling, drawing, & extruding	-	8	4	1 637	74 850	1 193	2 564	51 557	144 264	416 612	566 423	16 488
331422	Copper wire (except mechanical) drawing	-	3	3	g	D	D	D	D	D	D	D	D
331423	Secondary smelting, refining, & alloying of copper	-	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	-	27	14	1 597	65 751	985	2 175	38 479	162 145	398 650	552 515	17 882
331491	Other nonferrous metal rolling, drawing, & extruding	1	12	7	1 016	41 903	652	1 472	25 561	114 166	165 547	274 007	5 292
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	-	15	7	581	23 848	333	703	12 918	47 979	233 103	278 508	12 590
3315	Foundries	-	108	47	4 347	143 225	3 422	7 306	99 593	245 773	218 888	459 189	25 510
33151	Ferrous metal foundries	-	23	10	1 313	41 612	1 000	2 050	28 276	81 570	66 495	142 342	5 001
331511	Iron foundries	-	15	7	652	20 422	496	973	13 593	36 823	33 286	67 558	3 488
331512	Steel investment foundries	-	3	2	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	5	1	c	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	85	37	3 034	101 613	2 422	5 256	71 317	164 203	152 393	316 847	20 509
331521	Aluminum die-casting foundries	-	10	7	797	34 064	636	1 419	24 805	43 367	63 725	107 952	5 367
331522	Nonferrous (except aluminum) die-casting foundries	-	22	12	967	33 791	761	1 758	23 381	64 179	43 538	107 623	8 320
331524	Aluminum foundries (except die-casting)	1	26	10	869	23 984	700	1 442	17 063	40 083	22 158	61 720	6 511
331525	Copper foundries (except die-casting)	2	18	7	283	6 118	228	461	4 201	10 630	5 221	15 970	256
331528	Other nonferrous foundries (except die-casting)	-	9	1	118	3 656	97	176	1 867	5 944	17 751	23 582	55
332	Fabricated metal product mfg	1	2 771	763	67 717	2 204 994	50 203	101 430	1 377 079	4 837 937	3 418 191	8 267 322	380 085
3321	Forging & stamping	1	164	69	4 556	148 621	3 437	7 043	92 861	301 522	255 067	553 727	18 325
33211	Forging & stamping	1	164	69	4 556	148 621	3 437	7 043	92 861	301 522	255 067	553 727	18 325
332111	Iron & steel forging	1	16	8	599	19 511	468	990	14 738	48 607	52 571	97 577	4 978
332114	Custom roll forming	-	20	6	354	11 829	259	500	7 273	24 619	32 688	60 242	973
332116	Metal stamping	1	122	52	3 464	112 703	2 623	5 387	68 856	218 461	160 721	377 449	11 817
3322	Cutlery & handtool mfg	1	96	36	4 660	137 896	3 382	7 046	79 378	347 327	246 409	606 573	23 267
33221	Cutlery & handtool mfg	1	96	36	4 660	137 896	3 382	7 046	79 378	347 327	246 409	606 573	23 267
332211	Cutlery & flatware (except precious) mfg	2	20	11	1 965	53 762	1 564	3 125	37 479	127 620	69 184	194 695	9 528
332212	Hand & edge tool mfg	-	58	15	1 566	56 519	965	1 931	24 436	149 049	98 229	248 213	7 268
332213	Saw blade & handsaw mfg	-	12	4	786	19 786	607	1 476	12 613	58 226	68 336	140 423	5 874
332214	Kitchen utensil, pot, & pan mfg	4	6	6	343	7 829	246	514	4 850	12 432	10 660	23 242	597

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW YORK—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	620	187	13 608	443 185	9 700	19 438	268 234	877 845	770 967	1 640 674	37 906
33231	Plate work & fabricated structural product mfg	2	166	44	3 541	118 919	2 319	4 854	65 555	236 982	266 321	501 583	8 405
332311	Prefabricated metal building & component mfg	—	14	6	724	25 410	448	1 026	11 126	41 026	35 833	76 762	915
332312	Fabricated structural metal mfg	2	118	33	2 341	78 929	1 503	3 118	45 051	169 788	208 973	377 483	6 759
332313	Plate work mfg	1	34	5	476	14 580	368	710	9 378	26 168	21 515	47 338	731
33232	Ornamental & architectural metal products mfg	1	454	143	10 067	324 266	7 381	14 584	202 679	640 863	504 646	1 139 091	29 501
332321	Metal window & door mfg	2	94	32	2 224	58 894	1 603	3 232	35 339	141 948	119 693	261 464	3 235
332322	Sheet metal work mfg	1	236	90	6 444	220 603	4 890	9 589	142 506	406 183	312 706	715 143	22 704
332323	Ornamental & architectural metal work mfg	1	124	21	1 399	44 769	888	1 763	24 834	92 732	72 247	162 484	3 562
3324	Boiler, tank, & shipping container mfg	—	82	40	5 004	197 839	3 537	7 427	121 012	436 679	551 737	1 016 518	33 658
33241	Power boiler & heat exchanger mfg	—	34	18	2 784	106 891	1 867	3 924	58 032	223 957	162 782	392 203	8 194
332410	Power boiler & heat exchanger mfg	—	34	18	2 784	106 891	1 867	3 924	58 032	223 957	162 782	392 203	8 194
33242	Metal tank (heavy gauge) mfg	—	22	13	1 123	42 765	772	1 564	24 808	107 777	40 021	149 681	3 558
332420	Metal tank (heavy gauge) mfg	—	22	13	1 123	42 765	772	1 564	24 808	107 777	40 021	149 681	3 558
33243	Metal can, box, & other metal container (light gauge) mfg	—	26	9	1 097	48 183	898	1 939	38 172	104 945	348 934	474 634	21 906
332431	Metal can mfg	—	7	5	831	40 869	688	1 538	33 662	90 400	336 078	447 064	21 515
332439	Other metal container mfg	3	19	4	266	7 314	210	401	4 510	14 545	12 856	27 570	391
3325	Hardware mfg	2	55	26	3 335	102 602	2 475	4 765	62 816	256 445	135 850	393 998	12 966
33251	Hardware mfg	2	55	26	3 335	102 602	2 475	4 765	62 816	256 445	135 850	393 998	12 966
332510	Hardware mfg	2	55	26	3 335	102 602	2 475	4 765	62 816	256 445	135 850	393 998	12 966
3326	Spring & wire product mfg	3	77	19	1 833	49 534	1 399	2 572	30 826	105 061	80 002	184 772	8 670
33261	Spring & wire product mfg	3	77	19	1 833	49 534	1 399	2 572	30 826	105 061	80 002	184 772	8 670
332612	Spring (light gauge) mfg	5	9	4	397	10 821	313	533	7 857	26 327	14 872	41 432	3 355
332618	Other fabricated wire product mfg	3	63	15	1 404	37 681	1 063	1 993	22 451	75 598	62 991	138 490	5 129
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	1 118	217	18 023	580 869	13 837	27 469	382 221	1 192 425	650 087	1 821 473	102 391
33271	Machine shops	1	911	129	10 758	348 154	8 229	15 641	227 773	676 482	291 947	954 976	57 986
332710	Machine shops	1	911	129	10 758	348 154	8 229	15 641	227 773	676 482	291 947	954 976	57 986
33272	Turned product & screw, nut, & bolt mfg	1	207	88	7 265	232 715	5 608	11 828	154 448	515 943	358 140	866 497	44 405
332721	Precision turned product mfg	—	153	65	5 649	176 977	4 524	9 549	124 124	379 966	251 412	625 498	36 194
332722	Bolt, nut, screw, rivet, & washer mfg	4	54	23	1 616	55 738	1 084	2 279	30 324	135 977	106 728	240 999	8 211
3328	Coating, engraving, heat treating, & allied activities	1	275	83	6 003	171 072	4 654	9 292	107 985	367 071	161 226	520 175	84 071
33281	Coating, engraving, heat treating, & allied activities	1	275	83	6 003	171 072	4 654	9 292	107 985	367 071	161 226	520 175	84 071
332811	Metal heat treating	1	28	12	493	16 846	370	720	9 848	40 045	8 951	49 017	3 450
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	—	95	32	2 814	82 691	2 221	4 593	55 141	188 640	92 331	272 453	57 684
332813	Electroplating, plating, polishing, anodizing, & coloring	1	152	39	2 696	71 535	2 063	3 979	42 996	138 386	59 944	198 705	22 937
3329	Other fabricated metal product mfg	—	284	86	10 695	373 376	7 782	16 378	231 746	953 562	566 846	1 529 412	58 831
33291	Metal valve mfg	—	45	26	2 887	95 006	2 153	4 651	61 452	275 653	184 044	463 077	16 135
332911	Industrial valve mfg	—	17	11	1 491	50 865	1 134	2 417	32 545	158 051	95 109	256 511	5 677
332912	Fluid power valve & hose fitting mfg	1	16	6	593	19 297	390	846	12 268	44 845	18 102	64 029	3 205
332913	Plumbing fixture fitting & trim mfg	—	6	5	495	14 188	396	922	9 364	27 567	53 517	81 455	1 794
332919	Other metal valve & pipe fitting mfg	1	6	4	308	10 656	233	466	7 275	45 190	17 316	61 082	5 459

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg—Con.												
33299	All other fabricated metal product mfg	—	239	60	7 808	278 370	5 629	11 727	170 294	677 909	382 802	1 066 335	42 696
332991	Ball & roller bearing mfg	—	16	8	2 162	91 257	1 572	3 526	56 743	194 498	90 833	285 048	19 458
332994	Small arms mfg	—	8	2	g	D	D	D	D	D	D	D	4 201
332995	Other ordnance & accessories mfg	—	3	2	160	6 854	43	85	1 373	19 706	10 891	30 263	D
332996	Fabricated pipe & pipe fitting mfg	2	32	7	503	16 437	326	630	8 414	37 255	31 343	69 481	2 474
332997	Industrial pattern mfg	1	28	1	c	D	D	D	D	D	D	D	543
332998	Enameled iron & metal sanitary ware mfg	—	6	3	211	6 914	140	247	3 218	10 401	10 719	21 173	D
332999	All other miscellaneous fabricated metal product mfg	1	145	37	3 108	99 590	2 147	4 201	55 575	238 980	171 557	411 261	15 473
333	Machinery mfg	—	1 315	469	70 942	2 897 249	44 290	85 612	1 500 573	9 378 709	7 591 564	17 071 991	471 975
3331	Agriculture, construction, & mining machinery mfg	1	48	18	2 904	91 882	1 561	3 124	42 962	167 579	206 634	384 557	14 176
33311	Agricultural implement mfg	1	20	6	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	4	17	3	e	D	D	D	D	D	D	D	3 369
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	3	3	1 005	29 053	240	413	5 793	21 451	74 051	106 180	D
33312	Construction machinery mfg	2	23	10	952	28 413	612	1 223	14 992	48 569	67 337	117 550	4 969
333120	Construction machinery mfg	2	23	10	952	28 413	612	1 223	14 992	48 569	67 337	117 550	4 969
33313	Mining & oil & gas field machinery mfg	—	5	2	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	5	2	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	249	81	7 423	318 549	4 408	8 308	148 189	874 096	684 177	1 575 416	32 472
33321	Sawmill & woodworking machinery mfg	4	5	3	124	5 250	78	186	3 073	10 907	7 750	18 908	513
333210	Sawmill & woodworking machinery mfg	4	5	3	124	5 250	78	186	3 073	10 907	7 750	18 908	513
33322	Plastics & rubber industry machinery mfg	—	19	8	944	37 412	589	1 178	19 607	89 337	68 244	159 929	4 174
333220	Plastics & rubber industry machinery mfg	—	19	8	944	37 412	589	1 178	19 607	89 337	68 244	159 929	4 174
33329	Other industrial machinery mfg	—	225	70	6 355	275 887	3 741	6 944	125 509	773 852	608 183	1 396 579	27 785
333291	Paper industry machinery mfg	1	32	9	795	33 801	474	924	17 166	61 796	60 123	121 789	3 349
333292	Textile machinery mfg	—	24	8	581	22 452	371	686	11 069	42 028	31 194	72 235	1 569
333293	Printing machinery & equipment mfg	1	41	10	686	25 304	414	845	14 143	52 144	31 900	81 801	1 629
333294	Food product machinery mfg	1	31	9	501	17 986	277	503	7 941	38 296	46 139	83 841	1 250
333295	Semiconductor machinery mfg	—	8	6	1 705	93 104	1 046	1 687	40 704	407 548	253 105	681 081	12 181
333298	All other industrial machinery mfg	1	89	28	2 087	83 240	1 159	2 299	34 486	172 040	185 722	355 832	7 807
3333	Commercial & service industry machinery mfg	—	151	67	17 617	831 909	10 651	17 865	379 040	4 029 838	3 105 726	7 177 276	201 897
33331	Commercial & service industry machinery mfg	—	151	67	17 617	831 909	10 651	17 865	379 040	4 029 838	3 105 726	7 177 276	201 897
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	1	1	c	D	D	D	D	D	D	D	D
333313	Office machinery mfg	—	15	9	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	48	26	1 456	54 104	880	1 613	23 552	115 376	74 064	191 950	6 025
333315	Photographic & photocopying equipment mfg	—	41	13	j	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	1	42	16	1 855	78 868	1 100	1 523	25 038	144 204	72 200	216 205	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	97	51	7 323	256 555	4 918	10 061	143 952	695 023	727 406	1 427 651	25 386
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	97	51	7 323	256 555	4 918	10 061	143 952	695 023	727 406	1 427 651	25 386
333411	Air purification equipment mfg	-	10	4	265	8 472	168	331	4 394	16 328	23 608	38 923	480
333412	Industrial & commercial fan & blower mfg	-	10	5	931	31 075	376	746	11 696	109 491	43 527	153 483	4 021
333414	Heating equipment (except warm air furnaces) mfg	-	27	13	1 497	45 579	1 012	1 942	21 885	129 513	106 049	233 773	5 705
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	50	29	4 630	171 429	3 362	7 042	105 977	439 691	554 222	1 001 472	15 180
3335	Metalworking machinery mfg	1	422	107	10 863	424 038	7 430	14 517	252 429	839 653	564 155	1 400 406	58 399
33351	Metalworking machinery mfg	1	422	107	10 863	424 038	7 430	14 517	252 429	839 653	564 155	1 400 406	58 399
333511	Industrial mold mfg ...	1	94	21	1 504	54 314	1 178	2 276	36 824	104 588	36 910	140 817	9 674
333512	Machine tool (metal cutting types) mfg ...	-	20	13	3 105	134 266	1 906	3 675	70 990	275 117	246 257	530 733	14 186
333513	Machine tool (metal forming types) mfg ...	4	11	6	1 137	48 511	660	1 305	27 209	112 794	67 216	171 905	6 961
333514	Special die & tool, die set, jig, & fixture mfg .	3	185	40	2 710	90 356	2 079	3 954	61 941	162 768	69 523	234 312	14 821
333515	Cutting tool & machine tool accessory mfg ..	1	87	14	g	D	D	D	D	D	D	D	6 669
333516	Rolling mill machinery & equipment mfg	1	2	1	c	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg	1	23	12	1 071	48 601	664	1 442	27 941	93 720	86 343	177 770	D
3336	Engine, turbine, & power transmission equipment mfg	-	53	32	6 787	267 749	4 815	10 322	187 930	946 527	949 626	1 950 492	35 223
33361	Engine, turbine, & power transmission equipment mfg	-	53	32	6 787	267 749	4 815	10 322	187 930	946 527	949 626	1 950 492	35 223
333611	Turbine & turbine generator set unit mfg	-	9	7	2 891	138 057	2 213	4 560	100 486	432 180	465 456	951 082	17 952
333612	Speed changer, industrial high-speed drive, & gear mfg	3	20	12	g	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	15	10	1 247	40 789	937	1 830	26 061	86 040	58 960	144 485	5 175
333618	Other engine equipment mfg	-	9	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	295	113	18 025	706 567	10 507	21 415	346 071	1 825 993	1 353 840	3 156 193	104 422
33391	Pump & compressor mfg	-	36	25	5 534	236 825	3 455	6 985	129 951	721 741	693 466	1 381 687	49 054
333911	Pump & pumping equipment mfg	-	20	14	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	15	10	3 391	146 769	2 172	4 290	80 202	467 154	384 313	829 058	30 312
33392	Material handling equipment mfg	1	77	30	3 236	114 417	2 020	4 368	54 196	206 048	213 625	421 553	7 688
333921	Elevator & moving stairway mfg	3	20	12	783	28 183	556	1 226	15 535	59 053	40 823	99 746	1 279
333922	Conveyor & conveying equipment mfg	1	27	5	445	14 540	280	527	6 654	32 048	25 532	58 048	940
333923	Overhead traveling crane, hoist, & monorail system mfg .	-	10	5	462	15 513	254	600	7 573	42 682	22 854	65 986	1 301
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	20	8	1 546	56 181	930	2 015	24 434	72 265	124 416	197 773	4 168
33399	All other general-purpose machinery mfg	1	182	58	9 255	355 325	5 032	10 062	161 924	898 204	446 749	1 352 953	47 680
333991	Power-driven handtool mfg	1	13	4	426	16 766	201	394	6 315	35 291	24 830	60 466	6 340
333992	Welding & soldering equipment mfg	-	3	1	c	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	4	34	11	922	32 599	508	1 030	14 507	81 911	55 873	139 026	3 401
333994	Industrial process furnace & oven mfg ..	3	14	8	633	28 274	347	802	12 335	56 019	56 282	111 617	2 435
333995	Fluid power cylinder & actuator mfg	-	13	8	2 760	136 314	1 298	2 627	55 289	340 224	49 982	403 847	9 892
333997	Scale & balance (except laboratory) mfg	-	4	2	251	7 321	72	134	1 647	19 381	18 247	37 791	288
333999	All other miscellaneous general-purpose machinery mfg	1	94	24	4 016	124 800	2 500	4 892	67 799	335 332	220 799	549 871	23 407

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW YORK—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	—	975	433	86 243	3 541 667	43 927	87 451	1 264 620	8 449 091	6 530 471	15 113 667	536 066
3341	Computer & peripheral equipment mfg	—	93	30	12 544	552 320	5 911	10 499	155 545	1 175 998	939 921	2 048 399	75 803
33411	Computer & peripheral equipment mfg	—	93	30	12 544	552 320	5 911	10 499	155 545	1 175 998	939 921	2 048 399	75 803
334111	Electronic computer mfg	5	28	9	766	25 309	408	791	11 200	58 699	42 667	99 811	2 858
334113	Computer terminal mfg	1	9	2	435	20 932	254	507	8 649	43 948	72 728	122 660	610
334119	Other computer peripheral equipment mfg	—	53	18	11 275	503 507	5 206	9 100	133 777	1 066 451	821 653	1 816 259	71 625
3342	Communications equipment mfg	—	152	84	14 837	590 197	7 802	14 683	225 978	1 494 806	1 227 725	2 687 704	77 931
33421	Telephone apparatus mfg	2	33	23	2 908	133 880	1 166	2 131	38 533	331 448	300 064	620 176	20 461
334210	Telephone apparatus mfg	2	33	23	2 908	133 880	1 166	2 131	38 533	331 448	300 064	620 176	20 461
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	86	53	9 343	366 648	5 559	10 765	167 890	890 433	731 086	1 613 561	47 554
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	86	53	9 343	366 648	5 559	10 765	167 890	890 433	731 086	1 613 561	47 554
33429	Other communications equipment mfg	—	33	8	2 586	89 669	1 077	1 787	19 555	272 925	196 575	453 967	9 916
334290	Other communications equipment mfg	—	33	8	2 586	89 669	1 077	1 787	19 555	272 925	196 575	453 967	9 916
3343	Audio & video equipment mfg	4	38	4	440	11 998	268	445	4 405	21 820	27 407	48 897	661
33431	Audio & video equipment mfg	4	38	4	440	11 998	268	445	4 405	21 820	27 407	48 897	661
334310	Audio & video equipment mfg	4	38	4	440	11 998	268	445	4 405	21 820	27 407	48 897	661
3344	Semiconductor & other electronic component mfg	1	307	157	32 000	1 134 496	18 897	38 345	470 727	2 445 985	2 943 235	5 598 409	218 140
33441	Semiconductor & other electronic component mfg	1	307	157	32 000	1 134 496	18 897	38 345	470 727	2 445 985	2 943 235	5 598 409	218 140
334411	Electron tube mfg	—	6	3	2 050	60 263	1 477	3 347	38 178	175 939	205 850	384 732	3 930
334412	Bare printed circuit board mfg	—	66	21	4 750	133 093	3 463	6 970	77 912	389 387	266 385	648 599	34 057
334413	Semiconductor & related device mfg	2	41	17	7 830	382 684	3 238	6 504	103 126	625 583	481 083	1 167 165	98 661
334414	Electronic capacitor mfg	1	10	8	1 025	28 344	645	1 175	12 887	85 844	18 946	104 466	2 483
334415	Electronic resistor mfg	4	5	3	387	8 965	268	378	4 880	25 608	6 143	32 305	1 197
334416	Electronic coil, transformer, & other inductor mfg	1	31	20	1 595	40 617	1 318	2 602	23 271	84 013	31 365	113 866	3 619
334417	Electronic connector mfg	—	14	9	3 068	104 867	2 123	4 662	71 192	270 040	120 256	401 462	35 717
334418	Printed circuit assembly (electronic assembly) mfg	—	36	29	5 570	232 730	2 403	5 040	61 146	490 895	1 610 519	2 242 863	24 851
334419	Other electronic component mfg	1	98	47	5 725	142 933	3 962	7 667	78 135	298 676	202 688	502 951	13 625
3345	Navigational, measuring, medical, & control instruments mfg	—	304	137	24 119	1 177 274	9 460	20 145	362 575	3 143 641	1 271 560	4 439 776	121 313
33451	Navigational, measuring, medical, & control instruments mfg	—	304	137	24 119	1 177 274	9 460	20 145	362 575	3 143 641	1 271 560	4 439 776	121 313
334510	Electromedical & electrotherapeutic apparatus mfg	2	35	16	2 484	111 597	1 026	2 163	32 382	197 057	129 112	325 829	25 659
334511	Search, detection, navigation, & guidance instrument mfg	—	58	28	12 316	687 338	3 701	7 401	181 104	2 081 658	511 802	2 607 015	49 824
334512	Automatic environmental control mfg	6	12	4	306	9 538	227	490	5 762	21 921	16 360	38 580	1 000
334513	Industrial process control instrument mfg	2	43	19	1 461	57 375	695	1 165	19 163	121 160	87 596	210 401	3 467
334514	Totalizing fluid meter & counting device mfg	4	15	4	233	8 310	114	194	2 669	17 855	9 340	26 751	422
334515	Electricity measuring & testing instrument mfg	1	45	20	2 922	123 653	1 495	4 416	52 162	294 603	258 475	568 434	20 896
334516	Analytical laboratory instrument mfg	—	31	16	1 532	64 086	551	1 048	20 054	160 267	87 385	250 176	9 411
334517	Irradiation apparatus mfg	1	7	6	641	22 948	377	842	9 679	64 547	56 832	121 074	2 765

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg—Con.												
334518	Watch, clock, & part mfg	1	15	3	222	9 435	143	298	3 975	25 394	22 316	45 453	335
334519	Other measuring & controlling device mfg	1	43	21	2 002	82 994	1 131	2 128	35 625	159 179	92 342	246 063	7 534
3346	Mfg & reproducing magnetic & optical media .	2	81	21	2 303	75 382	1 589	3 334	45 390	166 841	120 623	290 482	42 218
33461	Mfg & reproducing magnetic & optical media	2	81	21	2 303	75 382	1 589	3 334	45 390	166 841	120 623	290 482	42 218
334611	Software reproducing .	1	7	4	294	10 887	130	294	4 200	21 539	12 124	33 286	2 957
334612	Prerecorded CD (except software), tape, & record reproducing	1	61	14	1 830	59 111	1 319	2 777	37 459	131 568	92 678	227 119	35 881
334613	Magnetic & optical recording media mfg .	9	13	3	179	5 384	140	263	3 731	13 734	15 821	30 077	3 380
335	Electrical equipment, appliance, & component mfg	1	424	192	24 990	814 828	18 043	35 482	485 753	2 842 281	2 088 089	4 950 531	134 443
3351	Electric lighting equipment mfg	1	128	48	h	D	D	D	D	D	D	D	13 184
33511	Electric lamp bulb & part mfg	—	2	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	2	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	126	47	h	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	62	18	1 364	34 088	1 011	1 995	18 255	87 261	88 881	175 159	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	1	40	17	1 654	61 642	1 118	2 235	30 293	168 662	100 304	274 398	3 115
335129	Other lighting equipment mfg	—	24	12	g	D	D	D	D	D	D	D	3 042
3353	Electrical equipment mfg ..	—	147	61	9 463	310 713	7 195	14 649	202 146	1 519 238	952 290	2 474 944	42 915
33531	Electrical equipment mfg	—	147	61	9 463	310 713	7 195	14 649	202 146	1 519 238	952 290	2 474 944	42 915
335311	Power, distribution, & specialty transformer mfg	3	11	4	346	11 042	195	437	4 802	23 961	13 855	39 681	658
335312	Motor & generator mfg	—	32	14	5 238	177 523	4 619	9 586	145 181	1 213 654	749 365	1 961 382	25 594
335313	Switchgear & switchboard apparatus mfg	4	26	10	556	22 818	358	679	11 160	44 230	34 363	79 217	1 571
335314	Relay & industrial control mfg	2	78	33	3 323	99 330	2 023	3 947	41 003	237 393	154 707	394 664	15 092
3359	Other electrical equipment & component mfg	2	141	83	10 584	346 118	7 189	13 936	191 752	924 636	843 244	1 778 379	78 265
33591	Battery mfg	1	10	6	1 379	49 927	930	2 249	28 030	82 234	85 116	168 195	15 753
335911	Storage battery mfg...	2	7	4	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	—	3	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	5	21	20	1 559	44 294	1 119	2 226	25 360	109 846	299 053	421 685	10 385
335921	Fiber optic cable mfg...	—	3	3	243	3 962	188	275	2 625	9 040	15 351	24 812	D
335929	Other communication & energy wire mfg ...	5	18	17	1 316	40 332	931	1 951	22 735	100 806	283 702	396 873	D
33593	Wiring device mfg	—	46	17	4 438	139 828	3 045	5 350	77 681	441 805	189 653	633 066	23 813
335931	Current-carrying wiring device mfg	—	33	12	2 624	75 383	1 798	2 964	40 404	220 628	103 530	318 008	18 127
335932	Noncurrent-carrying wiring device mfg	1	13	5	1 814	64 445	1 247	2 386	37 277	221 177	86 123	315 058	5 686
33599	All other electrical equipment & component mfg	1	64	40	3 208	112 069	2 095	4 111	60 681	290 751	269 422	555 433	28 314
335991	Carbon & graphite product mfg	—	7	6	780	32 991	598	1 322	23 701	111 887	122 371	227 820	21 188
335999	All other miscellaneous electrical equipment & component mfg	1	57	34	2 428	79 078	1 497	2 789	36 980	178 864	147 051	327 613	7 126

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	408	161	44 393	2 131 725	32 972	70 464	1 480 510	5 246 056	6 662 720	12 040 217	402 649
3361	Motor vehicle mfg	9	10	3	753	20 230	627	817	16 318	85 733	144 450	229 772	D
33611	Automobile & light duty motor vehicle mfg	9	9	2	c	D	D	D	D	D	D	D	D
336111	Automobile mfg	9	7	2	c	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	9	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	9	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	41	12	935	24 453	629	1 154	14 946	79 965	116 682	202 044	3 161
33621	Motor vehicle body & trailer mfg	—	41	12	935	24 453	629	1 154	14 946	79 965	116 682	202 044	3 161
336211	Motor vehicle body mfg	—	34	10	818	21 194	557	1 025	13 617	73 872	106 642	185 904	2 848
3363	Motor vehicle parts mfg	—	202	78	31 062	1 600 100	25 056	55 555	1 251 350	3 596 029	5 562 426	9 208 924	338 794
33631	Motor vehicle gasoline engine & engine parts mfg	—	36	7	i	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	33	7	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	70	27	5 781	188 318	3 653	7 734	92 462	465 136	418 583	923 476	37 357
336321	Vehicular lighting equipment mfg	—	7	2	400	11 539	213	415	4 688	7 401	11 212	27 296	D
336322	Other motor vehicle electrical & electronic equipment mfg	2	63	25	5 381	176 779	3 440	7 319	87 774	457 735	407 371	896 180	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	14	8	776	19 832	647	1 252	14 373	33 781	72 618	104 620	2 707
336340	Motor vehicle brake system mfg	—	14	8	776	19 832	647	1 252	14 373	33 781	72 618	104 620	2 707
33635	Motor vehicle transmission & power train parts mfg	—	16	7	6 753	391 062	5 843	14 563	330 761	972 826	1 050 197	2 006 903	104 531
336350	Motor vehicle transmission & power train parts mfg	—	16	7	6 753	391 062	5 843	14 563	330 761	972 826	1 050 197	2 006 903	104 531
33636	Motor vehicle seating & interior trim mfg	5	8	3	153	2 886	112	221	1 823	8 007	7 238	15 008	331
336360	Motor vehicle seating & interior trim mfg	5	8	3	153	2 886	112	221	1 823	8 007	7 238	15 008	331
33637	Motor vehicle metal stamping	—	8	4	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	8	4	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	47	20	7 570	440 027	5 952	13 145	333 744	1 052 394	637 322	1 693 272	50 359
336391	Motor vehicle air-conditioning mfg	—	1	1	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	8	46	19	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	69	39	8 677	384 896	4 673	9 043	141 120	1 290 306	665 605	2 018 183	35 623
33641	Aerospace product & parts mfg	—	69	39	8 677	384 896	4 673	9 043	141 120	1 290 306	665 605	2 018 183	35 623
336411	Aircraft mfg	8	5	3	f	D	D	D	D	D	D	D	1 352
336412	Aircraft engine & engine parts mfg	2	15	12	g	D	D	D	D	D	D	D	7 644
336413	Other aircraft part & auxiliary equipment mfg	—	49	24	5 841	268 344	2 757	4 973	79 153	1 075 798	516 619	1 653 673	26 627
3365	Railroad rolling stock mfg	—	16	8	1 630	58 310	923	1 819	27 735	99 516	95 728	208 143	18 197
33651	Railroad rolling stock mfg	—	16	8	1 630	58 310	923	1 819	27 735	99 516	95 728	208 143	18 197
336510	Railroad rolling stock mfg	—	16	8	1 630	58 310	923	1 819	27 735	99 516	95 728	208 143	18 197
3366	Ship & boat building	2	48	12	835	26 510	701	1 486	20 457	50 621	31 555	82 409	D
33661	Ship & boat building	2	48	12	835	26 510	701	1 486	20 457	50 621	31 555	82 409	D
336611	Ship building & repairing	2	23	7	f	D	D	D	D	D	D	D	545
336612	Boat building	1	25	5	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3369	Other transportation equipment mfg	3	22	9	501	17 226	363	590	8 584	43 886	46 274	90 742	1 703
33699	Other transportation equipment mfg	3	22	9	501	17 226	363	590	8 584	43 886	46 274	90 742	1 703
336991	Motorcycle, bicycle, & parts mfg	1	9	3	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	5	11	5	316	11 785	211	291	5 039	29 860	27 184	57 621	1 428
337	Furniture & related product mfg	2	1 136	223	21 818	568 623	16 577	30 748	353 553	1 250 752	873 223	2 111 880	80 954
3371	Household & institutional furniture & kitchen cabinet mfg	2	788	107	11 793	293 939	9 375	17 452	196 268	662 064	472 648	1 127 662	53 617
33711	Wood kitchen cabinet & counter top mfg	4	345	27	2 534	61 327	2 014	3 810	44 506	115 307	88 578	203 954	4 973
337110	Wood kitchen cabinet & counter top mfg ...	4	345	27	2 534	61 327	2 014	3 810	44 506	115 307	88 578	203 954	4 973
33712	Household & institutional furniture mfg	2	443	80	9 259	232 612	7 361	13 642	151 762	546 757	384 070	923 708	48 644
337121	Upholstered household furniture mfg	4	79	9	657	17 559	555	1 025	12 762	25 765	28 346	53 792	998
337122	Nonupholstered wood household furniture mfg	1	245	39	6 406	161 333	5 210	9 582	106 892	397 014	269 865	659 909	43 075
337124	Metal household furniture mfg	2	39	12	897	24 507	614	1 260	13 590	60 062	37 422	97 948	2 471
337125	Household furniture (except wood & metal) mfg	3	11	2	129	2 294	86	156	1 646	4 187	4 684	8 828	243
337127	Institutional furniture mfg	3	61	15	1 065	24 677	816	1 494	15 560	53 667	38 635	92 046	1 732
337129	Wood television, radio, & sewing machine cabinet mfg	1	8	3	105	2 242	80	125	1 312	6 062	5 118	11 185	125
3372	Office furniture (including fixtures) mfg	2	287	103	9 011	252 345	6 454	11 952	143 888	529 780	336 153	860 541	22 495
33721	Office furniture (including fixtures) mfg	2	287	103	9 011	252 345	6 454	11 952	143 888	529 780	336 153	860 541	22 495
337211	Wood office furniture mfg	2	37	13	1 636	50 951	1 186	2 631	28 596	95 769	56 738	152 147	4 282
337212	Custom architectural woodwork & millwork mfg	1	74	19	1 225	39 405	879	1 666	25 129	69 441	43 947	111 198	2 714
337214	Office furniture (except wood) mfg	2	25	7	814	21 670	613	1 296	12 722	49 624	39 841	89 467	5 605
337215	Showcase, partition, shelving, & locker mfg	2	151	64	5 336	140 319	3 776	6 359	77 441	314 946	195 627	507 729	9 894
3379	Other furniture related product mfg	3	61	13	1 014	22 339	748	1 344	13 397	58 908	64 422	123 677	4 842
33791	Mattress mfg	1	23	7	533	11 759	412	658	7 068	38 761	40 556	78 833	4 210
337910	Mattress mfg	1	23	7	533	11 759	412	658	7 068	38 761	40 556	78 833	4 210
33792	Blind & shade mfg	6	38	6	481	10 580	336	686	6 329	20 147	23 866	44 844	632
337920	Blind & shade mfg	6	38	6	481	10 580	336	686	6 329	20 147	23 866	44 844	632
339	Miscellaneous mfg	2	2 740	533	59 544	1 765 520	41 844	78 699	964 787	4 385 058	3 541 085	7 888 286	227 576
3391	Medical equipment & supplies mfg	2	798	125	20 310	677 439	13 383	25 970	338 509	1 573 008	761 248	2 336 242	123 869
33911	Medical equipment & supplies mfg	2	798	125	20 310	677 439	13 383	25 970	338 509	1 573 008	761 248	2 336 242	123 869
339111	Laboratory apparatus & furniture mfg	2	23	13	1 104	40 286	568	1 067	12 923	82 156	46 529	126 436	3 775
339112	Surgical & medical instrument mfg	1	80	34	8 598	275 511	5 189	9 901	112 612	573 503	332 671	909 504	36 021
339113	Surgical appliance & supplies mfg	2	102	29	3 328	116 922	2 117	3 561	46 145	322 738	163 993	483 841	16 280
339114	Dental equipment & supplies mfg	-	60	10	861	27 806	571	1 008	14 335	88 821	94 802	185 644	3 838
339115	Ophthalmic goods mfg	1	47	14	3 730	146 435	2 949	7 075	109 629	355 633	64 868	418 238	58 926
339116	Dental laboratories ...	5	486	25	2 689	70 479	1 989	3 358	42 865	150 157	58 385	212 579	5 029
3399	Other miscellaneous mfg ..	2	1 942	408	39 234	1 088 081	28 461	52 729	626 278	2 812 050	2 779 837	5 552 044	103 707
33991	Jewelry & silverware mfg	1	896	150	14 508	410 974	10 289	17 235	230 647	1 243 943	1 699 075	2 913 738	29 305
339911	Jewelry (except costume) mfg	1	615	102	9 445	279 543	6 329	11 760	142 151	807 348	1 233 261	2 029 611	18 330
339912	Silverware & plated ware mfg	-	20	5	g	D	D	D	D	D	D	D	D
339913	Jewelers' material & lapidary work mfg ...	2	132	20	1 331	36 837	908	1 552	17 411	93 925	302 605	391 928	1 925
339914	Costume jewelry & novelty mfg	4	129	23	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	4	80	19	1 618	38 253	1 330	2 611	26 083	140 898	113 088	245 156	12 312
339920	Sporting & athletic goods mfg	4	80	19	1 618	38 253	1 330	2 611	26 083	140 898	113 088	245 156	12 312

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33993	Doll, toy, & game mfg . . .	2	89	20	1 947	51 709	1 511	2 867	34 677	107 202	99 162	208 808	3 787
339931	Doll & stuffed toy mfg . . .	1	34	6	764	17 320	618	1 309	12 906	36 643	28 817	66 064	310
339932	Game, toy, & children's vehicle mfg	3	55	14	1 183	34 389	893	1 558	21 771	70 559	70 345	142 744	3 477
33994	Office supplies (except paper) mfg	—	77	18	2 725	65 522	1 910	4 512	38 541	191 323	126 933	321 560	9 272
339941	Pen & mechanical pencil mfg	2	17	7	470	11 806	338	592	5 599	26 998	19 284	46 417	2 720
339942	Lead pencil & art good mfg	—	14	4	878	16 899	632	1 632	9 496	70 484	48 376	122 446	4 813
339943	Marking device mfg . . .	4	36	2	280	6 004	182	349	3 920	12 406	6 652	18 998	496
339944	Carbon paper & inked ribbon mfg	—	10	5	1 097	30 813	758	1 939	19 526	81 435	52 621	133 699	1 243
33995	Sign mfg	3	381	78	6 009	187 401	4 053	7 681	95 422	354 545	238 887	592 466	12 593
339950	Sign mfg	3	381	78	6 009	187 401	4 053	7 681	95 422	354 545	238 887	592 466	12 593
33999	All other miscellaneous mfg	2	419	123	12 427	334 222	9 368	17 823	200 908	774 139	502 692	1 270 316	36 438
339991	Gasket, packing, & sealing device mfg . . .	—	33	14	2 151	73 688	1 530	3 066	45 490	213 192	140 682	351 982	8 127
339992	Musical instrument mfg	—	51	10	1 563	44 313	1 253	2 524	27 626	109 309	44 129	148 988	2 627
339993	Fastener, button, needle, & pin mfg	3	52	14	g	D	D	D	D	D	D	D	5 808
339994	Broom, brush, & mop mfg	1	32	13	1 573	37 143	1 293	2 509	22 452	60 866	56 139	115 511	D
339995	Burial casket mfg	—	6	1	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	245	71	5 741	144 879	4 187	7 651	83 749	315 668	212 629	528 077	16 302

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY—SCHENECTADY—TROY, NY MSA												
	Manufacturing	1	752	249	31 436	1 127 976	22 036	44 425	676 617	3 339 490	3 539 569	6 969 773	324 465
311	Food mfg	1	77	25	2 161	67 607	1 534	3 013	36 968	253 990	435 239	689 530	12 091
3114	Fruit & vegetable preserving & specialty food mfg	—	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	e	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	8	7	509	12 152	320	615	6 054	51 929	148 579	200 261	D
31151	Dairy product (except frozen) mfg	—	7	6	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	5	4	327	8 510	193	414	4 111	44 210	131 441	175 684	1 033
3118	Bakeries & tortilla mfg	1	41	8	581	15 999	414	835	8 557	20 151	53 406	73 566	2 589
31181	Bread & bakery product mfg	1	39	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries . .	1	20	6	427	13 534	299	646	6 660	14 759	50 031	64 792	2 279
312	Beverage & tobacco product mfg	—	9	4	692	12 011	297	567	7 084	51 672	102 639	154 559	1 677
3121	Beverage mfg	—	9	4	692	12 011	297	567	7 084	51 672	102 639	154 559	1 677
31211	Soft drink & ice mfg	—	8	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	626	10 491	269	514	6 521	46 165	98 893	145 330	1 268

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY—SCHENECTADY—TROY, NY MSA—Con. Manufacturing—Con.												
313	Textile mills	-	16	11	2 013	61 908	1 608	3 067	36 150	188 762	117 318	308 190	23 481
3132	Fabric mills	-	11	8	1 696	53 118	1 343	2 558	29 671	166 126	92 527	259 744	22 478
31321	Broadwoven fabric mills ..	4	4	2	e	D	D	D	D	D	D	D	2 599
313210	Broadwoven fabric mills	4	4	2	e	D	D	D	D	D	D	D	2 599
31323	Nonwoven fabric mills ...	-	2	2	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	2	2	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	5	4	832	19 830	678	1 465	14 865	112 002	41 410	152 641	D
313249	Other knit fabric & lace mills	-	5	4	832	19 830	678	1 465	14 865	112 002	41 410	152 641	D
3133	Textile & fabric finishing & fabric coating mills	-	4	2	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills	-	2	2	e	D	D	D	D	D	D	D	D
313320	Fabric coating mills	-	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	10	4	546	13 907	412	743	7 952	27 334	31 398	58 645	906
3149	Other textile product mills ..	-	8	2	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	5	1	265	6 121	191	350	3 250	13 876	18 840	32 666	D
314999	All other miscellaneous textile product mills ..	-	5	1	265	6 121	191	350	3 250	13 876	18 840	32 666	D
315	Apparel mfg	1	27	7	581	10 635	413	805	5 957	16 546	23 647	40 725	467
3152	Cut & sew apparel mfg	-	14	4	314	6 164	210	392	3 346	12 566	15 422	28 658	D
3159	Apparel accessories & other apparel mfg	3	11	3	e	D	D	D	D	D	D	D	165
31599	Apparel accessories & other apparel mfg	3	11	3	e	D	D	D	D	D	D	D	165
321	Wood product mfg	2	43	9	684	16 605	514	1 014	10 929	33 622	36 897	70 596	5 583
3219	Other wood product mfg ...	2	25	7	512	11 759	382	751	7 798	24 081	23 302	47 527	854
322	Paper mfg	-	25	19	2 592	105 285	1 926	3 973	69 911	233 166	339 086	578 688	25 454
3221	Pulp, paper, & paperboard mills	-	10	10	1 784	78 151	1 339	2 838	52 057	177 688	233 609	412 844	21 361
32212	Paper mills	-	5	5	1 274	59 442	963	2 007	39 681	150 865	190 030	341 322	12 920
322121	Paper (except newsprint) mills	-	5	5	1 274	59 442	963	2 007	39 681	150 865	190 030	341 322	12 920
32213	Paperboard mills	4	5	5	510	18 709	376	831	12 376	26 823	43 579	71 522	8 441
322130	Paperboard mills	4	5	5	510	18 709	376	831	12 376	26 823	43 579	71 522	8 441
3222	Converted paper product mfg	-	15	9	808	27 134	587	1 135	17 854	55 478	105 477	165 844	4 093
32221	Paperboard container mfg	-	11	7	f	D	D	D	D	D	D	D	4 039
322211	Corrugated & solid fiber box mfg	-	7	5	376	11 786	275	542	7 009	27 425	47 973	75 266	D
322212	Folding paperboard box mfg	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	114	23	2 724	77 319	2 170	4 253	54 444	197 736	106 751	302 792	9 682
3231	Printing & related support activities	2	114	23	2 724	77 319	2 170	4 253	54 444	197 736	106 751	302 792	9 682
32311	Printing	2	100	21	2 540	73 897	2 019	4 070	52 359	183 671	103 649	286 088	9 106
323110	Commercial lithographic printing ..	1	61	13	1 916	54 851	1 527	3 169	40 740	147 303	76 106	222 297	5 822
325	Chemical mfg	-	24	13	3 920	209 413	2 232	4 805	104 822	741 210	765 411	1 497 766	130 364
3251	Basic chemical mfg	-	6	4	1 059	52 770	509	1 099	23 989	227 224	238 348	464 849	27 043
32513	Dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	3	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	4	3	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	5	3	306	9 850	148	323	2 851	13 989	9 357	23 657	D
32551	Paint & coating mfg	-	3	2	e	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	3	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY—SCHENECTADY—TROY, NY MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	42	24	2 666	67 191	2 086	3 704	43 734	159 109	158 612	318 817	13 782
3261	Plastics product mfg	2	38	24	2 641	66 573	2 068	3 669	43 306	157 932	157 793	316 807	D
32611	Unsupported plastics film, sheet, & bag mfg	—	4	2	e	D	D	D	D	D	D	D	773
326111	Unsupported plastics bag mfg	—	3	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	26	19	1 939	48 576	1 533	2 623	31 776	112 584	116 911	230 239	9 506
326199	All other plastics product mfg	2	26	19	1 939	48 576	1 533	2 623	31 776	112 584	116 911	230 239	9 506
327	Nonmetallic mineral product mfg	—	43	14	1 763	80 788	1 270	2 777	52 339	297 288	170 335	473 118	24 664
3273	Cement & concrete product mfg	—	20	6	548	24 833	380	837	14 698	116 128	52 218	168 152	14 168
3279	Other nonmetallic mineral product mfg	—	8	3	873	44 192	612	1 311	28 942	145 103	82 623	233 724	8 072
32791	Abrasive product mfg	—	2	1	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	2	1	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	6	2	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	2	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	4	528	18 651	414	1 017	12 770	34 640	55 076	90 079	2 358
3313	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	93	31	2 957	107 767	2 150	4 333	68 249	287 061	286 073	577 038	19 932
3323	Architectural & structural metals mfg	3	27	8	584	19 175	424	933	11 709	45 424	62 672	108 302	2 375
33231	Plate work & fabricated structural product mfg	4	10	5	269	8 271	181	385	4 768	23 133	43 545	67 115	678
332312	Fabricated structural metal mfg	4	9	5	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	17	3	315	10 904	243	548	6 941	22 291	19 127	41 187	1 697
3324	Boiler, tank, & shipping container mfg	—	6	4	328	17 475	270	578	13 397	57 488	110 551	170 475	1 476
3325	Hardware mfg	—	3	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	3	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	3	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	30	9	636	21 171	496	986	14 411	36 421	26 234	62 582	2 805
33271	Machine shops	2	27	6	427	14 279	331	624	9 562	24 490	11 924	36 338	1 460
332710	Machine shops	2	27	6	427	14 279	331	624	9 562	24 490	11 924	36 338	1 460
3329	Other fabricated metal product mfg	—	19	7	978	38 714	580	1 244	20 673	121 146	75 707	197 903	11 707
33291	Metal valve mfg	—	4	3	273	10 108	202	417	7 425	47 829	19 653	67 011	D
33299	All other fabricated metal product mfg	—	15	4	705	28 606	378	827	13 248	73 317	56 054	130 892	D
332999	All other miscellaneous fabricated metal product mfg	—	11	3	638	26 862	331	737	12 340	70 319	54 590	126 268	D
333	Machinery mfg	—	56	20	3 997	166 727	2 500	5 137	100 655	484 578	575 342	1 127 320	23 802
3331	Agriculture, construction, & mining machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	14	4	297	10 189	168	326	5 351	16 069	17 708	33 634	352
33351	Metalworking machinery mfg	—	14	4	297	10 189	168	326	5 351	16 069	17 708	33 634	352

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY–SCHENECTADY–TROY, NY MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	3	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	18	6	636	28 320	322	507	8 072	79 353	59 040	140 721	7 525
33391	Pump & compressor mfg	—	5	3	398	20 011	166	181	4 025	65 303	46 267	113 914	D
333912	Air & gas compressor mfg	—	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	26	9	1 038	33 279	620	1 434	15 687	88 491	53 411	146 685	3 363
3344	Semiconductor & other electronic component mfg	—	5	2	e	D	D	D	D	D	D	D	178
33441	Semiconductor & other electronic component mfg	—	5	2	e	D	D	D	D	D	D	D	178
334419	Other electronic component mfg	—	3	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	15	5	506	18 204	264	573	6 740	53 459	26 954	81 406	2 582
33451	Navigational, measuring, medical, & control instruments mfg	1	15	5	506	18 204	264	573	6 740	53 459	26 954	81 406	2 582
335	Electrical equipment, appliance, & component mfg	4	7	3	296	9 744	147	324	3 410	22 888	8 082	32 527	759
336	Transportation equipment mfg	—	17	8	609	20 021	480	967	15 406	76 187	83 409	165 260	13 407
337	Furniture & related product mfg	—	21	8	694	18 041	534	1 141	11 308	52 424	43 445	95 636	7 245
3372	Office furniture (including fixtures) mfg	1	11	4	366	9 814	264	655	6 022	23 218	19 169	42 402	4 565
33721	Office furniture (including fixtures) mfg	1	11	4	366	9 814	264	655	6 022	23 218	19 169	42 402	4 565
339	Miscellaneous mfg	2	77	9	703	19 160	516	899	9 897	47 762	40 716	89 817	1 497
3391	Medical equipment & supplies mfg	4	33	4	306	9 507	219	327	4 226	24 549	12 007	37 854	962
33911	Medical equipment & supplies mfg	4	33	4	306	9 507	219	327	4 226	24 549	12 007	37 854	962
3399	Other miscellaneous mfg ..	1	44	5	397	9 653	297	572	5 671	23 213	28 709	51 963	535
	BINGHAMTON, NY MSA												
31-33	Manufacturing	1	290	122	25 484	1 027 594	14 051	27 556	356 443	2 832 274	1 869 116	4 717 204	156 028
311	Food mfg	—	22	11	1 337	40 029	1 054	2 021	24 544	226 037	282 899	506 584	11 332
3115	Dairy product mfg	—	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	4	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	11	3	259	6 117	199	390	3 850	20 580	30 843	51 779	633
321	Wood product mfg	5	19	7	453	11 528	362	759	8 401	25 422	39 558	64 505	1 632
3219	Other wood product mfg ..	9	13	5	298	8 037	238	474	5 373	17 700	23 850	41 103	803
322	Paper mfg	—	4	4	278	8 272	180	360	5 200	21 619	21 959	43 595	1 194
3222	Converted paper product mfg	—	4	4	278	8 272	180	360	5 200	21 619	21 959	43 595	1 194
323	Printing & related support activities	2	35	11	1 089	28 774	820	1 625	18 670	52 508	35 799	88 746	2 798
3231	Printing & related support activities	2	35	11	1 089	28 774	820	1 625	18 670	52 508	35 799	88 746	2 798
32311	Printing	1	27	11	1 055	27 971	792	1 584	18 079	50 879	35 462	86 772	2 435
323110	Commercial lithographic printing ..	2	18	8	370	10 869	264	489	6 077	19 903	12 729	32 411	1 572
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BINGHAMTON, NY MSA—Con. Manufacturing—Con.												
325	Chemical mfg	2	6	3	1 386	49 540	806	1 665	22 407	69 549	116 651	190 790	D
3259	Other chemical product mfg	3	2	2	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	2	2	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	3	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	17	7	515	13 045	405	733	7 705	44 728	58 641	101 154	5 335
3261	Plastics product mfg	1	17	7	515	13 045	405	733	7 705	44 728	58 641	101 154	5 335
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	3	341	8 853	283	543	5 522	36 164	50 825	84 837	4 548
326122	Plastics pipe & pipe fitting mfg	—	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	51	22	1 490	42 475	1 148	2 133	27 791	71 858	60 267	133 506	6 460
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	29	11	840	25 900	688	1 384	18 271	47 492	19 375	68 759	4 694
33271	Machine shops	—	26	8	666	20 826	543	1 084	14 226	36 461	15 389	53 775	3 851
332710	Machine shops	—	26	8	666	20 826	543	1 084	14 226	36 461	15 389	53 775	3 851
333	Machinery mfg	—	23	10	2 151	114 219	1 233	1 892	39 439	435 831	204 240	659 077	7 116
3332	Industrial machinery mfg ..	—	4	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	4	2	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	35	25	14 626	670 883	6 226	12 696	166 907	1 790 488	909 225	2 695 692	109 682
3341	Computer & peripheral equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	21	18	4 074	128 029	2 752	5 660	64 254	389 762	266 198	651 355	77 640
33441	Semiconductor & other electronic component mfg	4	21	18	4 074	128 029	2 752	5 660	64 254	389 762	266 198	651 355	77 640
334412	Bare printed circuit board mfg	—	5	3	1 639	38 839	1 103	2 110	22 393	131 613	125 239	252 045	D
334413	Semiconductor & related device mfg ...	9	2	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	2	5	5	e	D	D	D	D	D	D	D	1 063
334419	Other electronic component mfg	—	6	5	f	D	D	D	D	D	D	D	1 728
3345	Navigational, measuring, medical, & control instruments mfg	—	9	4	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	9	4	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	h	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	8	4	641	12 874	598	1 338	11 256	11 435	50 572	61 547	1 042
3353	Electrical equipment mfg ..	—	4	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BUFFALO-NIAGARA FALLS, NY MSA													
31-33	Manufacturing	-	1 561	582	81 398	3 258 585	58 703	121 293	2 120 425	9 595 175	8 825 676	18 457 932	764 290
311	Food mfg	-	1 122	56	6 508	203 612	4 824	9 691	130 632	1 347 857	1 087 063	2 443 599	72 833
3111	Animal food mfg	-	5	3	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	5	3	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	5	5	758	39 458	598	1 635	30 831	420 770	282 969	705 178	D
31121	Flour milling & malt mfg	-	4	4	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	3	3	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	18	7	601	12 269	391	702	6 604	34 611	37 638	73 687	2 525
31133	Confectionery mfg from purchased chocolate	1	8	3	371	6 968	256	406	3 627	24 571	10 376	34 987	794
311330	Confectionery mfg from purchased chocolate	1	8	3	371	6 968	256	406	3 627	24 571	10 376	34 987	794
3114	Fruit & vegetable preserving & specialty food mfg	1	13	8	985	30 096	806	1 323	14 101	147 612	147 477	294 783	4 290
31141	Frozen food mfg	-	5	4	698	20 569	588	836	8 153	114 518	87 161	201 638	2 729
311412	Frozen specialty food mfg	-	3	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	5	8	4	287	9 527	218	487	5 948	33 094	60 316	93 145	1 561
3115	Dairy product mfg	2	13	8	1 045	29 464	753	1 560	20 170	83 861	287 714	379 318	24 529
31151	Dairy product (except frozen) mfg	-	10	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	6	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	4	3	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	9	3	2	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	9	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	10	7	603	18 951	477	979	11 164	67 467	144 017	211 359	16 017
31161	Animal slaughtering & processing	3	10	7	603	18 951	477	979	11 164	67 467	144 017	211 359	16 017
311612	Meat processed from carcasses	3	9	7	f	D	D	D	D	D	D	D	16 017
3118	Bakeries & tortilla mfg	-	53	15	1 979	56 627	1 391	2 806	36 067	451 041	114 417	564 065	6 304
31181	Bread & bakery product mfg	-	46	11	1 375	38 785	857	1 603	21 967	269 629	49 962	319 751	3 226
311812	Commercial bakeries	-	15	6	1 117	34 994	698	1 387	19 977	255 121	42 196	297 527	2 794
31182	Cookie, cracker, & pasta mfg	-	7	4	604	17 842	534	1 203	14 100	181 412	64 455	244 314	3 078
311821	Cookie & cracker mfg	-	5	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	8	4	721	18 868	268	446	6 324	77 898	70 011	148 307	2 726
3121	Beverage mfg	2	8	4	721	18 868	268	446	6 324	77 898	70 011	148 307	2 726
31211	Soft drink & ice mfg	2	8	4	721	18 868	268	446	6 324	77 898	70 011	148 307	2 726
312111	Soft drink mfg	2	7	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	24	5	e	D	D	D	D	D	D	D	2 208
3149	Other textile product mills	1	17	5	e	D	D	D	D	D	D	D	2 194
315	Apparel mfg	-	21	6	2 446	61 298	2 103	3 950	45 069	184 388	70 555	254 173	4 479
3152	Cut & sew apparel mfg	-	7	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	12	4	g	D	D	D	D	D	D	D	4 017
31599	Apparel accessories & other apparel mfg	-	12	4	g	D	D	D	D	D	D	D	4 017
315991	Hat, cap, & millinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	42	18	1 564	37 392	1 303	2 699	27 079	86 081	122 347	208 818	4 703
3211	Sawmills & wood preservation	2	4	3	f	D	D	D	D	D	D	D	2 797
32111	Sawmills & wood preservation	2	4	3	f	D	D	D	D	D	D	D	2 797
321113	Sawmills	2	4	3	f	D	D	D	D	D	D	D	2 797
3219	Other wood product mfg	3	36	14	1 008	20 349	821	1 414	13 344	42 618	40 629	83 652	D
32192	Wood container & pallet mfg	6	14	7	478	7 590	407	642	5 585	17 583	13 779	31 249	932
321920	Wood container & pallet mfg	6	14	7	478	7 590	407	642	5 585	17 583	13 779	31 249	932
32199	All other wood product mfg	1	11	6	370	9 269	283	511	4 996	19 082	19 570	39 171	519

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BUFFALO-NIAGARA FALLS, NY MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	1	34	22	2 209	73 667	1 714	3 704	50 492	194 872	230 055	427 224	16 878
3222	Converted paper product mfg	1	32	20	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	19	13	1 269	45 107	1 011	2 218	30 066	108 711	125 606	236 368	9 412
322211	Corrugated & solid fiber box mfg	2	8	7	680	23 747	500	1 064	14 493	51 020	73 318	126 728	3 154
322212	Folding paperboard box mfg	—	7	5	491	18 182	425	992	13 113	51 140	41 323	92 248	6 166
32223	Stationery product mfg ..	—	8	4	506	13 357	415	828	9 535	37 461	48 394	86 232	D
322232	Envelope mfg	—	4	3	445	12 276	363	736	8 696	35 120	45 425	80 728	D
323	Printing & related support activities	1	196	44	4 153	128 116	3 155	6 045	85 835	259 810	167 939	428 134	32 350
3231	Printing & related support activities	1	196	44	4 153	128 116	3 155	6 045	85 835	259 810	167 939	428 134	32 350
32311	Printing	1	175	39	3 826	118 659	2 908	5 543	79 403	236 927	163 379	400 651	31 553
323110	Commercial lithographic printing ..	1	94	22	1 591	48 447	1 195	2 331	30 464	90 425	63 863	152 272	9 397
323117	Book printing	—	4	2	f	D	D	D	D	D	D	D	D
323119	Other commercial printing	4	17	5	410	11 752	275	517	6 169	21 597	15 584	36 905	1 895
32312	Support activities for printing	—	21	5	327	9 457	247	502	6 432	22 883	4 560	27 483	797
323122	Prepress services	—	16	4	274	8 458	200	426	5 655	19 871	3 988	23 891	613
324	Petroleum & coal products mfg	1	16	7	378	16 843	242	500	8 927	46 083	68 775	112 355	3 912
3241	Petroleum & coal products mfg	1	16	7	378	16 843	242	500	8 927	46 083	68 775	112 355	3 912
325	Chemical mfg	2	71	38	4 951	232 460	2 920	6 137	117 400	1 093 932	783 179	1 868 024	129 707
3251	Basic chemical mfg	—	24	17	2 391	133 020	1 524	3 358	76 353	418 235	373 262	785 971	108 933
32518	Other basic inorganic chemical mfg	—	9	6	1 127	62 806	792	1 762	40 225	172 179	145 413	307 452	84 982
325181	Alkalies & chlorine mfg	—	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	1	7	4	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	8	7	832	49 505	530	1 201	27 912	154 487	174 549	335 442	14 926
325199	All other basic organic chemical mfg	1	8	7	832	49 505	530	1 201	27 912	154 487	174 549	335 442	14 926
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	6	5	2	e	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	—	4	1	e	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	—	3	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	8	5	1 398	63 378	635	1 282	20 607	407 118	122 163	523 338	9 260
32541	Pharmaceutical & medicine mfg	—	8	5	1 398	63 378	635	1 282	20 607	407 118	122 163	523 338	9 260
325412	Pharmaceutical preparation mfg	—	6	4	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	1	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	3	11	6	299	11 071	180	323	5 822	22 717	37 428	61 009	3 369
326	Plastics & rubber products mfg	—	76	38	4 903	174 781	3 600	6 945	115 823	537 546	426 528	966 545	45 335
3261	Plastics product mfg	1	63	32	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	6	4	256	7 203	179	369	4 202	15 901	17 156	33 694	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	7	5	935	43 177	628	1 380	23 187	199 333	85 773	287 589	D
326121	Unsupported plastics profile shape mfg	—	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	41	22	2 006	53 246	1 446	2 638	32 819	118 970	108 146	225 298	7 692
326199	All other plastics product mfg	2	39	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	13	6	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	5	3	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	3	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BUFFALO-NIAGARA FALLS, NY MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	62	32	3 795	134 790	2 736	5 565	79 483	469 113	275 785	757 373	30 131
3271	Clay product & refractory mfg	-	8	6	941	33 842	671	1 323	20 528	89 309	41 832	131 336	7 583
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	6	4	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	23	8	570	19 608	382	735	11 465	40 804	43 054	83 794	4 718
32732	Ready-mix concrete mfg.	5	10	5	362	14 746	228	451	8 078	29 324	33 815	63 413	4 140
327320	Ready-mix concrete mfg	5	10	5	362	14 746	228	451	8 078	29 324	33 815	63 413	4 140
3279	Other nonmetallic mineral product mfg	-	25	18	2 245	80 569	1 651	3 465	46 929	336 947	189 500	538 773	17 615
32791	Abrasive product mfg ...	-	15	13	1 764	62 012	1 320	2 787	36 213	287 970	149 933	453 700	13 103
327910	Abrasive product mfg ..	-	15	13	1 764	62 012	1 320	2 787	36 213	287 970	149 933	453 700	13 103
32799	All other nonmetallic mineral product mfg ...	-	10	5	481	18 557	331	678	10 716	48 977	39 567	85 073	4 512
327992	Ground or treated mineral & earth mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	29	19	3 191	149 683	2 225	4 893	97 451	680 717	609 813	1 305 829	45 329
3311	Iron & steel mills & ferroalloy mfg	-	9	7	1 005	50 769	693	1 562	35 658	470 120	154 028	639 919	27 426
33111	Iron & steel mills & ferroalloy mfg	-	9	7	1 005	50 769	693	1 562	35 658	470 120	154 028	639 919	27 426
331111	Iron & steel mills	-	7	5	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	3	3	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	3	3	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	5	4	1 015	51 376	725	1 595	35 396	110 433	251 049	363 853	10 938
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	11	4	455	14 159	369	774	10 045	21 712	20 050	40 521	D
332	Fabricated metal product mfg	1	317	102	8 118	263 024	5 964	12 106	158 437	583 769	347 786	927 892	41 357
3321	Forging & stamping	1	16	7	481	15 954	339	664	9 233	28 516	26 957	55 285	1 798
33211	Forging & stamping	1	16	7	481	15 954	339	664	9 233	28 516	26 957	55 285	1 798
332116	Metal stamping	1	11	4	357	12 562	253	518	7 122	22 555	22 905	45 328	1 535
3322	Cutlery & handtool mfg	-	16	6	609	16 496	448	943	10 016	43 009	25 184	67 921	3 836
33221	Cutlery & handtool mfg ..	-	16	6	609	16 496	448	943	10 016	43 009	25 184	67 921	3 836
332213	Saw blade & handsaw mfg	-	3	2	270	6 854	225	438	4 830	24 211	17 118	41 311	D
3323	Architectural & structural metals mfg	1	50	19	1 132	38 734	766	1 621	22 152	88 071	67 183	155 130	4 185
33231	Plate work & fabricated structural product mfg ..	1	24	12	737	26 129	466	972	13 670	62 937	53 956	116 985	2 639
332312	Fabricated structural metal mfg	1	19	10	643	24 119	385	825	12 082	56 803	49 557	106 374	2 525
33232	Ornamental & architectural metal products mfg	1	26	7	395	12 605	300	649	8 482	25 134	13 227	38 145	1 546
332322	Sheet metal work mfg .	1	17	6	300	9 403	235	510	6 631	18 612	8 191	26 601	1 225
3324	Boiler, tank, & shipping container mfg	1	19	11	1 001	35 774	730	1 440	19 233	81 348	52 421	131 769	3 339
33241	Power boiler & heat exchanger mfg	-	10	7	784	29 263	562	1 128	15 491	69 447	43 042	110 346	3 123
332410	Power boiler & heat exchanger mfg	-	10	7	784	29 263	562	1 128	15 491	69 447	43 042	110 346	3 123
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	133	35	2 194	69 518	1 684	3 319	44 914	145 545	66 241	210 898	13 870
33271	Machine shops	2	108	24	1 241	38 461	951	1 792	25 771	71 234	26 363	96 901	7 086
332710	Machine shops	2	108	24	1 241	38 461	951	1 792	25 771	71 234	26 363	96 901	7 086
33272	Turned product & screw, nut, & bolt mfg	-	25	11	953	31 057	733	1 527	19 143	74 311	39 878	113 997	6 784
332721	Precision turned product mfg	-	20	9	864	28 290	678	1 414	17 968	66 045	35 771	101 550	6 446

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31-33	BUFFALO-NIAGARA FALLS, NY MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	—	40	10	1 098	38 264	785	1 569	21 769	90 689	37 969	128 550	5 961
33281	Coating, engraving, heat treating, & allied activities.....	—	40	10	1 098	38 264	785	1 569	21 769	90 689	37 969	128 550	5 961
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	—	14	5	635	23 823	444	883	13 400	62 545	17 140	79 443	2 974
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	19	4	399	12 223	293	588	7 042	22 663	19 226	42 025	2 525
3329	Other fabricated metal product mfg.....	1	30	8	1 131	33 537	871	1 885	22 570	78 742	49 165	127 851	3 696
33291	Metal valve mfg.....	1	6	3	774	22 161	622	1 406	15 961	57 805	34 122	91 071	2 486
332911	Industrial valve mfg...	—	3	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	3	24	5	357	11 376	249	479	6 609	20 937	15 043	36 780	1 210
333	Machinery mfg.....	1	169	66	9 376	397 863	5 357	10 929	194 270	923 824	507 802	1 440 821	48 648
3331	Agriculture, construction, & mining machinery mfg....	—	7	3	542	23 104	415	983	16 241	67 713	39 861	105 280	2 938
33313	Mining & oil & gas field machinery mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg..	—	22	4	694	26 392	432	890	13 842	55 344	46 074	99 646	2 718
33329	Other industrial machinery mfg.....	—	18	3	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	—	6	2	270	9 658	167	326	4 955	19 057	22 851	41 920	907
3333	Commercial & service industry machinery mfg..	1	11	4	431	15 431	227	363	5 900	37 660	28 033	67 743	903
33331	Commercial & service industry machinery mfg.....	1	11	4	431	15 431	227	363	5 900	37 660	28 033	67 743	903
333314	Optical instrument & lens mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	14	8	600	22 088	324	696	8 963	37 131	33 811	72 110	2 523
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	—	14	8	600	22 088	324	696	8 963	37 131	33 811	72 110	2 523
3335	Metalworking machinery mfg.....	3	52	13	1 948	81 331	1 189	2 459	47 642	170 436	107 663	271 981	10 522
33351	Metalworking machinery mfg.....	3	52	13	1 948	81 331	1 189	2 459	47 642	170 436	107 663	271 981	10 522
333513	Machine tool (metal forming types) mfg....	5	5	3	948	40 879	543	1 075	22 323	94 697	54 169	141 809	D
333514	Special die & tool, die set, jig, & fixture mfg..	3	23	7	584	19 375	367	745	10 702	35 967	13 625	50 499	2 948
3336	Engine, turbine, & power transmission equipment mfg.....	—	11	10	947	32 768	623	1 135	20 352	58 660	48 702	108 726	2 738
33361	Engine, turbine, & power transmission equipment mfg.....	—	11	10	947	32 768	623	1 135	20 352	58 660	48 702	108 726	2 738
333612	Speed changer, industrial high-speed drive, & gear mfg....	—	6	6	489	17 349	287	606	10 056	28 812	11 535	41 593	1 712
333618	Other engine equipment mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	—	52	24	4 214	196 749	2 147	4 403	81 330	496 880	203 658	715 335	26 306
33391	Pump & compressor mfg.....	—	7	4	773	37 880	397	842	15 931	121 062	97 374	221 185	13 297
333912	Air & gas compressor mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	1	13	5	287	8 283	198	411	5 044	19 270	17 687	37 249	408
33399	All other general-purpose machinery mfg.....	—	32	15	3 154	150 586	1 552	3 150	60 355	356 548	88 597	456 901	12 601
333994	Industrial process furnace & oven mfg..	4	4	3	258	12 877	151	342	5 870	27 641	24 119	51 243	1 045
333995	Fluid power cylinder & actuator mfg.....	—	6	4	2 232	115 495	1 052	2 134	45 351	293 183	25 993	331 124	8 208
333999	All other miscellaneous general-purpose machinery mfg.....	2	12	5	412	13 063	271	537	7 236	22 450	19 293	42 026	2 112

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BUFFALO-NIAGARA FALLS, NY MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	70	32	3 503	123 586	2 015	3 678	56 577	256 578	164 670	418 031	11 707
3342	Communications equipment mfg.....	2	14	6	367	13 317	150	274	3 417	27 772	24 525	52 900	1 019
3344	Semiconductor & other electronic component mfg.....	2	24	9	1 320	32 362	920	1 613	20 217	69 808	38 399	108 529	4 243
33441	Semiconductor & other electronic component mfg.....	2	24	9	1 320	32 362	920	1 613	20 217	69 808	38 399	108 529	4 243
334419	Other electronic component mfg.....	3	9	4	775	18 551	520	990	10 862	41 132	17 000	58 421	1 957
3345	Navigational, measuring, medical, & control instruments mfg.....	1	22	15	1 665	73 359	861	1 614	30 167	148 203	94 755	238 876	5 718
33451	Navigational, measuring, medical, & control instruments mfg.....	1	22	15	1 665	73 359	861	1 614	30 167	148 203	94 755	238 876	5 718
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	4	4	380	15 138	174	335	4 889	29 763	29 288	58 997	1 702
334511	Search, detection, navigation, & guidance instrument mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg.....	3	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	38	19	2 063	82 654	1 377	2 971	43 184	202 481	174 081	374 306	29 102
3353	Electrical equipment mfg ..	4	18	6	464	17 094	307	552	7 215	31 242	29 781	63 263	2 509
33531	Electrical equipment mfg.....	4	18	6	464	17 094	307	552	7 215	31 242	29 781	63 263	2 509
3359	Other electrical equipment & component mfg.....	—	14	9	1 382	60 105	887	2 062	31 963	158 120	137 667	291 204	25 895
33591	Battery mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	—	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	—	7	7	736	31 569	477	995	20 132	108 058	122 837	226 551	D
335991	Carbon & graphite product mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	58	29	18 002	1 011 488	15 033	33 567	824 294	2 245 731	3 435 200	5 691 610	226 266
3363	Motor vehicle parts mfg ...	—	34	21	16 885	973 293	14 367	32 292	804 396	2 183 239	3 361 397	5 554 133	221 914
33631	Motor vehicle gasoline engine & engine parts mfg.....	—	4	1	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg.....	—	2	1	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	2	6	4	1 413	42 058	1 106	2 133	25 588	146 934	122 322	266 353	15 076
336322	Other motor vehicle electrical & electronic equipment mfg.....	2	5	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	—	4	3	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	—	4	3	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	—	2	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	—	2	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	1	14	9	6 939	424 168	5 504	12 453	324 965	1 019 122	603 797	1 626 172	47 401
336391	Motor vehicle air-conditioning mfg.....	—	1	1	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	9	13	8	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	4	3	848	30 844	489	947	15 473	42 623	47 554	91 670	3 153
33641	Aerospace product & parts mfg.....	—	4	3	848	30 844	489	947	15 473	42 623	47 554	91 670	3 153
336413	Other aircraft part & auxiliary equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D

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31-33	BUFFALO-NIAGARA FALLS, NY MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	2	54	12	1 034	25 944	788	1 490	16 258	66 652	44 454	111 467	3 747
3371	Household & institutional furniture & kitchen cabinet mfg	1	30	5	509	11 996	397	796	8 021	34 596	21 772	56 682	D
33712	Household & institutional furniture mfg	—	11	3	337	8 316	258	525	5 416	24 860	16 386	41 592	1 059
3372	Office furniture (including fixtures) mfg	2	19	6	448	12 167	335	596	7 235	26 889	16 980	43 871	2 068
33721	Office furniture (including fixtures) mfg	2	19	6	448	12 167	335	596	7 235	26 889	16 980	43 871	2 068
339	Miscellaneous mfg	1	140	29	3 820	107 351	2 574	5 052	53 438	304 728	206 532	506 884	12 124
3391	Medical equipment & supplies mfg	—	66	10	1 731	41 681	1 097	1 820	18 965	129 439	102 727	229 525	8 521
33911	Medical equipment & supplies mfg	—	66	10	1 731	41 681	1 097	1 820	18 965	129 439	102 727	229 525	8 521
339112	Surgical & medical instrument mfg	1	8	2	498	9 685	325	635	4 449	27 804	3 318	30 571	797
339113	Surgical appliance & supplies mfg	—	9	4	718	17 194	408	575	5 746	47 077	50 226	93 007	D
339116	Dental laboratories	4	37	3	e	D	D	D	D	D	D	D	288
3399	Other miscellaneous mfg ..	1	74	19	2 089	65 670	1 477	3 232	34 473	175 289	103 805	277 359	3 603
33994	Office supplies (except paper) mfg	—	4	1	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	—	1	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg	—	21	2	316	16 789	180	355	4 915	44 101	16 772	60 732	1 047
339950	Sign mfg	—	21	2	316	16 789	180	355	4 915	44 101	16 772	60 732	1 047
33999	All other miscellaneous mfg	4	23	8	672	16 111	513	929	8 869	42 731	28 172	70 549	1 892
339991	Gasket, packing, & sealing device mfg ...	1	10	2	301	7 163	220	343	3 677	17 884	13 492	31 872	471
	ELMIRA, NY MSA												
31-33	Manufacturing	—	94	44	9 098	278 083	6 214	12 888	170 432	765 645	576 380	1 357 316	64 924
322	Paper mfg	—	3	3	421	14 159	294	551	7 857	26 389	21 296	47 350	D
3222	Converted paper product mfg	—	3	3	421	14 159	294	551	7 857	26 389	21 296	47 350	D
32221	Paperboard container mfg	—	3	3	421	14 159	294	551	7 857	26 389	21 296	47 350	D
322212	Folding paperboard box mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	11	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	11	2	f	D	D	D	D	D	D	D	D
32311	Printing	2	11	2	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	9	4	647	25 523	525	1 063	19 422	70 289	41 414	112 045	5 654
3272	Glass & glass product mfg .	—	5	3	585	23 670	481	965	18 394	67 794	39 134	107 287	5 296
32721	Glass & glass product mfg	—	5	3	585	23 670	481	965	18 394	67 794	39 134	107 287	5 296
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	21	12	1 210	39 765	982	2 085	26 555	112 141	50 559	162 677	5 727
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	10	4	391	13 367	322	713	8 860	26 398	15 945	41 225	1 591
3329	Other fabricated metal product mfg	—	4	2	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	11	7	2 054	75 274	1 455	2 877	43 634	165 961	122 472	302 469	12 112
3335	Metalworking machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg ...	—	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	6	4	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	6	4	4	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	4	3	3	f	D	D	D	D	D	D	D	D

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	ELMIRA, NY MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
334411	Electron tube mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
	GLENS FALLS, NY MSA												
31-33	Manufacturing	-	183	56	7 866	266 749	5 546	11 079	151 403	770 818	696 172	1 462 693	74 753
313	Textile mills.....	-	3	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	e	D	D	D	D	D	D	D	D
31324	Knit fabric mills.....	-	1	1	e	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills.....	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	3	23	5	417	9 399	331	683	6 555	18 853	24 562	43 149	1 279
322	Paper mfg.....	-	13	10	1 897	81 933	1 342	2 960	48 058	246 192	220 148	458 899	49 273
3221	Pulp, paper, & paperboard mills.....	-	5	5	1 411	61 087	960	2 118	36 290	209 282	179 930	383 566	D
32212	Paper mills.....	-	5	5	1 411	61 087	960	2 118	36 290	209 282	179 930	383 566	D
322121	Paper (except newsprint) mills.....	-	5	5	1 411	61 087	960	2 118	36 290	209 282	179 930	383 566	D
3222	Converted paper product mfg.....	-	8	5	486	20 846	382	842	11 768	36 910	40 218	75 333	D
32229	Other converted paper product mfg.....	-	4	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	24	7	648	19 627	483	855	12 099	57 573	36 918	93 577	7 884
3273	Cement & concrete product mfg.....	-	10	2	414	13 015	291	470	7 739	43 717	27 784	71 779	D
332	Fabricated metal product mfg.....	2	31	6	329	10 120	247	494	6 566	21 690	14 911	36 552	2 225
333	Machinery mfg.....	-	13	5	483	21 574	305	598	11 086	39 981	37 031	77 763	1 946
3332	Industrial machinery mfg ..	-	7	3	386	18 793	232	447	9 259	35 669	32 362	68 422	D
33329	Other industrial machinery mfg.....	-	7	3	386	18 793	232	447	9 259	35 669	32 362	68 422	D
333291	Paper industry machinery mfg.....	-	5	3	e	D	D	D	D	D	D	D	1 657
335	Electrical equipment, appliance, & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	5	3	400	11 824	265	536	5 844	25 045	14 189	38 649	748
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	5	3	400	11 824	265	536	5 844	25 045	14 189	38 649	748
33712	Household & institutional furniture mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	22	7	2 152	65 310	1 427	2 753	30 084	117 582	103 408	221 610	5 476
3391	Medical equipment & supplies mfg.....	-	11	5	2 009	61 436	1 324	2 536	27 750	108 892	97 843	207 285	4 986
33911	Medical equipment & supplies mfg.....	-	11	5	2 009	61 436	1 324	2 536	27 750	108 892	97 843	207 285	4 986
339112	Surgical & medical instrument mfg.....	-	6	5	1 989	60 998	1 311	2 520	27 544	107 779	97 203	205 520	4 913

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JAMESTOWN, NY MSA													
31-33	Manufacturing	-	222	92	13 084	409 068	9 651	19 457	267 195	1 459 552	1 499 709	2 973 564	110 171
311	Food mfg	-	22	12	2 444	69 485	1 814	3 766	43 440	420 483	578 897	999 303	19 871
3111	Animal food mfg	-	3	1	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	3	1	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	5	4	1 203	37 169	940	2 091	23 212	127 735	299 538	427 958	D
31142	Fruit & vegetable canning, pickling, & drying	-	4	3	g	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	3	3	g	D	D	D	D	D	D	D	8 111
3115	Dairy product mfg	7	3	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	9	1	1	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	9	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	9	4	3	319	5 105	199	360	2 914	11 235	11 208	21 939	D
321	Wood product mfg	1	19	6	303	6 537	237	416	4 038	13 132	15 224	28 231	1 109
327	Nonmetallic mineral product mfg	-	14	3	492	18 891	365	751	12 992	42 521	34 886	76 704	3 881
3271	Clay product & refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	1	1	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	55	20	2 496	83 530	1 901	4 061	58 422	151 532	115 364	266 206	16 864
3321	Forging & stamping	-	11	6	404	9 298	340	721	6 871	17 692	26 901	44 471	666
33211	Forging & stamping	-	11	6	404	9 298	340	721	6 871	17 692	26 901	44 471	666
332116	Metal stamping	-	6	4	322	6 472	284	580	5 202	10 852	17 465	28 221	D
3323	Architectural & structural metals mfg	-	14	6	420	12 150	288	619	7 544	27 174	13 362	40 258	472
33232	Ornamental & architectural metal products mfg	-	9	5	352	10 203	232	473	6 126	24 492	9 175	33 226	D
332321	Metal window & door mfg	-	3	3	250	7 481	158	362	4 471	18 052	5 147	22 977	256
3325	Hardware mfg	-	3	1	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	1	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	16	3	289	8 735	242	459	6 448	17 176	7 885	24 727	1 814
3329	Other fabricated metal product mfg	-	7	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	25	12	2 102	79 105	1 367	3 423	58 356	412 507	434 149	846 169	14 860
3335	Metalworking machinery mfg	2	15	5	510	19 235	384	793	14 207	32 571	16 948	50 100	5 773
33351	Metalworking machinery mfg	2	15	5	510	19 235	384	793	14 207	32 571	16 948	50 100	5 773
333514	Special die & tool, die set, jig, & fixture mfg ..	-	10	2	312	11 201	236	467	8 200	15 499	11 940	27 742	2 451
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	3	e	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JAMESTOWN, NY MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	2	6	5	625	15 313	386	727	7 824	8 578	20 391	38 112	2 396
3363	Motor vehicle parts mfg . . .	3	5	4	f	D	D	D	D	D	D	D	2 396
33632	Motor vehicle electrical & electronic equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	23	15	2 632	66 346	2 121	3 319	38 309	233 494	135 301	362 781	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	15	10	2 411	59 986	1 979	3 074	35 028	204 607	125 386	325 488	D
33712	Household & institutional furniture mfg	—	11	9	2 379	59 116	1 957	3 031	34 543	202 856	124 628	322 951	D
337122	Nonupholstered wood household furniture mfg	—	7	7	2 309	57 697	1 905	2 925	33 561	202 015	122 329	319 911	D
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA												
31-33	Manufacturing	1	29 610	8 242	837 259	29 316 270	556 831	1 099 707	14 974 104	88 559 145	75 447 144	164 000 119	5 662 912
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (CT Part)	1	3 136	1 014	126 073	5 105 182	77 123	159 649	2 450 980	15 589 132	10 842 000	26 362 516	999 073
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (NJ Part)	1	9 881	3 185	336 041	12 775 550	224 381	456 137	6 591 608	41 940 178	37 053 679	78 851 460	2 605 396
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (NY Part)	2	16 565	4 039	374 810	11 425 439	255 150	483 656	5 928 336	31 004 045	27 448 245	58 649 812	2 055 055
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (PA Part)	—	28	4	335	10 099	177	265	3 180	25 790	103 220	136 331	3 388
311	Food mfg	2	2 571	447	l	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	100	32	i	D	D	D	D	D	D	D	D
313	Textile mills	3	922	248	j	D	D	D	D	D	D	D	D
314	Textile product mills	2	809	173	j	D	D	D	D	D	D	D	D
315	Apparel mfg	3	4 418	1 362	m	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	1	230	55	i	D	D	D	D	D	D	D	D
321	Wood product mfg	4	326	66	h	D	D	D	D	D	D	D	D
322	Paper mfg	1	490	276	k	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	3 936	722	l	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	1	118	27	h	D	D	D	D	D	D	D	D
325	Chemical mfg	1	1 205	587	l	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	1 052	540	l	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	617	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	286	135	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	3 722	960	80 405	2 878 544	58 220	121 941	1 709 920	6 078 011	4 482 749	10 584 180	356 089
333	Machinery mfg	1	1 672	489	k	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	1 402	576	l	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	637	297	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	450	166	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	1 452	259	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	3 195	649	l	D	D	D	D	D	D	D	D
	Dutchess County, NY PMSA												
31-33	Manufacturing	—	210	59	11 848	521 317	5 675	11 405	153 806	937 456	1 932 127	3 032 927	54 681
321	Wood product mfg	6	7	3	269	7 987	202	431	4 258	24 075	39 413	62 410	1 322
323	Printing & related support activities	5	28	6	492	16 654	392	705	9 884	40 973	17 714	58 614	2 270
3231	Printing & related support activities	5	28	6	492	16 654	392	705	9 884	40 973	17 714	58 614	2 270
323110	Commercial lithographic printing ..	5	26	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	8	6	666	21 831	506	1 113	12 242	52 759	51 259	105 346	3 265
3262	Rubber product mfg	1	3	3	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	2	2	2	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	14	4	323	9 880	165	288	4 034	28 388	36 615	64 840	1 814
332	Fabricated metal product mfg	1	36	12	749	26 342	583	1 176	15 611	59 764	28 556	87 734	2 669
333	Machinery mfg	—	13	5	314	12 596	209	377	6 020	29 758	10 661	40 181	657
334	Computer & electronic product mfg	—	15	8	i	D	D	D	D	D	D	D	35 102
3344	Semiconductor & other electronic component mfg	—	9	5	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	9	5	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	4	2	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	9	3	1	519	12 452	453	1 032	11 498	700	2 739	3 488	D
	Nassau—Suffolk, NY PMSA												
31-33	Manufacturing	1	4 188	1 040	113 034	3 984 278	71 156	138 929	1 883 657	11 184 120	7 940 928	19 126 418	650 297
311	Food mfg	2	341	46	5 574	153 943	3 340	5 800	79 456	508 854	357 166	868 559	30 471
3118	Bakeries & tortilla mfg	1	266	21	3 853	102 175	2 242	3 701	52 672	336 532	180 658	518 608	18 643
31181	Bread & bakery product mfg	1	254	18	3 520	93 029	2 016	3 267	47 039	308 777	159 559	469 523	16 581
311811	Retail bakeries	3	195	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	57	13	2 371	76 096	1 361	2 322	38 588	270 266	136 504	407 739	14 865
31182	Cookie, cracker, & pasta mfg	2	12	3	333	9 146	226	434	5 633	27 755	21 099	49 085	2 062
3119	Other food mfg	3	15	8	630	20 411	333	598	8 974	80 405	60 440	142 495	5 931
31199	All other food mfg	2	9	5	437	13 354	230	441	6 385	63 286	42 986	106 183	5 170
311991	Perishable prepared food mfg	—	3	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Nassau—Suffolk, NY PMSA—Con. Manufacturing—Con.												
313	Textile mills	2	49	11	1 029	28 729	870	1 897	20 222	71 536	82 010	153 579	3 129
3132	Fabric mills	5	21	5	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	4	10	5	498	12 870	450	978	10 971	25 539	10 857	35 920	835
313241	Weft knit fabric mills ..	9	6	3	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	1	27	5	445	13 625	342	740	7 758	42 569	64 994	108 381	1 856
31331	Textile & fabric finishing mills	1	25	4	e	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	1	18	3	309	9 506	240	551	5 359	26 812	32 354	60 007	1 630
314	Textile product mills	2	85	13	950	24 824	722	1 351	14 811	53 244	46 673	99 616	2 455
3141	Textile furnishings mills	1	26	4	335	7 474	257	459	4 471	13 798	19 282	33 153	472
31412	Curtain & linen mills	2	24	3	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	3	59	9	615	17 350	465	892	10 340	39 446	27 391	66 463	1 983
31491	Textile bag & canvas mills	3	32	3	302	10 178	219	415	5 557	16 961	10 687	27 456	968
31499	All other textile product mills	3	27	6	313	7 172	246	477	4 783	22 485	16 704	39 007	1 015
314999	All other miscellaneous textile product mills ..	3	27	6	313	7 172	246	477	4 783	22 485	16 704	39 007	1 015
315	Apparel mfg	3	150	48	3 193	64 468	2 460	4 550	42 041	198 509	186 617	391 234	5 451
3151	Apparel knitting mills	6	23	7	462	12 864	364	700	7 614	19 426	58 709	79 931	3 415
31519	Other apparel knitting mills	6	23	7	462	12 864	364	700	7 614	19 426	58 709	79 931	3 415
315191	Outerwear knitting mills	6	23	7	462	12 864	364	700	7 614	19 426	58 709	79 931	3 415
3152	Cut & sew apparel mfg	3	95	36	2 352	43 059	1 793	3 300	29 907	159 146	105 901	269 447	1 883
31521	Cut & sew apparel contractors	6	55	20	1 091	17 231	1 007	1 767	14 251	33 200	9 194	42 171	863
315212	Women's, girls' & infants' cut & sew apparel contractors ..	5	49	17	961	15 447	884	1 552	12 658	29 600	8 769	38 146	784
31523	Women's & girls' cut & sew apparel mfg	1	27	11	934	19 819	502	959	11 074	104 804	73 845	183 031	703
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	3	2	e	D	D	D	D	D	D	D	342
315239	Women's & girls' cut & sew other outerwear mfg	-	11	5	273	6 437	144	263	2 592	17 415	22 925	41 046	226
31529	Other cut & sew apparel mfg	8	7	3	259	4 786	224	466	3 650	18 343	20 351	38 892	D
315299	All other cut & sew apparel mfg	9	6	3	e	D	D	D	D	D	D	D	207
3159	Apparel accessories & other apparel mfg	-	32	5	379	8 545	303	550	4 520	19 937	22 007	41 856	153
31599	Apparel accessories & other apparel mfg	-	32	5	379	8 545	303	550	4 520	19 937	22 007	41 856	153
316	Leather & allied product mfg ..	1	18	3	280	6 122	188	396	3 800	23 177	15 384	41 972	342
321	Wood product mfg	5	68	9	718	16 138	581	1 113	12 387	28 935	27 046	56 116	1 515
3219	Other wood product mfg	4	65	9	f	D	D	D	D	D	D	D	D
32191	Millwork	4	32	3	271	7 442	208	419	5 542	12 707	11 890	24 551	797
32199	All other wood product mfg	5	21	5	370	7 108	315	579	5 842	12 673	11 766	24 634	557
321999	All other miscellaneous wood product mfg	5	19	5	e	D	D	D	D	D	D	D	D
322	Paper mfg	4	64	30	2 629	84 294	2 015	4 027	53 016	222 164	278 058	502 789	20 676
3222	Converted paper product mfg	4	63	29	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	26	13	886	31 841	607	1 186	15 177	60 719	93 349	154 835	3 129
322211	Corrugated & solid fiber box mfg	1	15	8	458	15 833	302	559	6 894	26 820	54 328	81 570	D
322212	Folding paperboard box mfg	1	9	5	e	D	D	D	D	D	D	D	1 876
32222	Paper bag & coated & treated paper mfg	3	12	3	e	D	D	D	D	D	D	D	1 189
32223	Stationery product mfg ..	-	11	5	570	16 715	413	906	10 218	43 673	28 314	73 208	D
322232	Envelope mfg	-	3	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	9	14	8	689	20 834	590	1 181	16 044	93 122	111 514	205 184	D
322291	Sanitary paper product mfg	9	7	5	552	17 467	469	1 008	13 562	86 860	106 507	193 149	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Nassau—Suffolk, NY PMSA—Con. Manufacturing—Con.												
323	Printing & related support activities.....	2	659	110	9 257	306 125	6 730	12 848	191 475	660 661	398 566	1 060 459	49 047
3231	Printing & related support activities.....	2	659	110	9 257	306 125	6 730	12 848	191 475	660 661	398 566	1 060 459	49 047
32311	Printing.....	2	581	104	8 378	273 657	6 000	11 257	165 523	604 032	387 897	993 269	46 264
323110	Commercial lithographic printing ..	2	293	66	5 409	183 887	3 811	7 259	110 095	373 021	242 780	618 023	31 016
323112	Commercial flexographic printing .	1	17	6	472	16 350	292	557	9 331	41 215	36 572	76 775	5 213
323113	Commercial screen printing.....	3	51	6	446	10 361	363	643	6 283	20 034	12 648	32 768	2 425
323114	Quick printing.....	4	113	3	488	11 967	353	558	7 845	23 299	16 376	39 618	1 701
323116	Manifold business form printing.....	2	18	6	462	16 355	339	608	9 903	68 438	31 268	100 279	1 799
323117	Book printing.....	1	15	7	289	9 909	246	511	6 672	19 968	13 871	33 639	1 537
323118	Blankbook, looseleaf binder, & device mfg .	3	7	4	288	7 819	229	448	4 964	27 328	12 666	39 848	724
323119	Other commercial printing.....	5	56	6	486	15 734	338	621	9 588	27 630	19 004	46 510	1 509
32312	Support activities for printing.....	2	78	6	879	32 468	730	1 591	25 952	56 629	10 669	67 190	2 783
323122	Prepress services	2	63	4	744	28 677	618	1 347	23 360	49 572	9 548	59 043	1 898
325	Chemical mfg	1	140	60	10 917	382 870	5 809	11 736	138 945	2 161 593	1 631 509	3 812 409	147 569
3251	Basic chemical mfg	4	9	6	320	12 400	197	383	6 335	28 867	23 161	52 211	D
3254	Pharmaceutical & medicine mfg	1	57	31	5 789	208 693	2 879	5 395	71 062	603 556	514 601	1 121 331	82 646
32541	Pharmaceutical & medicine mfg	1	57	31	5 789	208 693	2 879	5 395	71 062	603 556	514 601	1 121 331	82 646
325411	Medicinal & botanical mfg	5	12	3	443	16 123	281	467	7 704	44 051	59 814	103 703	10 636
325412	Pharmaceutical preparation mfg	-	39	24	5 084	183 478	2 514	4 728	60 350	547 479	440 477	988 333	71 186
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	39	10	3 338	100 893	1 807	4 064	31 603	1 348 903	754 307	2 114 898	22 390
32562	Toilet preparation mfg ..	-	24	9	3 181	96 105	1 698	3 862	29 190	1 337 293	745 316	2 093 094	21 760
325620	Toilet preparation mfg .	-	24	9	3 181	96 105	1 698	3 862	29 190	1 337 293	745 316	2 093 094	21 760
3259	Other chemical product mfg	-	14	8	1 063	40 900	672	1 341	20 118	99 750	218 176	320 700	31 333
32599	All other chemical product & preparation mfg	-	14	8	1 063	40 900	672	1 341	20 118	99 750	218 176	320 700	31 333
325992	Photographic film, paper, plate, & chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	10	5	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	152	70	6 061	166 580	4 619	8 514	92 391	369 020	359 422	729 239	26 044
3261	Plastics product mfg	4	136	62	5 702	157 792	4 328	7 888	87 242	351 348	345 844	698 097	24 884
32611	Unsupported plastics film, sheet, & bag mfg ..	2	18	6	998	29 941	753	1 566	18 425	73 344	84 373	156 500	3 931
326111	Unsupported plastics bag mfg	-	7	3	683	19 869	538	1 145	12 606	45 024	51 403	95 379	D
32619	Other plastics product mfg	4	92	47	4 247	113 104	3 256	5 707	60 583	243 594	227 250	473 060	18 774
326199	All other plastics product mfg	4	89	47	4 229	112 725	3 241	5 679	60 303	242 662	226 485	471 361	18 736
3262	Rubber product mfg	3	16	8	359	8 788	291	626	5 149	17 672	13 578	31 142	1 160
32629	Other rubber product mfg	2	8	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	117	21	1 314	45 141	996	1 890	31 417	129 484	138 225	262 742	7 808
3272	Glass & glass product mfg .	4	26	4	275	7 959	171	322	4 209	21 320	18 593	39 862	1 265
32721	Glass & glass product mfg	4	26	4	275	7 959	171	322	4 209	21 320	18 593	39 862	1 265
327215	Glass product mfg made of purchased glass.....	4	20	4	258	7 590	156	303	3 918	20 258	18 178	38 380	1 162
3273	Cement & concrete product mfg	2	64	12	743	27 436	595	1 121	19 901	69 902	73 047	143 469	5 389
32732	Ready-mix concrete mfg .	1	30	4	285	11 613	243	448	9 311	25 315	36 870	62 507	2 255
327320	Ready-mix concrete mfg	1	30	4	285	11 613	243	448	9 311	25 315	36 870	62 507	2 255

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31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Nassau-Suffolk, NY PMSA—Con. Manufacturing—Con.												
331	Primary metal mfg	3	33	10	738	20 586	496	961	11 508	41 848	37 785	79 541	1 786
3315	Foundries	—	20	8	506	14 456	327	663	7 570	23 672	18 861	42 346	667
33152	Nonferrous metal foundries	—	18	8	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	9	5	257	7 347	175	343	4 390	11 221	10 594	21 511	211
332	Fabricated metal product mfg	1	685	142	12 454	456 697	8 747	17 719	250 174	977 975	622 903	1 599 925	51 139
3321	Forging & stamping	1	35	10	642	24 879	492	1 009	14 752	49 264	34 552	86 271	1 523
33211	Forging & stamping	1	35	10	642	24 879	492	1 009	14 752	49 264	34 552	86 271	1 523
332116	Metal stamping	1	29	8	503	19 584	385	794	11 166	37 755	17 278	54 556	969
3322	Cutlery & handtool mfg	—	18	6	973	35 410	608	1 398	13 043	85 553	95 306	195 800	5 587
33221	Cutlery & handtool mfg	—	18	6	973	35 410	608	1 398	13 043	85 553	95 306	195 800	5 587
332212	Hand & edge tool mfg	—	11	3	384	20 722	160	281	4 225	42 170	41 928	85 138	2 534
332213	Saw blade & handsaw mfg	—	4	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	151	41	3 116	111 048	2 160	4 395	62 853	217 055	149 598	364 405	6 365
33231	Plate work & fabricated structural product mfg	1	30	5	582	20 578	360	714	11 345	37 124	30 370	67 703	790
332311	Prefabricated metal building & component mfg	—	5	2	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	1	19	3	265	8 571	138	254	4 250	19 066	13 883	33 090	477
33232	Ornamental & architectural metal products mfg	1	121	36	2 534	90 470	1 800	3 681	51 508	179 931	119 228	296 702	5 575
332321	Metal window & door mfg	2	28	8	565	13 807	416	827	8 186	34 267	32 747	67 444	621
332322	Sheet metal work mfg	1	66	24	1 596	64 495	1 173	2 423	37 540	118 872	64 043	182 325	3 837
332323	Ornamental & architectural metal work mfg	1	27	4	373	12 168	211	431	5 782	26 792	22 438	46 933	1 117
3324	Boiler, tank, & shipping container mfg	1	14	4	330	11 538	247	505	6 659	23 364	10 388	33 946	745
3325	Hardware mfg	2	12	4	269	8 505	168	294	3 593	19 275	16 685	35 889	499
33251	Hardware mfg	2	12	4	269	8 505	168	294	3 593	19 275	16 685	35 889	499
332510	Hardware mfg	2	12	4	269	8 505	168	294	3 593	19 275	16 685	35 889	499
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	335	50	4 434	165 609	3 252	6 413	99 011	345 836	182 401	515 722	24 627
33271	Machine shops	1	273	29	2 832	110 270	2 088	4 223	67 522	233 084	90 658	314 325	19 651
332710	Machine shops	1	273	29	2 832	110 270	2 088	4 223	67 522	233 084	90 658	314 325	19 651
33272	Turned product & screw, nut, & bolt mfg	1	62	21	1 602	55 339	1 164	2 190	31 489	112 752	91 743	201 397	4 976
332721	Precision turned product mfg	—	40	10	870	26 729	680	1 232	16 883	48 111	46 071	91 766	1 371
332722	Bolt, nut, screw, rivet, & washer mfg	2	22	11	732	28 610	484	958	14 606	64 641	45 672	109 631	3 605
3328	Coating, engraving, heat treating, & allied activities	1	53	14	756	21 584	575	1 077	13 572	41 132	15 952	57 181	1 890
33281	Coating, engraving, heat treating, & allied activities	1	53	14	756	21 584	575	1 077	13 572	41 132	15 952	57 181	1 890
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	22	7	355	8 430	272	485	5 471	18 837	8 092	26 910	771
332813	Electroplating, plating, polishing, anodizing, & coloring	2	25	4	289	9 696	214	432	5 932	15 201	6 765	22 052	D
3329	Other fabricated metal product mfg	—	53	11	1 703	70 113	1 060	2 279	31 728	178 428	102 357	276 916	8 411
33291	Metal valve mfg	—	12	6	647	23 816	485	1 142	14 244	40 546	61 778	102 689	3 464
332913	Plumbing fixture fitting & trim mfg	—	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	41	5	1 056	46 297	575	1 137	17 484	137 882	40 579	174 227	4 947
332991	Ball & roller bearing mfg	—	2	1	f	D	D	D	D	D	D	D	D

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	Nassau—Suffolk, NY PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	287	77	6 554	241 730	4 032	8 023	117 722	524 626	437 432	948 480	24 445
3332	Industrial machinery mfg ..	1	60	21	1 542	62 778	909	1 832	28 126	130 602	141 838	269 610	D
33329	Other industrial machinery mfg	—	51	18	1 377	57 616	784	1 565	24 874	122 557	133 108	252 853	3 527
333298	All other industrial machinery mfg	—	22	9	694	28 746	391	783	11 631	63 541	73 479	134 323	1 935
3333	Commercial & service industry machinery mfg ..	—	41	16	g	D	D	D	D	D	D	D	2 946
33331	Commercial & service industry machinery mfg	—	41	16	g	D	D	D	D	D	D	D	2 946
333314	Optical instrument & lens mfg	—	14	8	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	13	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	16	7	799	24 719	524	998	11 088	59 184	53 535	110 578	3 926
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	16	7	799	24 719	524	998	11 088	59 184	53 535	110 578	3 926
333414	Heating equipment (except warm air furnaces) mfg	1	8	4	645	19 329	417	798	8 733	47 030	42 440	87 431	D
3335	Metalworking machinery mfg	1	88	11	929	35 491	642	1 170	19 805	71 345	46 511	112 231	3 558
33351	Metalworking machinery mfg	1	88	11	929	35 491	642	1 170	19 805	71 345	46 511	112 231	3 558
333515	Cutting tool & machine tool accessory mfg ..	1	25	4	283	15 236	178	360	6 243	33 265	22 948	51 625	855
3336	Engine, turbine, & power transmission equipment mfg	4	14	6	f	D	D	D	D	D	D	D	3 380
33361	Engine, turbine, & power transmission equipment mfg	4	14	6	f	D	D	D	D	D	D	D	3 380
333612	Speed changer, industrial high-speed drive, & gear mfg	7	5	2	526	11 774	331	718	6 918	26 806	17 396	44 150	D
3339	Other general-purpose machinery mfg	2	64	16	1 355	54 610	782	1 582	28 252	125 622	107 081	228 025	4 892
33391	Pump & compressor mfg	—	8	4	258	12 395	152	297	6 799	29 279	39 028	62 260	1 051
33399	All other general-purpose machinery mfg	2	45	8	926	35 013	511	1 047	17 463	79 639	52 005	132 680	3 396
333995	Fluid power cylinder & actuator mfg	—	3	3	469	18 551	207	432	8 761	42 309	22 421	65 901	D
334	Computer & electronic product mfg	—	305	143	26 698	1 164 098	13 830	27 853	455 765	2 842 470	1 697 491	4 473 144	195 144
3341	Computer & peripheral equipment mfg	—	24	6	3 790	160 056	1 588	1 780	31 120	615 878	241 883	791 172	D
33411	Computer & peripheral equipment mfg	—	24	6	3 790	160 056	1 588	1 780	31 120	615 878	241 883	791 172	D
334113	Computer terminal mfg	—	3	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	15	4	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	60	33	6 573	299 707	3 260	6 479	107 225	740 709	637 735	1 349 822	46 037
33421	Telephone apparatus mfg	1	11	9	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	11	9	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	35	23	3 570	170 329	2 070	4 389	75 513	335 976	302 538	635 166	25 502
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	35	23	3 570	170 329	2 070	4 389	75 513	335 976	302 538	635 166	25 502
33429	Other communications equipment mfg	—	14	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	14	1	g	D	D	D	D	D	D	D	D

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334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	102	52	6 706	233 864	4 175	8 402	107 486	527 002	333 367	889 753	36 387
33441	Semiconductor & other electronic component mfg	1	102	52	6 706	233 864	4 175	8 402	107 486	527 002	333 367	889 753	36 387
334412	Bare printed circuit board mfg	—	23	8	2 366	76 758	1 794	4 056	45 231	221 370	115 273	334 693	13 124
334413	Semiconductor & related device mfg ...	1	16	8	1 663	71 609	651	850	20 228	110 342	129 337	271 501	17 003
334414	Electronic capacitor mfg	2	4	3	432	13 983	231	474	6 202	44 870	7 226	52 031	1 551
334416	Electronic coil, transformer, & other inductor mfg	—	12	8	609	14 616	532	1 051	9 037	29 758	15 110	43 563	D
334417	Electronic connector mfg	1	6	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	2	13	10	553	22 443	342	669	9 367	36 738	33 234	71 307	1 673
334419	Other electronic component mfg	2	27	12	761	19 796	412	805	8 742	40 009	19 910	59 261	1 069
3345	Navigational, measuring, medical, & control instruments mfg	—	103	48	8 845	448 686	4 165	9 883	192 320	910 672	439 427	1 349 180	41 915
33451	Navigational, measuring, medical, & control instruments mfg	—	103	48	8 845	448 686	4 165	9 883	192 320	910 672	439 427	1 349 180	41 915
334510	Electromedical & electrotherapeutic apparatus mfg	6	12	3	661	32 801	227	538	8 568	36 755	23 708	62 168	5 923
334511	Search, detection, navigation, & guidance instrument mfg	—	27	12	4 732	268 823	2 264	4 484	126 551	541 613	140 567	675 541	20 144
334513	Industrial process control instrument mfg	3	15	6	401	15 568	179	315	5 078	30 804	20 230	51 570	886
334515	Electricity measuring & testing instrument mfg	—	13	8	1 221	55 594	531	2 532	20 936	132 295	144 587	284 299	7 217
334516	Analytical laboratory instrument mfg	—	7	5	464	19 696	159	332	6 272	66 573	28 950	97 024	3 622
334517	Irradiation apparatus mfg	1	5	5	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	11	5	630	30 335	331	635	12 411	41 382	27 993	64 867	1 212
3346	Mfg & reproducing magnetic & optical media	—	11	4	760	21 024	626	1 281	17 231	46 817	42 519	89 247	D
33461	Mfg & reproducing magnetic & optical media	—	11	4	760	21 024	626	1 281	17 231	46 817	42 519	89 247	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	7	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	110	51	3 670	122 572	2 361	4 845	58 520	273 986	273 635	549 883	10 226
3351	Electric lighting equipment mfg	2	29	10	733	22 669	424	797	9 789	52 352	41 290	94 186	1 065
33512	Lighting fixture mfg	2	28	10	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	1	8	3	322	10 342	173	314	4 455	20 620	6 587	27 788	257
3353	Electrical equipment mfg ..	3	39	15	1 448	49 672	942	2 025	25 238	97 908	63 743	162 280	5 184
33531	Electrical equipment mfg	3	39	15	1 448	49 672	942	2 025	25 238	97 908	63 743	162 280	5 184
335312	Motor & generator mfg	1	9	5	e	D	D	D	D	D	D	D	976
335314	Relay & industrial control mfg	4	22	7	935	30 776	574	1 371	14 400	69 637	34 801	105 092	3 651
3359	Other electrical equipment & component mfg	1	42	26	1 489	50 231	995	2 023	23 493	123 726	168 602	293 417	3 977
33593	Wiring device mfg	2	11	5	318	11 680	213	455	6 894	23 259	17 684	41 936	596
335931	Current-carrying wiring device mfg	2	9	5	e	D	D	D	D	D	D	D	D

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	Nassau—Suffolk, NY PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33599	All other electrical equipment & component mfg	1	22	15	874	28 060	559	1 073	11 768	63 628	61 629	124 088	2 376
335999	All other miscellaneous electrical equipment & component mfg	1	22	15	874	28 060	559	1 073	11 768	63 628	61 629	124 088	2 376
336	Transportation equipment mfg	1	136	48	7 045	305 940	3 556	7 121	97 819	1 152 443	644 976	1 847 282	27 862
3363	Motor vehicle parts mfg . . .	3	58	20	2 083	68 214	1 430	3 356	34 893	136 574	149 522	284 088	8 567
33632	Motor vehicle electrical & electronic equipment mfg	6	21	11	g	D	D	D	D	D	D	D	4 273
336322	Other motor vehicle electrical & electronic equipment mfg	7	19	10	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	42	22	4 557	225 990	1 794	3 161	54 632	976 672	461 318	1 491 504	18 282
33641	Aerospace product & parts mfg	—	42	22	4 557	225 990	1 794	3 161	54 632	976 672	461 318	1 491 504	18 282
336411	Aircraft mfg	8	4	3	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	6	4	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	32	15	h	D	D	D	D	D	D	D	14 614
337	Furniture & related product mfg	3	280	45	4 332	107 325	3 157	5 423	65 045	207 675	152 863	360 504	7 030
3371	Household & institutional furniture & kitchen cabinet mfg	4	197	16	1 433	32 973	1 146	2 137	23 360	62 987	53 436	116 759	2 086
33711	Wood kitchen cabinet & counter top mfg	3	107	9	763	18 119	618	1 166	13 114	35 385	27 847	63 546	1 186
337110	Wood kitchen cabinet & counter top mfg . . .	3	107	9	763	18 119	618	1 166	13 114	35 385	27 847	63 546	1 186
33712	Household & institutional furniture mfg	5	90	7	670	14 854	528	971	10 246	27 602	25 589	53 213	900
337122	Nonupholstered wood household furniture mfg	6	52	2	345	7 338	306	548	5 790	12 763	12 047	24 640	484
3372	Office furniture (including fixtures) mfg	2	71	28	2 693	69 437	1 863	2 914	38 471	134 539	89 158	222 935	4 322
33721	Office furniture (including fixtures) mfg	2	71	28	2 693	69 437	1 863	2 914	38 471	134 539	89 158	222 935	4 322
337215	Showcase, partition, shelving, & locker mfg	1	44	24	2 344	57 066	1 613	2 422	31 023	110 222	75 053	184 314	3 459
339	Miscellaneous mfg	3	477	96	9 241	267 045	6 412	12 387	136 847	639 243	422 301	1 061 525	32 833
3391	Medical equipment & supplies mfg	4	219	36	4 429	139 578	2 805	5 620	66 219	368 916	168 354	536 816	19 312
33911	Medical equipment & supplies mfg	4	219	36	4 429	139 578	2 805	5 620	66 219	368 916	168 354	536 816	19 312
339111	Laboratory apparatus & furniture mfg	6	12	6	335	12 163	201	343	4 661	33 967	16 670	48 272	1 366
339112	Surgical & medical instrument mfg	5	25	12	2 133	67 115	1 249	2 623	28 691	153 579	88 417	244 115	11 267
339113	Surgical appliance & supplies mfg	3	19	5	813	25 381	521	1 115	12 410	110 852	31 337	142 381	2 484
339115	Ophthalmic goods mfg	7	14	5	309	8 481	217	419	4 677	22 198	11 421	32 053	2 504
339116	Dental laboratories . . .	5	135	4	628	20 032	471	852	12 337	39 369	16 010	56 294	1 432

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Nassau—Suffolk, NY PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ..	3	258	60	4 812	127 467	3 607	6 767	70 628	270 327	253 947	524 709	13 521
33991	Jewelry & silverware mfg	2	63	12	731	22 813	575	1 015	13 306	44 901	73 797	117 925	923
339911	Jewelry (except costume) mfg	1	38	7	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	15	3	315	7 180	217	395	2 900	15 941	13 365	29 329	2 059
339941	Pen & mechanical pencil mfg	—	5	3	255	6 144	174	319	2 206	13 357	11 459	24 860	D
33995	Sign mfg	3	98	23	1 575	46 659	1 092	2 126	25 675	88 369	67 258	156 231	3 960
339950	Sign mfg	3	98	23	1 575	46 659	1 092	2 126	25 675	88 369	67 258	156 231	3 960
33999	All other miscellaneous mfg	2	53	17	1 882	42 085	1 507	2 780	24 026	103 112	77 921	181 034	5 347
339992	Musical instrument mfg	—	6	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	35	13	1 100	25 498	854	1 642	15 146	61 284	52 984	115 440	3 220
	New York, NY PMSA												
31-33	Manufacturing	3	11 821	2 833	239 106	6 604 084	170 241	317 566	3 687 171	18 113 174	16 511 634	34 656 597	1 288 694
311	Food mfg	3	1 176	161	18 129	499 211	11 898	22 622	265 389	1 271 217	1 766 784	3 043 685	82 961
3113	Sugar & confectionery product mfg	—	41	15	2 020	73 807	1 578	3 458	50 124	187 004	560 616	750 398	11 087
31131	Sugar mfg	—	4	2	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining ..	—	4	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ..	—	17	7	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	17	7	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	—	14	6	563	14 247	389	815	8 458	53 590	35 040	88 806	2 639
311340	Nonchocolate confectionery mfg ...	—	14	6	563	14 247	389	815	8 458	53 590	35 040	88 806	2 639
3114	Fruit & vegetable preserving & specialty food mfg	6	38	16	1 458	32 038	1 085	2 041	20 394	100 031	92 629	192 623	5 854
31141	Frozen food mfg	6	18	9	950	22 453	755	1 502	14 636	65 997	59 712	125 930	4 226
311412	Frozen specialty food mfg	6	16	9	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	5	20	7	508	9 585	330	539	5 758	34 034	32 917	66 693	1 628
311421	Fruit & vegetable canning	4	16	6	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	1	35	6	744	27 035	433	953	15 555	65 437	192 538	257 559	2 360
31151	Dairy product (except frozen) mfg	—	15	4	599	23 017	347	808	13 670	55 840	177 139	232 568	1 782
311511	Fluid milk mfg	—	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	6	71	22	1 420	41 429	1 076	2 293	28 022	157 984	270 563	427 726	7 586
31161	Animal slaughtering & processing	6	71	22	1 420	41 429	1 076	2 293	28 022	157 984	270 563	427 726	7 586
311612	Meat processed from carcasses	6	49	19	1 187	36 089	870	1 909	24 061	134 905	216 656	350 689	6 853
3117	Seafood product preparation & packaging ..	1	8	3	270	12 538	200	456	5 210	21 215	39 924	60 955	D
31171	Seafood product preparation & packaging	1	8	3	270	12 538	200	456	5 210	21 215	39 924	60 955	D
3118	Bakeries & tortilla mfg	4	875	71	9 477	238 240	5 738	10 058	106 627	497 898	287 737	786 234	36 164
31181	Bread & bakery product mfg	4	828	61	8 356	200 010	4 934	8 743	86 029	392 606	228 758	621 298	29 807
311811	Retail bakeries	5	603	14	2 751	41 185	1 744	2 366	20 447	91 915	59 384	151 658	4 714
311812	Commercial bakeries ..	4	215	43	5 402	154 627	3 053	6 169	63 084	289 769	160 365	449 729	24 565
31182	Cookie, cracker, & pasta mfg	3	46	10	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	3	17	9	942	32 423	688	1 124	17 795	83 169	43 826	127 503	5 785

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	95	28	2 682	72 698	1 744	3 282	38 489	229 181	297 098	530 085	11 580
31192	Coffee & tea mfg	1	9	6	501	18 012	263	631	10 059	90 152	119 414	213 351	3 635
311920	Coffee & tea mfg	1	9	6	501	18 012	263	631	10 059	90 152	119 414	213 351	3 635
31194	Seasoning & dressing mfg	4	19	6	584	19 724	386	783	9 437	45 539	56 587	101 797	3 325
311942	Spice & extract mfg	—	13	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg	1	52	13	1 369	28 961	940	1 531	16 053	74 678	93 866	168 251	3 771
311991	Perishable prepared food mfg	—	20	6	833	20 214	529	962	10 525	49 514	65 063	114 283	D
311999	All other miscellaneous food mfg	3	32	7	536	8 747	411	569	5 528	25 164	28 803	53 968	D
312	Beverage & tobacco product mfg	7	36	15	2 330	73 867	1 676	5 764	47 325	357 961	457 137	815 365	24 251
3121	Beverage mfg	7	35	15	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	7	26	11	2 045	65 361	1 493	5 507	44 034	327 893	425 243	754 186	22 122
312111	Soft drink mfg	7	19	8	1 900	62 531	1 443	5 428	42 905	322 336	423 242	746 643	21 363
313	Textile mills	3	485	114	9 419	345 589	6 766	14 194	165 238	925 706	1 266 880	2 221 933	55 408
3131	Fiber, yarn, & thread mills	4	27	5	309	4 767	288	483	3 986	9 871	22 051	31 713	1 059
31311	Fiber, yarn, & thread mills	4	27	5	309	4 767	288	483	3 986	9 871	22 051	31 713	1 059
3132	Fabric mills	4	139	33	2 936	95 970	2 381	5 062	54 477	211 277	291 844	502 891	23 520
31321	Broadwoven fabric mills	5	40	10	864	38 263	686	1 426	15 561	84 276	162 183	246 199	5 883
313210	Broadwoven fabric mills	5	40	10	864	38 263	686	1 426	15 561	84 276	162 183	246 199	5 883
31323	Nonwoven fabric mills	3	21	8	e	D	D	D	D	D	D	D	4 146
313230	Nonwoven fabric mills	3	21	8	e	D	D	D	D	D	D	D	4 146
31324	Knit fabric mills	2	58	14	1 474	45 210	1 217	2 737	31 019	98 502	94 724	193 030	13 160
313241	Weft knit fabric mills	4	37	8	565	15 351	442	951	11 132	32 646	49 769	81 450	2 643
313249	Other knit fabric & lace mills	—	21	6	909	29 859	775	1 786	19 887	65 856	44 955	111 580	10 517
3133	Textile & fabric finishing & fabric coating mills	2	319	76	6 174	244 852	4 097	8 649	106 775	704 558	952 985	1 687 329	30 829
31331	Textile & fabric finishing mills	2	310	72	5 877	234 364	3 901	8 280	102 371	689 050	929 248	1 648 600	30 098
313311	Broadwoven fabric finishing mills	3	253	57	4 771	190 585	3 198	6 856	84 317	541 123	767 639	1 336 154	24 212
313312	Textile & fabric finishing mills	1	57	15	1 106	43 779	703	1 424	18 054	147 927	161 609	312 446	5 886
31332	Fabric coating mills	4	9	4	297	10 488	196	369	4 404	15 508	23 737	38 729	731
313320	Fabric coating mills	4	9	4	297	10 488	196	369	4 404	15 508	23 737	38 729	731
314	Textile product mills	3	377	81	6 197	127 734	4 697	8 000	68 954	261 131	342 659	605 848	11 455
3141	Textile furnishings mills	1	147	32	2 764	62 105	2 090	3 636	30 816	145 747	241 590	386 364	3 509
31412	Curtain & linen mills	1	141	30	h	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	74	11	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	67	19	1 284	31 107	987	1 609	12 407	83 971	175 724	259 539	1 548
3149	Other textile product mills	4	230	49	3 433	65 629	2 607	4 364	38 138	115 384	101 069	219 484	7 946
31491	Textile bag & canvas mills	5	74	10	630	11 644	501	737	6 583	21 805	19 700	41 362	1 134
314912	Canvas & related product mills	5	54	8	442	8 370	357	519	5 086	16 285	14 407	30 511	1 008
31499	All other textile product mills	4	156	39	2 803	53 985	2 106	3 627	31 555	93 579	81 369	178 122	6 812
314999	All other miscellaneous textile product mills	4	155	39	h	D	D	D	D	D	D	D	D
315	Apparel mfg	4	3 646	1 080	80 931	1 596 538	60 055	101 930	919 617	3 838 754	4 708 022	8 552 627	91 356
3151	Apparel knitting mills	5	255	104	7 473	143 306	6 369	11 990	108 244	286 937	297 942	593 681	13 286
31511	Hosiery & sock mills	8	25	2	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	5	230	102	i	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	5	226	101	i	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New York, NY PMSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	4	3 033	898	66 965	1 324 641	48 537	80 536	732 625	3 264 223	4 138 296	7 396 162	71 918
31521	Cut & sew apparel contractors	7	1 980	522	35 062	459 258	29 779	48 194	359 538	723 853	227 633	942 570	30 267
315211	Men's & boys' cut & sew apparel contractors	5	44	20	1 089	15 605	994	1 679	13 040	27 870	4 025	31 884	579
315212	Women's, girls', & infants' cut & sew apparel contractors	7	1 936	502	33 973	443 653	28 785	46 515	346 498	695 983	223 608	910 686	29 688
31522	Men's & boys' cut & sew apparel mfg	2	171	59	4 856	101 737	3 715	6 564	69 580	306 239	408 957	724 056	7 391
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	3	40	17	1 247	29 725	954	1 914	20 095	72 902	66 181	138 638	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	27	6	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	17	2	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	6	10	2	302	3 166	289	383	2 810	7 295	4 088	11 471	840
315228	Men's & boys' cut & sew other outerwear mfg	4	73	29	1 819	27 596	1 625	2 831	21 907	64 680	69 704	136 105	3 572
31523	Women's & girls' cut & sew apparel mfg	3	713	298	25 575	725 462	13 909	23 691	280 014	2 143 055	3 394 779	5 532 410	32 055
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	3	60	18	1 449	31 246	1 176	2 219	20 312	103 549	135 665	244 684	D
315232	Women's & girls' cut & sew blouse & shirt mfg	4	148	53	3 921	85 764	2 618	4 379	40 875	323 971	548 309	866 812	D
315233	Women's & girls' cut & sew dress mfg	3	246	112	10 008	279 808	5 192	8 540	116 368	837 872	1 335 135	2 151 601	13 330
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	138	63	5 343	165 572	2 768	5 002	64 551	480 613	835 570	1 323 458	D
315239	Women's & girls' cut & sew other outerwear mfg	5	121	52	4 854	163 072	2 155	3 551	37 908	397 050	540 100	945 855	7 395
31529	Other cut & sew apparel mfg	4	169	19	1 472	38 184	1 134	2 087	23 493	91 076	106 927	197 126	2 205
315292	Fur & leather apparel mfg	6	121	7	608	16 222	409	759	8 434	44 019	71 639	114 601	1 471
315299	All other cut & sew apparel mfg	1	47	11	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	358	78	6 493	128 591	5 149	9 404	78 748	287 594	271 784	562 784	6 152
31599	Apparel accessories & other apparel mfg	2	358	78	6 493	128 591	5 149	9 404	78 748	287 594	271 784	562 784	6 152
315991	Hat, cap, & millinery mfg	1	75	15	1 212	20 686	1 013	1 769	14 490	44 514	34 632	80 643	D
315993	Men's & boys' neckwear mfg	1	49	19	g	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	2	229	41	3 556	68 226	2 734	5 082	41 837	135 065	149 891	284 778	D
316	Leather & allied product mfg	2	146	31	2 723	59 131	1 817	3 390	32 302	160 085	144 026	305 801	3 610
3161	Leather & hide tanning & finishing	5	32	6	319	8 150	213	436	5 505	16 890	26 275	43 292	614
31611	Leather & hide tanning & finishing	5	32	6	319	8 150	213	436	5 505	16 890	26 275	43 292	614
316110	Leather & hide tanning & finishing	5	32	6	319	8 150	213	436	5 505	16 890	26 275	43 292	614
3162	Footwear mfg	—	14	4	337	6 040	168	289	2 231	17 711	23 587	40 949	402
31621	Footwear mfg	—	14	4	337	6 040	168	289	2 231	17 711	23 587	40 949	402
3169	Other leather & allied product mfg	1	100	21	2 067	44 941	1 436	2 665	24 566	125 484	94 164	221 560	2 594
31699	Other leather & allied product mfg	1	100	21	2 067	44 941	1 436	2 665	24 566	125 484	94 164	221 560	2 594
316991	Luggage mfg	1	24	7	778	15 512	443	844	6 824	66 047	46 589	111 900	825
316992	Women's handbag & purse mfg	2	43	7	680	18 550	501	967	10 198	40 604	34 703	77 789	1 391
316993	Personal leather good (except women's handbag & purse) mfg	1	19	5	389	6 496	295	479	4 742	10 421	6 531	17 119	279

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	3	76	18	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	3	72	18	f	D	D	D	D	D	D	D	1 983
32191	Millwork	3	39	9	547	16 395	417	793	11 159	29 050	25 888	54 840	1 102
321918	Other millwork (including flooring) . . .	2	18	4	279	8 035	207	381	5 144	14 430	16 742	31 045	450
32199	All other wood product mfg	5	20	6	281	7 333	243	488	5 552	13 503	10 226	23 979	836
322	Paper mfg	4	134	61	5 404	173 147	4 078	7 233	100 640	316 808	370 059	688 712	67 856
3222	Converted paper product mfg	4	132	60	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	5	41	23	2 123	69 624	1 676	3 038	42 031	134 292	185 824	320 949	10 204
322211	Corrugated & solid fiber box mfg	6	16	7	762	30 906	558	1 116	18 868	60 624	117 217	178 327	6 254
322212	Folding paperboard box mfg	6	10	9	443	15 795	356	751	10 718	30 317	28 290	58 877	1 846
322213	Setup paperboard box mfg	2	8	4	699	14 860	587	817	8 331	24 938	19 036	44 109	1 366
32222	Paper bag & coated & treated paper mfg	1	25	5	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	2	16	3	299	8 687	168	266	3 628	15 910	10 628	26 957	D
32223	Stationery product mfg . . .	2	45	22	1 953	59 072	1 603	2 800	39 494	101 878	87 470	189 464	D
322231	Die-cut paper & paperboard office supplies mfg	4	25	12	921	20 509	769	1 362	14 067	40 931	21 868	62 965	D
322232	Envelope mfg	1	13	9	964	37 187	784	1 339	24 586	58 735	63 194	121 912	5 791
32229	Other converted paper product mfg	7	21	10	711	23 049	424	709	9 372	36 898	56 314	94 608	D
322299	All other converted paper product mfg . . .	7	21	10	711	23 049	424	709	9 372	36 898	56 314	94 608	D
323	Printing & related support activities	5	1 459	258	20 786	779 487	15 075	29 877	490 956	2 009 639	928 205	2 931 135	430 755
3231	Printing & related support activities	5	1 459	258	20 786	779 487	15 075	29 877	490 956	2 009 639	928 205	2 931 135	430 755
32311	Printing	5	1 209	196	16 068	601 326	11 537	22 811	375 826	1 675 121	847 845	2 516 160	417 420
323110	Commercial lithographic printing . . .	5	645	116	9 937	427 524	6 995	13 955	271 672	1 305 585	591 632	1 895 132	394 214
323113	Commercial screen printing	7	102	19	1 339	31 391	1 068	1 763	18 561	78 703	71 708	148 680	4 772
323114	Quick printing	2	176	11	1 009	31 712	697	1 204	19 670	61 475	41 084	102 433	6 229
323115	Digital printing	3	23	6	306	11 289	204	421	5 975	25 751	11 319	36 976	1 254
323117	Book printing	6	33	9	488	19 882	379	836	11 409	42 823	21 446	61 881	1 623
323118	Blankbook, looseleaf binder, & device mfg	6	20	12	1 067	23 065	892	2 119	16 076	39 490	27 827	66 410	1 700
323119	Other commercial printing	5	154	11	1 317	36 129	883	1 662	20 548	74 800	51 585	126 963	3 374
32312	Support activities for printing	3	250	62	4 718	178 161	3 538	7 066	115 130	334 518	80 360	414 975	13 335
323121	Tradebinding & related work	3	66	27	1 721	45 353	1 454	2 753	31 449	79 860	15 032	94 930	3 059
323122	Prepress services	3	184	35	2 997	132 808	2 084	4 313	83 681	254 658	65 328	320 045	10 276
325	Chemical mfg	1	226	77	12 767	504 556	7 700	16 587	260 392	3 352 732	1 249 908	4 572 348	225 881
3251	Basic chemical mfg	1	21	6	1 027	45 696	632	1 558	26 320	187 742	151 712	341 141	15 332
32513	Dye & pigment mfg	—	5	3	f	D	D	D	D	D	D	D	11 173
325131	Inorganic dye & pigment mfg	1	3	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	12	3	506	23 578	356	949	11 607	94 793	92 237	185 545	3 802
325199	All other basic organic chemical mfg	1	9	3	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg . .	4	6	4	263	11 799	207	436	8 890	88 368	41 718	134 901	4 063
32531	Fertilizer mfg	4	4	4	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	29	15	6 489	277 265	3 905	8 440	149 832	2 552 712	590 160	3 106 362	171 985
32541	Pharmaceutical & medicine mfg	—	29	15	6 489	277 265	3 905	8 440	149 832	2 552 712	590 160	3 106 362	171 985
325412	Pharmaceutical preparation mfg	—	22	14	6 393	273 375	3 853	8 341	148 220	2 528 009	578 787	3 070 514	170 889
3255	Paint, coating, & adhesive mfg	5	45	13	1 028	39 913	581	1 157	16 146	101 294	136 385	240 806	6 903
32551	Paint & coating mfg	5	31	8	696	27 111	399	766	10 878	60 101	73 138	133 291	3 791
325510	Paint & coating mfg	5	31	8	696	27 111	399	766	10 878	60 101	73 138	133 291	3 791
32552	Adhesive mfg	5	14	5	332	12 802	182	391	5 268	41 193	63 247	107 515	3 112
325520	Adhesive mfg	5	14	5	332	12 802	182	391	5 268	41 193	63 247	107 515	3 112

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3256	Soap, cleaning compound, & toilet preparation mfg . .	4	90	27	3 204	104 288	1 996	4 240	48 543	363 560	263 924	623 449	24 486
32561	Soap & cleaning compound mfg	6	45	12	638	22 585	407	718	10 006	71 251	65 110	137 105	3 535
325612	Polish & other sanitation good mfg . .	7	25	7	330	10 327	233	409	4 886	29 642	24 389	54 203	661
32562	Toilet preparation mfg . . .	3	45	15	2 566	81 703	1 589	3 522	38 537	292 309	198 814	486 344	20 951
325620	Toilet preparation mfg .	3	45	15	2 566	81 703	1 589	3 522	38 537	292 309	198 814	486 344	20 951
3259	Other chemical product mfg	2	31	12	730	24 817	364	731	10 309	56 461	62 841	119 910	D
32599	All other chemical product & preparation mfg	2	26	10	568	18 457	285	553	7 114	39 328	51 020	91 199	2 668
325998	All other miscellaneous chemical product & preparation mfg	1	16	6	354	11 531	135	260	3 300	25 906	22 356	48 039	1 967
326	Plastics & rubber products mfg	2	232	102	8 535	225 459	6 573	12 362	135 870	528 157	522 639	1 048 447	38 189
3261	Plastics product mfg	2	207	97	8 046	213 611	6 225	11 613	128 445	495 729	494 654	988 343	36 799
32611	Unsupported plastics film, sheet, & bag mfg . .	2	56	31	2 224	72 373	1 695	3 474	46 028	177 064	223 338	399 953	11 903
326111	Unsupported plastics bag mfg	3	33	18	1 198	35 260	920	1 846	22 589	90 563	95 277	185 483	5 579
326113	Unsupported plastics film & sheet (except packaging) mfg	2	19	11	843	30 763	622	1 268	18 123	78 672	117 998	197 026	5 992
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	8	4	356	10 403	243	401	5 410	21 265	24 448	45 216	1 031
326121	Unsupported plastics profile shape mfg	—	8	4	356	10 403	243	401	5 410	21 265	24 448	45 216	1 031
32619	Other plastics product mfg	3	131	58	5 112	122 559	4 037	7 194	72 753	276 122	222 772	497 928	22 032
326199	All other plastics product mfg	2	130	58	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg	7	25	5	489	11 848	348	749	7 425	32 428	27 985	60 104	1 390
32629	Other rubber product mfg	8	15	3	394	9 810	271	590	5 954	26 674	19 766	46 160	1 273
326299	All other rubber product mfg	8	11	3	370	9 087	250	549	5 472	25 106	18 967	43 789	1 149
327	Nonmetallic mineral product mfg	2	160	35	2 391	81 212	1 800	3 677	57 187	189 562	213 550	404 213	18 077
3272	Glass & glass product mfg .	3	50	7	651	16 038	491	955	10 033	35 340	26 778	62 207	2 158
32721	Glass & glass product mfg	3	50	7	651	16 038	491	955	10 033	35 340	26 778	62 207	2 158
327215	Glass product mfg made of purchased glass	3	42	7	604	15 006	448	885	9 113	33 479	25 604	59 177	2 036
3273	Cement & concrete product mfg	1	57	18	776	33 486	564	1 154	23 394	91 604	106 695	199 169	11 893
32732	Ready-mix concrete mfg .	1	39	16	649	29 545	478	970	21 343	78 822	98 787	178 155	7 728
327320	Ready-mix concrete mfg	1	39	16	649	29 545	478	970	21 343	78 822	98 787	178 155	7 728
3274	Lime & gypsum product mfg	—	5	2	319	13 855	246	589	10 657	20 637	52 769	73 426	2 020
32742	Gypsum product mfg	—	5	2	319	13 855	246	589	10 657	20 637	52 769	73 426	2 020
327420	Gypsum product mfg	—	5	2	319	13 855	246	589	10 657	20 637	52 769	73 426	2 020
3279	Other nonmetallic mineral product mfg	4	38	7	531	15 335	406	817	11 159	37 319	23 627	61 060	1 772
32799	All other nonmetallic mineral product mfg . . .	5	33	5	376	10 689	292	574	8 104	26 459	18 091	44 757	1 343
331	Primary metal mfg	1	66	19	1 467	52 115	992	2 205	30 590	113 622	218 167	331 474	9 776
3314	Nonferrous metal (except aluminum) production & processing	1	29	7	560	21 986	283	574	10 188	56 786	166 315	223 054	D
3315	Foundries	1	33	11	f	D	D	D	D	D	D	D	3 217
33152	Nonferrous metal foundries	1	29	10	730	25 291	583	1 371	16 935	48 685	43 732	92 413	3 123
331522	Nonferrous (except aluminum) die-casting foundries	—	7	3	401	16 884	323	862	11 621	33 236	21 377	54 811	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	2	700	172	12 071	357 553	8 906	17 446	219 599	735 107	498 148	1 240 999	46 204
3321	Forging & stamping	2	58	20	1 178	40 272	841	1 670	23 229	81 871	55 926	137 481	4 388
332116	Forging & stamping	2	58	20	1 178	40 272	841	1 670	23 229	81 871	55 926	137 481	4 388
	Metal stamping	3	49	16	1 008	34 770	726	1 450	20 573	71 786	44 148	106 038	3 783
3322	Cutlery & handtool mfg ...	4	27	10	670	15 797	509	1 080	10 028	28 997	23 465	53 125	1 522
33221	Cutlery & handtool mfg ..	4	27	10	670	15 797	509	1 080	10 028	28 997	23 465	53 125	1 522
332214	Kitchen utensil, pot, & pan mfg	4	6	6	343	7 829	246	514	4 850	12 432	10 660	23 242	597
3323	Architectural & structural metals mfg	2	226	57	3 821	121 406	2 704	5 430	73 224	244 475	186 724	430 513	7 843
33231	Plate work & fabricated structural product mfg ..	1	43	6	626	22 629	382	888	9 534	43 585	29 653	72 939	1 030
332311	Prefabricated metal building & component mfg	—	5	3	381	13 387	203	523	4 168	19 141	14 387	33 227	D
33232	Ornamental & architectural metal products mfg	2	183	51	3 195	98 777	2 322	4 542	63 690	200 890	157 071	357 574	6 813
332321	Metal window & door mfg	2	49	18	1 133	30 054	830	1 643	18 236	73 770	62 560	135 798	1 795
332322	Sheet metal work mfg ..	3	71	23	1 434	47 886	1 066	2 078	32 763	87 951	62 493	150 718	3 484
332323	Ornamental & architectural metal work mfg	1	63	10	628	20 837	426	821	12 691	39 169	32 018	71 058	1 534
3324	Boiler, tank, & shipping container mfg	1	18	6	372	13 454	267	562	8 350	29 468	24 509	54 415	876
3325	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
33251	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
332510	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
3326	Spring & wire product mfg ..	7	30	5	825	20 776	619	1 134	12 966	40 885	25 843	67 176	3 472
33261	Spring & wire product mfg ..	7	30	5	825	20 776	619	1 134	12 966	40 885	25 843	67 176	3 472
332618	Other fabricated wire product mfg	6	26	4	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	152	18	1 640	47 710	1 310	2 402	31 423	88 721	39 135	128 369	5 342
33271	Machine shops	4	130	11	1 127	32 704	891	1 599	21 217	63 302	26 738	90 458	3 519
332710	Machine shops	4	130	11	1 127	32 704	891	1 599	21 217	63 302	26 738	90 458	3 519
33272	Turned product & screw, nut, & bolt mfg	2	22	7	513	15 006	419	803	10 206	25 419	12 397	37 911	1 823
332721	Precision turned product mfg	—	15	5	388	11 184	324	651	7 942	20 772	7 563	28 396	1 195
3328	Coating, engraving, heat treating, & allied activities ..	1	88	21	1 301	32 691	1 040	2 007	21 285	72 768	30 128	105 447	17 398
33281	Coating, engraving, heat treating, & allied activities ..	1	88	21	1 301	32 691	1 040	2 007	21 285	72 768	30 128	105 447	17 398
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	22	6	326	8 468	277	505	5 939	18 239	10 654	31 373	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	61	14	909	21 476	708	1 398	13 533	48 240	17 485	65 832	16 193
3329	Other fabricated metal product mfg	2	87	28	1 660	48 703	1 212	2 365	28 792	104 972	86 332	193 097	3 767
33299	All other fabricated metal product mfg	2	76	23	1 488	43 684	1 085	2 138	25 995	93 693	76 285	170 074	3 373
332999	All other miscellaneous fabricated metal product mfg	2	46	17	1 015	27 981	736	1 453	16 784	67 682	55 316	122 803	2 621
333	Machinery mfg	2	250	64	5 457	186 517	3 568	6 370	93 477	384 313	316 872	701 472	17 898
3332	Industrial machinery mfg ..	2	63	11	1 048	44 489	611	1 076	20 113	79 344	100 590	183 509	6 676
33329	Other industrial machinery mfg	2	61	10	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	7	25	4	285	9 691	177	308	4 646	19 889	19 010	39 503	1 218
3333	Commercial & service industry machinery mfg ..	2	27	8	844	28 721	530	634	12 278	66 827	42 121	108 494	D
33331	Commercial & service industry machinery mfg ..	2	27	8	844	28 721	530	634	12 278	66 827	42 121	108 494	D
333319	Other commercial & service industry machinery mfg	—	14	5	f	D	D	D	D	D	D	D	D

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	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	25	14	726	21 847	528	997	12 348	42 803	43 821	86 553	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	2	25	14	726	21 847	528	997	12 348	42 803	43 821	86 553	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	3	16	11	552	15 425	414	786	9 379	27 980	32 681	61 290	D
3335	Metalworking machinery mfg	1	73	9	691	20 657	538	936	14 160	44 159	16 812	60 974	2 630
33351	Metalworking machinery mfg	1	73	9	691	20 657	538	936	14 160	44 159	16 812	60 974	2 630
333514	Special die & tool, die set, jig, & fixture mfg .	2	34	6	361	10 537	289	445	7 455	19 787	6 262	25 989	935
3339	Other general-purpose machinery mfg	2	52	21	2 084	68 827	1 316	2 650	33 349	147 562	110 838	255 577	4 214
33391	Pump & compressor mfg	7	4	3	268	7 328	155	225	3 526	15 912	16 507	32 591	D
33392	Material handling equipment mfg	3	22	10	820	28 440	560	1 210	14 776	61 298	40 143	101 314	D
333921	Elevator & moving stairway mfg	3	13	8	618	23 048	426	949	12 050	47 368	29 629	76 700	989
33399	All other general-purpose machinery mfg	—	26	8	996	33 059	601	1 215	15 047	70 352	54 188	121 672	1 843
333993	Packaging machinery mfg	—	11	4	268	11 354	170	325	5 229	18 662	11 178	29 995	634
333999	All other miscellaneous general-purpose machinery mfg	—	11	3	618	19 948	407	856	9 382	47 809	39 550	84 621	1 070
334	Computer & electronic product mfg	3	263	76	7 714	284 807	4 438	9 118	117 175	676 516	483 218	1 160 967	50 699
3341	Computer & peripheral equipment mfg	7	24	4	465	16 450	283	520	8 615	33 992	24 503	57 496	1 916
33411	Computer & peripheral equipment mfg	7	24	4	465	16 450	283	520	8 615	33 992	24 503	57 496	1 916
334111	Electronic computer mfg	8	8	3	345	13 030	205	366	6 295	26 610	17 314	42 716	1 157
3342	Communications equipment mfg	2	36	15	1 510	55 555	708	1 758	18 047	127 012	140 456	268 703	7 315
33421	Telephone apparatus mfg	6	10	5	500	21 436	212	415	6 884	36 244	47 436	86 283	3 648
334210	Telephone apparatus mfg	6	10	5	500	21 436	212	415	6 884	36 244	47 436	86 283	3 648
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	20	8	942	31 932	461	1 280	10 338	84 111	90 375	173 419	3 334
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	20	8	942	31 932	461	1 280	10 338	84 111	90 375	173 419	3 334
3344	Semiconductor & other electronic component mfg	2	46	23	2 420	74 549	1 635	3 233	36 478	162 107	94 906	257 780	8 419
33441	Semiconductor & other electronic component mfg	2	46	23	2 420	74 549	1 635	3 233	36 478	162 107	94 906	257 780	8 419
334413	Semiconductor & related device mfg ...	—	8	3	512	14 506	384	768	8 475	34 305	24 489	58 785	1 235
334417	Electronic connector mfg	1	5	5	f	D	D	D	D	D	D	D	2 838
334419	Other electronic component mfg	2	18	10	849	22 682	470	874	8 640	50 596	30 663	81 939	3 083
3345	Navigational, measuring, medical, & control instruments mfg	3	77	20	2 174	94 599	1 047	2 029	30 788	249 156	159 559	407 829	17 756
33451	Navigational, measuring, medical, & control instruments mfg	3	77	20	2 174	94 599	1 047	2 029	30 788	249 156	159 559	407 829	17 756
334510	Electromedical & electrotherapeutic apparatus mfg	5	12	3	398	19 757	124	274	4 283	47 438	18 068	60 744	3 981
334515	Electricity measuring & testing instrument mfg	2	13	4	685	30 821	334	653	11 210	99 382	72 925	176 943	11 439

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	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3346	Mfg & reproducing magnetic & optical media .	3	60	13	1 047	40 478	703	1 459	22 022	97 297	55 884	154 111	15 092
33461	Mfg & reproducing magnetic & optical media	3	60	13	1 047	40 478	703	1 459	22 022	97 297	55 884	154 111	15 092
334612	Prerecorded CD (except software), tape, & record reproducing.....	2	49	9	803	31 576	506	1 043	15 879	75 060	36 878	112 420	D
335	Electrical equipment, appliance, & component mfg	1	135	53	5 273	163 620	3 673	6 510	82 835	439 799	275 271	708 496	18 100
3351	Electric lighting equipment mfg	1	69	24	2 080	70 936	1 540	3 042	36 578	186 345	125 173	311 271	3 695
33512	Lighting fixture mfg	1	69	24	2 080	70 936	1 540	3 042	36 578	186 345	125 173	311 271	3 695
335121	Residential electric lighting fixture mfg ...	1	41	12	885	20 756	687	1 308	11 744	60 605	50 707	110 510	879
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	24	9	972	42 879	679	1 392	19 851	115 139	60 481	175 561	2 343
3353	Electrical equipment mfg ..	4	29	12	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	4	29	12	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	3	8	5	260	10 754	153	296	4 783	23 967	16 626	40 891	511
335314	Relay & industrial control mfg	4	11	6	e	D	D	D	D	D	D	D	1 140
3359	Other electrical equipment & component mfg	1	31	17	2 518	68 040	1 731	2 720	35 257	200 727	114 758	308 097	12 552
33593	Wiring device mfg	1	12	5	1 789	43 409	1 215	1 624	21 188	146 843	55 747	197 013	10 323
335931	Current-carrying wiring device mfg	—	8	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	10	5	436	13 469	312	691	7 641	31 063	22 434	51 544	1 100
336	Transportation equipment mfg	1	86	27	3 929	154 098	2 441	5 194	70 383	389 911	322 940	746 308	20 794
3363	Motor vehicle parts mfg ...	—	43	9	1 673	62 773	692	1 388	18 573	189 916	214 158	433 115	12 285
33632	Motor vehicle electrical & electronic equipment mfg	—	17	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	16	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	11	4	266	7 192	214	397	4 180	14 414	13 972	28 338	1 418
336399	All other motor vehicle parts mfg	4	11	4	266	7 192	214	397	4 180	14 414	13 972	28 338	1 418
3364	Aerospace product & parts mfg	1	14	7	1 453	60 880	1 119	2 363	31 134	135 124	57 221	195 393	6 910
33641	Aerospace product & parts mfg	1	14	7	1 453	60 880	1 119	2 363	31 134	135 124	57 221	195 393	6 910
336412	Aircraft engine & engine parts mfg	1	5	4	807	36 415	591	1 281	15 853	78 544	36 031	115 343	D
336413	Other aircraft part & auxiliary equipment mfg	1	9	3	646	24 465	528	1 082	15 281	56 580	21 190	80 050	D
3366	Ship & boat building	1	14	6	490	18 450	412	997	14 519	35 528	16 642	52 327	436
33661	Ship & boat building	1	14	6	490	18 450	412	997	14 519	35 528	16 642	52 327	436
336611	Ship building & repairing	1	12	5	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	554	91	6 347	169 109	4 921	9 005	111 086	316 597	246 248	561 159	11 455
3371	Household & institutional furniture & kitchen cabinet mfg	5	393	45	3 568	87 659	2 922	5 431	63 523	167 107	134 080	301 214	6 908
33711	Wood kitchen cabinet & counter top mfg	4	136	6	838	21 462	694	1 294	16 214	37 703	27 760	65 500	1 828
337110	Wood kitchen cabinet & counter top mfg ...	4	136	6	838	21 462	694	1 294	16 214	37 703	27 760	65 500	1 828

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	New York, NY PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3371	Household & institutional furniture & kitchen cabinet mfg—Con.												
33712	Household & institutional furniture mfg	5	257	39	2 730	66 197	2 228	4 137	47 309	129 404	106 320	235 714	5 080
337121	Upholstered household furniture mfg	5	59	8	464	13 861	388	734	9 969	21 152	21 528	42 374	907
337122	Nonupholstered wood household furniture mfg	6	131	14	1 157	27 008	986	1 843	20 689	47 778	40 000	87 646	1 947
337124	Metal household furniture mfg	4	23	5	367	9 055	306	632	6 417	27 320	19 765	47 958	1 191
337127	Institutional furniture mfg	4	34	11	641	14 751	486	818	9 091	30 170	21 470	51 224	835
3372	Office furniture (including fixtures) mfg	2	124	38	2 331	72 395	1 680	3 055	42 239	132 700	87 030	217 821	3 291
33721	Office furniture (including fixtures) mfg	2	124	38	2 331	72 395	1 680	3 055	42 239	132 700	87 030	217 821	3 291
337211	Wood office furniture mfg	3	12	4	321	11 648	157	320	4 679	20 246	10 417	30 601	532
337212	Custom architectural woodwork & millwork mfg	—	35	11	698	23 848	510	961	15 999	41 462	24 904	65 270	1 138
337215	Showcase, partition, shelving, & locker mfg	3	69	22	1 223	34 228	940	1 643	19 765	66 002	47 860	113 184	1 455
3379	Other furniture related product mfg	3	37	8	448	9 055	319	519	5 324	16 790	25 138	42 124	1 256
33792	Blind & shade mfg	4	25	5	285	5 977	194	329	3 309	11 330	15 010	26 760	300
337920	Blind & shade mfg	4	25	5	285	5 977	194	329	3 309	11 330	15 010	26 760	300
339	Miscellaneous mfg	2	1 596	297	26 045	733 911	18 255	34 313	394 133	1 764 196	2 064 506	3 817 319	60 469
3391	Medical equipment & supplies mfg	3	292	32	2 882	89 896	1 931	3 344	42 849	188 345	119 683	309 625	10 325
33911	Medical equipment & supplies mfg	3	292	32	2 882	89 896	1 931	3 344	42 849	188 345	119 683	309 625	10 325
339111	Laboratory apparatus & furniture mfg	—	5	5	557	20 100	227	396	4 263	31 930	19 787	51 646	D
339112	Surgical & medical instrument mfg	2	15	3	407	15 099	340	666	8 587	30 143	12 612	42 504	2 185
339113	Surgical appliance & supplies mfg	6	36	10	465	14 212	336	485	7 227	32 672	16 331	49 345	1 680
339114	Dental equipment & supplies mfg	1	26	4	314	10 155	192	359	4 772	27 068	41 270	68 343	1 984
339116	Dental laboratories	6	199	8	1 030	27 238	762	1 298	16 455	59 232	25 366	86 179	2 085
3399	Other miscellaneous mfg	2	1 304	265	23 163	644 015	16 324	30 969	351 284	1 575 851	1 944 823	3 507 694	50 144
33991	Jewelry & silverware mfg	2	778	130	11 217	319 039	7 514	13 790	160 223	904 405	1 488 208	2 380 256	19 695
339911	Jewelry (except costume) mfg	1	548	90	8 716	257 685	5 765	10 847	129 535	762 415	1 161 667	1 914 825	17 468
339913	Jewelers' material & lapidary work mfg	1	116	16	1 184	32 441	803	1 330	14 972	83 478	289 824	369 177	D
339914	Costume jewelry & novelty mfg	4	102	20	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	1	19	4	396	9 320	312	536	6 008	21 055	12 971	33 450	973
339920	Sporting & athletic goods mfg	1	19	4	396	9 320	312	536	6 008	21 055	12 971	33 450	973
33993	Doll, toy, & game mfg	3	44	8	1 016	26 285	796	1 634	17 987	60 478	57 244	118 507	2 226
339931	Doll & stuffed toy mfg	1	25	5	666	15 600	543	1 173	11 672	32 774	26 135	59 117	277
339932	Game, toy, & children's vehicle mfg	6	19	3	350	10 665	253	461	6 315	27 704	31 109	59 390	1 949
33994	Office supplies (except paper) mfg	1	42	11	1 431	30 251	1 077	2 418	18 637	95 169	64 761	163 657	5 606
339942	Lead pencil & art good mfg	—	7	3	783	14 528	592	1 554	8 701	63 716	43 683	111 217	D
33995	Sign mfg	4	161	40	3 155	98 050	2 173	4 134	51 796	175 095	121 769	295 592	6 130
339950	Sign mfg	4	161	40	3 155	98 050	2 173	4 134	51 796	175 095	121 769	295 592	6 130
33999	All other miscellaneous mfg	2	260	72	5 948	161 090	4 452	8 457	96 633	319 649	199 870	516 232	15 514
339992	Musical instrument mfg	—	28	4	780	27 894	596	1 310	18 479	67 341	24 232	88 205	1 808
339993	Fastener, button, needle, & pin mfg	1	47	13	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	2	19	10	1 260	30 517	1 046	2 116	18 992	45 243	44 516	88 292	916
339999	All other miscellaneous mfg	3	156	43	2 756	72 504	1 970	3 424	42 682	150 410	86 304	236 665	7 044

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newburgh, NY—PA PMSA												
31-33	Manufacturing	1	374	111	11 157	325 859	8 255	16 021	206 882	795 085	1 166 776	1 970 201	64 771
	Newburgh, NY—PA PMSA (NY Part)	1	346	107	j	D	D	D	D	D	D	D	D
	Newburgh, NY—PA PMSA (PA Part)	—	28	4	e	D	D	D	D	D	D	D	D
311	Food mfg	1	23	6	296	6 321	232	306	4 338	30 581	49 176	79 646	1 757
313	Textile mills	5	13	5	406	9 687	339	567	6 450	23 330	20 533	43 592	2 791
3133	Textile & fabric finishing & fabric coating mills	7	8	4	e	D	D	D	D	D	D	D	1 754
31331	Textile & fabric finishing mills	9	5	3	e	D	D	D	D	D	D	D	1 193
313311	Broadwoven fabric finishing mills	9	3	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	4	18	8	e	D	D	D	D	D	D	D	190
3152	Cut & sew apparel mfg	4	15	8	e	D	D	D	D	D	D	D	D
321	Wood product mfg	5	20	4	388	10 425	303	564	6 337	23 837	29 763	54 148	1 989
3219	Other wood product mfg . . .	7	16	2	302	7 877	240	438	4 795	18 646	22 935	42 071	D
322	Paper mfg	1	14	7	871	25 272	669	1 360	17 937	55 889	88 147	148 418	2 979
3222	Converted paper product mfg	1	13	6	f	D	D	D	D	D	D	D	2 979
32221	Paperboard container mfg	3	7	3	303	7 722	178	273	3 324	11 150	17 722	28 890	1 181
322211	Corrugated & solid fiber box mfg	3	6	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	4	2	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	3	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	48	3	e	D	D	D	D	D	D	D	932
3231	Printing & related support activities	2	48	3	e	D	D	D	D	D	D	D	932
32311	Printing	2	44	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	18	10	1 392	42 831	926	2 000	22 774	132 353	116 853	247 362	7 952
3256	Soap, cleaning compound, & toilet preparation mfg . . .	—	8	3	f	D	D	D	D	D	D	D	2 963
32562	Toilet preparation mfg . . .	—	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
325620	Toilet preparation mfg . . .	—	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
326	Plastics & rubber products mfg	—	17	11	1 496	39 646	1 188	2 233	28 287	108 188	107 678	213 818	6 767
3261	Plastics product mfg	—	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	9	6	1 053	27 386	866	1 589	20 838	68 329	75 624	142 209	D
326192	Resilient floor covering mfg	—	3	2	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	6	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	19	9	391	12 540	299	651	8 732	31 494	25 485	57 110	3 550
331	Primary metal mfg	—	5	3	394	16 422	247	530	9 381	31 977	153 630	183 829	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	—	2	2	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	49	11	1 077	44 002	837	1 787	32 736	105 090	232 355	341 164	10 232
3324	Boiler, tank, & shipping container mfg	—	4	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	2	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	10	3	e	D	D	D	D	D	D	D	D

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	2	19	7	1 121	34 794	910	1 883	24 198	76 031	115 721	190 208	6 585
3351	Electric lighting equipment mfg	—	9	3	483	16 053	386	758	9 707	33 498	31 266	64 479	D
33512	Lighting fixture mfg	—	9	3	483	16 053	386	758	9 707	33 498	31 266	64 479	D
3359	Other electrical equipment & component mfg	3	6	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	5	3	3	363	9 606	305	629	7 350	27 461	46 356	72 796	4 145
335929	Other communication & energy wire mfg ...	5	3	3	363	9 606	305	629	7 350	27 461	46 356	72 796	4 145
337	Furniture & related product mfg	4	19	5	e	D	D	D	D	D	D	D	543
3372	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	294
33721	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	294
339	Miscellaneous mfg	4	33	9	1 082	26 635	813	1 592	16 062	58 011	36 767	94 625	3 636
3399	Other miscellaneous mfg ...	4	20	7	968	22 999	738	1 457	14 389	49 383	32 449	81 634	3 156
33999	All other miscellaneous mfg	4	11	6	914	22 040	697	1 393	13 837	46 474	29 551	75 876	2 908
339999	All other miscellaneous mfg	5	7	4	748	18 576	576	1 120	11 752	39 498	26 813	65 992	2 753
	ROCHESTER, NY MSA												
31-33	Manufacturing	—	1 516	580	106 140	4 227 807	69 158	142 896	2 280 514	14 562 581	11 314 082	25 983 570	1 079 116
311	Food mfg	2	129	40	4 640	125 763	3 437	7 244	80 152	1 013 542	1 176 335	2 195 457	52 853
3114	Fruit & vegetable preserving & specialty food mfg	2	26	19	2 243	58 973	1 831	3 951	42 610	603 504	407 536	1 015 415	29 911
31141	Frozen food mfg	2	7	5	825	19 269	722	1 420	14 977	320 559	134 478	459 713	11 590
311411	Frozen fruit, juice, & vegetable mfg	5	5	4	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	2	1	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	2	19	14	1 418	39 704	1 109	2 531	27 633	282 945	273 058	555 702	18 321
311421	Fruit & vegetable canning	2	18	13	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	5	3	390	12 892	245	500	8 929	39 311	175 705	214 460	D
31151	Dairy product (except frozen) mfg	—	4	3	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	11	3	e	D	D	D	D	D	D	D	1 643
31161	Animal slaughtering & processing	—	11	3	e	D	D	D	D	D	D	D	1 643
311612	Meat processed from carcasses	—	6	2	e	D	D	D	D	D	D	D	1 092
3118	Bakeries & tortilla mfg	4	59	8	1 041	23 892	745	1 579	13 204	78 385	77 855	155 742	5 816
31181	Bread & bakery product mfg	1	57	7	f	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	39	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	17	5	628	16 211	502	1 183	9 651	54 994	31 388	86 392	3 862
3119	Other food mfg	2	15	4	352	9 948	237	518	5 394	68 147	62 617	130 205	2 944
312	Beverage & tobacco product mfg	1	16	10	1 830	67 030	824	1 786	24 499	188 033	187 055	375 444	13 731
3121	Beverage mfg	1	16	10	1 830	67 030	824	1 786	24 499	188 033	187 055	375 444	13 731
31211	Soft drink & ice mfg	4	8	4	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	4	3	393	10 657	107	218	2 931	38 137	55 693	93 851	3 062
31212	Breweries	—	3	2	f	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	f	D	D	D	D	D	D	D	D
31213	Wineries	—	5	4	f	D	D	D	D	D	D	D	D
312130	Wineries	—	5	4	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	19	2	262	4 171	219	364	2 988	7 598	5 271	12 810	364
315	Apparel mfg	2	11	3	1 045	25 011	794	1 568	15 022	76 459	56 492	130 677	1 885
3152	Cut & sew apparel mfg	2	7	3	g	D	D	D	D	D	D	D	1 879
31522	Men's & boys' cut & sew apparel mfg	2	3	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	f	D	D	D	D	D	D	D	D

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31-33	ROCHESTER, NY MSA—Con.												
	Manufacturing—Con.												
316	Leather & allied product mfg .	—	5	2	e	D	D	D	D	D	D	D	273
3162	Footwear mfg	—	2	2	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	33	6	379	8 394	314	587	6 064	17 197	24 604	41 618	990
3219	Other wood product mfg . . .	2	22	4	252	5 493	204	389	3 762	10 795	16 340	27 049	505
322	Paper mfg	1	35	25	2 218	73 358	1 673	3 593	43 303	192 624	196 589	385 516	20 946
3222	Converted paper product mfg	2	33	23	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	17	16	1 535	49 253	1 184	2 496	28 162	122 366	123 912	246 154	13 737
322211	Corrugated & solid fiber box mfg	1	12	12	970	29 494	689	1 432	15 993	75 076	83 515	158 510	10 664
322212	Folding paperboard box mfg	—	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	6	6	4	390	13 295	262	582	8 108	31 405	42 272	73 907	3 634
323	Printing & related support activities	2	170	45	3 881	129 049	2 705	5 640	75 121	259 711	168 692	428 168	22 216
3231	Printing & related support activities	2	170	45	3 881	129 049	2 705	5 640	75 121	259 711	168 692	428 168	22 216
32311	Printing	2	148	38	3 413	113 330	2 363	4 944	65 962	232 056	159 698	391 621	18 865
323110	Commercial lithographic printing	2	69	19	1 706	67 038	1 135	2 422	37 895	125 266	85 751	210 838	14 156
323113	Commercial screen printing	4	25	4	374	10 265	243	473	5 552	20 750	12 805	33 579	1 276
323116	Manifold business form printing	—	4	3	331	9 459	292	530	7 511	23 083	13 766	36 768	178
323118	Blankbook, looseleaf binder, & device mfg	—	2	2	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	—	16	5	299	7 389	188	373	3 983	21 966	14 816	36 622	1 311
32312	Support activities for printing	—	22	7	468	15 719	342	696	9 159	27 655	8 994	36 547	3 351
323121	Tradebinding & related work	—	7	3	283	8 471	235	494	6 117	15 242	4 410	19 591	2 625
325	Chemical mfg	—	41	16	22 851	1 166 382	10 812	28 204	492 616	4 008 462	2 354 463	6 427 372	360 522
3251	Basic chemical mfg	—	6	4	e	D	D	D	D	D	D	D	15 265
3254	Pharmaceutical & medicine mfg	—	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	2	7	4	1 072	30 207	855	1 558	17 647	124 709	85 650	192 254	D
32561	Soap & cleaning compound mfg	—	6	3	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	2	1	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	9	1	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	9	1	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	17	6	j	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	13	5	j	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	7	4	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	88	52	6 729	198 692	5 014	10 075	123 296	552 572	372 861	920 499	59 922
3261	Plastics product mfg	2	82	48	6 476	193 268	4 857	9 813	119 586	541 535	363 840	900 397	59 507
32611	Unsupported plastics film, sheet, & bag mfg	2	9	6	956	29 546	695	1 462	19 986	93 807	108 521	204 280	26 324
326111	Unsupported plastics bag mfg	1	6	3	671	22 244	525	1 123	17 148	70 135	64 271	134 419	D
32614	Polystyrene foam product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	3	2	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	3	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	60	36	4 082	121 568	3 148	6 237	75 071	283 009	165 241	445 811	21 047
326199	All other plastics product mfg	2	59	36	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROCHESTER, NY MSA —Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	—	6	4	253	5 424	157	262	3 710	11 037	9 021	20 102	415
32629	Other rubber product mfg	—	6	4	253	5 424	157	262	3 710	11 037	9 021	20 102	415
327	Nonmetallic mineral product mfg	1	70	28	2 245	74 097	1 663	3 244	44 451	171 598	112 376	284 792	84 990
3271	Clay product & refractory mfg	—	8	5	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	6	4	f	D	D	D	D	D	D	D	4 587
327113	Porcelain electrical supply mfg	—	4	4	901	31 537	671	1 359	18 706	63 493	34 481	97 927	D
3272	Glass & glass product mfg .	1	23	6	278	9 243	185	371	4 499	19 994	20 471	40 522	D
32721	Glass & glass product mfg	1	23	6	278	9 243	185	371	4 499	19 994	20 471	40 522	D
327215	Glass product mfg made of purchased glass	1	17	6	252	8 510	170	344	4 057	18 380	19 840	38 270	D
3273	Cement & concrete product mfg	2	31	12	655	19 767	500	830	12 493	48 724	34 408	83 672	D
32732	Ready-mix concrete mfg.	5	16	4	286	7 377	267	412	6 685	21 926	14 612	36 616	453
327320	Ready-mix concrete mfg	5	16	4	286	7 377	267	412	6 685	21 926	14 612	36 616	453
331	Primary metal mfg	—	10	7	369	12 220	262	549	7 630	26 439	26 439	50 048	437
3315	Foundries	—	8	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	333	117	11 147	353 189	8 308	16 662	228 685	773 206	513 430	1 302 816	69 600
3321	Forging & stamping	—	18	13	993	31 219	755	1 675	20 692	63 394	69 037	130 930	6 518
33211	Forging & stamping	—	18	13	993	31 219	755	1 675	20 692	63 394	69 037	130 930	6 518
332116	Metal stamping	1	12	11	846	26 036	650	1 420	16 804	48 164	38 341	85 888	D
3322	Cutlery & handtool mfg ...	—	12	2	302	8 049	226	445	5 190	32 594	32 594	69 411	1 332
33221	Cutlery & handtool mfg ...	—	12	2	302	8 049	226	445	5 190	32 594	32 594	69 411	1 332
332212	Hand & edge tool mfg .	—	10	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	46	23	1 571	50 564	1 178	2 250	32 219	103 511	66 163	167 582	5 698
33232	Ornamental & architectural metal products mfg	1	33	20	1 328	43 091	998	1 894	27 320	87 161	52 985	137 988	5 220
332322	Sheet metal work mfg .	1	26	18	1 216	39 507	939	1 770	25 744	79 449	47 343	124 573	4 869
3324	Boiler, tank, & shipping container mfg	—	9	6	1 292	49 551	819	1 588	27 124	84 025	83 602	193 239	18 404
33241	Power boiler & heat exchanger mfg	—	4	3	637	24 592	383	659	12 198	33 953	28 107	72 710	D
332410	Power boiler & heat exchanger mfg	—	4	3	637	24 592	383	659	12 198	33 953	28 107	72 710	D
33242	Metal tank (heavy gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	4	8	5	1 448	48 240	1 130	2 270	30 667	132 790	55 366	186 592	5 162
33251	Hardware mfg	4	8	5	1 448	48 240	1 130	2 270	30 667	132 790	55 366	186 592	5 162
332510	Hardware mfg	4	8	5	1 448	48 240	1 130	2 270	30 667	132 790	55 366	186 592	5 162
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	181	47	4 030	122 874	3 074	6 277	86 128	250 417	138 059	382 939	24 674
33271	Machine shops	1	125	20	2 257	63 525	1 669	3 095	43 942	126 124	64 852	188 268	12 471
332710	Machine shops	1	125	20	2 257	63 525	1 669	3 095	43 942	126 124	64 852	188 268	12 471
33272	Turned product & screw, nut, & bolt mfg	—	56	27	1 773	59 349	1 405	3 182	42 186	124 293	73 207	194 671	12 203
332721	Precision turned product mfg	—	43	24	1 617	54 404	1 283	2 957	39 003	115 163	67 903	180 856	11 655
3328	Coating, engraving, heat treating, & allied activities .	—	33	15	827	18 378	653	1 218	12 501	35 978	12 207	48 312	2 002
33281	Coating, engraving, heat treating, & allied activities	—	33	15	827	18 378	653	1 218	12 501	35 978	12 207	48 312	2 002
332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	—	15	8	417	9 884	331	670	6 495	16 667	7 894	24 596	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	14	5	307	5 689	240	400	3 933	9 710	3 100	12 929	287
3329	Other fabricated metal product mfg	—	20	6	640	23 171	438	878	13 392	63 700	54 042	118 259	5 594
33299	All other fabricated metal product mfg	—	15	3	419	14 692	317	622	8 681	40 185	31 891	71 563	4 505
332994	Small arms mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROCHESTER, NY MSA —Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg	—	229	106	22 624	1 013 008	14 420	26 078	514 011	4 436 301	3 541 655	8 011 699	237 487
3331	Agriculture, construction, & mining machinery mfg....	2	12	6	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	2	7	4	e	D	D	D	D	D	D	D	2 945
333111	Farm machinery & equipment mfg	3	6	3	391	11 601	276	493	5 874	28 492	24 697	53 670	D
3332	Industrial machinery mfg ..	—	28	10	f	D	D	D	D	D	D	D	5 668
33329	Other industrial machinery mfg	—	25	9	819	37 922	476	1 051	17 974	71 958	67 679	138 909	5 593
333298	All other industrial machinery mfg	—	12	4	445	21 789	207	440	7 313	39 845	46 599	87 350	2 573
3333	Commercial & service industry machinery mfg ..	—	39	21	j	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	39	21	j	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	8	6	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	16	8	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	13	6	j	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	5	1 055	27 891	860	1 629	18 915	51 931	55 593	106 389	2 580
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	6	5	1 055	27 891	860	1 629	18 915	51 931	55 593	106 389	2 580
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	3	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	102	45	4 088	166 910	2 811	5 699	99 883	311 573	234 076	548 781	23 894
33351	Metalworking machinery mfg	1	102	45	4 088	166 910	2 811	5 699	99 883	311 573	234 076	548 781	23 894
333511	Industrial mold mfg ...	—	26	12	639	25 989	495	999	17 642	46 053	17 554	62 742	5 553
333512	Machine tool (metal cutting types) mfg ...	—	6	6	1 416	66 708	786	1 554	34 092	129 636	125 740	259 862	6 729
333514	Special die & tool, die set, jig, & fixture mfg ..	3	43	15	806	29 705	668	1 368	21 410	55 240	23 399	79 039	5 084
333515	Cutting tool & machine tool accessory mfg ..	1	18	7	f	D	D	D	D	D	D	D	4 820
333518	Other metalworking machinery mfg	2	8	5	624	24 599	415	859	14 022	45 640	43 731	89 314	D
3339	Other general-purpose machinery mfg	—	38	18	2 070	81 012	1 221	2 441	38 918	241 004	216 940	452 705	7 941
33391	Pump & compressor mfg	—	5	4	508	22 449	303	590	11 245	70 134	119 153	188 870	942
333911	Pump & pumping equipment mfg	—	4	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	26	11	1 352	52 007	795	1 580	24 805	150 393	84 660	230 264	6 192
333999	All other miscellaneous general-purpose machinery mfg	—	17	6	1 030	39 191	640	1 270	19 965	126 948	61 363	182 009	4 964
334	Computer & electronic product mfg	—	100	60	8 696	309 425	4 959	9 711	132 512	653 470	482 228	1 139 011	37 188
3341	Computer & peripheral equipment mfg	—	15	8	g	D	D	D	D	D	D	D	5 870
33411	Computer & peripheral equipment mfg	—	15	8	g	D	D	D	D	D	D	D	5 870
334119	Other computer peripheral equipment mfg	—	12	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	16	15	3 069	125 586	1 543	3 006	54 407	290 338	145 595	434 422	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	8	8	1 829	76 344	1 107	2 205	42 881	180 058	83 690	265 231	6 682
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	8	8	1 829	76 344	1 107	2 205	42 881	180 058	83 690	265 231	6 682
33429	Other communications equipment mfg	—	5	4	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	5	4	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROCHESTER, NY MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	32	14	2 447	64 140	1 651	3 219	31 105	145 980	137 733	282 016	11 535
33441	Semiconductor & other electronic component mfg	1	32	14	2 447	64 140	1 651	3 219	31 105	145 980	137 733	282 016	11 535
334418	Printed circuit assembly (electronic) mfg	—	6	6	1 619	42 211	1 061	2 280	21 192	99 504	115 200	214 113	7 647
334419	Other electronic component mfg	5	13	4	601	14 586	436	646	6 528	29 891	15 270	44 365	1 577
3345	Navigational, measuring, medical, & control instruments mfg	—	36	23	2 152	85 511	1 095	2 017	32 095	160 368	101 486	265 879	8 930
33451	Navigational, measuring, medical, & control instruments mfg	—	36	23	2 152	85 511	1 095	2 017	32 095	160 368	101 486	265 879	8 930
334513	Industrial process control instrument mfg	—	7	4	458	20 072	202	315	5 372	34 810	32 274	68 482	1 190
334515	Electricity measuring & testing instrument mfg	—	7	4	453	16 296	289	567	8 683	29 235	15 076	47 464	544
334516	Analytical laboratory instrument mfg	—	9	6	465	18 930	200	367	6 116	36 885	21 330	59 181	1 610
334519	Other measuring & controlling device mfg	1	5	5	416	16 917	232	424	7 684	42 605	23 044	63 862	3 024
335	Electrical equipment, appliance, & component mfg	—	25	12	h	D	D	D	D	D	D	D	32 975
3353	Electrical equipment mfg ..	—	13	6	h	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	13	6	h	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	9	5	544	14 397	314	666	8 962	18 996	19 479	40 453	D
33591	Battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	27	13	4 423	201 158	3 802	6 700	169 677	318 912	1 067 096	1 383 726	16 084
3363	Motor vehicle parts mfg ...	—	15	10	4 157	192 066	3 625	6 351	164 622	300 903	1 035 944	1 337 267	15 196
33631	Motor vehicle gasoline engine & engine parts mfg	—	5	3	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	5	3	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	9	6	4	608	16 868	455	942	11 371	37 051	15 033	50 683	2 486
336322	Other motor vehicle electrical & electronic equipment mfg	9	6	4	608	16 868	455	942	11 371	37 051	15 033	50 683	2 486
337	Furniture & related product mfg	7	50	7	1 003	25 465	791	1 489	16 800	43 885	41 378	84 980	1 931
3371	Household & institutional furniture & kitchen cabinet mfg	4	32	3	356	7 554	289	504	5 395	12 649	12 662	25 290	402
3372	Office furniture (including fixtures) mfg	8	15	4	635	17 725	493	972	11 282	30 823	28 209	58 746	1 512
33721	Office furniture (including fixtures) mfg	8	15	4	635	17 725	493	972	11 282	30 823	28 209	58 746	1 512
337215	Showcase, partition, shelving, & locker mfg	9	3	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	105	26	6 192	246 662	4 527	9 870	155 389	568 615	169 547	739 049	61 987
3391	Medical equipment & supplies mfg	—	46	13	4 226	180 650	3 202	7 350	116 758	408 659	87 470	497 703	57 950
33911	Medical equipment & supplies mfg	—	46	13	4 226	180 650	3 202	7 350	116 758	408 659	87 470	497 703	57 950
339113	Surgical appliance & supplies mfg	1	8	3	649	39 071	378	512	9 796	69 902	30 556	101 674	D
339115	Ophthalmic goods mfg	—	10	7	3 246	133 444	2 617	6 458	102 641	322 905	47 243	369 407	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCHESTER, NY MSA													
—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ...	1	59	13	1 966	66 012	1 325	2 520	38 631	159 956	82 077	241 346	4 037
33993	Doll, toy, & game mfg ...	—	9	3	316	10 572	231	289	7 330	12 144	6 366	19 081	491
339932	Game, toy, & children's vehicle mfg ...	—	7	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg ...	—	24	5	316	10 989	166	293	4 371	20 700	16 666	37 356	672
339950	Sign mfg ...	—	24	5	316	10 989	166	293	4 371	20 700	16 666	37 356	672
33999	All other miscellaneous mfg ...	1	12	3	1 115	39 219	779	1 615	23 746	115 526	50 930	165 536	2 609
339991	Gasket, packing, & sealing device mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
SYRACUSE, NY MSA													
31-33	Manufacturing	—	787	277	44 756	1 680 971	29 931	60 850	939 268	4 623 547	5 303 962	9 950 408	367 551
311	Food mfg ...	2	67	15	2 240	66 462	1 586	3 246	42 048	356 635	428 990	780 765	20 187
3113	Sugar & confectionery product mfg ...	—	6	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans ...	—	2	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	—	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg ...	8	7	3	440	11 164	380	791	8 621	60 141	31 532	86 880	3 276
31141	Frozen food mfg ...	8	2	2	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg ...	8	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg ...	2	7	3	417	13 911	230	551	7 265	50 744	185 956	236 921	7 477
31151	Dairy product (except frozen) mfg ...	2	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg ...	2	4	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg ...	9	33	3	450	10 253	303	566	6 546	22 993	30 052	53 638	1 378
31181	Bread & bakery product mfg ...	9	31	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	9	4	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg ...	—	9	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg ...	—	9	3	g	D	D	D	D	D	D	D	D
31212	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg ...	—	4	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	—	4	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg ...	2	35	11	631	13 995	544	947	10 466	27 630	45 995	72 920	2 499
3219	Other wood product mfg ...	2	20	6	413	9 050	357	586	6 851	16 972	22 184	38 732	1 062
32192	Wood container & pallet mfg ...	1	9	5	299	6 728	266	422	5 111	12 371	17 699	29 679	814
321920	Wood container & pallet mfg ...	1	9	5	299	6 728	266	422	5 111	12 371	17 699	29 679	814
322	Paper mfg ...	—	27	18	2 217	85 555	1 703	3 835	55 845	236 174	234 747	463 715	29 623
3221	Pulp, paper, & paperboard mills ...	—	5	5	634	33 469	433	990	21 019	100 842	90 047	188 387	15 547
32212	Paper mills ...	—	2	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills ...	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg ...	1	22	13	1 583	52 086	1 270	2 845	34 826	135 332	144 700	275 328	14 076
32221	Paperboard container mfg ...	1	16	10	1 307	43 830	1 058	2 437	29 894	115 024	130 360	240 605	D
322211	Corrugated & solid fiber box mfg ...	—	7	5	450	16 671	336	732	8 856	31 224	69 779	101 683	2 978
322212	Folding paperboard box mfg ...	7	3	2	e	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities ...	—	91	21	1 758	50 598	1 256	2 250	32 810	108 806	73 788	183 750	4 713
3231	Printing & related support activities ...	—	91	21	1 758	50 598	1 256	2 250	32 810	108 806	73 788	183 750	4 713
32311	Printing ...	—	78	19	1 627	47 496	1 160	2 063	30 566	102 725	72 255	176 104	3 952
323110	Commercial lithographic printing ...	1	44	11	823	22 024	544	896	13 038	47 896	31 023	79 001	1 601
323116	Manifold business form printing ...	—	3	2	273	8 608	237	395	6 648	19 569	5 760	25 347	D

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31-33	SYRACUSE, NY MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	3	28	8	1 278	65 099	699	1 458	23 925	121 937	109 696	224 348	18 479
3254	Pharmaceutical & medicine mfg	—	10	3	936	52 613	472	1 012	16 524	74 208	65 795	131 976	D
32541	Pharmaceutical & medicine mfg	—	10	3	936	52 613	472	1 012	16 524	74 208	65 795	131 976	D
325412	Pharmaceutical preparation mfg	—	8	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	38	24	2 414	60 742	1 881	3 633	39 526	142 483	149 662	294 796	17 134
3261	Plastics product mfg	1	37	24	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	24	19	2 133	51 963	1 672	3 213	33 228	113 455	117 876	233 894	8 813
326199	All other plastics product mfg	1	24	19	2 133	51 963	1 672	3 213	33 228	113 455	117 876	233 894	8 813
327	Nonmetallic mineral product mfg	1	37	15	1 763	60 420	1 283	2 647	41 519	165 514	123 084	292 595	10 107
3271	Clay product & refractory mfg	—	5	4	775	20 600	494	995	11 342	44 279	15 605	58 517	3 185
32711	Pottery, ceramics, & plumbing fixture mfg	—	5	4	775	20 600	494	995	11 342	44 279	15 605	58 517	3 185
327112	Vitreous china, fine earthenware, & other pottery product mfg	—	5	4	775	20 600	494	995	11 342	44 279	15 605	58 517	3 185
3272	Glass & glass product mfg	—	6	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	6	3	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	2	2	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	23	8	e	D	D	D	D	D	D	D	3 675
331	Primary metal mfg	—	21	16	3 361	139 151	2 511	5 602	95 954	85 800	1 590 617	1 677 029	42 641
3311	Iron & steel mills & ferroalloy mfg	—	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	—	13	10	1 022	30 079	814	1 698	21 209	56 955	36 360	91 986	7 635
33151	Ferrous metal foundries	—	4	4	610	18 383	484	1 032	13 209	39 351	23 711	62 073	2 716
331512	Steel investment foundries	—	1	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	9	6	412	11 696	330	666	8 000	17 604	12 649	29 913	4 919
331524	Aluminum foundries (except die-casting)	—	4	3	307	9 379	240	504	6 386	13 740	9 949	23 388	D
332	Fabricated metal product mfg	1	150	50	4 467	146 410	3 193	6 686	91 058	291 919	230 881	524 186	27 867
3323	Architectural & structural metals mfg	—	29	10	775	25 860	456	964	13 922	24 159	48 210	71 805	2 419
33231	Plate work & fabricated structural product mfg	—	11	5	365	14 069	262	569	9 162	20 232	22 647	42 285	1 044
332312	Fabricated structural metal mfg	—	6	4	270	10 609	197	404	7 076	14 448	17 670	31 725	877
33232	Ornamental & architectural metal products mfg	1	18	5	410	11 791	194	395	4 760	3 927	25 563	29 520	1 375
332322	Sheet metal work mfg	1	10	4	312	9 704	123	264	3 476	S	S	19 725	1 197
3324	Boiler, tank, & shipping container mfg	—	2	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	68	17	1 570	47 701	1 222	2 506	33 515	108 028	84 764	191 732	12 797
33271	Machine shops	2	58	10	557	16 739	433	756	11 037	31 631	13 350	43 931	2 172
332710	Machine shops	2	58	10	557	16 739	433	756	11 037	31 631	13 350	43 931	2 172
33272	Turned product & screw, nut, & bolt mfg	—	10	7	1 013	30 962	789	1 750	22 478	76 397	71 414	147 801	10 625
332721	Precision turned product mfg	—	9	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SYRACUSE, NY MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	—	18	5	351	13 028	236	470	5 473	25 798	7 173	32 929	2 564
33281	Coating, engraving, heat treating, & allied activities.....	—	18	5	351	13 028	236	470	5 473	25 798	7 173	32 929	2 564
332813	Electroplating, plating, polishing, anodizing, & coloring	—	10	3	270	10 322	188	381	4 408	20 492	5 593	25 999	1 823
3329	Other fabricated metal product mfg.....	—	19	7	964	32 193	721	1 542	22 335	67 910	37 152	107 986	5 874
33291	Metal valve mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	17	5	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	74	30	4 403	185 490	2 783	5 848	100 992	505 297	544 549	1 056 221	17 666
3332	Industrial machinery mfg ..	1	12	4	368	16 712	165	326	6 241	39 546	33 632	75 374	3 793
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	7	2 638	116 849	1 751	3 905	70 264	348 717	445 410	801 133	10 122
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	12	7	2 638	116 849	1 751	3 905	70 264	348 717	445 410	801 133	10 122
333412	Industrial & commercial fan & blower mfg	—	2	2	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	7	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	5	24	5	e	D	D	D	D	D	D	D	1 744
33351	Metalworking machinery mfg	5	24	5	e	D	D	D	D	D	D	D	1 744
3336	Engine, turbine, & power transmission equipment mfg	—	5	4	322	12 209	209	371	6 532	26 822	9 855	35 986	D
33361	Engine, turbine, & power transmission equipment mfg	—	5	4	322	12 209	209	371	6 532	26 822	9 855	35 986	D
3339	Other general-purpose machinery mfg	—	16	8	523	17 962	325	556	8 050	44 732	25 461	68 064	1 052
33399	All other general-purpose machinery mfg	—	9	4	e	D	D	D	D	D	D	D	847
334	Computer & electronic product mfg.....	—	53	24	5 771	232 008	2 548	4 382	55 423	643 622	361 818	1 022 931	30 924
3342	Communications equipment mfg	—	14	8	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	11	6	2 172	56 856	1 500	2 607	24 908	167 639	148 139	307 165	11 102
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	11	6	2 172	56 856	1 500	2 607	24 908	167 639	148 139	307 165	11 102
3344	Semiconductor & other electronic component mfg	1	24	8	767	19 059	565	948	8 818	51 021	32 076	82 525	D
33441	Semiconductor & other electronic component mfg	1	24	8	767	19 059	565	948	8 818	51 021	32 076	82 525	D
334419	Other electronic component mfg	—	9	3	311	6 652	266	442	3 382	22 653	21 593	43 797	971
3345	Navigational, measuring, medical, & control instruments mfg	—	10	7	2 580	148 060	417	699	19 951	409 790	168 393	605 286	14 856
33451	Navigational, measuring, medical, & control instruments mfg	—	10	7	2 580	148 060	417	699	19 951	409 790	168 393	605 286	14 856
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SYRACUSE, NY MSA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	26	13	3 030	92 844	2 057	3 867	49 891	295 097	152 172	454 784	12 821
3353	Electrical equipment mfg ..	1	17	10	g	D	D	D	D	D	D	D	7 638
33531	Electrical equipment mfg	1	17	10	g	D	D	D	D	D	D	D	7 638
335314	Relay & industrial control mfg	1	13	8	1 282	29 134	859	1 516	13 286	97 045	61 521	158 350	7 394
3359	Other electrical equipment & component mfg	-	5	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	3	2	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	5	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	4	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	21	4	1 255	39 677	673	1 569	17 146	107 240	60 171	166 455	2 482
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	2	889	28 075	540	1 306	14 318	59 995	40 628	99 600	D
33712	Household & institutional furniture mfg	-	6	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	4	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	6	2	366	11 602	133	263	2 828	47 245	19 543	66 855	D
33721	Office furniture (including fixtures) mfg	-	6	2	366	11 602	133	263	2 828	47 245	19 543	66 855	D
337215	Showcase, partition, shelving, & locker mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	67	16	3 931	134 753	2 247	3 936	52 757	312 837	171 296	484 165	19 340
3391	Medical equipment & supplies mfg	-	25	5	2 846	101 370	1 420	2 395	30 574	214 832	95 103	310 567	D
33911	Medical equipment & supplies mfg	-	25	5	2 846	101 370	1 420	2 395	30 574	214 832	95 103	310 567	D
339112	Surgical & medical instrument mfg	-	7	3	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	42	11	1 085	33 383	827	1 541	22 183	98 005	76 193	173 598	D
33999	All other miscellaneous mfg	-	18	7	881	29 141	670	1 275	19 343	87 454	64 891	152 392	D
339991	Gasket, packing, & sealing device mfg ...	-	4	3	363	15 319	270	551	10 850	54 569	49 222	103 256	2 740
339995	Burial casket mfg	-	1	1	e	D	D	D	D	D	D	D	D
UTICA—ROME, NY MSA													
31-33	Manufacturing	2	351	132	20 050	582 892	14 910	27 043	379 493	1 582 470	1 582 868	3 147 642	94 439
311	Food mfg	1	38	14	773	17 273	511	922	10 798	64 977	102 793	166 865	6 612
3118	Bakeries & tortilla mfg	2	23	6	320	5 326	218	338	3 077	18 077	13 088	30 928	1 125
31181	Bread & bakery product mfg	2	21	5	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	9	4	1 263	22 879	1 018	1 878	15 011	38 687	70 274	102 192	5 293
3141	Textile furnishings mills ...	-	4	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	4	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	4	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	5	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	9	6	1	e	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	9	1	1	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	9	1	1	e	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	9	1	1	e	D	D	D	D	D	D	D	D

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31-33	UTICA-ROME, NY MSA—Con.													
	Manufacturing—Con.													
316	Leather & allied product mfg .	-	1	1	e	D	D	D	D	D	D	D	D	
3162	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D	
31621	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D	
316212	House slipper mfg	-	1	1	e	D	D	D	D	D	D	D	D	
321	Wood product mfg	3	24	7		547	12 887	441	853	9 127	29 216	37 980	67 421	1 909
3219	Other wood product mfg . . .	1	16	5		414	9 199	346	657	6 409	19 988	27 615	47 886	809
322	Paper mfg	-	11	8	1	034	38 464	811	1 607	25 910	82 023	103 859	186 643	8 133
3221	Pulp, paper, & paperboard mills	-	4	4	e	D	D	D	D	D	D	D	D	D
32212	Paper mills	-	3	3	e	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	3	3	e	D	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	7	4	f	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	5	4	f	D	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	3		322	10 007	243	476	6 573	20 120	23 288	43 325	903
322212	Folding paperboard box mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	32	6		595	19 107	438	780	11 832	40 838	23 956	64 823	2 832
3231	Printing & related support activities	2	32	6		595	19 107	438	780	11 832	40 838	23 956	64 823	2 832
32311	Printing	2	30	6	f	D	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	16	3		356	11 693	259	448	6 788	24 420	11 575	35 744	1 956
325	Chemical mfg	-	8	2		514	8 736	364	625	4 325	43 285	22 853	64 016	1 124
3256	Soap, cleaning compound, & toilet preparation mfg	-	2	1	e	D	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	9	6		334	5 895	277	426	3 489	17 453	13 076	30 260	1 327
3261	Plastics product mfg	4	9	6		334	5 895	277	426	3 489	17 453	13 076	30 260	1 327
327	Nonmetallic mineral product mfg	3	15	4		275	7 120	197	350	4 499	13 759	12 569	25 491	554
331	Primary metal mfg	-	9	8	2	474	89 218	1 737	3 675	61 864	220 628	430 809	646 027	17 803
3312	Steel product mfg from purchased steel	-	2	2	e	D	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	2	2	e	D	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	6	6	g	D	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	3	3	g	D	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	-	2	2	f	D	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	3	3	f	D	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	2	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	62	19		2 635	82 352	2 119	4 420	59 747	243 404	99 492	347 676	8 095
3322	Cutlery & handtool mfg	-	3	2	e	D	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	3	2	e	D	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	5	3		251	7 380	177	345	4 711	21 431	4 389	26 196	543
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	31	2		325	9 031	279	499	6 634	16 900	5 880	22 689	2 107
3328	Coating, engraving, heat treating, & allied activities	-	7	5		256	6 083	211	386	4 446	13 709	3 218	17 084	D
33281	Coating, engraving, heat treating, & allied activities	-	7	5		256	6 083	211	386	4 446	13 709	3 218	17 084	D
3329	Other fabricated metal product mfg	-	4	3	g	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	3	g	D	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	g	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	UTICA-ROME, NY MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	34	14	1 040	36 108	682	1 153	16 802	80 171	65 962	144 691	3 362
3332	Industrial machinery mfg ..	1	7	5	345	12 023	209	395	6 837	19 513	16 976	36 577	196
334	Computer & electronic product mfg	2	15	8	1 350	50 215	618	1 104	17 040	111 628	67 530	173 228	8 676
3341	Computer & peripheral equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	9	5	890	34 307	461	845	13 874	58 956	51 803	111 232	6 989
33451	Navigational, measuring, medical, & control instruments mfg	2	9	5	890	34 307	461	845	13 874	58 956	51 803	111 232	6 989
334510	Electromedical & electrotherapeutic apparatus mfg	1	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	8	13	8	1 018	26 424	624	1 206	12 715	50 394	157 538	221 001	6 152
3359	Other electrical equipment & component mfg	8	8	7	976	25 263	600	1 166	12 062	47 816	155 110	215 985	6 011
33592	Communication & energy wire & cable mfg	8	4	4	f	D	D	D	D	D	D	D	5 256
335929	Other communication & energy wire mfg ...	9	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	8	6	4	1 374	44 919	1 062	1 824	32 394	117 155	158 949	278 188	6 791
3361	Motor vehicle mfg	9	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	9	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	10	5	907	23 602	768	1 579	18 746	38 093	25 923	63 627	1 917
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	6	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	32	9	2 855	77 779	2 414	2 885	62 551	319 425	139 036	443 513	12 089
3391	Medical equipment & supplies mfg	—	16	3	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	16	3	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	16	6	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	—	3	1	g	D	D	D	D	D	D	D	D
339912	Silverware & plated ware mfg	—	3	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALBANY COUNTY, NY													
31-33	Manufacturing	-	272	84	9 065	335 918	6 082	12 067	189 530	1 086 466	1 086 288	2 182 390	99 613
311	Food mfg	-	31	9	651	21 626	474	1 016	12 413	40 913	195 986	237 275	6 195
323	Printing & related support activities	4	50	11	658	20 341	483	928	12 621	50 143	29 962	80 061	4 017
3231	Printing & related support activities	4	50	11	658	20 341	483	928	12 621	50 143	29 962	80 061	4 017
32311	Printing	4	41	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	8	5	846	41 266	561	1 124	24 567	291 287	209 749	492 622	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	6	596	19 124	434	798	10 959	36 008	43 755	80 109	2 120
3261	Plastics product mfg	-	13	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	22	8	1 274	59 828	918	2 004	39 821	234 600	120 743	360 812	D
3279	Other nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	31	11	1 136	41 081	755	1 459	21 860	97 080	59 738	158 909	4 875
337	Furniture & related product mfg	-	10	5	508	13 168	419	896	8 686	45 240	37 234	82 241	D
ALLEGANY COUNTY, NY													
31-33	Manufacturing	-	57	16	2 919	102 423	1 899	3 791	54 027	242 605	302 576	542 837	13 596
332	Fabricated metal product mfg	-	10	4	760	29 856	482	1 127	15 889	71 198	53 942	122 212	1 066
3324	Boiler, tank, & shipping container mfg	-	1	1	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRONX COUNTY, NY													
31-33	Manufacturing	2	527	162	12 941	319 638	9 928	17 876	202 107	725 466	526 172	1 252 335	40 240
311	Food mfg	4	121	18	1 721	41 384	1 171	2 055	22 667	113 612	107 701	221 941	5 848
3118	Bakeries & tortilla mfg	3	96	10	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	8	91	8	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	5	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	69	30	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	49	19	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	4	35	13	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	4	34	13	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	14	8	614	9 743	522	966	6 857	17 030	13 451	30 056	D
31599	Apparel accessories & other apparel mfg	2	14	8	614	9 743	522	966	6 857	17 030	13 451	30 056	D
322	Paper mfg	-	6	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	6	4	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	3	570	13 893	513	709	6 840	25 731	18 928	44 545	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRONX COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	1	20	7	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	25	13		1 287	19 085	1 049	1 563	14 519	49 097	31 547	77 357
3261	Plastics product mfg	1	22	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	17	9		1 108	15 874	923	1 371	12 327	41 971	24 908	63 552
326199	All other plastics product mfg	1	17	9		1 108	15 874	923	1 371	12 327	41 971	24 908	63 552
332	Fabricated metal product mfg	2	79	32		2 233	67 751	1 638	3 418	39 784	124 324	86 122	210 849
3323	Architectural & structural metals mfg	2	28	16		978	34 137	658	1 440	18 587	56 985	42 714	100 154
33232	Ornamental & architectural metal products mfg	3	23	15	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	23	7		729	22 704	552	1 074	12 747	40 069	28 638	68 929
337	Furniture & related product mfg	2	35	11		766	26 150	598	1 109	17 551	44 628	21 354	64 549
3372	Office furniture (including fixtures) mfg	2	15	8		548	21 194	428	819	14 367	36 417	16 254	51 169
33721	Office furniture (including fixtures) mfg	2	15	8		548	21 194	428	819	14 367	36 417	16 254	51 169
339	Miscellaneous mfg	3	39	16		1 012	29 383	730	1 379	17 032	57 552	29 431	86 612
3399	Other miscellaneous mfg ..	2	25	14		882	25 868	643	1 263	15 392	48 466	24 438	72 396
BROOME COUNTY, NY													
31-33	Manufacturing	1	242	108		20 429	787 802	12 357	24 079	314 019	1 631 937	1 492 959	3 147 613
311	Food mfg	—	18	9	g	D	D	D	D	D	D	D	D
3119	Other food mfg	—	4	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	33	11	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	33	11	g	D	D	D	D	D	D	D	D
32311	Printing	1	25	11	g	D	D	D	D	D	D	D	D
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	3	3	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	3	2	2	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	2	2	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	3	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	43	21		1 400	40 070	1 086	2 032	26 416	67 325	55 961	124 724
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	24	11		803	25 266	659	1 351	17 841	45 906	18 554	66 352
33271	Machine shops	—	21	8		629	20 192	514	1 051	13 796	34 875	14 568	51 368
332710	Machine shops	—	21	8		629	20 192	514	1 051	13 796	34 875	14 568	51 368
333	Machinery mfg	—	19	8	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	4	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	4	2	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BROOME COUNTY, NY —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg	2	31	22	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	4	2	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	5	19	16	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	5	19	16	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	4	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	9	2	2	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	6	5	f	D	D	D	D	D	D	D	1 728
3345	Navigational, measuring, medical, & control instruments mfg	—	7	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	7	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	8	4	641	12 874	598	1 338	11 256	11 435	50 572	61 547	1 042
3353	Electrical equipment mfg ..	—	4	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
	CATTARAUGUS COUNTY, NY												
31-33	Manufacturing	1	95	41	5 341	162 871	4 110	8 540	115 715	529 737	427 379	930 453	30 424
321	Wood product mfg	—	19	11	725	16 851	609	1 215	11 896	37 123	48 250	85 515	3 583
3219	Other wood product mfg ...	—	13	7	517	11 723	443	923	8 130	25 514	34 123	59 587	2 891
325	Chemical mfg	2	5	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	16	6	788	24 295	638	1 270	17 423	47 260	22 978	67 071	4 241
3322	Cutlery & handtool mfg ...	—	4	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	—	4	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	6	1 282	47 525	1 080	2 325	40 553	201 342	202 845	379 769	8 177
3339	Other general-purpose machinery mfg	—	4	2	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	—	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	1	1	f	D	D	D	D	D	D	D	D
	CAYUGA COUNTY, NY												
31-33	Manufacturing	—	100	33	3 859	110 428	2 824	5 347	70 958	312 020	295 568	618 577	20 236
327	Nonmetallic mineral product mfg	—	9	6	685	23 400	461	921	15 343	69 732	53 777	124 526	3 390
333	Machinery mfg	—	10	4	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
CAYUGA COUNTY, NY														
—Con.														
31-33	Manufacturing—													
	Con.													
335	Electrical equipment, appliance, & component mfg	—	4	2	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	—	2	2	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D	
335314	Relay & industrial control mfg	—	1	1	f	D	D	D	D	D	D	D	D	
CHAUTAUQUA COUNTY, NY														
31-33	Manufacturing	—	222	92		13 084	409 068	9 651	19 457	267 195	1 459 552	1 499 709	2 973 564	110 171
311	Food mfg	—	22	12		2 444	69 485	1 814	3 766	43 440	420 483	578 897	999 303	19 871
3114	Fruit & vegetable preserving & specialty food mfg	—	5	4		1 203	37 169	940	2 091	23 212	127 735	299 538	427 958	D
31142	Fruit & vegetable canning, pickling, & drying	—	4	3	g	D	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	3	3	g	D	D	D	D	D	D	D	D	8 111
331	Primary metal mfg	—	5	2	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	55	20		2 496	83 530	1 901	4 061	58 422	151 532	115 364	266 206	16 864
3329	Other fabricated metal product mfg	—	7	2	f	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	6	2	f	D	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	—	25	12		2 102	79 105	1 367	3 423	58 356	412 507	434 149	846 169	14 860
3335	Metalworking machinery mfg	2	15	5		510	19 235	384	793	14 207	32 571	16 948	50 100	5 773
33351	Metalworking machinery mfg	2	15	5		510	19 235	384	793	14 207	32 571	16 948	50 100	5 773
3336	Engine, turbine, & power transmission equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	6	5		625	15 313	386	727	7 824	8 578	20 391	38 112	2 396
3363	Motor vehicle parts mfg ...	3	5	4	f	D	D	D	D	D	D	D	D	2 396
337	Furniture & related product mfg	—	23	15		2 632	66 346	2 121	3 319	38 309	233 494	135 301	362 781	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	15	10		2 411	59 986	1 979	3 074	35 028	204 607	125 386	325 488	D
33712	Household & institutional furniture mfg	—	11	9		2 379	59 116	1 957	3 031	34 543	202 856	124 628	322 951	D
337122	Nonupholstered wood household furniture mfg	—	7	7		2 309	57 697	1 905	2 925	33 561	202 015	122 329	319 911	D
CHEMUNG COUNTY, NY														
31-33	Manufacturing	—	94	44		9 098	278 083	6 214	12 888	170 432	765 645	576 380	1 357 316	64 924
323	Printing & related support activities	2	11	2	f	D	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	11	2	f	D	D	D	D	D	D	D	D	D
32311	Printing	2	11	2	f	D	D	D	D	D	D	D	D	D
323116	Manifold business form printing	—	1	1	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	9	4		647	25 523	525	1 063	19 422	70 289	41 414	112 045	5 654
3272	Glass & glass product mfg ..	—	5	3		585	23 670	481	965	18 394	67 794	39 134	107 287	5 296
32721	Glass & glass product mfg	—	5	3		585	23 670	481	965	18 394	67 794	39 134	107 287	5 296
332	Fabricated metal product mfg	—	21	12		1 210	39 765	982	2 085	26 555	112 141	50 559	162 677	5 727

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHEMUNG COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	2	11	7	2 054	75 274	1 455	2 877	43 634	165 961	122 472	302 469	12 112
3335	Metalworking machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg ...	—	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	6	4	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	6	4	4	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	4	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	5	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	5	4	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	5	4	h	D	D	D	D	D	D	D	D
334411	Electron tube mfg	—	3	3	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	1	1	f	D	D	D	D	D	D	D	D
CHENANGO COUNTY, NY													
31-33	Manufacturing	—	86	33	3 829	120 318	2 643	5 307	62 315	497 910	279 013	790 411	49 898
325	Chemical mfg	—	5	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	3	1	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
CLINTON COUNTY, NY													
31-33	Manufacturing	1	82	28	4 188	131 846	3 422	6 362	98 261	359 452	403 482	777 901	53 155
322	Paper mfg	—	6	4	983	37 674	832	1 757	29 810	123 083	131 126	256 130	D
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	4	3	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	6	6	678	15 446	558	1 116	10 648	51 872	42 206	93 807	3 981
3261	Plastics product mfg	4	5	5	f	D	D	D	D	D	D	D	D
COLUMBIA COUNTY, NY													
31-33	Manufacturing	2	86	26	2 531	62 199	1 882	3 582	38 554	156 209	176 129	331 071	12 342
333	Machinery mfg	—	11	3	561	12 313	413	782	7 823	44 129	24 804	67 876	1 977

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CORTLAND COUNTY, NY													
31-33	Manufacturing	2	70	29	4 521	123 525	3 190	6 825	76 671	400 640	350 112	736 100	73 984
325	Chemical mfg	5	6	3	670	19 006	495	1 055	8 388	56 734	41 170	97 611	3 635
332	Fabricated metal product mfg	-	12	4	1 100	34 708	912	2 132	26 184	81 007	50 915	118 081	D
3328	Coating, engraving, heat treating, & allied activities	-	2	1	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	2	1	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
DELAWARE COUNTY, NY													
31-33	Manufacturing	-	60	28	4 386	147 909	3 169	6 621	92 675	418 039	351 779	783 680	27 563
323	Printing & related support activities	-	4	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	4	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	3	2	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	g	D	D	D	D	D	D	D	D
DUTCHESS COUNTY, NY													
31-33	Manufacturing	-	210	59	11 848	521 317	5 675	11 405	153 806	937 456	1 932 127	3 032 927	54 681
326	Plastics & rubber products mfg	1	8	6	666	21 831	506	1 113	12 242	52 759	51 259	105 346	3 265
3262	Rubber product mfg	1	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	36	12	749	26 342	583	1 176	15 611	59 764	28 556	87 734	2 669
334	Computer & electronic product mfg	-	15	8	i	D	D	D	D	D	D	D	35 102
3344	Semiconductor & other electronic component mfg	-	9	5	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	9	5	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	4	2	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	9	3	1	519	12 452	453	1 032	11 498	700	2 739	3 488	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ERIE COUNTY, NY													
31-33	Manufacturing	-	1 251	460	63 234	2 422 097	45 098	92 096	1 541 846	7 064 567	6 970 387	14 054 477	539 148
311	Food mfg	1	97	49	5 852	183 560	4 286	8 597	115 496	1 118 920	984 618	2 114 006	68 642
3112	Grain & oilseed milling	-	5	5	758	39 458	598	1 635	30 831	420 770	282 969	705 178	D
3113	Sugar & confectionery product mfg	1	15	7	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	8	5	f	D	D	D	D	D	D	D	3 332
31141	Frozen food mfg	-	3	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	11	8	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	8	6	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	9	7	f	D	D	D	D	D	D	D	16 017
31161	Animal slaughtering & processing	3	9	7	f	D	D	D	D	D	D	D	16 017
311612	Meat processed from carcasses	3	9	7	f	D	D	D	D	D	D	D	16 017
3118	Bakeries & tortilla mfg	-	41	12	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	37	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	14	6	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	6	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	2	6	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	2	6	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	2	6	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	20	6	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	7	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	11	4	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	11	4	g	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	31	15	g	D	D	D	D	D	D	D	4 047
3211	Sawmills & wood preservation	2	4	3	f	D	D	D	D	D	D	D	2 797
32111	Sawmills & wood preservation	2	4	3	f	D	D	D	D	D	D	D	2 797
321113	Sawmills	2	4	3	f	D	D	D	D	D	D	D	2 797
3219	Other wood product mfg ...	4	26	11	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	25	15	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	25	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	13	9	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	8	4	506	13 357	415	828	9 535	37 461	48 394	86 232	D
323	Printing & related support activities	1	176	38	3 831	120 636	2 931	5 623	81 369	243 969	154 719	399 218	28 957
3231	Printing & related support activities	1	176	38	3 831	120 636	2 931	5 623	81 369	243 969	154 719	399 218	28 957
32311	Printing	1	155	33	3 504	111 179	2 684	5 121	74 937	221 086	150 159	371 735	28 160
323110	Commercial lithographic printing ..	1	84	18	1 402	44 061	1 068	2 099	27 901	83 026	55 627	136 726	6 624
323117	Book printing	-	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	42	19	2 671	109 142	1 433	2 865	44 483	568 089	322 236	880 955	23 756
3251	Basic chemical mfg	-	7	6	580	28 184	331	654	14 219	88 626	55 640	142 885	D
3254	Pharmaceutical & medicine mfg	-	7	4	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	7	4	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	5	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ERIE COUNTY, NY—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	64	32	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	52	26	h	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	7	5	935	43 177	628	1 380	23 187	199 333	85 773	287 589	D
326121	Unsupported plastics profile shape mfg	-	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	33	17	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	31	17	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	12	6	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	5	3	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	3	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	43	20	2 148	76 343	1 552	3 226	47 182	221 794	134 523	358 838	19 693
3271	Clay product & refractory mfg	-	7	5	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	14	10	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	8	8	847	30 187	649	1 457	19 864	109 954	64 711	175 284	D
327910	Abrasive product mfg ...	-	8	8	847	30 187	649	1 457	19 864	109 954	64 711	175 284	D
331	Primary metal mfg	-	20	13	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	5	3	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	5	3	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	5	3	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	3	3	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	3	3	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	5	4	1 015	51 376	725	1 595	35 396	110 433	251 049	363 853	10 938
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	247	78	5 892	193 191	4 198	8 437	113 154	422 253	255 877	674 530	32 228
3323	Architectural & structural metals mfg	1	38	15	979	33 784	651	1 378	19 213	78 808	57 480	136 041	3 885
33231	Plate work & fabricated structural product mfg ..	1	17	8	605	21 726	367	759	11 089	54 446	44 636	99 082	2 403
332312	Fabricated structural metal mfg	1	13	7	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	12	7	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	5	5	677	26 248	472	1 003	13 726	62 688	36 646	97 105	D
332410	Power boiler & heat exchanger mfg	-	5	5	677	26 248	472	1 003	13 726	62 688	36 646	97 105	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	103	27	1 788	56 583	1 357	2 662	36 564	122 163	55 011	176 282	11 659
33271	Machine shops	2	84	18	970	29 053	743	1 369	19 856	53 923	20 001	73 306	5 470
332710	Machine shops	2	84	18	970	29 053	743	1 369	19 856	53 923	20 001	73 306	5 470
33272	Turned product & screw, nut, & bolt mfg	-	19	9	818	27 530	614	1 293	16 708	68 240	35 010	102 976	6 189
332721	Precision turned product mfg	-	14	7	729	24 763	559	1 180	15 533	59 974	30 903	90 529	5 851
3329	Other fabricated metal product mfg	3	27	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ERIE COUNTY, NY— Con. Manufacturing— Con.												
333	Machinery mfg	1	129	50	8 026	349 469	4 439	8 975	164 686	826 022	424 877	1 260 134	41 693
3331	Agriculture, construction, & mining machinery mfg....	—	5	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	14	3	534	20 922	324	690	10 483	42 082	36 490	77 705	D
3335	Metalworking machinery mfg	3	46	11	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	3	46	11	g	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg ...	5	5	3	948	40 879	543	1 075	22 323	94 697	54 169	141 809	D
3336	Engine, turbine, & power transmission equipment mfg	—	7	6	678	23 076	446	714	13 462	44 564	36 338	81 205	D
33361	Engine, turbine, & power transmission equipment mfg	—	7	6	678	23 076	446	714	13 462	44 564	36 338	81 205	D
3339	Other general-purpose machinery mfg	—	36	18	3 600	174 471	1 738	3 524	68 526	445 009	154 974	616 357	23 078
33391	Pump & compressor mfg	—	3	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	24	12	h	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	5	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	63	28	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	21	7	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	21	7	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	9	4	775	18 551	520	990	10 862	41 132	17 000	58 421	1 957
3345	Navigational, measuring, medical, & control instruments mfg	1	20	13	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	20	13	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	31	16	1 497	57 644	951	2 043	24 686	106 825	59 118	169 619	D
3359	Other electrical equipment & component mfg	1	11	6	f	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	51	27	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	28	19	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	1	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	1	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	5	4	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	2	4	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	4	3	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	4	3	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	9	11	7	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	9	11	7	f	D	D	D	D	D	D	D	D

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31-33	ERIE COUNTY, NY— Con.												
	Manufacturing— Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	—	4	3	848	30 844	489	947	15 473	42 623	47 554	91 670	3 153
33641	Aerospace product & parts mfg	—	4	3	848	30 844	489	947	15 473	42 623	47 554	91 670	3 153
336413	Other aircraft part & auxiliary equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	40	10	f	D	D	D	D	D	D	D	2 749
339	Miscellaneous mfg	1	126	28	3 709	105 102	2 497	4 939	52 252	295 948	199 077	490 364	11 957
3391	Medical equipment & supplies mfg	—	63	10	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	63	10	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	9	4	718	17 194	408	575	5 746	47 077	50 226	93 007	D
3399	Other miscellaneous mfg ..	1	63	18	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	4	1	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	—	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	4	19	7	f	D	D	D	D	D	D	D	D
	ESSEX COUNTY, NY												
31-33	Manufacturing	—	40	5	1 474	50 361	1 132	2 435	35 323	130 048	157 819	285 163	10 244
322	Paper mfg	—	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
	FRANKLIN COUNTY, NY												
31-33	Manufacturing	1	26	8	1 165	24 911	971	2 302	18 214	71 645	84 313	144 440	D
316	Leather & allied product mfg .	—	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	1	1	f	D	D	D	D	D	D	D	D
	FULTON COUNTY, NY												
31-33	Manufacturing	2	116	43	3 548	86 622	2 845	5 931	58 757	220 555	227 859	443 598	16 811
315	Apparel mfg	1	10	3	515	9 179	456	931	6 935	14 495	11 696	26 956	D
316	Leather & allied product mfg .	3	34	14	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	3	32	14	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	3	32	14	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	3	32	14	f	D	D	D	D	D	D	D	D
	GENESEE COUNTY, NY												
31-33	Manufacturing	1	107	40	3 979	127 047	2 834	5 973	75 499	335 245	443 367	778 051	32 387
327	Nonmetallic mineral product mfg	1	11	6	747	28 130	573	1 273	18 924	71 489	44 071	115 321	4 935
332	Fabricated metal product mfg	—	21	5	656	23 193	385	790	11 588	44 852	26 876	69 774	1 460
333	Machinery mfg	2	14	6	f	D	D	D	D	D	D	D	5 222
	GREENE COUNTY, NY												
31-33	Manufacturing	—	37	6	740	22 410	472	910	11 917	57 802	60 528	118 422	5 295

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HERKIMER COUNTY, NY													
31-33	Manufacturing	-	71	30	4 971	135 762	3 982	8 249	96 514	411 914	254 100	662 359	22 707
314	Textile product mills.....	-	4	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	2	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	7	1 921	62 191	1 623	3 514	48 484	196 668	48 601	249 883	4 243
3329	Other fabricated metal product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	g	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, NY													
31-33	Manufacturing	-	84	31	3 896	131 988	2 791	5 844	85 150	357 639	448 152	812 623	32 641
322	Paper mfg	-	8	7	1 358	57 938	1 088	2 505	42 552	162 910	188 796	356 454	17 813
3221	Pulp, paper, & paperboard mills	-	6	6	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	5	5	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	4	4	f	D	D	D	D	D	D	D	D
322122	Newsprint mills.....	-	1	1	f	D	D	D	D	D	D	D	D
KINGS COUNTY, NY													
31-33	Manufacturing	3	2 672	619	48 589	1 139 878	37 284	68 997	718 347	3 014 553	2 744 960	5 725 535	138 902
311	Food mfg	2	379	66	6 424	178 136	4 326	8 471	103 790	535 093	854 791	1 392 762	25 164
3113	Sugar & confectionery product mfg.....	-	14	8	980	36 304	770	1 595	25 227	106 334	276 619	383 062	5 519
3116	Meat product mfg.....	5	30	12	684	23 170	495	1 205	15 715	102 100	145 806	247 470	4 148
31161	Animal slaughtering & processing.....	5	30	12	684	23 170	495	1 205	15 715	102 100	145 806	247 470	4 148
311612	Meat processed from carcasses	5	18	10	575	20 415	399	1 035	13 811	86 713	118 022	204 249	3 775
3118	Bakeries & tortilla mfg.....	5	257	20	1 991	39 398	1 272	2 184	19 525	96 960	63 065	160 243	4 627
31181	Bread & bakery product mfg	6	244	17	1 824	33 745	1 158	1 995	16 974	80 351	52 212	132 602	4 120
311811	Retail bakeries	5	171	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	6	72	12	1 076	21 837	698	1 349	11 306	53 104	33 107	86 116	2 719
3119	Other food mfg	-	45	16	1 766	48 965	1 165	2 232	25 983	154 549	197 316	355 577	7 232
31199	All other food mfg	1	27	9	1 120	24 845	739	1 210	13 345	63 339	80 715	143 852	2 862
311991	Perishable prepared food mfg	-	14	4	763	18 912	478	885	9 903	45 651	60 739	106 187	1 776
312	Beverage & tobacco product mfg	7	13	5	815	18 549	613	1 272	11 905	88 455	78 392	166 371	D
3121	Beverage mfg	7	13	5	815	18 549	613	1 272	11 905	88 455	78 392	166 371	D
31211	Soft drink & ice mfg.....	9	9	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	6	2	f	D	D	D	D	D	D	D	D
313	Textile mills	6	92	11	1 130	27 326	953	1 902	18 496	53 279	62 505	115 483	5 147
3132	Fabric mills	5	53	6	657	15 172	549	1 124	10 616	28 408	34 123	62 351	3 362
314	Textile product mills.....	4	103	18	1 408	21 191	1 162	1 757	13 340	49 352	50 044	98 647	D
3141	Textile furnishings mills....	3	46	9	664	10 777	538	847	6 065	27 145	32 799	59 205	D
31412	Curtain & linen mills.....	3	44	9	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	5	57	9	744	10 414	624	910	7 275	22 207	17 245	39 442	D
31499	All other textile product mills	4	39	7	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	4	39	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KINGS COUNTY, NY—Con.												
	Manufacturing—Con.												
315	Apparel mfg	6	802	224	14 889	227 223	12 798	21 836	173 572	464 307	389 146	853 527	16 253
3151	Apparel knitting mills	7	107	46	h	D	D	D	D	D	D	D	4 323
31519	Other apparel knitting mills	7	100	45	h	D	D	D	D	D	D	D	4 181
315191	Outerwear knitting mills	7	99	45	2 916	50 344	2 443	4 513	39 107	109 470	79 524	190 472	D
3152	Cut & sew apparel mfg	6	631	164	10 661	152 964	9 238	15 358	117 405	307 804	269 175	574 852	10 034
31521	Cut & sew apparel contractors	7	435	109	6 614	83 441	5 934	9 805	70 998	131 847	30 163	161 792	4 894
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	417	101	6 197	77 332	5 564	9 088	66 040	122 085	28 907	150 771	4 669
31522	Men's & boys' cut & sew apparel mfg	6	51	18	1 444	22 955	1 261	2 166	17 655	55 727	52 800	108 907	2 896
315228	Men's & boys' cut & sew other outerwear mfg	6	34	14	1 021	15 692	899	1 601	12 327	33 660	39 372	73 990	2 617
31523	Women's & girls' cut & sew apparel mfg	5	126	36	2 524	45 669	1 977	3 282	28 086	117 789	184 275	299 780	2 176
315232	Women's & girls' cut & sew blouse & shirt mfg	2	38	10	574	9 700	467	784	6 440	26 362	38 655	64 823	441
315234	Women's & girls' cut & sew suit, coat, skirt mfg	7	15	5	551	14 881	294	615	5 895	50 821	77 712	125 992	620
315239	Women's & girls' cut & sew other outerwear mfg	6	35	11	f	D	D	D	D	D	D	D	567
3159	Apparel accessories & other apparel mfg	3	64	14	g	D	D	D	D	D	D	D	1 896
31599	Apparel accessories & other apparel mfg	3	64	14	g	D	D	D	D	D	D	D	1 896
315999	Other apparel accessories & other apparel mfg	3	36	11	844	16 237	708	1 345	11 629	27 126	24 617	52 507	1 614
316	Leather & allied product mfg .	1	24	8	891	18 263	533	1 132	9 197	68 119	45 879	113 691	D
3169	Other leather & allied product mfg	-	18	7	791	15 298	462	953	6 868	63 619	43 589	106 886	D
31699	Other leather & allied product mfg	-	18	7	791	15 298	462	953	6 868	63 619	43 589	106 886	D
322	Paper mfg	5	40	17	963	27 275	736	1 332	17 658	57 331	64 232	121 433	4 176
3222	Converted paper product mfg	5	40	17	963	27 275	736	1 332	17 658	57 331	64 232	121 433	4 176
323	Printing & related support activities	5	189	28	2 787	68 829	2 149	4 265	47 105	131 286	76 756	207 344	D
3231	Printing & related support activities	5	189	28	2 787	68 829	2 149	4 265	47 105	131 286	76 756	207 344	D
32311	Printing	5	159	18	2 252	58 955	1 683	3 587	39 523	113 422	72 912	185 607	D
323110	Commercial lithographic printing ..	3	68	6	758	26 125	533	1 115	17 673	52 644	31 811	84 411	D
323118	Blankbook, looseleaf binder, & device mfg .	9	6	3	653	13 329	550	1 484	10 354	21 052	18 379	38 829	D
32312	Support activities for printing	4	30	10	535	9 874	466	678	7 582	17 864	3 844	21 737	D
323121	Tradebinding & related work	4	21	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	56	16	2 799	111 012	1 854	4 600	60 617	611 780	307 135	881 722	27 772
3254	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	19	5	f	D	D	D	D	D	D	D	3 412
326	Plastics & rubber products mfg	2	87	37	2 505	71 847	1 893	3 812	41 729	167 962	187 891	355 597	12 613
3261	Plastics product mfg	2	80	36	g	D	D	D	D	D	D	D	12 460
32611	Unsupported plastics film, sheet, & bag mfg ..	2	28	17	1 060	33 643	776	1 697	20 500	85 921	94 615	180 205	4 199
326111	Unsupported plastics bag mfg	2	19	12	717	21 321	542	1 185	14 028	57 230	54 674	111 310	2 710
32619	Other plastics product mfg	3	48	16	1 221	30 693	959	1 805	17 454	59 697	64 006	123 839	6 865
326199	All other plastics product mfg	3	47	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	42	8	598	14 902	447	870	9 130	32 921	26 540	59 760	D

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KINGS COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	3	209	49	3 623	104 867	2 783	5 202	68 233	211 475	141 757	356 000	9 847
3323	Architectural & structural metals mfg	3	74	14	1 094	36 557	828	1 695	24 036	68 324	49 461	117 761	2 754
33232	Ornamental & architectural metal products mfg	3	59	13	983	32 805	749	1 534	21 975	59 383	42 668	101 877	2 514
333	Machinery mfg	5	64	14	1 056	32 945	688	1 148	17 933	67 354	50 485	116 901	2 561
334	Computer & electronic product mfg	2	33	9	1 096	34 263	744	1 792	17 114	93 672	90 077	182 927	D
3342	Communications equipment mfg	—	7	3	573	18 842	343	1 028	7 309	59 027	63 332	121 314	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	4	39	11	706	24 458	538	953	12 536	66 032	41 067	109 173	D
337	Furniture & related product mfg	3	201	37	2 352	52 120	1 770	3 034	33 252	91 822	86 026	176 914	4 113
3371	Household & institutional furniture & kitchen cabinet mfg	4	134	20	1 326	26 685	1 062	1 799	18 908	50 379	40 219	89 698	1 959
33712	Household & institutional furniture mfg	4	86	17	1 036	20 443	820	1 419	14 026	40 282	33 804	73 245	1 631
337122	Nonupholstered wood household furniture mfg	3	48	6	527	10 101	438	768	7 681	18 877	14 869	33 279	548
3372	Office furniture (including fixtures) mfg	2	50	14	808	21 369	548	986	11 771	33 574	31 805	65 399	1 184
33721	Office furniture (including fixtures) mfg	2	50	14	808	21 369	548	986	11 771	33 574	31 805	65 399	1 184
339	Miscellaneous mfg	3	231	44	3 457	75 042	2 475	4 035	42 916	152 537	114 847	267 192	4 940
3399	Other miscellaneous mfg ..	3	158	40	3 004	65 723	2 150	3 593	37 468	135 104	105 367	239 611	4 301
33994	Office supplies (except paper) mfg	1	15	5	641	13 301	523	1 013	9 443	23 018	19 945	43 519	D
33995	Sign mfg	1	32	9	838	18 978	577	930	9 756	33 439	19 105	51 788	761
339950	Sign mfg	1	32	9	838	18 978	577	930	9 756	33 439	19 105	51 788	761
33999	All other miscellaneous mfg	4	55	19	1 101	23 038	741	1 168	12 540	53 780	39 235	92 896	2 030
339999	All other miscellaneous mfg	5	42	14	859	18 558	558	828	9 813	42 906	25 781	68 939	1 819
LEWIS COUNTY, NY													
31-33	Manufacturing	1	24	10	1 560	53 105	1 207	2 616	35 388	130 304	381 373	505 297	16 169
322	Paper mfg	—	4	4	647	25 343	491	1 061	15 899	52 218	77 433	128 643	3 919
LIVINGSTON COUNTY, NY													
31-33	Manufacturing	—	48	18	2 196	59 493	1 725	3 055	39 069	327 003	158 566	500 465	19 769
MADISON COUNTY, NY													
31-33	Manufacturing	1	69	21	2 526	69 329	2 040	4 078	45 734	159 896	345 928	506 731	18 987
326	Plastics & rubber products mfg	6	8	5	646	16 083	543	1 091	11 056	21 689	47 298	68 653	2 724
3261	Plastics product mfg	6	8	5	646	16 083	543	1 091	11 056	21 689	47 298	68 653	2 724
32619	Other plastics product mfg	6	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	6	6	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONROE COUNTY, NY													
31-33	Manufacturing	-	1 007	378	82 459	3 521 824	52 189	108 568	1 861 646	12 354 950	9 314 071	21 774 715	846 690
311	Food mfg	2	79	16	2 111	61 704	1 443	3 100	34 606	346 914	633 509	982 057	20 882
3114	Fruit & vegetable preserving & specialty food mfg	6	6	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	4	49	7	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	47	6	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	11	6	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	11	6	g	D	D	D	D	D	D	D	D
31212	Breweries	-	3	2	f	D	D	D	D	D	D	D	D
312120	Breweries	-	3	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	8	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	5	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	22	13	1 301	43 046	951	2 095	25 752	111 489	108 356	216 093	7 815
3222	Converted paper product mfg	2	21	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	8	7	794	25 290	598	1 306	14 425	63 174	53 860	116 593	D
322211	Corrugated & solid fiber box mfg	-	6	6	f	D	D	D	D	D	D	D	1 655
323	Printing & related support activities	2	134	32	2 767	102 453	1 985	4 124	59 871	205 730	131 307	336 816	20 418
3231	Printing & related support activities	2	134	32	2 767	102 453	1 985	4 124	59 871	205 730	131 307	336 816	20 418
32311	Printing	2	114	25	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	57	14	1 439	60 738	997	2 101	34 635	114 075	79 720	193 860	13 755
325	Chemical mfg	-	29	12	j	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	1	1	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	-	6	3	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	6	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	13	5	j	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	9	4	j	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	5	3	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	47	30	3 963	118 305	2 924	5 596	70 279	296 824	174 744	467 127	37 984
3261	Plastics product mfg	1	44	28	h	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	2	2	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	34	23	2 983	91 248	2 272	4 446	54 929	219 593	119 833	337 803	D
326199	All other plastics product mfg	2	33	23	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	31	13	650	21 862	433	734	10 585	51 015	39 575	91 112	D
332	Fabricated metal product mfg	1	215	84	8 001	256 076	6 033	12 214	167 539	586 518	337 087	915 973	42 469
3321	Forging & stamping	-	16	12	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	16	12	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	11	10	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	29	14	1 106	35 965	837	1 561	23 215	74 843	41 131	115 528	4 466
33232	Ornamental & architectural metal products mfg	1	23	14	1 065	35 032	809	1 524	22 627	72 985	39 976	112 507	4 418
332322	Sheet metal work mfg	1	17	13	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	4	7	5	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	4	7	5	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	4	7	5	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MONROE COUNTY, NY												
	—Con.												
31-33	Manufacturing—												
	Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	111	38	3 162	100 291	2 402	4 946	69 988	209 698	121 934	325 911	20 383
33271	Machine shops	1	71	14	1 624	47 633	1 189	2 182	33 092	97 760	54 285	149 355	9 334
332710	Machine shops	1	71	14	1 624	47 633	1 189	2 182	33 092	97 760	54 285	149 355	9 334
33272	Turned product & screw, nut, & bolt mfg	—	40	24	1 538	52 658	1 213	2 764	36 896	111 938	67 649	176 556	11 049
332721	Precision turned product mfg	—	32	22	1 438	49 224	1 139	2 634	34 937	105 476	64 233	167 321	10 733
3328	Coating, engraving, heat treating, & allied activities.	—	21	10	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	—	21	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	168	79	19 753	919 474	12 387	22 090	462 276	4 195 115	3 298 699	7 528 831	225 685
3332	Industrial machinery mfg ..	—	21	8	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	20	8	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	33	18	j	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	33	18	j	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	7	5	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	9	4	j	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	84	39	3 791	156 164	2 572	5 221	93 079	288 441	224 002	516 276	20 772
33351	Metalworking machinery mfg	1	84	39	3 791	156 164	2 572	5 221	93 079	288 441	224 002	516 276	20 772
333511	Industrial mold mfg ...	1	23	10	f	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg ...	—	6	6	1 416	66 708	786	1 554	34 092	129 636	125 740	259 862	6 729
333514	Special die & tool, die set, jig, & fixture mfg ...	3	31	12	615	22 991	517	1 053	16 913	40 847	17 530	58 496	D
333515	Cutting tool & machine tool accessory mfg ..	1	16	6	f	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg	2	8	5	624	24 599	415	859	14 022	45 640	43 731	89 314	D
3339	Other general-purpose machinery mfg	1	21	10	g	D	D	D	D	D	D	D	6 135
33399	All other general-purpose machinery mfg	—	16	6	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	11	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	73	43	5 755	230 797	3 061	5 741	93 637	510 549	292 152	808 035	25 482
3341	Computer & peripheral equipment mfg	1	11	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	1	11	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	12	11	2 750	115 990	1 364	2 715	50 405	271 324	128 606	401 220	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	6	6	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	6	6	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	23	11	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	23	11	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	26	17	1 616	65 846	829	1 483	24 716	128 329	78 570	210 457	7 290
33451	Navigational, measuring, medical, & control instruments mfg	—	26	17	1 616	65 846	829	1 483	24 716	128 329	78 570	210 457	7 290

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	MONROE COUNTY, NY —Con.													
31-33	Manufacturing— Con.													
335	Electrical equipment, appliance, & component mfg	—	17	8	h	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	—	9	4	h	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	—	9	4	h	D	D	D	D	D	D	D	D	
335312	Motor & generator mfg	—	1	1	h	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	15	7	h	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	10	6	h	D	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	—	5	3	h	D	D	D	D	D	D	D	D	
336312	Gasoline engine & engine parts mfg	—	5	3	h	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	8	36	3	f	676	17 901	523	992	11 511	32 946	29 242	61 949	D
339	Miscellaneous mfg.....	1	82	22	f	5 020	203 052	3 736	8 377	128 949	455 856	117 656	575 260	59 602
3391	Medical equipment & supplies mfg	—	41	12	h	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	41	12	h	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	1	6	3	f	D	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	10	7	f	3 246	133 444	2 617	6 458	102 641	322 905	47 243	369 407	D
3399	Other miscellaneous mfg ..	2	41	10	f	D	D	D	D	D	D	D	D	D
	MONTGOMERY COUNTY, NY													
31-33	Manufacturing	1	84	36		4 790	123 604	3 686	7 299	75 884	345 445	290 317	637 700	22 684
311	Food mfg.....	—	9	5	f	728	26 105	564	1 073	15 083	118 913	75 773	194 621	D
326	Plastics & rubber products mfg	6	6	6	f	1 071	20 960	856	1 299	13 862	50 596	44 031	94 892	5 180
3261	Plastics product mfg	6	6	6	f	1 071	20 960	856	1 299	13 862	50 596	44 031	94 892	5 180
32619	Other plastics product mfg	9	3	3	f	547	8 165	437	511	5 276	15 519	16 267	31 842	D
326199	All other plastics product mfg.....	9	3	3	f	547	8 165	437	511	5 276	15 519	16 267	31 842	D
334	Computer & electronic product mfg.....	1	4	3	f	D	D	D	D	D	D	D	D	D
	NASSAU COUNTY, NY													
31-33	Manufacturing	1	1 653	369		42 717	1 550 762	26 522	50 743	704 513	4 093 684	2 996 600	7 117 267	232 253
311	Food mfg.....	4	169	21	f	1 891	44 834	1 224	2 156	23 852	152 163	120 948	273 205	8 469
3118	Bakeries & tortilla mfg	3	139	9	f	1 061	19 444	705	1 193	11 665	49 412	33 272	82 775	1 923
31181	Bread & bakery product mfg	4	134	7	f	919	15 685	582	974	8 614	34 093	22 234	56 444	1 550
311811	Retail bakeries	4	106	3	f	D	D	D	D	D	D	D	D	D
313	Textile mills	1	29	8	f	776	21 846	653	1 438	15 456	55 344	61 966	117 205	2 645
314	Textile product mills.....	1	42	8	f	523	12 866	404	733	7 556	32 732	32 249	64 644	1 137
315	Apparel mfg	5	87	22	f	1 357	31 132	1 130	2 076	20 456	69 852	106 792	178 975	1 928
3152	Cut & sew apparel mfg	4	52	16	f	D	D	D	D	D	D	D	D	736
31521	Cut & sew apparel contractors	5	31	9	f	D	D	D	D	D	D	D	D	370
322	Paper mfg	1	18	8	f	555	15 674	460	889	11 092	25 744	46 864	72 746	1 276
3222	Converted paper product mfg	1	18	8	f	555	15 674	460	889	11 092	25 744	46 864	72 746	1 276
323	Printing & related support activities.....	3	308	38	f	3 898	124 780	2 821	5 341	81 686	244 062	153 338	397 877	19 670
3231	Printing & related support activities.....	3	308	38	f	3 898	124 780	2 821	5 341	81 686	244 062	153 338	397 877	19 670
32311	Printing	3	271	36	f	3 366	104 508	2 374	4 265	64 795	217 477	150 203	368 164	18 462
323110	Commercial lithographic printing ..	3	127	22	f	1 982	63 984	1 398	2 516	38 880	127 469	84 332	213 148	10 664
32312	Support activities for printing.....	1	37	2	f	532	20 272	447	1 076	16 891	26 585	3 135	29 713	1 208

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NASSAU COUNTY, NY—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	3	52	19	3 086	126 414	1 527	2 975	47 072	340 234	461 338	802 360	68 151
3254	Pharmaceutical & medicine mfg	1	18	10	1 793	77 449	676	1 337	20 464	145 734	153 997	297 742	30 267
32541	Pharmaceutical & medicine mfg	1	18	10	1 793	77 449	676	1 337	20 464	145 734	153 997	297 742	30 267
325412	Pharmaceutical preparation mfg	1	13	8	g	D	D	D	D	D	D	D	29 705
3259	Other chemical product mfg	—	7	4	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	7	4	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	59	27	2 254	62 449	1 757	3 206	32 599	134 816	126 135	261 659	8 316
3261	Plastics product mfg	3	55	25	2 102	59 858	1 624	2 918	30 750	129 583	122 961	253 251	D
32611	Unsupported plastics film, sheet, & bag mfg	3	12	4	607	18 174	523	1 076	12 496	44 788	39 862	84 147	2 137
32619	Other plastics product mfg	3	32	17	1 317	36 844	963	1 609	15 652	75 029	73 196	149 203	5 266
326199	All other plastics product mfg	3	31	17	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	183	51	4 092	152 462	2 867	5 985	80 061	350 397	193 973	554 396	17 811
3323	Architectural & structural metals mfg	1	49	16	1 054	35 676	718	1 438	18 669	67 648	41 733	109 753	1 797
33232	Ornamental & architectural metal products mfg	1	42	16	1 009	34 034	690	1 385	17 559	64 696	39 676	104 747	D
332322	Sheet metal work mfg	1	20	9	551	22 269	376	742	10 723	36 608	20 261	56 773	1 296
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	73	16	895	36 680	688	1 368	22 039	70 871	45 972	116 587	6 441
33271	Machine shops	2	56	9	521	19 202	410	823	13 034	36 361	17 114	53 491	4 842
332710	Machine shops	2	56	9	521	19 202	410	823	13 034	36 361	17 114	53 491	4 842
3329	Other fabricated metal product mfg	—	17	5	833	37 819	480	966	14 661	116 177	24 190	136 024	3 732
33299	All other fabricated metal product mfg	—	15	3	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	85	29	3 233	114 421	1 909	3 891	53 983	263 501	222 024	474 945	11 908
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	4	564	18 083	382	775	8 403	44 168	39 382	81 186	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	4	564	18 083	382	775	8 403	44 168	39 382	81 186	D
3336	Engine, turbine, & power transmission equipment mfg	4	5	5	f	D	D	D	D	D	D	D	2 837
33361	Engine, turbine, & power transmission equipment mfg	4	5	5	f	D	D	D	D	D	D	D	2 837
3339	Other general-purpose machinery mfg	—	23	9	f	D	D	D	D	D	D	D	3 188
33399	All other general-purpose machinery mfg	—	13	4	576	21 841	277	579	10 574	50 641	27 239	78 814	D
334	Computer & electronic product mfg	—	95	38	9 137	419 375	4 805	10 006	169 842	1 012 090	600 151	1 589 301	52 519
3342	Communications equipment mfg	1	17	8	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D

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NASSAU COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	23	12	2 449	82 426	1 866	4 320	49 686	263 638	121 319	383 957	13 530
33441	Semiconductor & other electronic component mfg	—	23	12	2 449	82 426	1 866	4 320	49 686	263 638	121 319	383 957	13 530
334412	Bare printed circuit board mfg	—	5	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	40	18	4 172	223 791	1 826	3 867	93 870	493 439	147 264	626 968	23 095
33451	Navigational, measuring, medical, & control instruments mfg	—	40	18	4 172	223 791	1 826	3 867	93 870	493 439	147 264	626 968	23 095
334511	Search, detection, navigation, & guidance instrument mfg	—	12	6	2 793	170 680	1 177	2 492	75 589	343 737	73 116	408 220	D
334515	Electricity measuring & testing instrument mfg	—	6	4	665	22 841	355	730	7 822	65 475	36 746	97 198	3 088
335	Electrical equipment, appliance, & component mfg	3	27	10	714	26 810	492	956	14 738	49 610	29 092	79 494	1 036
336	Transportation equipment mfg	—	36	10	h	D	D	D	D	D	D	D	13 824
3364	Aerospace product & parts mfg	—	12	5	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	12	5	h	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	9	3	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	122	18	2 238	49 834	1 589	2 421	29 596	89 819	63 829	152 681	2 440
3371	Household & institutional furniture & kitchen cabinet mfg	6	87	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	26	11	1 543	33 904	1 033	1 389	18 360	63 542	42 715	105 065	1 203
33721	Office furniture (including fixtures) mfg	2	26	11	1 543	33 904	1 033	1 389	18 360	63 542	42 715	105 065	1 203
337215	Showcase, partition, shelving, & locker mfg	1	16	10	1 469	32 039	976	1 288	17 105	59 777	39 840	98 395	1 034
339	Miscellaneous mfg	2	249	44	4 086	120 920	2 861	5 186	59 373	260 715	201 285	462 320	15 336
3391	Medical equipment & supplies mfg	3	111	16	1 660	57 068	1 017	1 890	25 900	118 813	59 126	179 311	9 127
33911	Medical equipment & supplies mfg	3	111	16	1 660	57 068	1 017	1 890	25 900	118 813	59 126	179 311	9 127
339112	Surgical & medical instrument mfg	1	9	4	700	26 732	335	609	8 278	56 565	30 721	89 284	5 142
3399	Other miscellaneous mfg ..	2	138	28	2 426	63 852	1 844	3 296	33 473	141 902	142 159	283 009	6 209
33991	Jewelry & silverware mfg	1	42	8	522	17 138	416	696	9 969	32 526	59 380	91 372	D
33999	All other miscellaneous mfg	1	28	8	1 128	24 442	908	1 616	12 679	62 355	42 446	104 284	1 775
339992	Musical instrument mfg	—	4	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	17	7	f	D	D	D	D	D	D	D	1 017
NEW YORK COUNTY, NY													
31-33	Manufacturing	3	5 165	1 199	93 784	2 551 835	63 917	113 980	1 336 417	6 420 862	7 591 151	14 028 933	236 261
311	Food mfg	6	224	30	2 471	56 451	1 716	3 007	31 412	137 876	148 922	287 044	7 973
3118	Bakeries & tortilla mfg	6	167	18	1 636	31 681	1 062	1 788	18 568	75 831	52 911	128 842	4 977
31181	Bread & bakery product mfg	6	153	15	1 349	22 653	832	1 378	11 905	49 831	32 393	82 022	D
311811	Retail bakeries	6	113	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	5	39	9	642	11 794	377	766	6 293	24 992	17 666	42 588	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK COUNTY, NY—Con.												
	Manufacturing—Con.												
313	Textile mills	3	300	79	6 384	264 461	4 186	8 857	109 195	751 944	1 061 046	1 846 661	35 164
3132	Fabric mills	3	48	14	1 250	50 508	933	2 040	22 022	114 651	200 647	316 027	8 155
31321	Broadwoven fabric mills ..	4	16	5	533	29 442	387	774	8 157	64 880	135 316	199 910	3 602
313210	Broadwoven fabric mills	4	16	5	533	29 442	387	774	8 157	64 880	135 316	199 910	3 602
31324	Knit fabric mills	1	13	5	508	16 085	392	983	10 880	35 759	50 071	86 483	3 502
3133	Textile & fabric finishing & fabric coating mills	2	244	62	5 022	212 298	3 149	6 681	85 785	633 958	854 357	1 521 228	26 579
31331	Textile & fabric finishing mills	2	242	61	h	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	3	218	54	4 423	181 789	2 922	6 330	79 234	518 559	713 490	1 262 441	22 656
314	Textile product mills	2	142	35	2 581	56 962	1 901	3 147	26 772	121 837	189 693	311 198	D
3141	Textile furnishings mills	1	44	12	1 220	32 929	851	1 513	12 070	76 000	152 934	228 600	D
31412	Curtain & linen mills	1	41	11	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	23	5	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	6	98	23	1 361	24 033	1 050	1 634	14 702	45 837	36 759	82 598	D
31499	All other textile product mills	6	72	20	1 182	21 126	903	1 455	12 892	40 575	31 694	72 271	D
314999	All other miscellaneous textile product mills ..	6	72	20	1 182	21 126	903	1 455	12 892	40 575	31 694	72 271	D
315	Apparel mfg	4	2 191	648	50 717	1 102 304	34 475	57 590	559 275	2 828 187	3 820 909	6 654 316	57 666
3151	Apparel knitting mills	3	36	12	1 150	25 810	990	1 783	17 652	51 891	90 325	151 466	1 845
31519	Other apparel knitting mills	2	27	12	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	2	25	12	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	1 934	598	46 718	1 021 735	31 361	52 091	507 445	2 654 888	3 614 249	6 263 935	53 200
31521	Cut & sew apparel contractors	7	1 224	338	23 360	313 539	19 136	31 201	237 025	506 354	165 384	663 013	21 390
315211	Men's & boys' cut & sew apparel contractors	4	19	10	593	8 212	560	848	6 964	15 828	2 119	17 921	291
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	1 205	328	22 767	305 327	18 576	30 353	230 061	490 526	163 265	645 092	21 099
31522	Men's & boys' cut & sew apparel mfg	1	84	24	1 746	46 588	1 294	2 075	30 643	173 797	289 088	471 808	1 999
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	23	10	566	12 370	369	659	6 584	23 835	29 802	53 621	393
31523	Women's & girls' cut & sew apparel mfg	3	496	224	20 638	635 767	10 216	17 487	225 198	1 915 065	3 083 487	4 994 233	28 220
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	2	33	9	734	19 691	574	1 140	12 309	77 249	103 058	186 230	446
315232	Women's & girls' cut & sew blouse & shirt mfg	5	89	37	2 651	67 169	1 770	2 887	29 114	266 517	471 028	732 375	4 232
315233	Women's & girls' cut & sew dress mfg	3	199	97	9 236	268 315	4 589	7 580	107 930	815 145	1 288 135	2 082 658	12 645
315234	Women's & girls' cut & sew suit, coat, skirt mfg	1	115	54	4 531	144 451	2 262	4 085	55 137	414 079	742 528	1 165 800	4 567
315239	Women's & girls' cut & sew other outerwear mfg	5	60	27	3 486	136 141	1 021	1 795	20 708	342 075	478 738	827 170	6 330
31529	Other cut & sew apparel mfg	5	130	12	974	25 841	715	1 328	14 579	59 672	76 290	134 881	1 591
315292	Fur & leather apparel mfg	6	109	6	557	15 298	371	684	7 769	42 314	68 903	109 999	1 348
3159	Apparel accessories & other apparel mfg	3	221	38	2 849	54 759	2 124	3 716	34 178	121 408	116 335	238 915	2 621
31599	Apparel accessories & other apparel mfg	3	221	38	2 849	54 759	2 124	3 716	34 178	121 408	116 335	238 915	2 621
315991	Hat, cap, & millinery mfg	2	47	9	f	D	D	D	D	D	D	D	D
315993	Men's & boys' neckwear mfg	4	28	10	607	13 080	463	837	7 895	27 898	18 849	46 986	D
315999	Other apparel accessories & other apparel mfg	3	143	17	1 426	29 022	993	1 743	16 956	68 850	77 128	145 811	1 609
316	Leather & allied product mfg ..	2	90	17	1 311	30 758	895	1 640	16 459	72 429	74 892	148 957	2 393
3169	Other leather & allied product mfg	2	59	11	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	2	59	11	f	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	1	33	5	507	14 598	380	699	7 915	32 972	24 212	59 072	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW YORK COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
322	Paper mfg	3	35	16	1 175	36 867	967	1 708	26 083	63 991	59 965	124 576	D
3222	Converted paper product mfg	3	34	16	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	2	19	10	957	29 724	822	1 415	21 867	50 149	38 439	88 600	D
322231	Die-cut paper & paperboard office supplies mfg	3	12	6	641	14 653	552	1 031	10 094	27 451	15 030	42 433	D
323	Printing & related support activities	4	834	164	11 978	481 452	8 424	17 050	295 587	1 065 336	558 147	1 618 314	D
3231	Printing & related support activities	4	834	164	11 978	481 452	8 424	17 050	295 587	1 065 336	558 147	1 618 314	D
32311	Printing	4	664	121	8 764	347 816	6 079	12 136	207 406	808 943	496 893	1 300 771	D
323110	Commercial lithographic printing ..	3	384	79	6 164	259 260	4 227	8 547	155 605	609 841	353 978	962 714	D
323114	Quick printing	1	80	7	572	20 330	388	730	12 523	38 998	26 463	65 341	D
32312	Support activities for printing	2	170	43	3 214	133 636	2 345	4 914	88 181	256 393	61 254	317 543	D
323121	Tradebinding & related work	2	32	11	621	19 252	529	1 054	14 200	34 565	5 032	39 585	D
323122	Prepress services	3	138	32	2 593	114 384	1 816	3 860	73 981	221 828	56 222	277 958	D
325	Chemical mfg	6	46	11	g	D	D	D	D	D	D	D	8 263
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	20	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	80	14	1 045	25 886	753	1 353	15 738	65 699	38 659	104 795	8 056
334	Computer & electronic product mfg	4	88	15	1 204	48 419	683	1 387	20 909	114 663	76 029	188 836	11 401
3346	Mfg & reproducing magnetic & optical media ..	3	45	10	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	3	45	10	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	2	41	8	684	27 048	407	843	12 767	61 633	29 664	91 694	D
337	Furniture & related product mfg	5	107	10	910	27 238	739	1 362	19 154	47 970	44 628	92 660	2 156
3371	Household & institutional furniture & kitchen cabinet mfg	5	85	8	714	22 392	588	1 117	16 101	36 113	34 904	71 086	D
33712	Household & institutional furniture mfg	5	71	8	629	20 219	519	992	14 532	32 253	31 509	63 797	D
339	Miscellaneous mfg	2	905	143	11 608	334 146	7 685	14 011	168 757	939 970	1 312 226	2 224 052	23 817
3399	Other miscellaneous mfg ..	2	851	137	11 257	322 179	7 440	13 514	162 168	916 092	1 299 157	2 186 458	22 061
33991	Jewelry & silverware mfg	2	663	101	8 134	233 814	5 215	9 200	111 897	743 491	1 163 989	1 875 742	11 703
339911	Jewelry (except costume) mfg	2	491	76	6 496	194 443	4 107	7 357	92 254	643 307	886 369	1 502 181	9 976
339913	Jewelers' material & lapidary work mfg ..	1	99	12	912	24 091	605	992	11 264	67 750	255 833	319 271	1 473
339914	Costume jewelry & novelty mfg	5	71	12	f	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	12	2	578	13 596	483	1 060	10 085	28 916	26 517	56 541	D
33995	Sign mfg	4	43	12	775	30 123	486	976	14 305	55 308	43 592	99 148	2 156
339950	Sign mfg	4	43	12	775	30 123	486	976	14 305	55 308	43 592	99 148	2 156
33999	All other miscellaneous mfg	4	113	19	1 535	38 152	1 085	1 928	21 800	74 535	52 916	129 140	6 712
339993	Fastener, button, needle, & pin mfg....	2	31	8	533	12 667	385	727	7 422	25 397	21 881	49 200	4 420
339999	All other miscellaneous mfg	5	64	10	877	22 945	611	1 044	12 849	43 134	28 228	71 082	2 111
NIAGARA COUNTY, NY													
31-33	Manufacturing	1	310	122	18 164	836 488	13 605	29 197	578 579	2 530 608	1 855 289	4 403 455	225 142
311	Food mfg	-	25	7	656	20 052	538	1 094	15 136	228 937	102 445	329 593	4 191
322	Paper mfg	1	9	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	2	7	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NIAGARA COUNTY, NY													
—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	3	29	19	2 280	123 318	1 487	3 272	72 917	525 843	460 943	987 069	105 951
3251	Basic chemical mfg	1	17	11	1 811	104 836	1 193	2 704	62 134	329 609	317 622	643 086	D
32518	Other basic inorganic chemical mfg	—	7	4	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	—	2	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	6	6	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	6	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	12	6	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	2	11	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	8	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	8	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	19	12	1 647	58 447	1 184	2 339	32 301	247 319	141 262	398 535	10 438
3279	Other nonmetallic mineral product mfg	—	11	8	g	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	—	7	5	917	31 825	671	1 330	16 349	178 016	85 222	278 416	D
327910	Abrasive product mfg .	—	7	5	917	31 825	671	1 330	16 349	178 016	85 222	278 416	D
331	Primary metal mfg	—	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	70	24	2 226	69 833	1 766	3 669	45 283	161 516	91 909	253 362	9 129
3328	Coating, engraving, heat treating, & allied activities.	—	11	4	616	22 373	481	1 006	14 201	47 022	17 810	64 679	4 292
33281	Coating, engraving, heat treating, & allied activities.....	—	11	4	616	22 373	481	1 006	14 201	47 022	17 810	64 679	4 292
3329	Other fabricated metal product mfg	—	3	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	2	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	40	16	1 350	48 394	918	1 954	29 584	97 802	82 925	180 687	6 955
3339	Other general-purpose machinery mfg	1	16	6	614	22 278	409	879	12 804	51 871	48 684	98 978	3 228
335	Electrical equipment, appliance, & component mfg	—	7	3	566	25 010	426	928	18 498	95 656	114 963	204 687	D
3359	Other electrical equipment & component mfg	—	3	3	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	3	3	f	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	—	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	2	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	6	2	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	3	2	i	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	—	1	1	i	D	D	D	D	D	D	D	D
ONEIDA COUNTY, NY													
31-33	Manufacturing	2	280	102	15 079	447 130	10 928	18 794	282 979	1 170 556	1 328 768	2 485 283	71 732
314	Textile product mills	—	5	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	—	3	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	7	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	7	4	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	29	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	2	29	5	f	D	D	D	D	D	D	D	D
32311	Printing	2	27	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ONEIDA COUNTY, NY—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	9	8	2 474	89 218	1 737	3 675	61 864	220 628	430 809	646 027	17 803
3314	Nonferrous metal (except aluminum) production & processing	—	6	6	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	3	3	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	2	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	3	3	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	42	12	714	20 161	496	906	11 263	46 736	50 891	97 793	3 852
333	Machinery mfg	1	28	14	994	34 893	646	1 097	15 929	78 009	64 870	141 433	3 140
334	Computer & electronic product mfg	2	15	8	1 350	50 215	618	1 104	17 040	111 628	67 530	173 228	8 676
3345	Navigational, measuring, medical, & control instruments mfg	2	9	5	890	34 307	461	845	13 874	58 956	51 803	111 232	6 989
33451	Navigational, measuring, medical, & control instruments mfg	2	9	5	890	34 307	461	845	13 874	58 956	51 803	111 232	6 989
334510	Electromedical & electrotherapeutic apparatus mfg	1	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	8	12	7	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	8	8	7	976	25 263	600	1 166	12 062	47 816	155 110	215 985	6 011
33592	Communication & energy wire & cable mfg	8	4	4	f	D	D	D	D	D	D	D	5 256
336	Transportation equipment mfg	8	6	4	1 374	44 919	1 062	1 824	32 394	117 155	158 949	278 188	6 791
3361	Motor vehicle mfg	9	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	9	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	9	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	5	2	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	7	4	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	6	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	5	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	26	7	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	13	4	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	—	3	1	g	D	D	D	D	D	D	D	D
339912	Silverware & plated ware mfg	—	3	1	g	D	D	D	D	D	D	D	D
	ONONDAGA COUNTY, NY												
31-33	Manufacturing	—	510	191	33 289	1 296 321	21 138	43 122	682 338	3 617 140	2 969 571	6 614 405	266 765
311	Food mfg	6	42	11	1 121	29 633	642	1 221	13 726	64 968	124 537	190 470	3 575
312	Beverage & tobacco product mfg	—	8	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	8	3	g	D	D	D	D	D	D	D	D
31212	Breweries	—	3	2	g	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ONONDAGA COUNTY, NY—Con.												
	Manufacturing—Con.												
322	Paper mfg	1	18	13	992	34 053	747	1 669	20 338	76 102	94 631	170 965	D
3222	Converted paper product mfg	2	15	10	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	2	12	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	71	19	1 497	42 472	1 044	1 867	26 777	86 311	50 287	136 736	3 717
3231	Printing & related support activities	—	71	19	1 497	42 472	1 044	1 867	26 777	86 311	50 287	136 736	3 717
32311	Printing	—	60	17	g	D	D	D	D	D	D	D	2 958
323110	Commercial lithographic printing	1	35	11	772	20 702	506	837	12 194	45 433	29 583	75 109	1 494
325	Chemical mfg	2	23	8	g	D	D	D	D	D	D	D	17 790
3254	Pharmaceutical & medicine mfg	—	8	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	8	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	7	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	18	11	1 432	36 429	1 070	2 037	23 604	102 110	85 626	190 770	12 813
3261	Plastics product mfg	—	18	11	1 432	36 429	1 070	2 037	23 604	102 110	85 626	190 770	12 813
32619	Other plastics product mfg	—	10	9	1 276	30 968	960	1 796	19 326	81 866	62 274	147 116	D
326199	All other plastics product mfg	—	10	9	1 276	30 968	960	1 796	19 326	81 866	62 274	147 116	D
327	Nonmetallic mineral product mfg	3	15	7	f	D	D	D	D	D	D	D	5 006
331	Primary metal mfg	—	13	8	g	D	D	D	D	D	D	D	11 843
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	87	33	3 136	103 444	2 166	4 546	62 582	204 951	164 660	371 361	18 291
3323	Architectural & structural metals mfg	—	23	9	711	23 693	408	866	12 588	20 651	46 185	66 288	2 198
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	29	8	928	27 075	694	1 457	18 653	68 518	51 745	119 459	5 800
33272	Turned product & screw, nut, & bolt mfg	—	4	3	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg	—	3	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	13	4	738	26 549	560	1 225	19 131	52 586	33 027	88 639	4 971
33299	All other fabricated metal product mfg	—	12	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	51	22	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	6	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	6	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	6	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	42	20	i	D	D	D	D	D	D	D	29 845
3342	Communications equipment mfg	—	12	8	g	D	D	D	D	D	D	D	11 130
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	9	6	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	9	6	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	ONONDAGA COUNTY, NY—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3345	Navigational, measuring, medical, & control instruments mfg	—	9	6	h	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	—	9	6	h	D	D	D	D	D	D	D	D	
334511	Search, detection, navigation, & guidance instrument mfg	—	3	2	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	20	10	g	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	3	14	7	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	3	14	7	f	D	D	D	D	D	D	D	D	
335314	Relay & industrial control mfg	3	11	6	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	—	3	2	g	D	D	D	D	D	D	D	D	
33593	Wiring device mfg	—	2	2	g	D	D	D	D	D	D	D	D	
335932	Noncurrent-carrying wiring device mfg	—	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	4	2	h	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	3	1	h	D	D	D	D	D	D	D	D	
33635	Motor vehicle transmission & power train parts mfg	—	1	1	h	D	D	D	D	D	D	D	D	
336350	Motor vehicle transmission & power train parts mfg	—	1	1	h	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	—	17	4	g	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	—	11	2	f	D	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg	—	4	2	f	D	D	D	D	D	D	D	D	
337122	Nonupholstered wood household furniture mfg	—	3	2	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	—	52	12		3 560	118 813	1 954	3 330	40 958	259 673	126 898	387 659	
3391	Medical equipment & supplies mfg	—	19	4	h	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	—	19	4	h	D	D	D	D	D	D	D	D	
339112	Surgical & medical instrument mfg	—	5	3	h	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg ..	—	33	8	f	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg	—	15	6	f	D	D	D	D	D	D	D	D	
	ONTARIO COUNTY, NY													
31-33	Manufacturing	2	161	66		7 196	226 447	4 896	10 009	119 891	561 922	458 017	999 112	107 151
312	Beverage & tobacco product mfg	—	2	2	f	D	D	D	D	D	D	D	D	
3121	Beverage mfg	—	2	2	f	D	D	D	D	D	D	D	D	
31213	Wineries	—	2	2	f	D	D	D	D	D	D	D	D	
312130	Wineries	—	2	2	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	2	15	11		1 606	44 502	1 178	2 590	26 510	157 343	112 647	270 149	12 477
3261	Plastics product mfg	2	15	11		1 606	44 502	1 178	2 590	26 510	157 343	112 647	270 149	12 477
32614	Polystyrene foam product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
326140	Polystyrene foam product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	3	11	7	f	D	D	D	D	D	D	D	3 299	
326199	All other plastics product mfg	3	11	7	f	D	D	D	D	D	D	D	3 299	
332	Fabricated metal product mfg	—	36	9		905	31 075	644	1 306	20 937	68 227	50 531	118 205	5 507
333	Machinery mfg	1	17	8	f	D	D	D	D	D	D	D	D	3 330

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ONTARIO COUNTY, NY—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	17	8	954	29 515	617	1 289	13 198	32 433	63 796	98 411	2 599
3341	Computer & peripheral equipment mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
	ORANGE COUNTY, NY												
31-33	Manufacturing	1	346	107	j	D	D	D	D	D	D	D	D
322	Paper mfg.....	1	13	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	1	12	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	18	10	1 392	42 831	926	2 000	22 774	132 353	116 853	247 362	7 952
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	8	3	f	D	D	D	D	D	D	D	2 963
32562	Toilet preparation mfg...	-	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
325620	Toilet preparation mfg.	-	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
326	Plastics & rubber products mfg.....	-	16	11	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	14	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	9	6	1 053	27 386	866	1 589	20 838	68 329	75 624	142 209	D
326199	All other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	45	11	1 065	43 674	828	1 772	32 514	104 500	232 075	340 294	10 188
335	Electrical equipment, appliance, & component mfg.....	2	18	7	g	D	D	D	D	D	D	D	6 585
3359	Other electrical equipment & component mfg.....	3	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	4	32	9	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	20	7	968	22 999	738	1 457	14 389	49 383	32 449	81 634	3 156
33999	All other miscellaneous mfg.....	4	11	6	914	22 040	697	1 393	13 837	46 474	29 551	75 876	2 908
339999	All other miscellaneous mfg.....	5	7	4	748	18 576	576	1 120	11 752	39 498	26 813	65 992	2 753
	ORLEANS COUNTY, NY												
31-33	Manufacturing	1	48	24	2 269	71 236	1 631	3 118	42 941	230 558	265 254	496 047	11 198
333	Machinery mfg.....	-	7	3	528	21 401	336	757	11 653	85 779	111 695	196 895	D
	OSWEGO COUNTY, NY												
31-33	Manufacturing	-	108	32	5 082	204 893	3 929	8 303	140 238	534 491	1 692 895	2 210 695	61 563
311	Food mfg.....	1	10	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans.....	-	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans...	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	5	4	1 141	48 986	900	2 060	34 254	153 468	135 059	281 261	D
3222	Converted paper product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg...	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing,.....	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	34	9	647	22 184	495	996	14 377	45 451	25 685	71 205	5 683
	OTSEGO COUNTY, NY												
31-33	Manufacturing	3	68	17	1 481	38 035	1 151	2 252	24 708	131 047	94 639	225 039	10 113

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
PUTNAM COUNTY, NY													
31-33	Manufacturing	1	74	14	1 595	60 346	967	1 976	27 845	163 104	95 764	258 946	12 722
QUEENS COUNTY, NY													
31-33	Manufacturing	4	2 043	541	50 505	1 433 206	36 736	71 600	806 795	3 566 255	2 829 028	6 412 827	495 890
311	Food mfg	2	261	25	4 759	144 637	2 711	4 656	58 558	282 202	242 601	524 383	22 019
3118	Bakeries & tortilla mfg	2	212	11	3 248	101 704	1 611	2 468	31 064	175 569	72 910	248 695	15 443
31181	Bread & bakery product mfg	2	205	10	3 150	99 053	1 528	2 319	29 141	168 968	69 176	238 359	15 298
311811	Retail bakeries	6	155	1	645	9 124	426	527	4 365	20 473	13 196	33 880	1 039
311812	Commercial bakeries ..	1	47	8	2 473	89 399	1 076	1 757	24 394	146 990	54 420	201 415	14 141
312	Beverage & tobacco product mfg	9	7	4	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	7	4	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	7	4	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	7	4	g	D	D	D	D	D	D	D	D
313	Textile mills	4	66	15	1 001	25 037	851	1 831	17 928	61 234	47 366	108 511	5 030
3133	Textile & fabric finishing & fabric coating mills	3	29	6	520	14 307	439	943	9 695	34 368	23 898	58 348	1 200
314	Textile product mills	3	83	22	1 682	38 717	1 216	2 372	21 932	58 694	57 484	118 764	4 929
3141	Textile furnishings mills	4	32	8	577	13 097	441	851	8 590	23 130	23 091	45 617	D
3149	Other textile product mills ..	3	51	14	1 105	25 620	775	1 521	13 342	35 564	34 393	73 147	D
31499	All other textile product mills	3	37	12	1 000	23 289	689	1 351	11 924	32 214	30 681	66 119	3 826
314999	All other miscellaneous textile product mills ..	3	37	12	1 000	23 289	689	1 351	11 924	32 214	30 681	66 119	3 826
315	Apparel mfg	3	528	169	12 699	230 247	10 697	19 128	159 312	459 565	423 876	886 361	15 183
3151	Apparel knitting mills	4	103	42	3 075	60 788	2 637	5 199	46 581	113 506	118 476	230 060	6 726
31519	Other apparel knitting mills	4	96	42	h	D	D	D	D	D	D	D	6 626
315191	Outerwear knitting mills	4	95	41	3 000	59 380	2 576	5 093	45 650	110 288	113 292	220 846	D
3152	Cut & sew apparel mfg	3	386	109	7 870	128 838	6 637	11 104	91 583	244 207	203 324	450 420	7 304
31521	Cut & sew apparel contractors	6	273	60	h	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	267	58	h	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	4	25	14	1 500	28 250	1 048	2 092	19 044	67 051	53 471	120 146	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	3	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	74	30	1 747	37 914	1 359	2 452	22 176	81 373	96 848	181 412	1 306
315239	Women's & girls' cut & sew other outerwear mfg	3	21	12	597	16 093	419	724	8 441	35 817	43 545	80 744	D
3159	Apparel accessories & other apparel mfg	-	39	18	1 754	40 621	1 423	2 825	21 148	101 852	102 076	205 881	1 153
31599	Apparel accessories & other apparel mfg	-	39	18	1 754	40 621	1 423	2 825	21 148	101 852	102 076	205 881	1 153
315993	Men's & boys' neckwear mfg	-	8	7	683	18 865	557	1 094	8 899	64 753	56 668	123 106	D
315999	Other apparel accessories & other apparel mfg	-	23	7	827	16 743	648	1 278	8 959	27 017	35 965	62 399	D
322	Paper mfg	6	36	19	2 188	78 342	1 493	2 751	40 459	138 996	184 054	324 583	10 815
3222	Converted paper product mfg	6	36	19	2 188	78 342	1 493	2 751	40 459	138 996	184 054	324 583	10 815
32221	Paperboard container mfg	7	11	8	844	33 887	599	1 278	20 059	67 848	103 713	172 295	D
32223	Stationery product mfg ..	2	8	7	732	23 560	576	1 023	13 523	42 535	40 283	82 718	D
322232	Envelope mfg	1	5	5	629	21 565	499	923	12 411	34 995	38 049	72 982	D
323	Printing & related support activities	8	179	38	3 757	163 348	2 900	5 643	110 553	682 335	210 043	893 617	D
3231	Printing & related support activities	8	179	38	3 757	163 348	2 900	5 643	110 553	682 335	210 043	893 617	D
32311	Printing	8	160	31	2 962	133 197	2 322	4 382	94 412	630 197	196 405	827 633	D
323110	Commercial lithographic printing ..	8	86	17	2 019	108 153	1 570	3 030	79 097	577 772	163 304	742 264	D
32312	Support activities for printing	7	19	7	795	30 151	578	1 261	16 141	52 138	13 638	65 984	D
323121	Tradebinding & related work	5	8	5	529	15 830	424	975	9 331	27 020	6 150	33 196	D
325	Chemical mfg	5	31	11	1 356	48 577	793	1 596	18 746	139 187	115 497	250 540	11 157
3256	Soap, cleaning compound, & toilet preparation mfg ..	6	16	6	814	30 085	525	1 052	11 374	80 261	73 024	150 169	D
32562	Toilet preparation mfg ..	6	10	3	692	24 356	448	942	9 322	60 065	52 052	108 746	6 628
325620	Toilet preparation mfg ..	6	10	3	692	24 356	448	942	9 322	60 065	52 052	108 746	6 628

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	QUEENS COUNTY, NY —Con.												
31-33	Manufacturing— Con.												
326	Plastics & rubber products mfg	3	51	25	2 052	49 465	1 578	3 117	28 248	127 246	122 646	250 539	5 310
3261	Plastics product mfg	2	43	23	1 736	42 098	1 364	2 639	23 783	110 238	106 172	216 919	4 274
32619	Other plastics product mfg	2	27	17	1 256	29 310	984	2 067	17 235	82 088	66 778	149 723	3 469
326199	All other plastics product mfg	2	27	17	1 256	29 310	984	2 067	17 235	82 088	66 778	149 723	3 469
327	Nonmetallic mineral product mfg	1	47	13	757	25 269	569	1 158	17 604	62 681	68 991	131 553	D
332	Fabricated metal product mfg	2	179	43	2 814	84 227	1 958	3 830	48 909	164 241	130 214	295 836	D
3323	Architectural & structural metals mfg	2	79	21	1 371	40 493	959	1 822	24 081	87 762	76 784	163 279	2 645
33232	Ornamental & architectural metal products mfg	2	68	19	1 295	37 600	903	1 712	22 553	83 164	71 228	153 146	2 475
332322	Sheet metal work mfg	4	26	6	584	15 799	418	793	10 428	27 725	26 059	53 839	1 070
333	Machinery mfg	2	75	22	1 864	61 915	1 232	1 953	31 136	128 017	97 118	224 151	4 667
3339	Other general-purpose machinery mfg	4	21	9	593	18 983	353	653	8 912	39 866	27 644	67 034	D
334	Computer & electronic product mfg	3	45	15	1 489	53 609	706	1 381	17 920	126 517	73 050	197 457	D
3344	Semiconductor & other electronic component mfg	2	10	6	589	15 178	306	576	5 681	36 528	23 536	61 011	D
33441	Semiconductor & other electronic component mfg	2	10	6	589	15 178	306	576	5 681	36 528	23 536	61 011	D
334419	Other electronic component mfg	2	6	5	530	13 936	271	526	5 058	33 522	21 832	56 266	D
3345	Navigational, measuring, medical, & control instruments mfg	4	19	6	702	31 359	301	591	9 292	69 935	34 053	100 803	D
33451	Navigational, measuring, medical, & control instruments mfg	4	19	6	702	31 359	301	591	9 292	69 935	34 053	100 803	D
335	Electrical equipment, appliance, & component mfg	—	30	18	2 428	66 719	1 636	2 593	31 795	193 274	94 470	280 205	D
3351	Electric lighting equipment mfg	—	20	10	906	31 315	656	1 340	16 744	90 593	52 156	143 214	D
33512	Lighting fixture mfg	—	20	10	906	31 315	656	1 340	16 744	90 593	52 156	143 214	D
3359	Other electrical equipment & component mfg	—	5	5	1 437	32 181	919	1 133	13 113	97 203	37 789	126 891	D
33593	Wiring device mfg	—	1	1	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	33	13	2 225	85 724	1 137	2 430	33 633	244 004	237 435	509 115	D
3363	Motor vehicle parts mfg ...	—	19	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	9	4	644	24 372	515	1 087	15 502	55 922	27 761	82 518	D
33641	Aerospace product & parts mfg	2	9	4	644	24 372	515	1 087	15 502	55 922	27 761	82 518	D
337	Furniture & related product mfg	3	115	27	1 648	46 259	1 261	2 413	28 528	100 957	68 790	170 276	2 885
3371	Household & institutional furniture & kitchen cabinet mfg	5	80	12	811	20 585	676	1 370	15 438	48 509	33 980	83 320	2 028
33712	Household & institutional furniture mfg	5	54	10	634	16 227	527	1 089	12 085	40 579	27 807	69 168	D
3372	Office furniture (including fixtures) mfg	2	26	12	698	22 736	490	885	11 572	47 140	27 067	73 772	D
33721	Office furniture (including fixtures) mfg	2	26	12	698	22 736	490	885	11 572	47 140	27 067	73 772	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
QUEENS COUNTY, NY													
—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	226	53	6 127	173 615	4 768	9 954	104 538	391 377	373 224	758 279	14 173
3391	Medical equipment & supplies mfg.....	6	80	6	502	14 489	352	579	6 912	31 428	15 119	46 852	1 600
33911	Medical equipment & supplies mfg.....	6	80	6	502	14 489	352	579	6 912	31 428	15 119	46 852	1 600
3399	Other miscellaneous mfg ..	1	146	47	5 625	159 126	4 416	9 375	97 626	359 949	358 105	711 427	12 573
33991	Jewelry & silverware mfg.....	—	47	17	1 889	50 992	1 481	3 011	29 845	115 213	214 329	324 818	3 557
339911	Jewelry (except costume) mfg.....	—	23	10	1 425	37 934	1 129	2 336	23 229	89 028	180 282	263 355	3 237
33994	Office supplies (except paper) mfg.....	—	7	1	f	D	D	D	D	D	D	D	D
33995	Sign mfg.....	4	42	7	641	19 887	487	987	12 201	33 948	24 633	57 996	D
339950	Sign mfg.....	4	42	7	641	19 887	487	987	12 201	33 948	24 633	57 996	D
33999	All other miscellaneous mfg.....	1	45	19	2 337	71 483	1 924	4 032	45 966	134 485	74 390	204 662	2 867
339992	Musical instrument mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg.....	2	6	6	1 089	27 140	911	1 876	17 056	37 157	36 899	73 080	533
339999	All other miscellaneous mfg.....	1	28	10	f	D	D	D	D	D	D	D	D
RENSSELAER COUNTY, NY													
31-33	Manufacturing	2	110	43	5 023	169 053	3 030	6 016	84 809	301 710	448 971	767 221	39 718
313	Textile mills.....	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	4	6	6	526	19 068	375	826	11 830	25 348	45 433	71 868	8 552
325	Chemical mfg.....	4	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	18	8	541	19 473	422	854	13 869	41 843	31 478	73 666	6 115
333	Machinery mfg.....	—	8	3	995	29 346	252	462	7 133	23 204	57 439	91 575	D
3331	Agriculture, construction, & mining machinery mfg....	—	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
RICHMOND COUNTY, NY													
31-33	Manufacturing	1	162	20	2 156	59 551	1 404	2 748	37 816	148 814	170 688	316 185	57 187
ROCKLAND COUNTY, NY													
31-33	Manufacturing	—	309	72	10 739	413 332	6 958	14 387	215 551	2 642 449	1 005 826	3 649 805	201 365
311	Food mfg.....	7	40	6	704	18 624	481	1 110	11 247	51 803	64 627	116 510	9 973
325	Chemical mfg.....	—	22	15	4 689	198 951	2 887	6 165	103 976	2 134 729	467 270	2 598 594	155 362
3254	Pharmaceutical & medicine mfg.....	—	8	7	3 710	168 900	2 185	4 568	87 514	1 967 201	367 952	2 335 494	145 663
32541	Pharmaceutical & medicine mfg.....	—	8	7	3 710	168 900	2 185	4 568	87 514	1 967 201	367 952	2 335 494	145 663
325412	Pharmaceutical preparation mfg.....	—	7	6	h	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	9	6	906	28 122	636	1 470	14 881	158 881	96 125	251 771	9 208
32562	Toilet preparation mfg....	—	4	3	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg....	—	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	4	15	9	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	4	12	9	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	17	6	773	30 717	371	686	9 611	103 265	87 878	193 630	7 603

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	ROCKLAND COUNTY, NY—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	42	9		655	20 527	481	917	13 141	35 541	26 628	62 211	2 138
	ST. LAWRENCE COUNTY, NY													
31-33	Manufacturing	-	85	31		5 311	201 398	3 994	8 150	137 701	606 331	999 241	1 602 232	113 299
311	Food mfg	-	17	7		629	13 992	507	819	9 349	50 759	154 966	205 510	6 651
3115	Dairy product mfg	-	7	6		524	11 834	438	724	8 351	40 584	139 847	180 461	D
31151	Dairy product (except frozen) mfg	-	7	6		524	11 834	438	724	8 351	40 584	139 847	180 461	D
322	Paper mfg	2	6	5	f	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	2	5	5	f	D	D	D	D	D	D	D	D	D
32212	Paper mills	2	5	5	f	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	2	5	5	f	D	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	g	D	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	3	3	g	D	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	g	D	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	2	2	g	D	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
	SARATOGA COUNTY, NY													
31-33	Manufacturing	-	139	40		6 400	263 210	4 662	9 640	166 283	720 515	788 132	1 513 873	100 484
322	Paper mfg	-	8	6		1 366	55 949	1 107	2 215	42 130	151 896	188 948	342 184	D
3221	Pulp, paper, & paperboard mills	-	4	4	g	D	D	D	D	D	D	D	D	D
32212	Paper mills	-	4	4	g	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	4	4	g	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	16	4		1 055	29 501	965	2 011	26 987	77 795	39 812	116 515	1 211
3231	Printing & related support activities	-	16	4		1 055	29 501	965	2 011	26 987	77 795	39 812	116 515	1 211
32311	Printing	-	14	4	g	D	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	8	3		963	26 935	895	1 912	25 947	74 325	37 611	110 835	1 017
325	Chemical mfg	-	8	3	g	D	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	-	2	2	g	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	4		564	24 578	439	908	18 471	100 803	138 586	241 472	6 372

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SCHENECTADY COUNTY, NY													
31-33	Manufacturing	-	119	40	5 134	212 182	3 759	7 878	142 850	756 449	872 449	1 687 751	46 857
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	5	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	2	2	g	D	D	D	D	D	D	D	D
SCHOHARIE COUNTY, NY													
31-33	Manufacturing	1	28	6	1 024	24 009	817	1 525	17 261	128 905	53 412	180 838	15 109
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
SCHUYLER COUNTY, NY													
31-33	Manufacturing	-	17	6	574	18 345	395	843	12 683	49 887	34 668	88 837	D
SENECA COUNTY, NY													
31-33	Manufacturing	3	31	8	2 037	71 178	1 362	2 699	43 403	220 990	246 032	457 235	25 369
333	Machinery mfg	-	7	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
STEBEN COUNTY, NY													
31-33	Manufacturing	-	74	28	8 070	264 177	6 029	11 381	168 994	803 826	523 956	1 338 535	53 170
311	Food mfg	-	8	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	11	5	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	3	2	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	7	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	7	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	3	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	3	g	D	D	D	D	D	D	D	4 091
3339	Other general-purpose machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	STEBEN COUNTY, NY —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg..	—	4	2	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	4	3	871	24 949	732	1 645	14 678	52 412	31 156	83 029	D
3372	Office furniture (including fixtures) mfg.....	—	4	3	871	24 949	732	1 645	14 678	52 412	31 156	83 029	D
33721	Office furniture (including fixtures) mfg.....	—	4	3	871	24 949	732	1 645	14 678	52 412	31 156	83 029	D
337211	Wood office furniture mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
	SUFFOLK COUNTY, NY												
31-33	Manufacturing	1	2 535	671	70 317	2 433 516	44 634	88 186	1 179 144	7 090 436	4 944 328	12 009 151	418 044
311	Food mfg.....	1	172	25	3 683	109 109	2 116	3 644	55 604	356 691	236 218	595 354	22 002
3118	Bakeries & tortilla mfg.....	—	127	12	2 792	82 731	1 537	2 508	41 007	287 120	147 386	435 833	16 720
31181	Bread & bakery product mfg.....	—	120	11	2 601	77 344	1 434	2 293	38 425	274 684	137 325	413 079	15 031
311811	Retail bakeries.....	3	89	2	555	8 471	300	442	4 024	18 562	10 642	29 289	861
311812	Commercial bakeries ..	—	31	9	2 046	68 873	1 134	1 851	34 401	256 122	126 683	383 790	14 170
315	Apparel mfg.....	2	63	26	1 836	33 336	1 330	2 474	21 585	128 657	79 825	212 259	3 523
3152	Cut & sew apparel mfg....	2	43	20	g	D	D	D	D	D	D	D	1 147
31521	Cut & sew apparel contractors	7	24	11	f	D	D	D	D	D	D	D	493
31523	Women's & girls' cut & sew apparel mfg.....	1	12	8	746	13 907	378	723	8 205	87 203	49 938	141 440	454
322	Paper mfg.....	4	46	22	2 074	68 620	1 555	3 138	41 924	196 420	231 194	430 043	19 400
3222	Converted paper product mfg.....	5	45	21	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	17	9	666	25 441	440	885	11 497	46 423	73 220	120 395	D
32223	Stationery product mfg ..	—	9	4	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	9	10	7	644	19 532	553	1 108	15 131	90 126	108 106	198 706	D
322291	Sanitary paper product mfg.....	9	7	5	552	17 467	469	1 008	13 562	86 860	106 507	193 149	D
323	Printing & related support activities.....	2	351	72	5 359	181 345	3 909	7 507	109 789	416 599	245 228	662 582	29 377
3231	Printing & related support activities.....	2	351	72	5 359	181 345	3 909	7 507	109 789	416 599	245 228	662 582	29 377
32311	Printing.....	2	310	68	5 012	169 149	3 626	6 992	100 728	386 555	237 694	625 105	27 802
323110	Commercial lithographic printing ..	1	166	44	3 427	119 903	2 413	4 743	71 215	245 552	158 448	404 875	20 352
325	Chemical mfg.....	—	88	41	7 831	256 456	4 282	8 761	91 873	1 821 359	1 170 171	3 010 049	79 418
3254	Pharmaceutical & medicine mfg.....	1	39	21	3 996	131 244	2 203	4 058	50 598	457 822	360 604	823 589	52 379
32541	Pharmaceutical & medicine mfg.....	1	39	21	3 996	131 244	2 203	4 058	50 598	457 822	360 604	823 589	52 379
325412	Pharmaceutical preparation mfg.....	—	26	16	h	D	D	D	D	D	D	D	41 481
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	25	8	h	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg....	—	15	7	h	D	D	D	D	D	D	D	20 464
325620	Toilet preparation mfg ..	—	15	7	h	D	D	D	D	D	D	D	20 464
326	Plastics & rubber products mfg.....	4	93	43	3 807	104 131	2 862	5 308	59 792	234 204	233 287	467 580	17 728
3261	Plastics product mfg.....	4	81	37	3 600	97 934	2 704	4 970	56 492	221 765	222 883	444 846	D
32619	Other plastics product mfg.....	5	60	30	2 930	76 260	2 293	4 098	44 931	168 565	154 054	323 857	13 508
326199	All other plastics product mfg.....	5	58	30	h	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SUFFOLK COUNTY, NY												
	—Con.												
31-33	Manufacturing—												
	Con.												
327	Nonmetallic mineral product mfg	3	79	13	878	29 407	686	1 316	20 397	73 480	61 589	135 633	5 168
3273	Cement & concrete product mfg	2	48	9	581	20 641	457	875	14 270	54 793	48 754	103 935	3 692
332	Fabricated metal product mfg	1	502	91	8 362	304 235	5 880	11 734	170 113	627 578	428 930	1 045 529	33 328
3321	Forging & stamping	—	26	7	516	19 135	397	806	11 676	36 827	27 480	66 788	811
33211	Forging & stamping	—	26	7	516	19 135	397	806	11 676	36 827	27 480	66 788	811
3323	Architectural & structural metals mfg	1	102	25	2 062	75 372	1 442	2 957	44 184	149 407	107 865	254 652	4 568
33231	Plate work & fabricated structural product mfg ..	1	23	5	537	18 936	332	661	10 235	34 172	28 313	62 697	D
33232	Ornamental & architectural metal products mfg	1	79	20	1 525	56 436	1 110	2 296	33 949	115 235	79 552	191 955	D
332322	Sheet metal work mfg .	1	46	15	1 045	42 226	797	1 681	26 817	82 264	43 782	125 552	2 541
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	262	34	3 539	128 929	2 564	5 045	76 972	274 965	136 429	399 135	18 186
33271	Machine shops	1	217	20	2 311	91 068	1 678	3 400	54 488	196 723	73 544	260 834	14 809
332710	Machine shops	1	217	20	2 311	91 068	1 678	3 400	54 488	196 723	73 544	260 834	14 809
33272	Turned product & screw, nut, & bolt mfg	1	45	14	1 228	37 861	886	1 645	22 484	78 242	62 885	138 301	3 377
332721	Precision turned product mfg	—	31	7	716	21 293	564	1 028	14 190	37 472	37 061	72 425	1 070
332722	Boil, nut, screw, rivet, & washer mfg	3	14	7	512	16 568	322	617	8 294	40 770	25 824	65 876	2 307
3329	Other fabricated metal product mfg	—	36	6	870	32 294	580	1 313	17 067	62 251	78 167	140 892	4 679
33291	Metal valve mfg	—	10	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	202	48	3 321	127 309	2 123	4 132	63 739	261 125	215 408	473 535	12 537
3332	Industrial machinery mfg ..	1	46	17	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	37	14	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	18	8	645	26 791	363	726	10 727	60 012	70 681	128 015	D
3333	Commercial & service industry machinery mfg ..	1	29	13	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	1	29	13	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	64	7	568	24 605	392	689	13 394	48 604	32 354	79 602	2 821
33351	Metalworking machinery mfg	1	64	7	568	24 605	392	689	13 394	48 604	32 354	79 602	2 821
334	Computer & electronic product mfg	—	210	105	17 561	744 723	9 025	17 847	285 923	1 830 380	1 097 340	2 883 843	142 625
3341	Computer & peripheral equipment mfg	—	16	6	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	16	6	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	9	4	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	43	25	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	6	4	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	6	4	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	29	21	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	29	21	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	79	40	4 257	151 438	2 309	4 082	57 800	263 364	212 048	505 796	22 857
33441	Semiconductor & other electronic component mfg	1	79	40	4 257	151 438	2 309	4 082	57 800	263 364	212 048	505 796	22 857
334412	Bare printed circuit board mfg	1	18	6	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	13	7	g	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	9	6	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	2	20	8	522	13 501	260	485	5 310	28 678	12 443	40 914	857

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SUFFOLK COUNTY, NY—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	63	30	4 673	224 895	2 339	6 016	98 450	417 233	292 163	722 212	18 820
33451	Navigational, measuring, medical, & control instruments mfg	1	63	30	4 673	224 895	2 339	6 016	98 450	417 233	292 163	722 212	18 820
334510	Electromedical & electrotherapeutic apparatus mfg	6	7	3	608	30 127	207	496	7 834	31 759	20 742	54 107	5 605
334511	Search, detection, navigation, & guidance instrument mfg	—	15	6	1 939	98 143	1 087	1 992	50 962	197 876	67 451	267 321	D
334515	Electricity measuring & testing instrument mfg	—	7	4	556	32 753	176	1 802	13 114	66 820	107 841	187 101	4 129
334519	Other measuring & controlling device mfg	1	7	4	578	26 976	300	569	11 334	35 220	25 779	56 484	1 065
3346	Mfg & reproducing magnetic & optical media .	—	7	4	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	7	4	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	83	41	2 956	95 762	1 869	3 889	43 782	224 376	244 543	470 389	9 190
3353	Electrical equipment mfg ..	3	32	12	1 327	44 551	841	1 840	22 517	89 288	56 201	146 070	D
33531	Electrical equipment mfg	3	32	12	1 327	44 551	841	1 840	22 517	89 288	56 201	146 070	D
335314	Relay & industrial control mfg	4	21	6	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	32	21	1 200	38 664	780	1 549	15 980	102 913	154 412	258 462	3 382
33599	All other electrical equipment & component mfg	—	19	14	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	19	14	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	100	38	h	D	D	D	D	D	D	D	14 038
3363	Motor vehicle parts mfg ...	3	42	15	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	6	15	10	f	D	D	D	D	D	D	D	4 005
336322	Other motor vehicle electrical & electronic equipment mfg	7	13	9	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	30	17	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	2	30	17	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	2	23	12	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	158	27	2 094	57 491	1 568	3 002	35 449	117 856	89 034	207 823	4 590
3371	Household & institutional furniture & kitchen cabinet mfg	3	110	9	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	45	17	1 150	35 533	830	1 525	20 111	70 997	46 443	117 870	3 119
33721	Office furniture (including fixtures) mfg	2	45	17	1 150	35 533	830	1 525	20 111	70 997	46 443	117 870	3 119
337215	Showcase, partition, shelving, & locker mfg	—	28	14	875	25 027	637	1 134	13 918	50 445	35 213	85 919	2 425
339	Miscellaneous mfg	4	228	52	5 155	146 125	3 551	7 201	77 474	378 528	221 016	599 205	17 497
3391	Medical equipment & supplies mfg	5	108	20	2 769	82 510	1 788	3 730	40 319	250 103	109 228	357 505	10 185
33911	Medical equipment & supplies mfg	5	108	20	2 769	82 510	1 788	3 730	40 319	250 103	109 228	357 505	10 185
339112	Surgical & medical instrument mfg	7	16	8	1 433	40 383	914	2 014	20 413	97 014	57 696	154 831	6 125
339113	Surgical appliance & supplies mfg	2	10	4	709	21 657	452	990	10 480	102 393	27 073	129 555	1 866

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUFFOLK COUNTY, NY													
—Con.													
31-33	Manufacturing—												
	Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ..	3	120	32	2 386	63 615	1 763	3 471	37 155	128 425	111 788	241 700	7 312
33995	Sign mfg	2	56	15	1 153	32 815	815	1 581	18 348	60 115	42 886	103 709	2 356
339950	Sign mfg	2	56	15	1 153	32 815	815	1 581	18 348	60 115	42 886	103 709	2 356
33999	All other miscellaneous mfg	5	25	9	754	17 643	599	1 164	11 347	40 757	35 475	76 750	3 572
339999	All other miscellaneous mfg	6	18	6	f	D	D	D	D	D	D	D	2 203
SULLIVAN COUNTY, NY													
31-33	Manufacturing	6	54	7	f	D	D	D	D	D	D	D	2 830
TIOGA COUNTY, NY													
31-33	Manufacturing	—	48	14	5 055	239 792	1 694	3 477	42 424	1 200 337	376 157	1 569 591	42 770
334	Computer & electronic product mfg	—	4	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	2	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	2	1	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	2	1	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	h	D	D	D	D	D	D	D	D
TOMPKINS COUNTY, NY													
31-33	Manufacturing	1	94	25	3 613	123 582	2 619	5 298	76 171	303 091	357 202	667 080	32 829
333	Machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	18	6	646	24 118	422	804	11 898	63 128	101 216	164 224	5 622
336	Transportation equipment mfg	—	5	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	4	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
ULSTER COUNTY, NY													
31-33	Manufacturing	1	215	56	6 449	183 698	4 355	8 367	105 145	450 548	325 788	785 020	26 190
323	Printing & related support activities	—	22	6	726	20 749	567	1 140	13 874	50 692	55 115	104 618	4 596
3231	Printing & related support activities	—	22	6	726	20 749	567	1 140	13 874	50 692	55 115	104 618	4 596
32311	Printing	—	21	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	8	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	39	9	1 174	32 219	866	1 613	20 717	71 593	37 403	110 064	4 926
3322	Cutlery & handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	15	8	913	30 668	447	898	13 610	93 421	31 788	126 344	7 923
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ULSTER COUNTY, NY —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg.....	2	12	6	665	20 459	375	587	9 089	48 586	41 265	89 790	1 535
	WARREN COUNTY, NY												
31-33	Manufacturing	—	84	19	4 014	144 029	2 634	5 437	72 807	423 592	405 074	820 663	35 063
322	Paper mfg.....	—	4	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	13	3	1 304	42 869	757	1 467	14 894	66 549	73 007	130 790	3 298
3391	Medical equipment & supplies mfg.....	—	8	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	8	2	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
	WASHINGTON COUNTY, NY												
31-33	Manufacturing	—	99	37	3 852	122 720	2 912	5 642	78 596	347 226	291 098	642 030	39 690
322	Paper mfg.....	—	9	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	9	4	848	22 441	670	1 286	15 190	51 033	30 401	90 820	2 178
3391	Medical equipment & supplies mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
	WAYNE COUNTY, NY												
31-33	Manufacturing	1	145	54	8 041	221 760	5 883	12 173	141 468	752 903	674 807	1 435 180	61 921
311	Food mfg.....	1	17	9	1 316	32 385	1 005	2 261	21 360	327 367	244 377	571 304	11 974
3114	Fruit & vegetable preserving & specialty food mfg.....	1	11	7	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	1	8	5	791	18 859	591	1 373	12 718	206 214	171 043	376 990	D
311421	Fruit & vegetable canning.....	1	8	5	791	18 859	591	1 373	12 718	206 214	171 043	376 990	D
326	Plastics & rubber products mfg.....	1	14	7	931	30 423	718	1 557	22 372	86 999	75 503	162 600	8 776
3261	Plastics product mfg.....	1	12	6	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	—	3	2	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	42	10	817	21 667	633	1 209	14 584	29 417	57 842	100 925	16 726
333	Machinery mfg.....	—	15	7	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	3	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAYNE COUNTY, NY—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg...	—	1	1	f	D	D	D	D	D	D	D	D
WESTCHESTER COUNTY, NY													
31-33	Manufacturing	2	869	206	18 797	626 298	13 047	26 002	342 293	1 431 671	1 548 045	3 012 031	106 127
311	Food mfg.....	2	112	13	1 677	52 072	1 213	2 722	32 492	139 121	335 841	477 266	11 081
3118	Bakeries & tortilla mfg.....	3	83	7	879	21 583	618	1 417	13 209	49 681	35 142	84 761	D
31181	Bread & bakery product mfg	2	78	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	21	6	559	15 937	432	1 139	10 421	34 431	25 049	59 419	D
323	Printing & related support activities.....	3	138	18	1 369	43 509	939	1 775	23 942	87 597	55 075	142 522	9 232
3231	Printing & related support activities.....	3	138	18	1 369	43 509	939	1 775	23 942	87 597	55 075	142 522	9 232
32311	Printing	3	119	17	1 280	40 657	867	1 656	21 966	82 230	53 900	136 018	8 848
323110	Commercial lithographic printing ..	2	59	9	643	22 827	433	843	12 912	42 752	27 716	70 288	D
325	Chemical mfg	3	44	15	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	28	13	1 541	48 498	1 231	2 189	28 585	94 957	97 064	192 455	11 481
3261	Plastics product mfg	2	27	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	17	8	968	31 056	790	1 187	16 951	54 973	38 302	94 620	7 436
326199	All other plastics product mfg	1	17	8	968	31 056	790	1 187	16 951	54 973	38 302	94 620	7 436
332	Fabricated metal product mfg	1	104	28	1 929	60 807	1 473	3 057	38 832	141 783	82 952	225 463	5 823
3329	Other fabricated metal product mfg.....	1	17	7	f	D	D	D	D	D	D	D	1 348
333	Machinery mfg	1	35	12	1 037	36 669	666	1 347	17 059	81 063	57 673	136 991	D
334	Computer & electronic product mfg	3	65	29	2 927	105 993	1 830	3 656	47 284	215 538	144 150	364 293	18 663
3344	Semiconductor & other electronic component mfg	1	18	11	1 404	44 497	1 009	2 009	22 466	89 884	51 355	141 552	4 781
33441	Semiconductor & other electronic component mfg	1	18	11	1 404	44 497	1 009	2 009	22 466	89 884	51 355	141 552	4 781
3345	Navigational, measuring, medical, & control instruments mfg	4	28	10	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	4	28	10	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	28	14	1 336	47 306	944	1 892	27 203	108 572	84 399	192 831	6 006
3359	Other electrical equipment & component mfg	3	9	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	113	28	2 698	87 864	1 729	3 304	40 426	156 031	191 659	371 404	10 098
3391	Medical equipment & supplies mfg	1	42	11	1 008	36 246	550	951	12 392	78 463	65 223	143 512	3 691
33911	Medical equipment & supplies mfg	1	42	11	1 008	36 246	550	951	12 392	78 463	65 223	143 512	3 691
3399	Other miscellaneous mfg ..	2	71	17	1 690	51 618	1 179	2 353	28 034	77 568	126 436	227 892	6 407
33991	Jewelry & silverware mfg	—	12	3	f	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	—	7	3	f	D	D	D	D	D	D	D	D
WYOMING COUNTY, NY													
31-33	Manufacturing	1	55	28	3 011	79 149	2 400	4 809	54 736	195 719	186 335	371 919	17 196
323	Printing & related support activities.....	8	5	3	f	D	D	D	D	D	D	D	323
3231	Printing & related support activities.....	8	5	3	f	D	D	D	D	D	D	D	323
32311	Printing	8	5	3	f	D	D	D	D	D	D	D	323
323113	Commercial screen printing.....	8	3	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YATES COUNTY, NY												
	Manufacturing	-	27	6	522	15 646	351	639	9 500	91 224	132 781	225 212	5 444

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AKRON, NY												
	Manufacturing	5	11	8	1 255	41 938	789	1 635	21 295	107 163	117 795	227 377	9 110
31-33	ALBANY, NY												
	Manufacturing	2	86	21	1 933	62 560	1 412	2 932	36 417	157 323	261 260	420 461	14 750
31-33	ALBION, NY												
	Manufacturing	2	8	7	740	27 224	523	1 046	16 902	109 146	141 251	250 537	3 595
31-33	AMHERST TOWN BALANCE, NY *												
	Manufacturing	1	92	27	3 524	109 852	2 332	4 756	65 005	247 985	214 642	456 149	16 330
339	Miscellaneous mfg	-	19	6	1 153	31 821	737	1 660	17 542	95 003	73 001	163 626	D
3399	Other miscellaneous mfg . .	-	7	2	f	D	D	D	D	D	D	D	169
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	AMITYVILLE, NY *												
	Manufacturing	1	48	18	1 513	53 910	1 038	1 894	25 192	147 436	66 201	205 496	10 470
332	Fabricated metal product mfg	1	7	3	562	24 163	392	692	11 404	68 325	8 208	71 053	3 365
31-33	AMSTERDAM, NY												
	Manufacturing	1	50	16	2 089	54 154	1 598	3 374	33 180	128 831	112 158	244 070	7 299
31-33	AUBURN, NY												
	Manufacturing	-	64	27	3 087	92 613	2 344	4 584	61 626	275 943	269 122	556 297	17 681
333	Machinery mfg	-	7	2	f	D	D	D	D	D	D	D	1 337
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . .	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BABYLON TOWN BALANCE, NY *												
31-33	Manufacturing	2	747	193	15 725	532 592	11 134	21 897	305 861	1 166 916	851 594	2 004 036	68 062
311	Food mfg	3	33	6	506	11 487	352	602	7 127	30 940	27 609	58 786	1 427
315	Apparel mfg	-	21	10	526	11 050	379	623	5 590	26 407	32 890	59 655	2 524
322	Paper mfg	-	14	6	702	23 452	491	1 056	11 844	50 880	61 583	114 077	5 460
3222	Converted paper product mfg	-	14	6	702	23 452	491	1 056	11 844	50 880	61 583	114 077	5 460
323	Printing & related support activities.....	2	97	20	1 389	47 090	1 024	2 062	29 488	105 361	65 439	170 770	6 575
3231	Printing & related support activities.....	2	97	20	1 389	47 090	1 024	2 062	29 488	105 361	65 439	170 770	6 575
32311	Printing	2	84	17	1 228	41 795	890	1 835	25 588	93 681	61 126	154 855	5 703
323110	Commercial lithographic printing ..	2	45	10	811	28 599	568	1 222	17 318	64 262	44 099	108 470	4 408
325	Chemical mfg	1	13	5	549	20 259	334	542	6 528	140 265	60 975	196 593	10 417
326	Plastics & rubber products mfg	4	38	14	998	31 242	755	1 521	17 987	60 554	63 603	129 445	5 589
3261	Plastics product mfg	4	35	12	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	23	9	759	22 979	583	1 164	13 928	41 076	45 304	92 015	4 124
326199	All other plastics product mfg	4	23	9	759	22 979	583	1 164	13 928	41 076	45 304	92 015	4 124
332	Fabricated metal product mfg	1	207	41	3 311	122 131	2 448	5 120	74 550	241 120	178 874	419 841	14 120
3323	Architectural & structural metals mfg	1	35	8	680	26 023	529	1 103	17 484	58 896	34 520	93 032	1 223
33232	Ornamental & architectural metal products mfg	1	29	7	613	24 285	478	986	16 463	54 174	30 174	83 967	1 173
332322	Sheet metal work mfg ..	-	20	6	532	21 710	425	881	15 043	47 483	23 469	70 696	1 049
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	117	16	1 209	45 828	919	1 973	30 026	84 810	49 041	130 742	7 440
33271	Machine shops	1	99	10	918	37 390	682	1 502	23 953	69 255	40 016	106 177	6 260
332710	Machine shops	1	99	10	918	37 390	682	1 502	23 953	69 255	40 016	106 177	6 260
3329	Other fabricated metal product mfg	-	13	4	667	26 028	431	1 017	12 786	47 469	66 074	113 964	3 668
33291	Metal valve mfg	-	6	3	f	D	D	D	D	D	D	D	3 188
333	Machinery mfg	1	72	19	1 220	49 874	751	1 440	22 771	87 900	71 624	157 754	3 451
3332	Industrial machinery mfg ..	-	19	7	502	21 837	306	642	10 689	35 147	29 776	63 964	993
334	Computer & electronic product mfg	1	54	25	3 149	120 598	2 130	4 041	73 809	205 240	128 321	316 874	9 745
3344	Semiconductor & other electronic component mfg	3	22	7	732	19 520	583	1 158	10 674	44 746	27 037	70 563	4 831
33441	Semiconductor & other electronic component mfg	3	22	7	732	19 520	583	1 158	10 674	44 746	27 037	70 563	4 831
3345	Navigational, measuring, medical, & control instruments mfg	1	17	10	1 847	81 960	1 283	2 328	55 238	125 984	84 671	194 653	2 982
33451	Navigational, measuring, medical, & control instruments mfg	1	17	10	1 847	81 960	1 283	2 328	55 238	125 984	84 671	194 653	2 982
334511	Search, detection, navigation, & guidance instrument mfg	-	4	2	f	D	D	D	D	D	D	D	32
335	Electrical equipment, appliance, & component mfg	2	23	9	564	18 744	347	685	8 487	41 752	29 436	72 950	1 067
337	Furniture & related product mfg	2	42	10	774	18 821	627	1 273	12 526	42 145	35 765	77 477	1 228
339	Miscellaneous mfg	1	46	10	878	25 108	575	1 113	12 762	49 825	39 040	88 599	1 724
	BATAVIA, NY												
31-33	Manufacturing	-	50	18	1 986	59 224	1 394	2 814	33 279	155 700	267 663	418 058	12 789
332	Fabricated metal product mfg	-	12	3	545	20 307	310	635	9 690	40 364	23 920	62 431	1 202

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BATH, NY													
31-33	Manufacturing	-	7	2	820	26 926	717	1 130	22 022	71 454	51 267	123 822	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
BEACON, NY													
31-33	Manufacturing	-	16	5	519	12 143	456	664	6 890	37 554	25 406	62 628	520
BETHLEHEM TOWN, NY													
31-33	Manufacturing	-	11	3	1 092	53 360	852	1 760	38 507	377 096	202 718	579 216	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
BINGHAMTON, NY													
31-33	Manufacturing	-	79	36	5 994	199 593	4 173	7 410	99 132	718 099	524 403	1 266 449	16 724
311	Food mfg	-	8	6	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	13	2	678	17 854	523	1 072	11 748	30 749	20 930	52 349	1 053
3231	Printing & related support activities	-	13	2	678	17 854	523	1 072	11 748	30 749	20 930	52 349	1 053
32311	Printing	-	8	2	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	4	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	8	866	16 941	556	827	6 511	36 602	21 957	58 028	797
BRIGHTON TOWN, NY													
31-33	Manufacturing	5	31	9	681	24 135	489	1 020	15 349	64 018	37 350	98 089	3 223
BROOKHAVEN TOWN BALANCE, NY *													
31-33	Manufacturing	2	267	38	3 896	115 692	2 559	4 949	57 981	279 526	253 334	531 035	20 756
325	Chemical mfg	-	7	3	546	21 196	381	723	10 993	66 364	29 861	95 618	D
334	Computer & electronic product mfg	2	24	8	575	17 054	280	520	6 044	37 103	26 531	65 529	3 461
336	Transportation equipment mfg	-	9	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	BUFFALO, NY												
31-33	Manufacturing	1	466	169	20 307	748 399	14 499	29 005	462 933	2 491 343	2 047 310	4 527 213	174 239
311	Food mfg	-	49	30	3 644	130 244	2 673	5 337	81 908	790 358	729 693	1 527 158	59 401
3112	Grain & oilseed milling	-	5	5	758	39 458	598	1 635	30 831	420 770	282 969	705 178	D
3114	Fruit & vegetable preserving & specialty food mfg	-	4	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	18	6	f	D	D	D	D	D	D	D	2 022
31181	Bread & bakery product mfg	-	17	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	12	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	11	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	13	6	527	16 464	373	785	11 210	46 547	40 068	89 410	5 024
3222	Converted paper product mfg	1	13	6	527	16 464	373	785	11 210	46 547	40 068	89 410	5 024
323	Printing & related support activities	2	72	13	1 100	33 333	817	1 565	20 955	72 132	39 782	112 775	4 000
3231	Printing & related support activities	2	72	13	1 100	33 333	817	1 565	20 955	72 132	39 782	112 775	4 000
32311	Printing	2	59	11	976	29 941	717	1 385	18 462	65 124	38 651	104 638	3 502
323110	Commercial lithographic printing ..	2	36	7	543	16 896	397	772	10 264	34 095	24 395	58 489	2 032
325	Chemical mfg	-	22	9	1 191	58 245	616	1 210	21 376	305 883	130 163	433 599	11 621
3254	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	26	14	1 016	27 402	671	1 192	14 151	53 627	44 548	97 887	2 404
3261	Plastics product mfg	-	20	10	f	D	D	D	D	D	D	D	1 552
32619	Other plastics product mfg	-	14	7	537	15 847	293	542	6 546	37 572	25 847	63 377	1 060
326199	All other plastics product mfg	-	13	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	9	5	735	22 145	540	1 001	14 011	57 220	20 834	79 925	5 309
3271	Clay product & refractory mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	1 208	59 965	898	1 955	40 815	119 698	256 766	381 087	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	91	26	1 889	64 966	1 385	2 731	39 040	129 821	80 940	210 224	10 189
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	35	8	763	27 382	592	1 196	17 383	60 643	27 272	87 598	5 882
333	Machinery mfg	2	48	18	2 442	99 998	1 412	2 822	48 425	241 203	173 782	412 546	20 157
3335	Metalworking machinery mfg	7	14	5	f	D	D	D	D	D	D	D	4 127
33351	Metalworking machinery mfg	7	14	5	f	D	D	D	D	D	D	D	4 127
333513	Machine tool (metal forming types) mfg ...	9	4	2	f	D	D	D	D	D	D	D	2 742
3339	Other general-purpose machinery mfg	-	14	5	715	34 641	369	719	13 910	108 363	75 704	187 982	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	BUFFALO, NY—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg	1	13	8	h	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	1	7	5	g	D	D	D	D	D	D	D	D	
33635	Motor vehicle transmission & power train parts mfg	—	2	1	g	D	D	D	D	D	D	D	D	
336350	Motor vehicle transmission & power train parts mfg	—	2	1	g	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	44	12		1 634	50 225	1 128	2 136	23 539	143 350	86 719	230 035	4 089
3391	Medical equipment & supplies mfg	—	18	3		853	21 421	561	1 057	10 572	74 738	50 784	127 120	2 243
33911	Medical equipment & supplies mfg	—	18	3		853	21 421	561	1 057	10 572	74 738	50 784	127 120	2 243
3399	Other miscellaneous mfg ..	1	26	9		781	28 804	567	1 079	12 967	68 612	35 935	102 915	1 846
	CAMDEN, NY													
31-33	Manufacturing	—	7	2	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	—	1	1	f	D	D	D	D	D	D	D	D	
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	f	D	D	D	D	D	D	D	D	
33142	Copper rolling, drawing, extruding, & alloying ...	—	1	1	f	D	D	D	D	D	D	D	D	
331422	Copper wire (except mechanical) drawing ..	—	1	1	f	D	D	D	D	D	D	D	D	
	CANANDAIGUA, NY													
31-33	Manufacturing	—	25	8		1 397	44 667	860	1 680	15 999	68 857	98 669	164 842	3 901
312	Beverage & tobacco product mfg	—	1	1	f	D	D	D	D	D	D	D	D	
3121	Beverage mfg	—	1	1	f	D	D	D	D	D	D	D	D	
31213	Wineries	—	1	1	f	D	D	D	D	D	D	D	D	
312130	Wineries	—	1	1	f	D	D	D	D	D	D	D	D	
	CANASTOTA, NY													
31-33	Manufacturing	3	14	6		595	17 503	478	986	11 914	30 521	101 912	134 189	6 003
	CARMEL TOWN, NY													
31-33	Manufacturing	1	21	2		552	22 937	242	439	7 771	67 685	41 660	109 845	D
	CHEEKTOWAGA TOWN BALANCE, NY *													
31-33	Manufacturing	1	103	45		5 147	172 194	3 430	6 719	92 573	433 728	368 893	800 409	20 594
311	Food mfg	3	10	6		796	18 794	586	1 042	10 785	56 080	105 270	163 415	2 742
332	Fabricated metal product mfg	—	14	6		1 013	36 628	686	1 410	19 614	86 725	50 949	136 222	4 566
3324	Boiler, tank, & shipping container mfg	—	3	2	f	D	D	D	D	D	D	D	D	
33241	Power boiler & heat exchanger mfg	—	2	2	f	D	D	D	D	D	D	D	D	
332410	Power boiler & heat exchanger mfg	—	2	2	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	—	10	5		624	24 612	457	1 069	16 812	74 328	43 521	115 669	D
334	Computer & electronic product mfg	3	10	7		803	33 251	431	719	13 160	65 015	32 538	96 349	3 495
3345	Navigational, measuring, medical, & control instruments mfg	3	4	3		535	26 422	216	419	8 329	49 917	19 352	68 817	D
33451	Navigational, measuring, medical, & control instruments mfg	3	4	3		535	26 422	216	419	8 329	49 917	19 352	68 817	D
	CHESTNUT RIDGE, NY *													
31-33	Manufacturing	1	11	5		1 009	39 795	626	1 578	19 203	134 042	98 181	234 201	13 191
	CHILI TOWN, NY													
31-33	Manufacturing	—	28	15		1 653	65 996	1 158	2 316	41 843	286 274	465 273	752 498	7 445

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CICERO TOWN BALANCE, NY *													
31-33	Manufacturing	-	14	8	950	27 938	475	869	10 551	57 243	141 070	198 714	5 881
CLARENCE TOWN, NY													
31-33	Manufacturing	2	37	7	1 196	46 666	724	1 687	19 644	85 468	57 905	143 908	7 929
335	Electrical equipment, appliance, & component mfg	1	4	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	3	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
CLARKSTOWN TOWN BALANCE, NY *													
31-33	Manufacturing	1	87	18	1 807	60 804	952	1 906	24 868	377 465	154 692	533 052	13 630
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
CLAY TOWN BALANCE, NY *													
31-33	Manufacturing	-	29	14	2 066	53 645	1 681	3 183	34 861	113 254	89 357	205 784	8 513
334	Computer & electronic product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLIFTON PARK TOWN, NY													
31-33	Manufacturing	2	25	9	606	18 728	434	918	11 370	40 758	44 936	86 057	D
COBLESKILL, NY													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
COHOES, NY													
31-33	Manufacturing	-	25	9	816	31 476	537	1 087	16 271	54 732	61 975	115 933	D
COLONIE TOWN BALANCE, NY *													
31-33	Manufacturing	-	70	26	2 311	69 229	1 283	2 525	33 302	198 300	279 939	485 964	20 956
CORINTH, NY													
31-33	Manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CORNING, NY													
31-33	Manufacturing	-	16	8	1 176	42 068	919	1 919	28 880	131 021	43 366	174 917	D
327	Nonmetallic mineral product mfg	-	7	4	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	6	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	6	3	f	D	D	D	D	D	D	D	D
CORTLAND, NY													
31-33	Manufacturing	1	38	15	3 557	96 888	2 539	5 634	61 597	287 213	233 369	503 375	70 788
325	Chemical mfg	9	4	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	1	1	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	1	1	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
DEPEW, NY *													
31-33	Manufacturing	-	34	10	1 647	55 767	1 235	2 340	37 854	109 254	87 891	201 773	13 470
323	Printing & related support activities	-	5	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	5	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	2	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
DE WITT TOWN BALANCE, NY *													
31-33	Manufacturing	-	111	44	7 226	342 141	5 317	12 806	236 453	888 190	886 751	1 772 706	83 185
332	Fabricated metal product mfg	-	25	10	1 097	33 298	793	1 654	21 709	81 445	54 975	135 548	6 637
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	10	4	717	20 857	540	1 103	14 591	55 543	40 528	95 384	D
33272	Turned product & screw, nut, & bolt mfg	-	1	1	f	D	D	D	D	D	D	D	D
332721	Precision turned product mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	15	7	961	40 427	333	552	10 815	95 875	49 323	143 269	7 014
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
DUNKIRK, NY													
31-33	Manufacturing	2	17	7	1 657	57 266	1 279	2 552	37 212	138 438	250 328	404 193	15 298
311	Food mfg	2	4	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EAST AURORA, NY													
31-33	Manufacturing	-	10	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	g	D	D	D	D	D	D	D	D
EAST FISHKILL TOWN, NY													
31-33	Manufacturing	-	14	5	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
EAST HILLS, NY *													
31-33	Manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	2	f	D	D	D	D	D	D	D	D
EAST SYRACUSE, NY *													
31-33	Manufacturing	-	25	10	1 248	61 420	714	1 505	23 033	97 492	78 265	166 376	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELLENVILLE, NY *													
31-33	Manufacturing	-	8	4	847	23 658	640	1 210	14 059	42 008	20 126	63 123	D
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELMA TOWN, NY													
31-33	Manufacturing	-	15	4	1 267	36 788	1 018	2 022	24 710	143 520	105 770	244 522	12 859
336	Transportation equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELMIRA, NY													
31-33	Manufacturing	2	30	16	2 531	70 257	1 488	3 091	37 626	221 899	106 888	334 531	17 698
323	Printing & related support activities	-	5	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	5	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	1	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ELMIRA HEIGHTS, NY													
31-33	Manufacturing	-	13	7	2 124	81 435	1 620	3 167	52 005	188 275	159 298	355 610	12 807
333	Machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
ENDICOTT, NY *													
31-33	Manufacturing	2	26	9	i	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	4	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	9	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	3	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
EVANS TOWN, NY													
31-33	Manufacturing	1	12	6	1 681	45 835	1 410	2 551	33 168	89 142	46 638	141 397	7 439
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
FAIRPORT, NY *													
31-33	Manufacturing	-	18	5	754	30 432	549	1 224	14 791	78 391	49 661	125 350	10 579
FALCONER, NY													
31-33	Manufacturing	-	17	10	1 287	42 844	926	2 007	28 882	74 255	67 564	151 693	7 887
332	Fabricated metal product mfg	-	5	4	551	22 197	447	999	16 884	54 643	38 777	94 019	D
FARMINGDALE, NY *													
31-33	Manufacturing	1	74	21	2 227	82 182	1 636	3 005	39 276	176 451	160 512	340 186	9 158
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	10	5	710	17 054	564	1 068	8 870	43 021	25 818	67 918	1 738
3399	Other miscellaneous mfg ..	2	7	3	603	13 433	487	900	6 319	35 511	22 715	57 253	D
FORT EDWARD, NY													
31-33	Manufacturing	-	9	4	611	25 880	451	813	15 997	99 161	73 952	169 376	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREDONIA, NY													
31-33	Manufacturing	—	6	1	f	D	D	D	D	D	D	D	D
311	Food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	1	1	f	D	D	D	D	D	D	D	D
FREEPORT, NY *													
31-33	Manufacturing	1	122	41	3 330	92 650	2 354	4 307	50 983	175 742	216 765	392 362	12 792
323	Printing & related support activities.....	6	14	5	606	15 641	453	701	8 880	30 315	16 335	46 662	3 883
3231	Printing & related support activities.....	6	14	5	606	15 641	453	701	8 880	30 315	16 335	46 662	3 883
32311	Printing	7	12	4	f	D	D	D	D	D	D	D	D
FULTON, NY													
31-33	Manufacturing	—	21	10	2 168	82 836	1 676	3 634	57 342	422 128	278 655	692 654	22 510
311	Food mfg	1	2	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	—	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	1	1	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg...	—	1	1	f	D	D	D	D	D	D	D	D
GARDEN CITY, NY *													
31-33	Manufacturing	3	29	10	952	33 177	632	1 086	12 991	76 856	77 105	155 259	4 118
GATES TOWN, NY													
31-33	Manufacturing	—	82	36	10 752	443 315	7 048	11 185	189 364	612 841	1 530 402	2 185 942	184 764
326	Plastics & rubber products mfg	3	10	5	752	14 377	601	1 098	9 228	36 508	26 320	62 861	D
3261	Plastics product mfg	3	9	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	4	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	17	7	552	17 529	427	989	12 447	33 408	16 810	50 106	6 517
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	16	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	21	13	8 571	389 879	5 319	7 752	155 029	491 419	1 453 380	1 987 462	D
3333	Commercial & service industry machinery mfg ..	—	3	3	i	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	3	3	i	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	2	2	i	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	12	8	f	D	D	D	D	D	D	D	2 387
33351	Metalworking machinery mfg	1	12	8	f	D	D	D	D	D	D	D	2 387
GEDDES TOWN BALANCE, NY *													
31-33	Manufacturing	—	7	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GENEVA, NY *													
31-33	Manufacturing	5	16	4	682	20 376	538	933	11 022	76 547	29 995	88 919	D
GLEN COVE, NY													
31-33	Manufacturing	-	32	6	2 597	82 254	1 975	4 427	49 000	245 265	201 725	448 390	D
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	g	D	D	D	D	D	D	D	D
GLENS FALLS, NY													
31-33	Manufacturing	-	30	10	2 817	109 317	1 829	3 933	54 189	350 068	345 195	687 186	30 749
322	Paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	3	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D
GLENVILLE TOWN BALANCE, NY *													
31-33	Manufacturing	-	20	10	797	25 511	592	1 159	15 401	73 507	82 991	156 154	5 999
GLOVERSVILLE, NY													
31-33	Manufacturing	1	60	19	1 818	43 222	1 490	3 234	30 647	121 622	127 079	243 279	12 030
GRAND ISLAND TOWN, NY													
31-33	Manufacturing	-	20	6	999	33 004	517	847	14 633	170 163	63 580	231 664	5 191
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
GRANVILLE, NY													
31-33	Manufacturing	-	7	4	571	19 274	376	796	10 037	53 144	34 714	86 610	1 807
GREECE TOWN, NY													
31-33	Manufacturing	-	30	5	930	32 952	657	1 368	18 097	65 108	44 987	109 787	2 003
GREENBURGH TOWN BALANCE, NY *													
31-33	Manufacturing	1	40	7	948	33 205	515	1 089	15 187	124 255	169 398	297 634	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMBURG TOWN BALANCE, NY *													
31-33	Manufacturing	-	28	10	3 490	185 916	2 885	6 448	147 606	415 458	518 035	936 505	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
HAYERSTRAW, NY *													
31-33	Manufacturing	-	13	4	550	15 554	484	885	10 051	36 075	26 608	62 142	D
HEMPSTEAD, NY *													
31-33	Manufacturing	5	38	12	674	20 307	482	829	11 164	44 926	39 292	84 070	2 395
HEMPSTEAD TOWN BALANCE, NY *													
31-33	Manufacturing	2	376	53	4 752	165 052	3 111	5 873	79 154	314 307	330 406	643 867	29 795
325	Chemical mfg	-	7	3	642	39 284	216	358	7 154	54 955	95 865	148 412	18 871
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
HENRIETTA TOWN, NY													
31-33	Manufacturing	1	55	36	3 882	172 018	2 337	4 650	71 139	361 255	268 934	624 238	66 677
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	10	f	D	D	D	D	D	D	D	D
HERKIMER, NY													
31-33	Manufacturing	-	12	3	827	18 346	686	1 501	13 306	36 413	62 730	92 704	4 598
314	Textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	2	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	1	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	2	1	f	D	D	D	D	D	D	D	D
HOOSICK FALLS, NY													
31-33	Manufacturing	-	9	6	615	21 267	493	1 037	15 541	63 458	71 216	135 806	8 352
HORNELL, NY													
31-33	Manufacturing	4	9	6	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	3	2	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	3	2	f	D	D	D	D	D	D	D	D
HORSEHEADS, NY													
31-33	Manufacturing	-	16	9	3 315	89 655	2 283	5 130	60 369	267 468	261 511	529 806	D
334	Computer & electronic product mfg	-	5	4	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	5	4	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	4	h	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	3	3	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
HUDSON, NY													
31-33	Manufacturing	1	31	10	1 290	28 937	983	1 934	19 155	76 885	112 581	188 275	4 223
333	Machinery mfg	-	6	3	f	D	D	D	D	D	D	D	1 882

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HUNTINGTON TOWN BALANCE, NY *													
31-33	Manufacturing	—	182	41	7 956	275 939	4 153	9 131	102 491	1 680 966	1 043 799	2 752 439	42 484
323	Printing & related support activities.....	2	29	6	779	23 215	410	877	13 737	48 269	26 282	75 211	5 625
3231	Printing & related support activities.....	2	29	6	779	23 215	410	877	13 737	48 269	26 282	75 211	5 625
32311	Printing	2	24	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	14	5	680	19 434	329	712	10 645	38 477	23 946	63 075	5 059
325	Chemical mfg	—	10	8	3 133	101 763	1 407	3 436	26 865	1 254 745	745 004	2 018 006	21 559
3254	Pharmaceutical & medicine mfg	—	5	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	4	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	4	4	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ..	—	4	4	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	—	4	4	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	4	6	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	4	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	17	8	1 745	85 757	673	1 502	22 147	208 242	78 791	299 815	8 534
3345	Navigational, measuring, medical, & control instruments mfg	—	5	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	2	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	1	f	D	D	D	D	D	D	D	D
ILION, NY													
31-33	Manufacturing	1	4	3	g	D	D	D	D	D	D	D	2 588
332	Fabricated metal product mfg	—	2	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	1	1	g	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	1	1	g	D	D	D	D	D	D	D	D
ISLIP TOWN BALANCE, NY *													
31-33	Manufacturing	2	809	261	30 278	1 059 957	18 585	36 538	500 885	2 893 322	1 845 239	4 682 473	208 612
311	Food mfg	—	35	8	2 224	77 491	1 197	2 101	38 359	269 646	145 741	415 828	17 787
3118	Bakeries & tortilla mfg	—	26	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	24	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	8	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	15	9	800	14 172	516	1 045	10 057	84 942	34 952	123 268	536
3152	Cut & sew apparel mfg	2	13	7	f	D	D	D	D	D	D	D	536
322	Paper mfg	8	17	7	513	16 497	425	818	12 132	61 402	75 922	137 743	7 489
3222	Converted paper product mfg	8	17	7	513	16 497	425	818	12 132	61 402	75 922	137 743	7 489
323	Printing & related support activities.....	1	120	28	2 136	76 960	1 654	3 057	44 347	192 249	102 253	294 139	9 258
3231	Printing & related support activities.....	1	120	28	2 136	76 960	1 654	3 057	44 347	192 249	102 253	294 139	9 258
32311	Printing	1	108	28	2 074	74 648	1 608	2 969	42 877	185 557	100 787	285 997	9 008
323110	Commercial lithographic printing ..	1	56	14	1 210	47 390	944	1 719	26 914	93 113	52 517	145 938	4 542
325	Chemical mfg	1	34	11	2 015	64 094	1 047	1 930	22 905	228 501	205 871	442 671	21 199
3254	Pharmaceutical & medicine mfg	—	18	8	1 848	56 671	947	1 725	19 520	197 625	191 824	397 372	D
32541	Pharmaceutical & medicine mfg	—	18	8	1 848	56 671	947	1 725	19 520	197 625	191 824	397 372	D
325412	Pharmaceutical preparation mfg	—	12	7	1 725	51 457	848	1 539	17 463	184 543	168 963	361 484	16 701

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ISLIP TOWN BALANCE, NY *—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	6	28	18	1 465	36 756	1 187	2 065	21 515	81 687	71 883	153 865	D
3261	Plastics product mfg	6	25	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	21	13	1 249	29 974	1 027	1 709	16 880	66 538	56 874	123 679	4 085
326199	All other plastics product mfg	5	21	13	1 249	29 974	1 027	1 709	16 880	66 538	56 874	123 679	4 085
332	Fabricated metal product mfg	1	165	33	2 943	108 103	1 842	3 653	54 033	210 840	159 338	367 803	12 811
3323	Architectural & structural metals mfg	1	35	13	1 035	36 967	658	1 349	20 464	65 116	51 807	114 744	2 644
33232	Ornamental & architectural metal products mfg	1	30	10	661	23 575	452	952	13 685	43 771	34 675	75 837	2 073
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	85	10	1 102	37 810	732	1 454	21 983	74 742	43 493	117 019	6 574
33271	Machine shops	1	68	6	642	22 420	463	923	14 628	43 672	22 362	65 330	4 634
332710	Machine shops	1	68	6	642	22 420	463	923	14 628	43 672	22 362	65 330	4 634
333	Machinery mfg	3	73	16	1 233	44 471	795	1 518	22 474	77 813	77 453	154 679	6 492
3332	Industrial machinery mfg ..	1	16	7	504	18 431	300	595	7 706	26 986	34 981	60 210	1 479
334	Computer & electronic product mfg	—	75	44	9 282	379 177	4 655	9 401	144 611	1 072 289	503 301	1 505 847	97 839
3341	Computer & peripheral equipment mfg	—	6	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	6	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	4	2	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	12	10	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	10	9	1 383	59 737	926	2 342	39 381	151 257	86 856	228 733	9 773
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	10	9	1 383	59 737	926	2 342	39 381	151 257	86 856	228 733	9 773
3344	Semiconductor & other electronic component mfg	2	30	20	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	30	20	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	3	3	840	26 477	511	557	15 683	45 153	21 376	67 377	D
3345	Navigational, measuring, medical, & control instruments mfg	1	24	11	1 402	69 892	581	2 629	28 105	123 508	146 329	282 926	7 770
33451	Navigational, measuring, medical, & control instruments mfg	1	24	11	1 402	69 892	581	2 629	28 105	123 508	146 329	282 926	7 770
334515	Electricity measuring & testing instrument mfg	—	4	3	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	—	2	1	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	2	1	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	29	19	1 133	37 922	699	1 408	15 993	93 788	134 014	225 934	3 775
3359	Other electrical equipment & component mfg	—	13	11	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	10	9	630	19 332	404	783	7 486	42 453	47 025	87 694	1 672
335999	All other miscellaneous electrical equipment & component mfg	—	10	9	630	19 332	404	783	7 486	42 453	47 025	87 694	1 672

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ISLIP TOWN BALANCE, NY *—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	4	39	23	2 101	76 136	1 500	3 265	43 051	171 952	114 003	285 754	9 227
3363	Motor vehicle parts mfg ...	5	16	10	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	7	10	8	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	8	9	7	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	17	11	f	D	D	D	D	D	D	D	4 415
33641	Aerospace product & parts mfg	2	17	11	f	D	D	D	D	D	D	D	4 415
336413	Other aircraft part & auxiliary equipment mfg	1	12	7	f	D	D	D	D	D	D	D	2 328
337	Furniture & related product mfg	5	52	7	654	20 500	417	792	11 401	37 984	30 695	69 109	1 437
339	Miscellaneous mfg	5	74	27	3 164	88 919	2 219	4 588	48 197	253 792	138 038	393 742	12 675
3391	Medical equipment & supplies mfg	6	39	12	2 010	59 428	1 361	2 908	31 066	197 074	81 595	278 798	8 430
33911	Medical equipment & supplies mfg	6	39	12	2 010	59 428	1 361	2 908	31 066	197 074	81 595	278 798	8 430
339112	Surgical & medical instrument mfg	9	5	4	1 098	31 025	735	1 661	16 775	76 583	40 339	116 811	5 567
339113	Surgical appliance & supplies mfg	3	6	3	584	17 473	408	891	9 386	95 227	24 761	119 944	1 793
3399	Other miscellaneous mfg ..	3	35	15	1 154	29 491	858	1 680	17 131	56 718	56 443	114 944	4 245
33999	All other miscellaneous mfg	5	11	7	626	14 927	502	990	9 608	34 916	30 629	66 048	3 276
	ITHACA, NY												
31-33	Manufacturing	1	61	17	2 775	96 994	2 007	4 118	60 639	246 969	263 716	515 309	27 339
333	Machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	3	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
	JAMESTOWN, NY												
31-33	Manufacturing	—	83	36	5 056	150 247	3 776	6 831	90 190	405 316	267 596	666 922	54 409
332	Fabricated metal product mfg	—	25	12	1 627	52 718	1 202	2 577	35 090	80 464	58 553	137 697	11 549
337	Furniture & related product mfg	—	13	8	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	9	6	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	6	5	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	4	4	g	D	D	D	D	D	D	D	D
	JOHNSON CITY, NY *												
31-33	Manufacturing	7	24	6	595	16 755	412	807	10 076	22 369	47 302	70 008	D
	JOHNSTOWN, NY												
31-33	Manufacturing	3	40	21	1 629	41 073	1 265	2 558	26 498	93 377	97 397	191 361	D
	KINGSTON, NY												
31-33	Manufacturing	1	51	15	1 027	28 277	690	1 226	15 511	60 921	40 083	103 155	6 502

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LACKAWANNA, NY													
31-33	Manufacturing	-	21	7	861	39 041	656	1 346	28 982	427 497	96 091	523 050	D
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	1	f	D	D	D	D	D	D	D	D
LANCASTER, NY *													
31-33	Manufacturing	2	36	16	1 840	67 942	1 099	2 467	31 961	144 041	115 693	260 840	7 085
336	Transportation equipment mfg	3	2	2	f	D	D	D	D	D	D	D	D
LANCASTER TOWN BALANCE, NY *													
31-33	Manufacturing	-	23	11	886	22 402	670	1 353	14 155	61 943	115 413	176 526	2 773
LINDENHURST, NY *													
31-33	Manufacturing	3	68	9	802	20 496	624	1 147	13 465	49 093	33 193	81 991	1 846
LITTLE FALLS, NY													
31-33	Manufacturing	-	14	10	1 195	39 681	876	1 621	25 020	119 154	95 971	213 216	11 805
LOCKPORT, NY													
31-33	Manufacturing	-	60	24	8 183	454 901	6 489	14 622	348 498	1 104 815	769 633	1 889 365	50 714
332	Fabricated metal product mfg	-	12	6	872	24 655	714	1 581	17 380	59 340	39 023	98 111	2 066
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	i	D	D	D	D	D	D	D	D
LOWVILLE, NY													
31-33	Manufacturing	1	6	4	864	30 306	694	1 533	20 181	72 189	309 469	375 847	12 958
LYONS, NY													
31-33	Manufacturing	2	10	4	809	22 362	677	1 268	15 603	43 542	53 763	97 810	2 502
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
LYSANDER TOWN BALANCE, NY *													
31-33	Manufacturing	-	13	7	2 137	76 290	1 617	2 317	49 020	565 325	335 506	901 780	D
312	Beverage & tobacco product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	g	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	g	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	g	D	D	D	D	D	D	D	D
MALONE, NY													
31-33	Manufacturing	1	7	3	730	14 501	608	1 555	10 861	42 850	21 225	54 311	481
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316212	House slipper mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	MAMARONECK, NY *												
	Manufacturing	1	41	9	600	19 421	434	761	10 654	40 430	80 696	117 148	3 142
31-33	MANLIUS, NY *												
	Manufacturing	-	8	4	1 716	58 209	923	2 054	20 827	160 932	160 473	314 970	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	MASSENA, NY												
	Manufacturing	-	14	7	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	3	3	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	2	2	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	MEDINA, NY												
	Manufacturing	-	14	7	862	22 998	632	1 084	14 714	53 373	65 006	118 861	2 920
31-33	MIDDLETOWN, NY												
	Manufacturing	-	46	15	1 581	44 300	1 172	2 279	30 480	110 409	141 237	256 590	17 775
31-33	MINEOLA, NY *												
	Manufacturing	1	59	20	1 525	41 753	1 095	2 399	25 413	85 962	81 707	182 273	4 363
332	Fabricated metal product mfg	-	11	4	615	16 047	455	1 180	9 667	40 130	50 765	104 685	2 949
31-33	MOUNT KISCO, NY												
	Manufacturing	5	22	7	533	22 989	312	702	9 848	49 380	26 807	76 705	D
31-33	MOUNT VERNON, NY												
	Manufacturing	2	147	53	4 405	142 257	3 015	6 234	74 141	287 052	292 851	602 127	20 666
332	Fabricated metal product mfg	1	32	10	658	21 202	517	1 054	12 990	47 803	25 845	74 022	1 881
333	Machinery mfg	-	6	4	561	17 739	373	779	8 394	41 874	37 242	77 613	843
334	Computer & electronic product mfg	1	8	5	570	15 910	380	735	8 365	30 504	22 982	53 410	3 961
339	Miscellaneous mfg	1	21	7	1 094	36 347	747	1 755	20 546	45 194	99 188	168 961	5 041
3399	Other miscellaneous mfg ..	1	13	4	985	32 072	666	1 601	17 798	37 295	97 734	159 530	D
33991	Jewelry & silverware mfg	-	2	1	f	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWARK, NY													
31-33	Manufacturing	-	18	11	2 451	57 904	1 748	3 532	34 899	111 547	147 300	259 863	17 639
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
NEWBURGH, NY													
31-33	Manufacturing	4	48	14	1 467	28 528	1 179	1 976	18 639	59 176	58 499	116 873	3 684
339	Miscellaneous mfg.....	9	5	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	5	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	9	5	3	f	D	D	D	D	D	D	D	D
NEW HARTFORD TOWN BALANCE, NY *													
31-33	Manufacturing	-	20	11	1 479	52 948	784	1 501	24 349	159 313	128 220	276 591	5 752
NEW HYDE PARK, NY *													
31-33	Manufacturing	2	42	12	1 202	35 670	783	1 681	20 794	101 954	74 908	176 204	6 311
NEW ROCHELLE, NY													
31-33	Manufacturing	1	61	14	1 167	36 815	866	1 882	21 202	84 171	55 630	138 906	3 816
NEW WINDSOR TOWN BALANCE, NY *													
31-33	Manufacturing	-	36	17	2 006	65 201	1 453	2 868	43 882	149 783	271 139	420 745	8 779
326	Plastics & rubber products mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
NEW YORK, NY *													
31-33	Manufacturing	3	10 569	2 541	207 975	5 504 108	149 269	275 201	3 101 482	13 875 950	13 861 999	27 735 815	968 480
311	Food mfg.....	3	1 019	142	15 735	428 336	10 195	18 779	221 553	1 079 797	1 365 920	2 449 017	61 876
3113	Sugar & confectionery product mfg.....	-	32	12	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	14	6	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	14	6	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	6	31	13	1 110	22 977	812	1 381	14 890	71 480	72 821	144 097	D
31141	Frozen food mfg.....	7	14	6	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	7	12	6	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	30	6	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	-	14	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	6	65	22	1 396	40 990	1 056	2 268	27 703	156 786	267 321	423 282	7 495
31161	Animal slaughtering & processing.....	6	65	22	1 396	40 990	1 056	2 268	27 703	156 786	267 321	423 282	7 495
311612	Meat processed from carcasses.....	6	44	19	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	4	760	61	8 281	208 903	4 886	8 097	87 767	431 351	235 830	667 838	D
31181	Bread & bakery product mfg.....	4	720	52	7 214	173 110	4 126	6 876	68 980	334 199	183 786	518 052	23 965
311811	Retail bakeries.....	5	530	14	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	4	183	35	4 644	134 395	2 464	4 629	49 339	246 570	125 131	371 459	19 271
31182	Cookie, cracker, & pasta mfg.....	2	39	9	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	2	16	8	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	85	25	g	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	47	13	1 347	28 723	922	1 518	15 907	73 152	92 406	165 287	3 684
311991	Perishable prepared food mfg.....	-	17	6	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg.....	3	30	7	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	NEW YORK, NY *—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	9	29	12	g	D	D	D	D	D	D	D	
3121	Beverage mfg	9	28	12	g	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg	9	21	9	g	D	D	D	D	D	D	D	
312111	Soft drink mfg	9	15	7	g	D	D	D	D	D	D	D	
313	Textile mills	3	469	110	8 764	322 633	6 213	13 058	150 232	878 046	1 185 454	2 096 514	46 812
3132	Fabric mills	4	135	31	g	D	D	D	D	D	D	D	
31321	Broadwoven fabric mills ..	5	38	9	f	D	D	D	D	D	D	D	
313210	Broadwoven fabric mills	5	38	9	f	D	D	D	D	D	D	D	
31324	Knit fabric mills	3	56	13	g	D	D	D	D	D	D	D	
313241	Weft knit fabric mills ..	4	37	8	565	15 351	442	951	11 132	32 646	49 769	81 450	2 643
313249	Other knit fabric & lace mills	1	19	5	f	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills	2	309	74	i	D	D	D	D	D	D	D	
31331	Textile & fabric finishing mills	2	302	72	5 841	232 782	3 886	8 246	101 997	685 824	890 285	1 609 508	29 740
313311	Broadwoven fabric finishing mills	3	245	57	4 735	189 003	3 183	6 822	83 943	537 897	728 676	1 297 062	23 854
313312	Textile & fabric finishing mills	1	57	15	1 106	43 779	703	1 424	18 054	147 927	161 609	312 446	5 886
314	Textile product mills	3	344	77	5 876	119 994	4 460	7 584	64 325	241 955	313 219	558 168	10 913
3141	Textile furnishings mills....	2	130	30	h	D	D	D	D	D	D	D	
31412	Curtain & linen mills	1	124	28	g	D	D	D	D	D	D	D	
314121	Curtain & drapery mills	2	63	11	g	D	D	D	D	D	D	D	
314129	Other household textile product mills	1	61	17	g	D	D	D	D	D	D	1 315	
3149	Other textile product mills ..	5	214	47	h	D	D	D	D	D	D	D	
31491	Textile bag & canvas mills	6	65	8	f	D	D	D	D	D	D	D	
31499	All other textile product mills	4	149	39	2 761	52 839	2 076	3 569	30 843	91 313	75 856	170 385	6 720
314999	All other miscellaneous textile product mills ..	4	149	39	2 761	52 839	2 076	3 569	30 843	91 313	75 856	170 385	6 720
315	Apparel mfg	4	3 598	1 072	80 364	1 586 247	59 567	101 116	912 266	3 812 680	4 683 253	8 501 957	90 573
3151	Apparel knitting mills	5	252	103	i	D	D	D	D	D	D	D	
31519	Other apparel knitting mills	5	229	102	i	D	D	D	D	D	D	D	
315191	Outerwear knitting mills	5	225	101	i	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg	4	3 005	891	66 552	1 316 670	48 184	79 924	726 934	3 242 954	4 119 072	7 355 824	71 368
31521	Cut & sew apparel contractors	7	1 969	520	k	D	D	D	D	D	D	D	
315211	Men's & boys' cut & sew apparel contractors	5	44	20	1 089	15 605	994	1 679	13 040	27 870	4 025	31 884	579
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	1 925	500	k	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg	2	164	57	h	D	D	D	D	D	D	D	
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	39	16	g	D	D	D	D	D	D	D	
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	26	6	1 008	29 696	592	896	18 846	134 789	171 684	317 601	D
315228	Men's & boys' cut & sew other outerwear mfg	5	69	28	g	D	D	D	D	D	D	D	
31523	Women's & girls' cut & sew apparel mfg	3	706	296	25 443	723 942	13 799	23 592	278 702	2 139 000	3 392 809	5 526 473	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	3	58	18	g	D	D	D	D	D	D	D	
315232	Women's & girls' cut & sew blouse & shirt mfg	4	148	53	3 921	85 764	2 618	4 379	40 875	323 971	548 309	866 812	D
315233	Women's & girls' cut & sew dress mfg	3	245	111	i	D	D	D	D	D	D	D	
315234	Women's & girls' cut & sew suit, coat, skirt mfg	2	137	62	i	D	D	D	D	D	D	D	
315239	Women's & girls' cut & sew other outerwear mfg	5	118	52	4 835	162 829	2 138	3 526	37 715	394 973	538 869	942 672	D
31529	Other cut & sew apparel mfg	4	166	18	g	D	D	D	D	D	D	D	
315292	Fur & leather apparel mfg	6	121	7	608	16 222	409	759	8 434	44 019	71 639	114 601	1 471
315299	All other cut & sew apparel mfg	1	45	11	f	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NEW YORK, NY *—Con.													
	Manufacturing—Con.													
315	Apparel mfg—Con.													
3159	Apparel accessories & other apparel mfg	2	341	78	i	D	D	D	D	D	D	D	D	
31599	Apparel accessories & other apparel mfg	2	341	78	i	D	D	D	D	D	D	D	D	
315991	Hat, cap, & millinery mfg	1	73	15	g	D	D	D	D	D	D	D	D	
315993	Men's & boys' neckwear mfg	1	48	19	g	D	D	D	D	D	D	D	D	
315999	Other apparel accessories & other apparel mfg	2	215	41	h	D	D	D	D	D	D	D	D	
316	Leather & allied product mfg	2	138	30		2 633	57 474	1 754	3 288	31 284	156 485	138 899	297 254	3 535
3169	Other leather & allied product mfg	1	96	21		2 051	44 774	1 427	2 649	24 462	125 054	93 814	220 784	2 581
31699	Other leather & allied product mfg	1	96	21		2 051	44 774	1 427	2 649	24 462	125 054	93 814	220 784	2 581
316991	Luggage mfg	1	23	7	f	D	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	2	42	7	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg	3	59	14		845	23 178	678	1 313	16 488	40 558	34 471	75 442	D
3219	Other wood product mfg	3	56	14	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	4	121	58		5 111	164 896	3 842	6 754	95 074	301 922	347 036	650 205	D
3222	Converted paper product mfg	4	119	57	h	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	6	35	21		1 940	63 878	1 532	2 753	38 173	126 076	168 124	294 889	D
322211	Corrugated & solid fiber box mfg	7	12	6	f	D	D	D	D	D	D	D	D	D
322213	Setup paperboard box mfg	2	7	4	f	D	D	D	D	D	D	D	D	D
32223	Stationery product mfg	2	43	22	g	D	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	4	25	12		921	20 509	769	1 362	14 067	40 931	21 868	62 965	D
322232	Envelope mfg	1	12	9	f	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	7	17	9		630	21 127	354	566	8 077	32 021	54 267	87 559	D
322299	All other converted paper product mfg	7	17	9		630	21 127	354	566	8 077	32 021	54 267	87 559	D
323	Printing & related support activities	5	1 265	238		19 148	726 989	13 970	27 818	462 199	1 903 597	862 192	2 761 169	420 282
3231	Printing & related support activities	5	1 265	238		19 148	726 989	13 970	27 818	462 199	1 903 597	862 192	2 761 169	420 282
32311	Printing	5	1 041	177		14 553	552 682	10 532	20 914	349 709	1 576 305	783 252	2 354 803	407 409
323110	Commercial lithographic printing	5	561	105		9 144	398 951	6 475	12 957	255 802	1 251 049	556 267	1 807 353	388 102
323113	Commercial screen printing	7	92	19		1 282	30 273	1 026	1 689	17 923	75 881	69 841	143 974	D
323114	Quick printing	2	142	9		827	27 089	575	994	16 834	51 988	34 900	86 751	D
323118	Blankbook, looseleaf binder, & device mfg	7	16	9		901	19 329	757	1 901	14 430	33 596	23 636	56 557	D
323119	Other commercial printing	6	128	10		1 158	31 996	800	1 518	18 757	63 777	42 317	106 637	D
32312	Support activities for printing	3	224	61		4 595	174 307	3 438	6 904	112 490	327 292	78 940	406 366	12 873
323121	Tradebinding & related work	3	62	27		1 692	44 843	1 432	2 721	31 136	78 843	14 881	93 768	2 986
323122	Prepress services	3	162	34		2 903	129 464	2 006	4 183	81 354	248 449	64 059	312 598	9 887
325	Chemical mfg	2	157	46		6 332	237 460	3 923	8 762	126 617	1 009 573	627 680	1 605 624	54 055
3251	Basic chemical mfg	—	16	5	f	D	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	13	5		2 085	83 161	1 397	3 367	53 701	502 544	175 747	641 034	D
32541	Pharmaceutical & medicine mfg	—	13	5		2 085	83 161	1 397	3 367	53 701	502 544	175 747	641 034	D
325412	Pharmaceutical preparation mfg	—	7	5	g	D	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	5	36	9		693	24 574	413	826	11 012	69 334	105 478	178 866	D
3256	Soap, cleaning compound, & toilet preparation mfg	5	66	19		2 125	71 125	1 251	2 583	31 455	189 838	156 734	345 774	14 443
32562	Toilet preparation mfg	5	35	10		1 715	54 519	993	2 129	24 605	140 837	110 165	249 700	11 973
325620	Toilet preparation mfg	5	35	10		1 715	54 519	993	2 129	24 605	140 837	110 165	249 700	11 973

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	NEW YORK, NY *—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	2	187	78	6 128	148 119	4 686	8 786	88 370	362 675	358 501	718 292	20 732
3261	Plastics product mfg	2	166	74	i	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	2	44	23	g	D	D	D	D	D	D	5 245	D
326111	Unsupported plastics bag mfg	2	29	16	920	26 887	691	1 383	16 437	69 693	69 543	138 695	D
32619	Other plastics product mfg	2	108	45	3 830	82 614	3 002	5 483	50 188	199 503	169 103	366 268	12 467
326199	All other plastics product mfg	2	107	45	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	129	26	1 757	55 811	1 342	2 633	38 587	137 293	132 738	270 399	D
3272	Glass & glass product mfg	3	44	7	604	14 564	452	874	9 011	32 493	23 858	56 203	D
32721	Glass & glass product mfg	3	44	7	604	14 564	452	874	9 011	32 493	23 858	56 203	D
327215	Glass product mfg made of purchased glass	3	37	7	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	42	12	553	24 536	422	848	17 177	65 669	83 319	149 427	D
331	Primary metal mfg	2	56	12	773	23 309	525	993	12 559	52 371	119 242	171 591	D
332	Fabricated metal product mfg	3	557	139	9 778	284 745	7 169	13 876	173 537	569 895	399 012	973 855	39 051
3321	Forging & stamping	4	39	13	670	20 290	461	815	11 549	40 609	33 883	74 648	1 714
33211	Forging & stamping	4	39	13	670	20 290	461	815	11 549	40 609	33 883	74 648	1 714
332116	Metal stamping	5	33	10	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	3	23	10	f	D	D	D	D	D	D	D	1 441
33221	Cutlery & handtool mfg	3	23	10	f	D	D	D	D	D	D	D	1 441
3323	Architectural & structural metals mfg	2	193	51	3 490	112 315	2 477	5 005	67 395	220 445	171 211	390 826	7 216
33231	Plate work & fabricated structural product mfg	1	34	4	550	19 598	326	774	7 693	36 192	25 603	61 649	962
33232	Ornamental & architectural metal products mfg	2	159	47	2 940	92 717	2 151	4 231	59 702	184 253	145 608	329 177	6 254
332321	Metal window & door mfg	3	45	17	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	3	61	21	1 332	45 709	1 012	1 985	31 322	84 155	59 535	143 623	3 330
332323	Ornamental & architectural metal work mfg	2	53	9	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
33251	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
332510	Hardware mfg	—	14	7	604	16 744	404	796	10 302	42 950	26 086	71 376	1 596
3326	Spring & wire product mfg	8	25	3	f	D	D	D	D	D	D	D	3 126
33261	Spring & wire product mfg	8	25	3	f	D	D	D	D	D	D	D	3 126
332618	Other fabricated wire product mfg	8	21	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	99	10	g	D	D	D	D	D	D	D	3 518
33271	Machine shops	5	86	8	768	21 656	605	1 050	14 049	41 041	19 033	60 421	2 447
332710	Machine shops	5	86	8	768	21 656	605	1 050	14 049	41 041	19 033	60 421	2 447
3328	Coating, engraving, heat treating, & allied activities	1	80	19	1 143	28 570	910	1 753	18 343	60 995	23 798	84 950	D
33281	Coating, engraving, heat treating, & allied activities	1	80	19	1 143	28 570	910	1 753	18 343	60 995	23 798	84 950	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	57	14	861	20 146	672	1 321	12 679	45 962	16 693	62 754	D
3329	Other fabricated metal product mfg	3	67	21	1 102	32 468	789	1 478	18 468	60 069	53 917	115 580	D
33299	All other fabricated metal product mfg	3	60	18	f	D	D	D	D	D	D	D	2 200
332999	All other miscellaneous fabricated metal product mfg	3	33	13	605	17 046	429	817	10 030	31 516	28 040	59 211	1 488

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	NEW YORK, NY *—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	3	197	46	3 872	125 983	2 623	4 451	66 686	255 891	190 788	445 144	10 625
3332	Industrial machinery mfg ..	5	55	9	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	5	53	8	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	2	21	4	579	19 816	378	315	8 757	46 097	32 546	78 331	D
33331	Commercial & service industry machinery mfg	2	21	4	579	19 816	378	315	8 757	46 097	32 546	78 331	D
333319	Other commercial & service industry machinery mfg	1	11	3	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	19	10	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	19	10	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	44	18	1 471	50 736	921	1 780	24 925	99 572	68 477	166 424	2 977
33392	Material handling equipment mfg	3	18	8	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	3	12	7	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	22	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	174	39	3 816	137 039	2 149	4 586	56 305	336 366	241 093	572 725	23 386
3342	Communications equipment mfg	1	24	9	833	28 436	469	1 286	10 499	85 290	83 170	167 673	2 912
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	13	5	620	19 938	358	1 056	7 430	61 063	61 825	122 338	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	13	5	620	19 938	358	1 056	7 430	61 063	61 825	122 338	D
3344	Semiconductor & other electronic component mfg	3	23	10	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	3	23	10	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	2	10	6	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	4	40	8	960	42 927	419	826	12 945	100 089	57 601	151 788	D
33451	Navigational, measuring, medical, & control instruments mfg	4	40	8	960	42 927	419	826	12 945	100 089	57 601	151 788	D
3346	Mfg & reproducing magnetic & optical media ..	4	52	11	851	32 454	542	1 124	16 507	75 971	44 402	121 195	D
33461	Mfg & reproducing magnetic & optical media	4	52	11	851	32 454	542	1 124	16 507	75 971	44 402	121 195	D
334612	Prerecorded CD (except software), tape, & record reproducing	2	45	8	f	D	D	D	D	D	D	D	7 961
335	Electrical equipment, appliance, & component mfg	1	92	36	3 732	109 415	2 610	4 385	52 663	306 746	176 908	477 662	11 674
3351	Electric lighting equipment mfg	1	57	19	1 704	59 807	1 263	2 465	29 848	158 107	99 633	258 002	D
33512	Lighting fixture mfg	1	57	19	1 704	59 807	1 263	2 465	29 848	158 107	99 633	258 002	D
335121	Residential electric lighting fixture mfg ...	1	37	10	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	17	7	814	37 324	577	1 150	17 390	94 759	47 942	143 139	1 997
3359	Other electrical equipment & component mfg	1	18	11	1 806	41 545	1 188	1 600	18 133	132 749	65 603	191 753	8 209
33593	Wiring device mfg	2	9	3	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	6	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NEW YORK, NY *—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	1	70	21	3 082	115 328	1 817	3 901	54 092	298 577	268 591	599 258	D
3363	Motor vehicle parts mfg . . .	—	33	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	14	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	13	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	2	12	6	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	2	12	6	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	9	3	646	24 465	528	1 082	15 281	56 580	21 190	80 050	D
337	Furniture & related product mfg	3	470	86	5 779	154 255	4 454	8 091	100 328	289 506	224 834	512 599	10 234
3371	Household & institutional furniture & kitchen cabinet mfg	4	324	42	3 099	75 328	2 532	4 654	54 421	144 550	115 840	260 401	5 805
33711	Wood kitchen cabinet & counter top mfg	5	99	5	586	13 416	488	829	10 269	22 997	16 775	39 796	1 146
337110	Wood kitchen cabinet & counter top mfg . . .	5	99	5	586	13 416	488	829	10 269	22 997	16 775	39 796	1 146
33712	Household & institutional furniture mfg	4	225	37	2 513	61 912	2 044	3 825	44 152	121 553	99 065	220 605	4 659
337122	Nonupholstered wood household furniture mfg	6	114	14	1 076	25 376	910	1 706	19 381	44 903	37 190	81 958	1 780
337127	Institutional furniture mfg	3	27	10	f	D	D	D	D	D	D	D	665
3372	Office furniture (including fixtures) mfg	2	112	36	2 242	70 018	1 610	2 927	40 679	128 493	84 254	210 815	3 186
33721	Office furniture (including fixtures) mfg	2	112	36	2 242	70 018	1 610	2 927	40 679	128 493	84 254	210 815	3 186
337212	Custom architectural woodwork & millwork mfg	—	29	9	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	66	22	1 212	33 884	932	1 631	19 552	65 055	47 658	112 041	D
339	Miscellaneous mfg	2	1 429	258	22 386	616 949	15 788	29 602	335 918	1 551 807	1 836 588	3 353 421	46 429
3391	Medical equipment & supplies mfg	7	235	18	1 484	40 612	1 044	1 694	21 335	85 307	44 253	131 376	4 713
33911	Medical equipment & supplies mfg	7	235	18	1 484	40 612	1 044	1 694	21 335	85 307	44 253	131 376	4 713
339116	Dental laboratories . . .	7	168	5	788	19 990	582	970	11 799	42 616	20 113	64 083	D
3399	Other miscellaneous mfg . .	2	1 194	240	20 902	576 337	14 744	27 908	314 583	1 466 500	1 792 335	3 222 045	41 716
33991	Jewelry & silverware mfg	2	755	126	10 444	294 136	6 987	12 610	146 175	878 251	1 396 762	2 238 479	D
339911	Jewelry (except costume) mfg	2	535	87	8 014	234 026	5 303	9 773	116 348	738 795	1 071 513	1 776 855	D
339913	Jewelers' material & lapidary work mfg . . .	1	114	16	g	D	D	D	D	D	D	D	D
339914	Costume jewelry & novelty mfg	4	96	19	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg . . .	3	36	7	949	25 046	742	1 557	17 204	57 224	54 948	112 962	2 086
339931	Doll & stuffed toy mfg . .	1	23	5	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	1	37	9	1 345	27 038	1 021	2 328	17 471	90 566	57 163	150 939	5 414
339942	Lead pencil & art good mfg	—	6	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	3	126	32	2 614	81 024	1 801	3 383	42 484	144 024	100 065	242 883	4 745
339950	Sign mfg	3	126	32	2 614	81 024	1 801	3 383	42 484	144 024	100 065	242 883	4 745
33999	All other miscellaneous mfg	2	228	64	5 318	143 534	4 012	7 637	87 613	285 055	178 250	460 266	13 721
339992	Musical instrument mfg	—	20	4	733	26 864	564	1 249	17 878	65 088	22 379	84 069	1 769
339993	Fastener, button, needle, & pin mfg	2	45	12	819	19 810	611	1 185	11 367	39 970	34 409	76 292	D
339994	Broom, brush, & mop mfg	2	17	10	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	140	37	2 462	65 167	1 756	3 020	38 563	132 540	74 962	207 430	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NIAGARA FALLS, NY													
31-33	Manufacturing	-	69	30	3 942	183 667	2 722	5 722	113 963	683 992	559 753	1 233 970	140 710
325	Chemical mfg	-	12	11	1 813	103 365	1 189	2 679	61 564	299 728	270 647	567 658	96 414
3251	Basic chemical mfg	-	8	8	1 637	95 624	1 087	2 467	57 136	277 185	248 045	521 923	D
32518	Other basic inorganic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	3	629	39 063	429	996	23 321	109 035	113 288	229 415	D
325199	All other basic organic chemical mfg	-	3	3	629	39 063	429	996	23 321	109 035	113 288	229 415	D
NORTH CASTLE TOWN, NY													
31-33	Manufacturing	-	18	8	566	24 681	363	789	12 485	58 659	60 732	119 227	5 465
NORTH HEMPSTEAD TOWN BALANCE, NY *													
31-33	Manufacturing	2	200	50	6 793	287 003	3 758	7 551	129 343	539 300	335 751	866 066	38 928
325	Chemical mfg	2	7	3	757	25 879	270	501	6 608	56 241	41 809	95 912	D
3254	Pharmaceutical & medicine mfg	2	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	2	3	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	2	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	7	977	44 359	585	1 268	19 461	125 019	30 814	152 070	6 443
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	15	5	602	21 871	394	802	10 623	50 910	51 620	100 379	4 021
334	Computer & electronic product mfg	-	13	3	1 981	120 021	790	1 733	51 057	129 650	54 310	183 638	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	7	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	1	g	D	D	D	D	D	D	D	D
NORTH TONAWANDA, NY													
31-33	Manufacturing	5	61	26	2 131	72 569	1 531	3 105	42 675	300 857	219 214	522 227	14 193
332	Fabricated metal product mfg	-	17	5	557	21 215	397	817	12 580	45 773	10 576	56 283	3 784
333	Machinery mfg	-	11	8	551	20 937	376	863	12 759	47 272	49 385	96 482	4 231
NORWICH, NY													
31-33	Manufacturing	1	15	5	891	29 016	632	1 396	17 333	48 485	44 236	97 216	2 413
NYACK, NY *													
31-33	Manufacturing	-	8	2	671	19 542	467	1 084	8 937	51 448	48 072	95 870	D
OGDENSBURG, NY													
31-33	Manufacturing	2	18	7	757	16 559	446	908	8 045	103 013	87 726	191 089	1 800

Table 4. Industry Statistics for Places: 1997—Con.

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OLEAN, NY													
31-33	Manufacturing	1	20	11	2 994	105 075	2 318	4 979	79 196	394 390	296 284	666 391	20 626
325	Chemical mfg	2	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
ONEIDA, NY													
31-33	Manufacturing	-	12	6	516	15 113	438	922	9 917	49 918	159 767	209 400	6 611
ONEONTA, NY													
31-33	Manufacturing	2	22	8	818	22 993	652	1 304	14 348	86 341	41 762	127 624	6 826
ORANGETOWN TOWN BALANCE, NY *													
31-33	Manufacturing	1	76	26	4 702	205 737	2 840	5 964	106 529	711 652	450 196	1 233 690	123 550
325	Chemical mfg	-	6	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	6	5	619	20 549	488	1 028	13 981	49 629	46 375	95 916	D
3261	Plastics product mfg	5	5	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
ORCHARD PARK TOWN BALANCE, NY *													
31-33	Manufacturing	-	43	23	2 035	75 964	1 349	2 577	37 680	157 685	112 320	265 919	9 614
OSWEGO, NY													
31-33	Manufacturing	-	22	5	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D
OWEGO, NY *													
31-33	Manufacturing	-	15	5	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OYSTER BAY TOWN BALANCE, NY *												
31-33	Manufacturing	1	377	100	14 195	572 193	7 822	14 250	217 219	2 026 739	1 257 905	3 294 598	68 866
311	Food mfg	1	28	7	581	13 389	337	626	7 499	62 573	36 459	98 770	3 763
323	Printing & related support activities	1	87	13	1 402	55 280	1 062	2 316	39 059	99 343	56 758	156 237	6 680
3231	Printing & related support activities	1	87	13	1 402	55 280	1 062	2 316	39 059	99 343	56 758	156 237	6 680
32311	Printing	1	73	12	1 000	39 371	720	1 442	24 957	81 489	55 616	137 234	6 512
323110	Commercial lithographic printing ..	-	34	10	719	31 168	539	1 090	20 166	65 772	44 945	110 778	5 087
326	Plastics & rubber products mfg	1	21	8	763	22 443	615	1 140	13 085	48 198	35 504	83 115	1 573
3261	Plastics product mfg	1	20	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	43	13	751	25 434	556	1 107	14 341	61 668	35 623	97 747	2 952
333	Machinery mfg	-	19	8	779	35 345	439	908	14 086	80 089	99 026	169 020	1 969
334	Computer & electronic product mfg	-	32	20	3 886	172 813	1 825	3 444	59 794	573 978	320 148	866 962	23 738
3342	Communications equipment mfg	1	8	6	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	13	9	g	D	D	D	D	D	D	D	12 106
33451	Navigational, measuring, medical, & control instruments mfg	-	13	9	g	D	D	D	D	D	D	D	12 106
334511	Search, detection, navigation, & guidance instrument mfg	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	20	2	898	11 704	654	638	7 594	25 896	15 435	42 485	677
3372	Office furniture (including fixtures) mfg	4	9	2	868	11 176	627	602	7 197	24 862	14 495	40 508	625
33721	Office furniture (including fixtures) mfg	4	9	2	868	11 176	627	602	7 197	24 862	14 495	40 508	625
337215	Showcase, partition, shelving, & locker mfg	4	5	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	48	6	593	17 084	431	801	8 821	32 818	38 188	70 637	1 488
	PALMYRA, NY												
31-33	Manufacturing	-	9	7	1 590	57 195	1 153	2 476	37 907	174 375	100 515	274 083	D
326	Plastics & rubber products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENFIELD TOWN, NY													
31-33	Manufacturing	1	21	2	839	33 551	554	1 060	16 736	99 688	43 246	141 639	6 904
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
PERINTON TOWN BALANCE, NY *													
31-33	Manufacturing	1	37	18	1 545	49 165	995	1 942	25 636	121 601	78 489	195 479	14 330
334	Computer & electronic product mfg	-	8	5	580	19 073	277	558	6 682	47 068	31 182	75 811	2 732
PERRY, NY													
31-33	Manufacturing	4	6	4	843	21 683	738	1 501	15 909	41 296	22 122	54 621	D
323	Printing & related support activities	8	3	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	8	3	2	f	D	D	D	D	D	D	D	D
32311	Printing	8	3	2	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	8	3	2	f	D	D	D	D	D	D	D	D
PITTSFORD TOWN, NY													
31-33	Manufacturing	5	28	8	1 383	46 975	867	1 821	20 505	111 523	63 691	178 712	4 772
332	Fabricated metal product mfg	9	3	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	9	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	9	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	9	1	1	f	D	D	D	D	D	D	D	D
PLATTSBURGH, NY													
31-33	Manufacturing	1	54	19	2 459	73 087	1 914	3 797	50 600	220 743	213 880	435 758	D
322	Paper mfg	-	5	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	5	5	f	D	D	D	D	D	D	D	D
PORT CHESTER, NY													
31-33	Manufacturing	1	42	13	1 054	30 753	813	1 989	18 927	70 946	66 517	137 145	6 421
PORT JERVIS, NY													
31-33	Manufacturing	3	17	10	1 424	31 358	1 076	2 089	18 480	63 484	37 841	101 275	4 413
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
POUGHKEEPSIE, NY													
31-33	Manufacturing	-	38	15	h	D	D	D	D	D	D	D	18 962
334	Computer & electronic product mfg	-	3	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	3	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	9	1	1	f	D	D	D	D	D	D	D	D
POUGHKEEPSIE TOWN BALANCE, NY *													
31-33	Manufacturing	1	34	12	878	24 754	649	1 166	13 107	78 430	50 469	127 756	4 789

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
QUEENSBURY TOWN, NY													
31-33	Manufacturing	1	27	6	f	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	-	7	1	f	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg.....	-	4	1	f	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg.....	-	4	1	f	D	D	D	D	D	D	D	
339112	Surgical & medical instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	
RENSELAER, NY													
31-33	Manufacturing	2	15	4	1 146	44 845	641	1 044	15 999	58 919	168 252	233 305	12 424
325	Chemical mfg.....	3	2	2	f	D	D	D	D	D	D	D	
RIVERHEAD TOWN, NY													
31-33	Manufacturing	2	36	7	793	31 370	515	984	15 118	57 507	55 890	113 000	1 479
ROCHESTER, NY													
31-33	Manufacturing	-	533	201	51 405	2 218 800	31 693	70 150	1 198 572	7 098 433	5 086 305	12 269 688	492 044
311	Food mfg.....	6	37	8	914	24 487	538	1 031	12 376	73 956	146 489	219 877	6 020
312	Beverage & tobacco product mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
31212	Breweries.....	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	2	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	4	16	9	870	28 970	624	1 367	17 841	64 521	80 486	144 416	5 235
3222	Converted paper product mfg.....	4	15	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	80	19	1 458	51 053	1 048	2 049	30 909	89 548	57 392	147 582	12 566
3231	Printing & related support activities.....	1	80	19	1 458	51 053	1 048	2 049	30 909	89 548	57 392	147 582	12 566
32311	Printing.....	1	67	12	1 030	36 216	737	1 402	22 389	63 146	49 025	112 881	D
323110	Commercial lithographic printing..	-	41	8	783	29 086	561	1 093	18 249	49 462	38 293	88 433	8 315
325	Chemical mfg.....	-	20	10	j	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg..	-	4	3	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	10	4	j	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	7	3	j	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg.....	-	4	2	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	3	15	8	706	19 006	555	1 041	12 922	36 180	29 559	65 777	1 893
3261	Plastics product mfg.....	3	15	8	706	19 006	555	1 041	12 922	36 180	29 559	65 777	1 893
32619	Other plastics product mfg.....	4	11	5	500	14 947	389	848	10 103	27 108	20 075	47 184	1 521

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ROCHESTER, NY—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	128	47	4 155	130 944	3 120	6 122	87 612	282 692	176 483	458 398	21 305
3321	Forging & stamping	—	12	8	719	22 624	536	1 195	15 311	47 535	59 784	106 059	5 600
33211	Forging & stamping	—	12	8	719	22 624	536	1 195	15 311	47 535	59 784	106 059	5 600
332116	Metal stamping	—	7	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	19	7	560	19 064	448	831	12 633	44 339	21 829	65 805	1 851
33232	Ornamental & architectural metal products mfg	1	15	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	67	24	2 002	60 421	1 528	3 000	42 976	117 962	70 773	187 940	10 886
33271	Machine shops	1	44	11	1 238	34 397	934	1 676	25 211	67 783	43 081	110 438	5 595
332710	Machine shops	1	44	11	1 238	34 397	934	1 676	25 211	67 783	43 081	110 438	5 595
33272	Turned product & screw, nut, & bolt mfg	1	23	13	764	26 024	594	1 324	17 765	50 179	27 692	77 502	5 291
332721	Precision turned product mfg	1	18	13	742	25 415	576	1 296	17 345	49 065	26 745	75 435	D
333	Machinery mfg	—	86	37	h	D	D	D	D	D	D	D	19 742
3333	Commercial & service industry machinery mfg ..	1	18	7	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	1	18	7	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	50	22	2 598	105 701	1 633	3 224	58 370	209 827	158 317	370 152	11 945
33351	Metalworking machinery mfg	1	50	22	2 598	105 701	1 633	3 224	58 370	209 827	158 317	370 152	11 945
333512	Machine tool (metal cutting types) mfg ...	—	4	4	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	31	23	3 796	158 235	2 099	4 062	69 835	356 429	163 648	525 172	15 542
3342	Communications equipment mfg	—	7	6	2 246	99 643	1 152	2 332	45 628	230 370	98 567	332 535	6 879
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	4	4	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	4	4	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	8	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	8	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	14	10	907	35 829	523	1 028	15 961	73 481	38 900	114 032	5 598
33451	Navigational, measuring, medical, & control instruments mfg	—	14	10	907	35 829	523	1 028	15 961	73 481	38 900	114 032	5 598
335	Electrical equipment, appliance, & component mfg	—	6	3	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	3	2	h	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	h	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	4	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	5	4	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	3	2	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	3	2	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	9	18	2	507	14 056	390	750	8 808	25 910	23 264	48 992	1 157

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCHESTER, NY—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	43	16	3 428	119 046	2 620	6 218	89 206	299 850	61 170	363 170	D
3391	Medical equipment & supplies mfg	1	21	9	2 889	102 552	2 301	5 614	81 795	266 374	33 577	302 165	D
33911	Medical equipment & supplies mfg	1	21	9	2 889	102 552	2 301	5 614	81 795	266 374	33 577	302 165	D
339115	Ophthalmic goods mfg	—	8	5	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	3	22	7	539	16 494	319	604	7 411	33 476	27 593	61 005	1 531
ROME, NY													
31-33	Manufacturing	3	49	21	2 278	72 865	1 579	3 135	44 257	148 075	390 177	547 484	15 520
331	Primary metal mfg	—	3	3	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	2	2	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	9	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	9	3	3	f	D	D	D	D	D	D	D	D
SALAMANCA, NY													
31-33	Manufacturing	3	10	7	589	11 811	454	895	7 385	24 412	26 080	50 835	1 256
SALINA TOWN BALANCE, NY *													
31-33	Manufacturing	2	49	16	1 651	54 962	1 128	2 365	30 397	112 281	84 823	198 247	9 974
SARATOGA SPRINGS, NY													
31-33	Manufacturing	—	28	9	1 782	59 533	1 443	3 048	46 328	174 855	196 401	373 977	4 777
323	Printing & related support activities	—	4	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	4	1	f	D	D	D	D	D	D	D	D
32311	Printing	—	4	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	2	1	f	D	D	D	D	D	D	D	D
SAUGERTIES, NY *													
31-33	Manufacturing	—	17	6	892	28 593	637	1 367	16 532	73 741	83 393	155 211	5 265
323	Printing & related support activities	—	3	3	551	16 711	449	952	11 753	44 321	51 104	93 834	D
3231	Printing & related support activities	—	3	3	551	16 711	449	952	11 753	44 321	51 104	93 834	D
32311	Printing	—	3	3	551	16 711	449	952	11 753	44 321	51 104	93 834	D
SCHENECTADY, NY													
31-33	Manufacturing	—	66	18	3 401	154 864	2 592	5 573	109 167	568 643	680 537	1 302 892	38 273
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	2	2	g	D	D	D	D	D	D	D	D
SCHODACK TOWN, NY													
31-33	Manufacturing	7	8	6	600	20 398	423	883	12 944	27 014	40 370	68 435	7 055

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SENECA FALLS, NY													
31-33	Manufacturing	-	10	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
SHERRILL, NY													
31-33	Manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	2	1	g	D	D	D	D	D	D	D	D
339912	Silverware & plated ware mfg	-	2	1	g	D	D	D	D	D	D	D	D
SIDNEY, NY													
31-33	Manufacturing	-	6	6	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	1	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	1	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	g	D	D	D	D	D	D	D	D
SMITHTOWN TOWN, NY													
31-33	Manufacturing	1	203	86	7 686	297 208	4 797	9 337	130 239	701 960	688 557	1 418 745	59 591
322	Paper mfg	4	7	6	606	21 394	425	814	12 742	57 128	63 260	120 256	4 302
323	Printing & related support activities	4	32	10	542	18 999	426	825	12 653	40 737	29 828	71 153	5 896
3231	Printing & related support activities	4	32	10	542	18 999	426	825	12 653	40 737	29 828	71 153	5 896
32311	Printing	4	28	10	535	18 660	420	813	12 419	40 066	29 664	70 320	5 855
325	Chemical mfg	3	11	9	1 084	31 712	748	1 362	16 101	77 165	72 578	150 991	13 948
3254	Pharmaceutical & medicine mfg	4	6	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	4	6	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	24	13	2 177	115 824	936	1 732	29 913	275 057	336 528	640 690	22 138
3342	Communications equipment mfg	-	7	5	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	688	37 130	416	670	12 991	91 512	83 565	176 475	8 581
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	688	37 130	416	670	12 991	91 512	83 565	176 475	8 581
3344	Semiconductor & other electronic component mfg	-	7	3	759	42 726	124	270	4 330	43 175	103 663	178 191	9 384
33441	Semiconductor & other electronic component mfg	-	7	3	759	42 726	124	270	4 330	43 175	103 663	178 191	9 384
334413	Semiconductor & related device mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	7	8	4	593	21 575	365	912	10 949	39 222	23 387	62 890	2 831
3353	Electrical equipment mfg ..	7	6	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	7	6	3	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOLVAY, NY *												
31-33	Manufacturing	-	10	7	633	21 920	514	1 092	16 465	62 716	43 305	104 630	6 744
	SOUTHEAST TOWN, NY												
31-33	Manufacturing	2	27	8	789	28 405	561	1 176	15 638	72 095	38 571	110 482	7 855
	SUFFERN, NY *												
31-33	Manufacturing	-	15	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
	SYRACUSE, NY												
31-33	Manufacturing	-	163	55	10 193	409 522	5 800	11 417	183 090	1 111 876	806 731	1 958 056	41 811
323	Printing & related support activities	1	29	8	556	16 207	357	694	9 923	30 774	24 642	55 467	1 759
3231	Printing & related support activities	1	29	8	556	16 207	357	694	9 923	30 774	24 642	55 467	1 759
332	Fabricated metal product mfg	-	18	9	816	28 336	618	1 244	17 979	56 729	37 617	93 587	4 700
333	Machinery mfg	-	18	10	2 177	103 995	1 286	2 922	56 849	299 071	391 888	695 353	9 903
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	20	4	1 057	33 550	891	1 713	24 558	65 851	16 534	83 609	2 872
3391	Medical equipment & supplies mfg	-	10	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	10	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	1	f	D	D	D	D	D	D	D	D
	TONAWANDA, NY												
31-33	Manufacturing	-	54	19	3 108	121 808	2 327	4 856	86 110	345 749	310 788	658 410	35 672
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TONAWANDA TOWN BALANCE, NY *													
31-33	Manufacturing	-	75	39	7 677	383 561	6 220	13 902	305 617	907 013	2 300 931	3 232 242	72 737
326	Plastics & rubber products mfg	-	5	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	3	2	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	3	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
TROY, NY													
31-33	Manufacturing	2	41	14	1 727	53 208	749	1 475	20 694	77 144	110 201	196 881	6 741
333	Machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
UNION TOWN BALANCE, NY *													
31-33	Manufacturing	-	26	14	2 692	92 446	1 518	3 085	34 954	171 412	125 931	293 530	D
334	Computer & electronic product mfg	-	7	5	2 003	75 974	954	2 009	23 576	140 519	97 354	234 520	D
3344	Semiconductor & other electronic component mfg	1	3	3	f	D	D	D	D	D	D	D	2 099
33441	Semiconductor & other electronic component mfg	1	3	3	f	D	D	D	D	D	D	D	2 099
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
UTICA, NY													
31-33	Manufacturing	2	102	32	4 095	118 687	2 732	4 955	60 487	251 483	256 992	509 177	18 137
314	Textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	3	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	6	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	4	3	742	27 700	385	737	11 003	41 051	41 318	82 537	D
33451	Navigational, measuring, medical, & control instruments mfg	2	4	3	742	27 700	385	737	11 003	41 051	41 318	82 537	D
334510	Electromedical & electrotherapeutic apparatus mfg	1	2	2	f	D	D	D	D	D	D	D	D
VAN BUREN TOWN BALANCE, NY *													
31-33	Manufacturing	-	10	5	610	18 474	437	831	9 127	32 310	44 083	79 484	2 157

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VESTAL TOWN, NY												
	Manufacturing	2	23	14	982	25 664	753	1 465	17 259	64 250	67 818	129 182	5 205
	WATERTOWN, NY												
31-33	Manufacturing	1	41	15	1 855	56 049	1 198	2 307	30 249	138 761	137 269	279 929	8 141
	WATERVLIET, NY												
31-33	Manufacturing	3	19	6	844	37 675	554	1 015	21 069	43 293	94 473	136 258	D
	WEBSTER, NY *												
31-33	Manufacturing	-	10	4	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	h	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
	WEBSTER TOWN BALANCE, NY *												
31-33	Manufacturing	-	21	7	946	31 126	690	1 426	17 784	76 243	70 331	145 640	8 845
	WELLSVILLE, NY												
31-33	Manufacturing	-	17	5	1 806	69 473	1 081	2 169	34 855	162 026	94 275	253 552	8 279
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	1	1	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	f	D	D	D	D	D	D	D	D
	WESTBURY, NY *												
31-33	Manufacturing	3	47	13	989	39 575	643	1 239	19 703	85 586	46 840	135 886	4 739
	WEST SENECA TOWN, NY												
31-33	Manufacturing	1	38	6	606	17 060	479	935	12 165	222 121	46 562	267 169	2 332
	WHEATFIELD TOWN, NY												
31-33	Manufacturing	-	31	15	1 708	56 566	1 268	2 620	32 449	222 193	94 714	331 304	8 193
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
	WHITESBORO, NY *												
31-33	Manufacturing	9	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	9	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WHITESTOWN TOWN BALANCE, NY *												
31-33	Manufacturing	8	12	7	944	24 878	780	1 121	20 306	83 854	160 082	244 104	5 775
336	Transportation equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	9	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	9	1	1	f	D	D	D	D	D	D	D	D
	YONKERS, NY												
31-33	Manufacturing	1	131	34	4 074	132 632	3 114	5 730	79 299	274 591	463 478	742 559	23 977
326	Plastics & rubber products mfg	-	5	4	883	29 826	719	1 259	18 990	50 815	56 427	107 646	8 725
3261	Plastics product mfg	-	5	4	883	29 826	719	1 259	18 990	50 815	56 427	107 646	8 725
32619	Other plastics product mfg	1	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	3	531	18 986	418	830	12 683	36 384	35 779	72 529	2 971

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
NEW YORK		NEW YORK—Con.	
Companies ¹	number.. 23 148	Quantity of electricity purchased for heat and power	1,000 kWh.. 25 245 271
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 1 570 999
All establishments	number.. 23 908	Total value of shipments	\$1,000.. 146 720 195
Establishments with 1 to 19 employees	number.. 17 219	Value of resales	\$1,000.. 6 397 964
Establishments with 20 to 99 employees	number.. 5 230	Value added	\$1,000.. 76 999 763
Establishments with 100 employees or more	number.. 1 459	Total inventories, beginning of year	\$1,000.. 17 651 639
All employees	number.. 785 891	Finished goods inventories, beginning of year	\$1,000.. 6 036 585
Total compensation ²	\$1,000.. 33 159 866	Work-in-process inventories, beginning of year	\$1,000.. 5 815 001
Annual payroll	\$1,000.. 26 515 818	Materials and supplies inventories, beginning of year	\$1,000.. 5 800 053
Total fringe benefits	\$1,000.. 6 644 048	Total inventories, end of year	\$1,000.. 17 550 655
Production workers, average for year	number.. 538 186	Finished goods inventories, end of year	\$1,000.. 6 015 212
Production workers on March 12	number.. 533 685	Work-in-process inventories, end of year	\$1,000.. 5 450 720
Production workers on May 12	number.. 537 074	Materials and supplies inventories, end of year	\$1,000.. 6 084 723
Production workers on August 12	number.. 539 494	Gross book value of total assets at beginning of year	\$1,000.. 54 283 278
Production workers on November 12	number.. 542 491	Total capital expenditures (new and used)	\$1,000.. 5 724 553
Production-worker hours	\$1,000.. 1 057 483	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 980 934
Production-worker wages	\$1,000.. 14 695 767	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 4 743 619
Total cost of materials	\$1,000.. 69 255 045	Total retirements ²	\$1,000.. 1 849 171
Cost of materials, parts, containers, etc., consumed	\$1,000.. 58 749 348	Gross book value of total assets at end of year	\$1,000.. 58 158 660
Cost of resales	\$1,000.. 5 032 767	Total depreciation during year ²	\$1,000.. 3 816 314
Cost of fuels	\$1,000.. 825 558	Total rental payments ²	\$1,000.. 1 303 824
Cost of purchased electricity	\$1,000.. 1 548 495	Buildings and other structures rental payments ²	\$1,000.. 665 446
Cost of contract work	\$1,000.. 3 098 877	Machinery and equipment rental payments ²	\$1,000.. 638 378

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

NEW YORK

Airmont. See “Ramapo town balance.”

Amherst town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Amherst town balance contains all of Amherst town except the incorporated place of Williamsville.

Amityville. See “Babylon town balance.”

Ardasley. See “Greenburgh town balance.”

Attica is in Genesee and Wyoming Counties.

Babylon. See “Babylon town balance.”

Babylon town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Babylon town balance contains all of Babylon town except the incorporated places of Amityville, Babylon, and Lindenhurst.

Balance of Essex County includes the former Ticonderoga village, which disincorporated in January 1994.

Baldwinsville. See “Lysander town balance” and “Van Buren town balance.”

Ballston Spa. See “Milton town balance.”

Bayville. See “Oyster Bay town balance.”

Bellport. See “Brookhaven town balance.”

Blasdell. See “Hamburg town balance.”

Blooming Grove town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Blooming Grove town balance contains all of Blooming Grove town except the incorporated place of Washingtonville.

Briarcliff Manor. See “Mount Pleasant town balance.”

Brightwaters. See “Islip town balance.”

Bronxville. See “Eastchester town balance.”

Brookhaven town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census.

Brookhaven town balance contains all of Brookhaven town except the incorporated places of Bellport, Lake Grove, Patchogue, and Port Jefferson.

Brookville. See “Oyster Bay town balance.”

Cayuga Heights. See “Ithaca town balance.”

Cedarhurst. See “Hempstead town balance.”

Cheektowaga town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Cheektowaga town balance contains all of Cheektowaga town except the incorporated places of Depew, Sloan, and Williamsville.

Chestnut Ridge. See “Ramapo town balance.”

Chittenango. See “Sullivan town balance.”

Cicero town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Cicero town balance contains all of Cicero town except the incorporated place of North Syracuse.

Clarkstown town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Clarkstown town balance contains all of Clarkstown town except the incorporated places of Nyack and Spring Valley.

Clay town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Clay town balance contains all of Clay town except the incorporated place of North Syracuse.

Colonie. See “Colonie town balance.”

Colonie town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Colonie town balance contains all of Colonie town except the incorporated places of Colonie and Menands.

Cortlandt town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Cortlandt town balance contains all of Cortlandt town except the incorporated place of Croton-on-Hudson.

Croton-on-Hudson. See “Cortlandt town balance.”

Depew. See “Cheektowaga town balance” and “Lancaster town balance.”

De Witt town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. De Witt town balance contains all of De Witt town except the incorporated place of East Syracuse.

Dobbs Ferry. See “Greenburgh town balance.”

Eastchester town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Eastchester town balance contains all of Eastchester town except the incorporated places of Bronxville and Tuckahoe.

East Hills. See “North Hempstead town balance” and “Oyster Bay town balance.”

East Rockaway. See “Hempstead town balance.”

East Syracuse. See “De Witt town balance.”

East Williston. See “North Hempstead town balance.”

Ellenville. See “Shawangunk town balance.”

Elmsford. See “Greenburgh town balance.”

Endicott. See “Union town balance.”

Fairport. See “Perinton town balance.”

Farmingdale. See “Oyster Bay town balance.”

Fayetteville. See “Manlius town balance.”

Floral Park. See “Hempstead town balance” and “North Hempstead town balance.”

Florida. See “Warwick town balance.”

Flower Hill. See “North Hempstead town balance.”

Freeport. See “Hempstead town balance.”

Garden City. See “Hempstead town balance” and “North Hempstead town balance.”

Geddes town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Geddes town balance contains all of Geddes town except the incorporated place of Solvay.

Geneva is in Ontario and Seneca Counties.

Glenville town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Glenville town balance contains all of Glenville town except the incorporated place of Scotia.

Gowanda is in Cattaraugus and Erie Counties.

Great Neck. See “North Hempstead town balance.”

Great Neck Estates. See “North Hempstead town balance.”

Great Neck Plaza. See “North Hempstead town balance.”

Greenburgh town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Greenburgh town balance contains all of Greenburgh town except the incorporated places of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington, and Tarrytown.

Greenwood Lake. See “Warwick town balance.”

Hamburg. See “Hamburg town balance.”

Hamburg town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Hamburg town balance contains all of Hamburg town except the incorporated places of Blasdell and Hamburg.

Hastings-on-Hudson. See “Greenburgh town balance.”

Haverstraw. See “Haverstraw town balance.”

Haverstraw town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Haverstraw town balance contains all of Haverstraw town except the incorporated places of Haverstraw, Pomona, and West Haverstraw.

Hempstead. See “Hempstead town balance.”

Hempstead town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Hempstead town balance contains all of Hempstead town except the incorporated places of Cedarhurst, East Rockaway, Floral Park, Freeport, Garden City, Hempstead, Island Park, Lawrence, Lynbrook, Malverne, Mineola, New Hyde Park, Rockville Centre, and Valley Stream.

Huntington town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Huntington town balance contains all of Huntington town except the incorporated places of Lloyd Harbor and Northport.

Irvington. See “Greenburgh town balance.”

Islandia. See “Islip town balance.”

Island Park. See “Hempstead town balance.”

Islip town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Islip town balance contains all of Islip town except the incorporated places of Brightwaters and Islandia.

Ithaca town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Ithaca town balance contains all of Ithaca town except the incorporated place of Cayuga Heights.

Johnson City. See “Union town balance.”

Kenmore. See “Tonawanda town balance.”

Kings Point. See “North Hempstead town balance.”

Lake Grove. See “Brookhaven town balance.”

Lancaster. See “Lancaster town balance.”

Lancaster town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Lancaster town balance contains all of Lancaster town except the incorporated places of Depew and Lancaster.

Larchmont. See “Mamaroneck town balance.”

Lawrence. See “Hempstead town balance.”

Lewiston. See “Lewiston town balance.”

Lewiston town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Lewiston town balance contains all of Lewiston town except the incorporated place of Lewiston.

Lindenhurst. See “Babylon town balance.”

Liverpool. See “Salina town balance.”

Lloyd Harbor. See “Huntington town balance.”

Lynbrook. See “Hempstead town balance.”

Lysander town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Lysander town balance contains all of Lysander town except the incorporated place of Baldwinsville.

Malverne. See “Hempstead town balance.”

Mamaroneck. See “Mamaroneck town balance.”

Mamaroneck town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Mamaroneck town balance contains all of Mamaroneck town except the incorporated places of Larchmont and Mamaroneck.

Manlius. See “Manlius town balance.”

Manlius town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Manlius town balance contains all of Manlius town except the incorporated places of Fayetteville, Manlius, and Minoa.

Manorhaven. See “North Hempstead town balance.”

Massapequa Park. See “Oyster Bay town balance.”

Menands. See “Colonie town balance.”

Milton town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Milton town balance contains all of Milton town except the incorporated place of Ballston Spa.

Mineola. See “Hempstead town balance” and “North Hempstead town balance.”

Minoa. See “Manlius town balance.”

Montebello. See “Ramapo town balance.”

Moreau town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Moreau town balance contains all of Moreau town except the incorporated place of South Glens Falls.

Mount Pleasant town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Mount Pleasant town balance contains all of Mount Pleasant town except the incorporated places of Briarcliff Manor, Pleasantville, and Sleepy Hollow.

Munsey Park. See “North Hempstead town balance.”

Muttontown. See “Oyster Bay town balance.”

New Hartford town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. New Hartford town balance contains all of New Hartford town except the incorporated place of New York Mills.

New Hempstead. See “Ramapo town balance.”

New Hyde Park. See “Hempstead town balance” and “North Hempstead town balance.”

New Square. See “Ramapo town balance.”

New Windsor town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. New Windsor town balance contains all of New Windsor town except the incorporated place of Washingtonville.

New York is in Bronx, Kings, New York, Queens, and Richmond Counties.

New York Mills. See “New Hartford town balance” and “Whitestown town balance.”

North Hempstead town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. North Hempstead town balance contains all of North Hempstead town except the incorporated places of East Hills, East Williston, Floral Park, Flower Hill, Garden City, Great Neck, Great Neck Estates, Great Neck Plaza, Kings Point, Manorhaven, Mineola, Munsey Park, New Hyde Park, North Hills, Old Westbury, Port Washington North, Sands Point, Thomaston, Westbury, and Williston Park.

North Hills. See “North Hempstead town balance.”

Northport. See “Huntington town balance.”

North Syracuse. See “Cicero town balance” and “Clay town balance.”

Nyack. See “Clarkstown town balance” and “Orangetown town balance.”

Ogden town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Ogden town balance contains all of Ogden town except the incorporated place of Spencerport.

Old Westbury. See “North Hempstead town balance” and “Oyster Bay town balance.”

Orangetown town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Orangetown town balance contains all of Orangetown town except the incorporated places of Nyack and South Nyack.

Orchard Park. See “Orchard Park town balance.”

Orchard Park town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Orchard Park town balance contains all of Orchard Park town except the incorporated place of Orchard Park.

Owego. See “Owego town balance.”

Owego town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Owego town balance contains all of Owego town except the incorporated place of Owego.

Oyster Bay town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census.

Oyster Bay town balance contains all of Oyster Bay town except the incorporated places of Bayville, Brookville, East Hills, Farmingdale, Massapequa Park, Muttontown, Old Westbury, and Sea Cliff.

Patchogue. See “Brookhaven town balance.”

Perinton town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Perinton town balance contains all of Perinton town except the incorporated place of Fairport.

Pleasantville. See “Mount Pleasant town balance.”

Pomona. See “Haverstraw town balance” and “Ramapo town balance.”

Port Jefferson. See “Brookhaven town balance.”

Port Washington North. See “North Hempstead town balance.”

Poughkeepsie town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Poughkeepsie town balance contains all of Poughkeepsie town except the incorporated place of Wappingers Falls.

Ramapo town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Ramapo town balance contains all of Ramapo town except the incorporated places of Airmont, Chestnut Ridge, Montebello, New Hempstead, New Square, Pomona, Sloatsburg, Spring Valley, Suffern, and Wesley Hills.

Rockville Centre. See “Hempstead town balance.”

Salina town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Salina town balance contains all of Salina town except the incorporated place of Liverpool.

Sands Point. See “North Hempstead town balance.”

Saranac Lake is in Essex and Franklin Counties.

Saugerties. See “Saugerties town balance.”

Saugerties town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Saugerties town balance contains all of Saugerties town except the incorporated place of Saugerties.

Scotia. See “Glenville town balance.”

Sea Cliff. See “Oyster Bay town balance.”

Shawangunk town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Shawangunk town balance contains all of Shawangunk town except the incorporated place of Ellenville.

Sleepy Hollow name was changed from North Tarrytown in December 1996; see “Mount Pleasant town balance.”

Sloan. See “Cheektowaga town balance.”

Sloatsburg. See “Ramapo town balance.”

Solvay. See “Geddes town balance.”

Southampton. See “Southampton town balance.”

Southampton town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Southampton town balance contains all of Southampton town except the incorporated place of Southampton.

South Glens Falls. See “Moreau town balance.”

South Nyack. See “Orangetown town balance.”

Spencerport. See “Ogden town balance.”

Spring Valley. See “Clarkstown town balance” and “Ramapo town balance.”

Suffern. See “Ramapo town balance.”

Sullivan town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Sullivan town balance contains all of Sullivan town except the incorporated place of Chittenango.

Tarrytown. See “Greenburgh town balance.”

Thomaston. See “North Hempstead town balance.”

Tonawanda town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Tonawanda town balance contains all of Tonawanda town except the incorporated place of Kenmore.

Tuckahoe. See “Eastchester town balance.”

Union town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Union town balance contains all of Union town except the incorporated places of Endicott and Johnson City.

Valley Stream. See “Hempstead town balance.”

Van Buren town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Van Buren town balance contains all of Van Buren town except the incorporated place of Baldwinsville.

Wappingers Falls. See “Poughkeepsie town balance” and “Wappinger town balance.”

Wappinger town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Wappinger town balance contains all of Wappinger town except the incorporated place of Wappingers Falls.

Warwick. See “Warwick town balance.”

Warwick town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Censuses. Warwick town balance contains all of Warwick town except the incorporated places of Florida, Greenwood Lake, and Warwick.

Washingtonville. See “Blooming Grove town balance” and “New Windsor town balance.”

Webster. See “Webster town balance.”

Webster town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Webster town balance contains all of Webster town except the incorporated place of Webster.

Wesley Hills. See “Ramapo town balance.”

Westbury. See “North Hempstead town balance.”

West Haverstraw. See “Haverstraw town balance.”

Whitesboro. See “Whitestown town balance.”

Whitestown town balance. The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Whitestown town balance contains all of Whitestown town except the incorporated places of New York Mills, Whitesboro, and Yorkville.

Williamsville. See “Amherst town balance” and “Cheektowaga town balance.”

Williston Park. See “North Hempstead town balance.”

Yorkville. See “Whitestown town balance.”

Appendix E. Metropolitan Areas

NEW YORK

Albany—Schenectady—Troy, NY MSA

Albany County, NY
Montgomery County, NY
Rensselaer County, NY
Saratoga County, NY
Schenectady County, NY
Schoharie County, NY

Binghamton, NY MSA

Broome County, NY
Tioga County, NY

Buffalo—Niagara Falls, NY MSA

Erie County, NY
Niagara County, NY

Dutchess County, NY PMSA

Dutchess County, NY

Elmira, NY MSA

Chemung County, NY

Glens Falls, NY MSA

Warren County, NY
Washington County, NY

Jamestown, NY MSA

Chautauqua County, NY

Nassau—Suffolk, NY PMSA

Nassau County, NY
Suffolk County, NY

New York, NY PMSA

Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY

New York, NY PMSA—Con.

Richmond County, NY
Rockland County, NY
Westchester County, NY

New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Bergen—Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (Part)
Bridgeport city, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (Part)
Ansonia city, CT
Derby city, CT
Milford city, CT
Seymour town, CT
Danbury, CT PMSA
Fairfield County, CT (Part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown town, CT
Ridgefield town, CT
Litchfield County, CT (Part)
New Milford town, CT

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

Dutchess County, NY PMSA
Dutchess County, NY
Jersey City, NJ PMSA
Hudson County, NJ
Middlesex—Somerset—Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth—Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau—Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New Haven—Meriden, CT PMSA
Middlesex County, CT (Part)
Clinton town, CT
New Haven County, CT (Part)
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

New York, NY PMSA—Con.
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Warren County, NJ
Newburgh, NY—PA PMSA
Orange County, NY
Pike County, PA
Stamford—Norwalk, CT PMSA
Fairfield County, CT (Part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Norwalk city, CT
Stamford city, CT
Westport town, CT
Wilton town, CT
Trenton, NJ PMSA
Mercer County, NJ
Waterbury, CT PMSA
Litchfield County, CT (Part)
Watertown town, CT
New Haven County, CT (Part)
Naugatuck, CT
Southbury town, CT
Waterbury city, CT
Wolcott town, CT
Newburgh, NY—PA PMSA
Orange County, NY
Pike County, PA

Rochester, NY MSA

Genesee County, NY
Livingston County, NY
Monroe County, NY
Ontario County, NY
Orleans County, NY
Wayne County, NY

Syracuse, NY MSA

Cayuga County, NY
Madison County, NY
Onondaga County, NY
Oswego County, NY

Utica—Rome, NY MSA

Herkimer County, NY
Oneida County, NY

Ohio

1997

Issued May 2000

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
OHIO													
31-33	Manufacturing	-	17 974	6 897	984 201	35 950 500	730 170	1 501 585	23 560 975	112 491 355	129 709 277	241 902 924	8 989 209
311	Food mfg.....	1	936	308	48 624	1 468 870	35 061	69 444	926 980	8 873 516	8 963 872	17 869 313	460 777
3111	Animal food mfg.....	-	58	22	1 997	77 980	1 385	2 958	49 052	560 830	536 165	1 096 345	17 534
31111	Animal food mfg.....	-	58	22	1 997	77 980	1 385	2 958	49 052	560 830	536 165	1 096 345	17 534
311111	Dog & cat food mfg...	-	11	7	889	40 464	754	1 576	29 379	457 597	277 377	734 818	12 034
311119	Other animal food mfg.....	-	47	15	1 108	37 516	631	1 382	19 673	103 233	258 788	361 527	5 500
3112	Grain & oilseed milling	-	36	21	2 934	132 396	2 040	4 477	90 120	1 093 653	2 236 050	3 331 482	87 035
31121	Flour milling & malt mfg .	-	19	9	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	19	9	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg.....	-	15	10	1 513	62 614	945	2 094	36 989	478 341	1 725 432	2 200 223	49 622
311221	Wet corn milling	-	1	1	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	2	5	4	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	9	5	897	34 992	583	1 247	20 040	270 135	778 648	1 039 053	30 414
31123	Breakfast cereal mfg	-	2	2	g	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	2	73	18	g	D	D	D	D	D	D	D	D
31131	Sugar mfg.....	3	3	2	275	8 494	212	521	5 899	19 621	74 689	94 228	D
311313	Beet sugar mfg.....	3	2	2	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	1	35	12	1 036	17 261	808	1 192	11 523	50 016	44 486	96 844	2 127
311330	Confectionery mfg from purchased chocolate.....	1	35	12	1 036	17 261	808	1 192	11 523	50 016	44 486	96 844	2 127
31134	Nonchocolate confectionery mfg	-	25	3	518	14 442	301	477	5 266	43 882	24 851	68 194	552
311340	Nonchocolate confectionery mfg ...	-	25	3	518	14 442	301	477	5 266	43 882	24 851	68 194	552
3114	Fruit & vegetable preserving & specialty food mfg.....	-	65	37	9 874	303 274	8 268	16 616	221 209	2 469 774	1 407 403	3 876 985	117 473
31141	Frozen food mfg.....	1	23	15	5 721	151 364	4 742	9 351	101 581	911 431	662 152	1 574 630	54 821
311411	Frozen fruit, juice, & vegetable mfg.....	2	3	3	151	3 199	129	239	2 536	12 116	6 436	18 671	671
311412	Frozen specialty food mfg.....	1	20	12	5 570	148 165	4 613	9 112	99 045	899 315	655 716	1 555 959	54 150
31142	Fruit & vegetable canning, pickling, & drying.....	-	42	22	4 153	151 910	3 526	7 265	119 628	1 558 343	745 251	2 302 355	62 652
311421	Fruit & vegetable canning	-	35	18	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	4	3	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	74	44	5 645	171 375	3 558	7 885	103 580	1 014 075	1 373 168	2 406 729	49 193
31151	Dairy product (except frozen) mfg.....	2	56	36	4 947	150 424	3 110	6 941	91 296	938 717	1 245 552	2 202 604	44 098
311511	Fluid milk mfg.....	3	25	18	2 975	89 264	1 657	3 591	53 075	499 904	748 431	1 248 789	26 291
311513	Cheese mfg.....	1	23	13	g	D	D	D	D	D	D	D	12 126
311514	Dry, condensed, & evaporated dairy product mfg.....	-	7	5	835	32 564	542	1 653	20 833	339 942	202 825	558 585	D
31152	Ice cream & frozen dessert mfg.....	2	18	8	698	20 951	448	944	12 284	75 358	127 616	204 125	5 095
311520	Ice cream & frozen dessert mfg.....	2	18	8	698	20 951	448	944	12 284	75 358	127 616	204 125	5 095
3116	Meat product mfg.....	-	111	46	7 607	187 727	6 135	12 070	124 430	623 808	1 318 192	1 958 157	44 358
31161	Animal slaughtering & processing.....	-	111	46	7 607	187 727	6 135	12 070	124 430	623 808	1 318 192	1 958 157	44 358
311611	Animal (except poultry) slaughtering	2	49	10	1 037	25 528	906	1 740	21 058	84 501	230 958	315 345	2 468
311612	Meat processed from carcasses	-	46	23	4 638	128 525	3 580	7 411	80 107	454 459	907 694	1 374 726	32 781
311613	Rendering & meat byproduct processing.....	3	6	4	261	9 153	107	233	3 444	23 163	25 611	51 421	4 537
311615	Poultry processing.....	-	10	9	1 671	24 521	1 542	2 686	19 821	61 685	153 929	216 665	4 572
3118	Bakeries & tortilla mfg.....	-	403	65	12 154	348 792	7 914	13 915	198 277	1 672 624	816 801	2 488 307	37 590
31181	Bread & bakery product mfg.....	-	374	47	i	D	D	D	D	D	D	D	22 436
311811	Retail bakeries	3	292	13	1 794	22 992	1 094	1 403	12 739	47 136	24 769	72 124	2 217
311812	Commercial bakeries ..	-	76	31	6 515	207 168	3 602	6 588	93 098	653 906	313 281	967 120	19 619
311813	Frozen cakes, pies, & other pastries mfg ...	-	6	3	c	D	D	D	D	D	D	D	600
31182	Cookie, cracker, & pasta mfg.....	-	28	17	3 611	112 215	3 049	5 599	88 747	953 509	459 218	1 411 464	D
311821	Cookie & cracker mfg .	-	11	10	2 874	91 445	2 518	4 494	74 680	878 031	303 604	1 179 737	12 406
311822	Flour mixes & dough mfg from purchased flour	1	13	7	f	D	D	D	D	D	D	D	2 645

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	2	114	55	6 512	205 283	4 384	9 254	116 532	1 321 324	1 124 748	2 440 806	99 882
31191	Snack food mfg	1	36	16	1 770	57 476	1 244	2 732	31 025	312 566	167 157	479 412	32 917
311911	Roasted nuts & peanut butter mfg	—	8	3	217	5 965	161	324	2 990	17 723	33 157	50 284	484
311919	Other snack food mfg ..	1	28	13	1 553	51 511	1 083	2 408	28 035	294 843	134 000	429 128	32 433
31192	Coffee & tea mfg	7	4	3	175	5 103	100	205	2 338	37 899	47 411	85 052	1 674
311920	Coffee & tea mfg	7	4	3	175	5 103	100	205	2 338	37 899	47 411	85 052	1 674
31193	Flavoring syrup & concentrate mfg	1	10	5	759	29 557	428	956	17 142	538 660	300 918	836 317	16 813
311930	Flavoring syrup & concentrate mfg	1	10	5	759	29 557	428	956	17 142	538 660	300 918	836 317	16 813
31194	Seasoning & dressing mfg	2	22	12	1 443	48 963	794	1 657	20 551	212 545	208 252	420 920	31 617
311941	Mayonnaise, dressing, & other prepared sauce mfg	1	9	4	731	22 449	423	944	10 564	92 666	127 345	219 989	3 306
311942	Spice & extract mfg ...	4	13	8	712	26 514	371	713	9 987	119 879	80 907	200 931	28 311
31199	All other food mfg	1	42	19	2 365	64 184	1 818	3 704	45 476	219 654	401 010	619 105	16 861
311991	Perishable prepared food mfg	—	15	9	858	20 235	638	1 311	13 378	46 109	90 701	136 338	3 559
311999	All other miscellaneous food mfg	1	27	10	1 507	43 949	1 180	2 393	32 098	173 545	310 309	482 767	13 302
312	Beverage & tobacco product mfg	—	78	35	6 372	235 941	3 368	6 592	128 614	1 657 232	1 554 488	3 212 114	139 252
3121	Beverage mfg	—	78	35	6 372	235 941	3 368	6 592	128 614	1 657 232	1 554 488	3 212 114	139 252
31211	Soft drink & ice mfg	—	48	23	4 068	129 340	1 638	3 293	50 480	653 027	953 373	1 608 530	D
312111	Soft drink mfg	—	24	18	3 783	123 977	1 466	2 936	47 433	635 468	941 057	1 578 648	63 171
312113	Ice mfg	6	16	4	209	3 338	133	288	2 062	8 005	4 917	12 940	919
31212	Breweries	—	18	8	1 890	92 762	1 462	2 791	70 511	834 764	543 132	1 376 938	D
312120	Breweries	—	18	8	1 890	92 762	1 462	2 791	70 511	834 764	543 132	1 376 938	D
31213	Wineries	9	10	2	c	D	D	D	D	D	D	D	D
312130	Wineries	9	10	2	c	D	D	D	D	D	D	D	D
31214	Distilleries	—	2	2	e	D	D	D	D	D	D	D	D
312140	Distilleries	—	2	2	e	D	D	D	D	D	D	D	D
313	Textile mills	1	78	26	3 250	94 597	2 462	4 996	61 125	195 795	239 242	435 227	21 812
3132	Fabric mills	2	41	14	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	6	23	5	471	11 009	390	637	7 081	24 191	22 634	47 315	1 958
313210	Broadwoven fabric mills	6	23	5	471	11 009	390	637	7 081	24 191	22 634	47 315	1 958
31322	Narrow fabric mills & schiffli machine embroidery	2	10	1	e	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	1	3	1	290	5 670	238	480	3 423	4 045	5 204	8 169	146
31323	Nonwoven fabric mills ...	—	8	8	684	19 631	568	1 273	15 403	48 951	52 109	100 758	3 469
313230	Nonwoven fabric mills ..	—	8	8	684	19 631	568	1 273	15 403	48 951	52 109	100 758	3 469
3133	Textile & fabric finishing & fabric coating mills	—	36	12	1 773	57 845	1 239	2 554	34 897	117 933	158 526	277 549	16 159
31331	Textile & fabric finishing mills	5	22	3	230	7 021	165	367	3 729	15 681	9 389	25 084	852
313311	Broadwoven fabric finishing mills	5	22	3	230	7 021	165	367	3 729	15 681	9 389	25 084	852
31332	Fabric coating mills	—	14	9	1 543	50 824	1 074	2 187	31 168	102 252	149 137	252 465	15 307
313320	Fabric coating mills ...	—	14	9	1 543	50 824	1 074	2 187	31 168	102 252	149 137	252 465	15 307
314	Textile product mills	1	255	64	5 591	112 426	4 383	7 862	73 564	237 066	258 760	497 312	9 433
3141	Textile furnishings mills ...	—	101	18	1 889	38 238	1 415	2 615	23 874	76 470	90 797	171 193	3 034
31411	Carpet & rug mills	—	5	2	c	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	5	2	c	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	1	96	16	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	3	77	6	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	19	10	1 159	23 298	911	1 637	14 566	43 049	53 138	100 537	1 100
3149	Other textile product mills ..	1	154	46	3 702	74 188	2 968	5 247	49 690	160 596	167 963	326 119	6 399
31491	Textile bag & canvas mills	2	82	17	1 046	23 554	776	1 324	12 644	45 026	45 431	90 924	1 614
314911	Textile bag mills	—	10	4	221	6 488	177	364	3 034	14 334	15 764	30 373	286
314912	Canvas & related product mills	3	72	13	825	17 066	599	960	9 610	30 692	29 667	60 551	1 328
31499	All other textile product mills	1	72	29	2 656	50 634	2 192	3 923	37 046	115 570	122 532	235 195	4 785
314991	Rope, cordage, & twine mills	1	5	1	c	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	1	66	27	2 509	47 012	2 077	3 688	34 633	108 271	112 098	217 331	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	154	44	4 555	102 741	3 629	7 024	62 289	327 604	249 726	570 561	7 153
3151	Apparel knitting mills	—	4	3	199	4 105	157	323	2 338	7 076	7 212	14 298	26
31519	Other apparel knitting mills	—	4	3	199	4 105	157	323	2 338	7 076	7 212	14 298	26
315191	Outerwear knitting mills	—	4	3	199	4 105	157	323	2 338	7 076	7 212	14 298	26
3152	Cut & sew apparel mfg	3	91	33	3 175	59 747	2 742	5 356	46 364	163 928	155 370	314 725	4 273
31521	Cut & sew apparel contractors	1	43	6	499	7 429	434	723	5 976	33 933	4 128	35 559	273
315212	Women's, girls', & infants' cut & sew apparel contractors	1	38	5	410	6 038	364	583	4 812	31 760	3 273	32 531	217
31522	Men's & boys' cut & sew apparel mfg	3	27	19	1 939	34 241	1 706	3 192	27 303	85 636	114 542	198 387	2 924
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	2	6	3	545	9 053	455	780	6 830	35 518	35 761	74 029	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	8	6	4	531	9 299	511	904	8 019	21 242	21 841	42 562	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	5	4	c	D	D	D	D	D	D	D	65
315225	Men's & boys' cut & sew work clothing mfg	—	2	2	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	1	7	5	444	8 007	393	866	6 837	15 000	12 135	23 036	1 139
31523	Women's & girls' cut & sew apparel mfg	6	16	6	626	16 444	515	1 318	12 057	40 192	35 416	75 142	1 033
315239	Women's & girls' cut & sew other outerwear mfg	9	6	3	433	11 387	369	1 016	8 506	24 599	18 274	42 676	564
31529	Other cut & sew apparel mfg	5	5	2	111	1 633	87	123	1 028	4 167	1 284	5 637	43
315299	All other cut & sew apparel mfg	5	5	2	111	1 633	87	123	1 028	4 167	1 284	5 637	43
3159	Apparel accessories & other apparel mfg	—	59	8	1 181	38 889	730	1 345	13 587	156 600	87 144	241 538	2 854
31599	Apparel accessories & other apparel mfg	—	59	8	1 181	38 889	730	1 345	13 587	156 600	87 144	241 538	2 854
315991	Hat, cap, & millinery mfg	—	4	1	c	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	—	3	1	e	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	3	52	6	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	36	16	2 105	43 297	1 625	3 017	25 774	147 502	115 491	260 056	2 123
3162	Footwear mfg	—	4	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	3	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	1	1	e	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	2	2	2	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	26	12	1 358	27 463	1 126	2 165	17 209	77 500	60 769	138 605	911
31699	Other leather & allied product mfg	—	26	12	1 358	27 463	1 126	2 165	17 209	77 500	60 769	138 605	911
316991	Luggage mfg	—	9	5	e	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	3	1	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	13	6	844	16 389	713	1 407	10 740	55 196	41 145	96 165	397
321	Wood product mfg	1	703	207	20 133	452 802	16 954	32 508	342 839	1 111 298	1 288 799	2 385 614	96 405
3211	Sawmills & wood preservation	2	146	36	2 212	45 030	1 898	3 463	36 446	125 946	276 967	395 758	12 345
32111	Sawmills & wood preservation	2	146	36	2 212	45 030	1 898	3 463	36 446	125 946	276 967	395 758	12 345
321113	Sawmills	3	132	31	1 978	39 967	1 713	3 103	32 963	104 724	154 080	260 451	11 327
321114	Wood preservation	1	14	5	234	5 063	185	360	3 483	21 222	122 887	135 307	1 018
3212	Veneer, plywood, & engineered wood product mfg	—	53	31	2 588	65 351	1 930	4 059	40 377	162 382	221 577	384 487	7 921
32121	Veneer, plywood, & engineered wood product mfg	—	53	31	2 588	65 351	1 930	4 059	40 377	162 382	221 577	384 487	7 921
321211	Hardwood veneer & plywood mfg	—	8	3	f	D	D	D	D	D	D	D	D
321214	Truss mfg	—	36	23	1 432	33 710	1 069	2 112	19 207	73 583	92 967	166 904	3 395
321219	Reconstituted wood product mfg	—	7	3	488	13 366	269	575	6 862	44 174	78 535	121 406	2 537

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg . . .	1	504	140	15 333	342 421	13 126	24 986	266 016	822 970	790 255	1 605 369	76 139
32191	Millwork	2	150	49	4 660	109 879	3 832	7 509	80 613	224 986	315 458	533 775	16 539
321911	Wood window & door mfg	2	49	21	2 095	49 712	1 743	3 346	36 882	97 179	115 329	210 741	8 569
321912	Cut stock, resawing lumber, & planing . . .	1	40	14	1 215	29 366	1 013	2 106	22 286	65 572	121 159	180 689	5 025
321918	Other millwork (including flooring) . . .	2	61	14	1 350	30 801	1 076	2 057	21 445	62 235	78 970	142 345	2 945
32192	Wood container & pallet mfg	2	218	52	3 206	62 465	2 688	4 871	44 509	125 051	145 756	271 046	9 171
321920	Wood container & pallet mfg	2	218	52	3 206	62 465	2 688	4 871	44 509	125 051	145 756	271 046	9 171
32199	All other wood product mfg	—	136	39	7 467	170 077	6 606	12 606	140 894	472 933	329 041	800 548	50 429
321991	Manufactured home (mobile home) mfg . .	—	5	4	727	16 587	617	1 052	12 170	42 768	65 623	108 461	598
321992	Prefabricated wood building mfg	—	15	7	510	15 959	351	815	9 334	36 156	54 250	91 104	2 055
321999	All other miscellaneous wood product mfg . . .	1	116	28	6 230	137 531	5 638	10 739	119 390	394 009	209 168	600 983	47 776
322	Paper mfg	—	377	261	30 227	1 135 895	22 775	49 731	746 753	3 217 975	3 624 800	6 844 433	381 964
3221	Pulp, paper, & paperboard mills	—	28	27	6 982	344 379	5 355	12 318	247 899	1 098 621	919 655	2 005 678	146 335
32212	Paper mills	—	11	11	5 127	266 642	3 879	8 862	190 586	869 695	695 226	1 561 804	108 942
322121	Paper (except newsprint) mills	—	10	10	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	15	14	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	15	14	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	349	234	23 245	791 516	17 420	37 413	498 854	2 119 354	2 705 145	4 838 755	235 629
32221	Paperboard container mfg	—	212	155	13 481	441 624	10 234	21 647	286 548	1 073 692	1 543 601	2 618 422	151 210
322211	Corrugated & solid fiber box mfg	—	129	93	7 703	255 213	5 544	11 415	154 229	619 819	964 591	1 582 719	99 142
322212	Folding paperboard box mfg	1	44	33	3 605	118 254	2 916	6 418	83 269	281 198	342 368	627 974	40 080
322213	Setup paperboard box mfg	—	9	7	326	8 204	262	554	5 373	16 510	10 415	25 889	992
322214	Fiber can, tube, drum, & similar products mfg	—	25	18	1 121	34 724	915	1 882	25 346	94 509	136 176	231 078	6 410
322215	Nonfolding sanitary food container mfg . . .	—	5	4	726	25 229	597	1 378	18 331	61 656	90 051	150 762	4 586
32222	Paper bag & coated & treated paper mfg	—	62	37	5 887	246 005	4 114	9 620	142 252	758 494	855 191	1 623 259	68 364
322221	Coated & laminated packaging paper & plastics film mfg	—	7	3	233	8 935	172	365	5 512	24 236	42 459	65 328	3 021
322222	Coated & laminated paper mfg	—	42	27	4 196	184 828	2 722	6 321	96 140	619 048	606 803	1 240 834	52 931
322224	Uncoated paper & multiwall bag mfg	—	5	3	809	26 635	683	1 587	20 007	47 987	86 721	133 502	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	3	3	f	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	—	3	1	c	D	D	D	D	D	D	D	788
32223	Stationery product mfg	2	34	19	2 229	56 924	1 789	3 614	41 127	153 067	159 258	313 833	8 200
322231	Die-cut paper & paperboard office supplies mfg	—	17	8	1 077	26 743	904	1 794	20 242	66 144	68 816	135 360	3 925
322232	Envelope mfg	3	14	10	1 107	28 846	853	1 753	20 073	83 054	85 982	169 796	4 092
32229	Other converted paper product mfg	—	41	23	1 648	46 963	1 283	2 532	28 927	134 101	147 095	283 241	7 855
322291	Sanitary paper product mfg	—	4	3	542	15 533	397	820	9 754	67 176	78 422	145 790	3 770
322299	All other converted paper product mfg . . .	1	37	20	1 106	31 430	886	1 712	19 173	66 925	68 673	137 451	4 085
323	Printing & related support activities	1	1 836	412	43 003	1 331 787	30 816	60 027	812 711	3 060 026	1 863 029	4 911 202	237 433
3231	Printing & related support activities	1	1 836	412	43 003	1 331 787	30 816	60 027	812 711	3 060 026	1 863 029	4 911 202	237 433
32311	Printing	1	1 648	362	39 835	1 227 147	28 463	55 435	744 978	2 859 035	1 814 042	4 661 284	224 048
323110	Commercial lithographic printing	1	823	208	21 935	686 733	16 055	31 688	434 660	1 448 594	956 364	2 404 685	104 482
323111	Commercial gravure printing	6	14	3	324	18 121	242	490	12 304	57 890	20 795	79 147	6 090
323112	Commercial flexographic printing	—	62	30	3 256	122 178	1 796	3 664	45 748	295 121	223 049	511 171	30 936
323113	Commercial screen printing	1	178	44	4 642	114 897	3 261	6 163	63 378	247 959	187 947	429 312	22 846
323114	Quick printing	3	337	13	1 892	41 235	1 299	1 893	24 906	86 754	48 852	135 559	5 034
323115	Digital printing	—	11	1	128	3 152	92	151	1 720	8 549	3 986	12 555	521
323116	Manifold business form printing	1	44	28	3 070	99 627	2 144	4 258	64 344	360 886	151 575	513 089	25 365
323117	Book printing	—	21	10	2 632	85 799	2 167	4 503	65 156	213 322	126 472	341 191	21 912

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities—Con.												
3231	Printing & related support activities—Con.												
32311	Printing—Con.												
323118	Blankbook, looseleaf binder, & device mfg.	1	14	7	518	14 927	384	757	9 232	32 512	20 741	52 760	1 374
323119	Other commercial printing	4	144	18	1 438	40 478	1 023	1 868	23 530	107 448	74 261	181 815	5 488
32312	Support activities for printing	1	188	50	3 168	104 640	2 353	4 592	67 733	200 991	48 987	249 918	13 385
323121	Tradebinding & related work	2	41	8	786	16 986	695	1 295	12 864	33 026	5 666	38 580	2 405
323122	Prepress services	1	147	42	2 382	87 654	1 658	3 297	54 869	167 965	43 321	211 338	10 980
324	Petroleum & coal products mfg	—	183	45	5 697	256 412	3 578	7 514	133 811	1 016 439	5 244 349	6 261 183	107 130
3241	Petroleum & coal products mfg	—	183	45	5 697	256 412	3 578	7 514	133 811	1 016 439	5 244 349	6 261 183	107 130
32411	Petroleum refineries	—	6	6	1 959	104 974	1 221	2 746	55 096	483 433	4 190 796	4 680 819	61 226
324110	Petroleum refineries	—	6	6	1 959	104 974	1 221	2 746	55 096	483 433	4 190 796	4 680 819	61 226
32412	Asphalt paving, roofing, & saturated materials mfg	2	138	28	2 335	96 817	1 666	3 590	57 558	367 781	772 621	1 135 459	35 997
324121	Asphalt paving mixture & block mfg	3	121	16	1 118	42 027	867	1 734	29 908	172 455	495 209	671 194	15 187
324122	Asphalt shingle & coating materials mfg	1	17	12	1 217	54 790	799	1 856	27 650	195 326	277 412	464 265	20 810
32419	Other petroleum & coal products mfg	2	39	11	1 403	54 621	691	1 178	21 157	165 225	280 932	444 905	9 907
324191	Petroleum lubricating oil & grease mfg	2	36	9	g	D	D	D	D	D	D	D	9 619
325	Chemical mfg	—	715	372	46 943	1 975 098	27 024	55 864	1 002 024	10 844 265	10 401 766	21 170 744	814 942
3251	Basic chemical mfg	—	139	79	12 123	577 838	6 979	15 007	313 628	2 467 110	2 583 468	5 044 878	237 405
32512	Industrial gas mfg	—	33	11	f	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	33	11	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	1	20	12	2 343	111 810	1 430	3 181	66 977	502 940	426 305	921 616	47 117
325131	Inorganic dye & pigment mfg	—	7	5	898	46 149	512	1 113	27 379	208 449	232 091	431 250	22 751
325132	Synthetic organic dye & pigment mfg	3	13	7	1 445	65 661	918	2 068	39 598	294 491	194 214	490 366	24 366
32518	Other basic inorganic chemical mfg	—	41	25	4 685	222 449	2 466	5 290	112 463	859 870	590 014	1 453 499	45 920
325181	Alkalies & chlorine mfg	—	2	2	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	38	22	4 380	208 590	2 258	4 911	103 855	764 106	481 837	1 251 294	39 603
32519	Other basic organic chemical mfg	—	44	31	4 520	219 660	2 814	5 948	123 708	959 928	1 483 594	2 441 842	132 498
325192	Cyclic crude & intermediate mfg	—	5	4	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	38	27	4 012	195 751	2 497	5 155	108 958	835 027	1 213 416	2 041 565	107 393
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	44	33	4 123	204 704	2 555	5 522	122 069	1 064 735	1 334 183	2 416 511	153 656
32521	Resin & synthetic rubber mfg	1	44	33	4 123	204 704	2 555	5 522	122 069	1 064 735	1 334 183	2 416 511	153 656
325211	Plastics material & resin mfg	1	34	29	3 088	150 662	1 961	4 197	91 994	602 202	1 042 691	1 659 312	94 806
325212	Synthetic rubber mfg	—	10	4	1 035	54 042	594	1 325	30 075	462 533	291 492	757 199	58 850
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	32	17	1 795	52 029	1 012	2 225	26 513	150 986	496 724	640 738	37 207
32531	Fertilizer mfg	—	26	14	1 663	47 443	937	2 064	24 126	125 671	479 640	598 216	34 302
325311	Nitrogenous fertilizer mfg	—	3	2	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	—	22	12	g	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	2	6	3	132	4 586	75	161	2 387	25 315	17 084	42 522	2 905
325320	Pesticide & other agricultural chemical mfg	2	6	3	132	4 586	75	161	2 387	25 315	17 084	42 522	2 905

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	38	19	3 052	117 933	1 754	3 439	57 469	893 074	397 483	1 262 007	83 068
32541	Pharmaceutical & medicine mfg	—	38	19	3 052	117 933	1 754	3 439	57 469	893 074	397 483	1 262 007	83 068
325411	Medicinal & botanical mfg	1	8	2	174	7 606	82	177	2 923	22 901	15 718	38 857	6 789
325412	Pharmaceutical preparation mfg	—	20	13	2 660	104 572	1 547	3 055	51 124	850 958	373 295	1 195 495	74 768
325413	In-vitro diagnostic substance mfg	7	3	1	c	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	5	7	3	c	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	154	74	9 543	410 559	4 619	9 304	162 465	1 621 399	1 736 821	3 353 080	104 481
32551	Paint & coating mfg	—	95	45	6 563	295 504	2 920	6 035	108 433	1 159 372	1 235 817	2 389 077	78 579
325510	Paint & coating mfg	—	95	45	6 563	295 504	2 920	6 035	108 433	1 159 372	1 235 817	2 389 077	78 579
32552	Adhesive mfg	2	59	29	2 980	115 055	1 699	3 269	54 032	462 027	501 004	964 003	25 902
325520	Adhesive mfg	2	59	29	2 980	115 055	1 699	3 269	54 032	462 027	501 004	964 003	25 902
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	92	43	7 866	309 384	4 982	10 095	167 154	3 567 580	2 633 930	6 155 903	96 970
32561	Soap & cleaning compound mfg	—	80	37	5 480	216 888	3 695	7 559	124 844	2 813 618	2 221 334	4 988 228	76 753
325611	Soap & other detergent mfg	—	44	20	3 115	131 785	2 284	4 639	93 573	2 378 649	1 943 470	4 274 415	60 258
325612	Polish & other sanitation good mfg ..	—	29	14	2 255	81 418	1 363	2 824	29 544	417 610	252 663	669 847	14 301
325613	Surface active agent mfg	3	7	3	110	3 685	48	96	1 727	17 359	25 201	43 966	2 194
32562	Toilet preparation mfg ..	—	12	6	2 386	92 496	1 287	2 536	42 310	753 962	412 596	1 167 675	20 217
325620	Toilet preparation mfg ..	—	12	6	2 386	92 496	1 287	2 536	42 310	753 962	412 596	1 167 675	20 217
3259	Other chemical product mfg	2	216	107	8 441	302 651	5 123	10 272	152 726	1 079 381	1 219 157	2 297 627	102 155
32591	Printing ink mfg	2	45	17	g	D	D	D	D	D	D	D	D
325910	Printing ink mfg	2	45	17	g	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	3	1	e	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	3	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	2	168	89	7 060	255 447	4 442	8 863	133 069	976 151	1 071 470	2 044 739	95 269
325991	Custom compounding of purchased resin ...	1	69	44	3 816	132 901	2 550	5 241	75 448	398 411	633 623	1 026 783	54 297
325992	Photographic film, paper, plate, & chemical mfg	—	10	5	232	9 766	103	191	2 840	52 078	48 603	103 428	2 061
325998	All other miscellaneous chemical product & preparation mfg	3	89	40	3 012	112 780	1 789	3 431	54 781	525 662	389 244	914 528	38 911
326	Plastics & rubber products mfg	1	1 195	701	92 547	2 700 634	72 633	148 097	1 807 050	6 713 933	6 703 448	13 397 265	707 114
3261	Plastics product mfg	1	916	539	67 441	1 856 667	53 627	108 817	1 249 582	4 831 997	4 625 028	9 446 491	540 677
32611	Unsupported plastics film, sheet, & bag mfg ..	—	77	53	4 965	176 414	3 798	7 633	110 768	550 551	592 948	1 139 375	57 420
326111	Unsupported plastics bag mfg	—	23	17	1 375	39 542	1 165	2 327	27 604	117 079	125 284	241 995	4 417
326112	Unsupported plastics packaging film & sheet mfg	—	9	8	673	21 311	499	1 102	13 848	67 614	84 454	151 205	18 586
326113	Unsupported plastics film & sheet (except packaging) mfg	1	45	28	2 917	115 561	2 134	4 204	69 316	365 858	383 210	746 175	34 417
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	92	45	4 396	132 795	3 284	6 446	84 211	305 450	307 445	611 566	34 693
326121	Unsupported plastics profile shape mfg	—	65	30	2 872	88 390	2 081	3 991	54 641	187 260	159 315	345 751	17 921
326122	Plastics pipe & pipe fitting mfg	1	27	15	1 524	44 405	1 203	2 455	29 570	118 190	148 130	265 815	16 772
32613	Laminated plastics plate, sheet, & shape mfg	1	45	11	2 040	77 495	1 629	3 408	53 738	222 340	209 268	434 387	29 549
326130	Laminated plastics plate, sheet, & shape mfg	1	45	11	2 040	77 495	1 629	3 408	53 738	222 340	209 268	434 387	29 549
32614	Polystyrene foam product mfg	1	33	16	1 199	30 509	926	1 714	19 623	71 333	65 273	137 333	14 450
326140	Polystyrene foam product mfg	1	33	16	1 199	30 509	926	1 714	19 623	71 333	65 273	137 333	14 450
32615	Urethane & other foam product (except polystyrene) mfg	—	29	20	2 193	66 762	1 725	3 533	45 271	145 640	203 670	347 311	10 612
326150	Urethane & other foam product (except polystyrene) mfg	—	29	20	2 193	66 762	1 725	3 533	45 271	145 640	203 670	347 311	10 612
32616	Plastics bottle mfg	—	30	22	3 705	106 529	3 318	7 120	87 065	365 533	324 997	686 074	41 808
326160	Plastics bottle mfg	—	30	22	3 705	106 529	3 318	7 120	87 065	365 533	324 997	686 074	41 808

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31-33	OHIO—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32619	Other plastics product mfg	1	610	372	48 943	1 266 163	38 947	78 963	848 906	3 171 150	2 921 427	6 090 445	352 145
326191	Plastics plumbing fixture mfg	1	28	11	f	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	—	2	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	580	360	48 110	1 242 529	38 331	77 642	833 780	3 107 249	2 868 592	5 971 513	348 917
3262	Rubber product mfg	—	279	162	25 106	843 967	19 006	39 280	557 468	1 881 936	2 078 420	3 950 774	166 437
32621	Tire mfg	—	60	13	3 908	166 934	2 568	4 879	99 150	306 451	340 958	650 646	41 709
326211	Tire mfg (except retreading)	—	14	9	3 289	150 672	2 042	3 830	86 259	276 740	301 957	581 837	39 683
326212	Tire retreading	2	46	4	619	16 262	526	1 049	12 891	29 711	39 001	68 809	2 026
32622	Rubber & plastics hoses & belting mfg	—	16	12	2 595	90 042	1 978	4 312	63 457	243 515	322 517	561 230	13 903
326220	Rubber & plastics hoses & belting mfg ..	—	16	12	2 595	90 042	1 978	4 312	63 457	243 515	322 517	561 230	13 903
32629	Other rubber product mfg	—	203	137	18 603	586 991	14 460	30 089	394 861	1 331 970	1 414 945	2 738 898	110 825
326291	Rubber product mfg for mechanical use	—	120	83	12 255	404 448	9 775	20 396	283 842	912 168	734 458	1 634 955	80 058
326299	All other rubber product mfg	—	83	54	6 348	182 543	4 685	9 693	111 019	419 802	680 487	1 103 943	30 767
327	Nonmetallic mineral product mfg	1	841	351	37 768	1 267 649	29 717	61 081	897 965	3 873 784	2 515 278	6 371 640	344 634
3271	Clay product & refractory mfg	—	152	87	9 281	273 376	7 408	14 746	187 811	720 426	439 456	1 150 330	48 426
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	67	32	4 507	125 154	3 759	7 459	90 774	346 221	133 352	474 374	15 914
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	4	3	1 605	53 989	1 389	2 951	43 671	192 032	53 641	244 942	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	54	21	2 077	41 345	1 777	3 213	29 162	93 903	37 440	126 833	10 664
327113	Porcelain electrical supply mfg	—	9	8	825	29 820	593	1 295	17 941	60 286	42 271	102 599	D
32712	Clay building material & refractories mfg	—	85	55	4 774	148 222	3 649	7 287	97 037	374 205	306 104	675 956	32 512
327121	Brick & structural clay tile mfg	1	21	15	1 164	33 003	981	2 061	24 705	74 634	36 169	109 151	6 514
327122	Ceramic wall & floor tile mfg	—	10	7	949	19 238	805	1 338	14 427	46 675	44 292	91 468	4 936
327123	Other structural clay product mfg	—	6	5	380	11 554	280	528	6 749	25 707	8 668	32 882	1 118
327124	Clay refractory mfg ...	—	22	13	801	28 160	566	1 171	18 574	78 780	87 039	165 723	5 377
327125	Nonclay refractory mfg	—	26	15	1 480	56 267	1 017	2 189	32 582	148 409	129 936	276 732	14 567
3272	Glass & glass product mfg ..	—	128	54	12 463	435 630	10 159	21 126	327 420	1 575 786	723 927	2 268 676	145 570
32721	Glass & glass product mfg	—	128	54	12 463	435 630	10 159	21 126	327 420	1 575 786	723 927	2 268 676	145 570
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	43	22	7 647	279 515	6 316	13 301	211 243	1 088 100	364 283	1 424 345	110 318
327213	Glass container mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	83	30	h	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	387	133	7 814	258 406	5 782	12 104	168 803	637 612	681 740	1 330 544	74 538
32731	Cement mfg	—	12	4	384	17 188	286	661	11 938	71 958	55 155	127 743	14 829
327310	Cement mfg	—	12	4	384	17 188	286	661	11 938	71 958	55 155	127 743	14 829
32732	Ready-mix concrete mfg ..	4	215	72	3 841	127 909	2 972	6 354	91 506	314 807	413 765	728 449	34 852
327320	Ready-mix concrete mfg	4	215	72	3 841	127 909	2 972	6 354	91 506	314 807	413 765	728 449	34 852
32733	Concrete pipe, brick, & block mfg	1	59	32	1 572	49 607	1 036	2 207	26 837	111 100	109 336	234 439	14 485
327331	Concrete block & brick mfg	2	41	17	785	26 886	457	962	12 941	62 278	63 690	125 495	9 238
327332	Concrete pipe mfg	1	18	15	787	22 721	579	1 245	13 896	48 822	45 646	108 944	5 247
32739	Other concrete product mfg	2	101	25	2 017	63 702	1 488	2 882	38 522	139 747	103 484	239 913	10 372
327390	Other concrete product mfg	2	101	25	2 017	63 702	1 488	2 882	38 522	139 747	103 484	239 913	10 372
3274	Lime & gypsum product mfg	—	18	10	935	36 026	726	1 713	27 128	116 095	142 863	260 479	25 092
32741	Lime mfg	—	8	6	348	13 229	266	589	10 345	34 692	56 985	93 094	3 012
327410	Lime mfg	—	8	6	348	13 229	266	589	10 345	34 692	56 985	93 094	3 012
32742	Gypsum product mfg	—	10	4	587	22 797	460	1 124	16 783	81 403	85 878	167 385	22 080
327420	Gypsum product mfg ..	—	10	4	587	22 797	460	1 124	16 783	81 403	85 878	167 385	22 080

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	1	156	67	7 275	264 211	5 642	11 392	186 803	823 865	527 292	1 361 611	51 008
32791	Abrasive product mfg ...	—	34	19	2 090	72 496	1 497	3 071	42 543	253 044	150 463	412 462	19 376
327910	Abrasive product mfg . .	—	34	19	2 090	72 496	1 497	3 071	42 543	253 044	150 463	412 462	19 376
32799	All other nonmetallic mineral product mfg ...	1	122	48	5 185	191 715	4 145	8 321	144 260	570 821	376 829	949 149	31 632
327991	Cut stone & stone product mfg.....	1	36	8	460	11 136	333	681	7 588	27 369	17 557	44 417	2 230
327992	Ground or treated mineral & earth mfg..	2	36	14	915	32 859	633	1 333	20 310	115 498	92 325	210 426	9 044
327993	Mineral wool mfg.....	—	29	16	3 373	135 628	2 864	5 649	108 843	389 405	236 655	627 329	17 876
327999	All other miscellaneous nonmetallic mineral product mfg.....	1	21	10	437	12 092	315	658	7 519	38 549	30 292	66 977	2 482
331	Primary metal mfg.....	—	478	319	74 621	3 206 789	60 496	131 456	2 414 538	10 800 064	10 672 488	21 382 589	775 179
3311	Iron & steel mills & ferroalloy mfg.....	—	29	26	24 302	1 264 850	19 740	43 732	974 993	5 747 483	4 984 300	10 640 907	347 762
33111	Iron & steel mills & ferroalloy mfg.....	—	29	26	24 302	1 264 850	19 740	43 732	974 993	5 747 483	4 984 300	10 640 907	347 762
331111	Iron & steel mills.....	—	24	21	22 764	1 199 146	18 610	41 156	929 147	5 490 376	4 673 161	10 088 697	317 932
331112	Electrometallurgical ferroalloy product mfg.....	—	5	5	1 538	65 704	1 130	2 576	45 846	257 107	311 139	552 210	29 830
3312	Steel product mfg from purchased steel.....	—	66	48	9 959	392 240	7 819	16 562	274 168	1 112 305	1 761 402	2 860 818	93 935
33121	Iron & steel pipes & tubes mfg from purchased steel.....	—	26	22	5 122	176 940	4 251	8 989	133 112	520 919	705 913	1 216 321	35 947
331210	Iron & steel pipes & tubes mfg from purchased steel.....	—	26	22	5 122	176 940	4 251	8 989	133 112	520 919	705 913	1 216 321	35 947
33122	Rolling & drawing of purchased steel.....	—	40	26	4 837	215 300	3 568	7 573	141 056	591 386	1 055 489	1 644 497	57 988
331221	Cold-rolled steel shape mfg.....	—	29	17	3 607	170 137	2 651	5 483	112 111	494 456	894 228	1 387 419	50 218
331222	Steel wire drawing....	—	11	9	1 230	45 163	917	2 090	28 945	96 930	161 261	257 078	7 770
3313	Alumina & aluminum production & processing..	—	36	33	5 991	204 440	4 749	10 014	139 794	984 772	1 272 018	2 273 860	58 497
33131	Alumina & aluminum production & processing.....	—	36	33	5 991	204 440	4 749	10 014	139 794	984 772	1 272 018	2 273 860	58 497
331312	Primary aluminum production.....	—	1	1	g	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum .	—	12	9	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	—	4	4	1 226	47 561	952	1 869	31 852	220 656	442 832	687 325	15 525
331316	Aluminum extruded product mfg.....	—	18	18	2 473	68 466	1 936	3 931	44 082	181 811	270 849	449 663	9 919
331319	Other aluminum rolling & drawing.....	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	—	56	34	4 342	182 043	3 043	7 090	116 250	550 178	864 094	1 419 985	35 246
33141	Nonferrous metal (except aluminum) smelting & refining.....	—	8	4	216	7 717	131	249	3 915	17 526	44 270	62 041	715
331419	Other nonferrous metal primary smelting & refining.....	—	7	4	c	D	D	D	D	D	D	D	715
33142	Copper rolling, drawing, extruding, & alloying ...	—	13	11	1 571	64 240	1 084	2 417	38 152	174 971	470 631	653 786	14 728
331421	Copper rolling, drawing, & extruding .	—	7	7	1 199	47 764	836	1 877	30 025	148 721	352 266	504 913	13 827
331423	Secondary smelting, refining, & alloying of copper.....	—	6	4	372	16 476	248	540	8 127	26 250	118 365	148 873	901
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	35	19	2 555	110 086	1 828	4 424	74 183	357 681	349 193	704 158	19 803
331491	Other nonferrous metal rolling, drawing, & extruding.....	—	14	11	1 840	82 526	1 304	3 339	56 711	287 887	271 054	555 850	16 540
331492	Other nonferrous metal secondary smelting, refining, & alloying...	1	21	8	715	27 560	524	1 085	17 472	69 794	78 139	148 308	3 263

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	291	178	30 027	1 163 216	25 145	54 058	909 333	2 405 326	1 790 674	4 187 019	239 739
33151	Ferrous metal foundries ..	-	125	84	18 209	784 259	15 486	33 990	638 684	1 505 050	1 108 079	2 616 753	139 366
331511	Iron foundries	-	83	60	13 665	633 610	11 723	26 378	524 664	1 188 759	929 091	2 122 072	125 749
331512	Steel investment foundries	-	16	13	2 586	80 277	2 152	4 337	59 884	154 489	84 364	237 966	8 223
331513	Steel foundries (except investment)	-	26	11	1 958	70 372	1 611	3 275	54 136	161 802	94 624	256 715	5 394
33152	Nonferrous metal foundries	-	166	94	11 818	378 957	9 659	20 068	270 649	900 276	682 595	1 570 266	100 373
331521	Aluminum die-casting foundries	1	32	21	2 971	100 403	2 541	5 078	78 057	244 053	232 110	474 437	34 526
331522	Nonferrous (except aluminum) die-casting foundries	-	20	14	1 221	35 417	970	2 002	24 407	77 359	78 351	155 012	5 484
331524	Aluminum foundries (except die-casting) ..	-	80	42	4 818	140 083	3 807	8 015	98 349	273 001	213 152	485 281	43 480
331525	Copper foundries (except die-casting) ..	-	20	9	679	24 002	569	1 129	18 110	54 054	29 718	81 549	D
331528	Other nonferrous foundries (except die-casting)	-	14	8	2 129	79 052	1 772	3 844	51 726	251 809	129 264	373 987	D
332	Fabricated metal product mfg	-	4 332	1 511	143 223	4 807 291	108 563	220 158	3 188 491	11 474 356	10 440 507	21 923 931	922 928
3321	Forging & stamping	-	284	180	18 021	649 979	13 662	29 180	439 575	1 576 067	1 603 069	3 170 045	158 449
33211	Forging & stamping	-	284	180	18 021	649 979	13 662	29 180	439 575	1 576 067	1 603 069	3 170 045	158 449
332111	Iron & steel forging	1	43	34	3 810	152 107	2 758	5 994	106 602	364 156	394 359	763 619	37 101
332112	Nonferrous forging	-	6	3	g	D	D	D	D	D	D	D	D
332114	Custom roll forming	-	34	26	2 799	98 975	2 037	4 527	63 669	260 143	313 093	561 880	8 921
332115	Crown & closure mfg	1	7	5	e	D	D	D	D	D	D	D	D
332116	Metal stamping	-	188	108	8 537	274 011	6 531	13 494	174 764	588 901	561 000	1 150 318	46 064
332117	Powder metallurgy part mfg	-	6	4	568	20 525	434	889	14 180	48 687	26 722	75 893	D
3322	Cutlery & handtool mfg	1	118	49	6 121	195 238	4 127	8 010	105 627	714 487	388 759	1 095 840	35 926
33221	Cutlery & handtool mfg ..	1	118	49	6 121	195 238	4 127	8 010	105 627	714 487	388 759	1 095 840	35 926
332211	Cutlery & flatware (except precious) mfg	3	12	2	233	7 073	176	320	4 323	14 381	9 776	24 159	1 087
332212	Hand & edge tool mfg ..	1	90	39	4 596	150 102	3 048	5 755	77 966	513 662	247 917	761 932	24 648
332213	Saw blade & handsaw mfg	-	9	3	431	13 022	349	741	9 464	45 467	19 043	63 770	4 622
332214	Kitchen utensil, pot, & pan mfg	-	7	5	861	25 041	554	1 194	13 874	140 977	112 023	245 979	5 569
3323	Architectural & structural metals mfg	-	648	255	20 604	644 165	15 140	30 158	404 179	1 573 786	1 771 085	3 365 602	67 947
33231	Plate work & fabricated structural product mfg ..	-	296	109	7 332	242 110	5 331	10 667	146 009	589 486	629 842	1 220 470	22 508
332311	Prefabricated metal building & component mfg	-	23	9	1 005	29 934	688	1 252	15 684	82 947	97 902	180 033	2 927
332312	Fabricated structural metal mfg	-	177	62	3 948	133 552	2 866	5 812	79 690	369 136	390 013	762 747	13 226
332313	Plate work mfg	-	96	38	2 379	78 624	1 777	3 603	50 635	137 403	141 927	277 690	6 355
33232	Ornamental & architectural metal products mfg	-	352	146	13 272	402 055	9 809	19 491	258 170	984 300	1 141 243	2 145 132	45 439
332321	Metal window & door mfg	-	72	35	4 637	132 084	3 416	6 909	87 235	409 788	500 970	917 225	14 774
332322	Sheet metal work mfg ..	1	213	86	6 590	203 479	4 924	9 574	131 964	435 228	445 397	895 650	25 601
332323	Ornamental & architectural metal work mfg	-	67	25	2 045	66 492	1 469	3 008	38 971	139 284	194 876	332 257	5 064
3324	Boiler, tank, & shipping container mfg	-	108	64	8 558	309 291	6 799	13 260	224 117	749 174	1 217 723	1 960 423	37 478
33241	Power boiler & heat exchanger mfg	-	17	13	1 051	34 742	657	1 255	18 823	93 620	69 646	163 234	2 633
332410	Power boiler & heat exchanger mfg	-	17	13	1 051	34 742	657	1 255	18 823	93 620	69 646	163 234	2 633
33242	Metal tank (heavy gauge) mfg	-	28	17	2 947	101 958	2 335	4 432	69 694	189 831	191 552	385 553	6 468
332420	Metal tank (heavy gauge) mfg	-	28	17	2 947	101 958	2 335	4 432	69 694	189 831	191 552	385 553	6 468
33243	Metal can, box, & other metal container (light gauge) mfg	-	63	34	4 560	172 591	3 807	7 573	135 600	465 723	956 525	1 411 636	28 377
332431	Metal can mfg	-	21	15	3 348	136 109	2 887	5 719	111 295	387 296	835 014	1 211 785	22 302
332439	Other metal container mfg	2	42	19	1 212	36 482	920	1 854	24 305	78 427	121 511	199 851	6 075
3325	Hardware mfg	1	61	33	4 539	160 618	3 293	7 002	112 636	496 861	376 535	865 518	15 026
33251	Hardware mfg	1	61	33	4 539	160 618	3 293	7 002	112 636	496 861	376 535	865 518	15 026
332510	Hardware mfg	1	61	33	4 539	160 618	3 293	7 002	112 636	496 861	376 535	865 518	15 026

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	-	116	53	5 389	160 262	4 214	8 500	105 425	338 521	361 932	698 001	21 844
33261	Spring & wire product mfg	-	116	53	5 389	160 262	4 214	8 500	105 425	338 521	361 932	698 001	21 844
332611	Spring (heavy gauge) mfg	-	9	5	425	14 642	326	797	10 021	34 664	35 015	69 008	2 197
332612	Spring (light gauge) mfg	1	37	19	1 958	54 454	1 689	3 603	41 787	128 950	117 202	246 704	12 413
332618	Other fabricated wire product mfg	-	70	29	3 006	91 166	2 199	4 100	53 617	174 907	209 715	382 289	7 234
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	2 019	479	37 242	1 207 341	29 035	58 637	821 779	2 523 286	1 328 808	3 840 140	190 036
33271	Machine shops	1	1 692	322	24 461	786 309	19 222	37 777	536 097	1 527 137	678 040	2 188 863	108 732
332710	Machine shops	1	1 692	322	24 461	786 309	19 222	37 777	536 097	1 527 137	678 040	2 188 863	108 732
33272	Turned product & screw, nut, & bolt mfg	-	327	157	12 781	421 032	9 813	20 860	285 682	996 149	650 768	1 651 277	81 304
332721	Precision turned product mfg	-	230	101	8 172	263 134	6 485	14 122	186 653	610 401	309 407	917 870	47 463
332722	Bolt, nut, screw, rivet, & washer mfg	-	97	56	4 609	157 898	3 328	6 738	99 029	385 748	341 361	733 407	33 841
3328	Coating, engraving, heat treating, & allied activities .	-	530	207	15 541	478 673	12 143	24 401	318 052	1 177 969	1 444 081	2 647 246	209 586
33281	Coating, engraving, heat treating, & allied activities	-	530	207	15 541	478 673	12 143	24 401	318 052	1 177 969	1 444 081	2 647 246	209 586
332811	Metal heat treating	-	106	46	3 431	121 653	2 707	5 495	84 081	253 903	377 750	630 500	65 253
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	149	65	5 175	158 719	4 049	8 439	107 151	424 782	831 324	1 282 267	113 745
332813	Electroplating, plating, polishing, anodizing, & coloring	1	275	96	6 935	198 301	5 387	10 467	126 820	499 284	235 007	734 479	30 588
3329	Other fabricated metal product mfg	-	448	191	27 208	1 001 724	20 150	41 010	657 101	2 324 205	1 948 515	4 281 116	186 636
33291	Metal valve mfg	-	108	76	10 838	378 404	8 096	16 458	243 576	1 149 846	870 329	2 029 545	89 289
332911	Industrial valve mfg	1	34	24	2 897	99 790	2 081	4 012	60 381	242 304	178 481	429 568	20 897
332912	Fluid power valve & hose fitting mfg	-	43	30	5 694	206 617	4 301	8 788	136 032	735 320	486 935	1 210 986	44 230
332913	Plumbing fixture fitting & trim mfg	-	9	7	697	22 311	516	1 106	13 434	45 722	66 085	112 545	1 969
332919	Other metal valve & pipe fitting mfg	1	22	15	1 550	49 686	1 198	2 552	33 729	126 500	138 828	276 446	22 193
33299	All other fabricated metal product mfg	-	340	115	16 370	623 320	12 054	24 552	413 525	1 174 359	1 078 186	2 251 571	97 347
332991	Ball & roller bearing mfg	-	12	9	5 758	285 206	4 848	10 512	230 391	517 201	525 235	1 040 786	41 816
332993	Ammunition (except small arms) mfg	-	2	1	e	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	6	3	981	39 463	217	515	8 007	58 676	6 237	66 456	20
332996	Fabricated pipe & pipe fitting mfg	1	52	25	1 731	49 254	1 312	2 649	30 671	94 200	96 467	187 056	7 128
332997	Industrial pattern mfg	1	75	9	1 019	33 595	856	1 685	26 524	54 767	14 214	69 050	2 572
332998	Enameled iron & metal sanitary ware mfg	-	4	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	177	64	5 521	167 442	3 844	7 238	89 956	331 549	334 776	667 179	40 427
333	Machinery mfg	-	2 260	925	113 871	4 366 500	72 791	154 330	2 378 537	10 033 728	9 236 875	19 159 125	638 676
3331	Agriculture, construction, & mining machinery mfg	-	109	49	7 280	250 328	5 555	11 818	165 746	565 621	816 023	1 398 231	43 511
33311	Agricultural implement mfg	-	42	12	3 064	93 613	2 682	5 945	76 867	173 348	366 516	562 346	25 527
333111	Farm machinery & equipment mfg	1	33	10	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	9	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	46	28	3 420	130 150	2 270	4 688	71 400	308 454	387 352	689 469	15 745
333120	Construction machinery mfg	-	46	28	3 420	130 150	2 270	4 688	71 400	308 454	387 352	689 469	15 745
33313	Mining & oil & gas field machinery mfg	3	21	9	796	26 565	603	1 185	17 479	83 819	62 155	146 416	2 239
333131	Mining machinery & equipment mfg	3	15	9	728	24 536	559	1 110	16 424	79 626	58 612	138 743	2 062

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	1	309	132	14 529	565 463	7 952	16 653	259 935	1 477 569	1 218 116	2 673 085	65 987
33321	Sawmill & woodworking machinery mfg	—	19	3	580	20 897	409	851	12 398	39 731	29 502	70 169	1 073
333210	Sawmill & woodworking machinery mfg	—	19	3	580	20 897	409	851	12 398	39 731	29 502	70 169	1 073
33322	Plastics & rubber industry machinery mfg	—	58	31	4 597	196 348	2 225	4 451	80 906	667 897	487 254	1 133 589	25 737
333220	Plastics & rubber industry machinery mfg	—	58	31	4 597	196 348	2 225	4 451	80 906	667 897	487 254	1 133 589	25 737
33329	Other industrial machinery mfg	1	232	98	9 352	348 218	5 318	11 351	166 631	769 941	701 360	1 469 327	39 177
333291	Paper industry machinery mfg	—	20	11	849	37 870	427	790	16 721	65 275	94 955	165 167	4 353
333292	Textile machinery mfg	—	11	5	226	9 342	125	254	3 275	21 873	13 150	34 913	419
333293	Printing machinery & equipment mfg	—	38	12	1 723	55 273	716	1 613	23 563	143 509	156 903	297 123	7 047
333294	Food product machinery mfg	—	37	17	1 733	64 015	1 066	2 154	30 294	177 594	121 184	298 253	9 583
333295	Semiconductor machinery mfg	—	4	3	210	8 255	89	153	1 875	10 357	10 117	20 106	650
333298	All other industrial machinery mfg	2	122	50	4 611	173 463	2 895	6 387	90 903	351 333	305 051	653 765	17 125
3333	Commercial & service industry machinery mfg ..	2	105	46	6 793	253 698	3 752	7 764	105 981	688 646	442 712	1 133 542	43 468
33331	Commercial & service industry machinery mfg	2	105	46	6 793	253 698	3 752	7 764	105 981	688 646	442 712	1 133 542	43 468
333311	Automatic vending machine mfg	—	3	3	235	5 133	120	246	1 907	12 741	12 288	26 005	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	5	2	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	5	4	2	c	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	11	4	1 260	40 319	976	2 040	26 350	110 282	42 751	153 439	10 153
333315	Photographic & photocopying equipment mfg	—	10	8	313	13 023	201	397	5 912	28 137	11 652	38 823	2 178
333319	Other commercial & service industry machinery mfg	2	72	27	4 404	175 568	2 127	4 374	63 636	504 037	334 413	839 781	30 106
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	89	61	11 018	387 683	7 020	15 256	192 316	964 204	1 066 116	2 052 955	57 106
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	89	61	11 018	387 683	7 020	15 256	192 316	964 204	1 066 116	2 052 955	57 106
333411	Air purification equipment mfg	—	20	12	1 201	34 313	787	1 638	16 977	82 122	70 155	153 140	3 245
333412	Industrial & commercial fan & blower mfg	4	16	12	1 556	54 761	946	2 116	28 343	116 340	126 711	245 345	6 185
333414	Heating equipment (except warm air furnaces) mfg	—	18	9	1 314	47 496	767	1 572	20 452	108 344	81 978	188 328	4 207
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	35	28	6 947	251 113	4 520	9 930	126 544	657 398	787 272	1 466 142	43 469
3335	Metalworking machinery mfg	—	1 070	366	31 944	1 287 631	22 442	46 832	809 737	2 692 263	1 584 537	4 183 750	212 330
33351	Metalworking machinery mfg	—	1 070	366	31 944	1 287 631	22 442	46 832	809 737	2 692 263	1 584 537	4 183 750	212 330
333511	Industrial mold mfg ...	—	268	102	6 543	262 844	5 325	11 438	190 670	432 672	168 750	609 401	47 389
333512	Machine tool (metal cutting types) mfg ...	—	46	36	4 382	190 987	2 141	4 066	81 529	500 092	478 783	862 309	38 892
333513	Machine tool (metal forming types) mfg ...	—	33	24	3 577	161 829	2 374	5 087	96 803	318 939	260 454	580 772	21 498
333514	Special die & tool, die set, jig, & fixture mfg ..	1	478	116	9 491	363 269	7 290	14 963	254 491	688 886	299 817	981 392	57 147
333515	Cutting tool & machine tool accessory mfg ..	1	180	54	4 916	175 848	3 601	7 302	115 513	465 379	150 975	614 150	28 863
333516	Rolling mill machinery & equipment mfg	—	18	10	867	35 857	434	994	14 732	63 117	72 285	157 353	3 853
333518	Other metalworking machinery mfg	1	47	24	2 168	96 997	1 277	2 982	55 999	223 178	153 473	378 373	14 688

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	1	69	43	5 592	212 643	3 913	7 827	129 319	548 803	600 926	1 156 000	41 822
33361	Engine, turbine, & power transmission equipment mfg	1	69	43	5 592	212 643	3 913	7 827	129 319	548 803	600 926	1 156 000	41 822
333611	Turbine & turbine generator set unit mfg	—	3	3	156	6 873	83	179	2 310	9 758	18 863	30 273	132
333612	Speed changer, industrial high-speed drive, & gear mfg	3	23	12	1 015	35 722	696	1 344	21 216	81 726	77 123	158 799	4 990
333613	Mechanical power transmission equipment mfg	2	27	16	1 731	68 353	1 051	2 100	34 793	165 094	122 249	285 098	12 198
333618	Other engine equipment mfg	—	16	12	2 690	101 695	2 083	4 204	71 000	292 225	382 691	681 830	24 502
3339	Other general-purpose machinery mfg	—	509	228	36 715	1 409 054	22 157	48 180	715 503	3 096 622	3 508 445	6 561 562	174 452
33391	Pump & compressor mfg	—	58	33	8 380	317 720	4 962	10 465	159 171	670 278	767 059	1 425 105	33 183
333911	Pump & pumping equipment mfg	—	25	17	4 471	167 026	2 725	5 541	89 586	382 759	409 337	786 383	17 831
333912	Air & gas compressor mfg	—	24	11	3 210	122 552	1 772	4 011	53 035	211 530	294 894	500 742	12 532
333913	Measuring & dispensing pump mfg	—	9	5	699	28 142	465	913	16 550	75 989	62 828	137 980	2 820
33392	Material handling equipment mfg	—	124	73	8 719	325 039	5 646	11 613	173 343	671 035	740 729	1 408 992	37 409
333921	Elevator & moving stairway mfg	1	11	7	486	25 508	272	503	15 894	41 235	35 035	76 758	1 765
333922	Conveyor & conveying equipment mfg	1	64	35	3 258	122 523	1 873	4 109	51 800	243 229	213 406	455 904	8 055
333923	Overhead traveling crane, hoist, & monorail system mfg	—	19	8	1 028	38 025	540	1 056	17 219	106 147	160 510	258 371	8 758
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	30	23	3 947	138 983	2 961	5 945	88 430	280 424	331 778	617 959	18 831
33399	All other general-purpose machinery mfg	—	327	122	19 616	766 295	11 549	26 102	382 989	1 755 309	2 000 657	3 727 465	103 860
333991	Power-driven handtool mfg	—	23	10	1 905	81 918	1 160	2 268	42 957	179 982	96 091	274 961	9 538
333992	Welding & soldering equipment mfg	—	22	14	6 162	238 312	3 787	8 180	132 924	569 862	995 739	1 532 780	42 774
333993	Packaging machinery mfg	—	40	18	2 651	106 102	1 082	2 389	32 727	229 369	206 473	438 013	12 735
333994	Industrial process furnace & oven mfg ..	2	40	18	1 396	60 014	704	3 593	21 462	113 377	148 567	264 640	4 124
333995	Fluid power cylinder & actuator mfg	—	35	17	1 657	52 435	1 162	2 373	33 322	115 712	68 283	187 729	9 786
333996	Fluid power pump & motor mfg	1	15	6	2 161	91 019	1 546	3 369	60 159	208 799	212 240	419 181	11 989
333997	Scale & balance (except laboratory) mfg	—	8	5	495	18 575	277	436	8 062	59 848	61 578	121 445	1 120
333999	All other miscellaneous general-purpose machinery mfg	—	144	34	3 189	117 920	1 831	3 494	51 376	278 360	211 686	488 716	11 794
334	Computer & electronic product mfg	—	522	228	35 278	1 263 594	21 664	42 345	597 088	3 976 831	3 346 079	7 256 499	267 891
3341	Computer & peripheral equipment mfg	1	48	11	2 555	97 870	1 600	3 389	51 009	527 178	291 872	821 226	19 222
33411	Computer & peripheral equipment mfg	1	48	11	2 555	97 870	1 600	3 389	51 009	527 178	291 872	821 226	19 222
334111	Electronic computer mfg	2	15	5	477	15 477	281	517	6 734	90 220	20 785	101 867	1 330
334119	Other computer peripheral equipment mfg	—	26	6	2 043	81 344	1 306	2 843	43 497	434 721	268 814	714 798	17 517
3342	Communications equipment mfg	—	45	20	6 208	259 151	3 692	7 078	144 942	1 075 317	938 866	1 978 983	50 782
33421	Telephone apparatus mfg	—	9	5	3 281	162 179	2 293	4 190	115 698	842 712	767 386	1 577 579	35 393
334210	Telephone apparatus mfg	—	9	5	3 281	162 179	2 293	4 190	115 698	842 712	767 386	1 577 579	35 393
33422	Radio & TV broadcasting & wireless communications equipment mfg	3	32	13	2 781	92 140	1 323	2 789	27 135	225 421	159 615	382 412	15 174
334220	Radio & TV broadcasting & wireless communications equipment mfg	3	32	13	2 781	92 140	1 323	2 789	27 135	225 421	159 615	382 412	15 174

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg—Con.												
33429	Other communications equipment mfg	2	4	2	146	4 832	76	99	2 109	7 184	11 865	18 992	215
334290	Other communications equipment mfg	2	4	2	146	4 832	76	99	2 109	7 184	11 865	18 992	215
3343	Audio & video equipment mfg	—	10	3	528	15 477	411	789	8 685	14 265	69 457	79 049	D
33431	Audio & video equipment mfg	—	10	3	528	15 477	411	789	8 685	14 265	69 457	79 049	D
334310	Audio & video equipment mfg	—	10	3	528	15 477	411	789	8 685	14 265	69 457	79 049	D
3344	Semiconductor & other electronic component mfg	—	167	86	11 225	340 381	8 164	16 246	201 007	1 000 769	1 074 868	2 033 261	120 163
33441	Semiconductor & other electronic component mfg	—	167	86	11 225	340 381	8 164	16 246	201 007	1 000 769	1 074 868	2 033 261	120 163
334411	Electron tube mfg	—	12	8	3 508	116 106	2 747	5 670	78 668	328 943	649 845	939 273	54 536
334412	Bare printed circuit board mfg	1	36	17	1 199	31 043	960	1 843	19 936	65 499	39 217	104 915	12 107
334413	Semiconductor & related device mfg	—	12	6	1 932	67 415	1 327	2 595	36 371	278 491	127 129	399 762	35 230
334415	Electronic resistor mfg	1	2	2	c	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	11	6	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	7	4	362	10 604	254	455	7 535	56 022	13 795	70 545	1 304
334418	Printed circuit assembly (electronic assembly) mfg	2	18	13	887	22 440	625	1 308	12 739	49 047	53 505	99 601	3 870
334419	Other electronic component mfg	2	69	30	2 679	73 241	1 834	3 556	35 781	184 225	168 449	357 508	11 736
3345	Navigational, measuring, medical, & control instruments mfg	—	232	105	14 499	542 074	7 621	14 486	186 912	1 336 722	960 680	2 310 945	68 029
33451	Navigational, measuring, medical, & control instruments mfg	—	232	105	14 499	542 074	7 621	14 486	186 912	1 336 722	960 680	2 310 945	68 029
334510	Electromedical & electrotherapeutic apparatus mfg	—	17	5	785	37 032	292	629	10 071	87 681	112 329	203 046	3 848
334511	Search, detection, navigation, & guidance instrument mfg	—	15	5	f	D	D	D	D	D	D	D	3 024
334512	Automatic environmental control mfg	—	25	13	3 089	80 301	2 270	4 226	45 514	144 148	87 342	231 702	10 685
334513	Industrial process control instrument mfg	—	47	24	2 883	132 876	1 060	1 647	29 750	305 543	178 471	486 473	13 679
334514	Totalizing fluid meter & counting device mfg	—	11	5	641	16 169	511	916	9 206	44 712	91 968	136 749	D
334515	Electricity measuring & testing instrument mfg	—	32	17	1 718	67 495	793	1 536	24 581	152 049	77 159	230 986	12 680
334516	Analytical laboratory instrument mfg	—	20	5	1 086	41 006	523	984	12 457	79 186	44 749	123 242	9 349
334517	Irradiation apparatus mfg	—	9	6	1 071	54 601	322	681	10 143	150 671	193 230	346 104	3 325
334518	Watch, clock, & part mfg	—	4	2	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	52	23	2 360	88 306	1 321	2 694	34 528	279 686	141 623	422 313	8 147
3346	Mfg & reproducing magnetic & optical media	1	20	3	263	8 641	176	357	4 533	22 580	10 336	33 035	D
33461	Mfg & reproducing magnetic & optical media	1	20	3	263	8 641	176	357	4 533	22 580	10 336	33 035	D
334611	Software reproducing	2	6	1	c	D	D	D	D	D	D	D	1 550
334612	Prerecorded CD (except software), tape, & record reproducing	—	11	2	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	393	211	46 877	1 563 654	33 867	67 436	950 783	5 305 672	4 041 756	9 411 851	228 741

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3351	Electric lighting equipment mfg	-	63	33	6 923	228 715	5 712	12 103	174 534	1 021 575	485 494	1 500 340	36 584
33511	Electric lamp bulb & part mfg	-	11	11	h	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	11	11	h	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	52	22	h	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	1	13	6	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	-	14	4	1 070	26 582	768	1 643	15 177	186 940	105 281	290 922	2 826
335129	Other lighting equipment mfg	-	25	12	1 715	47 453	1 273	2 419	25 925	136 038	132 028	265 739	6 616
3352	Household appliance mfg	-	29	24	14 560	479 503	11 771	22 446	346 087	1 879 961	1 758 942	3 700 577	72 874
33521	Small electrical appliance mfg	-	16	14	i	D	D	D	D	D	D	D	41 984
335211	Electric housewares & household fan mfg	-	8	6	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	8	8	3 992	152 980	2 580	4 995	86 384	528 738	268 474	810 748	D
33522	Major appliance mfg	-	13	10	i	D	D	D	D	D	D	D	30 890
335221	Household cooking appliance mfg	-	5	3	e	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	4	3	f	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	177	83	15 380	560 466	9 360	18 889	264 554	1 627 541	976 043	2 608 610	79 938
33531	Electrical equipment mfg	-	177	83	15 380	560 466	9 360	18 889	264 554	1 627 541	976 043	2 608 610	79 938
335311	Power, distribution, & specialty transformer mfg	5	7	4	329	9 489	243	528	6 038	18 207	14 473	32 903	1 287
335312	Motor & generator mfg	-	48	28	5 621	173 894	4 106	8 546	110 868	431 189	314 478	748 817	31 284
335313	Switchgear & switchboard apparatus mfg	-	44	19	3 376	114 746	2 377	4 575	71 793	408 115	207 553	604 336	12 152
335314	Relay & industrial control mfg	-	78	32	6 054	262 337	2 634	5 240	75 855	770 030	439 539	1 222 554	35 215
3359	Other electrical equipment & component mfg	-	124	71	10 014	294 970	7 024	13 998	165 608	776 595	821 277	1 602 324	39 345
33591	Battery mfg	-	7	5	1 214	37 969	934	1 989	27 716	98 468	152 921	251 196	3 603
335911	Storage battery mfg	-	5	3	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	2	2	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	14	13	1 289	41 731	908	1 860	23 140	137 796	152 554	296 065	6 782
335921	Fiber optic cable mfg	-	2	2	c	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	12	11	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	51	31	4 041	110 833	2 934	5 704	64 868	240 324	248 721	487 631	15 485
335931	Current-carrying wiring device mfg	-	35	20	2 698	71 861	2 099	4 249	45 093	152 964	173 437	326 143	9 682
335932	Noncurrent-carrying wiring device mfg	-	16	11	1 343	38 972	835	1 455	19 775	87 360	75 284	161 488	5 803
33599	All other electrical equipment & component mfg	-	52	22	3 470	104 437	2 248	4 445	49 884	300 007	267 081	567 432	13 475
335991	Carbon & graphite product mfg	-	15	7	899	33 672	663	1 420	20 399	64 184	68 020	132 110	7 526
335999	All other miscellaneous electrical equipment & component mfg	-	37	15	2 571	70 765	1 585	3 025	29 485	235 823	199 061	435 322	5 949
336	Transportation equipment mfg	-	718	464	173 104	8 133 458	141 417	298 462	6 167 525	25 592 324	45 786 373	71 399 811	2 583 267
3361	Motor vehicle mfg	-	25	18	36 503	1 881 897	32 528	66 605	1 604 229	10 769 855	23 244 869	33 952 920	454 792
33611	Automobile & light duty motor vehicle mfg	-	16	10	k	D	D	D	D	D	D	D	438 073
336111	Automobile mfg	-	11	6	j	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	5	4	j	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	9	8	i	D	D	D	D	D	D	D	16 719
336120	Heavy duty truck mfg	-	9	8	i	D	D	D	D	D	D	D	16 719

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OHIO—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3362	Motor vehicle body & trailer mfg	-	72	38	5 256	149 688	4 132	8 445	104 094	281 876	492 474	781 160	26 598
33621	Motor vehicle body & trailer mfg	-	72	38	5 256	149 688	4 132	8 445	104 094	281 876	492 474	781 160	26 598
336211	Motor vehicle body mfg	-	39	24	3 380	92 626	2 639	5 215	65 237	168 350	303 581	481 090	24 084
336212	Truck trailer mfg	-	14	8	926	28 895	741	1 696	18 862	56 167	107 242	164 319	1 659
336213	Motor home mfg	-	3	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	16	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	484	336	111 445	5 114 391	93 248	200 425	4 033 544	11 259 491	18 433 490	29 724 705	1 889 709
33631	Motor vehicle gasoline engine & engine parts mfg	-	43	20	9 118	490 946	7 253	16 016	372 032	1 612 948	3 651 672	5 212 482	547 752
336311	Carburetor, piston, piston ring, & valve mfg	-	9	5	1 123	60 373	828	1 470	41 413	106 716	72 217	174 935	D
336312	Gasoline engine & engine parts mfg	-	34	15	7 995	430 573	6 425	14 546	330 619	1 506 232	3 579 455	5 037 547	D
33632	Motor vehicle electrical & electronic equipment mfg	-	54	34	16 936	778 204	13 636	27 205	582 439	1 417 706	2 550 656	4 019 441	126 557
336321	Vehicular lighting equipment mfg	-	9	5	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	45	29	j	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	20	18	8 623	448 169	7 180	14 820	332 808	774 098	1 053 360	1 828 941	126 943
336330	Motor vehicle steering & suspension component (except spring) mfg	-	20	18	8 623	448 169	7 180	14 820	332 808	774 098	1 053 360	1 828 941	126 943
33634	Motor vehicle brake system mfg	-	27	19	7 581	354 625	6 093	13 672	276 920	599 881	1 251 103	1 849 384	111 984
336340	Motor vehicle brake system mfg	-	27	19	7 581	354 625	6 093	13 672	276 920	599 881	1 251 103	1 849 384	111 984
33635	Motor vehicle transmission & power train parts mfg	-	36	23	13 004	702 708	11 165	25 293	585 768	1 725 537	3 143 213	4 892 262	323 483
336350	Motor vehicle transmission & power train parts mfg	-	36	23	13 004	702 708	11 165	25 293	585 768	1 725 537	3 143 213	4 892 262	323 483
33636	Motor vehicle seating & interior trim mfg	-	28	22	4 750	116 916	3 989	8 398	85 407	393 712	955 546	1 348 939	35 455
336360	Motor vehicle seating & interior trim mfg ...	-	28	22	4 750	116 916	3 989	8 398	85 407	393 712	955 546	1 348 939	35 455
33637	Motor vehicle metal stamping	-	146	109	30 311	1 471 618	25 947	57 273	1 210 990	2 589 863	3 071 805	5 668 852	365 210
336370	Motor vehicle metal stamping	-	146	109	30 311	1 471 618	25 947	57 273	1 210 990	2 589 863	3 071 805	5 668 852	365 210
33639	Other motor vehicle parts mfg	-	130	91	21 122	751 205	17 985	37 748	587 180	2 145 746	2 756 135	4 904 404	252 325
336391	Motor vehicle air-conditioning mfg	-	6	6	5 912	297 989	5 328	12 036	256 903	633 394	750 788	1 376 299	21 937
336399	All other motor vehicle parts mfg	-	124	85	15 210	453 216	12 657	25 712	330 277	1 512 352	2 005 347	3 528 105	230 388
3364	Aerospace product & parts mfg	-	75	45	14 935	834 898	7 561	14 694	322 918	2 769 202	2 800 176	5 609 656	186 884
33641	Aerospace product & parts mfg	-	75	45	14 935	834 898	7 561	14 694	322 918	2 769 202	2 800 176	5 609 656	186 884
336412	Aircraft engine & engine parts mfg	-	29	23	10 281	620 740	4 846	8 739	215 262	1 999 760	2 465 998	4 539 766	142 592
336413	Other aircraft part & auxiliary equipment mfg	-	41	20	h	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	13	7	867	25 084	716	1 494	17 562	45 010	191 851	243 705	2 313
33651	Railroad rolling stock mfg	-	13	7	867	25 084	716	1 494	17 562	45 010	191 851	243 705	2 313
336510	Railroad rolling stock mfg	-	13	7	867	25 084	716	1 494	17 562	45 010	191 851	243 705	2 313
3366	Ship & boat building	-	17	4	725	16 684	625	1 293	12 853	48 314	56 540	103 892	2 363
33661	Ship & boat building	-	17	4	725	16 684	625	1 293	12 853	48 314	56 540	103 892	2 363
336611	Ship building & repairing	2	10	1	166	6 632	140	307	4 659	12 772	3 559	16 331	D
336612	Boat building	-	7	3	559	10 052	485	986	8 194	35 542	52 981	87 561	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3369	Other transportation equipment mfg	-	32	16	3 373	110 816	2 607	5 506	72 325	418 576	566 973	983 773	20 608
33699	Other transportation equipment mfg	-	32	16	3 373	110 816	2 607	5 506	72 325	418 576	566 973	983 773	20 608
336991	Motorcycle, bicycle, & parts mfg	-	15	4	g	D	D	D	D	D	D	D	6 088
336992	Military armored vehicle, tank, & tank component mfg	-	7	5	f	D	D	D	D	D	D	D	3 806
336999	All other transportation equipment mfg	-	10	7	1 011	35 994	841	1 986	27 555	156 856	229 996	387 258	10 714
337	Furniture & related product mfg	-	735	142	20 761	586 361	16 179	32 804	366 203	1 567 444	1 473 593	3 039 424	109 490
3371	Household & institutional furniture & kitchen cabinet mfg	-	533	54	13 643	371 345	11 014	22 574	233 710	1 083 097	1 048 180	2 127 373	83 854
33711	Wood kitchen cabinet & counter top mfg	-	311	26	6 471	173 600	5 243	11 433	125 026	514 111	442 305	956 766	39 725
337110	Wood kitchen cabinet & counter top mfg ...	-	311	26	6 471	173 600	5 243	11 433	125 026	514 111	442 305	956 766	39 725
33712	Household & institutional furniture mfg	-	222	28	7 172	197 745	5 771	11 141	108 684	568 986	605 875	1 170 607	44 129
337121	Upholstered household furniture mfg	-	36	4	1 099	33 704	847	1 699	22 927	64 607	50 430	114 482	D
337122	Nonupholstered wood household furniture mfg	-	141	13	4 021	117 587	3 345	6 628	60 017	360 569	344 282	702 819	26 669
337124	Metal household furniture mfg	-	8	5	1 435	31 785	1 102	1 844	16 075	109 904	185 526	293 923	D
337127	Institutional furniture mfg	1	29	5	567	13 481	442	895	8 876	31 968	23 262	55 186	1 316
3372	Office furniture (including fixtures) mfg	1	168	73	5 925	181 768	4 383	8 756	114 134	377 615	320 600	700 250	21 463
33721	Office furniture (including fixtures) mfg	1	168	73	5 925	181 768	4 383	8 756	114 134	377 615	320 600	700 250	21 463
337211	Wood office furniture mfg	3	18	4	236	6 034	182	322	3 912	12 903	9 739	22 645	792
337212	Custom architectural woodwork & millwork mfg	-	34	14	637	18 682	453	923	11 452	31 048	26 529	58 033	1 876
337214	Office furniture (except wood) mfg	-	5	2	278	5 978	224	293	4 234	13 787	10 939	24 906	706
337215	Showcase, partition, shelving, & locker mfg	1	111	53	4 774	151 074	3 524	7 218	94 536	319 877	273 393	594 666	18 089
3379	Other furniture related product mfg	-	34	15	1 193	33 248	782	1 474	18 359	106 732	104 813	211 801	4 173
33791	Mattress mfg	-	22	13	1 075	31 242	727	1 404	17 736	102 768	97 809	200 817	4 016
337910	Mattress mfg	-	22	13	1 075	31 242	727	1 404	17 736	102 768	97 809	200 817	4 016
33792	Blind & shade mfg	1	12	2	118	2 006	55	70	623	3 964	7 004	10 984	157
337920	Blind & shade mfg	1	12	2	118	2 006	55	70	623	3 964	7 004	10 984	157
339	Miscellaneous mfg	1	1 149	255	29 651	844 704	21 168	40 837	476 311	2 464 501	1 688 558	4 143 030	132 865
3391	Medical equipment & supplies mfg	1	468	90	11 209	341 126	7 503	14 120	169 743	1 089 619	592 725	1 664 730	49 033
33911	Medical equipment & supplies mfg	1	468	90	11 209	341 126	7 503	14 120	169 743	1 089 619	592 725	1 664 730	49 033
339111	Laboratory apparatus & furniture mfg	-	17	7	956	37 819	502	1 043	16 099	89 845	55 529	143 906	3 668
339112	Surgical & medical instrument mfg	3	51	21	2 615	87 235	1 657	3 026	37 763	279 947	128 161	407 989	15 732
339113	Surgical appliance & supplies mfg	-	86	42	5 570	168 433	3 847	7 400	86 301	619 407	356 261	959 155	24 299
339114	Dental equipment & supplies mfg	3	24	1	165	3 896	116	187	2 440	11 965	8 869	20 448	1 096
339115	Ophthalmic goods mfg	1	25	5	460	9 806	320	608	5 604	21 124	14 571	35 876	1 722
339116	Dental laboratories ...	6	265	14	1 443	33 937	1 061	1 856	21 536	67 331	29 334	97 356	2 516
3399	Other miscellaneous mfg ..	1	681	165	18 442	503 578	13 665	26 717	306 568	1 374 882	1 095 833	2 478 300	83 832
33991	Jewelry & silverware mfg	1	59	6	525	13 373	351	629	6 102	29 467	34 346	64 388	1 221
339911	Jewelry (except costume) mfg	1	32	3	243	7 358	142	238	2 948	16 442	25 319	42 708	228
339914	Costume jewelry & novelty mfg	2	18	2	202	3 832	158	303	2 288	9 432	6 109	15 233	731
33992	Sporting & athletic goods mfg	1	57	10	772	18 381	594	1 070	11 974	42 450	37 802	84 044	1 001
339920	Sporting & athletic goods mfg	1	57	10	772	18 381	594	1 070	11 974	42 450	37 802	84 044	1 001
33993	Doll, toy, & game mfg ...	-	45	19	3 521	86 935	2 660	5 202	62 485	330 608	228 510	554 772	18 777
339931	Doll & stuffed toy mfg .	-	9	4	259	4 551	197	334	2 717	23 484	12 062	35 196	D
339932	Game, toy, & children's vehicle mfg	-	36	15	3 262	82 384	2 463	4 868	59 768	307 124	216 448	519 576	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OHIO—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33994	Office supplies (except paper) mfg	2	48	9	823	19 216	566	1 006	11 283	45 643	28 446	74 133	1 930
339942	Lead pencil & art good mfg	—	7	2	256	5 543	193	344	3 631	14 963	9 306	24 599	368
339943	Marking device mfg	4	28	4	380	9 118	248	449	5 513	19 078	9 141	27 995	1 113
339944	Carbon paper & inked ribbon mfg	—	9	2	155	3 577	107	175	1 666	8 992	8 525	17 464	363
33995	Sign mfg	2	261	59	4 636	128 376	3 148	6 332	68 227	252 014	208 204	461 345	12 290
339950	Sign mfg	2	261	59	4 636	128 376	3 148	6 332	68 227	252 014	208 204	461 345	12 290
33999	All other miscellaneous mfg	—	211	62	8 165	237 297	6 346	12 478	146 497	674 700	558 525	1 239 618	48 613
339991	Gasket, packing, & sealing device mfg	—	43	18	2 689	91 455	2 099	4 168	58 578	241 793	143 753	396 712	12 959
339992	Musical instrument mfg	—	23	7	596	16 710	510	1 009	13 183	48 810	13 588	63 001	622
339994	Broom, brush, & mop mfg	—	32	17	2 042	59 363	1 560	3 053	36 377	196 530	144 221	331 052	9 938
339995	Burial casket mfg	—	9	1	160	7 873	96	203	3 128	10 288	32 971	43 301	1 521
339999	All other miscellaneous mfg	1	99	19	2 642	61 141	2 057	3 998	34 778	175 415	222 392	402 227	23 183

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CANTON–MASSILLON, OH MSA												
	Manufacturing	—	669	265	41 134	1 380 775	31 899	63 637	953 346	4 201 488	4 341 495	8 524 742	312 344
311	Food mfg	—	37	15	2 841	75 836	2 220	4 614	47 791	396 458	438 656	837 203	21 837
3114	Fruit & vegetable preserving & specialty food mfg	—	4	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	8	5	656	19 076	496	1 010	10 919	65 581	133 042	198 027	2 230
31151	Dairy product (except frozen) mfg	2	6	5	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	3	5	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	10	2	f	D	D	D	D	D	D	D	1 058
31181	Bread & bakery product mfg	—	10	2	f	D	D	D	D	D	D	D	1 058
311812	Commercial bakeries	—	3	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	7	3	325	10 723	224	453	5 556	57 314	23 650	81 257	1 886
31191	Snack food mfg	—	4	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	4	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	11	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CANTON—MASSILLON, OH MSA—Con.												
	Manufacturing—Con.												
316	Leather & allied product mfg .	-	4	1	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	2	1	f	D	D	D	D	D	D	D	D
316999	All other leather good mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	17	4	496	9 868	380	703	6 336	19 649	25 658	45 330	1 221
3219	Other wood product mfg . . .	8	13	3	e	D	D	D	D	D	D	D	751
322	Paper mfg	-	18	14	989	34 821	771	1 704	24 182	94 044	125 227	219 679	31 670
3222	Converted paper product mfg	-	16	12	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	9	8	511	19 397	394	853	13 726	57 243	83 634	142 239	16 600
322211	Corrugated & solid fiber box mfg	-	6	5	353	15 267	282	676	10 679	41 683	68 241	111 230	D
323	Printing & related support activities	2	63	17	1 914	60 224	1 403	3 032	37 958	115 061	97 546	209 546	20 170
3231	Printing & related support activities	2	63	17	1 914	60 224	1 403	3 032	37 958	115 061	97 546	209 546	20 170
32311	Printing	2	58	17	1 886	59 586	1 382	3 003	37 518	113 832	97 042	207 804	20 127
323110	Commercial lithographic printing . .	2	31	10	1 293	44 356	1 000	2 300	28 967	77 950	72 981	150 489	9 897
323113	Commercial screen printing	-	9	3	376	9 880	246	493	5 838	23 835	14 916	36 126	9 206
324	Petroleum & coal products mfg	-	5	1	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	26	13	837	28 099	335	605	8 411	71 989	87 697	160 640	5 293
3259	Other chemical product mfg	1	9	4	312	9 804	168	268	3 854	28 193	41 853	70 889	2 000
32599	All other chemical product & preparation mfg	1	8	4	e	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin . . .	1	6	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	57	27	3 987	92 969	3 207	6 241	61 976	208 781	327 049	537 479	32 152
3261	Plastics product mfg	-	43	21	2 175	45 346	1 846	3 419	32 556	123 535	110 334	231 455	23 560
32611	Unsupported plastics film, sheet, & bag mfg . .	-	5	3	264	8 066	222	470	4 567	17 341	31 073	48 128	2 185
32619	Other plastics product mfg	-	26	15	1 684	33 214	1 442	2 568	24 697	98 065	74 281	170 211	21 115
326199	All other plastics product mfg	-	26	15	1 684	33 214	1 442	2 568	24 697	98 065	74 281	170 211	21 115
3262	Rubber product mfg	-	14	6	1 812	47 623	1 361	2 822	29 420	85 246	216 715	306 024	8 592
32629	Other rubber product mfg	-	9	5	1 720	45 623	1 282	2 659	27 812	82 064	207 959	293 833	8 459
326299	All other rubber product mfg	-	3	3	g	D	D	D	D	D	D	D	5 774
327	Nonmetallic mineral product mfg	1	35	14	1 527	38 974	1 219	2 150	25 497	106 830	90 515	194 554	11 652
3271	Clay product & refractory mfg	-	12	10	1 039	24 671	840	1 435	16 597	66 996	60 415	125 384	8 315
32712	Clay building material & refractories mfg	-	9	7	912	20 998	747	1 302	14 633	54 529	49 799	104 376	D
327122	Ceramic wall & floor tile mfg	1	4	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	34	18	8 687	377 410	7 350	15 232	292 834	1 540 931	1 243 097	2 774 883	59 620
3311	Iron & steel mills & ferroalloy mfg	-	5	4	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	5	4	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	4	3	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	8	3	g	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	6	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	6	2	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CANTON—MASSILLON, OH MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	18	10	2 721	96 917	2 383	4 898	69 431	222 111	122 163	339 988	10 644
33151	Ferrous metal foundries ..	-	10	6	1 493	47 869	1 265	2 552	36 080	88 141	43 488	131 762	5 468
331511	Iron foundries	-	4	2	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	4	2	f	D	D	D	D	D	D	D	681
33152	Nonferrous metal foundries	-	8	4	1 228	49 048	1 118	2 346	33 351	133 970	78 675	208 226	5 176
331528	Other nonferrous foundries (except die-casting)	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	160	69	9 306	326 346	7 319	14 529	238 822	735 113	761 113	1 473 425	62 782
3321	Forging & stamping	-	14	12	2 067	70 233	1 507	2 898	54 339	164 251	171 655	339 191	13 140
33211	Forging & stamping	-	14	12	2 067	70 233	1 507	2 898	54 339	164 251	171 655	339 191	13 140
332111	Iron & steel forging	-	7	7	1 325	53 112	963	1 995	43 664	127 975	145 176	275 242	11 704
332112	Nonferrous forging	9	1	1	e	D	D	D	D	D	D	D	D
332114	Custom roll forming	-	2	1	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	6	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	6	3	f	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	15	5	289	9 047	193	374	4 980	21 744	19 066	40 566	765
3324	Boiler, tank, & shipping container mfg	-	6	4	597	19 540	479	1 014	14 034	46 997	96 137	136 645	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	2	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	69	23	1 691	51 466	1 234	2 468	32 448	104 890	60 367	161 383	4 390
33271	Machine shops	-	58	17	1 013	30 526	743	1 366	18 471	57 283	32 288	85 266	2 311
332710	Machine shops	-	58	17	1 013	30 526	743	1 366	18 471	57 283	32 288	85 266	2 311
33272	Turned product & screw, nut, & bolt mfg	-	11	6	678	20 940	491	1 102	13 977	47 607	28 079	76 117	2 079
332721	Precision turned product mfg	-	6	3	404	11 088	291	634	7 573	22 164	14 309	37 068	1 516
332722	Bolt, nut, screw, rivet, & washer mfg	-	5	3	274	9 852	200	468	6 404	25 443	13 770	39 049	563
3328	Coating, engraving, heat treating, & allied activities ..	-	25	10	939	32 001	741	1 263	22 773	43 735	159 988	194 676	9 719
33281	Coating, engraving, heat treating, & allied activities	-	25	10	939	32 001	741	1 263	22 773	43 735	159 988	194 676	9 719
332811	Metal heat treating	-	3	2	e	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	-	15	5	323	6 256	250	397	4 102	10 587	3 956	14 556	2 257
3329	Other fabricated metal product mfg	-	17	7	2 878	120 166	2 465	5 063	94 941	223 567	177 175	401 032	D
33299	All other fabricated metal product mfg	-	16	6	h	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	5	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	86	31	2 218	75 446	1 496	2 965	42 896	167 769	135 338	305 135	8 360
3332	Industrial machinery mfg ..	5	18	9	622	22 542	371	809	10 900	44 285	38 520	82 004	2 642
33329	Other industrial machinery mfg	6	11	4	463	17 290	274	616	8 202	33 967	28 882	61 566	2 151
333298	All other industrial machinery mfg	8	8	3	347	12 032	191	448	5 329	25 940	22 519	48 486	D
3335	Metalworking machinery mfg	-	36	10	717	27 128	572	1 178	17 789	68 261	35 464	107 174	4 719
33351	Metalworking machinery mfg	-	36	10	717	27 128	572	1 178	17 789	68 261	35 464	107 174	4 719
333511	Industrial mold mfg	-	16	5	360	13 895	289	618	9 336	21 822	9 517	31 769	3 196
3339	Other general-purpose machinery mfg	-	23	7	712	21 544	441	801	11 579	45 780	52 495	97 498	773
33392	Material handling equipment mfg	-	5	3	374	11 508	235	410	6 453	23 732	36 560	61 002	444
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	15	4	327	9 816	200	384	5 024	21 488	15 388	35 358	295

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CANTON—MASSILLON, OH MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	15	5	635	16 198	515	1 039	10 939	32 874	16 135	49 142	2 311
3345	Navigational, measuring, medical, & control instruments mfg.....	—	8	3	451	11 757	372	799	8 227	20 950	9 195	30 101	1 441
33451	Navigational, measuring, medical, & control instruments mfg.....	—	8	3	451	11 757	372	799	8 227	20 950	9 195	30 101	1 441
334512	Automatic environmental control mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	16	11	3 871	142 404	2 681	5 331	88 764	436 393	201 243	651 231	29 747
3352	Household appliance mfg..	—	2	2	h	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	3	10	6	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	3	10	6	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg.....	2	6	4	336	10 602	233	402	5 239	11 996	22 862	35 029	1 373
336	Transportation equipment mfg.....	—	24	13	1 524	43 904	1 110	2 002	26 173	86 708	108 251	192 762	11 430
3363	Motor vehicle parts mfg ...	—	16	10	1 268	35 534	902	1 489	20 447	72 188	75 390	145 441	10 694
33631	Motor vehicle gasoline engine & engine parts mfg.....	—	5	2	260	6 707	178	330	3 735	12 904	16 774	29 856	1 099
336312	Gasoline engine & engine parts mfg....	—	4	2	e	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg....	—	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	22	4	808	20 766	647	1 132	14 418	44 495	51 313	95 426	3 183
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	17	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	4	26	5	395	9 523	311	610	6 385	18 106	12 332	30 378	D
3399	Other miscellaneous mfg ..	3	16	5	324	7 511	260	515	5 164	13 033	9 932	22 837	D
33995	Sign mfg.....	4	8	4	264	5 898	205	410	3 777	10 386	8 700	18 911	D
339950	Sign mfg.....	4	8	4	264	5 898	205	410	3 777	10 386	8 700	18 911	D
31-33	CINCINNATI—HAMILTON, OH—KY—IN CMSA												
	Manufacturing	—	2 686	1 045	139 924	5 357 729	93 955	191 998	3 057 171	18 883 613	16 469 729	35 239 117	1 463 667
	Cincinnati—Hamilton, OH—KY—IN CMSA (IN Part)	—	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati—Hamilton, OH—KY—IN CMSA (KY Part)	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati—Hamilton, OH—KY—IN CMSA (OH Part)	—	2 236	860	117 591	4 593 283	77 613	158 759	2 584 528	16 449 317	14 277 182	30 657 162	1 286 851
311	Food mfg.....	1	156	66	j	D	D	D	D	D	D	D	114 135
312	Beverage & tobacco product mfg.....	—	17	13	h	D	D	D	D	D	D	D	D
313	Textile mills.....	3	15	9	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	—	48	15	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	29	12	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	72	18	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	103	71	8 810	313 604	6 665	14 634	215 767	882 076	1 008 549	1 887 737	89 233
323	Printing & related support activities.....	1	393	116	10 814	369 598	7 805	15 484	225 743	902 215	521 822	1 419 311	54 918
324	Petroleum & coal products mfg	-	38	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	152	71	9 633	431 555	5 808	11 709	235 572	2 633 385	2 428 589	5 040 623	172 010
326	Plastics & rubber products mfg	1	140	75	9 036	274 527	6 916	13 781	173 554	731 575	683 985	1 413 317	91 751
327	Nonmetallic mineral product mfg	1	111	42	2 786	95 365	2 139	4 204	64 893	269 394	239 083	510 028	25 724
331	Primary metal mfg	-	40	26	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	535	188	18 623	623 307	13 784	27 607	407 199	1 394 083	1 186 888	2 588 580	113 506
333	Machinery mfg	-	288	133	20 476	842 261	11 313	23 183	383 084	2 018 845	1 663 052	3 583 195	122 495
334	Computer & electronic product mfg	1	85	34	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	63	35	5 710	192 502	3 948	8 324	107 711	516 102	437 358	959 982	D
336	Transportation equipment mfg	-	74	43	14 925	870 824	9 140	18 433	429 461	2 670 791	3 751 560	6 499 887	D
337	Furniture & related product mfg	1	117	26	2 365	63 427	1 701	3 181	37 445	144 366	124 860	271 190	5 900
339	Miscellaneous mfg	1	205	42	5 327	156 781	3 571	6 912	78 515	442 440	308 165	739 313	27 121
	Cincinnati, OH—KY—IN PMSA												
31-33	Manufacturing	-	2 290	890	119 533	4 538 513	78 998	159 800	2 494 921	14 558 177	14 203 781	28 671 346	1 267 606
	Cincinnati, OH—KY—IN PMSA (IN Part).....	-	40	14	2 261	87 160	1 607	2 872	53 481	200 394	129 703	305 991	15 556
	Cincinnati, OH—KY—IN PMSA (KY Part)	1	410	171	20 072	677 286	14 735	30 367	419 162	2 233 902	2 062 844	4 275 964	161 260
	Cincinnati, OH—KY—IN PMSA (OH Part).....	-	1 840	705	97 200	3 774 067	62 656	126 561	2 022 278	12 123 881	12 011 234	24 089 391	1 090 790
311	Food mfg	1	139	62	10 102	322 426	6 324	13 455	183 844	1 787 723	1 479 877	3 240 819	113 098
3112	Grain & oilseed milling	-	4	3	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	3	9	8	2 048	57 313	1 592	3 419	39 713	174 543	274 311	448 738	26 064
31141	Frozen food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
311412	Frozen specialty food mfg	4	4	4	1 538	43 037	1 170	2 653	28 862	119 316	214 415	333 742	24 892
31142	Fruit & vegetable canning, pickling, & drying	-	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
311421	Fruit & vegetable canning	-	5	4	510	14 276	422	766	10 851	55 227	59 896	114 996	1 172
3115	Dairy product mfg	2	7	4	586	19 777	299	703	9 713	57 838	142 051	200 505	D
31151	Dairy product (except frozen) mfg	-	4	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
31161	Animal slaughtering & processing.....	1	22	11	2 320	72 415	1 302	2 826	40 845	261 469	268 933	526 216	12 700
311612	Meat processed from carcasses	-	12	6	1 998	66 854	1 052	2 409	36 925	244 454	238 764	479 018	D

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	—	63	19	2 492	77 807	1 621	3 272	49 666	767 568	216 374	982 176	9 788
31181	Bread & bakery product mfg	—	56	13	1 373	33 100	710	1 298	15 302	108 373	49 738	158 225	1 975
311811	Retail bakeries	1	41	7	436	5 675	267	355	3 663	11 862	5 098	16 982	580
311812	Commercial bakeries	—	15	6	937	27 425	443	943	11 639	96 511	44 640	141 243	1 395
31182	Cookie, cracker, & pasta mfg	—	7	6	1 119	44 707	911	1 974	34 364	659 195	166 636	823 951	7 813
311821	Cookie & cracker mfg	—	5	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	3	23	14	1 942	66 339	989	2 242	26 609	220 315	307 210	525 553	39 322
31193	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
311930	Flavoring syrup & concentrate mfg	5	4	2	440	18 390	166	434	8 417	100 156	154 182	253 483	D
31194	Seasoning & dressing mfg	—	7	6	706	26 576	273	605	6 505	59 371	79 992	138 621	25 422
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	2	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	1	5	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg	5	8	3	521	12 776	411	880	8 809	34 152	50 114	84 192	3 500
311999	All other miscellaneous food mfg	9	6	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	15	12	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	15	12	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	6	5	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	961	34 504	391	882	14 765	368 051	265 894	634 974	D
31214	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
312140	Distilleries	—	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	3	14	9	f	D	D	D	D	D	D	D	D
3132	Fabric mills	3	7	6	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	5	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	42	12	993	25 230	619	1 242	13 673	39 367	58 586	103 085	1 385
3141	Textile furnishings mills	—	17	5	e	D	D	D	D	D	D	D	522
31412	Curtain & linen mills	—	16	5	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	6	4	409	10 356	239	491	4 688	16 383	29 908	50 688	450
3149	Other textile product mills	1	25	7	f	D	D	D	D	D	D	D	863
31499	All other textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535
314999	All other miscellaneous textile product mills	—	16	4	357	9 147	223	453	6 203	15 930	22 259	38 926	535
315	Apparel mfg	—	27	11	801	13 311	608	961	9 009	43 529	78 944	121 859	D
3152	Cut & sew apparel mfg	—	18	8	583	9 175	462	678	6 552	35 190	70 303	104 775	D
31522	Men's & boys' cut & sew apparel mfg	—	8	6	478	7 143	382	551	5 459	30 850	64 083	94 196	878
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	57	13	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	46	10	g	D	D	D	D	D	D	D	D
32191	Millwork	2	20	3	266	6 253	211	433	4 878	12 324	18 512	30 748	D
32199	All other wood product mfg	4	12	5	637	13 971	507	892	9 611	27 106	26 794	54 440	1 599
321999	All other miscellaneous wood product mfg	7	11	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	73	51	5 215	164 903	4 114	9 054	112 929	440 170	582 972	1 021 788	47 982
3221	Pulp, paper, & paperboard mills	—	5	5	388	14 734	302	684	10 876	51 205	35 692	85 762	2 338
32213	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	2	68	46	4 827	150 169	3 812	8 370	102 053	388 965	547 280	936 026	45 644
32221	Paperboard container mfg	1	36	28	2 604	85 626	2 016	4 353	56 114	216 646	308 482	527 467	28 567
322211	Corrugated & solid fiber box mfg	—	16	13	1 196	40 971	856	1 820	23 745	101 483	158 653	256 590	17 530
322212	Folding paperboard box mfg	3	10	8	1 042	33 363	874	1 956	25 225	82 342	99 525	187 695	7 303
322214	Fiber can, tube, drum, & similar products mfg	—	7	5	279	9 106	215	455	5 767	29 118	43 455	72 333	D
32222	Paper bag & coated & treated paper mfg	3	12	7	1 562	46 601	1 292	3 121	34 860	127 368	181 205	306 400	14 105
322224	Uncoated paper & multiwall bag mfg	3	3	3	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
322299	All other converted paper product mfg	2	13	8	420	11 883	324	531	6 494	26 981	30 918	58 274	1 520
323	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
3231	Printing & related support activities	1	350	102	10 100	346 741	7 271	14 460	210 618	835 607	482 910	1 314 479	51 924
32311	Printing	1	300	81	8 828	299 063	6 356	12 606	179 485	742 138	460 561	1 198 650	44 401
323110	Commercial lithographic printing	1	138	35	5 249	181 061	3 839	7 666	110 998	455 775	237 002	692 369	21 831
323111	Commercial gravure printing	5	2	2	e	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	—	22	11	663	23 483	423	794	10 810	44 797	74 583	118 720	7 739
323113	Commercial screen printing	—	28	9	895	25 981	644	1 310	14 805	77 286	64 530	138 702	3 875
323114	Quick printing	2	60	6	430	10 313	308	487	6 074	21 182	10 692	31 865	1 189
323116	Manifold business form printing	3	10	7	621	21 153	410	894	11 437	47 399	28 686	76 044	1 060
323117	Book printing	—	6	3	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	50	21	1 272	47 678	915	1 854	31 133	93 469	22 349	115 829	7 523
323122	Prepress services	1	43	19	1 079	43 243	743	1 513	27 422	85 210	20 929	106 379	6 683
324	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
3241	Petroleum & coal products mfg	—	35	8	1 141	47 714	699	1 508	25 970	133 932	350 114	485 518	8 114
32412	Asphalt paving, roofing, & saturated materials mfg	—	29	6	508	19 814	381	932	13 868	53 433	204 153	259 714	4 357
324122	Asphalt shingle & coating materials mfg	—	5	3	337	13 602	262	677	10 467	24 782	76 438	100 708	2 331
32419	Other petroleum & coal products mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757
324191	Petroleum lubricating oil & grease mfg	—	6	2	633	27 900	318	576	12 102	80 499	145 961	225 804	3 757
325	Chemical mfg	—	130	65	9 182	413 196	5 554	11 162	226 692	2 536 562	2 355 482	4 875 290	158 466
3251	Basic chemical mfg	—	27	14	2 706	127 553	1 788	3 603	78 473	543 368	649 586	1 192 412	68 707
32513	Dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
325132	Synthetic organic dye & pigment mfg	2	5	4	1 056	49 219	709	1 595	32 245	234 015	144 417	380 450	D
32518	Other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
325188	All other basic inorganic chemical mfg	—	8	4	304	14 302	205	427	8 858	73 958	71 993	145 709	17 259
32519	Other basic organic chemical mfg	—	7	5	1 299	62 321	831	1 491	35 909	224 153	429 131	651 027	31 565
325199	All other basic organic chemical mfg	—	5	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
32521	Resin & synthetic rubber mfg	—	4	3	872	45 399	611	1 308	29 621	168 382	193 499	366 065	12 239
325211	Plastics material & resin mfg	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
32541	Pharmaceutical & medicine mfg	—	9	4	994	38 293	404	751	12 613	395 344	187 902	571 698	8 012
325412	Pharmaceutical preparation mfg	—	7	4	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	—	25	13	991	39 685	472	898	14 568	124 588	170 031	297 613	22 236
32551	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
325510	Paint & coating mfg	—	17	10	684	27 260	327	612	9 449	83 669	112 556	198 923	19 858
32552	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
325520	Adhesive mfg	—	8	3	307	12 425	145	286	5 119	40 919	57 475	98 690	2 378
3256	Soap, cleaning compound, & toilet preparation mfg	1	24	16	h	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	20	12	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	10	7	1 235	59 376	988	1 843	44 921	454 832	668 175	1 113 059	23 314
325612	Polish & other sanitation good mfg	—	7	3	e	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	2	4	4	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	38	14	f	D	D	D	D	D	D	D	D
32591	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
325910	Printing ink mfg	1	18	8	528	18 314	209	436	6 922	40 870	54 984	95 101	3 167
32599	All other chemical product & preparation mfg	2	19	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	113	59	7 218	221 100	5 553	11 053	141 275	612 965	585 014	1 200 308	80 565
3261	Plastics product mfg	1	99	54	6 856	210 669	5 282	10 504	134 724	589 315	563 929	1 155 358	80 008
32611	Unsupported plastics film, sheet, & bag mfg	—	10	6	641	25 600	473	991	15 210	81 954	80 982	163 102	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	7	3	345	16 236	238	509	8 711	60 410	58 653	119 151	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	2	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	4	1	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	5	1	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
326160	Plastics bottle mfg	—	6	6	862	26 369	763	1 649	21 911	91 680	87 060	177 534	12 235
32619	Other plastics product mfg	3	60	33	3 903	109 958	2 988	5 670	66 353	255 404	248 069	502 415	27 845
326199	All other plastics product mfg	3	59	32	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	14	5	362	10 431	271	549	6 551	23 650	21 085	44 950	557
327	Nonmetallic mineral product mfg	1	89	36	2 455	84 815	1 868	3 650	56 484	236 548	209 497	447 332	22 638
3272	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
32721	Glass & glass product mfg	—	18	6	509	17 657	412	783	12 947	49 438	24 627	73 752	4 633
3273	Cement & concrete product mfg	2	48	18	1 050	35 762	803	1 545	23 102	90 799	85 510	176 368	10 575
32732	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
327320	Ready-mix concrete mfg	3	31	14	689	22 653	531	1 042	15 926	55 380	67 416	123 138	7 816
32739	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
327390	Other concrete product mfg	1	12	3	288	10 478	213	387	5 585	25 410	12 876	38 290	1 671
3274	Lime & gypsum product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32741	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
327410	Lime mfg	—	1	1	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	14	8	442	14 812	294	546	7 746	50 271	50 241	100 706	3 504
32799	All other nonmetallic mineral product mfg	—	11	8	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	-	32	19	2 914	105 765	2 090	4 481	70 728	272 565	275 948	538 374	16 783
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	4	2	304	11 009	159	415	5 109	20 114	33 875	55 347	D
33142	Copper rolling, drawing, extruding, & alloying	-	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	24	14	1 648	52 738	1 255	2 625	36 958	98 411	51 175	150 468	5 864
33151	Ferrous metal foundries	-	5	5	860	29 191	679	1 378	21 762	54 789	28 627	84 138	4 067
331511	Iron foundries	-	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	19	9	788	23 547	576	1 159	15 196	43 622	22 548	66 330	1 797
331524	Aluminum foundries (except die-casting)	-	12	8	709	21 892	510	1 037	13 946	39 829	20 456	60 415	D
332	Fabricated metal product mfg	-	446	161	16 330	539 133	12 104	23 786	352 623	1 179 584	976 738	2 163 816	88 268
3321	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
33211	Forging & stamping	1	20	10	869	24 910	681	1 378	17 920	54 100	70 458	123 695	9 726
332116	Metal stamping	1	16	8	797	22 648	628	1 284	16 488	50 260	68 492	117 931	D
3322	Cutlery & handtool mfg	-	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
33221	Cutlery & handtool mfg	-	14	4	401	13 824	225	447	6 271	29 453	20 405	49 647	D
332212	Hand & edge tool mfg	-	13	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	95	36	3 488	114 184	2 492	5 037	71 933	264 023	223 338	487 640	17 934
33231	Plate work & fabricated structural product mfg	-	37	14	901	31 267	591	1 186	17 793	75 218	87 867	163 486	4 458
332312	Fabricated structural metal mfg	-	25	9	610	20 555	426	839	12 757	51 957	65 636	117 748	3 428
33232	Ornamental & architectural metal products mfg	-	58	22	2 587	82 917	1 901	3 851	54 140	188 805	135 471	324 154	13 476
332321	Metal window & door mfg	-	9	4	1 265	40 972	944	1 963	26 980	105 860	81 835	187 470	6 828
332322	Sheet metal work mfg	1	36	16	1 146	36 297	849	1 659	24 011	68 733	42 304	111 287	6 171
3324	Boiler, tank, & shipping container mfg	-	13	9	2 035	66 641	1 731	3 007	53 699	107 295	153 392	271 182	D
33242	Metal tank (heavy gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	10	7	g	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	2	2	f	D	D	D	D	D	D	D	D
332439	Other metal container mfg	1	8	5	454	13 096	327	673	7 870	32 426	55 354	88 218	D
3325	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
33251	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
332510	Hardware mfg	-	12	7	619	18 363	502	903	12 035	30 944	45 497	77 321	D
3326	Spring & wire product mfg	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
33261	Spring & wire product mfg	1	10	5	1 430	48 820	1 045	1 760	32 197	101 003	151 325	251 719	7 142
332612	Spring (light gauge) mfg	3	3	2	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	182	44	3 971	130 684	2 933	6 294	87 262	309 225	128 979	433 855	20 566
33271	Machine shops	-	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
332710	Machine shops	-	155	28	2 539	90 133	1 951	4 250	60 970	217 438	76 151	289 446	15 565
33272	Turned product & screw, nut, & bolt mfg	1	27	16	1 432	40 551	982	2 044	26 292	91 787	52 828	144 409	5 001
332721	Precision turned product mfg	-	21	11	1 138	31 178	750	1 608	19 418	72 383	34 679	106 978	2 584
332722	Bolt, nut, screw, rivet, & washer mfg	4	6	5	294	9 373	232	436	6 874	19 404	18 149	37 431	2 417

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities	—	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
33281	Coating, engraving, heat treating, & allied activities	—	55	24	1 468	47 771	1 084	2 091	29 797	112 712	57 707	170 216	8 331
332811	Metal heat treating	—	15	9	364	11 815	269	382	7 509	36 116	4 244	40 344	1 587
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	20	7	607	18 215	445	928	12 383	33 552	31 635	65 031	3 790
332813	Electroplating, plating, polishing, anodizing, & coloring	—	20	8	497	17 741	370	781	9 905	43 044	21 828	64 841	2 954
3329	Other fabricated metal product mfg	2	45	22	2 049	73 936	1 411	2 869	41 509	170 829	125 637	298 541	16 848
33291	Metal valve mfg	1	13	11	1 339	46 367	884	1 770	24 675	119 034	96 963	218 333	13 109
332911	Industrial valve mfg	1	7	7	856	30 559	522	1 039	14 943	74 308	71 934	148 550	3 541
332912	Fluid power valve & hose fitting mfg	—	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	4	32	11	710	27 569	527	1 099	16 834	51 795	28 674	80 208	3 739
332999	All other miscellaneous fabricated metal product mfg	1	19	7	355	12 679	237	455	5 918	22 184	14 346	36 482	1 491
333	Machinery mfg	—	245	112	18 628	769 395	10 340	21 275	348 789	1 891 638	1 482 643	3 272 013	112 957
3331	Agriculture, construction, & mining machinery mfg	1	10	3	345	11 236	268	482	6 923	29 348	23 241	54 196	D
3332	Industrial machinery mfg	—	41	21	2 677	115 458	1 260	2 525	49 101	427 555	276 178	707 310	14 136
33322	Plastics & rubber industry machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	37	18	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	7	4	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	19	10	737	28 916	451	1 020	14 757	54 198	42 618	101 434	2 678
3333	Commercial & service industry machinery mfg	—	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
33331	Commercial & service industry machinery mfg	—	24	9	2 045	68 681	1 424	3 026	39 234	164 459	96 235	262 673	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	2	1	e	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	3	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	14	4	468	14 957	302	641	8 808	34 559	35 277	68 934	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	942	30 792	616	1 323	14 473	83 254	44 251	127 823	2 129
333415	AC & warm air heating & commercial/industrial refrig equip mfg	—	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
33351	Metalworking machinery mfg	—	81	29	5 768	259 584	2 858	5 612	110 268	583 536	535 789	1 008 087	50 660
333512	Machine tool (metal cutting types) mfg	—	8	8	3 430	159 085	1 397	2 492	53 709	434 967	415 948	742 101	D
333513	Machine tool (metal forming types) mfg	—	2	2	f	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg	1	35	8	501	15 167	359	613	10 134	29 454	19 018	47 770	3 564
333515	Cutting tool & machine tool accessory mfg	2	22	6	376	13 615	260	575	7 820	25 474	11 729	38 121	3 181
333516	Rolling mill machinery & equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
33361	Engine, turbine, & power transmission equipment mfg	3	8	5	637	27 671	354	754	12 016	45 789	65 302	113 565	1 799
333613	Mechanical power transmission equipment mfg	5	6	3	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	69	39	6 214	255 973	3 560	7 553	116 774	557 697	441 647	998 359	21 986
33391	Pump & compressor mfg	—	12	8	1 900	63 414	1 112	2 382	28 764	146 447	174 528	316 454	5 717
333911	Pump & pumping equipment mfg	—	5	4	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	4	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	—	3	2	467	21 329	325	680	13 208	59 748	49 132	107 860	2 322
33392	Material handling equipment mfg	—	14	10	1 531	73 936	743	1 508	29 855	115 060	122 977	239 203	3 302
333921	Elevator & moving stairway mfg	—	3	3	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	9	6	1 206	53 156	580	1 197	16 820	83 316	100 010	183 932	2 110
33399	All other general-purpose machinery mfg	1	43	21	2 783	118 623	1 705	3 663	58 155	296 190	144 142	442 702	12 967
333991	Power-driven handtool mfg	—	4	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	7	4	684	35 785	459	1 143	20 313	127 900	34 607	160 754	2 543
333999	All other miscellaneous general-purpose machinery mfg	2	19	9	923	33 888	556	1 150	15 762	87 192	49 939	138 085	3 804
334	Computer & electronic product mfg	1	78	34	4 781	168 782	2 525	5 190	66 683	329 639	397 049	724 161	40 223
3342	Communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	13	5	1 401	51 962	629	1 394	16 544	116 024	68 031	182 075	6 423
3343	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	17	9	g	D	D	D	D	D	D	D	19 861
33441	Semiconductor & other electronic component mfg	—	17	9	g	D	D	D	D	D	D	D	19 861
334413	Semiconductor & related device mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
33451	Navigational, measuring, medical, & control instruments mfg	1	37	16	g	D	D	D	D	D	D	D	5 146
334510	Electromedical & electrotherapeutic apparatus mfg	—	2	1	e	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	9	3	278	10 157	139	285	4 402	23 545	18 463	41 983	760

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	51	28	4 236	141 730	2 865	6 044	74 290	369 672	324 209	700 852	D
3351	Electric lighting equipment mfg	-	7	5	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	6	5	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
33531	Electrical equipment mfg	-	28	13	1 710	63 555	1 094	2 468	34 011	159 313	107 927	276 878	7 293
335312	Motor & generator mfg	-	8	5	705	25 838	474	1 064	14 977	71 939	33 440	108 261	D
335314	Relay & industrial control mfg	-	12	5	833	32 728	491	1 164	15 924	74 366	68 599	150 023	3 850
3359	Other electrical equipment & component mfg	-	13	8	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
335931	Current-carrying wiring device mfg	-	7	4	647	22 627	446	933	12 916	54 586	46 362	100 452	2 717
336	Transportation equipment mfg	-	65	39	14 369	849 608	8 806	17 777	417 336	2 627 112	3 682 402	6 385 830	436 555
3362	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
33621	Motor vehicle body & trailer mfg	-	6	4	e	D	D	D	D	D	D	D	152
3363	Motor vehicle parts mfg ...	-	37	23	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	9	6	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	7	4	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	3	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	7	2	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	7	2	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	5	2	331	12 096	261	554	9 771	33 568	22 668	55 758	D
336370	Motor vehicle metal stamping	-	5	2	331	12 096	261	554	9 771	33 568	22 668	55 758	D
33639	Other motor vehicle parts mfg	3	11	6	789	25 370	593	1 285	15 266	62 137	102 129	166 616	8 773
336399	All other motor vehicle parts mfg	3	11	6	789	25 370	593	1 285	15 266	62 137	102 129	166 616	8 773
3364	Aerospace product & parts mfg	-	15	9	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	15	9	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	9	7	i	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Cincinnati, OH—KY—IN PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	103	20	1 728	46 907	1 245	2 387	28 075	108 636	96 068	205 628	4 849
3371	Household & institutional furniture & kitchen cabinet mfg	1	64	6	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	1	42	2	293	6 818	214	420	4 628	19 788	15 275	35 938	361
337110	Wood kitchen cabinet & counter top mfg	1	42	2	293	6 818	214	420	4 628	19 788	15 275	35 938	361
3372	Office furniture (including fixtures) mfg	2	29	9	786	21 347	603	1 174	13 887	42 975	32 067	75 128	2 429
33721	Office furniture (including fixtures) mfg	2	29	9	786	21 347	603	1 174	13 887	42 975	32 067	75 128	2 429
337215	Showcase, partition, shelving, & locker mfg	3	19	7	634	17 282	503	969	10 987	34 569	27 096	61 783	2 138
3379	Other furniture related product mfg	—	10	5	e	D	D	D	D	D	D	D	D
33791	Mattress mfg	—	7	4	426	13 529	272	480	6 242	36 305	38 843	75 258	1 722
337910	Mattress mfg	—	7	4	426	13 529	272	480	6 242	36 305	38 843	75 258	1 722
339	Miscellaneous mfg	1	181	35	4 750	142 236	3 148	6 022	70 653	383 554	276 252	655 426	26 029
3391	Medical equipment & supplies mfg	—	74	11	1 655	52 136	1 099	2 074	24 886	165 906	122 220	288 967	9 761
33911	Medical equipment & supplies mfg	—	74	11	1 655	52 136	1 099	2 074	24 886	165 906	122 220	288 967	9 761
339112	Surgical & medical instrument mfg	—	13	5	857	25 964	551	1 048	12 235	65 223	42 927	108 956	3 065
339113	Surgical appliance & supplies mfg	—	9	2	e	D	D	D	D	D	D	D	5 184
3399	Other miscellaneous mfg	1	107	24	3 095	90 100	2 049	3 948	45 767	217 648	154 032	366 459	16 268
33991	Jewelry & silverware mfg	—	18	4	291	7 479	194	395	3 751	20 499	19 504	40 790	774
33995	Sign mfg	2	49	9	1 221	33 843	814	1 677	18 411	78 500	64 217	139 380	D
339950	Sign mfg	2	49	9	1 221	33 843	814	1 677	18 411	78 500	64 217	139 380	D
33999	All other miscellaneous mfg	1	17	6	1 255	41 659	787	1 436	19 255	104 003	62 155	163 398	D
339991	Gasket, packing, & sealing device mfg	4	4	3	329	8 459	235	405	4 301	14 989	12 905	27 879	1 406
339995	Burial casket mfg	—	1	1	f	D	D	D	D	D	D	D	D
	Hamilton—Middletown, OH PMSA												
31-33	Manufacturing	—	396	155	20 391	819 216	14 957	32 198	562 250	4 325 436	2 265 948	6 567 771	196 061
311	Food mfg	1	17	4	e	D	D	D	D	D	D	D	1 037
312	Beverage & tobacco product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	2	1	f	D	D	D	D	D	D	D	D
31212	Breweries	—	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries	—	2	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	2	1	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	1	1	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	15	5	532	14 245	421	1 003	10 408	33 826	75 176	110 155	2 103
3212	Veneer, plywood, & engineered wood product mfg	—	3	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	3	1	e	D	D	D	D	D	D	D	D
321211	Hardwood veneer & plywood mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI-HAMILTON, OH-KY-IN CMSA—Con.												
	Hamilton-Middletown, OH PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	-	30	20	3 595	148 701	2 551	5 580	102 838	441 906	425 577	865 949	41 251
3221	Pulp, paper, & paperboard mills	-	7	7	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	5	5	1 919	92 399	1 451	3 155	67 701	276 716	232 058	508 284	27 536
322121	Paper (except newsprint) mills	-	5	5	1 919	92 399	1 451	3 155	67 701	276 716	232 058	508 284	27 536
3222	Converted paper product mfg	-	23	13	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	14	10	1 041	33 387	713	1 567	22 052	80 037	121 029	200 930	8 724
322211	Corrugated & solid fiber box mfg	-	10	8	755	22 848	479	1 010	14 059	54 876	90 973	146 144	D
322212	Folding paperboard box mfg	-	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	1	6	1	296	9 613	112	248	3 300	43 080	34 678	78 101	3 065
322222	Coated & laminated paper mfg	1	3	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	43	14	714	22 857	534	1 024	15 125	66 608	38 912	104 832	2 994
3231	Printing & related support activities	1	43	14	714	22 857	534	1 024	15 125	66 608	38 912	104 832	2 994
32311	Printing	1	41	12	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	16	6	322	8 639	231	426	5 714	17 836	15 469	33 138	1 339
325	Chemical mfg	1	22	6	451	18 359	254	547	8 880	96 823	73 107	165 333	13 544
326	Plastics & rubber products mfg	1	27	16	1 818	53 427	1 363	2 728	32 279	118 610	98 971	213 009	11 186
3261	Plastics product mfg	1	25	15	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	4	4	564	19 176	389	824	11 477	34 151	34 441	66 978	4 961
326121	Unsupported plastics profile shape mfg	-	3	3	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	9	1	1	e	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	9	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	6	631	17 748	452	921	9 859	45 188	25 367	68 186	1 960
326199	All other plastics product mfg	-	10	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	22	6	331	10 550	271	554	8 409	32 846	29 586	62 696	3 086
331	Primary metal mfg	-	8	7	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	89	27	2 293	84 174	1 680	3 821	54 576	214 499	210 150	424 764	25 238
3321	Forging & stamping	5	5	5	272	11 311	236	528	8 009	18 844	18 222	37 050	2 997
33211	Forging & stamping	5	5	5	272	11 311	236	528	8 009	18 844	18 222	37 050	2 997
332116	Metal stamping	5	5	5	272	11 311	236	528	8 009	18 844	18 222	37 050	2 997
3323	Architectural & structural metals mfg	-	16	4	542	18 136	331	803	9 941	46 083	41 834	90 312	3 116
33232	Ornamental & architectural metal products mfg	-	11	2	398	12 880	239	600	7 121	33 691	33 146	69 264	D
332321	Metal window & door mfg	-	2	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	40	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	38	5	516	19 387	416	932	13 706	42 581	23 374	65 704	4 261
332710	Machine shops	2	38	5	516	19 387	416	932	13 706	42 581	23 374	65 704	4 261
3328	Coating, engraving, heat treating, & allied activities ..	-	11	5	450	18 913	354	811	13 173	59 825	91 157	150 860	12 094
33281	Coating, engraving, heat treating, & allied activities	-	11	5	450	18 913	354	811	13 173	59 825	91 157	150 860	12 094

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI—HAMILTON, OH—KY—IN CMSA—Con.												
	Hamilton—Middletown, OH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	43	21	1 848	72 866	973	1 908	34 295	127 207	180 409	311 182	9 538
3332	Industrial machinery mfg ..	-	15	9	925	40 139	437	809	18 354	68 629	105 899	179 628	4 345
33329	Other industrial machinery mfg	-	14	9	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	4	4	445	21 401	163	275	7 505	39 359	76 958	122 392	3 121
3339	Other general-purpose machinery mfg	-	12	5	410	12 986	216	439	5 255	29 762	45 074	72 978	968
335	Electrical equipment, appliance, & component mfg	-	12	7	1 474	50 772	1 083	2 280	33 421	146 430	113 149	259 130	5 758
3353	Electrical equipment mfg ..	-	8	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	8	4	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	3	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	3	2	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	9	4	556	21 216	334	656	12 125	43 679	69 158	114 057	D
3369	Other transportation equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	14	6	637	16 520	456	794	9 370	35 730	28 792	65 562	1 051
3372	Office furniture (including fixtures) mfg	-	6	4	533	14 005	393	672	8 195	29 224	25 112	55 449	858
33721	Office furniture (including fixtures) mfg	-	6	4	533	14 005	393	672	8 195	29 224	25 112	55 449	858
337215	Showcase, partition, shelving, & locker mfg	-	3	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	24	7	577	14 545	423	890	7 862	58 886	31 913	83 887	1 092
3399	Other miscellaneous mfg ..	-	19	7	552	13 616	407	858	7 437	55 916	30 468	79 434	906
	CLEVELAND—AKRON, OH CMSA												
31-33	Manufacturing	-	6 021	2 212	255 158	9 467 537	180 155	375 649	5 785 740	26 087 404	27 142 358	53 188 994	2 483 981
311	Food mfg	1	238	58	7 617	225 934	4 856	8 929	116 034	949 653	885 896	1 840 605	38 303
312	Beverage & tobacco product mfg	3	26	10	1 293	37 420	503	947	15 710	73 212	256 228	331 119	D
313	Textile mills	2	27	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	79	11	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	46	9	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	86	16	1 353	30 473	1 083	2 190	20 796	62 569	80 345	143 179	D
322	Paper mfg	-	94	64	6 751	262 865	4 853	10 967	151 997	747 417	763 355	1 512 195	67 865
323	Printing & related support activities	1	574	114	11 975	360 276	8 807	17 445	219 934	829 220	467 490	1 295 292	68 391
324	Petroleum & coal products mfg	4	48	17	1 423	61 593	816	1 459	25 644	228 112	367 566	592 602	35 585
325	Chemical mfg	1	266	149	17 989	733 732	10 471	21 821	361 634	2 821 049	2 996 364	5 829 343	283 383
326	Plastics & rubber products mfg	-	427	258	25 428	712 806	19 770	40 543	463 584	1 781 717	1 704 126	3 478 407	153 685
327	Nonmetallic mineral product mfg	2	197	65	4 292	153 964	3 181	7 004	103 150	452 760	371 566	834 583	37 516
331	Primary metal mfg	-	151	101	20 242	943 752	16 458	37 031	716 352	2 176 149	3 274 276	5 414 818	317 259

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CLEVELAND-AKRON, OH CMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	1 775	580	49 120	1 684 043	36 625	76 004	1 073 291	3 935 060	2 942 510	6 899 794	317 447
333	Machinery mfg	1	849	323	34 114	1 311 333	21 193	46 307	687 546	3 097 265	2 819 204	5 875 786	174 169
334	Computer & electronic product mfg	-	195	94	10 636	386 664	5 311	10 255	126 403	985 401	787 062	1 783 054	63 206
335	Electrical equipment, appliance, & component mfg	-	166	92	14 813	539 328	8 848	17 503	235 453	1 626 034	1 202 292	2 825 701	72 567
336	Transportation equipment mfg	-	194	121	31 557	1 561 195	25 545	53 876	1 199 562	4 963 111	7 225 146	12 183 179	751 027
337	Furniture & related product mfg	1	174	29	4 346	130 065	3 164	6 718	80 386	268 511	324 525	592 894	23 178
339	Miscellaneous mfg	1	400	96	10 062	285 330	6 982	13 582	159 709	974 685	574 386	1 539 539	46 626
	Akron, OH PMSA												
31-33	Manufacturing	1	1 389	531	55 296	1 923 910	38 816	79 873	1 170 601	4 705 320	4 270 263	9 000 911	480 437
311	Food mfg	-	45	11	1 907	55 333	1 032	1 822	24 215	125 789	213 727	341 064	5 787
3113	Sugar & confectionery product mfg	-	6	1	289	4 297	202	354	2 906	5 980	7 757	13 899	229
31133	Confectionery mfg from purchased chocolate ...	-	3	1	e	D	D	D	D	D	D	D	213
311330	Confectionery mfg from purchased chocolate	-	3	1	e	D	D	D	D	D	D	D	213
3118	Bakeries & tortilla mfg	1	28	4	1 086	34 678	425	640	9 213	77 933	38 655	116 239	1 864
31181	Bread & bakery product mfg	-	26	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	2	f	D	D	D	D	D	D	D	1 010
312	Beverage & tobacco product mfg	4	7	4	582	16 469	193	368	6 403	37 883	156 291	195 521	D
3121	Beverage mfg	4	7	4	582	16 469	193	368	6 403	37 883	156 291	195 521	D
31211	Soft drink & ice mfg	4	3	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	1	10	2	e	D	D	D	D	D	D	D	136
321	Wood product mfg	3	18	3	331	8 181	267	596	5 781	17 048	24 985	42 207	D
3219	Other wood product mfg ...	3	16	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	18	13	1 612	61 101	1 045	2 290	33 231	110 126	184 939	293 150	17 444
3222	Converted paper product mfg	-	17	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	7	6	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	5	4	259	9 234	186	401	5 339	17 974	31 283	48 704	D
32222	Paper bag & coated & treated paper mfg	-	7	5	1 028	42 131	590	1 315	20 537	66 444	126 242	191 183	D
322222	Coated & laminated paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	132	34	3 605	99 688	2 656	5 114	63 227	274 136	137 496	410 323	27 967
3231	Printing & related support activities	-	132	34	3 605	99 688	2 656	5 114	63 227	274 136	137 496	410 323	27 967
32311	Printing	-	116	30	3 343	93 219	2 449	4 748	58 939	261 979	134 645	395 343	26 383
323110	Commercial lithographic printing ..	1	63	16	1 214	36 754	807	1 521	21 753	77 004	34 082	110 668	4 688
323113	Commercial screen printing	-	17	7	1 017	22 870	831	1 564	14 003	30 520	30 700	61 050	1 519
323117	Book printing	-	2	1	e	D	D	D	D	D	D	D	D
32312	Support activities for printing	-	16	4	262	6 469	207	366	4 288	12 157	2 851	14 980	1 584
324	Petroleum & coal products mfg	2	11	3	379	10 097	247	384	5 457	32 425	62 643	93 642	4 454
3241	Petroleum & coal products mfg	2	11	3	379	10 097	247	384	5 457	32 425	62 643	93 642	4 454
32419	Other petroleum & coal products mfg	2	3	2	e	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	2	3	2	e	D	D	D	D	D	D	D	D

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	CLEVELAND—AKRON, OH CMSA—Con.												
	Akron, OH PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	2	73	43	4 179	158 523	2 674	5 684	81 993	537 258	570 579	1 116 065	63 315
3251	Basic chemical mfg	3	11	9	799	33 593	482	1 022	18 615	103 312	104 134	212 677	14 086
32519	Other basic organic chemical mfg	1	4	4	330	14 863	183	362	7 282	66 957	60 935	125 174	5 633
325199	All other basic organic chemical mfg	1	4	4	330	14 863	183	362	7 282	66 957	60 935	125 174	5 633
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	7	4	335	14 193	228	487	7 517	69 921	63 893	139 738	5 504
32521	Resin & synthetic rubber mfg	3	7	4	335	14 193	228	487	7 517	69 921	63 893	139 738	5 504
325211	Plastics material & resin mfg	3	4	4	308	13 177	210	455	6 867	66 215	57 526	129 679	4 951
3255	Paint, coating, & adhesive mfg	1	16	8	643	25 608	379	733	13 197	124 530	124 881	249 258	D
32551	Paint & coating mfg	4	8	4	321	12 370	168	288	5 262	50 353	43 059	93 458	D
325510	Paint & coating mfg ...	4	8	4	321	12 370	168	288	5 262	50 353	43 059	93 458	D
32552	Adhesive mfg	—	8	4	322	13 238	211	445	7 935	74 177	81 822	155 800	2 250
325520	Adhesive mfg	—	8	4	322	13 238	211	445	7 935	74 177	81 822	155 800	2 250
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	6	3	1 080	33 657	730	1 563	14 672	115 401	113 360	227 861	7 327
32561	Soap & cleaning compound mfg	—	4	3	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	28	17	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	26	16	1 154	46 787	764	1 753	25 883	109 114	155 355	262 612	31 263
325991	Custom compounding of purchased resin...	—	17	12	888	37 057	578	1 305	18 888	90 287	136 666	224 269	30 225
325998	All other miscellaneous chemical product & preparation mfg	—	9	4	266	9 730	186	448	6 995	18 827	18 689	38 343	1 038
326	Plastics & rubber products mfg	—	162	97	9 357	276 528	7 109	15 113	175 413	708 686	677 105	1 382 822	68 434
3261	Plastics product mfg	—	101	60	6 046	165 346	4 738	9 919	108 200	439 304	364 537	799 933	45 748
32611	Unsupported plastics film, sheet, & bag mfg ..	—	5	4	479	15 833	338	734	9 185	60 932	60 878	121 564	8 724
326112	Unsupported plastics packaging film & sheet mfg	—	3	3	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	5	10	6	448	13 885	336	675	9 043	34 837	19 996	55 723	3 259
326121	Unsupported plastics profile shape mfg	—	9	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	78	44	4 741	123 181	3 831	7 983	84 247	309 614	252 228	559 135	32 530
326199	All other plastics product mfg	—	76	43	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	61	37	3 311	111 182	2 371	5 194	67 213	269 382	312 568	582 889	22 686
32622	Rubber & plastics hoses & belting mfg	—	2	2	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	53	34	2 371	77 184	1 724	3 768	46 255	187 477	179 554	368 368	15 205
326291	Rubber product mfg for mechanical use	—	31	19	1 506	46 586	1 097	2 427	27 890	123 345	74 179	198 117	8 089
326299	All other rubber product mfg	—	22	15	865	30 598	627	1 341	18 365	64 132	105 375	170 251	7 116
327	Nonmetallic mineral product mfg	2	46	14	722	25 533	552	1 195	18 079	67 351	72 113	153 189	6 151
3273	Cement & concrete product mfg	2	27	9	461	15 924	361	793	11 460	36 124	56 971	106 421	4 076
331	Primary metal mfg	—	24	17	2 094	60 820	1 653	3 412	42 774	161 941	155 943	317 072	19 808
3315	Foundries	—	18	11	1 757	50 984	1 404	2 933	37 011	130 370	111 542	241 363	18 704
33152	Nonferrous metal foundries	—	10	8	1 594	47 072	1 268	2 689	34 269	122 797	107 368	229 629	18 263
331521	Aluminum die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	6	4	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND-AKRON, OH CMSA—Con.												
	Akron, OH PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg.....	-	368	110	9 372	298 459	7 135	14 533	190 807	638 552	430 084	1 057 370	53 537
3321	Forging & stamping.....	-	22	9	608	22 753	467	1 003	14 743	42 565	54 069	93 942	3 389
33211	Forging & stamping.....	-	22	9	608	22 753	467	1 003	14 743	42 565	54 069	93 942	3 389
332116	Metal stamping.....	-	15	6	436	16 041	343	752	11 122	28 188	30 825	58 962	2 862
3322	Cutlery & handtool mfg....	1	14	6	554	17 797	398	805	9 589	45 490	19 995	65 410	1 942
33221	Cutlery & handtool mfg..	1	14	6	554	17 797	398	805	9 589	45 490	19 995	65 410	1 942
332212	Hand & edge tool mfg..	1	14	6	554	17 797	398	805	9 589	45 490	19 995	65 410	1 942
3323	Architectural & structural metals mfg.....	-	49	17	1 264	38 352	935	1 864	23 771	79 657	90 601	170 427	3 848
33231	Plate work & fabricated structural product mfg..	-	22	7	661	22 628	496	1 053	14 222	48 275	60 268	108 779	2 718
332313	Plate work mfg.....	-	6	3	271	9 705	225	515	7 274	21 136	22 066	43 032	659
33232	Ornamental & architectural metal products mfg.....	1	27	10	603	15 724	439	811	9 549	31 382	30 333	61 648	1 130
332322	Sheet metal work mfg..	2	17	7	323	10 043	251	501	6 718	18 139	10 721	28 688	730
3324	Boiler, tank, & shipping container mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg.....	-	5	3	747	31 843	446	857	15 447	49 209	39 962	89 036	2 738
332420	Metal tank (heavy gauge) mfg.....	-	5	3	747	31 843	446	857	15 447	49 209	39 962	89 036	2 738
3325	Hardware mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	187	44	3 717	103 852	3 058	6 078	72 905	227 144	102 582	327 965	14 666
33271	Machine shops.....	-	168	35	3 172	86 570	2 624	5 108	60 764	172 400	80 342	252 686	12 675
332710	Machine shops.....	-	168	35	3 172	86 570	2 624	5 108	60 764	172 400	80 342	252 686	12 675
33272	Turned product & screw, nut, & bolt mfg.....	1	19	9	545	17 282	434	970	12 141	54 744	22 240	75 279	1 991
332721	Precision turned product mfg.....	3	13	6	330	11 091	261	601	8 268	21 975	9 324	29 919	973
3328	Coating, engraving, heat treating, & allied activities.	2	43	12	860	28 389	669	1 409	18 930	54 285	18 085	72 494	6 308
33281	Coating, engraving, heat treating, & allied activities.....	2	43	12	860	28 389	669	1 409	18 930	54 285	18 085	72 494	6 308
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	4	17	6	332	9 984	249	511	6 170	18 773	8 363	27 186	1 481
332813	Electroplating, plating, polishing, anodizing, & coloring.....	-	20	4	413	14 044	332	705	9 818	23 362	6 144	29 606	4 398
3329	Other fabricated metal product mfg.....	-	37	16	1 224	42 485	898	1 998	28 219	111 535	85 693	190 678	18 835
33291	Metal valve mfg.....	-	9	7	640	23 923	490	1 125	16 858	72 599	40 439	106 219	9 019
332912	Fluid power valve & hose fitting mfg.....	-	6	5	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	28	9	584	18 562	408	873	11 361	38 936	45 254	84 459	9 816
332991	Ball & roller bearing mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	222	93	7 795	304 645	4 529	9 390	146 663	671 905	431 323	1 098 765	45 975
3331	Agriculture, construction, & mining machinery mfg....	2	9	4	259	8 990	178	344	4 355	19 816	18 312	38 213	659
3332	Industrial machinery mfg..	3	45	20	1 392	57 224	763	1 598	25 380	128 243	126 218	256 027	7 548
33322	Plastics & rubber industry machinery mfg.....	3	20	12	797	32 620	422	947	14 445	68 659	79 508	149 707	4 783
333220	Plastics & rubber industry machinery mfg.....	3	20	12	797	32 620	422	947	14 445	68 659	79 508	149 707	4 783
33329	Other industrial machinery mfg.....	3	23	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	3	13	5	409	16 679	221	391	6 862	43 639	41 238	84 920	D
3333	Commercial & service industry machinery mfg..	9	3	2	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	9	3	2	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	9	2	2	g	D	D	D	D	D	D	D	D

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	CLEVELAND-AKRON, OH CMSA—Con.												
	Akron, OH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	253	8 204	158	309	3 864	14 668	13 763	29 193	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	4	3	253	8 204	158	309	3 864	14 668	13 763	29 193	D
3335	Metalworking machinery mfg	—	128	51	3 353	125 086	2 637	5 419	88 194	268 880	145 005	408 316	26 359
33351	Metalworking machinery mfg	—	128	51	3 353	125 086	2 637	5 419	88 194	268 880	145 005	408 316	26 359
333511	Industrial mold mfg ...	—	70	33	2 104	81 606	1 688	3 673	58 046	144 810	60 752	203 100	17 377
333514	Special die & tool, die set, jig, & fixture mfg .	2	31	6	403	14 445	324	672	10 058	28 300	10 218	38 255	2 171
333515	Cutting tool & machine tool accessory mfg ..	—	17	7	589	21 606	451	794	15 857	65 037	30 415	94 933	5 728
3339	Other general-purpose machinery mfg	—	27	10	1 128	39 975	503	1 148	15 003	81 896	60 992	142 948	4 383
33399	All other general-purpose machinery mfg	—	19	6	909	31 829	352	805	10 581	67 062	46 880	113 669	3 224
333993	Packaging machinery mfg	—	5	3	655	23 557	210	541	6 726	44 922	34 103	79 157	2 507
334	Computer & electronic product mfg	—	41	22	1 579	49 719	950	1 925	20 608	138 213	130 790	269 945	5 690
3344	Semiconductor & other electronic component mfg	—	15	12	656	19 385	459	1 004	10 684	62 977	68 758	131 757	3 457
33441	Semiconductor & other electronic component mfg	—	15	12	656	19 385	459	1 004	10 684	62 977	68 758	131 757	3 457
334419	Other electronic component mfg	—	3	3	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	22	10	899	29 411	479	898	9 333	73 442	60 302	134 596	D
33451	Navigational, measuring, medical, & control instruments mfg	—	22	10	899	29 411	479	898	9 333	73 442	60 302	134 596	D
334519	Other measuring & controlling device mfg	—	6	4	376	11 853	211	342	3 102	45 679	29 777	76 206	773
335	Electrical equipment, appliance, & component mfg	—	29	13	1 635	59 846	1 255	2 700	39 349	179 391	109 043	291 428	5 680
3351	Electric lighting equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	2	16	6	444	13 120	325	585	7 107	35 436	32 554	68 588	1 162
33531	Electrical equipment mfg	2	16	6	444	13 120	325	585	7 107	35 436	32 554	68 588	1 162
335312	Motor & generator mfg	2	7	3	258	6 294	223	452	4 883	25 282	23 422	49 434	756
3359	Other electrical equipment & component mfg	—	9	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	38	23	6 184	336 580	4 848	10 350	255 182	647 637	600 080	1 254 888	113 338
3362	Motor vehicle body & trailer mfg	—	4	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	3	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	29	17	4 200	253 767	3 675	7 822	215 831	370 738	415 218	790 197	101 896
33637	Motor vehicle metal stamping	—	9	5	2 844	210 351	2 555	5 624	184 769	257 356	313 060	574 139	D
336370	Motor vehicle metal stamping	—	9	5	2 844	210 351	2 555	5 624	184 769	257 356	313 060	574 139	D
33639	Other motor vehicle parts mfg	—	5	4	648	24 530	508	1 087	16 518	61 712	56 814	118 670	D
336399	All other motor vehicle parts mfg	—	5	4	648	24 530	508	1 087	16 518	61 712	56 814	118 670	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	CLEVELAND—AKRON, OH CMSA—Con.													
31-33	Akron, OH PMSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	-	5	3	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	5	3	g	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	2	31	4		782	19 217	532	760	8 771	46 341	75 843	124 076	3 854
3371	Household & institutional furniture & kitchen cabinet mfg	-	21	1		426	11 365	268	341	4 057	31 619	60 633	92 459	2 827
33712	Household & institutional furniture mfg	-	10	1	e	D	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	7	8	2	e	D	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	7	8	2	e	D	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	9	4	1	e	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	84	21		2 616	69 847	1 732	3 464	46 182	288 756	203 869	503 849	13 202
3391	Medical equipment & supplies mfg	2	33	8		482	12 211	316	668	6 249	31 160	22 760	52 696	1 781
33911	Medical equipment & supplies mfg	2	33	8		482	12 211	316	668	6 249	31 160	22 760	52 696	1 781
3399	Other miscellaneous mfg ..	-	51	13		2 134	57 636	1 416	2 796	39 933	257 596	181 109	451 153	11 421
33993	Doll, toy, & game mfg ...	-	5	1	g	D	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	17	7		524	15 850	341	665	7 743	68 011	48 416	127 411	901
339991	Gasket, packing, & sealing device mfg ...	-	5	5		389	12 932	241	513	6 164	60 551	42 982	114 450	532
	Cleveland—Lorain—Elyria, OH PMSA													
31-33	Manufacturing	-	4 632	1 681		199 862	7 543 627	141 339	295 776	4 615 139	21 382 084	22 872 095	44 188 083	2 003 544
311	Food mfg	1	193	47		5 710	170 601	3 824	7 107	91 819	823 864	672 169	1 499 541	32 516
3113	Sugar & confectionery product mfg	1	19	6		356	5 951	246	302	3 307	19 225	57 262	77 574	1 483
3114	Fruit & vegetable preserving & specialty food mfg	-	6	4	g	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	5	3	g	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	1	f	D	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	10	6		631	20 288	291	643	7 616	55 078	165 185	223 613	8 640
31151	Dairy product (except frozen) mfg	-	7	5	f	D	D	D	D	D	D	D	D	8 436
311511	Fluid milk mfg	-	3	3		432	14 640	150	327	4 261	38 036	93 819	131 796	D
3118	Bakeries & tortilla mfg	-	109	14		2 223	66 399	1 343	2 218	25 457	179 515	78 391	258 380	4 665
31181	Bread & bakery product mfg	-	103	10		1 974	58 219	1 143	1 882	20 972	138 682	50 034	188 877	4 437
311811	Retail bakeries	5	83	1		440	5 989	293	330	3 238	12 765	7 207	20 033	529
311812	Commercial bakeries ..	-	20	9		1 534	52 230	850	1 552	17 734	125 917	42 827	168 844	3 908
3119	Other food mfg	3	27	11		1 086	27 905	825	1 621	18 320	174 110	149 221	321 824	6 556
31199	All other food mfg	-	10	6		664	16 760	517	1 026	10 647	87 559	86 345	173 589	2 929
311991	Perishable prepared food mfg	-	6	5	e	D	D	D	D	D	D	D	D	1 981
312	Beverage & tobacco product mfg	2	19	6		711	20 951	310	579	9 307	35 329	99 937	135 598	D
3121	Beverage mfg	2	19	6		711	20 951	310	579	9 307	35 329	99 937	135 598	D
31211	Soft drink & ice mfg	1	12	4	f	D	D	D	D	D	D	D	D	1 046
312111	Soft drink mfg	1	6	2		468	13 499	178	314	6 344	10 205	73 930	85 020	406
314	Textile product mills	2	58	9		651	12 041	541	846	7 800	21 942	22 846	44 781	1 476
3149	Other textile product mills ..	2	35	9		577	10 911	478	758	7 086	19 561	20 142	39 706	1 377
31499	All other textile product mills	2	15	6		417	7 705	350	562	5 206	14 323	16 065	30 429	1 162
314999	All other miscellaneous textile product mills ..	2	12	5	e	D	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CLEVELAND-AKRON, OH CMSA—Con. Cleveland-Lorain-Elyria, OH PMSA—Con. Manufacturing—Con.												
315	Apparel mfg	3	36	7	653	13 893	544	1 072	10 404	56 035	26 846	83 728	D
3152	Cut & sew apparel mfg	3	22	5	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	8	2	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	8	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	68	13	1 022	22 292	816	1 594	15 015	45 521	55 360	100 972	2 802
3219	Other wood product mfg	4	58	10	862	18 853	693	1 339	12 863	37 092	41 774	78 948	1 927
32191	Millwork	5	20	6	511	11 095	406	777	7 549	22 770	25 970	48 700	1 317
321918	Other millwork (including flooring)	6	15	4	444	9 627	351	677	6 562	18 976	19 437	38 663	D
32192	Wood container & pallet mfg	4	26	3	260	5 789	212	420	3 948	10 313	10 375	20 689	468
321920	Wood container & pallet mfg	4	26	3	260	5 789	212	420	3 948	10 313	10 375	20 689	468
322	Paper mfg	—	76	51	5 139	201 764	3 808	8 677	118 766	637 291	578 416	1 219 045	50 421
3222	Converted paper product mfg	—	74	50	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	48	33	2 487	80 217	1 870	3 914	50 573	185 052	258 343	441 751	22 488
322211	Corrugated & solid fiber box mfg	—	24	18	1 313	40 010	928	1 868	22 831	94 684	139 504	234 488	6 912
322212	Folding paperboard box mfg	—	14	9	764	26 636	618	1 378	18 419	65 183	77 407	141 589	14 977
32222	Paper bag & coated & treated paper mfg	—	14	8	1 598	88 228	1 153	3 161	48 645	385 295	236 277	626 120	22 841
322222	Coated & laminated paper mfg	—	10	7	1 347	76 643	952	2 597	39 499	355 941	189 717	552 220	D
32223	Stationery product mfg	—	6	4	f	D	D	D	D	D	D	D	1 612
322232	Envelope mfg	—	4	4	511	15 422	390	746	9 957	28 314	37 628	65 332	D
32229	Other converted paper product mfg	—	6	5	464	15 464	330	699	7 696	30 646	37 419	69 030	D
322299	All other converted paper product mfg	—	5	4	e	D	D	D	D	D	D	D	1 418
323	Printing & related support activities	1	442	80	8 370	260 588	6 151	12 331	156 707	555 084	329 994	884 969	40 424
3231	Printing & related support activities	1	442	80	8 370	260 588	6 151	12 331	156 707	555 084	329 994	884 969	40 424
32311	Printing	1	390	71	7 624	237 676	5 569	11 185	141 535	510 568	319 824	830 376	38 489
323110	Commercial lithographic printing	1	221	52	5 892	186 313	4 359	8 851	117 140	388 279	250 973	640 070	27 040
323112	Commercial flexographic printing	1	6	4	452	17 495	317	751	5 573	54 168	30 274	83 572	D
323113	Commercial screen printing	—	29	4	346	8 749	244	427	4 737	17 558	8 258	25 715	1 187
323114	Quick printing	4	77	2	379	9 040	246	360	4 804	18 092	8 721	26 833	932
323119	Other commercial printing	9	40	3	271	7 777	195	370	4 528	16 111	11 176	27 320	1 122
32312	Support activities for printing	1	52	9	746	22 912	582	1 146	15 172	44 516	10 170	54 593	1 935
323121	Tradebinding & related work	—	17	2	332	7 357	290	570	5 199	15 248	2 288	17 592	774
323122	Prepress services	1	35	7	414	15 555	292	576	9 973	29 268	7 882	37 001	1 161
324	Petroleum & coal products mfg	4	37	14	1 044	51 496	569	1 075	20 187	195 687	304 923	498 960	31 131
3241	Petroleum & coal products mfg	4	37	14	1 044	51 496	569	1 075	20 187	195 687	304 923	498 960	31 131
32412	Asphalt paving, roofing, & saturated materials mfg	3	19	8	615	33 021	316	605	10 942	134 716	148 362	281 076	15 887
324122	Asphalt shingle & coating materials mfg	3	6	5	467	25 976	222	424	6 649	109 494	92 387	199 803	14 503
325	Chemical mfg	1	193	106	13 810	575 209	7 797	16 137	279 641	2 283 791	2 425 785	4 713 278	220 068
3251	Basic chemical mfg	—	35	27	3 379	154 560	1 948	4 439	85 127	671 219	893 607	1 555 539	62 347
32513	Dye & pigment mfg	—	7	6	914	45 640	516	1 139	26 765	200 374	217 269	413 067	15 320
325131	Inorganic dye & pigment mfg	—	4	4	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	12	8	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	1	11	7	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	13	11	1 353	62 067	863	1 846	35 677	275 568	447 073	721 490	33 353
325199	All other basic organic chemical mfg	—	12	10	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	15	13	1 217	57 020	741	1 629	33 579	217 701	255 405	475 196	58 325
32521	Resin & synthetic rubber mfg	—	15	13	1 217	57 020	741	1 629	33 579	217 701	255 405	475 196	58 325
325211	Plastics material & resin mfg	—	12	10	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	—	3	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	7	3	542	18 975	401	851	13 131	93 887	51 576	145 748	D
32541	Pharmaceutical & medicine mfg	—	7	3	542	18 975	401	851	13 131	93 887	51 576	145 748	D
325412	Pharmaceutical preparation mfg	—	3	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	41	21	3 539	162 016	1 687	3 378	64 693	492 062	587 662	1 084 204	26 212
32551	Paint & coating mfg	—	27	14	2 544	122 303	1 024	2 169	42 136	323 663	406 804	734 051	16 779
325510	Paint & coating mfg	—	27	14	2 544	122 303	1 024	2 169	42 136	323 663	406 804	734 051	16 779
32552	Adhesive mfg	2	14	7	995	39 713	663	1 209	22 557	168 399	180 858	350 153	9 433
325520	Adhesive mfg	2	14	7	995	39 713	663	1 209	22 557	168 399	180 858	350 153	9 433
3256	Soap, cleaning compound, & toilet preparation mfg	—	23	8	1 975	65 498	1 068	2 007	26 387	398 490	241 165	647 812	17 557
32561	Soap & cleaning compound mfg	—	20	6	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	—	8	3	353	14 041	203	370	4 131	181 592	79 934	262 372	3 033
32562	Toilet preparation mfg	1	3	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	1	3	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	67	32	3 047	112 355	1 883	3 678	54 200	396 977	387 668	782 402	36 541
32591	Printing ink mfg	2	13	4	288	11 178	168	370	5 183	18 717	33 941	55 562	1 184
325910	Printing ink mfg	2	13	4	288	11 178	168	370	5 183	18 717	33 941	55 562	1 184
32599	All other chemical product & preparation mfg	2	54	28	2 759	101 177	1 715	3 308	49 017	378 260	353 727	726 840	35 357
325991	Custom compounding of purchased resin	—	17	10	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	3	35	16	1 436	54 492	833	1 443	23 774	237 855	214 387	451 080	21 392
326	Plastics & rubber products mfg	—	265	161	16 071	436 278	12 661	25 430	288 171	1 073 031	1 027 021	2 095 585	85 251
3261	Plastics product mfg	1	204	124	11 956	318 541	9 469	18 923	211 851	806 943	769 237	1 571 710	66 263
32611	Unsupported plastics film, sheet, & bag mfg	1	17	14	722	22 423	581	1 268	15 769	62 415	58 060	120 133	3 547
326111	Unsupported plastics bag mfg	—	7	6	364	10 698	321	691	8 679	34 852	23 635	58 544	1 834
326113	Unsupported plastics film & sheet (except packaging) mfg	2	10	8	358	11 725	260	577	7 090	27 563	34 425	61 589	1 713
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	22	11	918	25 480	689	1 193	15 225	68 425	70 351	137 994	4 783
326121	Unsupported plastics profile shape mfg	—	17	7	523	13 432	406	637	8 148	29 962	28 502	58 484	2 009
326122	Plastics pipe & pipe fitting mfg	—	5	4	395	12 048	283	556	7 077	38 463	41 849	79 510	2 774
32613	Laminated plastics plate, sheet, & shape mfg	1	17	6	611	21 880	479	980	13 312	56 492	46 068	102 861	2 029
326130	Laminated plastics plate, sheet, & shape mfg	1	17	6	611	21 880	479	980	13 312	56 492	46 068	102 861	2 029
32616	Plastics bottle mfg	—	5	2	652	17 885	583	1 327	14 161	39 396	69 057	107 070	D
326160	Plastics bottle mfg	—	5	2	652	17 885	583	1 327	14 161	39 396	69 057	107 070	D
32619	Other plastics product mfg	1	133	86	8 751	222 578	6 905	13 701	148 397	561 639	505 771	1 065 166	48 386
326199	All other plastics product mfg	1	127	82	8 533	215 831	6 753	13 350	144 233	535 121	485 330	1 016 325	46 595
3262	Rubber product mfg	—	61	37	4 115	117 737	3 192	6 507	76 320	266 088	257 784	523 875	18 988
32629	Other rubber product mfg	—	49	34	3 899	111 944	3 032	6 174	72 567	254 982	240 710	495 641	18 149
326291	Rubber product mfg for mechanical use	—	36	26	2 992	82 984	2 379	4 988	57 373	168 548	113 963	282 752	13 042
326299	All other rubber product mfg	—	13	8	907	28 960	653	1 186	15 194	86 434	126 747	212 889	5 107

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	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	2	151	51	3 570	128 431	2 629	5 809	85 071	385 409	299 453	681 394	31 365
3271	Clay product & refractory mfg	—	22	6	843	31 819	597	1 347	18 666	59 960	51 436	110 350	4 641
32711	Pottery, ceramics, & plumbing fixture mfg . . .	—	12	2	337	12 395	223	449	6 003	22 147	22 928	45 525	145
327113	Porcelain electrical supply mfg	—	3	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	10	4	506	19 424	374	898	12 663	37 813	28 508	64 825	4 496
327125	Nonclay refractory mfg	—	7	3	477	18 659	348	826	12 134	36 310	27 088	62 315	4 437
3272	Glass & glass product mfg	—	20	5	521	19 795	417	1 047	15 711	131 376	28 409	160 395	11 633
32721	Glass & glass product mfg	—	20	5	521	19 795	417	1 047	15 711	131 376	28 409	160 395	11 633
327212	Other pressed & blown glass & glassware mfg	—	6	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	5	63	24	1 171	44 797	858	1 842	29 792	94 260	127 438	219 911	9 299
32732	Ready-mix concrete mfg	6	34	14	620	22 893	481	1 082	17 021	57 386	85 927	142 623	6 318
327320	Ready-mix concrete mfg	6	34	14	620	22 893	481	1 082	17 021	57 386	85 927	142 623	6 318
32739	Other concrete product mfg	3	17	4	355	15 068	254	515	9 038	22 214	27 605	48 884	1 784
327390	Other concrete product mfg	3	17	4	355	15 068	254	515	9 038	22 214	27 605	48 884	1 784
3279	Other nonmetallic mineral product mfg	4	42	14	911	27 143	661	1 350	17 443	71 178	62 416	132 300	4 505
32791	Abrasive product mfg	1	10	5	368	9 850	241	465	5 846	19 246	23 240	42 453	976
327910	Abrasive product mfg	1	10	5	368	9 850	241	465	5 846	19 246	23 240	42 453	976
32799	All other nonmetallic mineral product mfg	5	32	9	543	17 293	420	885	11 597	51 932	39 176	89 847	3 529
331	Primary metal mfg	—	127	84	18 148	882 932	14 805	33 619	673 578	2 014 208	3 118 333	5 097 746	297 451
3311	Iron & steel mills & ferroalloy mfg	—	5	4	7 534	412 612	6 280	14 394	321 052	978 088	2 164 329	3 104 563	147 465
33111	Iron & steel mills & ferroalloy mfg	—	5	4	7 534	412 612	6 280	14 394	321 052	978 088	2 164 329	3 104 563	147 465
331111	Iron & steel mills	—	5	4	7 534	412 612	6 280	14 394	321 052	978 088	2 164 329	3 104 563	147 465
3312	Steel product mfg from purchased steel	—	17	10	1 146	40 915	846	1 821	27 796	119 587	235 937	357 139	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	373	11 616	246	523	7 674	23 727	51 037	75 834	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	373	11 616	246	523	7 674	23 727	51 037	75 834	D
33122	Rolling & drawing of purchased steel	—	13	7	773	29 299	600	1 298	20 122	95 860	184 900	281 305	9 903
331221	Cold-rolled steel shape mfg	—	8	4	337	13 864	253	547	8 083	53 031	107 625	160 865	D
331222	Steel wire drawing	—	5	3	436	15 435	347	751	12 039	42 829	77 275	120 440	D
3314	Nonferrous metal (except aluminum) production & processing	1	25	16	1 650	71 438	1 244	2 832	46 268	150 785	230 823	386 270	14 932
33142	Copper rolling, drawing, extruding, & alloying . . .	—	6	6	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	2	2	e	D	D	D	D	D	D	D	D
331423	Secondary smelting, refining, & alloying of copper	—	4	4	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . .	2	16	8	918	40 853	725	1 647	29 106	107 611	66 536	173 900	D
331491	Other nonferrous metal rolling, drawing, & extruding	3	8	6	460	21 553	372	850	15 945	66 040	42 673	108 250	3 774
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	1	8	2	458	19 300	353	797	13 161	41 571	23 863	65 650	D

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	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	74	49	7 570	349 460	6 225	14 056	272 350	727 330	421 087	1 143 776	118 380
33151	Ferrous metal foundries ..	-	19	12	4 034	238 970	3 395	8 059	194 188	480 495	215 375	695 434	83 889
331511	Iron foundries	-	11	5	3 142	208 121	2 713	6 471	174 818	410 814	164 755	577 110	D
331512	Steel investment foundries	-	5	5	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	3	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	55	37	3 536	110 490	2 830	5 997	78 162	246 835	205 712	448 342	34 491
331521	Aluminum die-casting foundries	-	11	8	955	27 383	836	1 636	22 450	57 009	53 723	109 659	4 353
331522	Nonferrous (except aluminum) die-casting foundries	-	8	6	383	12 451	242	538	6 857	29 986	25 243	54 886	1 726
331524	Aluminum foundries (except die-casting) ..	1	22	14	1 279	41 701	1 070	2 359	30 470	79 564	67 567	145 577	17 682
331525	Copper foundries (except die-casting) ..	1	7	5	291	10 584	245	470	7 717	22 033	10 742	32 867	D
331528	Other nonferrous foundries (except die-casting)	-	7	4	628	18 371	437	994	10 668	58 243	48 437	105 353	D
332	Fabricated metal product mfg	-	1 407	470	39 748	1 385 584	29 490	61 471	882 484	3 296 508	2 512 426	5 842 424	263 910
3321	Forging & stamping	-	115	72	6 323	252 400	4 958	11 236	177 748	607 267	610 687	1 218 370	77 754
33211	Forging & stamping	-	115	72	6 323	252 400	4 958	11 236	177 748	607 267	610 687	1 218 370	77 754
332111	Iron & steel forging	-	16	12	1 092	47 781	802	1 855	29 761	104 385	128 999	236 182	14 844
332112	Nonferrous forging	-	4	1	g	D	D	D	D	D	D	D	D
332114	Custom roll forming	-	12	11	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	76	44	2 786	88 051	2 172	4 531	58 286	173 981	135 658	309 278	8 655
3322	Cutlery & handtool mfg	-	26	9	1 401	46 951	864	1 632	23 030	211 904	128 352	338 159	6 724
33221	Cutlery & handtool mfg ..	-	26	9	1 401	46 951	864	1 632	23 030	211 904	128 352	338 159	6 724
332212	Hand & edge tool mfg ..	-	20	7	1 295	43 460	789	1 505	21 034	201 419	113 034	313 584	6 239
3323	Architectural & structural metals mfg	1	139	43	3 044	96 389	2 119	4 189	54 722	201 363	187 177	388 939	9 087
33231	Plate work & fabricated structural product mfg ..	-	55	18	987	35 107	684	1 333	18 888	76 616	84 700	161 414	2 534
332312	Fabricated structural metal mfg	-	27	7	425	15 166	266	506	6 522	39 071	52 936	92 273	D
332313	Plate work mfg	-	24	10	493	17 971	372	744	11 423	32 819	27 652	60 301	1 197
33232	Ornamental & architectural metal products mfg	1	84	25	2 057	61 282	1 435	2 856	35 834	124 747	102 477	227 525	6 553
332322	Sheet metal work mfg ..	1	54	16	1 540	45 415	1 116	2 176	27 159	87 772	74 842	163 015	5 266
332323	Ornamental & architectural metal work mfg	-	13	6	323	10 369	213	462	5 934	26 427	15 638	41 950	855
3324	Boiler, tank, & shipping container mfg	3	25	9	800	29 358	641	1 322	21 214	54 383	84 141	140 658	3 960
33243	Metal can, box, & other metal container (light gauge) mfg	4	16	5	439	18 303	347	732	12 970	26 626	46 680	74 615	1 906
332439	Other metal container mfg	6	13	4	e	D	D	D	D	D	D	D	1 819
3325	Hardware mfg	4	17	7	1 219	30 753	565	1 237	13 873	79 590	49 310	127 449	3 844
33251	Hardware mfg	4	17	7	1 219	30 753	565	1 237	13 873	79 590	49 310	127 449	3 844
332510	Hardware mfg	4	17	7	1 219	30 753	565	1 237	13 873	79 590	49 310	127 449	3 844
3326	Spring & wire product mfg ..	-	41	23	1 679	50 490	1 301	2 701	32 109	104 910	76 773	180 533	5 579
33261	Spring & wire product mfg	-	41	23	1 679	50 490	1 301	2 701	32 109	104 910	76 773	180 533	5 579
332612	Spring (light gauge) mfg	2	14	8	f	D	D	D	D	D	D	D	2 656
332618	Other fabricated wire product mfg	-	24	13	962	30 708	734	1 539	17 509	60 898	44 143	104 748	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	690	156	12 791	445 028	9 880	20 355	298 773	953 503	542 568	1 501 898	77 146
33271	Machine shops	1	543	87	6 100	207 083	4 686	9 108	135 733	397 243	163 348	560 059	26 214
332710	Machine shops	1	543	87	6 100	207 083	4 686	9 108	135 733	397 243	163 348	560 059	26 214
33272	Turned product & screw, nut, & bolt mfg	-	147	69	6 691	237 945	5 194	11 247	163 040	556 260	379 220	941 839	50 932
332721	Precision turned product mfg	-	94	41	4 042	137 695	3 366	7 469	101 759	336 560	180 072	515 549	27 396
332722	Bolt, nut, screw, rivet, & washer mfg	-	53	28	2 649	100 250	1 828	3 778	61 281	219 700	199 148	426 290	23 536

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	1	205	80	5 194	159 192	4 044	8 177	101 735	372 340	260 904	638 764	26 481
33281	Coating, engraving, heat treating, & allied activities.....	1	205	80	5 194	159 192	4 044	8 177	101 735	372 340	260 904	638 764	26 481
332811	Metal heat treating....	1	50	20	1 468	49 388	1 164	2 389	34 060	107 839	46 878	154 671	7 712
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	—	44	16	1 183	35 864	880	1 810	19 584	86 511	130 218	220 944	6 852
332813	Electroplating, plating, polishing, anodizing, & coloring.....	—	111	44	2 543	73 940	2 000	3 978	48 091	177 990	83 808	263 149	11 917
3329	Other fabricated metal product mfg.....	—	149	71	7 297	275 023	5 118	10 622	159 280	711 248	572 514	1 307 654	53 335
33291	Metal valve mfg.....	—	53	38	4 601	178 902	3 251	6 936	107 526	530 854	407 168	958 009	42 739
332911	Industrial valve mfg...	1	16	12	g	D	D	D	D	D	D	D	14 213
332912	Fluid power valve & hose fitting mfg.....	—	20	13	2 409	100 721	1 623	3 472	55 022	360 493	220 954	583 027	14 322
332913	Plumbing fixture fitting & trim mfg.....	—	6	6	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	—	11	7	622	23 151	445	977	15 642	57 745	93 273	162 606	D
33299	All other fabricated metal product mfg.....	1	96	33	2 696	96 121	1 867	3 686	51 754	180 394	165 346	349 645	10 596
332993	Ammunition (except small arms) mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	2	18	8	680	20 959	492	1 014	12 291	31 847	34 830	66 860	2 823
332997	Industrial pattern mfg..	—	18	4	391	13 802	338	687	11 320	19 627	5 924	25 708	1 228
332999	All other miscellaneous fabricated metal product mfg.....	1	51	18	1 089	37 018	788	1 589	20 916	80 174	69 435	151 296	4 896
333	Machinery mfg.....	—	627	230	26 319	1 006 688	16 664	36 917	540 883	2 425 360	2 387 881	4 777 021	128 194
3331	Agriculture, construction, & mining machinery mfg....	2	12	6	770	28 042	561	1 217	16 177	113 893	84 417	191 764	3 263
33312	Construction machinery mfg.....	—	7	4	f	D	D	D	D	D	D	D	2 137
333120	Construction machinery mfg.....	—	7	4	f	D	D	D	D	D	D	D	2 137
3332	Industrial machinery mfg..	—	66	27	2 488	98 000	1 392	2 730	45 652	274 122	210 622	468 717	6 003
33321	Sawmill & woodworking machinery mfg.....	—	5	1	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg.....	—	5	1	e	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	11	4	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	—	50	22	1 373	49 631	777	1 574	23 486	115 313	93 278	208 473	3 953
333298	All other industrial machinery mfg.....	—	23	11	800	28 722	444	921	13 770	69 601	51 629	120 991	2 108
3333	Commercial & service industry machinery mfg..	—	21	7	601	27 885	397	809	13 210	84 301	75 987	162 219	2 131
33331	Commercial & service industry machinery mfg.....	—	21	7	601	27 885	397	809	13 210	84 301	75 987	162 219	2 131
333319	Other commercial & service industry machinery mfg.....	—	15	5	474	24 988	311	644	12 019	77 303	70 333	150 438	1 851
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	28	21	2 896	96 811	1 968	4 439	52 592	245 306	327 982	581 567	10 991
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	—	28	21	2 896	96 811	1 968	4 439	52 592	245 306	327 982	581 567	10 991
333412	Industrial & commercial fan & blower mfg.....	—	4	4	284	10 295	203	423	4 767	22 739	40 256	62 980	D
333414	Heating equipment (except warm air furnaces) mfg.....	—	10	7	1 180	43 940	663	1 393	18 563	97 258	78 291	173 478	3 909
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	10	8	1 299	39 021	1 002	2 411	26 806	116 146	200 696	327 002	5 762

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	—	331	99	8 314	319 924	5 990	12 418	205 236	705 437	350 694	1 069 369	49 681
33351	Metalworking machinery mfg	—	331	99	8 314	319 924	5 990	12 418	205 236	705 437	350 694	1 069 369	49 681
333511	Industrial mold mfg . . .	—	67	19	1 087	44 746	894	1 942	32 683	76 179	21 203	97 220	5 453
333512	Machine tool (metal cutting types) mfg . . .	—	18	13	993	41 471	663	1 465	24 585	66 883	61 194	125 749	1 684
333514	Special die & tool, die set, jig, & fixture mfg .	—	149	32	2 936	111 325	2 155	4 204	72 825	244 275	128 459	370 238	22 575
333515	Cutting tool & machine tool accessory mfg . .	—	69	23	2 467	88 188	1 823	3 771	59 191	258 670	68 689	324 448	13 346
333516	Rolling mill machinery & equipment mfg	—	7	5	333	14 018	180	430	6 252	19 709	43 671	86 973	1 619
333518	Other metalworking machinery mfg	2	14	4	333	14 041	171	372	6 291	26 159	16 689	42 839	4 525
3336	Engine, turbine, & power transmission equipment mfg	4	23	16	1 545	61 558	914	1 879	30 416	134 902	97 569	230 540	8 704
33361	Engine, turbine, & power transmission equipment mfg	4	23	16	1 545	61 558	914	1 879	30 416	134 902	97 569	230 540	8 704
333612	Speed changer, industrial high-speed drive, & gear mfg	5	10	5	654	24 826	426	834	13 820	42 023	39 540	82 157	3 892
333613	Mechanical power transmission equipment mfg	4	9	7	598	27 168	271	538	9 787	75 834	32 489	105 640	D
333618	Other engine equipment mfg	—	4	4	293	9 564	217	507	6 809	17 045	25 540	42 743	D
3339	Other general-purpose machinery mfg	—	146	54	9 705	374 468	5 442	13 425	177 600	867 399	1 240 610	2 072 845	47 421
33391	Pump & compressor mfg	4	11	5	263	7 919	126	217	3 317	17 530	13 668	31 147	783
33392	Material handling equipment mfg	—	31	21	1 848	71 831	1 014	2 232	31 363	164 566	189 489	344 615	4 812
333922	Conveyor & conveying equipment mfg	1	16	10	944	38 476	532	1 292	16 711	80 589	63 104	143 958	2 224
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	5	3	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	9	7	389	12 809	252	489	6 496	26 470	32 682	58 811	1 717
33399	All other general-purpose machinery mfg	—	104	28	7 594	294 718	4 302	10 976	142 920	685 303	1 037 453	1 697 083	41 826
333991	Power-driven handtool mfg	—	11	5	583	25 260	319	521	13 033	62 088	48 554	110 869	3 941
333992	Welding & soldering equipment mfg	—	9	6	4 706	177 265	2 868	6 189	94 862	423 670	802 199	1 194 343	D
333993	Packaging machinery mfg	—	11	5	1 335	57 163	536	1 099	17 316	135 587	140 514	279 666	D
333994	Industrial process furnace & oven mfg . .	—	17	5	292	10 981	161	2 418	5 177	19 811	22 717	41 422	658
333999	All other miscellaneous general-purpose machinery mfg	3	47	5	510	17 351	317	547	9 005	30 547	13 712	45 308	1 226
334	Computer & electronic product mfg	—	154	72	9 057	336 945	4 361	8 330	105 795	847 188	656 272	1 513 109	57 516
3341	Computer & peripheral equipment mfg	5	20	6	664	22 551	326	607	11 225	38 950	45 343	87 922	3 167
33411	Computer & peripheral equipment mfg	5	20	6	664	22 551	326	607	11 225	38 950	45 343	87 922	3 167
334119	Other computer peripheral equipment mfg	6	9	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	14	6	g	D	D	D	D	D	D	D	6 872
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	10	4	1 105	31 789	547	1 187	7 594	78 724	67 639	144 877	6 491
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	10	4	1 105	31 789	547	1 187	7 594	78 724	67 639	144 877	6 491

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	52	26	1 906	49 552	1 339	2 636	27 612	135 606	98 119	236 098	12 439
33441	Semiconductor & other electronic component mfg	1	52	26	1 906	49 552	1 339	2 636	27 612	135 606	98 119	236 098	12 439
334412	Bare printed circuit board mfg	3	11	5	255	5 888	219	417	4 167	10 331	8 360	18 925	797
334418	Printed circuit assembly (electronic assembly) mfg	—	7	6	456	12 174	321	689	6 879	27 617	36 844	62 036	2 578
334419	Other electronic component mfg	2	25	9	660	16 225	475	894	8 967	26 869	24 215	54 061	2 151
3345	Navigational, measuring, medical, & control instruments mfg	—	60	33	5 068	224 432	1 957	3 635	55 503	581 477	423 923	1 010 053	34 324
33451	Navigational, measuring, medical, & control instruments mfg	—	60	33	5 068	224 432	1 957	3 635	55 503	581 477	423 923	1 010 053	34 324
334510	Electromedical & electrotherapeutic apparatus mfg	—	5	2	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	12	10	1 586	71 319	481	698	13 617	188 453	66 928	254 510	10 304
334515	Electricity measuring & testing instrument mfg	—	11	8	1 277	52 719	549	1 135	18 230	123 314	63 221	188 853	11 306
334516	Analytical laboratory instrument mfg	—	4	1	e	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	—	4	3	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	13	6	550	23 052	293	754	8 618	61 029	29 449	91 942	2 260
335	Electrical equipment, appliance, & component mfg	—	137	79	13 178	479 482	7 593	14 803	196 104	1 446 643	1 093 249	2 534 273	66 887
3351	Electric lighting equipment mfg	—	26	12	1 942	60 175	1 558	2 993	43 380	191 102	123 942	312 360	9 522
33511	Electric lamp bulb & part mfg	—	4	4	997	32 334	815	1 627	25 887	112 488	60 358	169 174	D
335110	Electric lamp bulb & part mfg	—	4	4	997	32 334	815	1 627	25 887	112 488	60 358	169 174	D
33512	Lighting fixture mfg	1	22	8	945	27 841	743	1 366	17 493	78 614	63 584	143 186	D
335121	Residential electric lighting fixture mfg ...	1	7	4	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	10	10	1 867	63 268	1 059	1 947	22 938	162 759	316 736	480 392	10 515
33521	Small electrical appliance mfg	—	9	9	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	7	7	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	47	20	5 454	238 416	2 484	5 211	75 787	762 402	373 211	1 137 316	29 753
33531	Electrical equipment mfg	—	47	20	5 454	238 416	2 484	5 211	75 787	762 402	373 211	1 137 316	29 753
335312	Motor & generator mfg	—	13	6	1 208	43 866	957	2 149	30 743	101 322	65 814	164 346	3 628
335313	Switchgear & switchboard apparatus mfg	—	13	5	443	14 985	272	543	7 462	52 303	26 494	78 465	799
335314	Relay & industrial control mfg	—	21	9	3 803	179 565	1 255	2 519	37 582	608 777	280 903	894 505	25 326
3359	Other electrical equipment & component mfg	—	54	37	3 915	117 623	2 492	4 652	53 999	330 380	279 360	604 205	17 097
33592	Communication & energy wire & cable mfg	—	8	8	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	6	6	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	18	14	1 044	36 163	618	1 291	17 797	65 036	88 739	151 115	6 796
335931	Current-carrying wiring device mfg	—	11	7	379	12 315	297	608	7 363	20 927	32 238	52 565	3 485
335932	Noncurrent-carrying wiring device mfg	—	7	7	665	23 848	321	683	10 434	44 109	56 501	98 550	3 311

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CLEVELAND-AKRON, OH CMSA—Con.												
	Cleveland-Lorain-Elyria, OH PMSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33599	All other electrical equipment & component mfg	-	25	13	2 107	62 277	1 338	2 445	26 043	193 466	134 008	324 539	7 946
335991	Carbon & graphite product mfg	-	8	4	534	18 674	374	805	11 665	34 209	42 639	77 011	4 571
335999	All other miscellaneous electrical equipment & component mfg	-	17	9	1 573	43 603	964	1 640	14 378	159 257	91 369	247 528	3 375
336	Transportation equipment mfg	-	156	98	25 373	1 224 615	20 697	43 526	944 380	4 315 474	6 625 066	10 928 291	637 689
3361	Motor vehicle mfg	-	3	3	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	3	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	104	68	15 695	743 108	13 063	28 274	582 164	1 493 685	1 889 071	3 399 930	442 712
33631	Motor vehicle gasoline engine & engine parts mfg	-	15	7	h	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	7	4	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	8	3	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	10	4	678	16 508	450	825	7 608	43 730	44 152	86 721	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	9	4	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	4	3	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	44	35	10 261	510 829	8 804	20 245	416 918	856 579	1 064 454	1 924 860	D
336370	Motor vehicle metal stamping	-	44	35	10 261	510 829	8 804	20 245	416 918	856 579	1 064 454	1 924 860	D
33639	Other motor vehicle parts mfg	3	22	14	895	24 402	716	1 288	15 813	63 983	54 360	115 804	D
336399	All other motor vehicle parts mfg	3	20	12	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	26	19	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	26	19	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	11	10	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	15	9	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	2	12	7	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	2	12	7	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	143	25	3 564	110 848	2 632	5 958	71 615	222 170	248 682	468 818	19 324
3371	Household & institutional furniture & kitchen cabinet mfg	-	104	8	2 461	74 986	1 948	4 471	53 432	154 942	170 030	323 580	12 196
33711	Wood kitchen cabinet & counter top mfg	-	77	5	2 204	69 743	1 750	4 132	50 211	142 241	152 419	293 254	11 943
337110	Wood kitchen cabinet & counter top mfg ...	-	77	5	2 204	69 743	1 750	4 132	50 211	142 241	152 419	293 254	11 943
33712	Household & institutional furniture mfg	2	27	3	257	5 243	198	339	3 221	12 701	17 611	30 326	253
3372	Office furniture (including fixtures) mfg	1	31	14	846	29 631	502	1 097	13 390	41 892	51 908	93 094	6 135
33721	Office furniture (including fixtures) mfg	1	31	14	846	29 631	502	1 097	13 390	41 892	51 908	93 094	6 135
337215	Showcase, partition, shelving, & locker mfg	2	18	8	581	21 806	332	745	9 433	27 232	43 807	70 699	5 076
3379	Other furniture related product mfg	-	8	3	257	6 231	182	390	4 793	25 336	26 744	52 144	993

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND—AKRON, OH CMSA—Con.												
	Cleveland—Lorain—Elyria, OH PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	316	75	7 446	215 483	5 250	10 118	113 527	685 929	370 517	1 035 690	33 424
3391	Medical equipment & supplies mfg.....	1	140	35	3 916	118 812	2 709	5 284	61 330	453 880	235 400	669 460	23 586
33911	Medical equipment & supplies mfg.....	1	140	35	3 916	118 812	2 709	5 284	61 330	453 880	235 400	669 460	23 586
339112	Surgical & medical instrument mfg.....	2	18	9	475	18 411	280	502	7 151	80 863	23 215	103 721	6 423
339113	Surgical appliance & supplies mfg.....	—	29	16	2 614	79 209	1 873	3 776	43 033	329 387	186 550	497 559	14 829
339116	Dental laboratories...	5	74	5	424	10 365	310	532	6 351	19 387	7 317	26 922	682
3399	Other miscellaneous mfg.....	1	176	40	3 530	96 671	2 541	4 834	52 197	232 049	135 117	366 230	9 838
33993	Doll, toy, & game mfg...	—	8	5	548	12 712	436	880	6 562	37 582	15 098	49 448	510
339932	Game, toy, & children's vehicle mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg.....	—	58	13	885	26 867	549	1 057	11 656	53 059	34 179	86 931	2 302
339950	Sign mfg.....	—	58	13	885	26 867	549	1 057	11 656	53 059	34 179	86 931	2 302
33999	All other miscellaneous mfg.....	1	70	18	1 753	49 280	1 303	2 445	29 220	124 528	73 534	198 167	6 369
339992	Musical instrument mfg.....	—	13	4	418	11 701	361	713	9 398	39 909	9 854	50 293	460
339994	Broom, brush, & mop mfg.....	—	16	7	702	19 248	567	1 028	11 734	43 586	35 589	79 762	1 624
339999	All other miscellaneous mfg.....	3	22	3	381	10 572	197	364	3 764	26 795	14 406	40 269	3 063
	COLUMBUS, OH MSA												
31-33	Manufacturing.....	—	1 577	554	77 263	2 742 889	56 012	111 328	1 710 259	9 658 829	8 550 968	18 153 077	719 163
311	Food mfg.....	—	100	36	6 086	208 754	4 204	8 083	125 364	1 614 126	1 011 633	2 644 169	34 653
3111	Animal food mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
31111	Animal food mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg...	—	1	1	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling....	—	3	3	676	28 535	413	874	16 773	139 628	142 719	283 911	6 664
31122	Starch & vegetable fats & oils mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	—	1	1	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	—	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	—	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	7	7	2	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	9	4	2	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	9	4	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	—	9	6	1 064	37 912	738	1 915	25 986	395 183	233 076	645 324	5 071
31151	Dairy product (except frozen) mfg.....	—	6	4	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	13	9	660	13 359	548	956	9 562	39 264	130 528	170 385	2 041
31161	Animal slaughtering & processing.....	1	13	9	660	13 359	548	956	9 562	39 264	130 528	170 385	2 041
311612	Meat processed from carcasses.....	—	7	5	416	8 442	354	630	6 253	26 526	99 362	126 395	1 073
3118	Bakeries & tortilla mfg....	—	44	6	1 717	52 316	1 000	1 554	27 295	126 634	83 296	209 240	2 241
31181	Bread & bakery product mfg.....	—	44	6	1 717	52 316	1 000	1 554	27 295	126 634	83 296	209 240	2 241
311812	Commercial bakeries..	—	9	3	g	D	D	D	D	D	D	D	1 883
3119	Other food mfg.....	—	11	5	628	20 227	431	855	12 606	486 864	197 927	684 724	9 033
31194	Seasoning & dressing mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	12	7	1 967	85 566	1 156	2 055	51 320	577 321	442 185	1 020 140	67 698
3121	Beverage mfg.....	—	12	7	1 967	85 566	1 156	2 055	51 320	577 321	442 185	1 020 140	67 698
31211	Soft drink & ice mfg.....	—	9	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	—	4	4	f	D	D	D	D	D	D	D	D
31212	Breweries.....	—	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries.....	—	2	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	27	5	277	5 328	206	318	3 048	10 236	8 906	19 228	320

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLUMBUS, OH MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	8	16	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	12	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	8	3	2	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	9	2	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	5	2	e	D	D	D	D	D	D	D	272
321	Wood product mfg	1	53	15	1 089	24 479	882	1 631	16 417	58 335	66 382	123 413	2 744
3212	Veneer, plywood, & engineered wood product mfg	—	10	8	599	14 220	491	947	9 348	34 757	25 486	59 936	1 102
32121	Veneer, plywood, & engineered wood product mfg	—	10	8	599	14 220	491	947	9 348	34 757	25 486	59 936	1 102
321214	Truss mfg	—	5	5	255	5 744	210	403	3 469	11 041	13 798	24 576	371
3219	Other wood product mfg	3	37	7	449	9 529	358	634	6 494	19 739	22 301	42 080	1 526
322	Paper mfg	—	29	23	1 761	59 681	1 351	2 785	38 526	161 227	223 052	381 324	12 962
3221	Pulp, paper, & paperboard mills	—	4	4	356	13 728	270	596	9 044	36 309	38 390	73 281	4 200
32213	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	25	19	1 405	45 953	1 081	2 189	29 482	124 918	184 662	308 043	8 762
32221	Paperboard container mfg	—	16	15	1 178	39 432	891	1 813	24 762	104 980	146 883	250 364	7 746
322211	Corrugated & solid fiber box mfg	—	9	9	781	26 224	575	1 076	16 223	67 262	110 312	177 658	5 291
323	Printing & related support activities	1	238	54	5 303	166 209	3 826	7 142	103 540	359 051	265 910	623 834	25 875
3231	Printing & related support activities	1	238	54	5 303	166 209	3 826	7 142	103 540	359 051	265 910	623 834	25 875
32311	Printing	1	213	48	4 930	152 539	3 539	6 591	95 279	334 463	259 041	592 385	24 484
323110	Commercial lithographic printing	1	100	38	3 719	118 955	2 776	5 190	78 114	263 614	210 367	472 887	21 261
323113	Commercial screen printing	—	32	5	618	16 877	367	758	7 600	32 821	17 901	51 154	1 776
323114	Quick printing	3	54	1	293	7 142	193	297	4 494	15 933	9 216	25 144	775
32312	Support activities for printing	2	25	6	373	13 670	287	551	8 261	24 588	6 869	31 449	1 391
323122	Prepress services	1	17	5	297	12 275	220	453	7 235	22 461	6 202	26 659	1 353
325	Chemical mfg	—	75	34	5 025	211 716	2 571	5 135	85 563	1 020 537	922 532	1 916 982	96 978
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	2	6	3	374	20 016	203	436	10 010	36 799	175 175	210 730	4 293
32521	Resin & synthetic rubber mfg	2	6	3	374	20 016	203	436	10 010	36 799	175 175	210 730	4 293
325211	Plastics material & resin mfg	2	4	3	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	6	5	1 019	41 836	653	1 213	20 989	275 437	111 780	371 737	D
32541	Pharmaceutical & medicine mfg	—	6	5	1 019	41 836	653	1 213	20 989	275 437	111 780	371 737	D
325412	Pharmaceutical preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	25	13	2 663	117 732	1 096	2 325	37 934	548 034	435 493	971 824	32 882
32551	Paint & coating mfg	—	13	6	1 968	90 034	787	1 698	29 000	459 938	351 674	799 812	27 478
325510	Paint & coating mfg	—	13	6	1 968	90 034	787	1 698	29 000	459 938	351 674	799 812	27 478
32552	Adhesive mfg	2	12	7	695	27 698	309	627	8 934	88 096	83 819	172 012	5 404
325520	Adhesive mfg	2	12	7	695	27 698	309	627	8 934	88 096	83 819	172 012	5 404
3259	Other chemical product mfg	—	16	7	422	14 010	242	403	6 956	67 928	122 320	193 525	3 355
32599	All other chemical product & preparation mfg	—	13	5	336	11 150	203	327	5 942	59 071	112 230	174 546	3 296
326	Plastics & rubber products mfg	1	94	46	7 597	249 512	5 932	11 449	157 481	646 403	526 549	1 168 788	69 353
3261	Plastics product mfg	1	83	43	7 199	238 637	5 625	10 883	150 843	621 581	507 334	1 124 598	68 303
32611	Unsupported plastics film, sheet, & bag mfg	—	8	5	1 499	69 734	1 068	2 041	39 764	233 573	183 699	417 239	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	5	3	1 340	65 687	933	1 839	37 499	221 218	172 820	393 799	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	7	4	677	26 532	548	1 086	19 046	51 025	47 016	96 495	6 986
326121	Unsupported plastics profile shape mfg	—	3	2	f	D	D	D	D	D	D	D	D

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	COLUMBUS, OH MSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32619	Other plastics product mfg	2	53	28	4 696	132 347	3 742	7 229	85 424	300 323	246 749	545 265	34 292
326199	All other plastics product mfg	2	48	26	4 628	129 972	3 686	7 126	84 132	296 009	244 585	538 764	34 182
3262	Rubber product mfg	—	11	3	398	10 875	307	566	6 638	24 822	19 215	44 190	1 050
32621	Tire mfg	—	9	2	e	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	88	45	9 143	339 807	7 012	14 481	230 955	1 096 322	547 848	1 633 893	121 544
3271	Clay product & refractory mfg	—	11	4	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	8	3	309	12 141	157	313	4 531	34 936	33 291	68 097	4 874
3272	Glass & glass product mfg .	—	21	12	4 662	162 940	3 692	7 720	113 238	573 434	202 757	756 148	81 984
32721	Glass & glass product mfg	—	21	12	4 662	162 940	3 692	7 720	113 238	573 434	202 757	756 148	81 984
327212	Other pressed & blown glass & glassware mfg	—	11	8	4 286	153 644	3 394	7 218	106 853	555 263	185 242	720 577	80 533
327215	Glass product mfg made of purchased glass	1	10	4	376	9 296	298	502	6 385	18 171	17 515	35 571	1 451
3273	Cement & concrete product mfg	1	37	18	971	31 482	671	1 474	19 177	74 351	87 338	161 508	8 913
32732	Ready-mix concrete mfg .	—	20	9	508	16 689	418	929	12 239	40 418	54 374	94 894	4 261
327320	Ready-mix concrete mfg	—	20	9	508	16 689	418	929	12 239	40 418	54 374	94 894	4 261
32733	Concrete pipe, brick, & block mfg	1	8	6	308	10 738	145	328	4 271	24 980	21 665	46 590	3 271
3279	Other nonmetallic mineral product mfg	—	17	10	3 102	129 938	2 443	4 863	92 943	408 475	222 604	640 938	25 586
32791	Abrasive product mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	—	2	2	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	—	15	8	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	9	7	2 174	88 400	1 833	3 535	70 430	249 394	150 328	400 821	D
331	Primary metal mfg	—	32	19	3 650	121 570	3 013	6 018	89 829	349 204	385 226	737 728	20 346
3312	Steel product mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	3	2	e	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	2	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	4	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	4	2	e	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	3	359	11 877	247	490	6 845	43 042	33 040	76 407	3 994
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	19	11	2 216	70 432	1 903	3 601	57 523	163 512	80 457	244 647	6 667
33151	Ferrous metal foundries .	—	13	10	2 171	69 433	1 864	3 535	56 779	161 195	79 200	241 063	6 590
331511	Iron foundries	1	8	6	e	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	4	3	1 488	43 259	1 250	2 259	34 054	82 004	37 168	119 621	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLUMBUS, OH MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	295	96	10 639	372 525	8 285	16 361	254 080	1 000 404	973 391	1 962 011	43 964
3321	Forging & stamping	—	13	9	840	31 484	613	1 292	18 453	93 421	70 707	162 398	5 900
33211	Forging & stamping	—	13	9	840	31 484	613	1 292	18 453	93 421	70 707	162 398	5 900
332114	Custom roll forming	—	2	e	D	D	D	D	D	D	D	D	D
332116	Metal stamping	2	10	6	442	15 272	345	726	9 422	31 863	20 524	51 433	D
3322	Cutlery & handtool mfg	—	12	3	479	15 006	344	545	7 204	44 998	39 016	83 808	1 772
33221	Cutlery & handtool mfg	—	12	3	479	15 006	344	545	7 204	44 998	39 016	83 808	1 772
332212	Hand & edge tool mfg	—	7	2	354	10 910	249	363	4 587	39 053	34 106	73 004	954
3323	Architectural & structural metals mfg	—	62	25	1 534	48 899	1 108	2 035	29 578	145 271	139 702	286 453	2 994
33231	Plate work & fabricated structural product mfg	—	27	10	576	17 163	413	708	9 808	74 402	45 500	118 255	1 483
332312	Fabricated structural metal mfg	—	19	7	396	12 377	268	468	6 748	65 093	39 527	103 296	1 059
33232	Ornamental & architectural metal products mfg	1	35	15	958	31 736	695	1 327	19 770	70 869	94 202	168 198	1 511
332322	Sheet metal work mfg	1	23	10	682	23 290	492	948	14 466	53 230	82 454	138 630	1 339
3324	Boiler, tank, & shipping container mfg	—	15	10	1 549	58 552	1 168	2 413	39 429	141 518	259 686	393 310	9 544
33241	Power boiler & heat exchanger mfg	—	4	3	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	4	3	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	3	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	3	3	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	8	4	394	17 564	339	700	14 284	42 205	173 712	211 721	8 105
332431	Metal can mfg	—	3	2	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	4	3	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	4	3	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	4	3	g	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	2	14	5	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	2	14	5	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	126	20	1 374	41 877	1 100	2 119	29 627	81 654	39 599	119 992	6 014
33271	Machine shops	2	112	18	1 187	35 461	939	1 758	25 028	65 474	27 230	91 756	3 553
332710	Machine shops	2	112	18	1 187	35 461	939	1 758	25 028	65 474	27 230	91 756	3 553
3328	Coating, engraving, heat treating, & allied activities	—	25	10	1 329	36 435	1 106	2 213	25 127	108 792	49 628	157 546	4 657
33281	Coating, engraving, heat treating, & allied activities	—	25	10	1 329	36 435	1 106	2 213	25 127	108 792	49 628	157 546	4 657
332813	Electroplating, plating, polishing, anodizing, & coloring	—	11	6	1 016	27 588	873	1 774	19 260	84 881	42 865	127 079	3 269
3329	Other fabricated metal product mfg	—	24	11	1 861	59 002	1 437	2 693	38 687	186 975	171 860	362 445	8 957
33291	Metal valve mfg	—	3	3	989	28 122	777	1 367	17 486	88 201	64 006	152 968	2 954
332911	Industrial valve mfg	—	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	21	8	872	30 880	660	1 326	21 201	98 774	107 854	209 477	6 003
332991	Ball & roller bearing mfg	—	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	10	4	408	12 513	295	582	7 179	42 346	51 565	96 287	2 513
333	Machinery mfg	—	129	52	5 696	213 668	3 521	7 290	108 535	554 642	465 459	1 018 361	31 544
3331	Agriculture, construction, & mining machinery mfg	—	8	5	279	9 929	150	317	4 691	24 195	32 305	57 919	727
3332	Industrial machinery mfg	1	23	7	522	18 794	249	431	5 816	32 564	21 628	52 093	1 889
33329	Other industrial machinery mfg	1	19	5	429	15 480	173	294	4 062	25 133	15 080	39 139	1 614
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	13	10	2 443	90 958	1 591	3 527	48 621	243 343	216 127	462 887	13 457
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	13	10	2 443	90 958	1 591	3 527	48 621	243 343	216 127	462 887	13 457
333411	Air purification equipment mfg	—	7	5	585	16 094	399	840	8 209	39 619	37 465	76 759	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	6	5	1 858	74 864	1 192	2 687	40 412	203 724	178 662	386 128	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLUMBUS, OH MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	1	32	10	567	25 349	367	795	16 685	73 576	33 909	103 244	2 265
33351	Metalworking machinery mfg	1	32	10	567	25 349	367	795	16 685	73 576	33 909	103 244	2 265
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	276	9 526	235	494	7 840	26 724	24 973	51 531	D
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	276	9 526	235	494	7 840	26 724	24 973	51 531	D
3339	Other general-purpose machinery mfg	1	42	16	1 522	56 480	869	1 627	23 802	141 204	125 325	266 299	6 217
33392	Material handling equipment mfg	3	17	5	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	3	9	4	279	8 135	170	319	3 729	13 923	13 216	26 711	287
33399	All other general-purpose machinery mfg	1	24	10	1 105	43 840	608	1 128	17 777	117 942	103 569	220 990	5 809
333997	Scale & balance (except laboratory) mfg	—	4	3	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	8	3	366	15 731	199	431	6 472	41 011	29 038	70 836	2 375
334	Computer & electronic product mfg	—	72	30	6 129	281 827	3 913	7 406	166 586	1 020 936	1 086 111	2 093 778	53 430
3341	Computer & peripheral equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	7	4	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	4	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	4	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	3	24	9	f	D	D	D	D	D	D	D	5 282
33441	Semiconductor & other electronic component mfg	3	24	9	f	D	D	D	D	D	D	D	5 282
334419	Other electronic component mfg	3	15	8	842	27 527	551	1 185	12 772	60 862	40 802	103 812	4 529
3345	Navigational, measuring, medical, & control instruments mfg	—	29	14	1 323	63 712	630	1 112	20 143	139 615	113 331	254 999	6 047
33451	Navigational, measuring, medical, & control instruments mfg	—	29	14	1 323	63 712	630	1 112	20 143	139 615	113 331	254 999	6 047
334513	Industrial process control instrument mfg	—	5	4	525	30 297	238	378	9 072	54 891	70 236	126 984	1 765
335	Electrical equipment, appliance, & component mfg	—	18	8	1 934	62 065	1 489	3 291	43 126	274 718	139 056	412 998	9 234
3351	Electric lighting equipment mfg	—	5	4	1 386	46 259	1 087	2 448	33 864	233 027	104 614	336 950	6 698
33511	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	4	3	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	7	3	284	8 852	208	394	5 064	28 413	22 257	50 643	1 947
33531	Electrical equipment mfg	—	7	3	284	8 852	208	394	5 064	28 413	22 257	50 643	1 947
3359	Other electrical equipment & component mfg	—	6	1	264	6 954	194	449	4 198	13 278	12 185	25 405	589

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBUS, OH MSA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	59	30	6 122	204 188	5 090	10 985	155 495	614 376	1 149 120	1 757 367	113 984
3362	Motor vehicle body & trailer mfg	—	10	6	f	D	D	D	D	D	D	D	857
33621	Motor vehicle body & trailer mfg	—	10	6	f	D	D	D	D	D	D	D	857
336211	Motor vehicle body mfg	—	8	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	39	22	5 191	178 991	4 356	9 324	135 520	568 417	1 068 273	1 635 368	112 960
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	5	4	g	D	D	D	D	D	D	D	14 449
336360	Motor vehicle seating & interior trim mfg ...	—	5	4	g	D	D	D	D	D	D	D	14 449
33637	Motor vehicle metal stamping	—	6	4	707	23 816	541	1 000	17 570	68 291	81 915	151 634	D
336370	Motor vehicle metal stamping	—	6	4	707	23 816	541	1 000	17 570	68 291	81 915	151 634	D
33639	Other motor vehicle parts mfg	—	15	8	1 452	48 126	1 197	2 647	32 693	146 310	269 523	416 637	50 819
336399	All other motor vehicle parts mfg	—	15	8	1 452	48 126	1 197	2 647	32 693	146 310	269 523	416 637	50 819
337	Furniture & related product mfg	1	79	16	1 607	47 443	1 169	2 274	28 470	105 200	91 453	196 620	3 849
3371	Household & institutional furniture & kitchen cabinet mfg	2	51	4	e	D	D	D	D	D	D	D	655
33711	Wood kitchen cabinet & counter top mfg	2	32	3	263	6 485	184	361	4 049	10 320	8 575	18 938	450
337110	Wood kitchen cabinet & counter top mfg ...	2	32	3	263	6 485	184	361	4 049	10 320	8 575	18 938	450
3372	Office furniture (including fixtures) mfg	2	22	9	956	30 047	696	1 369	17 618	55 104	38 861	93 936	2 555
33721	Office furniture (including fixtures) mfg	2	22	9	956	30 047	696	1 369	17 618	55 104	38 861	93 936	2 555
337215	Showcase, partition, shelving, & locker mfg	2	18	8	872	27 693	627	1 219	16 010	51 227	35 923	87 031	2 529
3379	Other furniture related product mfg	—	6	3	e	D	D	D	D	D	D	D	639
33791	Mattress mfg	—	4	2	253	8 296	195	384	5 257	30 406	24 955	55 375	D
337910	Mattress mfg	—	4	2	253	8 296	195	384	5 257	30 406	24 955	55 375	D
339	Miscellaneous mfg	2	137	27	2 094	62 405	1 398	2 685	32 575	125 011	115 671	241 409	7 339
3391	Medical equipment & supplies mfg	3	64	11	918	27 624	589	1 083	13 857	63 577	38 579	102 582	3 068
33911	Medical equipment & supplies mfg	3	64	11	918	27 624	589	1 083	13 857	63 577	38 579	102 582	3 068
3399	Other miscellaneous mfg ...	2	73	16	1 176	34 781	809	1 602	18 718	61 434	77 092	138 827	4 271
33995	Sign mfg	2	40	13	812	22 121	577	1 165	12 931	38 957	35 423	74 781	2 202
339950	Sign mfg	2	40	13	812	22 121	577	1 165	12 931	38 957	35 423	74 781	2 202
DAYTON—SPRINGFIELD, OH MSA													
31-33	Manufacturing	—	1 563	590	88 330	3 478 374	65 314	136 948	2 330 102	10 487 572	12 724 446	23 155 930	650 759
311	Food mfg	—	51	14	1 755	52 706	1 158	2 246	33 174	335 228	480 937	816 898	24 307
3112	Grain & oilseed milling	—	3	2	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	2	2	e	D	D	D	D	D	D	D	D
311221	Wet corn milling	—	1	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	4	3	570	13 322	366	735	9 460	49 959	108 688	158 434	9 110
31151	Dairy product (except frozen) mfg	—	3	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	2	6	3	259	9 611	166	327	4 564	57 234	41 814	99 002	1 729

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON-SPRINGFIELD, OH MSA—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	5	2	364	12 341	155	345	3 019	28 871	54 773	83 441	D
3121	Beverage mfg	—	5	2	364	12 341	155	345	3 019	28 871	54 773	83 441	D
31211	Soft drink & ice mfg	—	3	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	1	6	4	281	6 781	221	393	3 948	15 715	12 993	29 400	347
314	Textile product mills	1	18	6	438	10 400	318	643	5 996	23 293	24 086	47 722	974
3149	Other textile product mills	—	9	5	362	9 095	262	535	5 074	20 292	20 158	40 832	861
321	Wood product mfg	1	35	13	904	21 571	697	1 383	13 565	47 475	51 885	99 182	4 374
3219	Other wood product mfg	1	32	11	788	18 950	598	1 173	11 549	42 844	46 561	89 233	D
32192	Wood container & pallet mfg	1	13	4	308	5 539	256	407	4 069	11 747	8 137	20 011	2 573
321920	Wood container & pallet mfg	1	13	4	308	5 539	256	407	4 069	11 747	8 137	20 011	2 573
32199	All other wood product mfg	1	12	5	410	11 814	291	671	6 314	28 078	35 459	63 242	1 608
322	Paper mfg	—	31	19	2 282	94 398	1 568	3 338	57 849	300 721	334 181	636 636	51 987
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	29	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	13	9	475	13 942	328	694	8 807	30 711	40 406	70 953	D
32222	Paper bag & coated & treated paper mfg	—	8	5	743	31 294	462	969	16 379	73 068	125 363	197 801	3 652
322222	Coated & laminated paper mfg	—	8	5	743	31 294	462	969	16 379	73 068	125 363	197 801	3 652
323	Printing & related support activities	1	176	41	4 867	170 237	3 048	5 854	85 852	382 560	227 613	604 577	30 124
3231	Printing & related support activities	1	176	41	4 867	170 237	3 048	5 854	85 852	382 560	227 613	604 577	30 124
32311	Printing	1	154	34	4 510	160 386	2 774	5 357	78 808	360 852	222 543	577 776	28 143
323110	Commercial lithographic printing	2	70	16	1 687	57 382	1 245	2 442	35 817	114 068	81 455	195 248	8 987
323112	Commercial flexographic printing	—	8	4	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	5	18	5	439	11 455	265	525	5 891	18 111	20 370	38 580	1 296
323116	Manifold business form printing	—	6	3	480	17 824	298	528	10 392	55 555	22 303	77 604	1 819
32312	Support activities for printing	2	22	7	357	9 851	274	497	7 044	21 708	5 070	26 801	1 981
323122	Prepress services	2	20	6	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	35	19	1 397	50 759	797	1 675	23 611	174 421	170 052	345 318	16 710
3255	Paint, coating, & adhesive mfg	1	9	5	395	11 728	279	551	7 010	61 370	63 533	124 080	3 300
32552	Adhesive mfg	1	4	3	256	7 373	177	342	4 086	40 936	42 094	83 016	D
325520	Adhesive mfg	1	4	3	256	7 373	177	342	4 086	40 936	42 094	83 016	D
3256	Soap, cleaning compound, & toilet preparation mfg	6	6	3	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	4	1	311	11 410	226	545	7 468	24 707	18 050	42 069	3 190
325611	Soap & other detergent mfg	9	4	1	311	11 410	226	545	7 468	24 707	18 050	42 069	3 190
3259	Other chemical product mfg	—	11	7	361	13 078	149	282	4 398	27 769	24 979	53 812	3 873
32599	All other chemical product & preparation mfg	—	10	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	92	47	6 213	186 802	4 920	9 595	120 744	348 900	359 518	707 727	40 433
3261	Plastics product mfg	1	77	42	4 418	116 016	3 488	6 817	70 592	262 458	284 491	545 980	34 698
32611	Unsupported plastics film, sheet, & bag mfg	—	8	5	389	11 678	312	636	7 094	28 445	48 128	76 675	1 057
326111	Unsupported plastics bag mfg	—	4	3	257	7 622	208	444	4 477	16 317	27 769	44 225	702
32615	Urethane & other foam product (except polystyrene) mfg	—	2	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON—SPRINGFIELD, OH MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32619	Other plastics product mfg	2	59	33	3 477	90 579	2 716	5 271	53 990	200 190	193 597	393 714	26 587
326199	All other plastics product mfg	2	58	33	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	15	5	1 795	70 786	1 432	2 778	50 152	86 442	75 027	161 747	5 735
32629	Other rubber product mfg	—	11	4	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	8	4	1 721	69 544	1 368	2 662	49 207	83 371	71 567	155 038	5 615
327	Nonmetallic mineral product mfg	2	50	27	1 771	55 388	1 337	2 794	34 541	163 421	126 787	291 274	20 533
3273	Cement & concrete product mfg	2	28	17	1 089	38 192	789	1 715	23 253	114 831	86 948	203 030	15 844
32732	Ready-mix concrete mfg.	3	15	8	376	12 979	281	628	8 660	34 589	44 159	78 644	2 803
327320	Ready-mix concrete mfg	3	15	8	376	12 979	281	628	8 660	34 589	44 159	78 644	2 803
32733	Concrete pipe, brick, & block mfg	2	7	5	405	12 427	306	668	7 356	34 253	22 087	56 866	D
327332	Concrete pipe mfg	1	3	3	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	2	14	7	523	12 973	431	883	8 632	38 501	31 330	69 685	3 671
32791	Abrasive product mfg ...	2	7	6	437	11 054	368	770	7 248	34 430	28 058	61 903	3 438
327910	Abrasive product mfg .	2	7	6	437	11 054	368	770	7 248	34 430	28 058	61 903	3 438
331	Primary metal mfg	1	32	20	2 109	76 750	1 665	3 528	53 727	150 607	154 184	300 830	12 150
3312	Steel product mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	2	26	15	1 183	39 098	954	2 028	28 945	83 177	48 287	131 271	7 201
33151	Ferrous metal foundries .	—	10	7	499	17 754	389	862	13 248	37 379	19 543	57 053	974
331512	Steel investment foundries	—	3	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	4	16	8	684	21 344	565	1 166	15 697	45 798	28 744	74 218	6 227
331521	Aluminum die-casting foundries	8	6	3	304	9 193	259	513	6 988	20 959	19 549	40 483	D
331524	Aluminum foundries (except die-casting) ..	—	8	5	e	D	D	D	D	D	D	D	3 902
332	Fabricated metal product mfg	1	408	138	11 107	386 918	7 671	15 973	224 327	795 921	472 746	1 271 327	54 878
3321	Forging & stamping	—	24	13	1 606	56 057	1 037	2 356	27 964	136 671	126 866	264 324	11 326
33211	Forging & stamping	—	24	13	1 606	56 057	1 037	2 356	27 964	136 671	126 866	264 324	11 326
332116	Metal stamping	—	18	9	1 148	39 743	706	1 558	18 153	99 078	101 397	201 369	6 224
3322	Cutlery & handtool mfg	6	11	10	792	32 072	371	788	12 640	76 351	22 521	101 896	4 171
33221	Cutlery & handtool mfg ..	6	11	10	792	32 072	371	788	12 640	76 351	22 521	101 896	4 171
332212	Hand & edge tool mfg .	6	11	10	792	32 072	371	788	12 640	76 351	22 521	101 896	4 171
3323	Architectural & structural metals mfg	1	51	17	1 031	35 017	733	1 448	21 894	64 697	53 700	117 442	2 835
33231	Plate work & fabricated structural product mfg ..	1	23	7	435	13 890	315	659	8 991	27 076	22 505	49 188	938
332313	Plate work mfg	—	13	5	300	9 488	221	467	6 138	18 942	16 711	35 365	787
33232	Ornamental & architectural metal products mfg	2	28	10	596	21 127	418	789	12 903	37 621	31 195	68 254	1 897
332322	Sheet metal work mfg .	2	19	8	407	15 720	294	520	9 191	26 927	18 995	45 390	1 580
3326	Spring & wire product mfg .	2	12	5	497	15 873	440	956	10 990	34 887	21 159	56 061	3 675
33261	Spring & wire product mfg	2	12	5	497	15 873	440	956	10 990	34 887	21 159	56 061	3 675
332612	Spring (light gauge) mfg	1	8	3	378	12 820	354	796	9 400	28 340	16 661	44 935	3 382
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	211	59	3 981	140 079	3 092	6 402	96 256	257 929	110 295	365 614	25 420
33271	Machine shops	1	176	43	3 067	111 062	2 377	4 971	76 307	194 084	82 694	274 770	20 137
332710	Machine shops	1	176	43	3 067	111 062	2 377	4 971	76 307	194 084	82 694	274 770	20 137
33272	Turned product & screw, nut, & bolt mfg	2	35	16	914	29 017	715	1 431	19 949	63 845	27 601	90 844	5 283
332721	Precision turned product mfg	2	30	13	779	25 702	610	1 274	17 753	55 483	23 037	77 934	4 046

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON-SPRINGFIELD, OH MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	2	54	21	1 269	36 931	965	1 933	24 117	88 645	33 874	122 526	5 185
33281	Coating, engraving, heat treating, & allied activities	2	54	21	1 269	36 931	965	1 933	24 117	88 645	33 874	122 526	5 185
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	17	7	359	10 011	297	664	7 290	22 659	12 910	35 444	1 675
332813	Electroplating, plating, polishing, anodizing, & coloring	1	31	10	699	20 118	509	889	12 341	49 651	17 188	66 876	2 478
3329	Other fabricated metal product mfg	—	37	10	1 661	61 511	793	1 609	23 319	105 699	34 283	141 738	1 887
33299	All other fabricated metal product mfg	—	32	9	1 493	56 398	670	1 351	19 824	90 850	29 266	122 035	1 618
332995	Other ordnance & accessories mfg	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	16	4	405	11 553	357	617	7 984	23 064	16 833	40 643	1 015
333	Machinery mfg	—	294	122	14 118	559 400	9 270	20 660	337 868	1 330 251	1 112 864	2 447 964	82 573
3332	Industrial machinery mfg ..	1	33	16	2 803	105 744	1 545	3 724	52 971	247 033	233 638	472 177	13 373
33329	Other industrial machinery mfg	1	26	14	2 539	95 335	1 425	3 487	49 191	222 790	211 214	425 025	11 279
333293	Printing machinery & equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	3	16	9	1 488	62 515	1 030	2 517	36 400	108 642	100 263	203 485	5 520
3333	Commercial & service industry machinery mfg ..	1	17	8	728	26 166	481	974	15 140	122 038	55 079	178 096	4 200
33331	Commercial & service industry machinery mfg	1	17	8	728	26 166	481	974	15 140	122 038	55 079	178 096	4 200
333319	Other commercial & service industry machinery mfg	—	11	5	552	19 197	396	794	12 033	108 789	43 112	152 715	2 348
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	7	2	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	5	7	2	e	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	5	5	2	474	14 881	300	797	9 746	34 525	21 467	58 310	1 298
3335	Metalworking machinery mfg	1	179	63	5 087	217 269	3 825	8 429	153 164	390 502	171 609	571 418	23 940
33351	Metalworking machinery mfg	1	179	63	5 087	217 269	3 825	8 429	153 164	390 502	171 609	571 418	23 940
333511	Industrial mold mfg	—	44	18	1 127	50 394	892	1 951	35 077	77 293	31 644	111 433	6 456
333513	Machine tool (metal forming types) mfg	—	4	2	343	15 493	289	467	12 705	26 365	17 292	46 504	D
333514	Special die & tool, die set, jig, & fixture mfg	—	101	29	2 575	105 493	1 992	4 401	77 339	188 254	59 782	247 587	11 715
333515	Cutting tool & machine tool accessory mfg	—	20	5	262	9 756	192	412	6 812	19 490	4 094	23 270	1 771
333518	Other metalworking machinery mfg	4	6	5	594	27 366	387	1 004	17 820	54 452	25 013	83 457	1 667
3336	Engine, turbine, & power transmission equipment mfg	—	11	6	1 134	47 856	843	1 707	31 352	170 175	286 211	462 835	5 767
33361	Engine, turbine, & power transmission equipment mfg	—	11	6	1 134	47 856	843	1 707	31 352	170 175	286 211	462 835	5 767
333618	Other engine equipment mfg	—	3	3	f	D	D	D	D	D	D	D	5 274
3339	Other general-purpose machinery mfg	—	44	26	3 844	146 280	2 238	4 975	74 660	364 052	341 513	699 841	33 947
33391	Pump & compressor mfg	—	6	5	1 301	49 988	702	1 595	23 763	104 405	112 608	213 585	6 498
333911	Pump & pumping equipment mfg	—	4	4	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	8	6	544	23 079	325	706	12 238	58 181	69 296	127 262	8 703
33399	All other general-purpose machinery mfg	—	30	15	1 999	73 213	1 211	2 674	38 659	201 466	159 609	358 994	18 746
333991	Power-driven handtool mfg	—	1	1	e	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	13	5	448	20 892	190	406	6 642	46 762	33 136	78 478	2 106

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON-SPRINGFIELD, OH MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	59	28	4 463	155 532	2 837	5 682	68 388	472 338	409 558	846 874	55 875
3341	Computer & peripheral equipment mfg.....	-	9	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	9	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	19	14	2 404	70 416	1 652	3 221	36 094	198 602	289 135	458 569	44 552
33441	Semiconductor & other electronic component mfg.....	-	19	14	2 404	70 416	1 652	3 221	36 094	198 602	289 135	458 569	44 552
334411	Electron tube mfg....	-	3	3	g	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	5	6	5	323	7 477	227	397	3 709	14 661	14 055	29 049	709
3345	Navigational, measuring, medical, & control instruments mfg.....	1	26	11	1 309	46 814	796	1 612	20 552	142 468	63 882	205 826	3 719
33451	Navigational, measuring, medical, & control instruments mfg.....	1	26	11	1 309	46 814	796	1 612	20 552	142 468	63 882	205 826	3 719
334516	Analytical laboratory instrument mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg.....	-	8	3	712	24 093	427	811	10 259	98 277	40 629	137 024	2 110
335	Electrical equipment, appliance, & component mfg.....	-	19	8	1 652	49 438	1 034	1 917	25 788	110 041	68 067	180 001	10 123
3353	Electrical equipment mfg..	-	14	7	1 538	46 147	935	1 726	23 209	104 616	61 533	168 007	D
33531	Electrical equipment mfg.....	-	14	7	1 538	46 147	935	1 726	23 209	104 616	61 533	168 007	D
335312	Motor & generator mfg.....	-	6	5	1 437	42 651	886	1 642	22 102	98 126	58 047	158 016	6 982
336	Transportation equipment mfg.....	-	69	51	31 123	1 505 250	25 873	55 481	1 183 243	5 540 293	8 399 127	13 918 743	221 989
3361	Motor vehicle mfg.....	-	4	3	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	-	2	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg....	-	2	2	i	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg....	-	2	2	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	51	37	19 292	904 640	16 199	35 225	710 274	1 761 801	2 479 748	4 239 373	165 747
33633	Motor vehicle steering & suspension component (except spring) mfg....	-	4	4	4 132	224 310	3 292	6 333	152 947	359 128	378 347	737 798	67 059
336330	Motor vehicle steering & suspension component (except spring) mfg.....	-	4	4	4 132	224 310	3 292	6 333	152 947	359 128	378 347	737 798	67 059
33634	Motor vehicle brake system mfg.....	-	5	3	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	-	5	3	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg....	-	2	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	13	9	1 489	43 464	1 282	3 066	31 852	92 243	80 604	174 979	7 848
336370	Motor vehicle metal stamping.....	-	13	9	1 489	43 464	1 282	3 066	31 852	92 243	80 604	174 979	7 848
33639	Other motor vehicle parts mfg.....	-	18	15	9 022	387 325	7 984	17 272	325 823	1 020 071	1 210 203	2 221 549	41 444
336391	Motor vehicle air-conditioning mfg.....	-	3	3	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	15	12	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	11	8	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	11	8	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	2	4	3	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	7	5	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON—SPRINGFIELD, OH MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	—	49	10	1 254	29 814	1 018	1 971	18 648	88 763	112 126	198 511	13 421
3371	Household & institutional furniture & kitchen cabinet mfg	—	34	4	1 016	22 407	830	1 585	13 915	74 714	102 899	175 232	D
33712	Household & institutional furniture mfg	—	10	2	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	113	18	1 964	47 654	1 531	3 140	32 301	157 751	118 899	273 928	5 174
3391	Medical equipment & supplies mfg	2	52	5	474	12 224	372	733	8 347	26 917	20 098	47 658	573
33911	Medical equipment & supplies mfg	2	52	5	474	12 224	372	733	8 347	26 917	20 098	47 658	573
339113	Surgical appliance & supplies mfg	—	8	3	279	7 840	222	507	5 647	17 293	16 122	33 868	215
3399	Other miscellaneous mfg	—	61	13	1 490	35 430	1 159	2 407	23 954	130 834	98 801	226 270	4 601
33993	Doll, toy, & game mfg	1	3	2	e	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	1	3	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg	—	26	4	526	11 897	390	790	7 121	32 409	31 748	63 929	1 914
339950	Sign mfg	—	26	4	526	11 897	390	790	7 121	32 409	31 748	63 929	1 914
33999	All other miscellaneous mfg	—	16	6	546	13 926	440	936	11 083	59 777	40 467	99 953	1 645
339994	Broom, brush, & mop mfg	—	4	4	e	D	D	D	D	D	D	D	D
	HUNTINGTON—ASHLAND, WV—KY—OH MSA												
31-33	Manufacturing	—	262	103	15 112	547 992	11 609	23 857	401 065	2 119 937	3 493 069	5 601 987	236 997
	Huntington—Ashland, WV—KY—OH MSA (KY Part)	—	73	32	5 607	235 714	4 529	9 458	183 294	746 147	2 348 730	3 079 435	144 185
	Huntington—Ashland, WV—KY—OH MSA (OH Part)	1	44	12	1 969	65 020	1 462	3 100	46 790	530 855	459 192	998 054	33 568
	Huntington—Ashland, WV—KY—OH MSA (WV Part)	1	145	59	7 536	247 258	5 618	11 299	170 981	842 935	685 147	1 524 498	59 244
311	Food mfg	3	11	5	540	15 440	173	347	3 341	43 235	30 967	74 395	1 790
3118	Bakeries & tortilla mfg	—	5	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	3	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	5	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	4	4	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	6	320	5 443	294	511	4 531	12 102	19 912	31 246	1 282
323	Printing & related support activities	—	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
3231	Printing & related support activities	—	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
32311	Printing	1	18	2	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	12	2	285	7 325	208	324	4 296	10 947	9 960	20 648	D
324	Petroleum & coal products mfg	—	7	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	7	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUNTINGTON-ASHLAND, WV-KY-OH MSA—Con. Manufacturing—Con.												
325	Chemical mfg	1	20	13	1 677	74 499	1 121	2 489	50 478	364 321	553 175	922 853	47 626
3251	Basic chemical mfg	—	12	6	786	36 347	496	1 130	21 527	187 437	298 852	491 470	30 781
32513	Dye & pigment mfg	—	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	2	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	5	3	e	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	—	2	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	5	2	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	5	2	2	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	5	2	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	12	5	533	15 550	398	873	9 862	33 733	32 846	66 229	D
3261	Plastics product mfg	—	8	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	8	731	22 103	566	1 176	16 044	39 769	51 262	90 987	2 485
3271	Clay product & refractory mfg	—	5	4	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	5	4	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	2	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	9	7	4 724	219 486	3 933	8 483	177 997	518 960	753 004	1 263 140	108 009
3311	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	3	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	3	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	—	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	59	23	1 312	37 028	981	1 836	24 455	74 776	60 021	135 271	4 623
3323	Architectural & structural metals mfg	2	13	7	e	D	D	D	D	D	D	D	689
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	34	12	765	21 628	590	1 009	14 714	41 507	29 149	70 437	3 143
33271	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
332710	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
33272	Turned product & screw, nut, & bolt mfg	—	5	4	e	D	D	D	D	D	D	D	283
333	Machinery mfg	7	17	8	654	23 372	474	943	14 841	53 345	50 628	103 614	D
3331	Agriculture, construction, & mining machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
33313	Mining & oil & gas field machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
333131	Mining machinery & equipment mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
334	Computer & electronic product mfg	—	3	2	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HUNTINGTON—ASHLAND, WV—KY—OH MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg.....	-	7	4	541	19 604	436	920	15 068	40 798	58 098	99 757	1 634
3365	Railroad rolling stock mfg... ..	-	2	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	23	2	f	D	D	D	D	D	D	D	1 237
3391	Medical equipment & supplies mfg.....	-	13	1	e	D	D	D	D	D	D	D	561
33911	Medical equipment & supplies mfg.....	-	13	1	e	D	D	D	D	D	D	D	561
339113	Surgical appliance & supplies mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
	LIMA, OH MSA												
31-33	Manufacturing	-	225	88	17 765	696 479	13 511	28 859	487 545	3 583 510	4 797 919	8 369 316	310 245
311	Food mfg.....	6	20	8	1 352	37 577	992	2 042	25 872	333 870	317 959	655 106	12 530
3115	Dairy product mfg.....	7	4	3	661	18 451	478	986	13 992	241 591	239 444	480 572	6 850
31151	Dairy product (except frozen) mfg.....	7	4	3	661	18 451	478	986	13 992	241 591	239 444	480 572	6 850
311511	Fluid milk mfg.....	9	2	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	8	14	4	283	5 676	199	411	3 140	14 809	16 504	27 468	1 003
323	Printing & related support activities.....	-	21	4	275	6 933	209	398	4 188	14 477	6 208	20 641	1 610
3231	Printing & related support activities.....	-	21	4	275	6 933	209	398	4 188	14 477	6 208	20 641	1 610
32311	Printing.....	-	20	4	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	7	5	f	D	D	D	D	D	D	D	60 865
3251	Basic chemical mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	13	9	1 893	66 369	1 486	3 263	48 889	170 642	223 727	391 680	17 391
3261	Plastics product mfg.....	-	6	3	305	6 875	269	534	5 422	16 556	29 042	45 326	824
3262	Rubber product mfg.....	-	7	6	1 588	59 494	1 217	2 729	43 467	154 086	194 685	346 354	16 567
32629	Other rubber product mfg.....	-	7	6	1 588	59 494	1 217	2 729	43 467	154 086	194 685	346 354	16 567
326291	Rubber product mfg for mechanical use	-	2	2	g	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	7	5	770	19 250	648	1 359	15 660	52 107	47 761	100 756	3 865
3315	Foundries.....	-	7	5	770	19 250	648	1 359	15 660	52 107	47 761	100 756	3 865
33151	Ferrous metal foundries ..	-	4	2	340	11 231	283	659	9 159	31 723	18 171	50 199	D
331511	Iron foundries.....	-	3	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	-	3	3	430	8 019	365	700	6 501	20 384	29 590	50 557	D
331522	Nonferrous (except aluminum) die-casting foundries.....	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LIMA, OH MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	48	17	2 465	71 233	1 968	4 090	49 905	213 281	107 577	318 322	16 040
3321	Forging & stamping	—	6	5	1 003	29 131	826	1 704	21 578	101 089	48 786	149 729	12 553
33211	Forging & stamping	—	6	5	1 003	29 131	826	1 704	21 578	101 089	48 786	149 729	12 553
332112	Nonferrous forging	—	1	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	4	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	9	5	470	14 228	415	854	9 626	48 352	35 456	82 282	1 307
33232	Ornamental & architectural metal products mfg	—	7	5	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	3	7	3	f	D	D	D	D	D	D	D	1 310
33281	Coating, engraving, heat treating, & allied activities	3	7	3	f	D	D	D	D	D	D	D	1 310
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	2	2	e	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	9	4	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	29	15	4 347	167 359	3 058	6 315	101 917	320 470	320 759	647 080	18 075
3335	Metalworking machinery mfg	—	19	8	1 385	62 100	838	1 903	34 929	124 686	102 629	226 821	2 871
33351	Metalworking machinery mfg	—	19	8	1 385	62 100	838	1 903	34 929	124 686	102 629	226 821	2 871
333513	Machine tool (metal forming types) mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	6	4	h	D	D	D	D	D	D	D	14 891
33392	Material handling equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	2	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	7	2	328	7 500	224	560	3 800	23 335	26 955	50 807	743
3353	Electrical equipment mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	10	4 091	223 036	3 304	7 420	176 678	560 226	1 208 856	1 792 248	D
3362	Motor vehicle body & trailer mfg	—	4	2	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	2	e	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	3	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	8	7	3 300	191 104	2 755	6 263	156 174	469 271	1 028 288	1 512 287	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	1	4	3	449	9 194	391	716	7 193	19 746	10 035	29 717	1 056
336370	Motor vehicle metal stamping	1	4	3	449	9 194	391	716	7 193	19 746	10 035	29 717	1 056
3369	Other transportation equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MANSFIELD, OH MSA													
31-33	Manufacturing	—	310	139	21 787	778 648	17 022	34 796	569 329	1 874 066	1 782 726	3 639 315	165 306
322	Paper mfg	2	11	5	508	15 744	394	718	9 826	32 269	35 270	67 203	1 413
3222	Converted paper product mfg	2	11	5	508	15 744	394	718	9 826	32 269	35 270	67 203	1 413
32221	Paperboard container mfg	1	8	4	468	14 721	363	660	9 086	28 315	32 116	60 044	1 235
322211	Corrugated & solid fiber box mfg	1	7	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	26	5	612	16 308	408	808	10 570	34 406	23 508	58 631	1 615
3231	Printing & related support activities	5	26	5	612	16 308	408	808	10 570	34 406	23 508	58 631	1 615
32311	Printing	5	23	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	9	3	251	8 012	177	372	5 335	14 141	8 818	23 039	370
326	Plastics & rubber products mfg	—	20	13	1 570	46 229	1 253	2 689	33 857	111 129	137 589	248 209	13 746
3261	Plastics product mfg	—	16	11	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	10	6	659	18 683	527	1 173	12 815	52 628	50 136	104 152	7 391
326199	All other plastics product mfg	—	8	4	f	D	D	D	D	D	D	D	7 391
3262	Rubber product mfg	—	4	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	9	4	893	35 376	749	1 458	27 800	101 251	37 690	138 966	4 115
3271	Clay product & refractory mfg	—	2	2	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	1	1	e	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	8	6	2 018	93 288	1 612	3 891	70 618	255 770	272 821	525 543	9 299
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	6	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	1	1	e	D	D	D	D	D	D	D	D
331511	Iron foundries	—	1	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	5	3	315	8 382	249	494	6 196	20 683	15 031	33 799	406
332	Fabricated metal product mfg	—	75	29	2 935	97 679	2 402	4 944	73 445	302 904	197 532	498 870	16 793
3321	Forging & stamping	—	10	7	521	13 315	398	806	6 894	27 836	29 464	56 156	1 373
33211	Forging & stamping	—	10	7	521	13 315	398	806	6 894	27 836	29 464	56 156	1 373
332116	Metal stamping	—	6	4	342	8 746	274	565	4 264	14 689	12 924	27 696	D
3323	Architectural & structural metals mfg	3	8	4	277	6 858	214	376	4 480	16 027	10 172	26 205	420
3326	Spring & wire product mfg	—	1	1	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	1	1	e	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	34	10	714	21 735	551	993	14 838	37 434	18 483	55 511	2 012
33271	Machine shops	—	24	5	462	14 584	344	580	10 157	24 081	13 355	37 033	1 418
332710	Machine shops	—	24	5	462	14 584	344	580	10 157	24 081	13 355	37 033	1 418
33272	Turned product & screw, nut, & bolt mfg	2	10	5	252	7 151	207	413	4 681	13 353	5 128	18 478	594
332721	Precision turned product mfg	2	10	5	252	7 151	207	413	4 681	13 353	5 128	18 478	594

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MANSFIELD, OH MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	43	22	2 576	85 544	1 716	3 114	47 270	229 544	224 898	445 788	12 104
3331	Agriculture, construction, & mining machinery mfg....	-	13	8	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	11	7	896	31 121	616	1 160	17 517	73 601	108 404	176 540	3 595
333120	Construction machinery mfg.....	-	11	7	896	31 121	616	1 160	17 517	73 601	108 404	176 540	3 595
3335	Metalworking machinery mfg.....	1	7	5	277	8 342	224	390	5 993	14 424	7 128	21 000	944
33351	Metalworking machinery mfg.....	1	7	5	277	8 342	224	390	5 993	14 424	7 128	21 000	944
3339	Other general-purpose machinery mfg.....	-	12	7	1 169	40 211	718	1 285	20 571	110 998	86 639	195 121	7 114
33391	Pump & compressor mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	5	3	253	6 706	203	369	4 679	11 178	13 472	24 114	443
334	Computer & electronic product mfg.....	-	12	6	2 722	67 707	1 986	3 466	36 951	140 283	85 795	224 260	11 385
3344	Semiconductor & other electronic component mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	-	5	3	2 326	59 859	1 722	3 013	33 689	111 798	59 575	170 946	D
335	Electrical equipment, appliance, & component mfg.....	-	12	7	1 576	49 137	1 298	2 472	35 550	183 372	98 926	282 940	12 201
3351	Electric lighting equipment mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	-	1	1	e	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	4	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	4	3	378	7 136	334	429	5 444	26 130	10 980	36 348	624
33593	Wiring device mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	27	22	5 208	243 547	4 426	9 679	208 287	424 938	565 786	988 422	76 313
3362	Motor vehicle body & trailer mfg.....	2	7	5	337	9 403	227	471	6 325	21 806	22 344	43 875	D
33621	Motor vehicle body & trailer mfg.....	2	7	5	337	9 403	227	471	6 325	21 806	22 344	43 875	D
3363	Motor vehicle parts mfg....	-	15	12	4 252	222 868	3 671	8 151	193 197	365 640	485 529	849 671	72 617
33637	Motor vehicle metal stamping.....	-	7	7	3 417	194 351	2 968	6 600	171 179	252 807	366 105	619 088	D
336370	Motor vehicle metal stamping.....	-	7	7	3 417	194 351	2 968	6 600	171 179	252 807	366 105	619 088	D
33639	Other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MANSFIELD, OH MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3366	Ship & boat building	—	2	2	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	2	2	e	D	D	D	D	D	D	D	D
336612	Boat building	—	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	21	5	319	7 388	253	527	4 573	15 171	28 408	43 407	687
3399	Other miscellaneous mfg ..	—	14	5	300	7 004	239	509	4 373	14 217	27 900	41 935	598
	PARKERSBURG—MARIETTA, WV—OH MSA												
31-33	Manufacturing	—	182	70	12 252	481 108	8 728	18 316	309 094	2 418 397	1 778 482	4 202 789	309 623
	Parkersburg—Marietta, WV—OH MSA (OH Part)	—	104	43	5 242	187 834	3 591	7 496	113 645	932 472	962 418	1 900 923	106 014
	Parkersburg—Marietta, WV—OH MSA (WV Part)	—	78	27	7 010	293 274	5 137	10 820	195 449	1 485 925	816 064	2 301 866	203 609
311	Food mfg	1	14	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	22	6	f	D	D	D	D	D	D	D	1 355
3219	Other wood product mfg ...	1	11	2	e	D	D	D	D	D	D	D	185
32192	Wood container & pallet mfg	—	8	2	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg	—	8	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	2	1	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	14	11	4 241	230 649	2 776	6 188	143 922	1 665 480	1 130 072	2 804 512	250 879
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	7	6	4 011	221 256	2 665	5 955	139 862	1 634 789	1 108 753	2 752 151	D
32521	Resin & synthetic rubber mfg	—	7	6	4 011	221 256	2 665	5 955	139 862	1 634 789	1 108 753	2 752 151	D
325211	Plastics material & resin mfg	—	5	5	h	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	9	1 297	36 510	1 038	2 057	25 784	91 996	45 803	135 273	D
3272	Glass & glass product mfg .	—	7	4	930	26 152	745	1 495	18 392	63 851	19 000	80 269	D
32721	Glass & glass product mfg	—	7	4	930	26 152	745	1 495	18 392	63 851	19 000	80 269	D
327212	Other pressed & blown glass & glassware mfg	—	5	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	5	5	876	35 680	677	1 626	25 789	136 844	184 069	313 097	D
3311	Iron & steel mills & ferroalloy mfg	—	3	3	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	f	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	39	14	1 750	58 900	1 268	2 636	39 003	220 495	109 429	329 677	6 031
3322	Cutlery & handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	—	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	15	8	480	13 083	329	666	9 080	37 294	20 842	57 316	1 167
33232	Ornamental & architectural metal products mfg	3	6	4	298	8 572	188	387	6 141	15 463	7 654	22 918	D
332322	Sheet metal work mfg .	2	4	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	13	4	419	16 107	328	635	12 109	40 806	22 912	64 276	982
335	Electrical equipment, appliance, & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	1	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	1	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PARKERSBURG—MARIETTA, WV—OH MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	7	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	5	846	28 268	522	1 063	14 039	73 920	55 008	128 259	4 914
3391	Medical equipment & supplies mfg	-	4	1	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	1	e	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	2	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	10	4	e	D	D	D	D	D	D	D	D
31-33	STEUBENVILLE—WEIRTON, OH—WV MSA												
	Manufacturing	-	104	47	11 530	458 573	8 589	18 744	324 587	1 219 112	2 001 511	3 206 200	156 324
	Steubenville—Weirton, OH—WV MSA (OH Part)	-	45	12	2 244	78 694	1 579	3 301	49 589	187 550	301 370	463 283	18 024
	Steubenville—Weirton, OH—WV MSA (WV Part)	-	59	35	9 286	379 879	7 010	15 443	274 998	1 031 562	1 700 141	2 742 917	138 300
322	Paper mfg	-	5	5	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	5	2	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	10	4	e	D	D	D	D	D	D	D	17 397
3251	Basic chemical mfg	-	6	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	17	11	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	6	4	1 233	31 279	1 068	2 038	24 424	67 855	29 524	96 210	2 622
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	6 628	307 894	4 817	10 923	218 002	787 135	1 004 455	1 756 039	D
3311	Iron & steel mills & ferroalloy mfg	-	4	4	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	4	4	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	4	4	i	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	12	1 649	53 028	1 255	2 872	36 332	184 302	561 859	742 732	10 279
3321	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	-	5	5	e	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	5	5	e	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TOLEDO, OH MSA													
31-33	Manufacturing	—	954	392	55 581	2 194 037	43 895	91 593	1 573 999	5 732 487	10 588 592	16 346 667	472 439
311	Food mfg	—	46	16	2 860	107 646	2 267	4 845	80 688	718 290	802 156	1 526 419	48 905
3112	Grain & oilseed milling	—	3	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	—	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	8	6	692	23 626	593	1 211	17 246	141 663	135 016	277 255	13 712
31142	Fruit & vegetable canning, pickling, & drying	—	7	5	f	D	D	D	D	D	D	D	D
311422	Specialty canning	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	6	2	e	D	D	D	D	D	D	D	1 370
31161	Animal slaughtering & processing	—	6	2	e	D	D	D	D	D	D	D	1 370
311612	Meat processed from carcasses	—	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	2	5	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg	—	2	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	1	5	3	924	27 407	732	1 440	20 081	40 211	73 086	114 101	9 177
3133	Textile & fabric finishing & fabric coating mills	—	3	2	f	D	D	D	D	D	D	D	D
31332	Fabric coating mills	—	2	2	f	D	D	D	D	D	D	D	D
313320	Fabric coating mills	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	17	6	509	11 512	452	856	9 373	37 598	53 111	89 788	1 499
3219	Other wood product mfg	6	13	4	e	D	D	D	D	D	D	D	800
322	Paper mfg	—	18	11	911	30 749	659	1 441	18 832	80 439	115 579	195 316	4 929
3222	Converted paper product mfg	—	18	11	911	30 749	659	1 441	18 832	80 439	115 579	195 316	4 929
32221	Paperboard container mfg	—	12	7	655	24 611	477	1 027	14 533	64 747	96 334	160 940	3 886
322211	Corrugated & solid fiber box mfg	—	8	5	467	18 334	332	717	10 499	46 336	67 245	113 393	2 786
323	Printing & related support activities	1	121	23	1 930	59 289	1 223	2 456	35 017	121 587	82 235	203 385	10 673
3231	Printing & related support activities	1	121	23	1 930	59 289	1 223	2 456	35 017	121 587	82 235	203 385	10 673
32311	Printing	2	110	19	1 765	53 393	1 129	2 260	31 760	110 105	79 210	188 918	9 849
323110	Commercial lithographic printing	1	52	12	888	29 159	625	1 305	18 965	58 859	46 134	104 819	4 388
324	Petroleum & coal products mfg	—	13	4	1 281	69 441	743	1 770	31 954	261 189	2 153 106	2 418 171	39 808
3241	Petroleum & coal products mfg	—	13	4	1 281	69 441	743	1 770	31 954	261 189	2 153 106	2 418 171	39 808
32411	Petroleum refineries	—	2	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	42	21	1 441	59 925	893	1 907	30 750	298 398	327 387	624 752	23 508
3251	Basic chemical mfg	1	9	5	279	14 283	179	413	8 521	86 035	69 403	155 839	13 707
3256	Soap, cleaning compound, & toilet preparation mfg	1	12	6	573	21 940	367	751	9 955	105 586	62 857	167 904	3 805
32561	Soap & cleaning compound mfg	1	12	6	573	21 940	367	751	9 955	105 586	62 857	167 904	3 805
325612	Polish & other sanitation good mfg	—	6	4	498	19 567	331	675	8 720	94 928	50 382	144 708	3 101
3259	Other chemical product mfg	4	10	5	306	12 634	165	392	6 084	63 454	61 516	124 248	3 459
326	Plastics & rubber products mfg	—	58	39	4 750	137 309	3 676	7 073	92 846	361 237	266 303	618 438	28 599
3261	Plastics product mfg	1	44	27	2 792	72 648	2 214	4 222	49 682	164 547	161 463	326 103	15 112
32619	Other plastics product mfg	1	36	23	2 579	67 136	2 049	3 901	45 924	150 030	143 562	293 771	13 675
326199	All other plastics product mfg	1	34	23	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	14	12	1 958	64 661	1 462	2 851	43 164	196 690	104 840	292 335	13 487
32629	Other rubber product mfg	—	13	12	g	D	D	D	D	D	D	D	13 487
326291	Rubber product mfg for mechanical use	—	7	7	1 663	54 532	1 239	2 336	36 709	166 712	77 675	236 173	12 521
326299	All other rubber product mfg	—	6	5	e	D	D	D	D	D	D	D	966

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TOLEDO, OH MSA— Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	—	40	17	3 261	120 191	2 715	5 730	94 248	463 162	280 990	734 182	24 672
3272	Glass & glass product mfg	—	13	8	2 768	103 891	2 326	4 950	82 727	416 668	234 696	641 940	17 753
32721	Glass & glass product mfg	—	13	8	2 768	103 891	2 326	4 950	82 727	416 668	234 696	641 940	17 753
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	5	4	1 852	68 601	1 622	3 346	57 001	262 631	123 533	381 977	14 832
327215	Glass product mfg made of purchased glass	—	7	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	19	7	399	12 887	315	641	8 934	34 218	33 173	67 168	6 423
331	Primary metal mfg	—	25	16	2 576	89 135	2 121	4 400	67 503	205 651	349 741	552 114	21 813
3312	Steel product mfg from purchased steel	—	6	6	g	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	1 095	31 592	924	1 845	23 263	70 962	140 269	210 398	7 303
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	1 095	31 592	924	1 845	23 263	70 962	140 269	210 398	7 303
3315	Foundries	—	16	8	1 173	44 867	978	2 070	35 899	98 727	107 356	204 088	12 349
33152	Nonferrous metal foundries	—	10	4	973	39 753	802	1 745	31 651	86 121	92 351	176 440	D
331521	Aluminum die-casting foundries	—	3	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	214	85	7 429	249 201	5 754	12 043	168 347	667 775	670 007	1 352 488	63 415
3321	Forging & stamping	—	15	12	941	35 100	704	1 447	22 586	73 460	93 071	163 441	2 037
33211	Forging & stamping	—	15	12	941	35 100	704	1 447	22 586	73 460	93 071	163 441	2 037
332114	Custom roll forming	—	3	3	e	D	D	D	D	D	D	D	D
332116	Metal stamping	1	11	9	f	D	D	D	D	D	D	D	1 708
3322	Cutlery & handtool mfg	—	11	4	754	25 676	474	1 076	14 907	109 073	68 737	175 789	4 222
33221	Cutlery & handtool mfg	—	11	4	754	25 676	474	1 076	14 907	109 073	68 737	175 789	4 222
332212	Hand & edge tool mfg	—	8	3	e	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	31	12	1 021	34 139	776	1 549	20 704	68 699	82 458	150 602	3 644
33231	Plate work & fabricated structural product mfg	—	17	7	385	14 294	275	585	8 104	25 507	33 705	59 005	1 420
332312	Fabricated structural metal mfg	—	10	4	264	10 504	177	377	5 451	18 221	28 400	46 563	1 236
33232	Ornamental & architectural metal products mfg	1	14	5	636	19 845	501	964	12 600	43 192	48 753	91 597	2 224
332323	Ornamental & architectural metal work mfg	—	3	2	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	9	6	486	18 469	407	854	15 277	65 521	114 599	184 003	2 339
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	3	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	3	2	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	—	8	4	330	11 202	264	586	6 556	25 004	29 827	54 564	D
33261	Spring & wire product mfg	—	8	4	330	11 202	264	586	6 556	25 004	29 827	54 564	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	81	23	1 635	54 902	1 341	2 715	39 872	93 233	49 294	143 867	5 825
33271	Machine shops	—	72	18	1 433	47 706	1 183	2 393	35 204	79 716	43 430	124 316	4 564
332710	Machine shops	—	72	18	1 433	47 706	1 183	2 393	35 204	79 716	43 430	124 316	4 564
3328	Coating, engraving, heat treating, & allied activities	—	34	17	1 357	45 572	1 076	2 266	32 051	103 840	184 773	304 822	41 415
33281	Coating, engraving, heat treating, & allied activities	—	34	17	1 357	45 572	1 076	2 266	32 051	103 840	184 773	304 822	41 415
332811	Metal heat treating	—	6	5	444	14 968	366	814	9 774	21 748	112 573	141 706	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	7	5	380	16 552	296	678	12 868	48 517	58 612	115 778	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	21	7	533	14 052	414	774	9 409	33 575	13 588	47 338	1 050

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TOLEDO, OH MSA— Con. Manufacturing— Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	2	23	5	e	D	D	D	D	D	D	D	1 923
33299	All other fabricated metal product mfg	1	19	5	e	D	D	D	D	D	D	D	1 739
333	Machinery mfg	1	114	50	3 756	153 131	2 412	5 089	80 481	289 267	263 980	561 822	17 162
3333	Commercial & service industry machinery mfg ..	—	6	3	458	15 970	277	572	7 863	33 963	41 821	73 368	745
33331	Commercial & service industry machinery mfg	—	6	3	458	15 970	277	572	7 863	33 963	41 821	73 368	745
333319	Other commercial & service industry machinery mfg	—	5	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	62	25	1 603	70 093	1 247	2 715	47 467	110 079	52 388	170 842	9 517
33351	Metalworking machinery mfg	1	62	25	1 603	70 093	1 247	2 715	47 467	110 079	52 388	170 842	9 517
333511	Industrial mold mfg . . .	—	18	7	552	25 083	464	1 008	19 851	24 401	9 198	41 849	5 613
333514	Special die & tool, die set, jig, & fixture mfg .	2	27	9	467	18 710	382	768	14 099	34 611	11 210	46 303	2 342
333515	Cutting tool & machine tool accessory mfg ..	—	9	3	284	13 907	227	504	7 388	25 699	13 973	39 956	818
3339	Other general-purpose machinery mfg	—	27	16	1 357	56 722	676	1 374	19 673	118 983	131 379	253 080	5 712
33399	All other general-purpose machinery mfg	—	21	13	1 229	52 496	609	1 241	17 966	108 499	124 154	235 416	5 370
333994	Industrial process furnace & oven mfg . .	1	5	4	465	24 421	186	390	6 449	37 565	65 401	103 781	1 633
333999	All other miscellaneous general-purpose machinery mfg	—	8	4	352	13 167	170	326	4 346	37 411	36 638	73 756	D
334	Computer & electronic product mfg	3	32	15	958	29 486	644	1 277	14 852	127 397	37 709	155 867	3 413
3344	Semiconductor & other electronic component mfg	4	11	6	e	D	D	D	D	D	D	D	1 566
33441	Semiconductor & other electronic component mfg	4	11	6	e	D	D	D	D	D	D	D	1 566
3345	Navigational, measuring, medical, & control instruments mfg	3	11	6	277	8 094	160	301	3 784	13 516	15 734	30 040	D
33451	Navigational, measuring, medical, & control instruments mfg	3	11	6	277	8 094	160	301	3 784	13 516	15 734	30 040	D
335	Electrical equipment, appliance, & component mfg	—	17	8	1 165	38 819	901	1 996	26 935	79 024	106 177	183 411	3 937
3353	Electrical equipment mfg ..	—	7	3	e	D	D	D	D	D	D	D	814
33531	Electrical equipment mfg	—	7	3	e	D	D	D	D	D	D	D	814
3359	Other electrical equipment & component mfg	—	6	4	684	23 795	578	1 289	18 825	51 129	84 654	135 705	D
33591	Battery mfg	—	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg . . .	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	53	40	16 505	854 370	14 710	31 585	728 232	1 517 809	4 590 670	6 138 523	140 048
3361	Motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	—	45	35	j	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	3	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	—	3	1	e	D	D	D	D	D	D	D	D

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31-33	TOLEDO, OH MSA— Con.												
	Manufacturing— Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg— Con.												
33637	Motor vehicle metal stamping	-	20	15	2 282	111 662	1 811	3 968	83 787	244 212	231 412	472 880	41 351
336370	Motor vehicle metal stamping	-	20	15	2 282	111 662	1 811	3 968	83 787	244 212	231 412	472 880	41 351
33639	Other motor vehicle parts mfg	2	16	14	1 738	53 601	1 437	2 855	39 357	114 659	160 018	278 397	20 091
336399	All other motor vehicle parts mfg	2	16	14	1 738	53 601	1 437	2 855	39 357	114 659	160 018	278 397	20 091
337	Furniture & related product mfg	-	46	15	3 650	112 815	2 909	5 852	52 530	327 996	323 055	650 485	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	30	7	3 207	102 990	2 596	5 312	46 588	309 683	292 322	601 108	D
33712	Household & institutional furniture mfg	-	10	6	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	6	4	h	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	6	14	7	e	D	D	D	D	D	D	D	1 017
33721	Office furniture (including fixtures) mfg	6	14	7	e	D	D	D	D	D	D	D	1 017
337215	Showcase, partition, shelving, & locker mfg	6	13	7	393	8 550	292	485	5 308	14 472	28 121	42 894	D
339	Miscellaneous mfg	3	68	18	1 409	38 634	907	1 529	17 673	98 346	56 350	154 482	3 225
3391	Medical equipment & supplies mfg	3	28	8	817	21 719	507	762	9 546	56 839	24 158	81 372	2 011
33911	Medical equipment & supplies mfg	3	28	8	817	21 719	507	762	9 546	56 839	24 158	81 372	2 011
339113	Surgical appliance & supplies mfg	2	6	5	497	12 709	305	390	5 221	34 181	14 975	49 617	961
3399	Other miscellaneous mfg ..	2	40	10	592	16 915	400	767	8 127	41 507	32 192	73 110	1 214
	WHEELING, WV—OH MSA												
31-33	Manufacturing	-	137	42	3 511	90 020	2 737	5 094	62 990	314 948	335 739	648 600	31 996
	Wheeling, WV—OH MSA (OH Part)	-	55	13	1 523	36 909	1 190	2 221	26 412	111 446	162 993	272 475	19 800
	Wheeling, WV—OH MSA (WV Part)	-	82	29	1 988	53 111	1 547	2 873	36 578	203 502	172 746	376 125	12 196
311	Food mfg	-	12	3	e	D	D	D	D	D	D	D	1 632
332	Fabricated metal product mfg	1	32	11	713	18 773	579	1 135	13 670	47 234	87 645	130 678	4 734
3329	Other fabricated metal product mfg	-	3	3	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	3	e	D	D	D	D	D	D	D	D
	YOUNGSTOWN— WARREN, OH MSA												
31-33	Manufacturing	-	896	345	55 718	2 267 067	44 898	92 144	1 690 527	5 200 433	9 224 530	14 454 875	270 887
311	Food mfg	1	47	8	1 038	24 256	891	1 516	17 579	74 877	176 274	252 135	6 254
3116	Meat product mfg	-	7	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	7	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	12	3	e	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	4	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	4	1	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	38	14	f	D	D	D	D	D	D	D	2 121
3219	Other wood product mfg ..	1	30	9	514	10 306	414	742	7 293	21 761	39 012	59 767	1 264
322	Paper mfg	5	7	6	e	D	D	D	D	D	D	D	1 355
3222	Converted paper product mfg	5	7	6	e	D	D	D	D	D	D	D	1 355
32223	Stationery product mfg ..	6	4	4	e	D	D	D	D	D	D	D	1 235
322232	Envelope mfg	6	4	4	e	D	D	D	D	D	D	D	1 235

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YOUNGSTOWN-WARREN, OH MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	3	65	15	1 208	33 196	851	1 720	20 452	78 700	48 666	126 445	6 371
3231	Printing & related support activities.....	3	65	15	1 208	33 196	851	1 720	20 452	78 700	48 666	126 445	6 371
32311	Printing	3	60	15	1 179	32 184	831	1 684	19 798	76 363	47 983	123 448	D
323110	Commercial lithographic printing ..	—	33	8	561	15 907	411	800	10 037	35 815	18 075	53 880	4 061
323113	Commercial screen printing.....	7	4	3	367	10 214	235	530	5 716	28 863	17 750	45 777	D
325	Chemical mfg	2	19	6	e	D	D	D	D	D	D	D	4 045
326	Plastics & rubber products mfg	3	55	23	3 389	84 805	2 864	5 691	59 262	211 935	188 991	406 641	14 771
3261	Plastics product mfg	4	41	18	2 683	60 225	2 306	4 532	43 325	156 741	154 116	309 951	13 616
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	12	5	455	11 369	389	774	7 933	29 680	34 556	64 558	1 875
326121	Unsupported plastics profile shape mfg	—	9	5	416	10 711	358	736	7 476	27 664	30 364	58 316	1 671
32619	Other plastics product mfg	5	24	13	2 182	47 835	1 879	3 692	34 655	124 543	115 991	239 293	11 442
326199	All other plastics product mfg	5	22	13	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	14	5	706	24 580	558	1 159	15 937	55 194	34 875	96 690	1 155
32621	Tire mfg	—	5	1	e	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	8	3	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	4	2	e	D	D	D	D	D	D	D	446
327	Nonmetallic mineral product mfg	1	67	29	2 730	72 940	2 250	4 419	54 525	183 262	113 667	296 312	12 273
3271	Clay product & refractory mfg	—	27	17	1 905	47 111	1 604	3 054	34 024	111 350	69 032	179 372	7 207
32711	Pottery, ceramics, & plumbing fixture mfg	—	13	8	1 189	22 249	1 054	1 966	17 068	51 662	13 768	65 478	3 519
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	—	13	8	1 189	22 249	1 054	1 966	17 068	51 662	13 768	65 478	3 519
32712	Clay building material & refractories mfg	—	14	9	716	24 862	550	1 088	16 956	59 688	55 264	113 894	3 688
327124	Clay refractory mfg	—	5	4	258	9 016	195	372	6 563	20 184	16 283	36 627	1 600
327125	Nonclay refractory mfg	—	9	5	458	15 846	355	716	10 393	39 504	38 981	77 267	2 088
3272	Glass & glass product mfg	—	9	5	382	14 187	331	693	12 316	40 393	17 069	57 407	2 635
32721	Glass & glass product mfg	—	9	5	382	14 187	331	693	12 316	40 393	17 069	57 407	2 635
3273	Cement & concrete product mfg	3	20	4	251	6 755	167	386	4 807	14 800	19 733	34 508	1 430
331	Primary metal mfg	—	55	40	9 149	406 352	7 065	15 452	285 075	1 105 979	1 653 721	2 742 915	82 406
3311	Iron & steel mills & ferroalloy mfg	—	7	7	4 281	219 030	3 310	7 309	159 572	596 234	848 810	1 436 793	52 054
33111	Iron & steel mills & ferroalloy mfg	—	7	7	4 281	219 030	3 310	7 309	159 572	596 234	848 810	1 436 793	52 054
331111	Iron & steel mills	—	7	7	4 281	219 030	3 310	7 309	159 572	596 234	848 810	1 436 793	52 054
3312	Steel product mfg from purchased steel	—	11	9	1 314	59 007	945	1 932	36 481	142 575	201 212	338 082	13 712
33121	Iron & steel pipes & tubes mfg from purchased steel	—	7	6	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	7	6	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	4	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	11	11	1 937	55 501	1 621	3 310	38 233	171 062	434 268	592 071	8 423
33131	Alumina & aluminum production & processing.....	—	11	11	1 937	55 501	1 621	3 310	38 233	171 062	434 268	592 071	8 423
331316	Aluminum extruded product mfg	—	9	9	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YOUNGSTOWN-WARREN, OH MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	-	4	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	3	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	2	1	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	22	11	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	-	15	7	677	22 125	539	1 203	14 775	40 644	37 176	79 048	2 622
331511	Iron foundries.....	-	9	5	558	18 790	457	1 051	12 862	34 274	32 586	68 088	2 584
332	Fabricated metal product mfg.....	1	237	98	7 614	238 495	5 954	11 883	161 840	567 736	565 279	1 128 537	30 320
3321	Forging & stamping.....	1	14	11	911	33 291	702	1 438	22 523	81 030	109 395	188 721	4 170
33211	Forging & stamping.....	1	14	11	911	33 291	702	1 438	22 523	81 030	109 395	188 721	4 170
332111	Iron & steel forging ...	3	4	4	295	11 496	221	503	8 407	30 216	30 163	61 829	1 662
332114	Custom roll forming....	-	3	3	362	11 949	278	561	7 958	22 216	37 484	55 567	D
332116	Metal stamping.....	-	7	4	254	9 846	203	374	6 158	28 598	41 748	71 325	D
3323	Architectural & structural metals mfg.....	-	65	33	2 219	72 155	1 632	3 236	44 500	173 189	219 320	390 402	7 607
33231	Plate work & fabricated structural product mfg..	-	35	19	1 305	45 499	997	2 000	28 949	103 887	110 882	212 702	5 122
332312	Fabricated structural metal mfg.....	1	22	13	827	28 571	644	1 323	18 560	88 002	70 092	156 255	3 367
332313	Plate work mfg.....	-	12	5	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	-	30	14	914	26 656	635	1 236	15 551	69 302	108 438	177 700	2 485
332321	Metal window & door mfg.....	1	14	7	453	10 684	307	537	6 136	42 586	25 583	68 978	532
332323	Ornamental & architectural metal work mfg.....	-	9	5	332	10 065	230	494	6 502	18 841	72 528	90 623	1 287
3324	Boiler, tank, & shipping container mfg.....	-	11	8	812	24 782	663	1 413	17 341	54 009	79 994	135 407	D
33242	Metal tank (heavy gauge) mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	-	4	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	-	6	5	535	17 973	440	996	13 788	35 515	67 332	104 547	3 169
332431	Metal can mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	85	20	1 354	40 160	1 085	2 031	27 137	84 510	44 319	127 954	3 678
33271	Machine shops.....	1	78	17	1 204	36 542	974	1 840	24 857	74 500	37 088	110 336	2 666
332710	Machine shops.....	1	78	17	1 204	36 542	974	1 840	24 857	74 500	37 088	110 336	2 666
3328	Coating, engraving, heat treating, & allied activities.	1	22	10	432	11 738	336	662	8 065	26 549	12 012	38 560	2 030
33281	Coating, engraving, heat treating, & allied activities.....	1	22	10	432	11 738	336	662	8 065	26 549	12 012	38 560	2 030
3329	Other fabricated metal product mfg.....	1	36	15	1 837	55 337	1 498	3 032	41 534	144 297	99 489	242 197	6 839
33291	Metal valve mfg.....	3	5	3	439	15 426	321	758	9 779	39 551	29 730	68 950	D
332919	Other metal valve & pipe fitting mfg.....	5	3	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	1	31	12	1 398	39 911	1 177	2 274	31 755	104 746	69 759	173 247	D
332998	Enameled iron & metal sanitary ware mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	4	16	8	e	D	D	D	D	D	D	D	1 206
333	Machinery mfg.....	1	125	57	4 637	170 911	3 306	6 781	103 327	359 752	251 140	609 273	25 440
3332	Industrial machinery mfg ..	5	10	4	257	9 149	195	439	6 350	22 012	13 767	34 823	1 290
3335	Metalworking machinery mfg.....	1	70	29	1 740	65 021	1 343	2 749	42 163	121 839	65 847	185 482	11 304
33351	Metalworking machinery mfg.....	1	70	29	1 740	65 021	1 343	2 749	42 163	121 839	65 847	185 482	11 304
333514	Special die & tool, die set, jig, & fixture mfg ..	-	42	15	1 047	42 500	870	1 856	29 303	72 857	34 789	104 002	7 318
3339	Other general-purpose machinery mfg.....	-	32	17	2 253	88 013	1 461	3 034	49 609	194 739	153 080	349 523	12 104
33399	All other general-purpose machinery mfg.....	-	25	13	1 964	78 506	1 256	2 593	43 370	170 353	126 629	298 975	11 610
333994	Industrial process furnace & oven mfg..	2	7	5	433	17 109	239	520	6 924	38 918	45 010	86 394	1 286
333996	Fluid power pump & motor mfg.....	-	2	1	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	YOUNGSTOWN-WARREN, OH MSA—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg	1	11	3	e	D	D	D	D	D	D	D	1 280	
335	Electrical equipment, appliance, & component mfg	—	12	6		1 428	52 851	1 086	2 488	41 078	227 833	131 086	359 894	10 898
3351	Electric lighting equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	3	1	e	D	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	35	19	j	D	D	D	D	D	D	D	D	68 180
3361	Motor vehicle mfg	—	3	1	i	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	1	i	D	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	2	1	i	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	20	14		14 023	746 638	11 396	23 437	576 825	1 139 836	2 209 507	3 401 979	D
33632	Motor vehicle electrical & electronic equipment mfg	—	5	4	i	D	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	5	4	i	D	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	6	5	h	D	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	6	5	h	D	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	5	3	e	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	41	7		770	28 480	659	1 472	24 134	88 142	52 895	141 128	1 779
3371	Household & institutional furniture & kitchen cabinet mfg	2	27	2	e	D	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	11	4		461	22 799	412	1 065	20 290	77 906	40 263	118 170	1 111
33721	Office furniture (including fixtures) mfg	—	11	4		461	22 799	412	1 065	20 290	77 906	40 263	118 170	1 111
337215	Showcase, partition, shelving, & locker mfg	—	8	2	e	D	D	D	D	D	D	D	D	884
339	Miscellaneous mfg	5	50	5	e	D	D	D	D	D	D	D	D	1 727
3399	Other miscellaneous mfg	7	28	3	e	D	D	D	D	D	D	D	D	1 321

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAMS COUNTY, OH													
31-33	Manufacturing	2	31	6	f	D	D	D	D	D	D	D	D
ALLEN COUNTY, OH													
31-33	Manufacturing	-	132	50	9 529	407 819	7 458	16 428	299 735	2 753 764	3 894 247	6 631 706	251 048
325	Chemical mfg	-	6	4	f	D	D	D	D	D	D	D	60 865
326	Plastics & rubber products mfg	-	8	6	922	27 497	730	1 727	20 802	92 178	99 297	189 577	D
3262	Rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	25	11	1 434	41 589	1 118	2 410	28 033	118 006	68 019	183 148	D
3328	Coating, engraving, heat treating, & allied activities .	3	7	3	f	D	D	D	D	D	D	D	1 310
33281	Coating, engraving, heat treating, & allied activities	3	7	3	f	D	D	D	D	D	D	D	1 310
336	Transportation equipment mfg	-	8	8	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg . . .	-	5	5	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
ASHLAND COUNTY, OH													
31-33	Manufacturing	-	98	44	7 135	215 730	5 681	11 218	145 301	580 043	574 218	1 157 517	42 584
322	Paper mfg	-	6	4	591	20 269	440	992	12 205	42 261	54 449	96 007	7 732
3222	Converted paper product mfg	-	6	4	591	20 269	440	992	12 205	42 261	54 449	96 007	7 732
32221	Paperboard container mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	8	7	860	18 595	751	1 585	14 492	56 505	47 697	102 054	2 370
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	6	1 225	40 663	917	1 766	27 183	72 372	116 521	190 482	5 835
3339	Other general-purpose machinery mfg	-	4	4	1 015	32 696	761	1 487	22 010	61 427	109 091	171 923	4 484
33391	Pump & compressor mfg	-	2	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	1	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	6	3	1 010	34 673	829	1 309	21 907	68 761	50 400	121 196	7 728
3399	Other miscellaneous mfg . .	1	6	3	1 010	34 673	829	1 309	21 907	68 761	50 400	121 196	7 728
33999	All other miscellaneous mfg	1	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg . . .	1	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ASHTABULA COUNTY, OH													
31-33	Manufacturing	-	175	73	9 984	302 559	7 607	15 617	206 384	921 192	883 673	1 794 321	73 778
325	Chemical mfg	-	15	11	1 830	77 511	1 146	2 525	45 830	278 308	349 008	620 021	26 573
3251	Basic chemical mfg	-	8	6	1 034	49 633	614	1 378	30 207	210 083	265 140	467 802	20 300
32513	Dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	6	4	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	1	6	4	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	29	22	3 546	88 205	2 938	5 851	66 364	221 048	205 587	424 387	16 228
3261	Plastics product mfg	-	23	18	3 049	71 574	2 533	4 955	53 905	188 789	181 791	368 784	13 260
32619	Other plastics product mfg	-	14	12	2 558	55 564	2 149	4 129	43 731	133 665	133 311	265 291	11 115
326199	All other plastics product mfg	-	14	12	2 558	55 564	2 149	4 129	43 731	133 665	133 311	265 291	11 115
332	Fabricated metal product mfg	1	41	9	914	26 473	778	1 470	20 061	64 096	75 665	139 702	7 012
333	Machinery mfg	-	27	7	898	32 704	680	1 510	22 635	177 480	44 701	221 986	3 916
3335	Metalworking machinery mfg	-	14	5	595	21 060	492	1 045	15 928	155 887	21 014	176 627	2 605
33351	Metalworking machinery mfg	-	14	5	595	21 060	492	1 045	15 928	155 887	21 014	176 627	2 605
336	Transportation equipment mfg	1	7	4	f	D	D	D	D	D	D	D	D
ATHENS COUNTY, OH													
31-33	Manufacturing	-	43	7	1 351	32 501	983	1 931	22 273	123 097	102 399	222 066	3 200
AUGLAIZE COUNTY, OH													
31-33	Manufacturing	2	93	38	8 236	288 660	6 053	12 431	187 810	829 746	903 672	1 737 610	59 197
311	Food mfg	7	12	6	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	7	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	7	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	3	971	38 872	756	1 536	28 087	78 464	124 430	202 103	D
3262	Rubber product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	4	3	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	6	1 031	29 644	850	1 680	21 872	95 275	39 558	135 174	D
3321	Forging & stamping	-	5	4	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	5	4	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	12	h	D	D	D	D	D	D	D	17 587
3335	Metalworking machinery mfg	-	14	8	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	14	8	g	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg	-	4	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	3	h	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	2	2	h	D	D	D	D	D	D	D	D
BELMONT COUNTY, OH													
31-33	Manufacturing	-	55	13	1 523	36 909	1 190	2 221	26 412	111 446	162 993	272 475	19 800
BROWN COUNTY, OH													
31-33	Manufacturing	-	25	7	1 110	33 406	872	1 604	24 791	85 887	195 085	280 824	7 451

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BUTLER COUNTY, OH													
31-33	Manufacturing	-	396	155	20 391	819 216	14 957	32 198	562 250	4 325 436	2 265 948	6 567 771	196 061
312	Beverage & tobacco product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	15	5	532	14 245	421	1 003	10 408	33 826	75 176	110 155	2 103
322	Paper mfg	-	30	20	3 595	148 701	2 551	5 580	102 838	441 906	425 577	865 949	41 251
3221	Pulp, paper, & paperboard mills	-	7	7	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	5	5	1 919	92 399	1 451	3 155	67 701	276 716	232 058	508 284	27 536
322121	Paper (except newsprint) mills	-	5	5	1 919	92 399	1 451	3 155	67 701	276 716	232 058	508 284	27 536
3222	Converted paper product mfg	-	23	13	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	14	10	1 041	33 387	713	1 567	22 052	80 037	121 029	200 930	8 724
322211	Corrugated & solid fiber box mfg	-	10	8	755	22 848	479	1 010	14 059	54 876	90 973	146 144	D
323	Printing & related support activities	1	43	14	714	22 857	534	1 024	15 125	66 608	38 912	104 832	2 994
3231	Printing & related support activities	1	43	14	714	22 857	534	1 024	15 125	66 608	38 912	104 832	2 994
32311	Printing	1	41	12	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	27	16	1 818	53 427	1 363	2 728	32 279	118 610	98 971	213 009	11 186
3261	Plastics product mfg	1	25	15	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	4	4	564	19 176	389	824	11 477	34 151	34 441	66 978	4 961
32619	Other plastics product mfg	-	12	6	631	17 748	452	921	9 859	45 188	25 367	68 186	1 960
326199	All other plastics product mfg	-	10	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	89	27	2 293	84 174	1 680	3 821	54 576	214 499	210 150	424 764	25 238
3323	Architectural & structural metals mfg	-	16	4	542	18 136	331	803	9 941	46 083	41 834	90 312	3 116
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	40	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	38	5	516	19 387	416	932	13 706	42 581	23 374	65 704	4 261
332710	Machine shops	2	38	5	516	19 387	416	932	13 706	42 581	23 374	65 704	4 261
333	Machinery mfg	-	43	21	1 848	72 866	973	1 908	34 295	127 207	180 409	311 182	9 538
3332	Industrial machinery mfg	-	15	9	925	40 139	437	809	18 354	68 629	105 899	179 628	4 345
33329	Other industrial machinery mfg	-	14	9	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	12	7	1 474	50 772	1 083	2 280	33 421	146 430	113 149	259 130	5 758
3353	Electrical equipment mfg	-	8	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	8	4	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	9	4	556	21 216	334	656	12 125	43 679	69 158	114 057	D
337	Furniture & related product mfg	-	14	6	637	16 520	456	794	9 370	35 730	28 792	65 562	1 051
3372	Office furniture (including fixtures) mfg	-	6	4	533	14 005	393	672	8 195	29 224	25 112	55 449	858
33721	Office furniture (including fixtures) mfg	-	6	4	533	14 005	393	672	8 195	29 224	25 112	55 449	858
339	Miscellaneous mfg	-	24	7	577	14 545	423	890	7 862	58 886	31 913	83 887	1 092
3399	Other miscellaneous mfg	-	19	7	552	13 616	407	858	7 437	55 916	30 468	79 434	906

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARROLL COUNTY, OH													
31-33	Manufacturing	1	40	15	1 782	56 715	1 267	2 585	42 955	138 786	163 738	302 269	14 082
332	Fabricated metal product mfg	-	9	3	f	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	3	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	3	2	f	D	D	D	D	D	D	D	D
332111	Iron & steel forging	-	2	2	f	D	D	D	D	D	D	D	D
CHAMPAIGN COUNTY, OH													
31-33	Manufacturing	2	55	22	3 452	101 264	2 853	5 727	71 873	493 422	456 572	946 810	76 749
336	Transportation equipment mfg	-	5	5	1 176	40 049	1 010	2 125	28 211	165 153	272 508	436 495	D
3363	Motor vehicle parts mfg	-	5	5	1 176	40 049	1 010	2 125	28 211	165 153	272 508	436 495	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
CLARK COUNTY, OH													
31-33	Manufacturing	-	230	91	13 231	519 968	10 009	20 640	369 091	1 575 185	2 506 108	4 071 535	82 816
332	Fabricated metal product mfg	-	67	26	g	D	D	D	D	D	D	D	11 620
3321	Forging & stamping	-	5	3	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	5	3	f	D	D	D	D	D	D	D	D
332116	Metal stamping	-	4	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	29	11	f	D	D	D	D	D	D	D	5 578
333	Machinery mfg	-	32	14	g	D	D	D	D	D	D	D	14 644
3339	Other general-purpose machinery mfg	-	6	6	f	D	D	D	D	D	D	D	10 997
336	Transportation equipment mfg	-	20	15	i	D	D	D	D	D	D	D	43 037
3361	Motor vehicle mfg	-	3	2	i	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	2	2	i	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	2	2	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	1	13	9	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	17	6	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	12	6	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	7	6	f	D	D	D	D	D	D	D	D
CLERMONT COUNTY, OH													
31-33	Manufacturing	-	167	56	7 892	305 479	5 123	10 452	178 597	887 101	672 119	1 544 253	84 173
323	Printing & related support activities	1	14	4	568	13 576	364	616	6 853	48 132	35 906	80 762	807
3231	Printing & related support activities	1	14	4	568	13 576	364	616	6 853	48 132	35 906	80 762	807
332	Fabricated metal product mfg	-	38	13	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	25	9	2 506	103 215	1 372	2 816	46 776	389 174	185 925	565 111	D
3332	Industrial machinery mfg	-	6	3	g	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	5	1 651	92 198	1 304	2 846	71 340	237 490	245 271	474 227	D
3363	Motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
CLINTON COUNTY, OH													
31-33	Manufacturing	-	50	26	4 969	135 476	3 897	7 907	86 634	352 444	465 834	809 559	32 457
332	Fabricated metal product mfg	-	10	6	866	23 461	618	1 142	13 796	95 942	36 063	129 055	2 219
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
COLUMBIANA COUNTY, OH													
31-33	Manufacturing	1	209	82	8 616	246 325	7 016	14 001	169 784	583 190	530 966	1 109 266	36 252
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	9	5	3	1 063	23 419	920	1 791	17 812	72 053	45 789	117 914	D
3261	Plastics product mfg	9	5	3	1 063	23 419	920	1 791	17 812	72 053	45 789	117 914	D
32619	Other plastics product mfg	9	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	3	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	28	13	1 717	41 229	1 449	2 851	29 883	105 173	56 184	160 785	6 340
3271	Clay product & refractory mfg	-	17	11	g	D	D	D	D	D	D	D	5 908
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	10	6	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	10	6	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	14	7	583	17 825	475	973	11 634	32 507	29 399	61 821	D
3315	Foundries	1	13	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	51	21	2 150	66 084	1 759	3 610	49 104	166 917	117 510	283 124	10 129
3329	Other fabricated metal product mfg	-	13	9	1 341	42 109	1 126	2 337	32 774	116 122	70 831	185 641	4 819
33299	All other fabricated metal product mfg	-	11	7	g	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	42	21	g	D	D	D	D	D	D	D	7 151
3335	Metalworking machinery mfg	-	18	9	f	D	D	D	D	D	D	D	5 650
33351	Metalworking machinery mfg	-	18	9	f	D	D	D	D	D	D	D	5 650
3339	Other general-purpose machinery mfg	-	12	7	f	D	D	D	D	D	D	D	D
COSHOCTON COUNTY, OH													
31-33	Manufacturing	-	55	28	4 814	162 921	3 508	7 649	104 981	513 448	684 426	1 191 259	44 672
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAWFORD COUNTY, OH													
31-33	Manufacturing	-	90	46	6 575	211 584	5 213	10 495	156 559	674 489	532 555	1 194 663	38 344
326	Plastics & rubber products mfg	-	6	5	969	28 945	761	1 618	21 619	58 486	80 315	136 848	D
3262	Rubber product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	7	1 341	55 274	1 112	2 249	45 831	214 645	116 640	330 575	11 405
3329	Other fabricated metal product mfg	-	5	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	5	2	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	10	1 165	38 207	836	1 550	23 032	84 491	118 288	196 334	4 201
3331	Agriculture, construction, & mining machinery mfg	-	7	6	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	7	6	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	7	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	9	984	21 872	760	1 538	14 606	57 866	81 403	137 847	D
CUYAHOGA COUNTY, OH													
31-33	Manufacturing	-	2 712	975	116 680	4 640 647	79 865	168 379	2 783 617	11 552 746	11 936 791	23 382 330	1 241 924
311	Food mfg	1	118	31	3 813	113 906	2 724	5 381	71 668	645 639	491 184	1 137 016	25 643
3114	Fruit & vegetable preserving & specialty food mfg	-	4	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	4	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	6	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	71	11	1 341	34 851	998	1 783	19 915	121 707	48 417	170 591	3 759
31181	Bread & bakery product mfg	1	67	8	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	13	7	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	14	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	2	14	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	32	7	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	20	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	58	39	3 490	118 894	2 627	5 514	75 981	260 795	346 541	605 254	29 568
3222	Converted paper product mfg	-	56	38	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	37	26	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	18	13	916	26 558	657	1 294	16 642	63 132	96 606	160 283	D
322212	Folding paperboard box mfg	-	11	8	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	9	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	324	57	6 346	199 112	4 707	9 500	120 113	426 024	238 516	664 625	30 643
3231	Printing & related support activities	2	324	57	6 346	199 112	4 707	9 500	120 113	426 024	238 516	664 625	30 643
32311	Printing	2	284	52	5 890	184 460	4 353	8 775	110 232	397 617	231 721	629 521	D
323110	Commercial lithographic printing	1	161	40	h	D	D	D	D	D	D	D	20 010

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CUYAHOGA COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	5	24	10	f	D	D	D	D	D	D	D	
3241	Petroleum & coal products mfg	5	24	10	f	D	D	D	D	D	D	D	
325	Chemical mfg	—	113	58	8 066	329 676	4 162	8 313	140 130	1 299 596	1 248 951	2 561 225	87 244
3251	Basic chemical mfg	—	16	11	1 056	42 975	473	1 018	18 906	185 671	240 803	425 497	14 233
32519	Other basic organic chemical mfg	—	8	6	527	18 647	267	550	9 380	83 634	152 508	235 001	9 955
3254	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	6	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	28	16	h	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	20	11	2 179	106 238	828	1 723	36 057	268 114	352 133	622 799	16 091
325510	Paint & coating mfg	—	20	11	2 179	106 238	828	1 723	36 057	268 114	352 133	622 799	16 091
32552	Adhesive mfg	1	8	5	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg	1	8	5	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	19	7	1 903	62 894	1 031	1 932	25 403	392 038	235 279	635 600	D
32561	Soap & cleaning compound mfg	—	16	5	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	1	3	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	1	3	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	35	16	1 354	58 905	765	1 550	24 895	217 826	219 162	437 869	16 489
32599	All other chemical product & preparation mfg	2	25	12	1 086	48 628	610	1 211	20 117	202 798	189 364	390 022	D
325998	All other miscellaneous chemical product & preparation mfg	2	18	8	831	37 462	466	903	15 994	171 140	152 878	323 032	D
326	Plastics & rubber products mfg	1	92	45	3 841	112 514	2 971	6 141	69 865	290 008	259 927	549 962	22 556
3261	Plastics product mfg	1	79	40	h	D	D	D	D	D	D	D	18 948
32619	Other plastics product mfg	1	48	26	2 076	57 799	1 570	3 366	35 678	161 592	135 730	297 073	D
326199	All other plastics product mfg	1	47	25	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	13	5	f	D	D	D	D	D	D	D	3 608
327	Nonmetallic mineral product mfg	4	72	24	1 633	57 043	1 206	2 651	38 545	135 731	126 818	260 002	13 222
331	Primary metal mfg	—	76	51	11 700	642 265	9 466	22 121	499 024	1 447 945	2 333 496	3 728 869	219 478
3311	Iron & steel mills & ferroalloy mfg	—	2	2	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	11	6	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	10	5	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	1	18	14	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	5	5	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	2	11	7	f	D	D	D	D	D	D	D	D
3315	Foundries	—	41	25	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	9	5	h	D	D	D	D	D	D	D	D
331511	Iron foundries	—	6	2	h	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	32	20	1 609	56 143	1 229	2 620	38 466	115 901	90 885	204 697	9 802
331521	Aluminum die-casting foundries	—	8	6	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	1	12	7	632	23 564	517	1 130	16 471	41 720	26 456	68 225	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CUYAHOGA COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	786	286	24 171	874 197	17 669	37 494	549 049	2 004 040	1 699 672	3 722 062	169 736
3321	Forging & stamping	—	68	41	4 522	195 429	3 576	8 261	139 890	493 038	485 664	978 221	68 962
33211	Iron & steel forging	—	68	41	4 522	195 429	3 576	8 261	139 890	493 038	485 664	978 221	68 962
332111	Nonferrous forging	—	11	8	874	40 027	635	1 450	24 430	85 715	99 662	187 354	D
332112	Metal stamping	—	2	1	g	D	D	D	D	D	D	D	D
332116	Plate work & fabricated structural product mfg	1	47	27	1 665	54 298	1 284	2 661	35 505	111 249	88 920	199 319	D
3323	Architectural & structural metals mfg	1	89	29	1 842	60 512	1 233	2 436	33 923	118 441	113 615	232 411	5 198
33231	Ornamental & architectural metal products mfg	—	34	12	629	23 381	430	848	12 695	42 496	49 669	92 180	D
33232	Sheet metal work mfg	2	55	17	1 213	37 131	803	1 588	21 228	75 945	63 946	140 231	D
332322	Boiler, tank, & shipping container mfg	2	30	10	803	24 838	547	1 045	14 174	52 214	40 716	93 464	D
3324	Hardware mfg	4	17	7	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	5	13	6	1 096	27 564	483	1 090	12 261	71 429	43 631	113 408	D
33251	Hardware mfg	5	13	6	1 096	27 564	483	1 090	12 261	71 429	43 631	113 408	D
332510	Hardware mfg	5	13	6	1 096	27 564	483	1 090	12 261	71 429	43 631	113 408	D
3326	Spring & wire product mfg	—	22	11	986	30 347	766	1 618	18 104	58 704	40 279	98 382	2 632
33261	Other fabricated wire product mfg	—	22	11	986	30 347	766	1 618	18 104	58 704	40 279	98 382	2 632
332618	Machine shops, turned product, & screw, nut, & bolt mfg	—	16	10	758	25 270	572	1 182	13 798	47 982	34 107	81 703	1 498
3327	Machine shops	1	337	94	7 291	263 162	5 584	11 872	176 900	566 076	336 387	906 789	40 184
33271	Machine shops	1	259	58	3 633	131 452	2 790	5 750	87 162	258 212	98 281	356 401	14 946
332710	Machine shops	1	259	58	3 633	131 452	2 790	5 750	87 162	258 212	98 281	356 401	14 946
33272	Turned product & screw, nut, & bolt mfg	—	78	36	3 658	131 710	2 794	6 122	89 738	307 864	238 106	550 388	25 238
332721	Precision turned product mfg	—	47	16	1 708	57 133	1 412	3 242	42 122	161 970	91 887	252 989	9 268
332722	Bolt, nut, screw, rivet, & washer mfg	—	31	20	1 950	74 577	1 382	2 880	47 616	145 894	146 219	297 399	15 970
3328	Coating, engraving, heat treating, & allied activities	1	143	58	3 733	118 191	2 864	5 800	73 077	282 752	229 813	516 965	20 096
33281	Coating, engraving, heat treating, & allied activities	1	143	58	3 733	118 191	2 864	5 800	73 077	282 752	229 813	516 965	20 096
332811	Metal heat treating	2	31	12	860	31 471	670	1 386	21 352	66 711	37 776	104 370	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	27	11	804	25 885	582	1 207	13 035	60 633	120 577	185 245	5 693
332813	Electroplating, plating, polishing, anodizing, & coloring	1	85	35	2 069	60 835	1 612	3 207	38 690	155 408	71 460	227 350	D
3329	Other fabricated metal product mfg	—	80	33	3 687	144 785	2 412	4 937	73 089	344 813	367 984	725 004	24 807
33291	Metal valve mfg	—	24	14	2 096	84 211	1 383	2 820	43 759	221 520	253 811	483 700	18 076
332912	Fluid power valve & hose fitting mfg	—	7	4	g	D	D	D	D	D	D	D	5 419
33299	All other fabricated metal product mfg	1	56	19	1 591	60 574	1 029	2 117	29 330	123 293	114 173	241 304	6 731
332999	All other miscellaneous fabricated metal product mfg	—	34	13	852	28 557	618	1 244	16 443	64 249	48 556	114 154	3 957
333	Machinery mfg	—	360	138	16 335	641 972	9 811	20 371	335 173	1 329 964	1 490 604	2 748 022	71 697
3332	Industrial machinery mfg	—	37	17	1 494	64 553	742	1 324	25 612	210 285	149 288	341 919	3 339
33322	Plastics & rubber industry machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	6	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	31	14	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	14	8	1 318	48 069	729	1 606	20 798	87 006	66 899	153 610	4 317
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	14	8	1 318	48 069	729	1 606	20 798	87 006	66 899	153 610	4 317
333414	Heating equipment (except warm air furnaces) mfg	—	6	3	771	32 011	371	816	12 151	60 743	33 430	93 559	2 381

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CUYAHOGA COUNTY, OH—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	—	189	58	4 934	195 754	3 459	7 142	125 102	329 943	192 543	515 199	22 554
33351	Metalworking machinery mfg	—	189	58	4 934	195 754	3 459	7 142	125 102	329 943	192 543	515 199	22 554
333511	Industrial mold mfg ...	—	38	10	564	24 578	446	949	17 716	41 635	11 599	53 500	2 977
333512	Machine tool (metal cutting types) mfg ...	—	12	9	766	32 216	511	1 146	19 816	49 724	48 393	96 271	D
333514	Special die & tool, die set, jig, & fixture mfg .	—	85	21	1 860	73 713	1 304	2 540	46 344	130 369	72 600	203 229	8 339
333515	Cutting tool & machine tool accessory mfg ..	1	36	11	1 334	49 060	942	1 918	31 920	73 413	35 927	106 931	8 094
3336	Engine, turbine, & power transmission equipment mfg	4	17	13	1 432	56 847	845	1 755	28 513	124 349	90 672	213 055	7 888
33361	Engine, turbine, & power transmission equipment mfg	4	17	13	1 432	56 847	845	1 755	28 513	124 349	90 672	213 055	7 888
333612	Speed changer, industrial high-speed drive, & gear mfg	5	6	4	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	5	7	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	79	33	6 284	245 578	3 426	7 211	117 709	455 218	898 804	1 312 025	31 220
33392	Material handling equipment mfg	—	18	13	g	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	8	5	533	22 123	330	885	10 673	41 253	43 269	84 540	1 197
33399	All other general-purpose machinery mfg	—	54	17	4 864	190 324	2 656	5 458	93 390	330 736	733 174	1 030 999	D
333991	Power-driven handtool mfg	—	9	5	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	4	2	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	99	46	5 600	209 653	2 658	5 484	63 841	526 263	466 094	997 464	33 285
3342	Communications equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	9	4	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	9	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	25	11	f	D	D	D	D	D	D	D	8 436
33441	Semiconductor & other electronic component mfg	2	25	11	f	D	D	D	D	D	D	D	8 436
3345	Navigational, measuring, medical, & control instruments mfg	—	44	26	3 213	139 850	1 338	2 861	38 287	368 694	336 032	708 955	D
33451	Navigational, measuring, medical, & control instruments mfg	—	44	26	3 213	139 850	1 338	2 861	38 287	368 694	336 032	708 955	D
334515	Electricity measuring & testing instrument mfg	—	10	7	g	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	—	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	76	44	8 982	352 191	4 652	9 144	128 374	1 043 578	805 088	1 842 494	55 700
3351	Electric lighting equipment mfg	—	18	6	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	16	4	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	1	6	3	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	5	5	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	5	5	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	3	3	f	D	D	D	D	D	D	D	D

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	CUYAHOGA COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	28	15	4 468	202 749	1 776	3 759	55 559	682 543	335 692	1 014 001	D
33531	Electrical equipment mfg	-	28	15	4 468	202 749	1 776	3 759	55 559	682 543	335 692	1 014 001	D
335312	Motor & generator mfg	-	10	5	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	10	6	3 112	158 532	763	1 595	27 718	575 398	255 227	831 847	D
3359	Other electrical equipment & component mfg	-	25	18	g	D	D	D	D	D	D	D	10 386
33593	Wiring device mfg	-	9	7	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	10	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	108	67	j	D	D	D	D	D	D	D	443 243
3363	Motor vehicle parts mfg ...	-	78	50	j	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	11	5	h	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	6	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	5	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	34	27	i	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	34	27	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	16	10	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	5	14	8	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	16	11	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	16	11	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	5	5	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	11	6	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	93	18	1 332	40 618	895	1 784	21 162	72 723	85 287	157 853	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	65	6	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	22	10	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	22	10	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	15	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	188	38	2 851	81 143	2 025	3 769	42 995	182 650	118 964	299 861	D
3391	Medical equipment & supplies mfg	2	88	21	1 570	44 536	1 135	2 050	23 690	94 098	56 758	148 795	5 532
33911	Medical equipment & supplies mfg	2	88	21	1 570	44 536	1 135	2 050	23 690	94 098	56 758	148 795	5 532
339113	Surgical appliance & supplies mfg	-	12	6	694	17 281	544	954	9 907	37 652	26 833	63 795	D
3399	Other miscellaneous mfg ...	1	100	17	1 281	36 607	890	1 719	19 305	88 552	62 206	151 066	D
33995	Sign mfg	-	32	8	507	17 072	305	624	7 553	35 026	22 394	57 359	D
339950	Sign mfg	-	32	8	507	17 072	305	624	7 553	35 026	22 394	57 359	D
33999	All other miscellaneous mfg	2	39	6	531	14 236	416	809	9 006	35 537	29 637	65 249	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DARKE COUNTY, OH													
31-33	Manufacturing	1	92	29	5 811	172 412	4 299	8 490	107 075	545 213	600 670	1 147 367	41 481
326	Plastics & rubber products mfg	2	7	5	832	24 153	693	1 691	19 482	55 276	111 499	166 177	20 827
3261	Plastics product mfg	2	7	5	832	24 153	693	1 691	19 482	55 276	111 499	166 177	20 827
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	7	1 184	31 758	630	881	10 919	20 585	47 146	65 438	2 844
3329	Other fabricated metal product mfg	2	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	2	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	1 225	38 456	1 073	2 257	31 598	219 055	179 605	405 626	D
3363	Motor vehicle parts mfg	-	5	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	8	2	f	D	D	D	D	D	D	D	D
DEFIANCE COUNTY, OH													
31-33	Manufacturing	-	48	24	7 150	329 244	6 119	13 337	272 245	645 795	698 771	1 338 882	29 629
327	Nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	8	766	22 115	638	1 289	16 815	65 669	59 167	120 767	3 427
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	3 978
336	Transportation equipment mfg	-	5	4	559	21 194	411	927	12 950	41 420	33 142	73 665	6 159
3363	Motor vehicle parts mfg	-	5	4	559	21 194	411	927	12 950	41 420	33 142	73 665	6 159
DELAWARE COUNTY, OH													
31-33	Manufacturing	-	117	40	5 131	187 616	3 234	6 804	97 748	725 123	571 824	1 285 693	32 523
323	Printing & related support activities	-	13	3	518	14 222	338	687	7 731	33 952	19 081	52 601	1 874
3231	Printing & related support activities	-	13	3	518	14 222	338	687	7 731	33 952	19 081	52 601	1 874
32311	Printing	-	13	3	518	14 222	338	687	7 731	33 952	19 081	52 601	1 874
325	Chemical mfg	-	8	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	4	1	g	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	3	1	g	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	3	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	12	6	556	18 554	356	647	8 264	47 485	25 491	73 124	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	5	552	16 533	492	1 012	13 166	50 792	53 263	101 457	2 403

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ERIE COUNTY, OH													
31-33	Manufacturing	-	117	60	9 176	409 211	7 192	15 606	304 126	1 006 347	1 249 309	2 251 459	108 218
311	Food mfg	-	8	5	533	15 004	461	917	11 968	44 439	190 888	235 436	1 029
326	Plastics & rubber products mfg	-	10	6	1 133	36 296	1 005	2 095	29 654	81 679	72 831	154 141	14 509
3261	Plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	12	2 305	127 527	1 832	4 229	98 492	76 011	206 034	280 524	9 880
3329	Other fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	8	1 008	37 051	585	1 119	17 047	80 452	44 703	124 311	3 774
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336321	Vehicular lighting equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
FAIRFIELD COUNTY, OH													
31-33	Manufacturing	1	154	41	6 251	188 190	4 762	9 335	125 351	464 348	373 783	833 702	32 676
327	Nonmetallic mineral product mfg	-	14	7	1 971	62 510	1 584	3 157	43 178	118 879	76 950	195 641	12 663
3272	Glass & glass product mfg	-	7	6	1 903	60 702	1 534	3 064	41 984	115 159	73 099	188 029	D
32721	Glass & glass product mfg	-	7	6	1 903	60 702	1 534	3 064	41 984	115 159	73 099	188 029	D
327212	Other pressed & blown glass & glassware mfg	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	46	12	1 350	40 314	991	1 936	25 116	91 746	59 732	150 098	2 491
FAYETTE COUNTY, OH													
31-33	Manufacturing	-	45	22	2 959	83 460	2 426	4 754	66 188	241 045	334 077	572 809	19 845
311	Food mfg	-	9	5	513	9 181	359	798	7 361	33 655	85 341	117 790	5 885
326	Plastics & rubber products mfg	-	8	5	1 120	38 739	1 003	1 944	33 901	114 007	107 987	220 569	7 894
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, OH													
31-33	Manufacturing	-	1 061	376	48 265	1 754 559	34 268	66 850	1 059 500	6 256 934	5 635 190	11 837 662	470 977
311	Food mfg	-	69	29	4 969	172 821	3 388	6 552	100 140	1 430 645	828 402	2 278 733	29 955
3115	Dairy product mfg	-	4	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	3	3	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	11	9	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	11	9	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	32	5	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	32	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	7	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	9	5	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	11	7	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	11	7	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	8	5	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	4	4	f	D	D	D	D	D	D	D	D
31212	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	2	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	8	14	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	10	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FRANKLIN COUNTY, OH—Con.												
	Manufacturing—Con.												
322	Paper mfg	—	17	13	793	24 964	606	1 235	14 843	62 228	66 979	127 866	4 623
3222	Converted paper product mfg	—	16	12	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	10	9	661	21 162	497	1 034	12 253	52 553	56 463	107 650	D
323	Printing & related support activities	1	192	46	3 626	112 093	2 621	4 811	67 807	229 038	158 472	388 132	18 239
3231	Printing & related support activities	1	192	46	3 626	112 093	2 621	4 811	67 807	229 038	158 472	388 132	18 239
32311	Printing	1	168	40	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	80	33	2 424	77 046	1 808	3 375	47 968	163 507	126 080	289 320	14 887
325	Chemical mfg	—	51	24	3 125	123 002	1 798	3 554	54 969	498 210	425 051	905 325	83 114
3254	Pharmaceutical & medicine mfg	—	6	5	1 019	41 836	653	1 213	20 989	275 437	111 780	371 737	D
32541	Pharmaceutical & medicine mfg	—	6	5	1 019	41 836	653	1 213	20 989	275 437	111 780	371 737	D
325412	Pharmaceutical preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	18	11	g	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	5	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	8	5	f	D	D	D	D	D	D	D	D
32552	Adhesive mfg	2	10	6	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg	2	10	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	60	26	4 005	130 147	3 109	5 489	77 820	342 764	269 854	610 175	28 611
3261	Plastics product mfg	2	52	25	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	—	5	3	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	6	3	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	—	3	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	31	15	2 598	79 590	1 983	3 371	46 494	206 406	157 551	362 502	D
326199	All other plastics product mfg	3	27	13	h	D	D	D	D	D	D	D	19 898
327	Nonmetallic mineral product mfg	—	48	25	3 601	133 683	2 730	5 750	89 510	484 185	273 483	747 622	63 727
3272	Glass & glass product mfg	—	10	4	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	10	4	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	4	2	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	19	12	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	11	6	1 079	47 673	749	1 601	27 748	180 002	112 598	300 839	D
32791	Abrasive product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	18	8	2 219	70 802	1 811	3 239	51 200	193 595	220 197	415 413	D
3315	Foundries	—	10	4	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	6	4	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	3	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	175	62	6 285	248 157	4 844	9 808	170 650	649 500	668 448	1 305 835	30 012
3321	Forging & stamping	1	10	7	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	1	10	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	41	19	1 013	33 726	727	1 348	19 094	105 551	54 376	158 413	2 465
33232	Ornamental & architectural metal products mfg	2	25	12	620	20 869	450	884	11 981	40 129	24 508	64 763	1 249
3324	Boiler, tank, & shipping container mfg	—	11	6	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	2	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	57	10	f	D	D	D	D	D	D	D	D
33271	Machine shops	3	53	10	628	19 399	480	954	13 744	33 411	17 985	51 111	2 157
332710	Machine shops	3	53	10	628	19 399	480	954	13 744	33 411	17 985	51 111	2 157

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FRANKLIN COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	—	20	7	559	19 324	419	818	12 072	71 156	26 352	97 210	1 282
33281	Coating, engraving, heat treating, & allied activities.....	—	20	7	559	19 324	419	818	12 072	71 156	26 352	97 210	1 282
3329	Other fabricated metal product mfg.....	—	17	6	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	17	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	77	39	4 411	171 074	2 686	5 599	84 334	456 591	402 957	857 813	28 152
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	5	5	1 983	78 332	1 256	2 837	41 600	218 139	193 728	415 393	12 804
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	5	5	1 983	78 332	1 256	2 837	41 600	218 139	193 728	415 393	12 804
333415	AC & warm air heating & commercial industrial refrig equip mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	1	24	10	1 014	39 305	546	993	15 906	109 396	96 945	205 964	4 406
33399	All other general-purpose machinery mfg.....	1	16	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	54	23	5 086	247 028	3 200	5 912	145 843	723 182	879 574	1 575 131	50 486
3342	Communications equipment mfg.....	—	6	3	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	—	4	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	—	4	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	3	18	8	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	3	18	8	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	3	10	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	21	10	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	21	10	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	36	19	3 209	96 911	2 647	5 807	70 027	315 522	651 069	964 080	42 101
3362	Motor vehicle body & trailer mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg.....	—	5	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg... Motor vehicle seating & interior trim mfg.....	—	24	12	g	D	D	D	D	D	D	D	41 148
33636	Motor vehicle seating & interior trim mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg... Other motor vehicle parts mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	—	10	5	874	28 590	724	1 578	18 813	91 990	150 381	243 283	D
336399	All other motor vehicle parts mfg.....	—	10	5	874	28 590	724	1 578	18 813	91 990	150 381	243 283	D
337	Furniture & related product mfg.....	1	48	11	1 266	37 533	944	1 828	22 879	85 081	75 594	160 840	2 617
3372	Office furniture (including fixtures) mfg.....	2	17	6	763	23 903	572	1 115	14 240	40 394	27 882	68 476	1 576
33721	Office furniture (including fixtures) mfg.....	2	17	6	763	23 903	572	1 115	14 240	40 394	27 882	68 476	1 576
337215	Showcase, partition, shelving, & locker mfg.....	3	13	5	679	21 549	503	965	12 632	36 517	24 944	61 571	1 550

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRANKLIN COUNTY, OH—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	3	119	24	1 883	57 166	1 251	2 407	29 800	106 771	108 305	215 911	D
3391	Medical equipment & supplies mfg.....	3	56	10	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	3	56	10	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	2	63	14	g	D	D	D	D	D	D	D	D
33995	Sign mfg.....	2	37	12	f	D	D	D	D	D	D	D	D
339950	Sign mfg.....	2	37	12	f	D	D	D	D	D	D	D	D
FULTON COUNTY, OH													
31-33	Manufacturing....	-	110	59	9 108	276 538	7 288	15 256	165 470	807 833	870 386	1 673 351	105 701
311	Food mfg.....	-	9	4	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	3	10	7	662	16 274	513	1 024	10 689	39 067	43 206	81 158	6 399
3261	Plastics product mfg.....	5	9	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	6	6	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel.....	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel.....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	26	14	1 583	49 764	1 251	2 567	32 730	115 782	157 688	268 466	D
3323	Architectural & structural metals mfg.....	-	7	5	517	17 323	400	766	10 256	36 036	45 783	81 294	D
336	Transportation equipment mfg.....	-	9	6	898	24 487	681	1 761	16 351	58 076	113 721	175 445	D
3363	Motor vehicle parts mfg....	-	9	6	898	24 487	681	1 761	16 351	58 076	113 721	175 445	D
337	Furniture & related product mfg.....	-	8	5	h	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	8	5	h	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	5	5	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg.....	-	4	4	h	D	D	D	D	D	D	D	D
GALLIA COUNTY, OH													
31-33	Manufacturing....	-	18	5	948	26 851	759	1 619	19 216	72 748	45 606	117 640	3 821
GEAUGA COUNTY, OH													
31-33	Manufacturing....	1	233	82	9 851	306 167	7 117	14 401	180 718	692 614	679 650	1 380 222	47 773
325	Chemical mfg.....	3	11	4	512	14 237	339	529	7 364	44 505	60 955	104 618	3 485
326	Plastics & rubber products mfg.....	-	43	31	3 629	100 682	2 733	5 261	61 750	243 928	216 678	460 874	15 160
3261	Plastics product mfg.....	1	30	21	1 894	49 984	1 440	2 571	30 349	125 259	84 269	209 117	8 835
32619	Other plastics product mfg.....	1	22	16	1 546	41 297	1 170	2 134	24 973	105 796	64 597	169 983	7 994
326199	All other plastics product mfg.....	1	21	16	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	13	10	1 735	50 698	1 293	2 690	31 401	118 669	132 409	251 757	6 325
32629	Other rubber product mfg.....	-	13	10	1 735	50 698	1 293	2 690	31 401	118 669	132 409	251 757	6 325
326291	Rubber product mfg for mechanical use.....	-	9	7	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	45	9	691	23 636	456	834	11 693	43 509	31 100	75 343	3 063
333	Machinery mfg.....	-	25	12	1 195	46 424	761	1 572	24 176	107 838	70 421	179 072	5 446

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
GAUGA COUNTY, OH														
—Con.														
31-33	Manufacturing—Con.													
337	Furniture & related product mfg	—	8	1	g	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	1	g	D	D	D	D	D	D	D	D	
33711	Wood kitchen cabinet & counter top mfg	—	6	1	g	D	D	D	D	D	D	D	D	
337110	Wood kitchen cabinet & counter top mfg ...	—	6	1	g	D	D	D	D	D	D	D	D	
GREENE COUNTY, OH														
31-33	Manufacturing	—	141	48		4 952	166 168	3 542	7 499	102 997	430 549	306 003	737 958	41 039
326	Plastics & rubber products mfg	—	9	6		870	28 157	635	1 271	15 011	62 497	70 082	132 160	6 233
332	Fabricated metal product mfg	1	27	9	f	D	D	D	D	D	D	D	D	4 684
333	Machinery mfg	—	24	8	f	D	D	D	D	D	D	D	D	2 512
336	Transportation equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
GUERNSEY COUNTY, OH														
31-33	Manufacturing	—	59	26		3 773	113 675	3 048	6 241	86 328	399 807	496 326	899 947	26 802
326	Plastics & rubber products mfg	—	13	8		1 145	31 475	917	1 954	22 167	74 973	78 959	152 642	4 293
3261	Plastics product mfg	—	11	6	f	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	9	5		737	19 918	582	1 414	13 553	47 204	50 024	97 143	D
326199	All other plastics product mfg	—	9	5		737	19 918	582	1 414	13 553	47 204	50 024	97 143	D
333	Machinery mfg	—	10	3		646	18 714	497	905	13 728	39 787	43 965	84 830	3 457
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
HAMILTON COUNTY, OH														
31-33	Manufacturing	—	1 450	550		76 053	3 027 893	48 484	97 496	1 593 465	10 275 769	9 817 883	20 077 915	853 298
311	Food mfg	2	102	44		7 242	238 155	4 256	9 078	124 465	1 319 311	1 088 082	2 388 959	D
3114	Fruit & vegetable preserving & specialty food mfg	9	4	3	f	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	9	1	1	f	D	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	16	7	g	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	16	7	g	D	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	11	5	g	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	50	15		2 176	70 345	1 401	2 904	45 604	686 826	174 504	858 650	D
31181	Bread & bakery product mfg	—	45	11	g	D	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	14	6	f	D	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	5	4	f	D	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	—	3	3	f	D	D	D	D	D	D	D	D	D
3119	Other food mfg	3	18	12	g	D	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	—	5	4	f	D	D	D	D	D	D	D	D	D
31199	All other food mfg	5	6	3	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAMILTON COUNTY, OH—Con.												
	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	11	8	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	11	8	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	5	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	961	34 504	391	882	14 765	368 051	265 894	634 974	D
314	Textile product mills	—	31	10	756	18 638	496	984	9 546	30 193	40 968	74 596	D
315	Apparel mfg	1	21	8	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	14	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg	5	30	8	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	4	25	7	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	7	9	4	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	7	9	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	41	29	2 628	89 471	1 978	4 226	57 475	249 099	297 800	548 878	25 133
3222	Converted paper product mfg	2	38	26	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	24	19	1 887	66 764	1 435	3 136	42 905	174 423	237 247	414 270	20 784
322211	Corrugated & solid fiber box mfg	—	9	8	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	4	9	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	250	69	6 700	232 268	4 844	9 698	142 577	523 914	302 845	826 787	D
3231	Printing & related support activities	1	250	69	6 700	232 268	4 844	9 698	142 577	523 914	302 845	826 787	D
32311	Printing	1	213	55	i	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	1	91	20	3 120	108 474	2 272	4 663	67 057	252 460	132 197	385 758	D
323116	Manifold business form printing	3	8	6	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	—	37	14	f	D	D	D	D	D	D	D	D
323122	Prepress services	—	31	12	f	D	D	D	D	D	D	D	3 706
324	Petroleum & coal products mfg	—	25	6	878	37 145	493	988	17 800	114 982	295 898	412 372	D
3241	Petroleum & coal products mfg	—	25	6	878	37 145	493	988	17 800	114 982	295 898	412 372	D
32419	Other petroleum & coal products mfg	—	5	2	f	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	—	5	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	88	49	7 973	369 922	4 703	9 449	199 750	2 278 593	2 108 567	4 372 418	D
3251	Basic chemical mfg	—	20	12	2 544	121 333	1 672	3 383	74 214	521 188	583 900	1 105 512	D
32513	Dye & pigment mfg	2	3	3	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	2	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	6	5	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	2	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	7	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	7	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	5	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	16	9	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	9	7	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	—	9	7	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	20	13	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	18	11	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	9	7	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	22	10	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAMILTON COUNTY, OH—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg.....	1	57	25	2 944	92 557	2 222	4 463	58 028	236 934	185 185	424 558	26 661
3261	Plastics product mfg.....	1	49	22	h	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg....	—	3	1	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	4	28	14	g	D	D	D	D	D	D	D	5 799
326199	All other plastics product mfg.....	4	27	13	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	42	19	868	28 265	603	1 153	15 444	83 981	74 448	158 795	6 208
331	Primary metal mfg.....	—	22	15	2 021	65 140	1 401	3 053	41 516	122 636	87 504	212 376	6 691
3315	Foundries.....	—	18	12	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	—	5	5	860	29 191	679	1 466	21 762	54 789	28 627	84 138	4 067
331511	Iron foundries.....	—	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	—	13	7	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	268	96	10 705	363 274	8 001	15 484	240 764	784 689	614 618	1 404 074	50 310
3323	Architectural & structural metals mfg.....	—	59	23	2 552	83 771	1 894	3 715	54 083	199 056	159 915	358 238	10 323
33232	Ornamental & architectural metal products mfg.....	—	37	15	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg.....	—	8	3	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg.....	—	24	10	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg.....	—	8	5	1 770	58 271	1 533	2 532	48 141	84 891	115 436	210 454	D
33242	Metal tank (heavy gauge) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	7	4	f	D	D	D	D	D	D	D	D
332431	Metal can mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	108	28	2 451	88 268	1 851	4 154	59 654	213 868	85 396	294 693	16 516
33271	Machine shops.....	—	95	22	2 030	75 277	1 549	3 552	50 961	186 073	63 505	245 110	13 767
332710	Machine shops.....	—	95	22	2 030	75 277	1 549	3 552	50 961	186 073	63 505	245 110	13 767
3328	Coating, engraving, heat treating, & allied activities..	—	39	18	1 140	39 270	830	1 659	24 655	88 561	24 960	113 088	D
33281	Coating, engraving, heat treating, & allied activities.....	—	39	18	1 140	39 270	830	1 659	24 655	88 561	24 960	113 088	D
3329	Other fabricated metal product mfg.....	1	28	12	1 454	48 170	993	1 957	27 058	114 830	97 908	214 851	10 819
33291	Metal valve mfg.....	1	10	9	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg....	1	6	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	144	64	10 932	441 783	6 027	12 334	198 193	968 844	800 882	1 691 649	D
3332	Industrial machinery mfg ..	—	25	13	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	1	24	12	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	1	14	8	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	13	5	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	13	5	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	—	49	18	h	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg.....	—	49	18	h	D	D	D	D	D	D	D	D
333512	Machine tool (metal cutting types) mfg ...	—	4	4	g	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg....	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HAMILTON COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	39	21	h	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	9	5	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	3	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	6	6	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	1	5	5	796	32 436	458	963	11 185	73 953	60 315	135 339	D
33399	All other general-purpose machinery mfg	-	24	10	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	3	51	23	2 466	90 125	1 277	2 655	35 845	194 199	158 496	349 705	D
3342	Communications equipment mfg	7	8	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	7	8	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	7	8	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	25	13	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	25	13	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	34	20	3 283	105 696	2 288	4 679	56 973	282 108	253 953	536 071	13 378
3351	Electric lighting equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	4	3	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	3	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	18	8	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	18	8	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	4	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	9	7	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	34	17	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	17	7	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	11	6	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	11	6	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	7	5	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	67	13	g	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	20	5	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	20	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HAMILTON COUNTY, OH—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	120	20	2 455	73 762	1 655	3 183	36 704	204 919	162 048	368 363	11 908
3391	Medical equipment & supplies mfg.....	—	49	9	1 425	45 359	922	1 746	20 737	144 907	111 128	256 770	D
33911	Medical equipment & supplies mfg.....	—	49	9	1 425	45 359	922	1 746	20 737	144 907	111 128	256 770	D
339112	Surgical & medical instrument mfg.....	1	10	4	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	2	71	11	1 030	28 403	733	1 437	15 967	60 012	50 920	111 593	D
	HANCOCK COUNTY, OH												
31-33	Manufacturing	1	97	43	11 964	422 536	9 302	18 440	293 046	1 330 152	1 448 667	2 792 395	124 560
311	Food mfg.....	4	8	3	1 122	28 853	1 007	1 543	24 022	83 451	285 692	374 183	9 805
3118	Bakeries & tortilla mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg..	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	14	13	3 886	158 917	2 620	5 966	97 674	283 799	327 104	609 182	50 774
3261	Plastics product mfg.....	1	9	9	1 624	43 481	1 377	3 633	36 764	103 163	113 985	219 106	D
32619	Other plastics product mfg.....	3	6	6	1 161	28 469	942	2 683	23 478	56 313	73 349	130 390	2 647
326199	All other plastics product mfg.....	3	6	6	1 161	28 469	942	2 683	23 478	56 313	73 349	130 390	2 647
3262	Rubber product mfg.....	—	5	4	2 262	115 436	1 243	2 333	60 910	180 636	213 119	390 076	D
32621	Tire mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	11	2	625	26 976	540	1 018	21 431	100 214	179 400	271 868	4 651
334	Computer & electronic product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	—	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	18	13	2 876	86 238	2 335	4 448	62 107	198 736	344 087	547 554	36 142
3363	Motor vehicle parts mfg... ..	—	15	11	h	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	3	3	686	29 045	505	1 018	22 007	76 010	76 987	153 321	6 131
336370	Motor vehicle metal stamping	—	3	3	686	29 045	505	1 018	22 007	76 010	76 987	153 321	6 131
33639	Other motor vehicle parts mfg.....	—	3	3	684	17 350	543	1 065	11 462	30 976	42 456	73 971	5 048
336399	All other motor vehicle parts mfg.....	—	3	3	684	17 350	543	1 065	11 462	30 976	42 456	73 971	5 048
	HARDIN COUNTY, OH												
31-33	Manufacturing	—	38	19	2 412	84 603	1 975	3 710	63 017	212 992	275 478	484 323	15 281
336	Transportation equipment mfg.....	1	5	4	955	39 290	795	1 447	29 560	101 561	138 729	238 131	3 661
3363	Motor vehicle parts mfg... ..	1	4	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg.....	—	2	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARRISON COUNTY, OH													
31-33	Manufacturing	1	24	9	678	14 213	535	991	8 891	40 669	65 106	105 816	D
HENRY COUNTY, OH													
31-33	Manufacturing	-	54	24	3 947	148 631	3 239	6 763	114 700	1 145 543	578 076	1 721 053	62 884
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	6	664	21 933	540	1 012	17 200	70 045	70 147	141 155	6 651
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
HIGHLAND COUNTY, OH													
31-33	Manufacturing	-	41	16	3 851	94 380	3 297	6 758	68 322	280 686	367 097	653 806	32 338
326	Plastics & rubber products mfg	4	3	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	4	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	g	D	D	D	D	D	D	D	D
HOCKING COUNTY, OH													
31-33	Manufacturing	-	26	13	2 102	60 399	1 804	3 487	47 319	174 526	165 492	341 250	7 923
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
HOLMES COUNTY, OH													
31-33	Manufacturing	1	164	52	4 621	100 248	3 889	7 188	76 259	328 952	380 991	710 140	22 654
311	Food mfg	1	14	6	778	9 990	678	938	7 338	29 599	104 069	133 593	2 680
3116	Meat product mfg	2	3	2	579	5 298	547	693	4 533	16 510	52 109	68 994	D
31161	Animal slaughtering & processing.....	2	3	2	579	5 298	547	693	4 533	16 510	52 109	68 994	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	46	15	874	17 380	771	1 415	14 380	38 826	61 582	101 219	5 939
3219	Other wood product mfg ...	1	32	11	591	11 784	526	1 014	9 876	28 779	38 513	66 253	2 513
326	Plastics & rubber products mfg	-	13	10	1 069	28 889	950	2 055	22 539	126 692	60 006	186 241	7 020
3262	Rubber product mfg	-	6	6	642	16 158	589	1 259	13 374	40 612	17 443	58 328	383
32629	Other rubber product mfg	-	6	6	642	16 158	589	1 259	13 374	40 612	17 443	58 328	383
326291	Rubber product mfg for mechanical use	-	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	11	3	632	16 641	538	1 052	12 845	68 709	91 237	159 561	3 195

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HURON COUNTY, OH													
31-33	Manufacturing	-	110	56	11 114	326 047	9 239	18 475	239 813	988 289	1 162 801	2 152 726	51 977
311	Food mfg	-	4	3	877	28 777	694	1 302	21 812	222 966	319 943	545 686	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	7	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	7	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	7	1	g	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	8	1 143	26 720	928	2 111	17 228	71 660	58 173	131 032	3 441
3261	Plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	2 763
32619	Other plastics product mfg	-	6	3	823	16 249	749	1 716	13 860	30 371	33 942	65 235	D
326199	All other plastics product mfg	-	6	3	823	16 249	749	1 716	13 860	30 371	33 942	65 235	D
332	Fabricated metal product mfg	-	24	9	1 126	30 116	883	1 662	20 468	57 856	35 400	93 374	4 161
3328	Coating, engraving, heat treating, & allied activities	-	1	1	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	1	1	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	10	2 394	71 719	2 037	4 467	54 845	176 895	359 222	539 264	18 379
3331	Agriculture, construction, & mining machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	4	943	24 699	853	1 118	17 470	53 075	73 021	125 030	D
3363	Motor vehicle parts mfg	-	5	2	f	D	D	D	D	D	D	D	405
33637	Motor vehicle metal stamping	-	3	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	4	3	567	12 681	455	762	8 418	68 111	29 890	97 017	870
JACKSON COUNTY, OH													
31-33	Manufacturing	-	37	14	3 631	83 403	3 174	6 570	65 134	422 817	359 631	780 489	34 614
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	JACKSON COUNTY, OH—Con.													
	Manufacturing—Con.													
326	Plastics & rubber products mfg	8	2	2	f	D	D	D	D	D	D	D	D	
3261	Plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D	
326199	All other plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D	
	JEFFERSON COUNTY, OH													
31-33	Manufacturing	—	45	12		2 244	78 694	1 579	3 301	49 589	187 550	301 370	463 283	18 024
331	Primary metal mfg	—	4	3	g	D	D	D	D	D	D	D	D	
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D	
331111	Iron & steel mills	—	2	2	f	D	D	D	D	D	D	D	D	
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	f	D	D	D	D	D	D	D	D	
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	1	1	f	D	D	D	D	D	D	D	D	
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D	
	KNOX COUNTY, OH													
31-33	Manufacturing	—	72	30		4 924	174 423	3 550	7 373	104 621	399 281	573 664	972 343	27 938
333	Machinery mfg	—	7	4	g	1 829	86 479	1 042	2 417	40 944	149 941	184 793	329 580	D
3339	Other general-purpose machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	5	919	29 041	771	1 600	20 971	88 296	178 541	272 072	5 009	
3363	Motor vehicle parts mfg ...	—	5	4	f	D	D	D	D	D	D	D	D	
	LAKE COUNTY, OH													
31-33	Manufacturing	—	769	262		25 423	893 185	18 166	37 099	518 756	2 746 752	1 880 518	4 660 968	186 520
322	Paper mfg	—	3	3	g	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	—	3	3	g	D	D	D	D	D	D	D	D	
32222	Paper bag & coated & treated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D	
322222	Coated & laminated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	3	46	8	f	D	D	D	D	D	D	D	D	
3231	Printing & related support activities	3	46	8	f	D	D	D	D	D	D	D	D	
32311	Printing	3	44	8	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	1	26	17	1 568	73 435	1 075	2 273	44 898	343 960	463 811	810 422	29 267	
3251	Basic chemical mfg	—	5	4	620	33 838	435	926	20 532	159 806	268 438	431 937	18 437	
32519	Other basic organic chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D	
325199	All other basic organic chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	—	42	26	1 668	48 602	1 265	2 581	29 494	111 488	111 333	223 154	11 614	
3261	Plastics product mfg	—	29	18	g	D	D	D	D	D	D	D	9 175	
32619	Other plastics product mfg	—	19	12	809	25 514	589	1 178	14 509	62 426	67 427	130 124	7 742	
326199	All other plastics product mfg	—	18	11	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	—	33	8	683	23 939	516	1 147	17 866	143 617	47 106	191 442	11 779	
331	Primary metal mfg	—	17	7	1 532	44 471	1 191	2 563	29 082	101 306	91 241	195 106	12 508	
3315	Foundries	—	9	5	g	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries	—	5	3	f	D	D	D	D	D	D	D	D	
33152	Nonferrous metal foundries	—	4	2	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LAKE COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	324	94	7 491	254 417	5 863	12 171	174 778	627 101	344 412	983 815	50 119
3321	Forging & stamping	1	25	20	1 175	36 454	889	1 935	24 157	66 060	69 517	135 974	3 190
33211	Forging & stamping	1	25	20	1 175	36 454	889	1 935	24 157	66 060	69 517	135 974	3 190
332116	Metal stamping	—	17	12	841	24 795	662	1 439	16 902	44 438	30 169	75 145	D
3323	Architectural & structural metals mfg	—	25	6	502	14 732	342	636	7 847	41 052	40 180	81 307	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	206	37	3 174	106 054	2 600	5 264	76 468	207 862	97 195	305 324	20 607
33271	Machine shops	1	170	19	1 550	48 398	1 204	2 234	32 486	88 739	35 021	123 647	8 162
332710	Machine shops	1	170	19	1 550	48 398	1 204	2 234	32 486	88 739	35 021	123 647	8 162
33272	Turned product & screw, nut, & bolt mfg	—	36	18	1 624	57 656	1 396	3 030	43 982	119 123	62 174	181 677	12 445
332721	Precision turned product mfg	—	30	17	1 582	56 501	1 369	2 967	43 191	117 139	61 261	178 780	12 288
3329	Other fabricated metal product mfg	—	36	23	2 133	82 065	1 650	3 603	56 812	278 524	123 232	413 715	22 593
33291	Metal valve mfg	—	21	17	1 743	69 586	1 339	2 996	49 156	259 568	103 960	375 243	21 480
332911	Industrial valve mfg ...	—	9	8	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	9	6	934	39 891	652	1 558	25 540	205 322	69 612	280 835	D
333	Machinery mfg	—	113	41	3 493	132 552	2 474	5 058	74 740	362 817	267 917	657 775	18 823
3332	Industrial machinery mfg ..	—	9	6	588	22 617	397	880	12 781	40 155	34 352	76 146	1 592
3335	Metalworking machinery mfg	1	66	20	1 576	60 954	1 086	2 183	34 958	93 033	76 811	192 604	9 370
33351	Metalworking machinery mfg	1	66	20	1 576	60 954	1 086	2 183	34 958	93 033	76 811	192 604	9 370
333514	Special die & tool, die set, jig, & fixture mfg .	—	25	5	528	18 040	410	744	12 209	28 539	12 064	39 400	1 705
3339	Other general-purpose machinery mfg	—	25	7	930	34 892	709	1 410	19 510	201 052	130 638	334 240	6 342
33399	All other general-purpose machinery mfg	—	19	3	774	28 459	602	1 209	16 741	188 851	121 977	312 931	5 786
333992	Welding & soldering equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	25	14	2 228	88 179	990	1 673	26 611	239 595	129 849	372 895	D
3344	Semiconductor & other electronic component mfg	1	14	9	706	17 930	503	947	10 503	72 252	45 956	119 405	D
33441	Semiconductor & other electronic component mfg	1	14	9	706	17 930	503	947	10 503	72 252	45 956	119 405	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	26	18	1 842	48 733	1 308	2 414	25 883	123 656	109 009	230 867	D
3353	Electrical equipment mfg ..	—	8	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	8	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	5	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	11	10	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	15	7	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	46	16	2 228	68 747	1 534	2 764	32 341	255 081	92 521	327 005	8 585
3391	Medical equipment & supplies mfg	—	20	6	971	33 436	500	795	10 786	167 999	57 768	207 369	6 284
33911	Medical equipment & supplies mfg	—	20	6	971	33 436	500	795	10 786	167 999	57 768	207 369	6 284
339113	Surgical appliance & supplies mfg	—	6	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	26	10	1 257	35 311	1 034	1 969	21 555	87 082	34 753	119 636	2 301
33999	All other miscellaneous mfg	1	14	7	807	24 274	646	1 200	15 534	60 041	24 219	85 222	1 901

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAWRENCE COUNTY, OH													
31-33	Manufacturing	1	44	12	1 969	65 020	1 462	3 100	46 790	530 855	459 192	998 054	33 568
325	Chemical mfg	3	6	3	528	28 528	325	788	20 188	139 428	353 616	500 663	29 490
LICKING COUNTY, OH													
31-33	Manufacturing	-	150	55	9 489	321 100	7 635	15 544	239 585	1 315 655	1 136 065	2 455 079	46 812
323	Printing & related support activities.....	-	14	3	603	22 729	393	776	14 492	71 370	40 882	110 914	2 072
3231	Printing & related support activities.....	-	14	3	603	22 729	393	776	14 492	71 370	40 882	110 914	2 072
32311	Printing	-	14	3	603	22 729	393	776	14 492	71 370	40 882	110 914	2 072
326	Plastics & rubber products mfg	-	16	9	1 047	30 135	826	1 627	20 087	91 627	74 113	163 248	5 948
3261	Plastics product mfg	-	14	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	6	553	13 678	454	926	9 641	27 427	25 893	53 342	D
326199	All other plastics product mfg	-	10	6	553	13 678	454	926	9 641	27 427	25 893	53 342	D
327	Nonmetallic mineral product mfg	-	10	5	g	D	D	D	D	D	D	D	12 659
3279	Other nonmetallic mineral product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	3	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	31	9	1 002	24 613	842	1 656	16 945	65 863	51 828	114 978	4 074
3328	Coating, engraving, heat treating, & allied activities.	-	2	2	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities.....	-	2	2	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	1 302	54 396	1 087	2 206	43 125	160 901	213 462	369 874	D
3363	Motor vehicle parts mfg ...	-	6	5	1 302	54 396	1 087	2 206	43 125	160 901	213 462	369 874	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOGAN COUNTY, OH													
31-33	Manufacturing	-	58	25	6 295	238 900	5 088	10 463	186 328	1 334 710	2 452 106	3 766 000	79 011
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
LORAIN COUNTY, OH													
31-33	Manufacturing	-	437	165	27 252	1 054 368	21 092	42 559	730 080	4 578 744	6 631 358	11 225 530	361 241
325	Chemical mfg	-	11	7	980	48 949	560	1 440	27 448	225 863	213 516	438 492	D
326	Plastics & rubber products mfg	1	32	22	1 831	47 941	1 489	2 874	33 733	118 129	106 258	222 397	8 754
3261	Plastics product mfg	-	27	17	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	19	12	g	D	D	D	D	D	D	D	4 009
326199	All other plastics product mfg	-	18	12	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	17	11	3 702	160 157	3 212	6 857	120 032	375 963	564 482	955 122	46 859
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries	-	13	9	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	5	4	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	148	56	5 216	168 553	3 757	7 515	102 018	458 475	296 482	755 669	23 644
3322	Cutlery & handtool mfg	-	4	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	2	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	70	17	1 473	48 556	1 036	1 982	28 144	112 403	64 209	175 977	8 102
33271	Machine shops	1	51	8	552	16 673	408	675	9 798	30 632	22 523	52 730	1 766
332710	Machine shops	1	51	8	552	16 673	408	675	9 798	30 632	22 523	52 730	1 766
33272	Turned product & screw, nut, & bolt mfg	-	19	9	921	31 883	628	1 307	18 346	81 771	41 686	123 247	6 336
332721	Precision turned product mfg	-	10	5	546	17 121	422	911	11 631	43 933	21 200	64 317	D
3328	Coating, engraving, heat treating, & allied activities .	-	22	10	727	19 079	626	1 305	14 770	41 841	16 246	59 596	2 107
33281	Coating, engraving, heat treating, & allied activities.....	-	22	10	727	19 079	626	1 305	14 770	41 841	16 246	59 596	2 107
3329	Other fabricated metal product mfg	-	17	10	1 061	36 825	767	1 527	23 086	68 275	65 522	133 188	4 540
33291	Metal valve mfg	-	5	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LORAIN COUNTY, OH—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	59	17	3 470	121 294	2 294	4 906	65 615	373 805	440 315	822 364	24 272
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	4	g	D	D	D	D	D	D	D	5 899
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	4	g	D	D	D	D	D	D	D	5 899
333415	AC & warm air heating & commercial industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	29	6	518	17 977	407	882	13 252	80 272	42 530	120 807	11 549
33351	Metalworking machinery mfg	-	29	6	518	17 977	407	882	13 252	80 272	42 530	120 807	11 549
3339	Other general-purpose machinery mfg	-	15	5	1 418	56 455	676	1 306	21 881	128 521	147 190	279 352	5 510
33399	All other general-purpose machinery mfg	-	13	4	g	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	3	646	22 362	361	570	8 188	35 775	32 773	68 303	D
335	Electrical equipment, appliance, & component mfg	-	16	6	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	11	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	6	1	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	5	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	14	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	9	9	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	4	4	595	19 908	515	1 034	15 143	35 363	34 513	71 842	D
336370	Motor vehicle metal stamping	-	4	4	595	19 908	515	1 034	15 143	35 363	34 513	71 842	D
339	Miscellaneous mfg	-	30	7	1 263	34 512	1 061	2 412	25 694	178 115	112 906	294 174	11 259
3391	Medical equipment & supplies mfg	-	13	5	1 092	30 255	929	2 145	23 156	169 283	105 480	275 462	D
33911	Medical equipment & supplies mfg	-	13	5	1 092	30 255	929	2 145	23 156	169 283	105 480	275 462	D
339113	Surgical appliance & supplies mfg	-	7	5	g	D	D	D	D	D	D	D	D
LUCAS COUNTY, OH													
31-33	Manufacturing	-	652	235	33 116	1 404 781	26 522	54 992	1 050 563	3 742 090	8 284 488	12 070 967	266 220
311	Food mfg	-	25	7	1 219	55 035	909	1 987	40 567	517 557	338 727	859 977	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	1	3	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	2	2	f	D	D	D	D	D	D	D	D
31332	Fabric coating mills	-	2	2	f	D	D	D	D	D	D	D	D
313320	Fabric coating mills	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	97	18	1 518	47 658	1 013	2 068	30 264	98 675	68 865	167 335	9 489
3231	Printing & related support activities	2	97	18	1 518	47 658	1 013	2 068	30 264	98 675	68 865	167 335	9 489
32311	Printing	2	87	15	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	40	9	761	25 387	531	1 126	16 692	52 266	38 976	91 064	3 938
324	Petroleum & coal products mfg	-	8	2	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	8	2	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LUCAS COUNTY, OH—Con.												
	Manufacturing—Con.												
325	Chemical mfg	-	29	13	1 103	47 589	706	1 508	24 557	247 395	255 229	501 816	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	10	4	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	10	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	30	17	931	21 811	712	1 344	14 740	62 200	49 589	112 098	3 838
3261	Plastics product mfg	1	23	12	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	20	11	656	13 944	495	871	9 213	36 357	32 603	70 150	D
326199	All other plastics product mfg	1	18	11	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	24	9	2 165	76 747	1 873	3 837	63 334	288 785	198 725	482 963	10 846
3272	Glass & glass product mfg .	-	8	4	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	8	4	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	4	3	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	13	8	1 179	49 160	956	2 139	37 521	108 974	215 432	322 671	D
3315	Foundries	-	7	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	6	2	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	3	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	148	50	3 907	133 261	3 010	6 224	87 675	356 882	323 576	699 846	14 628
3321	Forging & stamping	1	12	10	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	1	12	10	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	61	15	913	33 149	721	1 478	22 584	59 636	30 647	91 456	4 694
33271	Machine shops	1	52	10	711	25 953	563	1 156	17 916	46 119	24 783	71 905	3 433
332710	Machine shops	1	52	10	711	25 953	563	1 156	17 916	46 119	24 783	71 905	3 433
3328	Coating, engraving, heat treating, & allied activities .	-	25	11	840	26 855	652	1 340	17 818	50 614	142 801	209 627	D
33281	Coating, engraving, heat treating, & allied activities	-	25	11	840	26 855	652	1 340	17 818	50 614	142 801	209 627	D
333	Machinery mfg	1	82	35	2 327	97 759	1 626	3 406	57 039	174 989	150 415	335 046	11 704
3335	Metalworking machinery mfg	1	45	20	1 195	53 471	967	2 096	38 108	77 067	33 109	119 031	8 238
33351	Metalworking machinery mfg	1	45	20	1 195	53 471	967	2 096	38 108	77 067	33 109	119 031	8 238
333511	Industrial mold mfg ...	-	15	6	511	22 784	431	929	18 392	20 368	8 579	37 326	D
3339	Other general-purpose machinery mfg	1	15	8	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	11	6	565	25 258	325	679	9 923	50 654	55 634	108 550	D
334	Computer & electronic product mfg	2	24	11	596	18 268	374	703	9 266	97 194	24 155	114 172	2 291
335	Electrical equipment, appliance, & component mfg	-	13	5	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	34	25	12 805	668 835	11 595	24 333	577 826	1 247 058	4 174 741	5 445 486	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	26	20	i	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	10	8	1 506	85 933	1 253	2 781	67 977	202 077	178 508	378 208	39 219
336370	Motor vehicle metal stamping	-	10	8	1 506	85 933	1 253	2 781	67 977	202 077	178 508	378 208	39 219
33639	Other motor vehicle parts mfg	3	11	9	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	11	9	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LUCAS COUNTY, OH—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	3	54	14	1 210	33 479	777	1 310	15 189	85 684	46 878	132 161	D
3391	Medical equipment & supplies mfg	3	25	6	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	3	25	6	f	D	D	D	D	D	D	D	D
MADISON COUNTY, OH													
31-33	Manufacturing	—	51	23	3 401	102 807	2 744	5 457	72 054	287 047	317 509	606 543	71 167
332	Fabricated metal product mfg	—	13	4	1 128	32 667	874	1 533	20 683	114 344	72 191	190 492	4 700
3329	Other fabricated metal product mfg	—	3	3	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	2	2	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
MAHONING COUNTY, OH													
31-33	Manufacturing	1	405	147	13 001	398 635	9 883	19 660	259 212	953 686	1 157 896	2 110 011	51 484
323	Printing & related support activities	6	34	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	6	34	7	f	D	D	D	D	D	D	D	D
32311	Printing	6	32	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	30	9	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	24	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	13	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	11	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	20	17	2 305	85 644	1 835	3 816	59 154	281 482	453 474	740 576	D
3311	Iron & steel mills & ferroalloy mfg	—	3	3	532	27 559	434	1 002	22 320	149 780	251 075	404 764	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	532	27 559	434	1 002	22 320	149 780	251 075	404 764	D
331111	Iron & steel mills	—	3	3	532	27 559	434	1 002	22 320	149 780	251 075	404 764	D
3313	Alumina & aluminum production & processing	—	7	7	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	7	7	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	7	7	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	103	40	2 418	76 470	1 792	3 219	46 131	135 594	166 659	303 703	7 516
3323	Architectural & structural metals mfg	1	32	14	953	30 660	651	1 167	16 469	33 112	69 760	103 372	2 195
33231	Plate work & fabricated structural product mfg	—	13	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	34	10	517	14 936	408	645	9 403	36 391	17 567	53 423	1 085
333	Machinery mfg	1	53	24	2 157	82 129	1 578	3 132	51 766	177 405	95 127	270 242	14 526
3335	Metalworking machinery mfg	1	35	13	f	D	D	D	D	D	D	D	4 253
33351	Metalworking machinery mfg	1	35	13	f	D	D	D	D	D	D	D	4 253
3339	Other general-purpose machinery mfg	—	11	6	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	11	6	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	—	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	3	710	23 225	433	996	14 466	62 517	73 587	136 449	D
336	Transportation equipment mfg	—	10	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION COUNTY, OH													
31-33	Manufacturing	—	86	39	6 842	229 826	5 270	10 682	160 030	837 517	1 065 971	1 924 683	60 884
311	Food mfg.....	1	8	5	730	23 569	546	1 176	17 255	89 977	305 483	396 825	D
322	Paper mfg.....	—	4	4	621	18 891	505	1 032	13 032	81 954	105 169	188 186	8 092
3222	Converted paper product mfg.....	—	4	4	621	18 891	505	1 032	13 032	81 954	105 169	188 186	8 092
332	Fabricated metal product mfg.....	6	23	7	772	26 360	565	1 097	17 766	70 237	59 721	129 872	4 634
333	Machinery mfg.....	—	11	4	672	28 226	322	794	11 831	45 813	60 922	112 754	D
335	Electrical equipment, appliance, & component mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg...	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
MEDINA COUNTY, OH													
31-33	Manufacturing	1	306	124	10 672	346 701	7 492	17 721	195 584	890 036	860 105	1 744 712	92 308
311	Food mfg.....	—	13	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	2	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	—	26	7	f	D	D	D	D	D	D	D	4 587
3231	Printing & related support activities.....	—	26	7	f	D	D	D	D	D	D	D	4 587
32311	Printing.....	—	21	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	17	9	854	31 401	515	1 057	13 971	91 559	89 544	178 500	D
326	Plastics & rubber products mfg.....	1	27	15	1 556	38 334	1 265	2 722	26 965	88 430	127 238	214 811	10 939
3261	Plastics product mfg.....	1	16	10	1 140	28 623	950	2 196	21 799	64 872	107 739	171 861	D
32619	Other plastics product mfg.....	1	11	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	9	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	3	15	9	603	25 266	389	943	14 354	41 855	61 179	101 109	D
331	Primary metal mfg.....	1	14	13	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	63	16	1 265	38 308	967	1 987	24 885	99 287	65 095	165 833	10 336
333	Machinery mfg.....	2	43	15	928	31 742	644	3 500	18 544	73 456	73 923	147 802	4 040
3339	Other general-purpose machinery mfg.....	4	15	5	525	14 815	334	2 822	8 052	33 389	25 325	59 648	1 845
336	Transportation equipment mfg.....	—	9	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	—	6	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	—	5	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	—	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	25	8	698	21 635	404	707	8 330	54 767	31 280	85 003	D
3399	Other miscellaneous mfg...	—	19	6	522	14 443	305	501	5 531	37 846	20 550	57 417	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MERCER COUNTY, OH													
31-33	Manufacturing	-	62	26	4 473	130 820	3 720	7 616	93 575	413 195	379 240	775 725	46 429
311	Food mfg	-	9	4	606	11 597	539	1 145	9 276	28 210	66 600	95 168	1 764
323	Printing & related support activities	-	6	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	1	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	4	754	30 352	648	1 500	24 948	55 915	65 033	117 534	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
MIAMI COUNTY, OH													
31-33	Manufacturing	-	265	95	13 848	454 903	9 839	20 192	265 412	1 338 462	1 312 576	2 611 753	124 376
311	Food mfg	-	11	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	24	12	1 288	34 649	1 034	2 137	21 463	85 151	92 281	176 871	9 350
3261	Plastics product mfg	-	23	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	12	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	5	831	32 046	671	1 441	23 030	71 548	97 629	165 632	7 149
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	66	12	g	D	D	D	D	D	D	D	6 313
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	42	8	f	D	D	D	D	D	D	D	5 101
33271	Machine shops	1	37	8	f	D	D	D	D	D	D	D	4 642
332710	Machine shops	1	37	8	f	D	D	D	D	D	D	D	4 642
333	Machinery mfg	-	59	24	2 992	101 898	1 874	4 049	59 647	316 457	253 231	578 898	22 283
3335	Metalworking machinery mfg	1	32	9	f	D	D	D	D	D	D	D	4 060
33351	Metalworking machinery mfg	1	32	9	f	D	D	D	D	D	D	D	4 060
3339	Other general-purpose machinery mfg	-	11	6	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	9	4	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	5	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	6	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	4	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MIAMI COUNTY, OH—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	8	7	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	4	5	5	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	3	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	3	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	11	4	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	2	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	MONROE COUNTY, OH		21	3	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing,	—	2	2	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	f	D	D	D	D	D	D	D	D
31-33	MONTGOMERY COUNTY, OH		927	356	56 299	2 337 335	41 924	88 617	1 592 602	7 143 376	8 599 759	15 734 684	402 528
311	Food mfg	—	23	4	f	D	D	D	D	D	D	D	10 705
321	Wood product mfg	—	17	7	f	D	D	D	D	D	D	D	3 081
322	Paper mfg	—	19	12	g	D	D	D	D	D	D	D	47 591
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	17	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	126	32	3 729	139 514	2 228	4 345	66 989	313 559	182 522	490 967	26 159
3231	Printing & related support activities	1	126	32	3 729	139 514	2 228	4 345	66 989	313 559	182 522	490 967	26 159
32311	Printing	1	109	25	h	D	D	D	D	D	D	D	24 219
323110	Commercial lithographic printing ..	2	47	11	1 033	37 922	759	1 493	23 619	73 123	49 363	122 232	6 745
323112	Commercial flexographic printing ..	—	4	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	2	22	13	g	D	D	D	D	D	D	D	10 094
326	Plastics & rubber products mfg	1	49	25	3 675	114 321	2 943	5 597	77 724	181 163	178 691	360 031	23 369
3261	Plastics product mfg	2	37	21	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	33	19	2 147	54 163	1 684	3 118	33 818	110 808	94 419	204 603	17 857
326199	All other plastics product mfg	2	32	19	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	12	4	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	8	3	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	7	3	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	20	14	f	D	D	D	D	D	D	D	3 927
3273	Cement & concrete product mfg	2	10	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	3	13	10	f	D	D	D	D	D	D	D	2 983
3315	Foundries	3	11	8	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTGOMERY COUNTY, OH—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	248	91	i	D	D	D	D	D	D	D	32 261
3321	Forging & stamping	—	18	10	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	18	10	f	D	D	D	D	D	D	D	D
332116	Metal stamping	—	13	6	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg.	6	8	7	702	29 442	303	633	10 850	69 993	19 803	92 791	3 911
33221	Cutlery & handtool mfg. ...	6	8	7	702	29 442	303	633	10 850	69 993	19 803	92 791	3 911
332212	Hand & edge tool mfg.	6	8	7	702	29 442	303	633	10 850	69 993	19 803	92 791	3 911
3323	Architectural & structural metals mfg	1	28	11	f	D	D	D	D	D	D	D	1 504
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	127	38	g	D	D	D	D	D	D	D	13 709
33271	Machine shops	1	103	26	1 761	65 695	1 340	2 890	44 813	111 252	49 550	159 535	10 487
332710	Machine shops	1	103	26	1 761	65 695	1 340	2 890	44 813	111 252	49 550	159 535	10 487
33272	Turned product & screw, nut, & bolt mfg	3	24	12	f	D	D	D	D	D	D	D	3 222
332721	Precision turned product mfg	3	21	10	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	38	17	f	D	D	D	D	D	D	D	4 363
33281	Coating, engraving, heat treating, & allied activities ..	1	38	17	f	D	D	D	D	D	D	D	4 363
332813	Electroplating, plating, polishing, anodizing, & coloring	—	21	8	f	D	D	D	D	D	D	D	1 979
3329	Other fabricated metal product mfg	—	20	4	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	17	3	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	179	76	8 959	373 700	6 128	13 948	233 399	769 906	689 616	1 458 427	43 134
3332	Industrial machinery mfg ..	2	17	10	2 199	80 922	1 350	3 284	44 782	201 780	179 586	369 074	10 610
33329	Other industrial machinery mfg	2	13	9	g	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	—	3	1	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	4	9	7	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	118	45	3 963	173 771	3 013	6 632	123 120	304 653	143 850	458 310	17 608
33351	Metalworking machinery mfg	1	118	45	3 963	173 771	3 013	6 632	123 120	304 653	143 850	458 310	17 608
333511	Industrial mold mfg ..	—	28	13	899	41 304	721	1 567	28 988	61 876	26 182	90 049	4 483
333514	Special die & tool, die set, jig, & fixture mfg ..	—	69	22	2 040	84 467	1 600	3 529	62 251	150 564	46 402	196 580	9 496
3336	Engine, turbine, & power transmission equipment mfg	—	8	3	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	8	3	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	23	13	1 650	72 706	896	2 228	35 510	150 039	132 640	276 151	D
33399	All other general-purpose machinery mfg	—	16	9	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	42	20	2 646	96 722	1 619	3 128	41 715	300 606	139 096	433 140	D
3341	Computer & peripheral equipment mfg	—	7	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	7	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	4	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	12	10	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	12	10	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	19	8	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	19	8	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	6	3	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MONTGOMERY COUNTY, OH—Con.													
	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg	-	11	5	g	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	9	5	g	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	9	5	g	D	D	D	D	D	D	D	D	
335312	Motor & generator mfg	-	4	3	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	38	26	j	D	D	D	D	D	D	D	164 878	
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D	
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D	
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	31	21	j	D	D	D	D	D	D	D	D	
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	h	D	D	D	D	D	D	D	D	
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	h	D	D	D	D	D	D	D	D	
33634	Motor vehicle brake system mfg	-	4	2	h	D	D	D	D	D	D	D	D	
336340	Motor vehicle brake system mfg	-	4	2	h	D	D	D	D	D	D	D	D	
33637	Motor vehicle metal stamping	-	5	3	f	D	D	D	D	D	D	D	D	
336370	Motor vehicle metal stamping	-	5	3	f	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	12	9	i	D	D	D	D	D	D	D	37 352	
336391	Motor vehicle air-conditioning mfg	-	2	2	i	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	10	7	h	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	68	10	g	D	D	D	D	D	D	D	2 517	
3399	Other miscellaneous mfg ..	1	34	5	f	D	D	D	D	D	D	D	D	
33995	Sign mfg	-	20	4	f	D	D	D	D	D	D	D	D	
339950	Sign mfg	-	20	4	f	D	D	D	D	D	D	D	D	
	MORGAN COUNTY, OH													
31-33	Manufacturing	-	10	3		921	27 480	736	1 385	18 601	72 333	64 196	135 528	7 680
	MORROW COUNTY, OH													
31-33	Manufacturing	-	27	10		1 778	57 537	1 169	2 309	28 151	147 501	223 339	366 173	20 341
333	Machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D	
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
33322	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	
333220	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	MUSKINGUM COUNTY, OH													
31-33	Manufacturing	1	113	39		10 096	248 775	8 869	16 963	199 187	765 725	456 886	1 214 575	74 825
311	Food mfg	-	9	7		606	17 810	398	771	8 656	89 298	71 479	160 806	4 785
314	Textile product mills	-	3	3	f	D	D	D	D	D	D	D	D	
321	Wood product mfg	-	13	2	h	D	D	D	D	D	D	D	D	
3219	Other wood product mfg ...	-	10	2	h	D	D	D	D	D	D	D	D	
32199	All other wood product mfg	-	3	2	h	D	D	D	D	D	D	D	D	
321999	All other miscellaneous wood product mfg ...	-	3	2	h	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	1	22	9		947	26 814	813	1 443	20 773	66 543	53 113	119 070	9 471
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUSKINGUM COUNTY, OH—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	—	2	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	6	4	2	1 339	27 244	1 178	2 509	21 072	43 595	48 560	91 425	3 949
3363	Motor vehicle parts mfg . . .	6	3	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	5	2	2	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	5	2	2	g	D	D	D	D	D	D	D	D
NOBLE COUNTY, OH													
31-33	Manufacturing	—	12	5	f	D	D	D	D	D	D	D	D
OTTAWA COUNTY, OH													
31-33	Manufacturing	—	56	24	2 886	100 791	2 308	4 799	74 523	319 561	322 184	634 246	43 083
326	Plastics & rubber products mfg	—	5	4	606	20 003	527	1 111	15 305	66 488	71 618	137 174	4 599
327	Nonmetallic mineral product mfg	—	5	4	701	25 193	591	1 357	20 155	71 170	91 389	162 753	D
331	Primary metal mfg	—	2	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	f	D	D	D	D	D	D	D	D
PAULDING COUNTY, OH													
31-33	Manufacturing	—	39	17	1 628	46 447	1 263	2 569	32 814	108 994	147 271	256 518	8 762
327	Nonmetallic mineral product mfg	1	5	4	502	15 475	394	834	10 885	34 227	35 891	70 197	4 352
PERRY COUNTY, OH													
31-33	Manufacturing	—	35	15	1 763	50 757	1 515	2 997	38 403	148 484	91 881	238 876	8 775
331	Primary metal mfg	—	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PICKAWAY COUNTY, OH													
31-33	Manufacturing	-	44	19	4 726	188 617	3 369	7 338	116 021	609 722	516 597	1 134 398	65 008
326	Plastics & rubber products mfg	-	4	4	1 550	64 185	1 154	2 425	40 290	168 328	129 308	299 626	D
3261	Plastics product mfg	-	4	4	1 550	64 185	1 154	2 425	40 290	168 328	129 308	299 626	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
PIKE COUNTY, OH													
31-33	Manufacturing	-	28	10	4 953	190 160	3 161	7 045	103 147	762 141	438 759	1 202 314	24 238
325	Chemical mfg	-	1	1	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	h	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	h	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	1	1	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	-	1	1	g	D	D	D	D	D	D	D	D
PORTAGE COUNTY, OH													
31-33	Manufacturing	-	298	124	12 984	417 840	9 633	20 146	265 096	1 109 170	1 017 329	2 154 174	95 115
323	Printing & related support activities	-	16	5	896	26 769	666	1 401	19 414	134 712	55 574	189 404	D
3231	Printing & related support activities	-	16	5	896	26 769	666	1 401	19 414	134 712	55 574	189 404	D
32311	Printing	-	15	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	49	37	3 693	114 386	2 767	5 895	72 391	307 951	280 963	585 772	24 118
3261	Plastics product mfg	-	30	23	2 136	61 801	1 670	3 418	40 656	183 447	125 116	305 993	14 357
32619	Other plastics product mfg	-	23	17	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	23	17	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	19	14	1 557	52 585	1 097	2 477	31 735	124 504	155 847	279 779	9 761
32622	Rubber & plastics hoses & belting mfg	-	2	2	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg	-	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	16	11	636	19 194	466	1 083	11 284	44 127	24 572	68 531	D
326291	Rubber product mfg for mechanical use	1	12	8	505	14 120	371	858	8 344	34 751	22 018	56 564	2 108
331	Primary metal mfg	-	7	5	982	27 864	834	1 840	21 250	64 304	82 090	145 575	D
3315	Foundries	-	5	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	3	3	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PORTAGE COUNTY, OH—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	83	25	1 858	54 962	1 426	2 868	37 284	121 149	99 630	219 007	21 187
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	44	11	608	17 689	499	1 004	12 447	43 022	23 108	65 544	2 165
3329	Other fabricated metal product mfg	-	11	7	601	20 671	441	954	13 839	43 334	46 872	89 314	14 300
333	Machinery mfg	1	46	16	1 269	49 866	744	1 575	24 663	89 208	53 616	142 398	5 321
3335	Metalworking machinery mfg	1	31	10	548	23 517	428	952	15 756	41 559	13 707	55 167	2 197
33351	Metalworking machinery mfg	1	31	10	548	23 517	428	952	15 756	41 559	13 707	55 167	2 197
335	Electrical equipment, appliance, & component mfg	-	10	6	1 146	44 388	901	2 018	31 091	140 117	72 449	215 531	4 733
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
PREBLE COUNTY, OH													
31-33	Manufacturing	-	61	23	3 274	109 179	2 451	5 153	68 668	352 361	345 762	698 034	50 534
326	Plastics & rubber products mfg	-	7	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	7	929	29 154	808	1 574	24 488	94 944	43 742	136 533	D
3329	Other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	3	3	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	3	3	f	D	D	D	D	D	D	D	D
PUTNAM COUNTY, OH													
31-33	Manufacturing	-	42	22	4 005	129 906	3 433	6 983	98 821	345 548	873 956	1 237 083	126 530
332	Fabricated metal product mfg	-	9	8	524	16 862	417	869	11 547	86 147	354 965	448 315	D
333	Machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	2	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	RICHLAND COUNTY, OH												
31-33	Manufacturing	-	220	93	15 212	567 064	11 809	24 301	412 770	1 199 577	1 250 171	2 444 652	126 962
326	Plastics & rubber products mfg	1	14	8	601	17 284	492	1 071	12 238	52 643	57 274	111 361	D
3261	Plastics product mfg	1	13	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	54	22	1 594	42 405	1 290	2 695	27 614	88 259	80 892	168 295	5 388
333	Machinery mfg	-	30	12	1 411	47 337	880	1 564	24 238	145 053	106 610	249 454	7 903
3339	Other general-purpose machinery mfg	-	10	5	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	4	3	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	5	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	7	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	5	3	2 326	59 859	1 722	3 013	33 689	111 798	59 575	170 946	D
335	Electrical equipment, appliance, & component mfg	-	10	5	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	17	13	4 224	221 675	3 666	8 141	193 681	367 072	484 383	850 575	D
3363	Motor vehicle parts mfg	-	11	9	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	6	6	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	6	6	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
	ROSS COUNTY, OH												
31-33	Manufacturing	-	48	14	h	D	D	D	D	D	D	D	57 636
322	Paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SANDUSKY COUNTY, OH													
31-33	Manufacturing	-	124	50	10 156	307 078	8 377	15 732	226 865	1 243 491	1 273 390	2 533 643	78 618
311	Food mfg	-	10	4	f	D	D	D	D	D	D	D	8 786
326	Plastics & rubber products mfg	-	11	9	2 024	48 706	1 630	3 066	30 909	138 525	144 586	284 244	15 226
3261	Plastics product mfg	-	10	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	6	6	g	D	D	D	D	D	D	D	4 135
326199	All other plastics product mfg	-	6	6	g	D	D	D	D	D	D	D	4 135
327	Nonmetallic mineral product mfg	-	12	7	541	19 544	383	874	13 749	45 208	44 666	92 068	4 502
332	Fabricated metal product mfg	1	25	10	859	29 729	649	1 170	18 409	86 593	120 122	203 901	5 574
335	Electrical equipment, appliance, & component mfg	-	9	5	h	D	D	D	D	D	D	D	10 867
3352	Household appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	6	4	730	26 182	602	1 202	18 585	64 430	97 250	161 912	D
3363	Motor vehicle parts mfg	3	5	4	f	D	D	D	D	D	D	D	D
SCIOTO COUNTY, OH													
31-33	Manufacturing	-	63	16	1 942	55 025	1 426	2 791	34 735	112 454	179 115	290 775	9 809
331	Primary metal mfg	-	3	3	530	19 790	416	877	14 991	45 855	59 228	105 414	D
SENECA COUNTY, OH													
31-33	Manufacturing	-	101	45	6 882	231 230	5 485	11 026	167 051	662 211	449 793	1 124 638	50 062
327	Nonmetallic mineral product mfg	-	9	4	f	D	D	D	D	D	D	D	2 538
3271	Clay product & refractory mfg	-	3	3	f	D	D	D	D	D	D	D	1 882
32711	Pottery, ceramics, & plumbing fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	9	910	22 926	724	1 421	15 116	39 094	20 285	58 091	2 773
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	11	6	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	9	4	588	14 715	473	968	10 857	19 168	6 494	24 657	D
332710	Machine shops	-	9	4	588	14 715	473	968	10 857	19 168	6 494	24 657	D
333	Machinery mfg	-	15	7	1 548	55 308	1 115	2 337	36 155	124 490	79 391	206 324	21 264
3335	Metalworking machinery mfg	-	7	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	7	2	f	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBY COUNTY, OH													
31-33	Manufacturing	-	136	72	13 278	470 483	10 060	22 073	304 306	1 464 298	3 743 411	5 129 155	107 867
311	Food mfg	-	6	5	882	25 086	755	1 406	17 110	85 261	486 776	569 696	18 543
326	Plastics & rubber products mfg	-	6	5	891	25 174	820	1 821	22 081	78 563	75 337	152 159	D
3261	Plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	2	2	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	7	7	f	D	D	D	D	D	D	D	D
3315	Foundries	1	6	6	f	D	D	D	D	D	D	D	1 803
33152	Nonferrous metal foundries	1	6	6	f	D	D	D	D	D	D	D	1 803
331524	Aluminum foundries (except die-casting) ..	1	6	6	f	D	D	D	D	D	D	D	1 803
332	Fabricated metal product mfg	-	46	16	1 942	61 330	1 583	3 281	45 330	195 034	352 998	555 431	6 629
3323	Architectural & structural metals mfg	-	14	8	1 274	38 424	1 028	2 131	28 687	143 030	305 738	458 098	2 538
33232	Ornamental & architectural metal products mfg	-	11	8	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	8	5	f	D	D	D	D	D	D	D	1 325
333	Machinery mfg	-	26	17	3 556	135 133	2 137	4 641	58 763	270 972	351 876	628 499	23 918
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	647	20 321	486	941	12 559	14 194	63 016	78 626	3 765
3352	Household appliance mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	4	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	2	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
STARK COUNTY, OH													
31-33	Manufacturing	-	629	250	39 352	1 324 060	30 632	61 052	910 391	4 062 702	4 177 757	8 222 473	298 262
311	Food mfg	-	35	15	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	4	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	8	5	656	19 076	496	1 010	10 919	65 581	133 042	198 027	2 230
31151	Dairy product (except frozen) mfg	2	6	5	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	8	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	8	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	STARK COUNTY, OH— Con. Manufacturing— Con.												
322	Paper mfg	-	16	12	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	14	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	59	15	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	59	15	g	D	D	D	D	D	D	D	D
32311	Printing	-	54	15	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	30	9	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	23	11		708	24 084	253	430	6 424	59 606	72 102	132 675
326	Plastics & rubber products mfg	-	52	24		3 787	87 776	3 038	5 929	57 991	196 970	301 892	500 538
3261	Plastics product mfg	-	39	19	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	25	15	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	25	15	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	13	5	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	8	4	g	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	31	12	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	9	8	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	7	6	f	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	1	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	33	18	i	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	5	4	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	5	4	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	4	3	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	7	3	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	5	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	5	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	18	10		2 721	96 917	2 383	4 898	69 431	222 111	122 163	339 988
33151	Ferrous metal foundries	-	10	6		1 493	47 869	1 265	2 552	36 080	88 141	43 488	131 762
331513	Steel foundries (except investment)	-	4	2	f	D	D	D	D	D	D	D	681
33152	Nonferrous metal foundries	-	8	4		1 228	49 048	1 118	2 346	33 351	133 970	78 675	208 226
331528	Other nonferrous foundries (except die-casting)	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	151	66	i	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	11	10	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	11	10	g	D	D	D	D	D	D	D	D
332111	Iron & steel forging	-	5	5	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	6	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	6	3	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	6	4		597	19 540	479	1 014	14 034	46 997	96 137	136 645
33243	Metal can, box, & other metal container (light gauge) mfg	-	2	2	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	2	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	64	22		1 655	50 770	1 207	2 420	31 975	103 365	59 944	159 435
33271	Machine shops	-	53	16		977	29 830	716	1 318	17 998	55 758	31 865	83 318
332710	Machine shops	-	53	16		977	29 830	716	1 318	17 998	55 758	31 865	83 318
33272	Turned product & screw, nut, & bolt mfg	-	11	6		678	20 940	491	1 102	13 977	47 607	28 079	76 117
3328	Coating, engraving, heat treating, & allied activities	-	25	10		939	32 001	741	1 263	22 773	43 735	159 988	194 676
33281	Coating, engraving, heat treating, & allied activities	-	25	10		939	32 001	741	1 263	22 773	43 735	159 988	194 676

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	STARK COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	-	17	7	2 878	120 166	2 465	5 063	94 941	223 567	177 175	401 032	D
33299	All other fabricated metal product mfg	-	16	6	h	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	2	82	30	2 147	73 356	1 447	2 885	41 721	163 776	132 255	298 044	8 043
3332	Industrial machinery mfg ..	5	18	9	622	22 542	371	809	10 900	44 285	38 520	82 004	2 642
3335	Metalworking machinery mfg	-	34	10	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	34	10	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	22	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	15	5	635	16 198	515	1 039	10 939	32 874	16 135	49 142	2 311
335	Electrical equipment, appliance, & component mfg	-	16	11	3 871	142 404	2 681	5 331	88 764	436 393	201 243	651 231	29 747
3352	Household appliance mfg ..	-	2	2	h	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	2	2	h	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	3	10	6	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	3	10	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	24	13	1 524	43 904	1 110	2 002	26 173	86 708	108 251	192 762	11 430
3363	Motor vehicle parts mfg ...	-	16	10	1 268	35 534	902	1 489	20 447	72 188	75 390	145 441	10 694
337	Furniture & related product mfg	-	19	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	4	3	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	4	3	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	3	2	f	D	D	D	D	D	D	D	D
	SUMMIT COUNTY, OH												
31-33	Manufacturing	1	1 091	407	42 312	1 506 070	29 183	59 727	905 505	3 596 150	3 252 934	6 846 737	385 322
311	Food mfg	-	35	8	1 674	49 011	841	1 499	19 288	112 194	130 867	242 930	D
3118	Bakeries & tortilla mfg	1	24	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	22	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	5	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	4	6	4	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	6	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	13	9	1 306	51 002	843	1 838	27 782	88 912	151 935	238 631	D
3222	Converted paper product mfg	-	12	8	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	6	4	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	4	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	116	29	2 709	72 919	1 990	3 713	43 813	139 424	81 922	220 919	D
3231	Printing & related support activities	1	116	29	2 709	72 919	1 990	3 713	43 813	139 424	81 922	220 919	D
32311	Printing	1	101	25	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	57	14	1 089	33 957	713	1 339	19 649	73 677	28 254	101 504	D
323113	Commercial screen printing	-	16	7	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SUMMIT COUNTY, OH—Con.												
	Manufacturing—Con.												
325	Chemical mfg	2	60	38	3 788	143 788	2 375	5 091	72 133	472 321	476 756	949 364	59 370
3251	Basic chemical mfg	4	10	8	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	5	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	4	3	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	25	15	1 129	45 442	750	1 729	25 385	106 026	148 208	252 485	D
32599	All other chemical product & preparation mfg	—	24	15	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ...	—	15	11	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	113	60	5 664	162 142	4 342	9 218	103 022	400 735	396 142	797 050	44 316
3261	Plastics product mfg	1	71	37	3 910	103 545	3 068	6 501	67 544	255 857	239 421	493 940	31 391
32619	Other plastics product mfg	—	55	27	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	53	26	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	42	23	1 754	58 597	1 274	2 717	35 478	144 878	156 721	303 110	12 925
32629	Other rubber product mfg	—	37	23	1 735	57 990	1 258	2 685	34 971	143 350	154 982	299 837	D
326291	Rubber product mfg for mechanical use	—	19	11	1 001	32 466	726	1 569	19 546	88 594	52 161	141 553	5 981
326299	All other rubber product mfg	—	18	12	734	25 524	532	1 116	15 425	54 756	102 821	158 284	D
331	Primary metal mfg	—	17	12	1 112	32 956	819	1 572	21 524	97 637	73 853	171 497	D
3315	Foundries	—	13	8	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	285	85	7 514	243 497	5 709	11 665	153 523	517 403	330 454	838 363	32 350
3321	Forging & stamping	—	21	8	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	21	8	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	38	14	967	32 605	702	1 472	19 715	65 698	73 796	139 650	3 289
33231	Plate work & fabricated structural product mfg ..	—	16	6	569	20 139	416	891	12 154	42 654	55 584	98 456	2 514
3324	Boiler, tank, & shipping container mfg	—	5	4	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	3	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	3	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	143	33	3 109	86 163	2 559	5 074	60 458	184 122	79 474	262 421	12 501
33271	Machine shops	—	128	28	2 779	75 132	2 315	4 545	52 988	147 489	67 421	214 893	11 075
332710	Machine shops	—	128	28	2 779	75 132	2 315	4 545	52 988	147 489	67 421	214 893	11 075
3328	Coating, engraving, heat treating, & allied activities ..	2	35	10	686	22 269	541	1 131	14 699	44 357	16 432	60 876	D
33281	Coating, engraving, heat treating, & allied activities	2	35	10	686	22 269	541	1 131	14 699	44 357	16 432	60 876	D
3329	Other fabricated metal product mfg	—	26	9	623	21 814	457	1 044	14 380	68 201	38 821	101 364	4 535
333	Machinery mfg	3	176	77	6 526	254 779	3 785	7 815	122 000	582 697	377 707	956 367	40 654
3332	Industrial machinery mfg ..	3	38	18	g	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	3	17	11	661	27 299	348	805	12 080	54 909	67 898	124 171	D
333220	Plastics & rubber industry machinery mfg	3	17	11	661	27 299	348	805	12 080	54 909	67 898	124 171	D
33329	Other industrial machinery mfg	2	19	7	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	9	3	2	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	3	2	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	9	2	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SUMMIT COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	-	97	41	2 805	101 569	2 209	4 467	72 438	227 321	131 298	353 149	24 162
33351	Metalworking machinery mfg	-	97	41	2 805	101 569	2 209	4 467	72 438	227 321	131 298	353 149	24 162
333511	Industrial mold mfg ...	-	50	26	1 684	63 950	1 347	2 897	45 475	114 101	53 059	163 825	15 876
333515	Cutting tool & machine tool accessory mfg ..	-	15	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	22	8	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	14	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	36	19	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	9	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	12	9	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	22	10	899	29 411	479	898	9 333	73 442	60 302	134 596	D
33451	Navigational, measuring, medical, & control instruments mfg	-	22	10	899	29 411	479	898	9 333	73 442	60 302	134 596	D
336	Transportation equipment mfg	-	32	19	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	26	16	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	9	5	2 844	210 351	2 555	5 624	184 769	257 356	313 060	574 139	D
336370	Motor vehicle metal stamping	-	9	5	2 844	210 351	2 555	5 624	184 769	257 356	313 060	574 139	D
33639	Other motor vehicle parts mfg	-	5	4	648	24 530	508	1 087	16 518	61 712	56 814	118 670	D
336399	All other motor vehicle parts mfg	-	5	4	648	24 530	508	1 087	16 518	61 712	56 814	118 670	D
3364	Aerospace product & parts mfg	-	4	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	25	3	f	D	D	D	D	D	D	D	3 358
339	Miscellaneous mfg	-	74	19	2 445	64 263	1 605	3 231	44 076	277 189	199 284	487 614	13 059
3399	Other miscellaneous mfg ...	-	44	12	g	D	D	D	D	D	D	D	11 302
33993	Doll, toy, & game mfg ...	-	5	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D
	TRUMBULL COUNTY, OH												
31-33	Manufacturing	-	282	116	34 101	1 622 107	27 999	58 483	1 261 531	3 663 557	7 535 668	11 235 598	183 151
326	Plastics & rubber products mfg	1	20	11	g	D	D	D	D	D	D	D	5 617
3261	Plastics product mfg	2	12	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	8	5	f	D	D	D	D	D	D	D	3 362
326199	All other plastics product mfg	3	8	5	f	D	D	D	D	D	D	D	3 362
3262	Rubber product mfg	-	8	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	17	7	f	D	D	D	D	D	D	D	3 559

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TRUMBULL COUNTY, OH—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	-	21	16	6 261	302 883	4 755	10 663	214 287	791 990	1 170 848	1 940 518	73 350
3311	Iron & steel mills & ferroalloy mfg	-	4	4	3 749	191 471	2 876	6 307	137 252	446 454	597 735	1 032 029	D
33111	Iron & steel mills & ferroalloy mfg	-	4	4	3 749	191 471	2 876	6 307	137 252	446 454	597 735	1 032 029	D
331111	Iron & steel mills	-	4	4	3 749	191 471	2 876	6 307	137 252	446 454	597 735	1 032 029	D
3312	Steel product mfg from purchased steel	-	7	5	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	3	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	3	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	4	4	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	4	4	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	83	37	3 046	95 941	2 403	5 054	66 605	265 225	281 110	541 710	12 675
3323	Architectural & structural metals mfg	-	24	16	1 107	36 782	861	1 816	24 870	131 715	143 299	272 401	4 853
33231	Plate work & fabricated structural product mfg ...	-	15	10	663	22 976	530	1 100	15 479	82 652	57 150	137 299	3 316
332312	Fabricated structural metal mfg	-	10	8	585	20 657	469	981	13 806	77 128	53 377	128 103	2 959
3324	Boiler, tank, & shipping container mfg	-	6	5	571	18 021	482	1 100	13 507	41 355	61 756	104 446	2 549
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	33	7	611	18 914	501	1 028	13 168	37 484	21 568	58 839	1 971
333	Machinery mfg	2	30	12	f	D	D	D	D	D	D	D	3 763
335	Electrical equipment, appliance, & component mfg	-	6	3	718	29 626	653	1 492	26 612	165 316	57 499	223 445	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	17	13	j	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	11	10	j	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	4	4	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	4	4	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TUSCARAWAS COUNTY, OH													
31-33	Manufacturing	1	226	91	9 823	304 121	7 495	15 008	198 876	896 110	1 141 463	2 054 557	50 101
321	Wood product mfg	-	29	9	1 043	28 884	749	1 552	17 763	60 508	103 464	164 145	3 756
3219	Other wood product mfg ...	-	22	6	610	17 583	521	1 064	12 484	34 370	49 950	84 800	1 847
325	Chemical mfg	3	11	8	611	24 081	418	948	15 257	159 213	151 270	309 405	5 757
326	Plastics & rubber products mfg	1	24	17	1 820	43 750	1 481	2 840	30 371	102 950	101 485	201 061	7 566
3261	Plastics product mfg	-	15	12	g	D	D	D	D	D	D	D	4 289
32619	Other plastics product mfg	-	7	5	793	15 264	678	1 317	11 325	33 831	37 141	68 487	1 961
326199	All other plastics product mfg	-	6	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	3	9	5	f	D	D	D	D	D	D	D	3 277
32629	Other rubber product mfg	2	5	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	16	10	648	17 233	537	1 114	13 080	38 350	29 505	67 736	5 420
3271	Clay product & refractory mfg	1	9	9	574	15 397	476	985	11 586	34 473	22 768	57 141	D
32712	Clay building material & refractories mfg	1	9	9	574	15 397	476	985	11 586	34 473	22 768	57 141	D
331	Primary metal mfg	-	7	5	806	30 850	652	1 510	20 191	144 420	276 207	428 901	10 880
3313	Alumina & aluminum production & processing ..	-	3	3	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	12	1 170	35 654	968	1 914	25 375	88 841	184 216	285 133	3 330
333	Machinery mfg	2	18	8	1 585	65 081	1 029	2 133	39 549	144 903	139 717	283 624	9 266
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	15	4	598	21 286	419	780	10 405	70 808	22 980	95 059	795
UNION COUNTY, OH													
31-33	Manufacturing	-	40	18	8 462	370 693	6 799	14 794	288 575	2 696 856	4 815 865	7 467 187	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	1	1	f	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	4	6	2	f	D	D	D	D	D	D	D	33
3339	Other general-purpose machinery mfg	4	3	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	4	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VAN WERT COUNTY, OH													
31-33	Manufacturing	-	50	23	4 553	140 777	3 853	7 920	112 768	420 516	524 312	942 100	26 117
332	Fabricated metal product mfg	-	10	7	1 823	59 784	1 474	2 588	44 006	203 803	180 668	380 316	14 038
3321	Forging & stamping	-	3	3	603	21 150	443	879	13 931	43 587	37 463	82 334	D
33211	Forging & stamping	-	3	3	603	21 150	443	879	13 931	43 587	37 463	82 334	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	1	f	D	D	D	D	D	D	D	628
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
VINTON COUNTY, OH													
31-33	Manufacturing	-	17	10	624	15 406	460	934	9 977	34 276	57 587	91 210	2 233
WARREN COUNTY, OH													
31-33	Manufacturing	-	198	92	12 145	407 289	8 177	17 009	225 425	875 124	1 326 147	2 186 399	145 868
311	Food mfg	-	5	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	15	10	994	31 300	805	1 791	22 479	83 853	125 501	205 667	D
3222	Converted paper product mfg	-	13	8	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	18	6	713	22 895	521	982	13 541	43 697	39 181	83 583	3 964
3231	Printing & related support activities.....	4	18	6	713	22 895	521	982	13 541	43 697	39 181	83 583	3 964
32311	Printing	4	16	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	15	9	1 355	37 219	945	1 868	20 341	79 277	87 174	167 008	13 545
3261	Plastics product mfg	5	14	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	9	5	831	19 875	684	1 328	14 144	40 737	52 595	93 191	D
326199	All other plastics product mfg	7	9	5	831	19 875	684	1 328	14 144	40 737	52 595	93 191	D
332	Fabricated metal product mfg	-	46	21	2 068	58 249	1 434	2 967	36 767	143 409	130 962	275 207	16 428
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	22	8	887	22 798	574	1 191	14 415	48 522	27 178	75 707	1 953
33272	Turned product & screw, nut, & bolt mfg	-	5	4	670	16 553	404	879	10 082	36 123	22 462	58 558	1 015
332721	Precision turned product mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	16	8	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN COUNTY, OH													
—Con.													
31-33	Manufacturing—												
	Con.												
334	Computer & electronic product mfg	-	7	5	g	D	D	D	D	D	D	D	25 782
3342	Communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	9	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	7	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, OH													
31-33	Manufacturing	-	104	43	5 242	187 834	3 591	7 496	113 645	932 472	962 418	1 900 923	106 014
325	Chemical mfg	-	9	8	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	4	4	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	5	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, OH													
31-33	Manufacturing	-	252	103	16 172	521 486	11 720	24 799	333 202	1 607 780	1 463 498	3 105 047	122 746
311	Food mfg	-	22	8	1 601	54 618	1 152	2 756	35 763	323 649	251 570	573 099	13 354
321	Wood product mfg	-	35	12	836	18 965	647	1 215	12 530	42 616	44 615	87 555	1 663
3219	Other wood product mfg ...	-	28	10	668	14 063	552	1 031	10 319	29 684	32 609	62 594	1 184
322	Paper mfg	-	7	6	726	28 872	575	1 283	20 245	69 960	104 053	173 388	2 788
326	Plastics & rubber products mfg	-	18	10	2 524	86 773	1 659	4 075	55 524	275 302	254 041	542 653	30 586
3261	Plastics product mfg	-	12	7	2 250	80 704	1 424	3 525	52 076	258 607	245 027	516 947	29 995
32619	Other plastics product mfg	-	7	4	2 049	76 482	1 304	3 316	49 808	247 860	229 560	492 304	D
326199	All other plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	12	9	704	18 829	590	1 157	13 502	42 485	25 032	67 146	3 490

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WAYNE COUNTY, OH—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	7	5	1 038	39 473	862	2 092	30 053	114 622	109 058	226 230	7 064
3315	Foundries	—	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	37	11	1 351	38 426	1 024	2 131	26 254	74 898	90 878	176 761	5 938
3323	Architectural & structural metals mfg	—	8	4	764	20 778	580	1 225	14 794	21 462	48 729	81 346	D
33232	Ornamental & architectural metal products mfg	—	6	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	28	11	1 582	57 221	1 060	2 188	35 177	144 602	173 707	314 258	6 553
3339	Other general-purpose machinery mfg	—	9	4	f	D	D	D	D	D	D	D	3 497
33399	All other general-purpose machinery mfg	—	7	4	f	D	D	D	D	D	D	D	3 497
333996	Fluid power pump & motor mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	15	11	3 367	93 904	2 590	4 906	62 579	307 598	262 808	583 761	38 314
3362	Motor vehicle body & trailer mfg	—	5	3	1 002	17 435	738	1 064	10 673	23 736	102 670	141 018	D
33621	Motor vehicle body & trailer mfg	—	5	3	1 002	17 435	738	1 064	10 673	23 736	102 670	141 018	D
336211	Motor vehicle body mfg	—	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	10	8	2 365	76 469	1 852	3 842	51 906	283 862	160 138	442 743	D
33635	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	5	3	553	15 309	461	716	11 564	37 773	23 655	60 509	D
336399	All other motor vehicle parts mfg	—	5	3	553	15 309	461	716	11 564	37 773	23 655	60 509	D
339	Miscellaneous mfg	—	14	4	807	26 314	502	953	13 015	63 334	40 703	103 424	2 882
3399	Other miscellaneous mfg	—	10	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	5	3	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	1	1	f	D	D	D	D	D	D	D	D
	WILLIAMS COUNTY, OH												
31-33	Manufacturing	—	131	67	9 132	267 061	6 835	13 044	170 296	849 669	981 509	1 831 507	37 534
311	Food mfg	2	5	3	545	15 794	348	658	6 887	49 787	36 218	85 137	D
326	Plastics & rubber products mfg	—	15	12	1 820	49 379	1 350	2 576	31 575	141 097	144 868	285 591	7 083
3261	Plastics product mfg	—	13	10	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	11	9	g	D	D	D	D	D	D	D	5 159
326199	All other plastics product mfg	—	11	9	g	D	D	D	D	D	D	D	5 159
332	Fabricated metal product mfg	1	38	13	1 107	31 646	871	1 660	20 186	65 315	66 855	133 232	8 779
333	Machinery mfg	—	21	11	1 674	55 776	1 163	2 231	34 332	159 698	120 034	283 061	2 834
3339	Other general-purpose machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	—	2	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	8	1 383	38 718	1 164	2 273	28 313	115 034	145 961	255 168	7 769
3363	Motor vehicle parts mfg	—	9	7	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	4	3	f	D	D	D	D	D	D	D	4 906
336330	Motor vehicle steering & suspension component (except spring) mfg	—	4	3	f	D	D	D	D	D	D	D	4 906

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WOOD COUNTY, OH													
31-33	Manufacturing	-	192	98	13 357	512 718	10 085	21 345	357 966	1 182 564	1 433 718	2 602 349	100 518
311	Food mfg	-	12	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	1	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	2	1	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	18	15	3 157	99 224	2 451	4 705	67 417	259 970	173 508	425 182	18 362
3261	Plastics product mfg	-	12	9	1 551	45 771	1 255	2 454	31 547	95 603	97 277	192 799	D
32619	Other plastics product mfg	-	11	8	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	11	8	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	6	6	1 606	53 453	1 196	2 251	35 870	164 367	76 231	232 383	D
32629	Other rubber product mfg	-	6	6	1 606	53 453	1 196	2 251	35 870	164 367	76 231	232 383	D
326291	Rubber product mfg for mechanical use	-	5	5	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	5	854	35 396	663	1 513	26 103	156 231	62 216	213 140	8 738
3272	Glass & glass product mfg	-	3	3	749	32 724	562	1 348	23 784	149 185	57 440	201 306	D
32721	Glass & glass product mfg	-	3	3	749	32 724	562	1 348	23 784	149 185	57 440	201 306	D
332	Fabricated metal product mfg	-	40	21	1 939	66 176	1 493	3 252	47 942	195 111	188 743	384 176	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	15	7	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	15	7	f	D	D	D	D	D	D	D	D
332710	Machine shops	-	15	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	22	11	1 023	40 741	484	1 028	15 192	75 689	93 924	170 129	D
3339	Other general-purpose machinery mfg	-	10	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	9	2 802	161 048	2 434	5 491	134 055	212 675	302 208	517 592	D
3363	Motor vehicle parts mfg	-	10	9	2 802	161 048	2 434	5 491	134 055	212 675	302 208	517 592	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	4	4	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	4	4	f	D	D	D	D	D	D	D	D
WYANDOT COUNTY, OH													
31-33	Manufacturing	1	53	25	4 188	112 125	3 488	7 193	83 921	281 652	297 767	573 070	23 958
326	Plastics & rubber products mfg	4	12	9	1 869	47 080	1 603	3 243	37 073	109 775	110 255	220 713	15 629
3261	Plastics product mfg	4	9	6	1 713	42 480	1 475	3 027	34 130	105 824	100 411	207 202	D
32619	Other plastics product mfg	4	6	5	1 575	39 538	1 355	2 798	31 655	100 120	85 100	186 171	10 476
326199	All other plastics product mfg	4	6	5	1 575	39 538	1 355	2 798	31 655	100 120	85 100	186 171	10 476
327	Nonmetallic mineral product mfg	-	10	2	694	21 318	528	1 243	14 867	52 579	43 693	95 819	1 705
3272	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AKRON, OH													
31-33	Manufacturing	2	370	123	12 822	451 802	7 762	16 266	228 291	1 129 973	890 593	2 020 361	91 664
311	Food mfg	-	15	2	796	28 556	175	260	4 982	45 764	26 384	72 122	1 132
3118	Bakeries & tortilla mfg	-	10	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	10	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	49	11	1 019	29 638	728	1 400	19 524	57 758	28 336	85 940	3 456
3231	Printing & related support activities	1	49	11	1 019	29 638	728	1 400	19 524	57 758	28 336	85 940	3 456
32311	Printing	2	40	8	852	25 765	607	1 194	17 201	51 149	26 584	77 590	2 334
325	Chemical mfg	3	21	15	1 248	48 990	802	1 768	28 976	159 936	184 670	346 859	12 887
3259	Other chemical product mfg	-	8	7	511	19 873	338	827	13 065	46 202	76 334	122 792	1 642
32599	All other chemical product & preparation mfg	-	7	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	32	16	1 853	54 086	1 368	2 938	33 471	138 012	153 263	290 240	26 386
3261	Plastics product mfg	-	20	9	1 478	40 549	1 133	2 499	26 639	109 024	111 810	218 360	D
32619	Other plastics product mfg	-	17	8	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	15	7	978	27 049	765	1 722	17 881	75 656	66 655	141 111	12 680
332	Fabricated metal product mfg	1	101	26	1 874	61 168	1 417	3 021	41 734	119 765	83 374	203 572	8 209
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	44	8	594	16 631	440	935	11 959	31 325	14 629	45 296	2 219
333	Machinery mfg	5	60	26	2 811	118 760	1 236	2 605	40 952	264 084	149 985	411 375	11 525
3332	Industrial machinery mfg ..	2	18	8	527	23 167	270	594	9 662	50 166	44 028	92 653	2 447
3333	Commercial & service industry machinery mfg ..	9	2	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	9	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	9	1	1	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	26	13	716	24 950	563	1 229	18 418	44 172	30 643	73 629	2 712
33351	Metalworking machinery mfg	-	26	13	716	24 950	563	1 229	18 418	44 172	30 643	73 629	2 712
333511	Industrial mold mfg ...	-	14	9	525	18 330	412	940	13 691	34 360	23 633	56 920	1 928
336	Transportation equipment mfg	-	10	7	1 494	65 227	927	2 008	33 881	244 779	148 106	391 280	16 049
3363	Motor vehicle parts mfg ...	-	8	6	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
ALLIANCE, OH *													
31-33	Manufacturing	-	52	20	2 897	88 760	2 252	4 550	61 202	208 454	176 323	379 210	8 927
331	Primary metal mfg	-	5	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	1	1	f	D	D	D	D	D	D	D	D
AMHERST, OH													
31-33	Manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARCHBOLD, OH													
31-33	Manufacturing	-	25	16	5 061	161 343	4 152	8 592	89 508	523 789	519 739	1 043 982	42 576
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	3	519	16 927	416	849	10 924	41 971	47 630	88 899	1 378
337	Furniture & related product mfg	-	3	3	h	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	3	h	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	3	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	h	D	D	D	D	D	D	D	D
ASHLAND, OH													
31-33	Manufacturing	-	53	30	4 813	153 856	3 721	7 147	100 886	378 066	429 665	808 467	35 301
322	Paper mfg	-	5	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	3	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	4	1 015	33 951	764	1 476	22 900	57 998	105 713	165 049	D
3339	Other general-purpose machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	2	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	3	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	3	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg...	1	2	2	f	D	D	D	D	D	D	D	D
ASHTABULA, OH													
31-33	Manufacturing	-	33	18	2 212	72 001	1 669	3 566	47 774	166 562	141 207	308 228	10 377
326	Plastics & rubber products mfg	-	7	7	1 297	37 366	1 086	2 245	27 308	77 065	75 700	151 708	D
3261	Plastics product mfg	-	6	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	3 013
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	3 013
ATHENS, OH													
31-33	Manufacturing	-	17	5	779	19 372	633	1 444	15 485	59 591	62 440	121 847	1 882
AURORA, OH													
31-33	Manufacturing	-	27	16	1 669	64 578	1 126	2 359	36 167	157 307	131 410	301 043	9 193
326	Plastics & rubber products mfg	-	8	7	546	17 666	429	889	12 538	47 209	35 396	82 752	3 266
3261	Plastics product mfg	-	8	7	546	17 666	429	889	12 538	47 209	35 396	82 752	3 266
AVON, OH													
31-33	Manufacturing	-	17	8	778	30 074	557	1 108	17 148	61 391	53 827	115 062	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AVON LAKE, OH													
31-33	Manufacturing	-	24	17	4 403	221 750	3 614	7 129	175 462	S	S	1 821 670	163 276
325	Chemical mfg	1	4	4	573	31 179	277	684	16 013	149 987	149 138	297 615	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
BARBERTON, OH													
31-33	Manufacturing	-	77	31	4 140	122 501	3 241	6 535	77 945	233 165	302 839	535 491	15 619
326	Plastics & rubber products mfg	-	14	7	559	17 783	416	897	11 698	35 252	76 396	112 209	1 750
332	Fabricated metal product mfg	-	23	10	2 314	69 432	1 836	3 628	43 016	129 081	81 712	209 607	9 068
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	13	6	1 409	31 583	1 289	2 570	25 459	64 297	34 787	98 388	6 227
33271	Machine shops	-	13	6	1 409	31 583	1 289	2 570	25 459	64 297	34 787	98 388	6 227
332710	Machine shops	-	13	6	1 409	31 583	1 289	2 570	25 459	64 297	34 787	98 388	6 227
BEAVERCREEK, OH													
31-33	Manufacturing	-	31	9	826	31 396	446	982	12 047	76 333	91 242	167 723	8 510
BEDFORD, OH													
31-33	Manufacturing	-	41	9	951	32 143	682	1 432	21 698	122 475	76 494	199 241	16 785
BEDFORD HEIGHTS, OH													
31-33	Manufacturing	-	54	24	2 181	72 540	1 491	3 084	43 069	208 613	201 093	410 174	7 758
331	Primary metal mfg	-	3	3	543	19 262	382	833	13 752	54 041	66 580	119 819	3 216
BELLEFONTAINE, OH													
31-33	Manufacturing	-	17	9	g	D	D	D	D	D	D	D	17 926
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
BELLEVUE, OH *													
31-33	Manufacturing	-	24	13	1 823	59 292	1 395	2 959	39 334	182 914	448 074	640 772	18 369
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BEREA, OH													
31-33	Manufacturing	1	41	16	1 616	55 447	1 161	2 485	33 446	122 686	91 860	212 312	9 260
332	Fabricated metal product mfg	-	16	8	829	28 122	634	1 284	18 075	59 819	38 457	96 221	5 653
BLANCHESTER, OH *													
31-33	Manufacturing	-	11	8	904	26 850	719	1 219	13 783	66 535	169 856	234 216	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLUE ASH, OH													
31-33	Manufacturing	-	109	44	7 045	236 717	4 622	9 482	127 517	601 809	501 714	1 101 338	35 111
323	Printing & related support activities.....	2	21	5	800	29 525	539	1 192	17 159	57 614	39 397	96 830	7 725
3231	Printing & related support activities.....	2	21	5	800	29 525	539	1 192	17 159	57 614	39 397	96 830	7 725
32311	Printing	2	20	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	11	2 057	74 479	1 468	3 279	45 459	200 571	98 162	296 350	10 947
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	18	9	1 002	31 624	581	1 146	15 218	75 770	55 336	133 252	5 192
335	Electrical equipment, appliance, & component mfg	-	6	4	778	20 823	502	949	8 509	60 998	59 037	118 611	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLUFFTON, OH *													
31-33	Manufacturing	-	6	4	744	28 261	501	1 311	18 571	89 745	93 316	179 718	D
BOWLING GREEN, OH													
31-33	Manufacturing	-	41	20	3 107	96 612	2 296	4 319	61 993	255 711	184 144	429 770	17 307
326	Plastics & rubber products mfg	-	4	4	g	D	D	D	D	D	D	D	13 422
3262	Rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	2	g	D	D	D	D	D	D	D	D
BRECKSVILLE, OH													
31-33	Manufacturing	-	20	8	690	26 921	456	963	14 215	69 957	62 604	132 977	6 027
BROOKLYN, OH													
31-33	Manufacturing	-	44	22	3 136	91 322	2 250	4 874	53 726	220 033	160 000	378 437	9 513
323	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	10	821	28 894	657	1 448	19 262	67 852	33 370	101 282	3 806

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROOK PARK, OH													
31-33	Manufacturing	-	66	28	6 333	366 609	5 161	11 437	289 031	924 196	748 254	1 696 868	D
331	Primary metal mfg	-	2	2	h	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	2	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	24	10	551	18 952	410	859	11 681	42 992	27 095	70 175	3 196
336	Transportation equipment mfg	-	6	5	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
BROOKVILLE, OH													
31-33	Manufacturing	-	16	10	1 289	34 208	1 016	1 989	21 788	75 262	58 056	132 942	14 022
326	Plastics & rubber products mfg	-	5	3	736	20 347	574	1 039	11 525	41 957	38 289	80 131	D
3261	Plastics product mfg	-	5	3	736	20 347	574	1 039	11 525	41 957	38 289	80 131	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
BRUNSWICK, OH													
31-33	Manufacturing	2	29	14	658	20 997	485	1 000	12 638	48 428	45 913	93 616	2 850
BRYAN, OH													
31-33	Manufacturing	-	39	23	3 775	122 126	2 670	5 141	74 984	431 900	321 350	756 068	14 228
311	Food mfg	2	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	1 167	34 349	880	1 620	22 881	99 792	100 994	200 503	D
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	5	848	31 589	604	1 116	20 806	106 322	52 226	161 316	2 080
BUCYRUS, OH													
31-33	Manufacturing	-	19	12	3 019	104 208	2 570	5 402	83 928	422 256	294 525	709 018	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
BYESVILLE, OH													
31-33	Manufacturing	-	6	4	698	16 784	573	1 366	12 762	46 097	45 358	91 145	D
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMBRIDGE, OH													
31-33	Manufacturing	-	30	14	2 188	64 906	1 779	3 322	50 659	125 188	134 133	263 545	15 225
333	Machinery mfg	-	6	2	f	D	D	D	D	D	D	D	3 389
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
CANAL WINCHESTER, OH *													
31-33	Manufacturing	-	12	7	880	25 748	694	1 407	17 241	63 613	171 544	235 361	3 316
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
CANTON, OH													
31-33	Manufacturing	-	182	70	13 120	461 881	10 384	20 979	334 815	1 745 086	1 497 113	3 233 494	104 482
311	Food mfg	-	9	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	33	8	770	23 263	588	1 376	15 332	50 713	38 566	88 916	5 418
3231	Printing & related support activities	-	33	8	770	23 263	588	1 376	15 332	50 713	38 566	88 916	5 418
32311	Printing	-	28	8	742	22 625	567	1 347	14 892	49 484	38 062	87 174	5 375
323110	Commercial lithographic printing ..	-	15	6	609	19 400	469	1 198	13 224	42 052	31 326	73 024	4 362
326	Plastics & rubber products mfg	-	12	6	1 649	37 725	1 317	2 724	27 697	95 671	95 398	187 282	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	5	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	6	2	523	15 393	405	719	9 823	39 938	20 948	61 656	D
33151	Ferrous metal foundries ..	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	50	21	4 255	162 971	3 534	7 245	127 227	361 688	270 402	628 890	27 410
3321	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	6	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	6	1	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	516	17 927	293	583	8 223	35 264	29 738	65 095	D
337	Furniture & related product mfg	-	7	3	721	18 995	571	1 007	13 112	40 825	48 222	88 678	D
3372	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAREY, OH													
31-33	Manufacturing	-	12	4	874	24 822	730	1 512	19 288	78 035	49 623	127 250	D
326	Plastics & rubber products mfg	-	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
CELINA, OH													
31-33	Manufacturing	-	16	7	2 030	57 940	1 642	3 245	38 301	255 222	176 463	419 654	D
323	Printing & related support activities	-	3	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
CENTERVILLE, OH													
31-33	Manufacturing	2	40	6	566	18 869	437	925	13 669	45 219	20 606	66 180	5 898
CHARDON, OH													
31-33	Manufacturing	-	24	12	1 730	57 010	1 219	2 603	32 795	120 429	113 441	233 261	10 638
326	Plastics & rubber products mfg	1	5	4	692	23 209	518	1 135	13 201	51 646	44 703	96 522	4 122
CHILLICOTHE, OH													
31-33	Manufacturing	-	19	5	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
CINCINNATI, OH													
31-33	Manufacturing	1	604	234	28 917	1 021 808	18 157	36 495	554 899	3 778 697	2 841 418	6 540 188	203 327
311	Food mfg	1	46	22	4 089	136 510	2 202	4 873	68 271	675 861	521 161	1 193 336	26 496
3116	Meat product mfg	-	9	5	1 160	42 338	535	1 210	16 948	90 158	146 443	235 893	D
31161	Animal slaughtering & processing	-	9	5	1 160	42 338	535	1 210	16 948	90 158	146 443	235 893	D
311612	Meat processed from carcasses	-	8	4	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	19	7	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	16	5	f	D	D	D	D	D	D	D	1 075
311812	Commercial bakeries	-	6	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	3	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	4	9	7	g	D	D	D	D	D	D	D	13 338
312	Beverage & tobacco product mfg	-	9	6	1 200	38 962	576	1 139	17 541	506 762	270 287	777 193	D
3121	Beverage mfg	-	9	6	1 200	38 962	576	1 139	17 541	506 762	270 287	777 193	D
31211	Soft drink & ice mfg	-	3	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	15	10	847	28 437	676	1 475	20 855	89 002	103 563	191 899	9 790
3222	Converted paper product mfg	2	13	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CINCINNATI, OH—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	132	38	2 703	94 407	1 947	3 832	58 273	197 905	100 778	298 025	10 472
3231	Printing & related support activities.....	1	132	38	2 703	94 407	1 947	3 832	58 273	197 905	100 778	298 025	10 472
32311	Printing.....	2	105	29	2 165	74 282	1 566	2 996	45 933	159 450	89 468	248 399	7 311
323110	Commercial lithographic printing ..	-	53	13	1 170	39 222	832	1 610	23 165	73 709	47 480	120 779	4 902
32312	Support activities for printing.....	1	27	9	538	20 125	381	836	12 340	38 455	11 310	49 626	3 161
324	Petroleum & coal products mfg.....	-	6	2	610	27 212	305	564	11 759	77 165	138 648	215 119	D
3241	Petroleum & coal products mfg.....	-	6	2	610	27 212	305	564	11 759	77 165	138 648	215 119	D
32419	Other petroleum & coal products mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	31	18	3 734	167 069	1 961	4 074	81 710	977 843	697 414	1 666 352	60 785
3251	Basic chemical mfg.....	1	10	7	1 889	93 796	1 221	2 534	57 836	371 109	427 533	803 036	48 665
32513	Dye & pigment mfg.....	2	3	3	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	2	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	9	4	678	31 647	295	665	10 877	205 382	77 884	279 658	4 059
32562	Toilet preparation mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	4	23	8	756	20 862	604	1 102	13 426	43 147	45 402	89 284	3 735
3261	Plastics product mfg.....	4	19	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	7	11	5	516	13 678	414	735	8 238	22 373	23 674	46 233	D
326199	All other plastics product mfg.....	7	11	5	516	13 678	414	735	8 238	22 373	23 674	46 233	D
331	Primary metal mfg.....	-	14	9	1 119	36 077	819	1 847	24 133	64 771	35 436	100 854	3 681
3315	Foundries.....	-	13	9	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	-	10	6	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	6	5	582	17 531	402	826	10 779	31 408	14 343	45 897	D
332	Fabricated metal product mfg.....	1	112	43	3 923	125 415	3 043	5 759	88 425	244 926	161 411	414 943	14 313
3323	Architectural & structural metals mfg.....	1	22	11	743	24 510	558	1 003	16 824	47 032	38 926	86 105	2 709
33232	Ornamental & architectural metal products mfg.....	1	15	8	615	19 752	449	795	13 158	37 844	23 427	61 390	2 241
332322	Sheet metal work mfg.....	-	11	6	550	17 915	405	701	12 043	34 055	19 082	53 349	2 177
3324	Boiler, tank, & shipping container mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	3	45	10	899	30 393	669	1 352	20 342	58 650	35 390	92 458	6 384
33271	Machine shops.....	1	40	8	667	22 988	511	1 035	15 943	42 929	23 643	65 001	4 520
332710	Machine shops.....	1	40	8	667	22 988	511	1 035	15 943	42 929	23 643	65 001	4 520
3328	Coating, engraving, heat treating, & allied activities ..	-	20	11	678	24 299	506	1 102	14 684	55 222	15 086	69 948	2 939
33281	Coating, engraving, heat treating, & allied activities.....	-	20	11	678	24 299	506	1 102	14 684	55 222	15 086	69 948	2 939
3329	Other fabricated metal product mfg.....	-	11	5	548	14 145	398	750	8 254	43 795	31 590	77 405	994
33291	Metal valve mfg.....	-	6	5	f	D	D	D	D	D	D	D	973

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31-33	CINCINNATI, OH—Con. Manufacturing—Con.												
333	Machinery mfg	-	44	22	4 012	167 848	1 980	3 699	72 497	497 900	365 418	776 671	25 600
3333	Commercial & service industry machinery mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	17	7	2 176	97 619	1 014	1 656	42 308	315 198	209 655	431 083	D
33351	Metalworking machinery mfg	-	17	7	2 176	97 619	1 014	1 656	42 308	315 198	209 655	431 083	D
333512	Machine tool (metal cutting types) mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	13	8	843	35 549	410	899	13 798	91 246	73 605	162 949	D
334	Computer & electronic product mfg	7	17	9	1 083	34 409	656	1 428	17 779	59 680	68 849	135 817	5 545
3342	Communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	14	10	1 689	56 421	1 199	2 471	31 160	144 844	151 230	294 479	7 271
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	6	5	671	24 019	443	932	13 443	60 233	46 669	106 352	D
33593	Wiring device mfg	-	5	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	5	510	15 739	389	707	10 301	40 033	27 165	68 629	3 182
337	Furniture & related product mfg	1	24	5	577	17 715	368	685	9 406	42 781	39 118	81 993	1 547
339	Miscellaneous mfg	1	53	7	731	23 991	473	946	10 408	47 124	38 906	86 780	3 669
	CIRCLEVILLE, OH												
31-33	Manufacturing	-	16	6	1 284	46 685	1 104	2 502	38 579	171 193	81 619	252 951	6 787
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
	CLEVELAND, OH												
31-33	Manufacturing	1	1 270	442	44 400	1 662 238	31 573	65 143	1 008 460	4 128 581	4 572 783	8 675 765	342 651
311	Food mfg	2	53	18	1 663	47 571	998	2 050	24 138	173 292	256 933	430 714	13 632
322	Paper mfg	-	33	24	1 823	60 327	1 366	2 946	38 124	134 723	181 757	315 498	13 105
3222	Converted paper product mfg	-	33	24	1 823	60 327	1 366	2 946	38 124	134 723	181 757	315 498	13 105
32221	Paperboard container mfg	1	21	16	988	29 214	749	1 503	18 988	65 011	86 429	150 819	7 076
323	Printing & related support activities	2	158	29	2 922	102 608	2 151	4 478	57 927	222 887	106 103	329 446	20 965
3231	Printing & related support activities	2	158	29	2 922	102 608	2 151	4 478	57 927	222 887	106 103	329 446	20 965
32311	Printing	2	132	26	2 572	91 435	1 872	3 888	50 380	200 480	102 313	303 339	20 100
323110	Commercial lithographic printing ..	2	86	21	1 822	66 675	1 304	2 678	39 354	135 419	66 315	203 020	11 577
324	Petroleum & coal products mfg	3	15	7	624	34 563	272	495	9 957	107 744	107 817	215 957	15 072
3241	Petroleum & coal products mfg	3	15	7	624	34 563	272	495	9 957	107 744	107 817	215 957	15 072

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND, OH—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	—	62	28	3 479	155 573	1 688	3 316	64 209	571 005	641 341	1 220 481	37 570
3251	Basic chemical mfg	—	10	6	547	22 430	281	626	12 170	109 588	145 286	254 356	7 305
3255	Paint, coating, & adhesive mfg	—	16	7	g	D	D	D	D	D	D	D	17 834
32551	Paint & coating mfg	—	11	4	1 472	75 540	530	1 140	26 240	166 294	246 864	417 567	D
325510	Paint & coating mfg	—	11	4	1 472	75 540	530	1 140	26 240	166 294	246 864	417 567	D
32552	Adhesive mfg	1	5	3	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg	1	5	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	17	7	579	24 176	329	596	9 280	120 465	115 139	237 495	D
326	Plastics & rubber products mfg	1	32	14	1 270	36 271	1 028	2 119	22 475	72 120	72 877	145 503	5 348
3261	Plastics product mfg	1	25	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	16	10	736	19 837	606	1 271	13 399	42 870	47 952	91 460	2 485
326199	All other plastics product mfg	1	16	10	736	19 837	606	1 271	13 399	42 870	47 952	91 460	2 485
327	Nonmetallic mineral product mfg	3	33	10	692	20 838	541	1 133	14 360	50 682	39 539	88 458	4 580
331	Primary metal mfg	—	35	20	5 789	314 698	4 686	10 988	244 601	742 787	1 615 192	2 351 265	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries	—	20	11	f	D	D	D	D	D	D	D	2 178
332	Fabricated metal product mfg	1	408	125	10 142	337 771	7 460	15 146	203 956	742 027	521 365	1 273 376	52 080
3321	Forging & stamping	—	42	21	1 803	69 543	1 347	3 032	45 021	146 295	143 976	292 497	13 608
33211	Forging & stamping	—	42	21	1 803	69 543	1 347	3 032	45 021	146 295	143 976	292 497	13 608
332111	Iron & steel forging	—	9	7	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	27	12	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	49	13	958	30 198	645	1 215	16 882	57 540	44 311	102 285	2 589
33232	Ornamental & architectural metal products mfg	1	30	9	760	24 352	494	961	13 541	49 611	36 022	86 002	2 391
332322	Sheet metal work mfg	2	19	6	585	18 718	403	785	10 689	40 801	32 183	73 468	1 993
3326	Spring & wire product mfg	—	12	7	634	20 020	478	1 029	11 655	40 797	24 970	65 332	1 869
33261	Spring & wire product mfg	—	12	7	634	20 020	478	1 029	11 655	40 797	24 970	65 332	1 869
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	145	24	2 559	86 621	2 018	4 049	59 311	192 323	89 041	286 808	12 798
33271	Machine shops	1	114	17	1 560	52 441	1 217	2 339	35 120	102 570	36 779	140 038	6 191
332710	Machine shops	1	114	17	1 560	52 441	1 217	2 339	35 120	102 570	36 779	140 038	6 191
33272	Turned product & screw, nut, & bolt mfg	—	31	7	999	34 180	801	1 710	24 191	89 753	52 262	146 770	6 607
332721	Precision turned product mfg	—	20	3	516	17 381	398	915	11 528	47 383	19 075	65 808	1 423
3328	Coating, engraving, heat treating, & allied activities	1	104	39	2 268	66 924	1 719	3 235	39 384	171 315	75 952	247 833	13 347
33281	Coating, engraving, heat treating, & allied activities	1	104	39	2 268	66 924	1 719	3 235	39 384	171 315	75 952	247 833	13 347
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	19	7	591	17 656	414	802	7 494	39 820	18 929	59 107	4 755
332813	Electroplating, plating, polishing, anodizing, & coloring	1	64	26	1 313	37 421	1 040	1 976	24 147	96 064	48 540	144 908	4 513
3329	Other fabricated metal product mfg	1	30	11	1 153	40 272	710	1 463	16 750	80 161	86 762	170 228	3 872
33299	All other fabricated metal product mfg	—	19	5	664	25 733	372	778	8 738	47 943	58 416	108 950	D
333	Machinery mfg	1	156	61	4 765	174 347	3 103	6 314	98 747	363 442	305 769	659 096	13 851
3335	Metalworking machinery mfg	—	90	29	2 069	77 334	1 460	2 964	50 539	127 344	77 877	201 462	5 597
33351	Metalworking machinery mfg	—	90	29	2 069	77 334	1 460	2 964	50 539	127 344	77 877	201 462	5 597
333514	Special die & tool, die set, jig, & fixture mfg	—	42	11	932	35 237	638	1 189	20 904	63 353	35 690	99 684	2 757

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CLEVELAND, OH—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	4	9	7	757	27 861	500	996	16 103	50 033	47 359	98 166	3 652
33361	Engine, turbine, & power transmission equipment mfg	4	9	7	757	27 861	500	996	16 103	50 033	47 359	98 166	3 652
333612	Speed changer, industrial high-speed drive, & gear mfg	5	5	3	555	21 481	349	687	11 701	34 254	35 692	70 637	3 382
3339	Other general-purpose machinery mfg	—	25	8	565	19 261	299	649	8 387	40 922	46 409	87 079	1 339
334	Computer & electronic product mfg	—	32	14	1 079	30 685	734	1 322	14 720	82 255	45 412	127 446	D
3345	Navigational, measuring, medical, & control instruments mfg	—	11	7	650	18 936	438	737	8 731	53 012	22 819	76 275	1 653
33451	Navigational, measuring, medical, & control instruments mfg	—	11	7	650	18 936	438	737	8 731	53 012	22 819	76 275	1 653
335	Electrical equipment, appliance, & component mfg	—	33	19	2 757	87 988	1 974	3 770	52 599	253 081	191 923	445 292	7 212
3351	Electric lighting equipment mfg	1	10	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	3	3	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	3	3	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	8	4	652	18 194	490	962	12 386	36 719	43 836	80 069	1 160
33531	Electrical equipment mfg	—	8	4	652	18 194	490	962	12 386	36 719	43 836	80 069	1 160
3359	Other electrical equipment & component mfg	—	12	10	838	23 865	591	1 059	13 633	59 459	54 447	114 738	2 521
336	Transportation equipment mfg	—	54	32	4 513	181 743	3 404	6 903	117 825	409 371	339 863	723 646	39 569
3363	Motor vehicle parts mfg ...	—	41	27	3 531	140 116	2 760	5 557	93 672	284 724	266 056	541 543	31 815
33631	Motor vehicle gasoline engine & engine parts mfg	—	6	4	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	—	4	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	17	13	1 855	67 171	1 461	3 276	43 935	154 915	153 284	304 583	14 672
336370	Motor vehicle metal stamping	—	17	13	1 855	67 171	1 461	3 276	43 935	154 915	153 284	304 583	14 672
3364	Aerospace product & parts mfg	—	5	3	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	5	3	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	3	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	60	18	1 413	39 597	1 053	2 050	22 318	96 236	71 018	166 129	4 004
3391	Medical equipment & supplies mfg	1	17	6	617	15 425	503	955	9 630	34 368	26 555	59 470	D
33911	Medical equipment & supplies mfg	1	17	6	617	15 425	503	955	9 630	34 368	26 555	59 470	D
3399	Other miscellaneous mfg ..	1	43	12	796	24 172	550	1 095	12 688	61 868	44 463	106 659	D
	CLYDE, OH												
31-33	Manufacturing	—	6	4	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	1	1	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	h	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLDWATER, OH													
31-33	Manufacturing	-	9	5	856	28 122	740	1 667	23 206	52 025	66 389	115 028	6 089
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.	-	1	1	f	D	D	D	D	D	D	D	D
COLUMBIANA, OH *													
31-33	Manufacturing	-	29	12	980	31 553	768	1 534	18 237	64 011	67 403	130 307	6 176
COLUMBUS, OH *													
31-33	Manufacturing	-	685	242	32 243	1 173 265	22 784	44 505	725 125	4 498 713	3 957 141	8 409 312	315 222
311	Food mfg.	-	43	20	4 052	142 868	2 772	5 568	86 858	1 301 853	721 734	2 043 082	21 275
3115	Dairy product mfg.	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.	-	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.	-	8	7	521	10 338	437	773	7 387	31 685	113 718	145 816	1 296
31161	Animal slaughtering & processing.	-	8	7	521	10 338	437	773	7 387	31 685	113 718	145 816	1 296
3118	Bakeries & tortilla mfg.	-	19	4	1 494	48 828	857	1 364	25 521	121 121	80 288	200 699	D
31181	Bread & bakery product mfg.	-	19	4	1 494	48 828	857	1 364	25 521	121 121	80 288	200 699	D
311812	Commercial bakeries .	-	4	2	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	-	7	5	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.	-	7	5	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.	-	4	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.	-	3	3	f	D	D	D	D	D	D	D	D
31212	Breweries .	-	2	1	f	D	D	D	D	D	D	D	D
312120	Breweries .	-	2	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.	8	14	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.	8	10	4	f	D	D	D	D	D	D	D	D
322	Paper mfg.	-	13	9	603	18 466	463	937	11 185	48 661	52 661	99 870	D
3222	Converted paper product mfg.	-	12	8	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.	-	8	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.	1	128	32	2 432	74 671	1 767	3 209	46 728	161 099	110 157	271 270	12 182
3231	Printing & related support activities.	1	128	32	2 432	74 671	1 767	3 209	46 728	161 099	110 157	271 270	12 182
32311	Printing .	1	112	28	2 129	62 266	1 541	2 739	39 458	139 281	104 078	243 374	11 006
323110	Commercial lithographic printing .	1	56	25	1 711	51 173	1 266	2 282	32 632	118 510	91 385	209 916	10 229
325	Chemical mfg.	1	32	16	1 686	69 102	841	1 771	26 247	188 255	236 157	423 003	D
3255	Paint, coating, & adhesive mfg.	1	10	7	1 174	48 343	570	1 223	17 105	136 274	161 177	295 343	D
32551	Paint & coating mfg.	-	5	3	600	25 235	331	745	10 545	66 626	91 270	155 673	19 178
325510	Paint & coating mfg.	-	5	3	600	25 235	331	745	10 545	66 626	91 270	155 673	19 178
32552	Adhesive mfg.	2	5	4	574	23 108	239	478	6 560	69 648	69 907	139 670	D
325520	Adhesive mfg.	2	5	4	574	23 108	239	478	6 560	69 648	69 907	139 670	D
326	Plastics & rubber products mfg.	2	35	17	2 623	89 127	2 108	4 136	59 972	228 465	213 164	440 689	17 872
3261	Plastics product mfg.	2	28	16	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg. .	-	4	3	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.	-	5	3	f	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg.	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.	3	13	8	1 363	42 631	1 111	2 271	31 442	105 423	109 976	215 366	D
326199	All other plastics product mfg.	3	11	7	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.	-	32	15	2 259	78 477	1 814	3 841	57 593	290 347	147 159	419 236	48 279
3272	Glass & glass product mfg. .	-	7	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.	-	7	3	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg.	-	4	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	COLUMBUS, OH *— Con. Manufacturing— Con.												
331	Primary metal mfg	—	11	3	g	D	D	D	D	D	D	D	D
3315	Foundries	—	7	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	1	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	116	40	3 650	132 058	2 724	5 365	83 878	372 607	414 875	780 224	20 468
3323	Architectural & structural metals mfg	1	32	14	838	28 056	601	1 150	16 344	95 451	45 790	140 000	1 996
33232	Ornamental & architectural metal products mfg	2	21	9	510	17 418	362	731	10 000	34 319	19 510	53 705	881
3324	Boiler, tank, & shipping container mfg	—	6	4	671	29 405	543	1 138	20 937	63 958	187 464	246 584	8 213
333	Machinery mfg	—	52	28	3 007	119 211	1 697	3 661	60 723	352 881	246 552	591 668	21 810
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	3	3	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	19	8	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	13	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	27	10	3 409	177 757	2 355	4 135	122 060	559 028	784 974	1 313 277	32 735
3342	Communications equipment mfg	—	5	2	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	3	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	11	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	11	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	24	10	1 330	37 612	1 061	2 317	25 771	102 718	175 817	279 029	21 695
3363	Motor vehicle parts mfg	1	17	7	g	D	D	D	D	D	D	D	21 058
33639	Other motor vehicle parts mfg	—	9	5	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	9	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	26	7	710	21 858	526	1 030	13 019	41 083	38 990	80 577	1 313
3372	Office furniture (including fixtures) mfg	—	11	5	545	17 665	406	799	10 400	30 499	20 121	50 740	D
33721	Office furniture (including fixtures) mfg	—	11	5	545	17 665	406	799	10 400	30 499	20 121	50 740	D
339	Miscellaneous mfg	2	73	13	1 204	35 298	778	1 508	17 444	62 483	81 978	145 045	3 852
3391	Medical equipment & supplies mfg	2	36	5	524	14 068	323	581	6 891	27 291	24 082	51 553	1 330
33911	Medical equipment & supplies mfg	2	36	5	524	14 068	323	581	6 891	27 291	24 082	51 553	1 330
3399	Other miscellaneous mfg	2	37	8	680	21 230	455	927	10 553	35 192	57 896	93 492	2 522
31-33	CONNEAUT, OH Manufacturing	1	33	13	1 755	42 401	1 507	2 483	33 016	126 726	121 878	246 398	20 178
326	Plastics & rubber products mfg	—	4	3	548	11 680	484	440	9 615	31 315	34 414	65 664	D
3261	Plastics product mfg	—	4	3	548	11 680	484	440	9 615	31 315	34 414	65 664	D
31-33	COSHOCTON, OH Manufacturing	—	27	20	3 793	122 138	2 730	5 936	75 954	407 354	509 544	910 209	30 532
326	Plastics & rubber products mfg	—	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRESTLINE, OH *													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
CUYAHOGA FALLS, OH													
31-33	Manufacturing	1	88	35	3 220	111 431	2 263	4 433	60 326	315 078	219 007	531 882	26 976
325	Chemical mfg	1	6	6	1 077	42 588	636	1 459	16 282	131 920	94 024	224 221	9 779
3256	Soap, cleaning compound, & toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	1	1	f	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	15	10	753	26 780	542	955	17 231	64 128	30 737	93 781	11 458
DAYTON, OH													
31-33	Manufacturing	1	350	138	20 112	811 184	15 082	32 626	564 428	1 599 319	1 986 134	3 579 404	128 455
311	Food mfg	-	12	4	f	D	D	D	D	D	D	D	10 588
323	Printing & related support activities	-	53	12	1 197	44 556	804	1 566	26 423	103 091	53 683	156 329	4 841
3231	Printing & related support activities	-	53	12	1 197	44 556	804	1 566	26 423	103 091	53 683	156 329	4 841
32311	Printing	-	48	12	1 161	43 654	782	1 519	25 774	101 110	53 130	153 749	D
325	Chemical mfg	3	11	8	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	11	4	1 410	52 680	1 172	2 226	38 388	44 978	62 881	109 246	4 324
3262	Rubber product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	4	7	5	f	D	D	D	D	D	D	D	2 342
3315	Foundries	4	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	113	44	2 922	106 636	2 111	4 244	63 077	226 662	111 168	337 193	13 272
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	49	18	1 067	37 647	835	1 744	25 548	66 018	33 634	98 829	5 829
33271	Machine shops	-	36	11	702	27 680	548	1 208	18 624	46 062	21 672	67 123	4 410
332710	Machine shops	-	36	11	702	27 680	548	1 208	18 624	46 062	21 672	67 123	4 410
3328	Coating, engraving, heat treating, & allied activities	-	23	9	538	15 898	391	687	9 568	41 052	11 652	52 676	2 012
33281	Coating, engraving, heat treating, & allied activities	-	23	9	538	15 898	391	687	9 568	41 052	11 652	52 676	2 012
333	Machinery mfg	3	53	23	2 978	125 872	2 176	5 239	85 390	236 569	166 408	393 634	13 060
3332	Industrial machinery mfg	9	4	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	9	4	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	9	3	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	38	17	1 263	55 957	960	2 037	41 590	95 173	39 484	140 062	4 847
33351	Metalworking machinery mfg	3	38	17	1 263	55 957	960	2 037	41 590	95 173	39 484	140 062	4 847
3339	Other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAYTON, OH—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	15	10	6 873	335 629	5 722	13 276	269 075	474 420	1 038 860	1 513 956	D
3363	Motor vehicle parts mfg ...	-	11	7	i	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	g	D	D	D	D	D	D	D	D
	DEFIANCE, OH												
31-33	Manufacturing	-	23	13	5 607	278 144	4 833	10 684	231 745	493 455	595 719	1 087 601	21 782
327	Nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	559	21 194	411	927	12 950	41 420	33 142	73 665	6 159
3363	Motor vehicle parts mfg ...	-	5	4	559	21 194	411	927	12 950	41 420	33 142	73 665	6 159
	DELAWARE, OH												
31-33	Manufacturing	-	38	17	2 370	99 678	1 242	2 623	43 114	497 673	343 727	832 081	15 997
325	Chemical mfg	-	7	3	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	4	1	g	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	3	1	g	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	-	3	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
	DOVER, OH												
31-33	Manufacturing	-	38	21	2 403	83 344	1 695	3 635	51 389	256 287	401 232	668 525	10 482
	DUBLIN, OH *												
31-33	Manufacturing	-	24	5	1 142	36 802	609	1 099	16 786	100 764	55 251	157 618	21 635
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
	EASTLAKE, OH												
31-33	Manufacturing	1	101	24	2 667	77 738	2 163	4 297	54 707	143 013	124 444	273 159	12 365
331	Primary metal mfg	-	5	2	635	15 138	587	1 188	12 824	26 561	30 173	56 519	D
3315	Foundries	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	47	10	798	25 733	670	1 277	18 551	45 108	37 224	82 187	5 494
	EAST LIVERPOOL, OH												
31-33	Manufacturing	-	20	7	719	19 439	596	1 061	13 510	46 553	19 391	66 325	3 926
327	Nonmetallic mineral product mfg	-	6	5	561	14 465	472	921	10 650	33 494	8 393	42 385	D
3271	Clay product & refractory mfg	-	4	4	f	D	D	D	D	D	D	D	D
	EAST PALESTINE, OH												
31-33	Manufacturing	-	19	9	783	15 976	677	1 281	11 967	42 104	23 194	64 872	891
327	Nonmetallic mineral product mfg	-	8	5	f	D	D	D	D	D	D	D	300
3271	Clay product & refractory mfg	-	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EATON, OH													
31-33	Manufacturing	-	14	8	2 021	65 467	1 507	3 307	38 969	176 441	167 990	345 458	37 921
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
ELYRIA, OH													
31-33	Manufacturing	-	132	58	7 704	260 233	5 644	12 298	162 051	858 688	747 211	1 610 790	46 698
326	Plastics & rubber products mfg	1	14	10	791	23 043	605	1 212	15 287	60 916	72 430	131 557	5 813
3261	Plastics product mfg	1	13	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	49	23	2 800	99 221	1 869	3 742	55 815	303 013	184 752	489 246	12 573
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	22	8	773	27 138	498	908	14 056	68 024	28 978	97 450	3 208
33272	Turned product & screw, nut, & bolt mfg	-	9	6	591	22 805	352	696	11 110	60 524	25 746	86 750	2 447
333	Machinery mfg	-	18	6	1 367	44 072	1 103	2 524	29 120	143 492	213 746	365 643	6 569
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	12	4	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	5	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	3	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	3	f	D	D	D	D	D	D	D	D
EUCLID, OH													
31-33	Manufacturing	-	108	42	8 223	325 981	4 778	10 435	166 492	725 724	945 014	1 627 612	50 206
331	Primary metal mfg	-	8	7	773	35 626	610	1 474	25 204	72 750	48 501	121 222	11 161
3314	Nonferrous metal (except aluminum) production & processing	-	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	40	13	849	28 431	614	1 264	18 666	58 168	34 712	92 548	3 620
333	Machinery mfg	-	22	11	4 345	172 774	2 358	5 024	82 300	302 933	701 834	969 415	26 784
3339	Other general-purpose machinery mfg	-	4	3	h	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	4	3	h	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	985	39 458	522	1 205	19 172	185 283	66 894	248 150	4 449
3353	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	EUCLID, OH—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	2	2	f	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	-	2	2	f	D	D	D	D	D	D	D	D	
	EVENDALE, OH													
31-33	Manufacturing	-	25	17	i	D	D	D	D	D	D	D	97 318	
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
32613	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D	
326130	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	3	2	i	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	3	2	i	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	3	2	i	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	-	3	2	i	D	D	D	D	D	D	D	D	
	FAIRBORN, OH													
31-33	Manufacturing	-	14	8		779	27 004	574	1 272	16 944	83 286	55 807	139 518	14 969
	FAIRFIELD, OH *													
31-33	Manufacturing	1	84	33		3 096	95 928	2 232	5 030	59 066	245 037	244 780	492 793	16 846
332	Fabricated metal product mfg	-	21	7		797	28 395	575	1 418	18 477	79 971	60 920	142 903	7 362
	FINDLAY, OH													
31-33	Manufacturing	-	66	30		7 559	271 541	5 475	11 327	172 177	696 898	701 111	1 397 274	88 799
326	Plastics & rubber products mfg	-	10	10		3 538	148 167	2 302	5 258	88 526	257 580	304 185	557 193	D
3261	Plastics product mfg	2	7	7		g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	5	5		g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	5	5		g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3		g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	2		g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	2		g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1		f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1		f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1		f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1		f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	12		h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	13	10		2 430	67 498	1 958	3 602	46 886	166 506	256 983	421 188	30 025
33634	Motor vehicle brake system mfg	-	2	2		f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2		f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	3		684	17 350	543	1 065	11 462	30 976	42 456	73 971	5 048
336399	All other motor vehicle parts mfg	-	3	3		684	17 350	543	1 065	11 462	30 976	42 456	73 971	5 048
	FOREST PARK, OH													
31-33	Manufacturing	-	27	11		966	38 197	706	1 480	24 532	94 856	62 125	156 566	6 101
333	Machinery mfg	-	5	4		524	23 513	377	761	14 887	59 694	43 370	102 566	2 999

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FOSTORIA, OH *												
31-33	Manufacturing	3	39	22	3 528	126 656	2 775	5 546	90 008	304 931	406 339	713 840	39 634
326	Plastics & rubber products mfg	3	3	3	543	18 919	409	891	11 484	64 783	42 790	106 349	D
332	Fabricated metal product mfg	-	8	5	685	16 357	560	1 094	12 063	21 388	8 650	28 922	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	6	4	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	5	3	f	D	D	D	D	D	D	D	D
332710	Machine shops	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
	FRANKLIN, OH												
31-33	Manufacturing	-	39	21	1 822	59 908	1 393	3 020	40 051	134 979	183 846	312 579	15 653
322	Paper mfg	-	8	7	712	23 490	576	1 290	16 705	66 598	93 648	155 269	11 156
3222	Converted paper product mfg	-	6	5	f	D	D	D	D	D	D	D	D
	FREMONT, OH												
31-33	Manufacturing	-	54	28	4 027	116 674	3 163	5 637	79 470	573 001	517 426	1 084 462	50 836
311	Food mfg	-	7	4	f	D	D	D	D	D	D	D	8 760
326	Plastics & rubber products mfg	-	6	5	g	D	D	D	D	D	D	D	9 402
3261	Plastics product mfg	-	5	5	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	6	553	20 749	433	848	14 556	66 850	97 765	161 247	D
335	Electrical equipment, appliance, & component mfg	-	5	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	2	2	f	D	D	D	D	D	D	D	D
	GAHANNA, OH												
31-33	Manufacturing	1	28	7	517	16 075	305	519	7 050	36 513	38 995	74 440	1 955
	GALION, OH												
31-33	Manufacturing	-	35	17	1 580	48 732	1 114	2 148	31 624	95 618	121 976	214 334	6 241
333	Machinery mfg	-	7	4	579	22 006	391	822	13 716	45 332	76 165	119 377	2 484
	GARFIELD HEIGHTS, OH												
31-33	Manufacturing	2	48	18	1 502	48 093	1 050	2 210	28 055	102 517	87 527	189 260	7 558
	GENEVA, OH												
31-33	Manufacturing	-	16	6	570	16 541	422	983	11 209	24 647	71 356	97 376	1 598
	GIRARD, OH												
31-33	Manufacturing	-	15	8	962	30 157	784	1 474	20 525	114 135	112 609	221 971	3 407
	GREEN, OH												
31-33	Manufacturing	1	33	12	977	29 954	754	1 598	18 759	60 735	51 947	110 022	3 907
	GREENFIELD, OH												
31-33	Manufacturing	-	13	7	951	25 166	776	1 614	18 572	57 558	53 428	111 158	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENVILLE, OH													
31-33	Manufacturing	-	28	12	2 830	88 633	2 261	4 559	61 559	398 008	406 775	807 115	16 266
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
GROVE CITY, OH													
31-33	Manufacturing	-	20	10	1 165	42 060	856	1 648	26 718	127 827	94 814	221 097	5 754
HAMILTON, OH													
31-33	Manufacturing	-	86	34	3 717	136 924	2 659	5 446	89 295	363 002	335 589	692 200	31 580
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	6	535	20 157	299	650	11 843	32 587	31 052	61 585	1 422
HARRISON, OH													
31-33	Manufacturing	-	21	11	1 592	40 531	1 033	2 073	19 918	81 211	116 303	198 470	6 730
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
HEATH, OH													
31-33	Manufacturing	-	11	5	1 405	64 370	1 149	2 579	49 560	205 508	322 777	525 319	4 440
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
HICKSVILLE, OH													
31-33	Manufacturing	-	10	6	646	17 797	521	1 067	13 316	67 561	60 709	122 579	2 470
HIGHLAND HEIGHTS, OH													
31-33	Manufacturing	-	31	18	1 948	90 603	828	1 704	26 446	266 889	302 357	578 487	18 249
332	Fabricated metal product mfg	-	8	7	546	21 732	402	873	14 637	56 962	81 595	148 855	D
334	Computer & electronic product mfg	-	6	4	f	D	D	D	D	D	D	D	2 783
3345	Navigational, measuring, medical, & control instruments mfg	-	3	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HILLIARD, OH													
31-33	Manufacturing	1	35	22	2 188	73 622	1 563	2 815	37 311	203 687	298 590	499 855	15 046
326	Plastics & rubber products mfg	4	4	4	768	25 388	581	767	9 292	72 633	27 674	99 089	6 226
3261	Plastics product mfg	4	4	4	768	25 388	581	767	9 292	72 633	27 674	99 089	6 226
32619	Other plastics product mfg	4	4	4	768	25 388	581	767	9 292	72 633	27 674	99 089	6 226
326199	All other plastics product mfg	4	4	4	768	25 388	581	767	9 292	72 633	27 674	99 089	6 226
HILLSBORO, OH													
31-33	Manufacturing	-	13	4	1 185	29 870	1 054	2 016	23 676	98 024	128 112	225 741	11 290
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
HUBER HEIGHTS, OH *													
31-33	Manufacturing	1	34	12	g	D	D	D	D	D	D	D	9 155
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	1	1	f	D	D	D	D	D	D	D	D
HUDSON VILLAGE, OH													
31-33	Manufacturing	1	36	12	2 315	67 008	1 473	2 958	45 385	295 090	192 390	483 585	17 998
332	Fabricated metal product mfg	-	10	4	504	18 719	322	661	10 243	74 076	38 787	106 443	5 099
339	Miscellaneous mfg	-	3	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
HURON, OH													
31-33	Manufacturing	-	10	7	614	18 028	462	1 002	12 399	45 256	102 297	146 771	11 140
INDEPENDENCE, OH													
31-33	Manufacturing	-	28	13	1 248	50 626	814	1 593	28 302	113 066	72 742	190 210	5 446
IRONTON, OH													
31-33	Manufacturing	-	15	5	g	D	D	D	D	D	D	D	D
JACKSON, OH													
31-33	Manufacturing	1	14	5	1 650	35 580	1 398	2 814	25 274	166 954	145 747	310 582	14 588
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	8	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	8	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JEFFERSON, OH (ASHTABULA COUNTY) Manufacturing	-	8	5	586	16 267	413	870	10 482	42 306	60 179	101 961	3 603
31-33	JEFFERSON, OH (MADISON COUNTY) Manufacturing	-	8	6	749	23 244	658	1 225	19 316	72 898	89 354	162 265	D
31-33	JOHNSTOWN, OH Manufacturing	-	10	3	645	14 175	536	990	10 165	30 068	27 618	57 593	D
31-33	KENT, OH Manufacturing	-	72	31	2 412	70 201	1 807	3 512	42 154	155 054	187 053	343 001	7 761
326	Plastics & rubber products mfg	-	10	8	568	14 754	423	857	8 871	34 942	21 914	55 480	1 782
333	Machinery mfg	1	17	9	554	20 291	376	736	12 038	42 612	25 098	67 445	2 607
31-33	KENTON, OH Manufacturing	-	10	6	f	D	D	D	D	D	D	D	D
31-33	KETTERING, OH * Manufacturing	-	51	17	5 025	269 936	3 781	7 526	167 735	457 138	379 956	831 892	54 301
334	Computer & electronic product mfg	-	7	4	830	37 990	489	968	12 444	124 022	41 798	159 728	D
3341	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	h	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	h	D	D	D	D	D	D	D	D
31-33	LAKEWOOD, OH Manufacturing	-	41	10	1 128	44 132	777	1 744	27 380	103 812	81 379	182 108	9 998
31-33	LANCASTER, OH Manufacturing	-	78	22	4 282	134 020	3 313	6 617	90 557	366 487	262 098	625 070	24 451
327	Nonmetallic mineral product mfg	-	8	4	1 590	53 067	1 292	2 601	36 658	102 203	67 986	169 727	D
3272	Glass & glass product mfg .	-	4	3	1 547	51 918	1 263	2 553	35 934	99 784	65 632	164 916	D
32721	Glass & glass product mfg	-	4	3	1 547	51 918	1 263	2 553	35 934	99 784	65 632	164 916	D
327212	Other pressed & blown glass & glassware mfg	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	5	1 005	31 752	718	1 433	19 226	74 295	48 828	121 722	1 354
31-33	LEBANON, OH Manufacturing	1	36	16	1 871	68 989	1 212	2 342	38 459	141 571	166 247	308 725	37 495
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEXINGTON, OH													
31-33	Manufacturing	-	11	8	1 488	32 940	1 087	1 348	18 557	98 995	52 498	150 403	6 886
334	Computer & electronic product mfg	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	g	D	D	D	D	D	D	D	D
LIMA, OH													
31-33	Manufacturing	-	48	18	3 856	209 267	3 110	7 002	161 160	623 253	1 105 616	1 743 714	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
LOCKLAND, OH													
31-33	Manufacturing	-	22	12	898	25 808	689	1 359	17 278	74 863	90 684	168 148	21 971
LOGAN, OH													
31-33	Manufacturing	-	13	10	1 943	56 794	1 664	3 215	44 372	165 451	155 642	322 232	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
LONDON, OH													
31-33	Manufacturing	-	13	7	999	26 036	798	1 646	17 819	64 948	54 312	120 277	7 301
LORAIN, OH													
31-33	Manufacturing	-	64	21	7 745	340 374	6 496	12 824	256 751	3 215 673	3 431 750	6 669 531	102 675
331	Primary metal mfg	-	5	2	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LORDSTOWN, OH													
31-33	Manufacturing	-	9	3	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	h	D	D	D	D	D	D	D	D
LOUDONVILLE, OH *													
31-33	Manufacturing	-	10	4	779	18 454	703	1 399	15 397	44 876	76 443	126 512	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	1	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
LOUISVILLE, OH													
31-33	Manufacturing	-	9	4	898	39 258	604	1 339	23 975	81 832	224 834	306 267	10 877
LOVELAND, OH *													
31-33	Manufacturing	1	21	10	574	16 208	375	710	8 168	35 357	39 738	75 418	1 864
MACEDONIA, OH													
31-33	Manufacturing	-	46	19	1 899	56 378	1 289	2 362	29 124	175 063	204 865	388 576	23 976
MANSFIELD, OH													
31-33	Manufacturing	-	126	55	7 844	265 361	5 962	13 078	181 131	643 978	613 309	1 256 467	84 708
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	35	17	1 185	30 921	965	2 097	20 087	60 341	59 019	119 850	4 172
333	Machinery mfg	-	13	6	988	36 783	605	1 113	19 018	95 149	76 680	169 672	5 530
3339	Other general-purpose machinery mfg	-	5	3	735	29 500	406	725	14 166	78 116	65 624	141 717	D
33391	Pump & compressor mfg	-	3	2	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	1	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	8	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	7	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	5	5	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	5	5	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAPLE HEIGHTS, OH													
31-33	Manufacturing	3	31	7	576	19 028	464	880	12 489	31 367	46 207	77 934	1 747
MARIETTA, OH													
31-33	Manufacturing	-	36	12	1 624	53 775	1 102	2 230	31 552	151 178	230 749	398 506	13 252
MARION, OH													
31-33	Manufacturing	-	48	23	2 723	92 581	1 877	4 072	54 520	300 441	479 777	784 864	22 967
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	654	27 717	309	772	11 552	45 043	60 065	111 094	D
MARTINS FERRY, OH													
31-33	Manufacturing	-	13	4	f	D	D	D	D	D	D	D	D
MARYSVILLE, OH													
31-33	Manufacturing	5	15	8	f	D	D	D	D	D	D	D	D
MASON, OH													
31-33	Manufacturing	-	39	23	4 108	133 546	2 578	5 296	68 385	327 943	580 722	894 684	49 598
332	Fabricated metal product mfg	-	10	7	1 177	31 288	799	1 601	20 366	90 139	78 451	168 976	8 764
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
MASSILLON, OH													
31-33	Manufacturing	-	64	32	4 737	144 695	3 732	7 285	93 678	273 150	705 365	975 636	41 847
311	Food mfg	-	4	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	8	1 600	55 256	1 246	2 506	37 389	113 987	268 656	367 222	13 164
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	8	3	599	18 360	421	980	11 725	41 664	20 636	61 708	1 829
33272	Turned product & screw, nut, & bolt mfg	-	4	2	f	D	D	D	D	D	D	D	D
MAUMEE, OH													
31-33	Manufacturing	1	40	15	2 118	103 324	1 627	3 366	74 232	283 703	316 439	596 848	40 149
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	2	f	D	D	D	D	D	D	D	D
MAYFIELD, OH													
31-33	Manufacturing	-	12	7	988	40 895	460	957	17 570	68 617	51 002	121 542	5 787
333	Machinery mfg	-	3	3	610	28 464	360	782	15 106	61 362	44 416	107 397	D
3339	Other general-purpose machinery mfg	-	3	3	610	28 464	360	782	15 106	61 362	44 416	107 397	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MAYFIELD HEIGHTS, OH													
31-33	Manufacturing	-	8	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	g	D	D	D	D	D	D	D	D
MEDINA, OH													
31-33	Manufacturing	-	87	36	3 813	123 914	2 694	7 957	69 696	348 114	412 943	759 501	41 730
MENTOR, OH													
31-33	Manufacturing	1	244	98	8 617	274 822	6 225	11 888	155 979	870 739	599 492	1 450 412	46 151
326	Plastics & rubber products mfg	-	15	10	736	23 634	558	1 141	13 220	61 255	61 209	122 261	6 395
3261	Plastics product mfg	-	12	8	625	20 975	462	900	11 204	57 369	53 529	110 685	5 789
332	Fabricated metal product mfg	-	98	28	1 903	57 375	1 500	2 863	38 698	111 559	81 803	193 633	10 803
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	74	14	1 051	32 842	869	1 647	24 130	62 531	36 724	99 324	7 613
33271	Machine shops	1	63	9	602	18 509	473	868	12 443	35 281	14 367	49 638	4 680
332710	Machine shops	1	63	9	602	18 509	473	868	12 443	35 281	14 367	49 638	4 680
333	Machinery mfg	-	36	15	1 272	46 383	1 019	2 072	29 995	208 575	139 660	350 252	5 356
3339	Other general-purpose machinery mfg	-	8	4	663	23 754	563	1 131	15 712	166 750	113 279	282 202	2 333
33399	All other general-purpose machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	13	10	1 224	33 412	896	1 687	17 891	83 078	78 033	159 526	1 997
3353	Electrical equipment mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	4	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	17	11	1 569	49 209	1 008	1 732	18 787	199 421	70 394	248 603	7 024
3391	Medical equipment & supplies mfg	-	10	6	937	32 497	476	763	10 369	165 653	56 487	203 723	6 175
33911	Medical equipment & supplies mfg	-	10	6	937	32 497	476	763	10 369	165 653	56 487	203 723	6 175
339113	Surgical appliance & supplies mfg	-	4	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	7	5	632	16 712	532	969	8 418	33 768	13 907	44 880	849
MIAMISBURG, OH													
31-33	Manufacturing	2	41	23	2 138	80 424	908	1 853	25 541	146 966	97 205	248 662	4 896
332	Fabricated metal product mfg	-	7	4	990	40 148	235	524	8 675	60 459	7 809	68 255	1 063
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
MIDDLEBURG HEIGHTS, OH													
31-33	Manufacturing	4	29	11	642	19 008	484	948	11 701	39 752	33 867	73 326	1 962

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MIDDLETOWN, OH *													
31-33	Manufacturing	-	71	38	7 187	353 017	5 542	12 393	269 384	2 807 989	866 330	3 662 892	85 242
322	Paper mfg	-	12	10	1 409	56 086	1 012	2 422	39 926	169 471	178 312	343 258	11 909
3221	Pulp, paper, & paperboard mills	-	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	6	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
MILFORD, OH *													
31-33	Manufacturing	-	16	7	512	13 802	232	290	3 289	25 004	31 108	57 004	D
MINERVA, OH *													
31-33	Manufacturing	-	13	7	1 630	53 936	1 423	2 688	36 892	146 899	91 644	234 123	5 974
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	g	D	D	D	D	D	D	D	D
MINSTER, OH													
31-33	Manufacturing	6	13	7	1 553	62 223	969	2 246	39 569	331 152	231 477	561 280	9 581
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg....	-	2	2	f	D	D	D	D	D	D	D	D
MOGADORE, OH *													
31-33	Manufacturing	-	21	11	933	28 165	669	1 451	17 242	91 707	107 589	198 681	3 216
MONROE, OH *													
31-33	Manufacturing	-	19	8	978	35 990	651	1 390	22 014	103 421	138 429	240 778	13 097
MONTPELIER, OH													
31-33	Manufacturing	-	19	10	1 929	61 555	1 468	2 934	40 473	177 898	379 949	554 805	9 613
333	Machinery mfg	-	6	4	704	20 152	498	998	11 863	48 260	65 036	113 030	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORAINE, OH													
31-33	Manufacturing	-	70	32	j	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	6	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	6	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	5	h	D	D	D	D	D	D	D	7 072
33639	Other motor vehicle parts mfg	-	4	3	h	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	h	D	D	D	D	D	D	D	D
MOUNT GILEAD, OH													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
MOUNT VERNON, OH													
31-33	Manufacturing	-	25	16	3 580	136 461	2 510	5 472	78 686	285 930	419 795	704 829	18 810
333	Machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	2	2	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
NAPOLEON, OH													
31-33	Manufacturing	-	28	13	2 972	125 234	2 500	5 441	98 141	1 083 369	508 478	1 591 993	51 722
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWARK, OH													
31-33	Manufacturing	-	49	18	4 017	133 350	3 276	6 504	99 635	441 871	326 998	770 247	17 657
327	Nonmetallic mineral product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	6	802	18 349	690	1 346	12 883	39 514	28 718	67 527	3 090
3328	Coating, engraving, heat treating, & allied activities	-	2	2	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	2	2	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
NEW BREMEN, OH													
31-33	Manufacturing	-	9	3	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
NEWCOMERSTOWN, OH													
31-33	Manufacturing	-	18	7	721	19 917	601	1 145	14 029	53 308	34 078	86 266	2 782
NEW LEXINGTON, OH													
31-33	Manufacturing	-	6	3	907	24 094	800	1 630	19 609	61 143	56 894	117 809	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
NEW LONDON, OH													
31-33	Manufacturing	-	13	5	522	10 419	421	726	7 187	22 253	14 682	37 189	1 367
NEW PHILADELPHIA, OH													
31-33	Manufacturing	3	29	12	2 105	81 257	1 509	3 092	52 401	239 302	222 893	459 316	13 979
333	Machinery mfg	2	3	3	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NILES, OH													
31-33	Manufacturing	-	37	20	2 275	95 316	1 766	4 215	68 828	294 789	326 185	628 183	14 024
331	Primary metal mfg	-	6	5	1 063	54 598	772	2 040	38 710	175 705	230 557	412 539	7 656
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	16	10	f	D	D	D	D	D	D	D	3 104
NORTH BALTIMORE, OH													
31-33	Manufacturing	-	10	6	975	30 672	813	1 735	21 347	95 164	219 246	316 822	6 587
326	Plastics & rubber products mfg	1	3	3	578	20 387	465	961	14 407	53 467	34 272	87 600	D
NORTH CANTON, OH													
31-33	Manufacturing	-	19	9	3 415	125 274	2 341	4 445	80 312	426 388	167 958	604 575	37 149
335	Electrical equipment, appliance, & component mfg	-	2	2	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg...	-	1	1	h	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	h	D	D	D	D	D	D	D	D
NORTH KINGSVILLE, OH													
31-33	Manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin...	-	1	1	f	D	D	D	D	D	D	D	D
NORTH RIDGEVILLE, OH													
31-33	Manufacturing	1	49	15	1 495	37 883	1 183	2 375	25 880	103 959	94 362	199 897	5 847
332	Fabricated metal product mfg	-	21	7	548	14 348	440	913	9 918	28 952	20 070	49 743	2 119
NORTH ROYALTON, OH													
31-33	Manufacturing	2	84	20	1 111	37 445	905	1 805	25 337	80 988	54 167	135 232	4 953
NORTHWOOD, OH													
31-33	Manufacturing	2	14	8	697	21 078	564	1 275	13 671	51 401	46 841	96 868	7 019
NORTON, OH *													
31-33	Manufacturing	-	33	8	779	25 078	540	1 075	13 707	86 602	72 601	160 417	4 398

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORWALK, OH													
31-33	Manufacturing	-	42	22	3 363	106 668	2 596	5 283	71 998	262 564	201 417	458 819	12 784
332	Fabricated metal product mfg	-	7	3	685	16 853	557	1 071	11 980	31 837	14 042	45 859	D
3328	Coating, engraving, heat treating, & allied activities ..	-	1	1	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	1	1	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
NORWOOD, OH													
31-33	Manufacturing	2	48	20	2 932	108 352	2 037	4 391	59 574	300 597	249 304	555 033	25 954
323	Printing & related support activities	-	9	5	945	34 627	720	1 468	19 697	114 511	49 116	164 448	7 461
3231	Printing & related support activities	-	9	5	945	34 627	720	1 468	19 697	114 511	49 116	164 448	7 461
32311	Printing	-	9	5	945	34 627	720	1 468	19 697	114 511	49 116	164 448	7 461
323110	Commercial lithographic printing ..	-	5	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
OAKWOOD, OH (CUYAHOGA COUNTY)													
31-33	Manufacturing	-	31	11	855	30 919	581	1 183	16 147	60 656	139 851	201 694	4 027
OBERLIN, OH													
31-33	Manufacturing	-	11	5	g	D	D	D	D	D	D	D	8 493
ONTARIO, OH													
31-33	Manufacturing	-	12	9	3 599	195 147	3 067	6 523	165 359	222 232	358 789	580 893	26 152
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
OREGON, OH													
31-33	Manufacturing	-	12	4	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
ORRVILLE, OH													
31-33	Manufacturing	-	35	20	3 726	116 410	2 660	5 433	72 713	317 708	359 026	705 065	19 245
311	Food mfg	-	6	2	829	29 097	545	1 312	20 282	173 319	139 492	311 098	9 387
331	Primary metal mfg	-	5	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	886	17 716	691	808	12 473	22 148	81 306	120 067	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OTTAWA, OH													
31-33	Manufacturing	-	9	6	2 412	83 628	2 102	4 318	67 495	211 997	442 533	638 231	23 019
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
OXFORD, OH													
31-33	Manufacturing	-	10	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PAINESVILLE, OH													
31-33	Manufacturing	-	51	19	2 499	108 824	1 822	4 337	62 294	431 320	243 304	710 032	25 388
322	Paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
PARMA, OH													
31-33	Manufacturing	-	58	13	5 002	278 778	4 327	10 342	232 950	388 141	584 554	972 801	D
332	Fabricated metal product mfg.....	-	13	6	556	20 339	429	963	13 312	41 333	32 727	73 758	D
336	Transportation equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping.....	-	2	2	h	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping.....	-	2	2	h	D	D	D	D	D	D	D	D
PERRYSBURG, OH													
31-33	Manufacturing	-	29	15	3 597	194 673	2 646	6 063	143 425	339 240	395 930	737 272	39 537
332	Fabricated metal product mfg.....	-	6	4	617	19 645	395	884	12 639	92 847	62 801	153 967	D
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
PIQUA, OH													
31-33	Manufacturing	1	61	24	3 861	120 337	2 762	5 908	68 154	313 018	307 157	616 723	27 968
326	Plastics & rubber products mfg.....	-	8	5	569	15 191	461	984	9 887	38 974	45 816	84 007	2 938
3261	Plastics product mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	9	6	1 035	35 004	592	1 365	17 944	79 627	65 134	149 088	5 733
3339	Other general-purpose machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PORT CLINTON, OH													
31-33	Manufacturing	-	11	6	f	D	D	D	D	D	D	D	5 703
PORTSMOUTH, OH													
31-33	Manufacturing	1	28	9	842	22 854	673	1 414	15 794	46 428	43 706	89 319	3 689
RAVENNA, OH													
31-33	Manufacturing	-	35	18	2 095	71 244	1 661	3 615	51 305	213 918	132 321	343 471	13 229
326	Plastics & rubber products mfg	-	11	7	690	23 045	490	1 096	13 548	60 963	44 724	103 868	3 852
3262	Rubber product mfg	-	6	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
READING, OH													
31-33	Manufacturing	-	36	15	1 499	61 276	899	1 969	32 318	141 597	131 184	276 585	12 803
REYNOLDSBURG, OH *													
31-33	Manufacturing	-	15	4	591	15 978	488	965	11 876	95 827	117 574	213 038	D
RITTMAN, OH *													
31-33	Manufacturing	-	10	6	779	30 435	577	1 275	21 524	96 717	63 197	158 719	5 125
ROSSFORD, OH													
31-33	Manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
SABINA, OH													
31-33	Manufacturing	-	9	4	751	20 959	550	1 076	12 467	60 853	103 281	164 278	3 028
ST. BERNARD, OH													
31-33	Manufacturing	-	25	12	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	3	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	2	2	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	2	2	f	D	D	D	D	D	D	D	D
ST. MARYS, OH													
31-33	Manufacturing	-	22	9	1 856	66 749	1 484	3 044	49 441	166 357	285 853	451 965	22 576
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SALEM, OH													
31-33	Manufacturing	2	53	25	3 821	119 266	3 049	6 448	84 752	297 446	211 506	505 616	19 086
326	Plastics & rubber products mfg	9	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	14	7	1 320	43 274	1 110	2 349	34 448	115 248	73 518	187 924	5 543
3329	Other fabricated metal product mfg	-	4	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	17	12	g	D	D	D	D	D	D	D	6 148
SANDUSKY, OH													
31-33	Manufacturing	-	66	35	5 206	223 405	4 000	8 631	162 633	303 519	494 270	798 992	24 144
332	Fabricated metal product mfg	-	11	5	2 020	119 268	1 623	3 844	93 291	60 835	197 452	257 072	D
3329	Other fabricated metal product mfg	-	2	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	6	f	D	D	D	D	D	D	D	D
SEBRING, OH													
31-33	Manufacturing	5	16	11	949	24 508	701	1 427	14 655	48 952	43 774	91 986	3 370
SHARONVILLE, OH *													
31-33	Manufacturing	-	57	17	3 944	237 003	2 811	6 976	171 158	801 708	812 563	1 620 734	D
336	Transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
SHELBY, OH													
31-33	Manufacturing	1	13	6	g	D	D	D	D	D	D	D	5 862
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SIDNEY, OH													
31-33	Manufacturing	-	62	43	7 441	243 486	5 251	10 761	132 414	530 186	1 205 112	1 752 489	52 663
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	5	5	741	17 893	552	1 033	11 183	31 493	23 746	56 580	1 605
3315	Foundries	1	4	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	4	4	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	1	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	11	994	34 128	808	1 686	25 010	91 453	172 102	270 561	4 891
333	Machinery mfg	-	14	11	3 243	122 086	1 918	4 163	51 766	238 230	335 572	579 818	21 735
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	3	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
SOLON, OH													
31-33	Manufacturing	-	114	68	11 173	417 574	6 675	14 383	209 788	1 347 999	1 056 745	2 398 733	90 684
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	3	1 196	42 830	578	1 337	17 825	194 442	141 321	342 565	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	19	15	1 909	72 420	1 036	2 285	36 340	168 063	166 390	334 213	6 767
3325	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	23	15	1 980	83 296	1 306	2 759	48 605	186 742	164 944	342 218	8 786
3335	Metalworking machinery mfg	-	8	6	1 056	44 813	781	1 656	30 420	64 330	30 816	95 149	6 665
33351	Metalworking machinery mfg	-	8	6	1 056	44 813	781	1 656	30 420	64 330	30 816	95 149	6 665
333515	Cutting tool & machine tool accessory mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	14	9	2 259	83 875	1 016	2 491	26 231	183 328	163 385	349 609	17 193
3342	Communications equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	4	1 013	47 387	395	1 205	16 789	99 987	96 628	199 293	10 496
33451	Navigational, measuring, medical, & control instruments mfg	-	7	4	1 013	47 387	395	1 205	16 789	99 987	96 628	199 293	10 496
334515	Electricity measuring & testing instrument mfg	-	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOLON, OH—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
	SOUTH EUCLID, OH												
31-33	Manufacturing	-	23	4	596	23 133	389	844	12 675	57 292	32 477	88 356	2 613
	SPRINGBORO, OH *												
31-33	Manufacturing	-	20	13	1 614	56 090	1 077	2 263	27 805	100 190	161 639	257 987	13 153
	SPRINGDALE, OH												
31-33	Manufacturing	1	46	20	3 980	151 683	2 746	5 571	81 426	823 722	577 120	1 390 058	76 868
311	Food mfg	9	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	9	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	9	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	572	20 276	429	912	10 739	41 631	31 691	73 240	3 533
3261	Plastics product mfg	-	6	4	572	20 276	429	912	10 739	41 631	31 691	73 240	3 533
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	2 154
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
	SPRINGFIELD, OH												
31-33	Manufacturing	1	115	54	h	D	D	D	D	D	D	D	32 933
332	Fabricated metal product mfg	1	30	13	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	19	10	g	D	D	D	D	D	D	D	13 517
3339	Other general-purpose machinery mfg	-	6	6	f	D	D	D	D	D	D	D	10 997
339	Miscellaneous mfg	-	12	5	f	D	D	D	D	D	D	D	D
	STEUBENVILLE, OH												
31-33	Manufacturing	-	15	4	f	D	D	D	D	D	D	D	338
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
	STOW, OH												
31-33	Manufacturing	1	72	28	2 527	89 381	1 694	3 519	49 417	179 497	165 763	342 539	25 487
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
	STREETSBORO, OH												
31-33	Manufacturing	-	32	20	2 184	65 850	1 544	3 267	38 974	222 657	118 609	341 015	18 107
326	Plastics & rubber products mfg	-	5	4	840	22 128	702	1 516	15 544	53 874	41 451	95 453	5 506
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STRONGSVILLE, OH													
31-33	Manufacturing	-	76	35	3 286	122 671	2 178	4 550	68 283	340 221	330 245	650 934	20 245
332	Fabricated metal product mfg	-	19	11	856	30 319	618	1 379	19 005	96 116	53 518	149 191	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	14	8	536	18 151	445	1 016	13 582	64 288	26 938	90 430	D
333	Machinery mfg	-	17	5	759	34 042	396	661	14 351	130 319	74 855	190 185	D
3332	Industrial machinery mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	2	f	D	D	D	D	D	D	D	D
STRUTHERS, OH													
31-33	Manufacturing	-	21	9	643	15 117	567	947	9 949	45 399	86 948	131 852	2 745
TALLMADGE, OH *													
31-33	Manufacturing	-	52	24	1 661	55 276	1 259	2 406	33 819	117 103	83 096	198 435	11 358
TIFFIN, OH													
31-33	Manufacturing	-	40	16	2 967	96 253	2 374	4 864	70 803	271 920	184 877	461 356	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg...	-	1	1	f	D	D	D	D	D	D	D	D
TIPP CITY, OH													
31-33	Manufacturing	-	35	15	1 940	62 357	1 328	2 895	33 403	153 113	106 662	257 963	10 356
TOLEDO, OH													
31-33	Manufacturing	-	462	167	25 446	1 100 980	20 604	42 651	848 432	2 764 850	6 461 904	9 282 316	171 073
311	Food mfg	-	19	7	1 175	54 277	880	1 934	40 167	515 947	337 847	857 533	D
3112	Grain & oilseed milling	-	2	2	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	2	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	73	17	1 367	43 987	896	1 870	27 887	91 391	64 203	155 388	9 094
3231	Printing & related support activities	2	73	17	1 367	43 987	896	1 870	27 887	91 391	64 203	155 388	9 094
32311	Printing	2	63	14	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	30	8	659	22 569	452	982	14 872	46 711	35 547	82 086	3 680
324	Petroleum & coal products mfg	-	4	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	4	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	22	12	603	13 263	433	832	8 732	31 837	32 560	64 562	1 929

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TOLEDO, OH—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	12	4	1 410	48 054	1 237	2 495	39 148	168 340	114 416	282 982	6 374
3272	Glass & glass product mfg	-	4	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	2	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	6	1 039	45 840	836	1 891	34 946	101 633	197 356	297 483	D
3315	Foundries	-	5	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	5	2	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	3	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	121	41	3 070	104 661	2 328	4 702	66 827	196 455	254 395	468 919	11 766
3321	Forging & stamping	1	11	9	590	19 428	448	828	12 477	31 962	35 004	67 771	1 789
33211	Forging & stamping	1	11	9	590	19 428	448	828	12 477	31 962	35 004	67 771	1 789
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	49	12	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	41	8	580	22 072	456	945	15 037	38 585	20 956	60 625	2 901
332710	Machine shops	-	41	8	580	22 072	456	945	15 037	38 585	20 956	60 625	2 901
3328	Coating, engraving, heat treating, & allied activities	-	21	9	772	25 306	592	1 237	16 670	48 034	141 604	205 800	D
33281	Coating, engraving, heat treating, & allied activities	-	21	9	772	25 306	592	1 237	16 670	48 034	141 604	205 800	D
333	Machinery mfg	1	51	22	1 442	59 009	1 049	2 183	40 377	95 334	78 578	183 116	8 452
3335	Metalworking machinery mfg	2	32	15	973	41 999	788	1 700	32 356	52 897	22 260	84 411	7 042
33351	Metalworking machinery mfg	2	32	15	973	41 999	788	1 700	32 356	52 897	22 260	84 411	7 042
336	Transportation equipment mfg	-	25	17	11 372	591 734	10 388	21 854	515 926	1 088 055	4 031 983	5 146 060	54 835
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	19	13	i	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	3	9	7	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	3	9	7	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	41	10	952	26 137	607	1 001	11 697	65 995	37 016	102 710	2 676
3391	Medical equipment & supplies mfg	4	18	5	621	16 402	381	553	6 858	44 925	19 633	64 882	1 765
33911	Medical equipment & supplies mfg	4	18	5	621	16 402	381	553	6 858	44 925	19 633	64 882	1 765
TORONTO, OH													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
TRENTON, OH													
31-33	Manufacturing	-	7	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TROTWOOD, OH													
31-33	Manufacturing	-	22	8	601	19 061	429	816	11 154	43 093	26 427	69 639	7 177
TROY, OH													
31-33	Manufacturing	-	65	30	5 694	198 929	3 945	7 942	115 298	718 818	703 288	1 389 386	68 640
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	9	1 286	42 392	824	1 734	25 436	195 982	150 275	351 046	D
3339	Other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	5	3	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	5	5	g	D	D	D	D	D	D	D	9 416
3363	Motor vehicle parts mfg ...	5	4	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
TWINSBURG, OH													
31-33	Manufacturing	-	83	45	6 179	317 756	4 704	10 191	240 805	556 580	582 221	1 141 514	109 905
326	Plastics & rubber products mfg	-	9	6	656	20 404	509	1 158	13 007	52 576	36 594	90 399	3 330
3261	Plastics product mfg	-	8	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	8	672	21 273	475	954	10 347	85 542	83 283	168 368	3 406
336	Transportation equipment mfg	-	4	3	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	3	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	1	g	D	D	D	D	D	D	D	D
UHRICHSVILLE, OH													
31-33	Manufacturing	-	11	5	554	15 754	372	731	11 262	46 426	9 855	56 541	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UPPER SANDUSKY, OH													
31-33	Manufacturing	2	20	13	2 563	68 233	2 107	4 298	49 803	146 658	175 927	315 436	15 564
326	Plastics & rubber products mfg	7	5	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	8	3	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
URBANA, OH													
31-33	Manufacturing	3	27	17	2 284	64 601	1 814	3 526	42 318	343 686	179 200	520 372	D
VANDALIA, OH													
31-33	Manufacturing	-	44	26	4 998	156 205	3 809	7 931	104 729	527 650	512 139	1 035 799	30 686
333	Machinery mfg	1	12	6	509	19 712	342	750	11 391	39 019	27 176	66 903	2 059
336	Transportation equipment mfg	-	5	4	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
VAN WERT, OH													
31-33	Manufacturing	-	22	13	3 725	119 528	3 157	6 435	95 652	367 109	325 009	688 529	20 064
332	Fabricated metal product mfg	-	5	5	g	D	D	D	D	D	D	D	D
3321	Forging & stamping	-	3	3	603	21 150	443	879	13 931	43 587	37 463	82 334	D
33211	Forging & stamping	-	3	3	603	21 150	443	879	13 931	43 587	37 463	82 334	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
WADSWORTH, OH													
31-33	Manufacturing	1	64	31	2 044	66 174	1 496	2 902	39 021	160 305	131 964	292 322	18 011
WAPAKONETA, OH													
31-33	Manufacturing	-	22	11	1 431	38 972	1 128	2 122	25 029	95 343	77 392	173 940	7 788
332	Fabricated metal product mfg	-	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN, OH													
31-33	Manufacturing	-	69	29	12 471	629 742	9 738	19 473	467 205	1 097 861	2 107 498	3 247 441	77 693
331	Primary metal mfg	-	7	6	1 075	50 887	770	1 639	33 366	135 415	345 414	473 904	17 612
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	i	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	2	2	i	D	D	D	D	D	D	D	D
WARRENSVILLE HEIGHTS, OH													
31-33	Manufacturing	-	54	21	1 873	63 119	1 306	2 339	35 767	152 248	116 195	269 097	7 381
WASHINGTON, OH													
31-33	Manufacturing	1	31	15	1 638	42 856	1 263	2 606	31 109	141 006	187 077	326 156	12 488
326	Plastics & rubber products mfg	-	6	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
WAUSEON, OH													
31-33	Manufacturing	-	34	21	1 782	47 408	1 400	3 010	32 140	97 497	110 735	206 153	14 815
WAVERLY CITY, OH													
31-33	Manufacturing	-	8	3	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	1	1	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
WELLINGTON, OH													
31-33	Manufacturing	-	11	7	786	21 786	653	1 208	18 021	48 016	27 029	74 866	7 845
WELLSTON, OH													
31-33	Manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST CARROLLTON CITY, OH													
31-33	Manufacturing	-	42	23	3 052	135 276	2 237	5 098	91 864	389 177	490 627	880 319	55 412
322	Paper mfg	-	4	4	945	46 705	699	1 590	31 788	189 972	168 274	358 635	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	7	f	D	D	D	D	D	D	D	1 495
333	Machinery mfg	-	10	7	1 131	52 973	772	1 896	33 667	106 921	42 530	148 096	D
3335	Metalworking machinery mfg	-	6	5	f	D	D	D	D	D	D	D	2 847
33351	Metalworking machinery mfg	-	6	5	f	D	D	D	D	D	D	D	2 847
333514	Special die & tool, die set, jig, & fixture mfg .	-	6	5	f	D	D	D	D	D	D	D	2 847
WESTERVILLE, OH *													
31-33	Manufacturing	-	37	10	1 206	49 828	745	1 500	20 275	99 567	94 805	191 471	6 334
WESTLAKE, OH													
31-33	Manufacturing	2	55	19	1 662	54 793	1 141	2 104	32 956	145 672	166 192	308 665	6 501
WHITEHALL, OH													
31-33	Manufacturing	-	11	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
WICKLIFFE, OH													
31-33	Manufacturing	-	65	19	3 432	133 314	1 874	3 680	55 271	350 486	209 981	562 061	25 340
332	Fabricated metal product mfg	-	25	7	904	34 723	670	1 526	22 828	81 214	48 041	130 927	5 751
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
WILLARD, OH													
31-33	Manufacturing	-	6	5	3 798	118 015	3 443	7 224	98 877	443 490	412 778	858 664	17 271
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg .	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	2	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	g	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILLOUGHBY, OH													
31-33	Manufacturing	-	197	63	5 179	187 819	3 834	8 299	117 970	583 386	251 361	842 315	38 304
332	Fabricated metal product mfg	-	108	33	2 879	102 435	2 212	4 829	69 149	323 331	129 620	458 880	17 709
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	71	15	1 320	47 675	1 029	2 237	32 793	95 919	40 388	136 677	6 777
33271	Machine shops	1	56	8	656	21 784	493	961	14 656	38 640	15 734	54 306	2 336
332710	Machine shops	1	56	8	656	21 784	493	961	14 656	38 640	15 734	54 306	2 336
33272	Turned product & screw, nut, & bolt mfg	-	15	7	664	25 891	536	1 276	18 137	57 279	24 654	82 371	4 441
332721	Precision turned product mfg	-	14	7	f	D	D	D	D	D	D	D	4 441
3329	Other fabricated metal product mfg	-	14	8	900	34 953	691	1 499	23 925	168 923	61 446	236 438	9 188
33291	Metal valve mfg	-	11	7	f	D	D	D	D	D	D	D	8 903
333	Machinery mfg	1	31	13	792	34 390	487	1 040	15 881	62 421	40 781	104 440	6 766
3335	Metalworking machinery mfg	2	18	7	507	21 789	322	683	11 064	37 959	21 827	60 329	5 496
33351	Metalworking machinery mfg	2	18	7	507	21 789	322	683	11 064	37 959	21 827	60 329	5 496
WILMINGTON, OH													
31-33	Manufacturing	1	17	8	2 456	61 078	2 046	4 410	46 017	172 792	141 236	306 117	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
WOODLAWN, OH													
31-33	Manufacturing	2	50	24	1 829	64 002	1 094	2 081	29 056	132 602	133 911	266 876	30 053
WOOSTER, OH													
31-33	Manufacturing	-	43	21	6 426	243 264	4 517	10 577	154 476	856 510	711 416	1 583 584	79 551
326	Plastics & rubber products mfg	-	6	4	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	6	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	-	1	1	f	D	D	D	D	D	D	D	D
WORTHINGTON, OH													
31-33	Manufacturing	2	46	13	1 943	82 679	1 322	2 460	40 133	291 279	167 133	467 687	19 560
327	Nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
XENIA, OH													
31-33	Manufacturing	1	40	14	773	20 064	594	1 128	14 134	45 847	29 420	75 726	6 556
YELLOW SPRINGS, OH													
31-33	Manufacturing	-	7	3	856	29 137	592	1 258	15 078	57 114	14 803	71 101	2 477
YOUNGSTOWN, OH *													
31-33	Manufacturing	-	148	49	4 658	166 457	3 392	6 931	108 149	413 577	539 465	953 978	20 822
331	Primary metal mfg	-	9	7	975	47 409	714	1 584	33 052	189 699	303 420	498 281	4 181
332	Fabricated metal product mfg	1	41	16	976	32 797	681	1 318	19 620	44 766	69 685	115 735	2 738
3323	Architectural & structural metals mfg	1	17	7	531	19 055	361	678	10 674	18 685	42 738	61 839	1 311
333	Machinery mfg	-	12	5	1 275	52 428	929	1 888	33 796	111 780	61 806	172 870	D
3339	Other general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	g	D	D	D	D	D	D	D	D
ZANESVILLE, OH													
31-33	Manufacturing	1	53	21	4 194	112 193	3 507	6 986	83 723	356 455	243 722	598 993	21 015
327	Nonmetallic mineral product mfg	-	8	5	692	20 335	605	1 062	16 621	52 283	39 201	92 495	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	5	2	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	5	2	2	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	5	2	2	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
OHIO		OHIO—Con.	
Companies ¹	number.. 16 186	Quantity of electricity purchased for heat and power	1,000 kWh.. 65 476 243
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 687 720
All establishments	number.. 17 974	Total value of shipments	\$1,000.. 241 902 924
Establishments with 1 to 19 employees	number.. 11 077	Value of resales	\$1,000.. 8 606 858
Establishments with 20 to 99 employees	number.. 4 813	Value added	\$1,000.. 112 491 355
Establishments with 100 employees or more	number.. 2 084	Total inventories, beginning of year	\$1,000.. 22 280 617
All employees	number.. 984 201	Finished goods inventories, beginning of year	\$1,000.. 7 957 676
Total compensation ²	\$1,000.. 46 364 207	Work-in-process inventories, beginning of year	\$1,000.. 6 230 785
Annual payroll	\$1,000.. 35 950 500	Materials and supplies inventories, beginning of year	\$1,000.. 8 072 156
Total fringe benefits	\$1,000.. 10 413 707	Total inventories, end of year	\$1,000.. 22 605 641
Production workers, average for year	number.. 730 170	Finished goods inventories, end of year	\$1,000.. 8 181 781
Production workers on March 12	number.. 727 354	Work-in-process inventories, end of year	\$1,000.. 6 306 645
Production workers on May 12	number.. 727 880	Materials and supplies inventories, end of year	\$1,000.. 8 117 215
Production workers on August 12	number.. 732 970	Gross book value of total assets at beginning of year	\$1,000.. 86 211 989
Production workers on November 12	number.. 732 476	Total capital expenditures (new and used)	\$1,000.. 8 989 209
Production-worker hours	1,000.. 1 501 585	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 1 248 853
Production-worker wages	\$1,000.. 23 560 975	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 7 740 356
Total cost of materials	\$1,000.. 129 709 277	Total retirements ²	\$1,000.. 2 912 683
Cost of materials, parts, containers, etc., consumed	\$1,000.. 115 907 046	Gross book value of total assets at end of year	\$1,000.. 92 288 565
Cost of resales	\$1,000.. 6 231 100	Total depreciation during year ²	\$1,000.. 5 698 639
Cost of fuels	\$1,000.. 1 564 599	Total rental payments ²	\$1,000.. 1 702 330
Cost of purchased electricity	\$1,000.. 2 817 246	Buildings and other structures rental payments ²	\$1,000.. 721 547
Cost of contract work	\$1,000.. 3 189 286	Machinery and equipment rental payments ²	\$1,000.. 980 763

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

OHIO

Alliance is in Mahoning and Stark Counties.

Bellevue is in Huron and Sandusky Counties.

Blanchester is in Clinton and Warren Counties.

Bluffton is in Allen and Hancock Counties.

Buckeye Lake is in Fairfield and Licking Counties; it annexed into Fairfield County in October 1995.

Canal Winchester is in Fairfield and Franklin Counties.

Carlisle is in Montgomery and Warren Counties.

Columbiana is in Columbiana and Mahoning Counties.

Columbus is in Delaware, Fairfield, and Franklin Counties.

Crestline is in Crawford and Richland Counties.

Delphos is in Allen and Van Wert Counties.

Dublin is in Delaware, Franklin, and Union Counties.

Fairfield is in Butler and Hamilton Counties.

Fostoria is in Hancock, Seneca, and Wood Counties.

Huber Heights is in Miami and Montgomery Counties.

Kettering is in Greene and Montgomery Counties.

Loudonville is in Ashland and Holmes Counties.

Loveland is in Clermont, Hamilton, and Warren Counties.

Middletown is in Butler and Warren Counties.

Milford is in Clermont and Hamilton Counties.

Minerva is in Carroll, Columbiana, and Stark Counties.

Mogadore is in Portage and Summit Counties.

Monroe is in Butler and Warren Counties.

Norton is in Summit and Wayne Counties.

Pickerington is in Fairfield and Franklin Counties.

Plain City is in Madison and Union Counties.

Reynoldsburg is in Fairfield, Franklin, and Licking Counties.

Rittman is in Medina and Wayne Counties.

Sharonville is in Butler and Hamilton Counties.

Springboro is in Montgomery and Warren Counties.

Swanton is in Fulton and Lucas Counties.

Tallmadge is in Portage and Summit Counties.

Union is in Miami and Montgomery Counties; it annexed into Miami County in March 1996.

Vermilion is in Erie and Lorain Counties.

Westerville is in Delaware and Franklin Counties.

Youngstown is in Mahoning and Trumbull Counties.

Appendix E. Metropolitan Areas

OHIO

Akron, OH PMSA

Portage County, OH
Summit County, OH

Canton—Massillon, OH MSA

Carroll County, OH
Stark County, OH

Cincinnati, OH—KY—IN PMSA

Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH
Hamilton County, OH
Warren County, OH

Cincinnati—Hamilton, OH—KY—IN CMSA

Cincinnati, OH—KY—IN PMSA
Dearborn County, IN
Ohio County, IN
Boone County, KY
Campbell County, KY
Gallatin County, KY
Grant County, KY
Kenton County, KY
Pendleton County, KY
Brown County, OH
Clermont County, OH

Cincinnati—Hamilton, OH—KY—IN CMSA—Con.

Cincinnati, OH—KY—IN PMSA—Con.
Hamilton County, OH
Warren County, OH
Hamilton—Middletown, OH PMSA
Butler County, OH

Cleveland—Lorain—Elyria, OH PMSA

Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Cleveland—Akron, OH CMSA

Akron, OH PMSA
Portage County, OH
Summit County, OH
Cleveland—Lorain—Elyria, OH PMSA
Ashtabula County, OH
Cuyahoga County, OH
Geauga County, OH
Lake County, OH
Lorain County, OH
Medina County, OH

Columbus, OH MSA

Delaware County, OH
Fairfield County, OH
Franklin County, OH
Licking County, OH
Madison County, OH
Pickaway County, OH

Dayton—Springfield, OH MSA

Clark County, OH
Greene County, OH
Miami County, OH
Montgomery County, OH

Hamilton—Middletown, OH PMSA

Butler County, OH

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Mansfield, OH MSA

Crawford County, OH
Richland County, OH

Parkersburg—Marietta, WV—OH MSA

Washington County, OH
Wood County, WV

Steubenville—Weirton, OH—WV MSA

Jefferson County, OH
Brooke County, WV
Hancock County, WV

Toledo, OH MSA

Fulton County, OH
Lucas County, OH
Wood County, OH

Wheeling, WV—OH MSA

Belmont County, OH
Marshall County, WV
Ohio County, WV

Youngstown—Warren, OH MSA

Columbiana County, OH
Mahoning County, OH
Trumbull County, OH

Oklahoma

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
OKLAHOMA													
31-33	Manufacturing	-	4 087	1 191	164 060	4 963 236	122 705	242 407	3 229 468	17 233 699	20 259 932	37 453 197	1 113 680
311	Food mfg	-	221	79	13 750	336 733	10 302	20 921	221 867	1 187 821	2 516 130	3 714 245	82 381
3111	Animal food mfg	-	40	17	1 085	29 420	718	1 507	17 600	185 272	553 584	738 074	12 625
31111	Animal food mfg	-	40	17	1 085	29 420	718	1 507	17 600	185 272	553 584	738 074	12 625
311111	Dog & cat food mfg	-	3	3	e	D	D	D	D	D	D	D	D
311119	Other animal food mfg	-	37	14	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	8	8	698	23 510	517	1 122	15 618	122 848	276 835	401 975	2 894
31121	Flour milling & malt mfg	-	4	4	292	10 834	208	478	6 856	22 851	121 372	147 952	D
311211	Flour milling	-	4	4	292	10 834	208	478	6 856	22 851	121 372	147 952	D
31122	Starch & vegetable fats & oils mfg	-	4	4	406	12 676	309	644	8 762	99 997	155 463	254 023	D
311222	Soybean processing	-	1	1	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing	2	2	2	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	8	1	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	4	1	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	4	1	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	14	4	380	8 815	325	639	6 927	29 268	47 303	76 650	D
31141	Frozen food mfg	1	8	3	300	6 789	259	512	5 447	19 877	33 235	53 125	677
311412	Frozen specialty food mfg	1	7	3	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	10	5	f	D	D	D	D	D	D	D	4 771
31151	Dairy product (except frozen) mfg	-	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	3	3	491	13 340	302	783	7 653	60 637	110 229	170 809	1 773
31152	Ice cream & frozen dessert mfg	-	5	2	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	5	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	65	20	6 140	127 418	5 271	10 695	100 207	323 131	1 018 307	1 346 814	33 485
31161	Animal slaughtering & processing	1	65	20	6 140	127 418	5 271	10 695	100 207	323 131	1 018 307	1 346 814	33 485
311611	Animal (except poultry) slaughtering	-	38	5	2 081	44 489	1 664	3 509	35 394	89 538	529 821	615 787	D
311612	Meat processed from carcasses	-	16	9	1 759	43 232	1 483	2 928	31 923	112 029	305 548	421 843	17 543
311615	Poultry processing	4	6	4	2 202	36 774	2 084	4 180	31 914	103 828	160 677	268 721	6 555
3118	Bakeries & tortilla mfg	-	57	14	3 252	87 544	2 034	4 020	44 861	233 070	241 525	474 043	13 843
31181	Bread & bakery product mfg	-	50	11	2 322	65 007	1 280	2 444	28 479	177 660	137 853	315 642	11 919
311811	Retail bakeries	6	37	2	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	9	6	1 318	40 024	504	822	13 761	96 426	46 899	142 882	5 273
311813	Frozen cakes, pies, & other pastries mfg	-	4	3	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	5	3	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	3	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	c	D	D	D	D	D	D	D	D
3119	Other food mfg	1	19	10	1 136	30 919	676	1 285	17 019	175 804	129 679	306 085	12 703
31192	Coffee & tea mfg	-	2	2	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	2	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	2	6	3	e	D	D	D	D	D	D	D	2 467
311941	Mayonnaise, dressing, & other prepared sauce mfg	-	3	2	c	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	9	3	1	c	D	D	D	D	D	D	D	D
31199	All other food mfg	-	8	4	350	12 804	240	399	7 311	88 335	29 293	117 476	D
311991	Perishable prepared food mfg	-	2	2	c	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	6	2	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	28	9	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	27	9	1 797	49 478	711	1 515	15 248	246 723	266 498	513 073	D
31211	Soft drink & ice mfg	-	27	9	1 797	49 478	711	1 515	15 248	246 723	266 498	513 073	D
312111	Soft drink mfg	-	12	7	1 678	47 070	625	1 320	13 606	241 812	262 512	504 176	12 298
312113	Ice mfg	4	14	2	c	D	D	D	D	D	D	D	645
313	Textile mills	1	22	4	418	8 824	360	657	6 572	18 408	23 157	40 142	1 953
3131	Fiber, yarn, & thread mills	-	1	1	c	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	c	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	c	D	D	D	D	D	D	D	D
3132	Fabric mills	1	12	3	164	4 106	140	273	2 964	10 299	9 401	19 690	1 175
31323	Nonwoven fabric mills	-	2	2	c	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	-	2	2	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills.....	1	77	13	1 476	25 039	1 173	1 853	16 127	60 937	95 887	157 716	3 577
3141	Textile furnishings mills....	1	28	5	643	10 273	556	886	7 436	25 367	57 395	84 186	948
31411	Carpet & rug mills	—	3	1	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	3	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	4	25	4	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	5	19	2	c	D	D	D	D	D	D	D	143
314129	Other household textile product mills	3	6	2	160	2 544	141	210	1 788	4 840	5 795	10 468	D
3149	Other textile product mills..	1	49	8	833	14 766	617	967	8 691	35 570	38 492	73 530	2 629
31491	Textile bag & canvas mills	—	25	3	381	6 315	274	472	3 631	18 152	19 153	36 773	1 274
314912	Canvas & related product mills	—	24	3	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	2	24	5	452	8 451	343	495	5 060	17 418	19 339	36 757	1 355
314999	All other miscellaneous textile product mills ..	2	22	5	e	D	D	D	D	D	D	D	D
315	Apparel mfg	1	97	42	5 781	91 721	5 065	9 335	75 138	179 537	267 726	442 195	4 260
3152	Cut & sew apparel mfg	—	69	37	5 452	87 137	4 787	8 835	71 787	171 028	260 857	426 017	4 029
31521	Cut & sew apparel contractors	2	26	14	g	D	D	D	D	D	D	D	1 550
315211	Men's & boys' cut & sew apparel contractors	—	7	6	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	19	8	1 059	14 620	950	1 726	12 032	24 909	2 483	27 796	D
31522	Men's & boys' cut & sew apparel mfg	—	19	13	2 061	32 974	1 850	3 311	28 657	77 168	171 178	239 234	1 001
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	6	3	3	c	D	D	D	D	D	D	D	185
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	4	4	g	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	1	8	4	234	3 073	215	313	2 651	19 328	11 007	30 399	33
315228	Men's & boys' cut & sew other outerwear mfg	—	2	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	17	8	644	10 572	537	914	8 354	23 507	63 731	89 227	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	2	2	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	1	6	3	237	4 146	206	279	3 390	6 738	4 384	10 876	82
31529	Other cut & sew apparel mfg	1	7	2	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	1	6	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	4	25	4	e	D	D	D	D	D	D	D	198
31599	Apparel accessories & other apparel mfg	4	25	4	e	D	D	D	D	D	D	D	198
315991	Hat, cap, & millinery mfg	—	2	1	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	6	23	3	171	2 291	134	174	1 344	3 959	4 862	9 267	D
316	Leather & allied product mfg .	1	25	6	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	18	6	520	7 220	433	731	4 671	13 371	11 253	24 669	451
31699	Other leather & allied product mfg	—	18	6	520	7 220	433	731	4 671	13 371	11 253	24 669	451
316993	Personal leather good (except women's handbag & purse) mfg	—	2	1	c	D	D	D	D	D	D	D	D
316999	All other leather good mfg	—	14	5	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	138	34	2 840	64 875	2 461	4 897	53 714	179 882	228 032	405 267	13 210
3211	Sawmills & wood preservation	1	30	8	811	21 980	736	1 605	20 110	81 695	119 030	198 728	7 900
32111	Sawmills & wood preservation	1	30	8	811	21 980	736	1 605	20 110	81 695	119 030	198 728	7 900
321113	Sawmills	1	27	7	718	20 365	680	1 481	19 186	77 297	115 145	190 348	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3212	Veneer, plywood, & engineered wood product mfg	2	18	4	552	15 866	504	1 081	14 304	38 061	44 853	82 826	3 337
32121	Veneer, plywood, & engineered wood product mfg	2	18	4	552	15 866	504	1 081	14 304	38 061	44 853	82 826	3 337
321212	Softwood veneer & plywood mfg	—	1	1	e	D	D	D	D	D	D	D	D
321214	Truss mfg	4	13	1	c	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	6	4	2	154	4 615	141	315	4 173	6 996	13 118	20 661	999
3219	Other wood product mfg ...	1	90	22	1 477	27 029	1 221	2 211	19 300	60 126	64 149	123 713	1 973
32191	Millwork	3	34	8	408	7 573	326	547	5 204	16 673	17 133	33 668	1 094
321911	Wood window & door mfg	2	11	4	132	2 517	101	163	1 715	5 084	6 984	11 818	328
321918	Other millwork (including flooring) ...	1	15	3	219	4 058	176	310	2 739	8 418	7 537	16 061	478
32192	Wood container & pallet mfg	2	24	7	297	5 766	253	482	4 171	12 339	13 606	26 129	257
321920	Wood container & pallet mfg	2	24	7	297	5 766	253	482	4 171	12 339	13 606	26 129	257
32199	All other wood product mfg	1	32	7	772	13 690	642	1 182	9 925	31 114	33 410	63 916	622
321991	Manufactured home (mobile home) mfg ..	—	3	3	508	9 179	454	914	7 410	22 797	25 153	47 155	317
321999	All other miscellaneous wood product mfg ...	4	21	3	205	3 121	150	200	1 810	5 721	5 458	11 353	236
322	Paper mfg	—	44	25	3 897	153 860	3 156	6 278	115 332	677 634	572 241	1 245 259	110 601
3221	Pulp, paper, & paperboard mills	—	6	6	2 334	107 898	1 989	4 054	86 624	586 793	426 636	1 009 358	101 274
32212	Paper mills	—	3	3	1 662	72 030	1 493	2 950	61 343	425 862	173 136	595 893	D
322121	Paper (except newsprint) mills	—	3	3	1 662	72 030	1 493	2 950	61 343	425 862	173 136	595 893	D
32213	Paperboard mills	—	3	3	672	35 868	496	1 104	25 281	160 931	253 500	413 465	D
322130	Paperboard mills	—	3	3	672	35 868	496	1 104	25 281	160 931	253 500	413 465	D
3222	Converted paper product mfg	1	38	19	1 563	45 962	1 167	2 224	28 708	90 841	145 605	235 901	9 327
32221	Paperboard container mfg	—	15	8	857	26 704	642	1 338	17 077	42 494	84 611	127 598	5 942
322211	Corrugated & solid fiber box mfg	—	13	7	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	4	3	151	4 434	94	179	2 088	11 613	9 709	21 161	1 652
32223	Stationery product mfg ..	2	10	4	273	7 830	214	403	5 116	16 428	19 170	35 652	715
322232	Envelope mfg	1	7	4	253	7 272	199	370	4 774	15 028	17 348	32 338	637
32229	Other converted paper product mfg	3	9	4	282	6 994	217	304	4 427	20 306	32 115	51 490	1 018
322291	Sanitary paper product mfg	1	3	2	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	8	6	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	466	56	5 710	143 799	4 206	7 433	92 533	320 964	252 367	564 348	24 618
3231	Printing & related support activities	3	466	56	5 710	143 799	4 206	7 433	92 533	320 964	252 367	564 348	24 618
32311	Printing	3	432	53	5 449	136 274	4 007	7 084	87 747	306 348	248 870	546 227	23 884
323110	Commercial lithographic printing ..	3	203	32	3 039	80 742	2 272	4 147	53 187	182 344	172 151	345 660	16 668
323113	Commercial screen printing	1	59	8	834	18 572	577	972	9 320	34 200	27 966	61 951	3 250
323114	Quick printing	3	77	3	507	10 202	374	636	6 978	18 218	9 740	27 944	1 379
323116	Manifold business form printing	—	14	5	606	16 423	439	801	11 386	50 371	25 474	76 001	1 191
323119	Other commercial printing	6	61	2	272	5 446	199	290	3 740	12 373	6 155	18 565	747
32312	Support activities for printing	3	34	3	261	7 525	199	349	4 786	14 616	3 497	18 121	734
323122	Prepress services	3	24	2	184	5 735	131	215	3 518	11 259	2 795	14 048	449
324	Petroleum & coal products mfg	1	45	14	2 494	110 792	1 676	4 127	71 012	681 353	3 638 934	4 324 845	69 603

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg—Con.												
3241	Petroleum & coal products mfg	1	45	14	2 494	110 792	1 676	4 127	71 012	681 353	3 638 934	4 324 845	69 603
32411	Petroleum refineries	1	6	5	1 638	85 491	1 057	2 846	53 207	588 227	3 417 515	4 010 620	62 310
324110	Petroleum refineries ..	1	6	5	1 638	85 491	1 057	2 846	53 207	588 227	3 417 515	4 010 620	62 310
32412	Asphalt paving, roofing, & saturated materials mfg	—	27	6	565	16 410	444	868	12 732	46 098	108 680	154 786	5 133
324121	Asphalt paving mixture & block mfg	1	20	3	305	9 130	220	448	6 756	26 994	48 381	75 211	3 681
324122	Asphalt shingle & coating materials mfg	—	7	3	260	7 280	224	420	5 976	19 104	60 299	79 575	1 452
32419	Other petroleum & coal products mfg	—	12	3	291	8 891	175	413	5 073	47 028	112 739	159 439	2 160
324191	Petroleum lubricating oil & grease mfg	—	10	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg	1	126	43	3 855	146 922	2 551	5 583	88 181	1 705 937	949 890	2 657 298	105 560
3251	Basic chemical mfg	1	32	12	768	29 418	514	1 108	18 420	166 895	147 169	312 365	57 410
32512	Industrial gas mfg	1	11	—	c	D	D	D	D	D	D	D	20 634
325120	Industrial gas mfg	1	11	—	c	D	D	D	D	D	D	D	20 634
32518	Other basic inorganic chemical mfg	1	17	10	533	20 841	360	773	13 189	85 256	64 661	148 046	19 138
325182	Carbon black mfg	—	1	1	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	2	16	9	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	4	2	c	D	D	D	D	D	D	D	17 638
325199	All other basic organic chemical mfg	1	3	2	c	D	D	D	D	D	D	D	17 638
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	3	122	4 621	75	157	2 442	30 929	123 033	152 624	4 671
32521	Resin & synthetic rubber mfg	—	3	3	122	4 621	75	157	2 442	30 929	123 033	152 624	4 671
325211	Plastics material & resin mfg	—	3	3	122	4 621	75	157	2 442	30 929	123 033	152 624	4 671
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	3	14	7	754	33 511	512	1 114	22 767	455 591	326 822	793 994	15 754
32531	Fertilizer mfg	3	8	5	666	30 785	477	1 044	22 053	389 955	319 153	716 309	14 524
325311	Nitrogenous fertilizer mfg	3	6	5	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	10	3	e	D	D	D	D	D	D	D	2 708
32541	Pharmaceutical & medicine mfg	—	10	3	e	D	D	D	D	D	D	D	2 708
325412	Pharmaceutical preparation mfg	—	4	1	c	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	23	9	481	15 970	245	475	5 668	63 292	76 916	140 337	1 646
32551	Paint & coating mfg	1	16	7	328	12 179	141	267	3 321	41 815	46 991	88 988	842
325510	Paint & coating mfg ...	1	16	7	328	12 179	141	267	3 321	41 815	46 991	88 988	842
32552	Adhesive mfg	1	7	2	153	3 791	104	208	2 347	21 477	29 925	51 349	804
325520	Adhesive mfg	1	7	2	153	3 791	104	208	2 347	21 477	29 925	51 349	804
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	25	3	c	D	D	D	D	D	D	D	1 056
32561	Soap & cleaning compound mfg	4	19	2	c	D	D	D	D	D	D	D	657
3259	Other chemical product mfg	—	19	6	1 157	44 297	826	2 068	29 540	788 019	225 519	1 004 710	22 315
32599	All other chemical product & preparation mfg	—	18	6	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	5	2	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	11	4	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OKLAHOMA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	178	68	13 501	461 374	11 507	22 055	354 732	1 349 204	1 337 767	2 693 754	93 669
3261	Plastics product mfg	-	137	54	6 077	165 542	4 707	8 564	103 497	488 430	612 012	1 095 391	35 098
32611	Unsupported plastics film, sheet, & bag mfg ..	-	17	9	1 623	56 787	1 151	2 366	33 883	184 888	250 977	436 158	15 252
326111	Unsupported plastics bag mfg	-	6	3	f	D	D	D	D	D	D	D	9 947
326113	Unsupported plastics film & sheet (except packaging) mfg	-	9	6	999	42 894	701	1 515	24 678	143 690	183 216	327 099	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	19	7	609	17 370	498	1 053	12 809	54 043	55 548	109 717	4 387
326122	Plastics pipe & pipe fitting mfg	2	10	6	541	15 457	445	968	11 766	50 946	52 903	103 964	4 165
32615	Urethane & other foam product (except polystyrene) mfg	2	6	2	162	3 600	124	247	1 717	8 334	10 907	19 188	417
326150	Urethane & other foam product (except polystyrene) mfg	2	6	2	162	3 600	124	247	1 717	8 334	10 907	19 188	417
32619	Other plastics product mfg	-	82	34	3 514	82 916	2 791	4 656	51 560	230 599	279 022	504 503	14 323
326191	Plastics plumbing fixture mfg	1	8	2	c	D	D	D	D	D	D	D	414
326192	Resilient floor covering mfg	-	1	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	73	31	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	41	14	7 424	295 832	6 800	13 491	251 235	860 774	725 755	1 598 363	58 571
32621	Tire mfg	-	16	5	6 518	271 896	6 125	12 147	237 498	805 932	690 874	1 509 028	53 889
326211	Tire mfg (except retreading)	-	5	4	6 433	270 114	6 059	12 019	236 422	800 944	684 228	1 497 488	53 768
32629	Other rubber product mfg	1	23	8	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	13	7	799	20 632	596	1 196	12 063	45 114	26 806	72 473	4 573
327	Nonmetallic mineral product mfg	-	254	66	8 101	250 842	6 582	13 931	193 274	754 272	495 183	1 250 103	69 248
3271	Clay product & refractory mfg	-	18	13	1 599	39 455	1 256	2 685	27 360	93 393	52 922	145 167	8 840
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	7	3	703	14 067	520	1 123	8 607	26 218	22 852	46 815	1 147
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	6	3	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	11	10	896	25 388	736	1 562	18 753	67 175	30 070	98 352	7 693
327121	Brick & structural clay tile mfg	-	6	6	427	9 364	345	705	6 749	30 829	13 673	45 523	4 912
327122	Ceramic wall & floor tile mfg	-	1	1	e	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	-	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	22	11	2 799	109 651	2 342	5 063	91 565	289 960	151 622	441 229	30 095
32721	Glass & glass product mfg	-	22	11	2 799	109 651	2 342	5 063	91 565	289 960	151 622	441 229	30 095
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	2	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	3	3	1 092	44 184	970	1 878	37 722	149 563	70 678	221 885	19 209
327215	Glass product mfg made of purchased glass	1	16	6	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	179	31	2 629	72 184	2 158	4 415	52 876	218 010	194 490	414 760	19 801
32731	Cement mfg	-	6	3	392	17 505	295	700	10 977	73 930	46 031	121 077	4 701
327310	Cement mfg	-	6	3	392	17 505	295	700	10 977	73 930	46 031	121 077	4 701
32732	Ready-mix concrete mfg ..	1	130	18	1 547	38 323	1 329	2 648	30 859	109 854	121 771	232 077	12 671
327320	Ready-mix concrete mfg	1	130	18	1 547	38 323	1 329	2 648	30 859	109 854	121 771	232 077	12 671
32733	Concrete pipe, brick, & block mfg	2	15	4	212	5 041	146	283	3 057	13 598	10 100	23 927	861
327331	Concrete block & brick mfg	3	11	3	143	3 200	104	182	2 076	8 677	7 071	15 711	D
32739	Other concrete product mfg	1	28	6	478	11 315	388	784	7 983	20 628	16 588	37 679	1 568
327390	Other concrete product mfg	1	28	6	478	11 315	388	784	7 983	20 628	16 588	37 679	1 568
3274	Lime & gypsum product mfg	-	4	4	685	20 945	531	1 219	15 907	123 910	69 036	193 016	8 281
32742	Gypsum product mfg	-	4	4	685	20 945	531	1 219	15 907	123 910	69 036	193 016	8 281
327420	Gypsum product mfg ..	-	4	4	685	20 945	531	1 219	15 907	123 910	69 036	193 016	8 281

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	1	31	7	389	8 607	295	549	5 566	28 999	27 113	55 931	2 231
32799	All other nonmetallic mineral product mfg ...	1	31	7	389	8 607	295	549	5 566	28 999	27 113	55 931	2 231
327999	All other miscellaneous nonmetallic mineral product mfg.....	1	9	4	176	4 022		230	2 254	15 906	14 998	30 671	456
331	Primary metal mfg.....	—	65	38	5 009	152 571	4 064	8 815	118 828	417 740	512 960	933 116	29 535
3311	Iron & steel mills & ferroalloy mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	—	3	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	1	17	11	1 784	52 734	1 467	3 360	42 319	153 898	225 351	377 748	20 586
33121	Iron & steel pipes & tubes mfg from purchased steel.....	1	6	6	902	27 485	736	1 773	21 426	68 308	113 773	184 241	15 067
331210	Iron & steel pipes & tubes mfg from purchased steel.....	1	6	6	902	27 485	736	1 773	21 426	68 308	113 773	184 241	15 067
33122	Rolling & drawing of purchased steel.....	—	11	5	882	25 249	731	1 587	20 893	85 590	111 578	193 507	5 519
331222	Steel wire drawing.....	—	7	5	846	24 055	703	1 544	20 175	76 233	101 611	174 094	5 025
3313	Alumina & aluminum production & processing..	—	4	3	250	7 178	200	375	4 910	22 675	42 300	66 787	D
33131	Alumina & aluminum production & processing.....	—	4	3	250	7 178	200	375	4 910	22 675	42 300	66 787	D
331314	Secondary smelting & alloying of aluminum..	—	3	2	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	—	4	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding ..	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries.....	1	37	21	2 157	61 699	1 753	3 540	47 171	126 962	82 710	209 327	5 129
33151	Ferrous metal foundries ..	—	19	13	1 574	46 055	1 316	2 643	36 336	95 355	57 629	152 569	3 726
331511	Iron foundries.....	—	11	7	998	33 447	850	1 600	27 090	68 349	41 069	109 461	2 427
331512	Steel investment foundries.....	—	4	4	c	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment).....	—	4	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries.....	2	18	8	583	15 644	437	897	10 835	31 607	25 081	56 758	1 403
331521	Aluminum die-casting foundries.....	1	2	1	c	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries.....	5	2	2	c	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	1	9	2	229	4 077	151	290	2 740	7 166	3 772	10 890	221
332	Fabricated metal product mfg.....	1	969	281	26 503	784 231	19 955	41 380	516 893	2 066 309	1 844 176	3 891 636	160 591
3321	Forging & stamping.....	—	35	19	1 551	43 908	1 163	2 396	28 255	117 910	95 632	208 714	14 040
33211	Forging & stamping.....	—	35	19	1 551	43 908	1 163	2 396	28 255	117 910	95 632	208 714	14 040
332111	Iron & steel forging ...	—	5	2	161	5 116	132	265	3 092	14 154	12 806	26 978	D
332114	Custom roll forming...	1	8	4	c	D	D	D	D	D	D	D	1 473
332115	Crown & closure mfg..	—	2	1	c	D	D	D	D	D	D	D	D
332116	Metal stamping.....	—	16	9	777	20 172	554	1 082	13 006	58 025	40 759	95 509	8 155
332117	Powder metallurgy part mfg.....	2	3	3	230	6 620	155	338	3 376	15 199	10 100	24 364	1 285
3323	Architectural & structural metals mfg.....	1	191	68	5 988	165 277	4 237	8 198	96 813	408 173	431 476	847 407	17 213
33231	Plate work & fabricated structural product mfg..	1	94	36	2 675	80 702	1 858	3 693	45 551	194 513	272 250	470 111	8 596
332311	Prefabricated metal building & component mfg.....	—	13	2	326	10 724	197	429	5 607	24 431	34 326	59 079	737
332312	Fabricated structural metal mfg.....	1	59	27	1 756	52 141	1 238	2 533	30 371	140 758	203 668	345 405	6 135
332313	Plate work mfg.....	1	22	7	593	17 837	423	731	9 573	29 324	34 256	65 627	1 724
33232	Ornamental & architectural metal products mfg.....	—	97	32	3 313	84 575	2 379	4 505	51 262	213 660	159 226	377 296	8 617
332321	Metal window & door mfg.....	—	11	5	1 397	37 801	843	1 639	19 772	100 254	82 236	186 858	2 826
332322	Sheet metal work mfg..	2	61	20	1 099	29 599	841	1 605	18 410	60 448	51 691	111 796	3 904
332323	Ornamental & architectural metal work mfg.....	1	25	7	817	17 175	695	1 261	13 080	52 958	25 299	78 642	1 887

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	74	53	4 175	149 477	3 191	7 611	104 529	312 075	480 808	787 730	18 945
33241	Power boiler & heat exchanger mfg	—	42	35	2 897	104 404	2 162	5 294	70 021	215 393	251 522	463 150	10 741
332410	Power boiler & heat exchanger mfg	—	42	35	2 897	104 404	2 162	5 294	70 021	215 393	251 522	463 150	10 741
33242	Metal tank (heavy gauge) mfg	—	19	14	871	25 907	686	1 414	18 432	56 631	49 615	107 632	2 075
332420	Metal tank (heavy gauge) mfg	—	19	14	871	25 907	686	1 414	18 432	56 631	49 615	107 632	2 075
33243	Metal can, box, & other metal container (light gauge) mfg	—	13	4	407	19 166	343	903	16 076	40 051	179 671	216 948	6 129
332431	Metal can mfg	—	4	3	326	17 343	281	768	14 822	32 511	170 386	199 903	5 938
3325	Hardware mfg	1	7	3	g	D	D	D	D	D	D	D	3 589
33251	Hardware mfg	1	7	3	g	D	D	D	D	D	D	D	3 589
332510	Hardware mfg	1	7	3	g	D	D	D	D	D	D	D	3 589
3326	Spring & wire product mfg	—	24	10	g	D	D	D	D	D	D	D	4 698
33261	Spring & wire product mfg	—	24	10	g	D	D	D	D	D	D	D	4 698
332611	Spring (heavy gauge) mfg	2	4	3	125	3 024	103	242	2 479	5 869	7 902	13 712	215
332618	Other fabricated wire product mfg	—	16	5	949	20 173	776	1 630	12 904	41 975	54 790	98 287	3 678
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	397	57	4 971	135 508	3 877	7 046	97 129	281 878	144 498	421 891	35 659
33271	Machine shops	1	359	42	3 853	103 232	3 058	5 370	73 948	215 528	105 148	317 172	26 284
332710	Machine shops	1	359	42	3 853	103 232	3 058	5 370	73 948	215 528	105 148	317 172	26 284
33272	Turned product & screw, nut, & bolt mfg	2	38	15	1 118	32 276	819	1 676	23 181	66 350	39 350	104 719	9 375
332721	Precision turned product mfg	1	32	12	770	20 734	547	1 179	15 802	40 586	19 799	59 772	6 084
332722	Bolt, nut, screw, rivet, & washer mfg	3	6	3	348	11 542	272	497	7 379	25 764	19 551	44 947	3 291
3328	Coating, engraving, heat treating, & allied activities	1	86	21	1 400	40 695	1 132	2 285	27 979	112 581	109 158	219 501	36 908
33281	Coating, engraving, heat treating, & allied activities	1	86	21	1 400	40 695	1 132	2 285	27 979	112 581	109 158	219 501	36 908
332811	Metal heat treating	—	11	4	373	11 677	323	637	8 898	48 156	57 758	103 169	1 423
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	35	9	617	17 281	472	1 011	12 004	41 454	44 707	86 562	33 506
332813	Electroplating, plating, polishing, anodizing, & coloring	3	40	8	410	11 737	337	637	7 077	22 971	6 693	29 770	1 979
3329	Other fabricated metal product mfg	—	145	50	6 054	194 867	4 435	9 776	121 618	549 193	462 463	1 000 118	29 263
33291	Metal valve mfg	—	39	21	2 831	99 798	2 090	4 796	62 604	330 793	283 039	606 215	15 230
332911	Industrial valve mfg	1	27	15	1 731	65 143	1 148	2 529	32 981	162 042	170 002	327 661	11 000
332912	Fluid power valve & hose fitting mfg	1	7	3	e	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	106	29	3 223	95 069	2 345	4 980	59 014	218 400	179 424	393 903	14 033
332991	Ball & roller bearing mfg	—	5	3	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	35	14	1 817	57 346	1 242	2 836	32 897	113 048	102 983	215 291	7 574
332999	All other miscellaneous fabricated metal product mfg	2	47	11	893	25 449	689	1 381	16 792	55 254	42 983	97 221	3 033
333	Machinery mfg	—	430	153	22 845	762 406	15 818	31 023	424 276	2 404 534	2 120 088	4 461 438	128 609
3331	Agriculture, construction, & mining machinery mfg	—	128	44	7 426	241 094	5 443	10 074	149 343	823 573	655 032	1 446 166	41 866
33311	Agricultural implement mfg	4	33	7	517	8 539	419	691	7 066	11 946	20 989	34 328	3 075
333111	Farm machinery & equipment mfg	4	32	7	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	20	11	3 171	106 150	2 336	4 392	60 862	231 918	290 124	508 595	13 272
333120	Construction machinery mfg	—	20	11	3 171	106 150	2 336	4 392	60 862	231 918	290 124	508 595	13 272
33313	Mining & oil & gas field machinery mfg	—	75	26	3 738	126 405	2 688	4 991	81 415	579 709	343 919	903 243	25 519
333131	Mining machinery & equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	69	24	h	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	2	46	17	1 651	59 698	1 097	2 078	32 890	166 623	153 485	321 011	6 192
33322	Plastics & rubber industry machinery mfg	9	5	1	c	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	9	5	1	c	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	40	16	g	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	5	2	118	3 353	85	175	2 051	6 896	4 695	11 271	234
333298	All other industrial machinery mfg	1	24	13	1 219	41 598	842	1 564	24 032	122 278	120 452	244 122	3 545
3333	Commercial & service industry machinery mfg ..	—	34	10	1 143	37 492	631	1 244	15 431	80 178	91 214	171 498	3 481
33331	Commercial & service industry machinery mfg	—	34	10	1 143	37 492	631	1 244	15 431	80 178	91 214	171 498	3 481
333313	Office machinery mfg .	—	2	2	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	25	7	846	29 374	440	896	11 464	59 629	70 525	128 025	3 032
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	40	23	4 442	131 562	3 284	7 436	85 409	350 651	386 598	736 316	18 110
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	40	23	4 442	131 562	3 284	7 436	85 409	350 651	386 598	736 316	18 110
333411	Air purification equipment mfg	—	8	3	528	20 141	229	623	6 848	33 570	15 657	49 774	D
333412	Industrial & commercial fan & blower mfg	—	7	2	513	16 016	370	719	10 432	29 126	29 021	58 061	1 000
333414	Heating equipment (except warm air furnaces) mfg	2	8	5	371	13 221	287	672	8 243	35 947	25 056	54 382	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	17	13	3 030	82 184	2 398	5 422	59 886	252 008	316 864	574 099	15 618
3335	Metalworking machinery mfg	1	59	9	928	25 428	726	1 026	17 062	46 678	47 388	94 960	5 500
33351	Metalworking machinery mfg	1	59	9	928	25 428	726	1 026	17 062	46 678	47 388	94 960	5 500
333511	Industrial mold mfg ...	—	13	3	391	8 627	324	355	6 111	16 677	25 116	41 866	4 507
333512	Machine tool (metal cutting types) mfg ...	—	4	2	e	D	D	D	D	D	D	D	105
333514	Special die & tool, die set, jig, & fixture mfg .	3	20	1	103	3 430	85	146	2 604	6 657	1 863	8 541	492
3336	Engine, turbine, & power transmission equipment mfg	—	11	4	1 333	46 331	951	1 890	25 803	319 191	247 631	556 797	20 797
33361	Engine, turbine, & power transmission equipment mfg	—	11	4	1 333	46 331	951	1 890	25 803	319 191	247 631	556 797	20 797
333611	Turbine & turbine generator set unit mfg	—	3	1	c	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	112	46	5 922	220 801	3 686	7 275	98 338	617 640	538 740	1 134 690	32 663
33391	Pump & compressor mfg	—	40	17	3 174	125 074	1 927	4 038	48 888	376 144	317 697	683 194	20 990
333911	Pump & pumping equipment mfg	—	24	13	2 656	102 824	1 651	3 438	40 355	306 712	241 752	539 305	19 306
333912	Air & gas compressor mfg	1	14	4	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	24	11	1 143	37 290	780	1 401	19 728	87 876	88 216	172 328	4 657
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	9	7	809	26 796	554	927	13 977	66 887	53 627	116 843	3 675
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	10	2	c	D	D	D	D	D	D	D	712
33399	All other general-purpose machinery mfg	1	48	18	1 605	58 437	979	1 836	29 722	153 620	132 827	279 168	7 016
333994	Industrial process furnace & oven mfg ..	—	5	4	463	19 322	160	410	5 149	51 897	47 172	92 588	2 240
333996	Fluid power pump & motor mfg	—	3	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	26	8	428	14 094	293	518	6 647	35 653	38 279	73 164	1 029

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	137	48	13 065	480 290	7 834	14 853	239 677	2 545 545	1 386 382	3 959 532	92 232
3341	Computer & peripheral equipment mfg.....	-	11	3	g	D	D	D	D	D	D	D	42 833
33411	Computer & peripheral equipment mfg.....	-	11	3	g	D	D	D	D	D	D	D	42 833
334112	Computer storage device mfg.....	-	4	3	2 250	98 293	450	952	15 291	58 445	119 186	176 916	D
3342	Communications equipment mfg.....	-	19	6	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg.....	3	8	3	c	D	D	D	D	D	D	D	791
334290	Other communications equipment mfg.....	3	8	3	c	D	D	D	D	D	D	D	791
3343	Audio & video equipment mfg.....	1	6	2	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	1	6	2	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	1	6	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	38	15	h	D	D	D	D	D	D	D	14 123
33441	Semiconductor & other electronic component mfg.....	-	38	15	h	D	D	D	D	D	D	D	14 123
334413	Semiconductor & related device mfg...	-	3	3	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	1	5	4	414	8 758	274	592	4 481	18 875	23 290	41 375	2 174
334419	Other electronic component mfg.....	-	16	7	1 587	40 008	1 255	2 477	27 749	88 318	65 748	153 857	7 001
3345	Navigational, measuring, medical, & control instruments mfg.....	1	58	21	2 756	103 911	1 477	2 685	39 447	196 362	231 026	424 386	9 533
33451	Navigational, measuring, medical, & control instruments mfg.....	1	58	21	2 756	103 911	1 477	2 685	39 447	196 362	231 026	424 386	9 533
334510	Electromedical & electrotherapeutic apparatus mfg.....	1	5	3	159	5 142	64	146	1 373	39 648	9 505	50 326	803
334511	Search, detection, navigation, & guidance instrument mfg.....	-	5	3	f	D	D	D	D	D	D	D	3 024
334513	Industrial process control instrument mfg.....	1	12	7	1 078	46 203	460	916	13 543	54 584	96 986	149 371	3 024
334515	Electricity measuring & testing instrument mfg.....	3	9	3	181	6 172	110	213	2 576	14 376	17 769	33 376	806
334516	Analytical laboratory instrument mfg.....	1	7	1	237	9 348	116	248	4 516	14 728	16 081	30 821	D
334519	Other measuring & controlling device mfg.....	7	9	3	230	7 607	147	286	3 318	12 769	15 960	31 852	722
335	Electrical equipment, appliance, & component mfg.....	-	73	29	3 464	101 783	2 370	4 722	59 468	313 655	338 974	655 541	9 847
3351	Electric lighting equipment mfg.....	1	10	2	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg.....	-	9	1	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg...	-	3	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	39	17	2 033	57 012	1 326	2 733	32 488	159 859	147 045	310 032	4 585
33531	Electrical equipment mfg.....	-	39	17	2 033	57 012	1 326	2 733	32 488	159 859	147 045	310 032	4 585
335311	Power, distribution, & specialty transformer mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	17	8	1 308	35 828	843	1 720	20 592	102 476	89 886	192 152	3 653
335313	Switchgear & switchboard apparatus mfg.....	-	7	4	380	11 798	229	523	6 758	34 873	39 452	76 893	431
335314	Relay & industrial control mfg.....	1	13	4	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	-	22	9	1 080	34 265	813	1 550	21 474	133 861	164 291	297 508	4 122
33592	Communication & energy wire & cable mfg	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	9	2	e	D	D	D	D	D	D	D	1 125
335931	Current-carrying wiring device mfg	-	7	1	c	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	2	1	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	10	4	290	10 110	199	429	5 060	26 086	33 721	60 226	D
335999	All other miscellaneous electrical equipment & component mfg	-	7	3	218	7 830	147	312	3 780	18 383	22 456	42 341	477
336	Transportation equipment mfg	-	212	98	20 244	644 972	16 165	31 163	444 511	1 587 490	3 006 470	4 601 085	75 389
3361	Motor vehicle mfg	-	4	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	2	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	67	33	3 676	82 955	3 032	5 800	56 567	183 495	278 083	456 325	12 332
33621	Motor vehicle body & trailer mfg	1	67	33	3 676	82 955	3 032	5 800	56 567	183 495	278 083	456 325	12 332
336211	Motor vehicle body mfg	2	18	6	360	8 338	286	531	5 643	20 218	33 590	53 346	1 168
336212	Truck trailer mfg	1	15	4	e	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	2	2	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	32	21	2 563	55 411	2 145	4 045	37 812	130 636	182 279	310 340	10 466
3363	Motor vehicle parts mfg ...	-	70	30	6 299	153 287	4 820	9 844	100 125	477 239	546 960	1 025 530	23 035
33631	Motor vehicle gasoline engine & engine parts mfg	-	16	4	976	25 692	605	1 231	14 644	81 075	114 988	193 407	3 262
336311	Carburetor, piston, piston ring, & valve mfg	-	4	1	c	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	12	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	12	5	1 671	36 526	1 422	3 501	25 076	44 283	95 157	136 548	5 757
336322	Other motor vehicle electrical & electronic equipment mfg	-	12	5	1 671	36 526	1 422	3 501	25 076	44 283	95 157	136 548	5 757
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	10	6	1 224	27 770	867	1 570	18 667	79 699	107 372	194 968	2 243
336350	Motor vehicle transmission & power train parts mfg	-	10	6	1 224	27 770	867	1 570	18 667	79 699	107 372	194 968	2 243
33637	Motor vehicle metal stamping	6	5	3	c	D	D	D	D	D	D	D	667
336370	Motor vehicle metal stamping	6	5	3	c	D	D	D	D	D	D	D	667
33639	Other motor vehicle parts mfg	1	19	8	1 052	33 005	706	1 386	17 717	84 184	110 363	193 867	6 794
336399	All other motor vehicle parts mfg	1	19	8	1 052	33 005	706	1 386	17 717	84 184	110 363	193 867	6 794
3364	Aerospace product & parts mfg	-	51	26	5 528	204 543	4 138	7 664	120 989	445 365	307 585	773 509	25 416
33641	Aerospace product & parts mfg	-	51	26	5 528	204 543	4 138	7 664	120 989	445 365	307 585	773 509	25 416
336411	Aircraft mfg	1	7	5	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	15	11	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	29	10	2 107	89 436	1 433	2 887	52 657	286 198	163 796	475 409	11 646

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	OKLAHOMA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3365	Railroad rolling stock mfg...	—	4	3	e	D	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg	—	4	3	e	D	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg	—	4	3	e	D	D	D	D	D	D	D	D	
3366	Ship & boat building	—	8	3	e	D	D	D	D	D	D	D	D	
33661	Ship & boat building	—	8	3	e	D	D	D	D	D	D	D	D	
336612	Boat building	—	6	3	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	166	37		3 374	75 101	2 616	4 730	52 302	151 891	118 732	269 368	8 394
3371	Household & institutional furniture & kitchen cabinet mfg	3	116	17		1 349	27 600	1 140	1 961	20 736	51 747	40 499	92 421	2 607
33711	Wood kitchen cabinet & counter top mfg	4	69	9		674	13 831	558	990	10 584	25 916	16 805	42 950	1 852
337110	Wood kitchen cabinet & counter top mfg ...	4	69	9		674	13 831	558	990	10 584	25 916	16 805	42 950	1 852
33712	Household & institutional furniture mfg	2	47	8		675	13 769	582	971	10 152	25 831	23 694	49 471	755
337121	Upholstered household furniture mfg	1	10	2		264	5 755	240	417	5 177	11 557	13 025	24 534	270
337122	Nonupholstered wood household furniture mfg	3	27	5		249	4 352	217	360	3 402	8 102	5 654	13 738	344
337127	Institutional furniture mfg	1	7	1		137	3 318	104	167	1 324	5 438	4 226	9 679	87
3372	Office furniture (including fixtures) mfg	—	31	13		1 763	41 822	1 278	2 429	28 387	81 483	55 193	134 989	4 272
33721	Office furniture (including fixtures) mfg	—	31	13		1 763	41 822	1 278	2 429	28 387	81 483	55 193	134 989	4 272
337212	Custom architectural woodwork & millwork mfg	—	10	6		1 167	28 818	787	1 481	19 237	66 790	30 672	95 967	2 439
337214	Office furniture (except wood) mfg	7	3	1	c		D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	1	16	4		381	7 502	319	577	5 301	19 192	14 112	33 031	1 393
3379	Other furniture related product mfg	1	19	7		262	5 679	198	340	3 179	18 661	23 040	41 958	1 515
33791	Mattress mfg	1	18	7	e	D	D	D	D	D	D	D	D	D
337910	Mattress mfg	1	18	7	e	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	314	48		5 389	109 986	3 678	6 369	64 822	369 486	275 289	645 773	16 945
3391	Medical equipment & supplies mfg	3	136	12		1 360	33 001	987	1 660	19 077	82 008	43 837	127 550	4 462
33911	Medical equipment & supplies mfg	3	136	12		1 360	33 001	987	1 660	19 077	82 008	43 837	127 550	4 462
339112	Surgical & medical instrument mfg	1	8	3		319	9 050	218	467	5 203	18 030	12 040	30 476	653
339113	Surgical appliance & supplies mfg	3	13	2		354	9 361	252	419	4 626	25 100	15 014	40 599	1 626
339114	Dental equipment & supplies mfg	7	13	2	c	D	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	10	3		228	4 605	160	248	2 724	16 605	6 841	23 913	1 326
339116	Dental laboratories ...	7	91	2		340	7 626	264	416	5 158	16 506	7 018	23 772	692
3399	Other miscellaneous mfg ..	2	178	36		4 029	76 985	2 691	4 709	45 745	287 478	231 452	518 223	12 483
33991	Jewelry & silverware mfg	—	19	3		609	13 736	407	750	7 609	28 192	33 237	61 370	729
339912	Silverware & plated ware mfg	—	3	1	e	D	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	2	35	9		1 501	26 092	873	1 530	14 566	155 354	121 841	277 599	7 112
339920	Sporting & athletic goods mfg	2	35	9		1 501	26 092	873	1 530	14 566	155 354	121 841	277 599	7 112
33993	Doll, toy, & game mfg ...	1	12	2		154	2 740	126	236	1 992	4 727	5 267	10 189	323
339932	Game, toy, & children's vehicle mfg	1	8	2		138	2 531	111	210	1 800	4 280	5 019	9 491	323
33995	Sign mfg	3	59	9		496	10 338	358	570	5 548	18 687	10 572	29 008	617
339950	Sign mfg	3	59	9		496	10 338	358	570	5 548	18 687	10 572	29 008	617
33999	All other miscellaneous mfg	1	43	12		1 209	22 702	886	1 535	14 850	77 579	58 910	135 517	3 500
339991	Gasket, packing, & sealing device mfg ...	1	15	3		456	10 730	380	746	7 695	26 743	24 495	50 922	2 672
339999	All other miscellaneous mfg	1	24	7		688	10 508	450	671	6 130	47 926	32 714	79 929	728

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees, h–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ENID, OK MSA													
31-33	Manufacturing	–	66	14	2 389	62 677	2 090	3 043	41 971	232 575	265 901	506 210	7 307
332	Fabricated metal product mfg	–	15	2	454	8 490	384	794	7 404	19 224	16 632	35 499	1 345
3327	Machine shops, turned product, & screw, nut, & bolt mfg	–	6	1	e	D	D	D	D	D	D	D	696
33271	Machine shops	–	5	1	287	4 929	235	503	4 574	10 283	5 223	15 449	D
332710	Machine shops	–	5	1	287	4 929	235	503	4 574	10 283	5 223	15 449	D
336	Transportation equipment mfg	–	3	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	–	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	–	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	–	1	1	g	D	D	D	D	D	D	D	D
FORT SMITH, AR–OK MSA													
31-33	Manufacturing	–	314	130	27 144	675 334	22 339	43 626	494 740	2 235 626	2 747 430	5 010 015	148 004
	Fort Smith, AR–OK MSA (AR Part)	–	295	125	k	D	D	D	D	D	D	D	146 120
	Fort Smith, AR–OK MSA (OK Part)	–	19	5	e	D	D	D	D	D	D	D	1 884
311	Food mfg	–	31	19	8 112	157 420	6 970	13 406	126 652	547 671	912 759	1 463 379	42 111
3114	Fruit & vegetable preserving & specialty food mfg	2	5	3	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	2	4	3	f	D	D	D	D	D	D	D	D
311422	Specialty canning	–	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	–	9	7	6 099	106 409	5 659	10 740	93 279	187 036	462 635	651 105	26 794
31161	Animal slaughtering & processing	–	9	7	6 099	106 409	5 659	10 740	93 279	187 036	462 635	651 105	26 794
311615	Poultry processing	–	6	6	6 050	105 481	5 613	10 661	92 471	185 279	456 198	642 916	26 737
3118	Bakeries & tortilla mfg	5	7	3	497	9 863	234	372	4 264	24 152	17 163	41 474	1 763
31181	Bread & bakery product mfg	–	4	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	–	1	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	–	1	1	e	D	D	D	D	D	D	D	D
31191	Snack food mfg	–	1	1	e	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	–	1	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	–	4	3	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	–	4	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg	5	6	4	422	5 464	336	524	3 960	11 770	9 394	21 205	518
3152	Cut & sew apparel mfg	5	5	4	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	4	3	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	11	4	284	4 964	241	455	3 769	8 139	13 668	21 776	754
322	Paper mfg	–	14	10	1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
3222	Converted paper product mfg	–	14	10	1 279	39 460	1 053	2 108	29 840	132 576	161 893	288 802	11 434
32221	Paperboard container mfg	–	12	9	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	–	9	6	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg . . .	–	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	–	27	6	880	27 861	637	1 263	19 027	55 893	37 261	92 958	5 131
3231	Printing & related support activities	–	27	6	880	27 861	637	1 263	19 027	55 893	37 261	92 958	5 131
32311	Printing	–	26	6	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing	–	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT SMITH, AR-OK MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	24	15	1 563	34 364	1 156	2 216	24 382	95 769	104 816	201 127	6 453
3261	Plastics product mfg	-	20	12	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	6	4	e	D	D	D	D	D	D	D	2 005
326150	Urethane & other foam product (except polystyrene) mfg	-	6	4	e	D	D	D	D	D	D	D	2 005
32619	Other plastics product mfg	-	11	6	877	19 901	596	1 282	14 042	66 135	58 991	125 164	D
326199	All other plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	20	7	577	16 056	491	1 017	11 657	59 157	49 345	107 119	3 781
331	Primary metal mfg	-	4	4	888	38 049	668	1 303	23 112	165 761	152 888	322 369	21 467
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	1	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	48	14	1 597	39 169	1 339	2 901	28 019	102 973	111 315	215 408	4 610
3323	Architectural & structural metals mfg	-	19	5	428	11 497	351	745	8 016	45 244	69 049	114 817	2 003
33232	Ornamental & architectural metal products mfg	-	14	4	360	9 824	289	626	6 507	41 795	67 756	110 069	D
3325	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
33261	Spring & wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
332618	Other fabricated wire product mfg	1	3	2	482	10 354	414	1 149	8 413	17 872	13 351	31 077	D
333	Machinery mfg	-	20	8	2 604	80 136	2 077	3 825	53 465	270 433	250 591	520 964	8 083
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	4	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	4	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	6	h	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	h	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	h	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	5	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	14	5	625	17 042	513	1 083	12 497	41 075	64 478	105 712	2 076
3363	Motor vehicle parts mfg ...	-	8	3	e	D	D	D	D	D	D	D	1 662
337	Furniture & related product mfg	-	41	15	2 717	53 208	2 309	4 029	39 988	93 416	118 279	211 504	5 353
3371	Household & institutional furniture & kitchen cabinet mfg	-	29	10	2 400	46 642	2 038	3 538	34 991	80 297	105 069	185 055	4 607
33712	Household & institutional furniture mfg	-	24	10	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	6	3	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	8	4	387	8 838	313	554	6 396	22 553	16 194	38 919	1 279

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31-33	FORT SMITH, AR—OK MSA—Con.													
	Manufacturing—Con.													
337	Furniture & related product mfg—Con.													
3372	Office furniture (including fixtures) mfg	—	10	3	e	D	D	D	D	D	D	D	D	
33721	Office furniture (including fixtures) mfg	—	10	3	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	8	22	4	e	D	D	D	D	D	D	D	1 189	
3399	Other miscellaneous mfg ..	8	15	4		462	9 524	388	686	5 663	26 189	8 828	38 009	1 131
33992	Sporting & athletic goods mfg	9	5	3		377	7 977	323	579	4 713	23 658	7 400	34 025	D
339920	Sporting & athletic goods mfg	9	5	3		377	7 977	323	579	4 713	23 658	7 400	34 025	D
	LAWTON, OK MSA													
31-33	Manufacturing	—	51	13		3 325	119 762	2 914	5 930	102 499	509 641	391 060	900 820	44 071
326	Plastics & rubber products mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
32621	Tire mfg	—	2	1	g	D	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D	D
	OKLAHOMA CITY, OK MSA													
31-33	Manufacturing	—	1 181	335		51 318	1 620 012	36 803	71 979	1 027 486	6 051 128	6 545 644	12 605 214	259 896
311	Food mfg.....	—	64	28		3 662	103 613	2 367	4 516	59 113	388 433	753 170	1 143 883	24 495
3111	Animal food mfg.....	—	8	4		366	12 612	235	531	7 822	128 269	238 942	366 638	D
31111	Animal food mfg.....	—	8	4		366	12 612	235	531	7 822	128 269	238 942	366 638	D
3112	Grain & oilseed milling	—	3	3		332	10 494	237	487	6 727	32 968	133 742	166 224	D
3114	Fruit & vegetable preserving & specialty food mfg	1	7	3	e	D	D	D	D	D	D	D	D	640
31141	Frozen food mfg.....	1	6	3	e	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	1	6	3	e	D	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	15	6		872	23 608	670	1 102	14 151	57 284	178 516	234 685	D
31161	Animal slaughtering & processing.....	1	15	6		872	23 608	670	1 102	14 151	57 284	178 516	234 685	D
311612	Meat processed from carcasses	—	9	6		822	22 418	626	1 021	13 329	54 864	171 306	225 051	D
3118	Bakeries & tortilla mfg.....	—	18	5		672	19 481	319	582	7 299	44 427	28 938	73 346	2 427
31181	Bread & bakery product mfg	—	15	5	f	D	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	5	4	f	D	D	D	D	D	D	D	D	D
3119	Other food mfg	1	7	5		757	17 586	421	854	9 253	85 789	97 598	184 123	D
31192	Coffee & tea mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	2	4	2	e	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	4	2	f	D	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	—	4	2	f	D	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	2	26	9		701	12 952	498	945	7 269	25 132	31 344	57 402	844
3152	Cut & sew apparel mfg	2	14	5		474	9 295	312	579	4 590	18 647	26 812	45 582	742
31529	Other cut & sew apparel mfg	—	2	1	e	D	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	2	1	e	D	D	D	D	D	D	D	D	D
321	Wood product mfg	4	41	9		533	11 287	409	736	7 427	26 456	26 574	53 513	1 804
3219	Other wood product mfg ...	2	33	7		408	8 208	312	556	5 240	17 692	16 577	34 632	790
322	Paper mfg	3	13	7		574	16 887	454	904	10 982	25 677	38 903	64 838	D
3222	Converted paper product mfg	3	13	7		574	16 887	454	904	10 982	25 677	38 903	64 838	D
32221	Paperboard container mfg	—	4	3		351	10 360	278	539	6 666	11 815	21 153	32 963	D
322211	Corrugated & solid fiber box mfg.....	—	3	3	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA CITY, OK MSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	188	28	2 482	66 615	1 808	3 239	43 463	158 767	102 651	254 963	7 747
3231	Printing & related support activities.....	1	188	28	2 482	66 615	1 808	3 239	43 463	158 767	102 651	254 963	7 747
32311	Printing.....	1	170	26	2 342	62 939	1 697	3 040	40 862	151 822	101 106	246 468	7 314
323110	Commercial lithographic printing ..	1	87	15	1 309	36 614	965	1 758	24 148	81 921	69 829	145 518	4 454
323113	Commercial screen printing.....	2	22	3	320	8 923	211	413	4 786	16 364	13 588	29 915	1 023
323116	Manifold business form printing.....	-	7	3	322	8 735	219	387	5 630	34 980	6 944	41 844	453
324	Petroleum & coal products mfg.....	-	14	4	375	10 462	261	462	7 414	16 038	91 275	107 422	D
3241	Petroleum & coal products mfg.....	-	14	4	375	10 462	261	462	7 414	16 038	91 275	107 422	D
32412	Asphalt paving, roofing, & saturated materials mfg.....	-	10	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	37	11	1 138	46 442	727	1 413	24 750	660 759	248 257	908 093	11 378
3254	Pharmaceutical & medicine mfg.....	-	6	2	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	6	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	6	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	5	1	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	51	20	4 211	154 290	3 630	7 104	111 708	389 961	363 174	755 037	22 260
3261	Plastics product mfg.....	1	43	18	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg..	-	8	3	648	27 427	487	1 148	17 487	89 857	84 584	176 178	D
326113	Unsupported plastics film & sheet (except packaging) mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	27	12	g	D	D	D	D	D	D	D	6 828
326199	All other plastics product mfg.....	1	25	11	1 072	28 771	746	1 406	15 206	64 896	90 859	154 705	D
3262	Rubber product mfg.....	-	8	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	53	26	1 836	41 493	1 396	2 940	27 869	93 462	92 412	183 990	7 985
3271	Clay product & refractory mfg.....	-	5	4	755	15 824	549	1 229	9 952	35 003	26 190	58 764	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	-	33	13	722	17 409	579	1 236	12 584	37 550	49 071	87 068	5 090
32732	Ready-mix concrete mfg.	-	19	7	320	7 706	267	556	5 894	19 472	33 432	52 932	3 654
327320	Ready-mix concrete mfg.....	-	19	7	320	7 706	267	556	5 894	19 472	33 432	52 932	3 654
32739	Other concrete product mfg.....	-	9	4	316	7 553	257	551	5 426	12 049	11 485	23 555	951
327390	Other concrete product mfg.....	-	9	4	316	7 553	257	551	5 426	12 049	11 485	23 555	951
331	Primary metal mfg.....	-	10	3	664	20 376	511	1 241	16 699	50 411	89 268	137 579	1 144
3314	Nonferrous metal (except aluminum) production & processing.....	-	2	1	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding ..	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA CITY, OK MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	210	56	6 310	197 101	4 354	9 097	117 767	488 625	595 071	1 084 100	33 636
3323	Architectural & structural metals mfg	1	51	20	2 470	73 829	1 624	3 305	39 691	200 572	203 465	411 147	5 919
33231	Plate work & fabricated structural product mfg ..	1	20	9	812	27 686	517	1 168	14 230	80 860	107 380	190 743	2 549
332311	Prefabricated metal building & component mfg	-	6	2	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	2	13	7	505	17 346	334	758	8 831	57 275	74 470	133 934	1 855
33232	Ornamental & architectural metal products mfg	-	31	11	1 658	46 143	1 107	2 137	25 461	119 712	96 085	220 404	3 370
332321	Metal window & door mfg	-	5	3	1 243	34 425	797	1 522	18 864	92 694	71 009	168 093	2 666
332322	Sheet metal work mfg ..	-	17	6	299	8 640	228	478	4 980	21 056	20 405	41 468	540
3324	Boiler, tank, & shipping container mfg	-	7	3	325	16 982	278	738	14 648	32 287	160 663	189 997	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	5	2	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	-	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	78	12	891	24 167	626	1 110	17 305	48 495	24 888	71 230	6 389
33271	Machine shops	1	70	9	605	16 873	476	812	11 668	32 775	18 264	49 425	3 608
332710	Machine shops	1	70	9	605	16 873	476	812	11 668	32 775	18 264	49 425	3 608
33272	Turned product & screw, nut, & bolt mfg	-	8	3	286	7 294	150	298	5 637	15 720	6 624	21 805	2 781
332721	Precision turned product mfg	-	7	3	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	34	15	2 231	72 680	1 552	3 396	40 226	186 214	184 893	369 805	14 020
33291	Metal valve mfg	1	15	10	1 311	48 280	939	2 114	26 975	116 499	142 118	255 288	9 314
332911	Industrial valve mfg ...	1	11	8	1 249	46 412	893	2 026	25 779	112 452	137 812	246 997	9 036
33299	All other fabricated metal product mfg	-	19	5	920	24 400	613	1 282	13 251	69 715	42 775	114 517	4 706
332996	Fabricated pipe & pipe fitting mfg	-	8	1	480	13 242	241	531	5 026	28 049	13 537	45 372	D
332999	All other miscellaneous fabricated metal product mfg	1	8	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	102	34	5 626	165 892	4 259	8 429	108 903	403 942	526 901	916 095	19 943
3331	Agriculture, construction, & mining machinery mfg ...	-	33	13	1 635	48 169	1 194	1 812	31 064	74 211	151 306	210 658	5 809
33312	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	1	28	11	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	1	27	10	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	1	11	4	265	6 580	206	328	3 967	9 836	11 663	21 422	635
33331	Commercial & service industry machinery mfg	1	11	4	265	6 580	206	328	3 967	9 836	11 663	21 422	635
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	8	7	1 890	51 782	1 597	3 689	37 666	167 032	220 154	392 139	6 872
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	8	7	1 890	51 782	1 597	3 689	37 666	167 032	220 154	392 139	6 872
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	7	6	g	D	D	D	D	D	D	D	6 872
3339	Other general-purpose machinery mfg	-	28	8	1 626	52 879	1 115	2 353	32 529	141 282	135 816	272 503	D
33391	Pump & compressor mfg	-	16	5	1 016	30 293	646	1 512	16 042	87 848	95 826	179 040	D
333911	Pump & pumping equipment mfg	-	10	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	5	1	e	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA CITY, OK MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	-	45	15	8 692	346 154	5 113	9 639	182 584	2 284 696	1 084 004	3 398 998	76 880
3341	Computer & peripheral equipment mfg	-	8	3	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	8	3	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	4	3	2 250	98 293	450	952	15 291	58 445	119 186	176 916	D
3342	Communications equipment mfg	-	8	2	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	1	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	1	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	15	4	g	D	D	D	D	D	D	D	8 157
33441	Semiconductor & other electronic component mfg	-	15	4	g	D	D	D	D	D	D	D	8 157
334419	Other electronic component mfg	-	9	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	12	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	12	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	16	3	549	17 759	410	778	12 702	70 309	56 926	122 064	1 301
3359	Other electrical equipment & component mfg	-	7	1	e	D	D	D	D	D	D	D	779
336	Transportation equipment mfg	-	77	39	9 639	313 909	7 873	15 756	240 160	721 780	2 208 762	2 935 367	29 748
3361	Motor vehicle mfg	-	3	2	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	3	15	8	888	19 647	695	1 369	13 100	44 761	70 169	114 186	1 837
33621	Motor vehicle body & trailer mfg	3	15	8	888	19 647	695	1 369	13 100	44 761	70 169	114 186	1 837
336214	Travel trailer & camper mfg	3	9	6	675	14 154	524	971	9 082	37 250	56 316	93 021	1 626
3363	Motor vehicle parts mfg ...	-	43	22	4 408	98 831	3 346	6 964	65 008	218 327	343 762	566 532	13 656
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	9	4	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	9	4	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	8	6	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	8	6	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	9	4	451	11 203	361	674	8 192	25 712	27 994	53 922	2 268
336399	All other motor vehicle parts mfg	4	9	4	451	11 203	361	674	8 192	25 712	27 994	53 922	2 268
3364	Aerospace product & parts mfg	2	14	6	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	2	14	6	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	2	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
OKLAHOMA CITY, OK MSA—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3365	Railroad rolling stock mfg...	—	1	1	e	D	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	71	18		1 428	32 767	1 041	1 872	20 773	68 930	58 113	125 971	5 167
3371	Household & institutional furniture & kitchen cabinet mfg	5	42	7		441	9 034	367	665	6 929	17 340	12 540	30 058	1 443
33711	Wood kitchen cabinet & counter top mfg	5	23	5		288	5 861	242	425	4 639	11 258	7 978	19 414	1 124
337110	Wood kitchen cabinet & counter top mfg ...	5	23	5		288	5 861	242	425	4 639	11 258	7 978	19 414	1 124
3372	Office furniture (including fixtures) mfg	—	16	7		823	19 917	552	997	11 779	38 976	31 264	68 738	2 511
33721	Office furniture (including fixtures) mfg	—	16	7		823	19 917	552	997	11 779	38 976	31 264	68 738	2 511
337212	Custom architectural woodwork & millwork mfg	—	4	2	e	D	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	—	9	3	e	D	D	D	D	D	D	D	D	1 221
339	Miscellaneous mfg	2	122	20		1 992	39 598	1 378	2 347	22 710	112 131	82 004	193 756	3 760
3391	Medical equipment & supplies mfg	5	54	3		355	7 294	279	419	4 212	19 304	8 902	28 527	589
33911	Medical equipment & supplies mfg	5	54	3		355	7 294	279	419	4 212	19 304	8 902	28 527	589
3399	Other miscellaneous mfg ..	1	68	17		1 637	32 304	1 099	1 928	18 498	92 827	73 102	165 229	3 171
33991	Jewelry & silverware mfg	—	9	2	e	D	D	D	D	D	D	D	D	D
339912	Silverware & plated ware mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
33995	Sign mfg	2	26	3		258	5 433	202	351	3 200	8 668	4 935	13 491	195
339950	Sign mfg	2	26	3		258	5 433	202	351	3 200	8 668	4 935	13 491	195
33999	All other miscellaneous mfg	—	19	8		673	10 923	437	678	6 430	49 564	33 006	81 896	1 598
339999	All other miscellaneous mfg	—	13	5		580	8 877	368	542	5 047	44 644	30 010	73 905	D
TULSA, OK MSA														
31-33	Manufacturing	1	1 441	471		50 859	1 656 426	35 211	72 908	969 224	4 799 900	5 169 760	9 954 007	361 740
311	Food mfg	—	27	10		1 889	52 897	1 004	1 977	23 868	154 533	134 722	289 289	7 943
3115	Dairy product mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	13	4	g	D	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	12	3	g	D	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	2	1	f	D	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	—	1	1	e	D	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
315	Apparel mfg	4	19	5		477	6 761	439	770	5 573	12 411	4 276	18 323	209
3152	Cut & sew apparel mfg	4	13	5	e	D	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	—	5	2	e	D	D	D	D	D	D	D	D	78
315212	Women's, girls', & infants' cut & sew apparel contractors ..	—	5	2	e	D	D	D	D	D	D	D	D	78
321	Wood product mfg	1	25	9		367	7 070	292	553	4 668	18 596	19 261	37 137	616
3219	Other wood product mfg ...	1	21	9		336	6 529	267	517	4 330	17 560	17 970	34 811	600
322	Paper mfg	—	13	9		872	31 106	641	1 304	20 573	164 941	121 704	283 578	21 939
3222	Converted paper product mfg	—	12	8	f	D	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	5	4	e	D	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	3	e	D	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TULSA, OK MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	3	155	20	1 793	49 151	1 287	2 446	29 093	95 672	73 013	168 747	9 753
3231	Printing & related support activities.....	3	155	20	1 793	49 151	1 287	2 446	29 093	95 672	73 013	168 747	9 753
32311	Printing	3	139	19	1 672	45 302	1 199	2 296	26 908	88 001	71 061	159 121	9 452
323110	Commercial lithographic printing ..	3	55	14	1 027	28 859	765	1 504	17 823	56 304	47 560	104 169	6 617
323113	Commercial screen printing.....	-	18	3	283	7 467	173	339	3 209	13 658	11 720	25 183	1 759
324	Petroleum & coal products mfg	-	12	4	809	37 739	500	1 247	22 687	263 721	1 217 447	1 478 218	20 426
3241	Petroleum & coal products mfg	-	12	4	809	37 739	500	1 247	22 687	263 721	1 217 447	1 478 218	20 426
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	5	44	13	755	29 150	446	923	16 529	327 381	218 809	551 021	30 541
326	Plastics & rubber products mfg	-	70	27	1 953	56 285	1 507	3 158	32 891	141 016	158 604	298 099	8 144
3261	Plastics product mfg	-	54	19	1 485	44 107	1 129	2 344	25 401	116 209	144 329	259 675	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	7	4	e	D	D	D	D	D	D	D	3 083
326113	Unsupported plastics film & sheet (except packaging) mfg	-	5	4	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	7	3	320	9 379	272	644	7 081	32 356	21 334	54 175	1 742
326122	Plastics pipe & pipe fitting mfg	-	5	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	30	11	602	13 977	488	932	8 599	26 995	18 742	45 409	2 228
326199	All other plastics product mfg	1	26	10	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	1	16	8	468	12 178	378	814	7 490	24 807	14 275	38 424	D
32629	Other rubber product mfg	1	11	7	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	1	10	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	48	23	3 300	119 505	2 699	6 028	95 010	324 859	186 738	514 602	34 861
3271	Clay product & refractory mfg	-	6	5	f	D	D	D	D	D	D	D	2 982
32712	Clay building material & refractories mfg	-	4	4	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	-	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	8	5	1 903	76 326	1 560	3 515	63 124	185 271	102 711	290 204	D
32721	Glass & glass product mfg	-	8	5	1 903	76 326	1 560	3 515	63 124	185 271	102 711	290 204	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	27	11	742	24 268	616	1 411	18 415	92 845	57 252	150 510	5 508
32732	Ready-mix concrete mfg ..	-	14	7	440	13 874	385	857	11 690	48 773	35 954	84 743	2 743
327320	Ready-mix concrete mfg	-	14	7	440	13 874	385	857	11 690	48 773	35 954	84 743	2 743
331	Primary metal mfg	1	33	22	2 603	78 045	2 079	4 597	57 651	219 044	279 174	507 161	18 312
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	1	9	7	1 038	30 527	835	1 873	22 920	76 801	123 515	204 241	12 514
33121	Iron & steel pipes & tubes mfg from purchased steel	1	5	5	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	1	5	5	f	D	D	D	D	D	D	D	D
3315	Foundries	2	20	11	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	2	7	4	f	D	D	D	D	D	D	D	1 868
331513	Steel foundries (except investment)	-	2	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	2	13	7	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TULSA, OK MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	484	157	13 848	429 645	10 396	22 117	280 111	1 088 784	860 599	1 938 646	94 893
3321	Forging & stamping	—	21	11	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	21	11	f	D	D	D	D	D	D	D	D
332116	Metal stamping	1	10	5	357	9 372	211	380	5 124	18 151	19 713	36 789	2 831
3323	Architectural & structural metals mfg	1	82	29	1 993	59 634	1 409	2 822	34 865	125 834	160 134	286 255	6 721
33231	Plate work & fabricated structural product mfg	—	39	15	1 240	40 107	856	1 820	22 825	88 698	131 968	220 898	4 591
332312	Fabricated structural metal mfg	—	28	12	862	27 028	620	1 369	16 867	67 429	107 123	172 705	3 439
332313	Plate work mfg	1	10	3	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	3	43	14	753	19 527	553	1 002	12 040	37 136	28 166	65 357	2 130
332322	Sheet metal work mfg	3	31	12	618	16 586	463	851	10 299	30 396	23 611	53 978	1 838
3324	Boiler, tank, & shipping container mfg	—	55	42	3 532	124 283	2 656	6 346	84 014	261 062	289 644	547 447	12 207
33241	Power boiler & heat exchanger mfg	—	36	30	2 711	99 854	2 010	4 991	66 606	204 854	238 656	438 875	10 218
332410	Power boiler & heat exchanger mfg	—	36	30	2 711	99 854	2 010	4 991	66 606	204 854	238 656	438 875	10 218
33242	Metal tank (heavy gauge) mfg	—	14	11	770	23 338	605	1 264	16 539	50 752	43 615	95 545	1 893
332420	Metal tank (heavy gauge) mfg	—	14	11	770	23 338	605	1 264	16 539	50 752	43 615	95 545	1 893
3325	Hardware mfg	1	4	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	1	4	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	1	4	2	g	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	—	12	7	1 039	22 979	850	1 831	15 095	45 229	59 417	105 860	4 459
33261	Spring & wire product mfg	—	12	7	1 039	22 979	850	1 831	15 095	45 229	59 417	105 860	4 459
332618	Other fabricated wire product mfg	—	9	4	903	19 274	741	1 570	12 292	39 429	52 587	93 564	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	176	26	2 156	66 464	1 699	3 141	47 346	140 108	69 012	207 790	19 023
33271	Machine shops	1	159	20	1 667	50 349	1 321	2 336	36 337	106 351	45 825	150 757	14 462
332710	Machine shops	1	159	20	1 667	50 349	1 321	2 336	36 337	106 351	45 825	150 757	14 462
33272	Turned product & screw, nut, & bolt mfg	2	17	6	489	16 115	378	805	11 009	33 757	23 187	57 033	4 561
332722	Bolt, nut, screw, rivet, & washer mfg	4	3	2	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	3	52	15	870	26 270	705	1 444	17 735	63 509	46 463	110 309	35 225
33281	Coating, engraving, heat treating, & allied activities	3	52	15	870	26 270	705	1 444	17 735	63 509	46 463	110 309	35 225
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	19	6	436	13 025	348	748	9 488	33 530	38 717	72 501	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	27	7	e	D	D	D	D	D	D	D	1 859
3329	Other fabricated metal product mfg	1	77	25	2 409	81 658	1 672	3 637	46 812	181 535	153 988	328 530	9 859
33291	Metal valve mfg	1	18	9	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	1	13	7	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	59	16	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	21	11	1 153	39 988	842	1 993	24 601	75 641	78 466	149 862	4 715
332999	All other miscellaneous fabricated metal product mfg	1	23	4	398	12 262	303	673	7 948	30 108	22 562	51 466	1 491
333	Machinery mfg	1	173	69	8 473	316 563	5 051	10 187	149 257	836 251	812 501	1 618 392	51 326
3331	Agriculture, construction, & mining machinery mfg	—	34	16	1 940	69 518	1 173	2 343	37 669	159 480	190 386	340 250	10 124
33312	Construction machinery mfg	—	9	8	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	9	8	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	1	24	8	1 049	40 076	625	1 153	21 530	103 526	98 428	196 944	6 552
333132	Oil & gas field machinery & equipment mfg	1	24	8	1 049	40 076	625	1 153	21 530	103 526	98 428	196 944	6 552
3332	Industrial machinery mfg	2	29	14	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	25	13	962	32 296	638	1 172	18 572	100 789	96 834	197 800	3 372
333298	All other industrial machinery mfg	—	16	11	859	29 669	578	1 062	16 978	89 199	91 456	181 261	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TULSA, OK MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3333	Commercial & service industry machinery mfg ..	—	12	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	12	3	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	9	2	f	D	D	D	D	D	D	D	2 520
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	18	9	1 338	46 540	822	1 962	24 339	99 205	92 663	186 076	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	18	9	1 338	46 540	822	1 962	24 339	99 205	92 663	186 076	D
333411	Air purification equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	2	6	4	e	D	D	D	D	D	D	D	597
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	4	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	50	21	2 867	114 198	1 667	3 165	44 856	350 453	308 429	643 652	16 058
33391	Pump & compressor mfg	—	15	8	1 382	58 465	854	1 644	22 326	207 930	168 645	373 108	9 425
333911	Pump & pumping equipment mfg	—	7	6	1 116	45 441	734	1 350	18 430	160 562	107 017	264 348	8 627
333912	Air & gas compressor mfg	1	7	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	8	5	771	26 209	511	868	13 287	62 035	60 617	117 993	3 858
333923	Overhead traveling crane, hoist, & monorail system mfg ..	—	5	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	27	8	714	29 524	302	653	9 243	80 488	79 167	152 551	2 775
333994	Industrial process furnace & oven mfg ..	—	4	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	60	20	2 866	100 313	1 663	3 221	40 655	154 609	211 673	361 971	9 880
3342	Communications equipment mfg	2	8	3	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	15	5	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	15	5	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	30	11	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	30	11	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	4	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	1	7	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	38	18	1 625	49 371	1 073	2 189	26 080	139 134	155 597	299 399	4 240
3353	Electrical equipment mfg ..	1	25	12	872	26 601	532	1 125	13 781	66 150	66 403	133 737	1 352
33531	Electrical equipment mfg	1	25	12	872	26 601	532	1 125	13 781	66 150	66 403	133 737	1 352
335312	Motor & generator mfg	1	9	5	411	13 399	249	530	6 819	31 035	28 033	56 790	765
335313	Switchgear & switchboard apparatus mfg	—	6	3	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	9	5	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TULSA, OK MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	53	28	5 072	198 860	3 485	7 390	111 657	474 477	425 477	912 080	28 536
3361	Motor vehicle mfg	-	1	1	e	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	11	6	e	D	D	D	D	D	D	D	772
33621	Motor vehicle body & trailer mfg	2	11	6	e	D	D	D	D	D	D	D	772
3363	Motor vehicle parts mfg ...	-	18	6	f	D	D	D	D	D	D	D	5 896
33639	Other motor vehicle parts mfg	-	9	4	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	9	4	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	18	13	h	D	D	D	D	D	D	D	20 901
33641	Aerospace product & parts mfg	-	18	13	h	D	D	D	D	D	D	D	20 901
336411	Aircraft mfg	1	3	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	6	5	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	9	5	g	D	D	D	D	D	D	D	9 629
337	Furniture & related product mfg	1	44	10	1 261	28 930	997	1 929	21 886	55 789	31 614	87 256	2 436
3371	Household & institutional furniture & kitchen cabinet mfg	2	30	5	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	2	20	3	264	5 897	217	404	4 400	11 145	6 247	17 434	583
337110	Wood kitchen cabinet & counter top mfg ...	2	20	3	264	5 897	217	404	4 400	11 145	6 247	17 434	583
3372	Office furniture (including fixtures) mfg	-	12	5	913	21 554	704	1 407	16 363	41 867	23 398	65 083	D
33721	Office furniture (including fixtures) mfg	-	12	5	913	21 554	704	1 407	16 363	41 867	23 398	65 083	D
337212	Custom architectural woodwork & millwork mfg	-	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	110	20	2 049	41 385	1 216	2 063	23 071	195 052	127 457	324 851	9 303
3391	Medical equipment & supplies mfg	2	50	6	505	12 129	358	588	7 456	30 774	13 166	44 840	1 777
33911	Medical equipment & supplies mfg	2	50	6	505	12 129	358	588	7 456	30 774	13 166	44 840	1 777
3399	Other miscellaneous mfg ...	2	60	14	1 544	29 256	858	1 475	15 615	164 278	114 291	280 011	7 526
33992	Sporting & athletic goods mfg	2	18	5	1 091	19 286	545	939	10 089	141 315	99 278	242 170	6 517
339920	Sporting & athletic goods mfg	2	18	5	1 091	19 286	545	939	10 089	141 315	99 278	242 170	6 517

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADAIR COUNTY, OK													
31-33	Manufacturing	-	14	6	1 626	33 921	1 216	2 380	20 973	102 568	208 663	312 572	7 758
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLAINE COUNTY, OK													
31-33	Manufacturing	-	15	3	622	17 062	532	1 071	13 132	54 976	41 465	98 025	3 452
BRYAN COUNTY, OK													
31-33	Manufacturing	1	31	11	949	19 303	783	1 151	13 966	40 200	80 947	122 483	4 226
CANADIAN COUNTY, OK													
31-33	Manufacturing	-	64	17	3 003	82 290	2 121	3 854	52 276	610 656	409 982	1 024 388	16 229
336	Transportation equipment mfg	1	8	4	g	D	D	D	D	D	D	D	2 055
3363	Motor vehicle parts mfg ...	-	4	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
CARTER COUNTY, OK													
31-33	Manufacturing	6	45	9	2 801	105 427	2 455	4 649	90 708	228 555	764 584	1 012 587	36 245
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
CLEVELAND COUNTY, OK													
31-33	Manufacturing	-	151	35	4 287	116 375	3 161	6 597	68 966	426 569	467 205	902 324	19 243
327	Nonmetallic mineral product mfg	-	7	4	669	13 254	501	1 078	8 119	26 916	28 514	53 241	1 493
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	4	565	17 556	398	849	10 099	38 616	66 934	104 873	4 502
333	Machinery mfg	-	13	5	1 218	33 652	1 056	2 588	26 093	98 439	160 606	266 692	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
COMANCHE COUNTY, OK													
31-33	Manufacturing	-	51	13	3 325	119 762	2 914	5 930	102 499	509 641	391 060	900 820	44 071
326	Plastics & rubber products mfg	-	2	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAIG COUNTY, OK													
31-33	Manufacturing	-	18	6	978	21 657	828	1 689	14 109	73 664	54 786	128 086	5 555
CREEK COUNTY, OK													
31-33	Manufacturing	-	96	31	4 032	116 350	3 123	6 675	85 174	465 879	236 464	703 335	31 065
327	Nonmetallic mineral product mfg	-	6	4	1 160	33 687	951	2 174	28 741	106 297	50 216	162 100	D
3272	Glass & glass product mfg .	-	2	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	40	12	1 737	49 900	1 318	2 795	35 499	261 540	70 423	329 869	5 477
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
CUSTER COUNTY, OK													
31-33	Manufacturing	-	23	6	g	D	D	D	D	D	D	D	12 453
311	Food mfg	1	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
DELAWARE COUNTY, OK													
31-33	Manufacturing	1	30	5	673	12 138	567	946	9 452	16 735	28 259	45 195	D
GARFIELD COUNTY, OK													
31-33	Manufacturing	-	66	14	2 389	62 677	2 090	3 043	41 971	232 575	265 901	506 210	7 307
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
GARVIN COUNTY, OK													
31-33	Manufacturing	-	26	11	1 153	29 387	799	1 524	19 016	128 754	482 089	615 447	10 006
GRADY COUNTY, OK													
31-33	Manufacturing	-	64	15	2 792	69 958	2 402	4 800	55 807	412 325	338 849	747 050	11 318
332	Fabricated metal product mfg	-	10	4	f	D	D	D	D	D	D	D	4 387
3329	Other fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	3	g	D	D	D	D	D	D	D	2 253
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
JACKSON COUNTY, OK													
31-33	Manufacturing	-	12	3	896	16 320	799	1 946	13 095	83 162	118 854	205 147	8 288

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSTON COUNTY, OK													
31-33	Manufacturing	-	10	4	678	17 089	562	1 026	10 773	32 491	63 925	98 373	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	4	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	4	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	3	2	f	D	D	D	D	D	D	D	D
KAY COUNTY, OK													
31-33	Manufacturing	-	74	29	4 019	126 453	3 136	6 851	87 380	517 727	1 488 245	2 001 232	59 492
324	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	6	993	22 781	798	1 552	16 781	65 125	42 490	107 577	3 126
3323	Architectural & structural metals mfg	-	4	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	6	843	29 542	657	1 440	18 939	120 034	52 290	172 681	8 498
3331	Agriculture, construction, & mining machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
LE FLORE COUNTY, OK													
31-33	Manufacturing	-	32	7	1 104	24 370	889	1 553	16 451	49 983	87 251	137 026	2 654
LINCOLN COUNTY, OK													
31-33	Manufacturing	1	21	5	737	14 075	648	1 391	11 299	67 217	65 878	131 999	1 530
MCCLAIN COUNTY, OK													
31-33	Manufacturing	-	19	6	f	D	D	D	D	D	D	D	849
MCCURTAIN COUNTY, OK													
31-33	Manufacturing	1	25	13	2 758	79 558	2 539	5 209	67 368	299 603	497 364	794 737	D
311	Food mfg	5	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	8	f	D	D	D	D	D	D	D	D
3211	Sawmills & wood preservation	-	8	6	f	D	D	D	D	D	D	D	7 433
32111	Sawmills & wood preservation	-	8	6	f	D	D	D	D	D	D	D	7 433
321113	Sawmills	-	7	6	f	D	D	D	D	D	D	D	7 433
MARSHALL COUNTY, OK													
31-33	Manufacturing	-	20	7	1 196	24 262	1 084	2 133	20 673	56 495	79 453	130 538	2 200
MAYES COUNTY, OK													
31-33	Manufacturing	-	68	27	3 357	102 353	2 653	5 051	77 721	361 579	375 261	731 509	36 673
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	3	525	13 850	309	639	9 167	19 476	27 050	47 445	689

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MUSKOGEE COUNTY, OK													
31-33	Manufacturing	-	87	27	4 780	155 274	3 927	7 890	119 666	581 022	411 318	990 307	27 791
322	Paper mfg	-	6	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	8	891	26 039	762	1 577	19 480	83 687	117 484	196 561	9 168
333	Machinery mfg	-	8	2	763	24 071	567	1 098	15 935	54 532	50 730	105 697	1 266
NOBLE COUNTY, OK													
31-33	Manufacturing	-	13	3	g	D	D	D	D	D	D	D	6 769
333	Machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	1	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
OKLAHOMA COUNTY, OK													
31-33	Manufacturing	-	851	255	39 462	1 281 491	28 036	54 291	809 261	4 630 081	5 298 005	9 922 061	205 144
311	Food mfg	-	43	19	h	D	D	D	D	D	D	D	20 250
3118	Bakeries & tortilla mfg.	-	14	3	f	D	D	D	D	D	D	D	2 279
31181	Bread & bakery product mfg	-	11	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	5	4	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.	-	3	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	21	7	f	D	D	D	D	D	D	D	D
322	Paper mfg	3	13	7	574	16 887	454	904	10 982	25 677	38 903	64 838	D
3222	Converted paper product mfg	3	13	7	574	16 887	454	904	10 982	25 677	38 903	64 838	D
323	Printing & related support activities	1	146	24	g	D	D	D	D	D	D	D	7 143
3231	Printing & related support activities	1	146	24	g	D	D	D	D	D	D	D	7 143
32311	Printing	1	129	22	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	68	12	g	D	D	D	D	D	D	D	4 231
326	Plastics & rubber products mfg	-	38	17	3 610	128 415	3 202	6 130	95 083	296 480	289 652	588 226	19 780
3261	Plastics product mfg	1	33	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	22	11	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	20	10	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	4	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	34	20	f	D	D	D	D	D	D	D	4 849
3273	Cement & concrete product mfg	-	19	11	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA COUNTY, OK—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	148	45	4 613	149 517	3 280	6 867	90 035	373 290	481 122	855 145	22 951
3323	Architectural & structural metals mfg	-	34	16	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	11	6	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	23	10	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	5	3	1 243	34 425	797	1 522	18 864	92 694	71 009	168 093	2 666
3329	Other fabricated metal product mfg	1	27	11	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	1	11	7	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	1	9	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	75	24	3 717	108 203	2 666	4 885	65 038	249 665	324 051	551 189	D
3331	Agriculture, construction, & mining machinery mfg. ...	-	24	9	g	D	D	D	D	D	D	D	5 435
33312	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	6	5	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	6	5	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	6	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	21	5	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	14	4	f	D	D	D	D	D	D	D	2 325
333911	Pump & pumping equipment mfg	-	8	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	35	12	i	D	D	D	D	D	D	D	68 541
3341	Computer & peripheral equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	3	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	6	2	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	11	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	11	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	11	3	f	D	D	D	D	D	D	D	1 254
336	Transportation equipment mfg	-	50	25	i	D	D	D	D	D	D	D	26 064
3361	Motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	32	16	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	6	3	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	6	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OKLAHOMA COUNTY, OK—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	51	16	1 281	29 856	918	1 671	18 471	63 075	53 852	115 939	4 772
3372	Office furniture (including fixtures) mfg	—	13	6	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	13	6	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	85	14	g	D	D	D	D	D	D	D	3 087
3399	Other miscellaneous mfg ..	1	46	12	g	D	D	D	D	D	D	D	2 634
33999	All other miscellaneous mfg	—	13	6	f	D	D	D	D	D	D	D	1 492
339999	All other miscellaneous mfg	—	8	4	f	D	D	D	D	D	D	D	D
	OKMULGEE COUNTY, OK												
31-33	Manufacturing	—	35	10	1 120	38 471	901	1 588	27 368	202 295	97 475	295 391	11 850
	OSAGE COUNTY, OK												
31-33	Manufacturing	—	21	4	939	31 183	561	924	12 737	52 810	84 137	137 060	D
	OTTAWA COUNTY, OK												
31-33	Manufacturing	—	67	16	1 819	41 411	1 415	2 301	24 809	103 731	173 209	276 359	5 269
	PAYNE COUNTY, OK												
31-33	Manufacturing	—	60	16	2 584	76 476	1 928	3 760	49 983	456 145	406 703	846 754	25 520
333	Machinery mfg	—	10	4	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
	PITTSBURG COUNTY, OK												
31-33	Manufacturing	1	27	6	875	20 730	751	1 432	16 026	102 261	116 853	217 090	3 650
	PONTOTOC COUNTY, OK												
31-33	Manufacturing	1	47	12	1 743	36 582	1 425	2 169	25 503	81 155	129 533	209 679	4 170
326	Plastics & rubber products mfg	—	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	2	2	f	D	D	D	D	D	D	D	D
	POTTAWATOMIE COUNTY, OK												
31-33	Manufacturing	—	72	18	3 673	119 659	2 818	6 048	83 946	328 601	324 877	654 882	18 025
326	Plastics & rubber products mfg	—	7	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	14	3	616	17 503	357	770	8 424	39 947	20 223	63 163	D
3329	Other fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	3	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROGERS COUNTY, OK													
31-33	Manufacturing	-	122	42	4 562	147 433	3 316	7 067	87 947	428 261	396 987	822 863	22 580
332	Fabricated metal product mfg	-	51	19	2 092	63 980	1 600	3 794	45 825	165 812	160 462	321 229	7 394
3324	Boiler, tank, & shipping container mfg	-	6	6	888	31 532	698	2 003	24 010	87 185	70 648	157 435	D
33241	Power boiler & heat exchanger mfg	-	3	3	623	23 969	472	1 481	17 526	62 247	47 654	107 014	D
332410	Power boiler & heat exchanger mfg	-	3	3	623	23 969	472	1 481	17 526	62 247	47 654	107 014	D
333	Machinery mfg	-	12	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	2	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	3	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	6	942	33 983	634	1 352	17 513	81 078	111 750	191 920	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
SEMINOLE COUNTY, OK													
31-33	Manufacturing	-	30	7	1 689	33 398	1 371	2 503	24 500	84 004	178 728	252 274	5 521
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D
STEPHENS COUNTY, OK													
31-33	Manufacturing	-	58	12	1 941	49 768	1 556	2 894	37 454	306 236	164 809	470 398	13 520
333	Machinery mfg	-	9	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	4	1	f	D	D	D	D	D	D	D	D
TEXAS COUNTY, OK													
31-33	Manufacturing	-	13	5	g	D	D	D	D	D	D	D	D
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
TULSA COUNTY, OK													
31-33	Manufacturing	-	1 136	376	39 402	1 310 681	26 754	55 393	750 371	3 586 728	4 277 163	7 858 076	293 295
311	Food mfg	-	21	8	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	12	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	11	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	11	8	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	10	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	140	19	1 690	47 163	1 217	2 345	27 819	92 198	70 774	163 032	9 595
3231	Printing & related support activities	3	140	19	1 690	47 163	1 217	2 345	27 819	92 198	70 774	163 032	9 595
32311	Printing	3	124	18	1 569	43 314	1 129	2 195	25 634	84 527	68 822	153 406	9 294
323110	Commercial lithographic printing ..	3	47	13	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	7	4	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	7	4	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TULSA COUNTY, OK—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	54	23	1 716	51 298	1 310	2 774	29 528	131 899	151 799	282 208	D
3261	Plastics product mfg	-	40	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	35	17	2 055	83 549	1 676	3 709	64 488	209 507	128 676	335 597	D
3272	Glass & glass product mfg	-	6	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	6	3	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	19	9	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	25	16	2 101	62 396	1 678	3 722	46 512	155 430	196 376	357 035	D
3312	Steel product mfg from purchased steel	-	5	3	f	D	D	D	D	D	D	D	D
3315	Foundries	2	18	11	f	D	D	D	D	D	D	D	3 140
33151	Ferrous metal foundries ..	2	7	4	f	D	D	D	D	D	D	D	1 868
332	Fabricated metal product mfg	1	360	121	9 019	294 010	6 667	14 048	183 585	618 322	588 650	1 202 018	77 723
3323	Architectural & structural metals mfg	1	63	25	1 617	48 778	1 120	2 261	26 953	99 937	111 079	213 301	5 839
33231	Plate work & fabricated structural product mfg ..	-	27	12	943	31 353	620	1 367	16 076	68 238	87 208	157 665	3 799
332312	Fabricated structural metal mfg	1	19	9	597	19 464	407	958	10 877	49 062	64 339	113 537	D
33232	Ornamental & architectural metal products mfg	3	36	13	674	17 425	500	894	10 877	31 699	23 871	55 636	2 040
332322	Sheet metal work mfg ..	3	26	11	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	41	31	2 348	82 626	1 716	3 821	52 380	160 708	203 531	361 554	D
33241	Power boiler & heat exchanger mfg	-	29	23	1 859	68 026	1 351	3 102	42 941	133 329	179 086	310 647	8 203
332410	Power boiler & heat exchanger mfg	-	29	23	1 859	68 026	1 351	3 102	42 941	133 329	179 086	310 647	8 203
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	126	21	1 746	55 474	1 383	2 666	39 575	121 408	58 522	178 593	D
33271	Machine shops	1	112	16	1 301	40 810	1 041	1 940	29 582	90 293	38 069	127 004	12 962
332710	Machine shops	1	112	16	1 301	40 810	1 041	1 940	29 582	90 293	38 069	127 004	12 962
3328	Coating, engraving, heat treating, & allied activities ..	3	46	15	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities ..	3	46	15	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	52	17	1 615	55 269	1 142	2 573	32 140	122 676	119 135	238 198	6 224
33299	All other fabricated metal product mfg	-	37	10	g	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	17	8	781	25 332	620	1 478	17 287	46 118	68 256	113 257	D
333	Machinery mfg	1	140	59	7 161	268 469	4 069	8 411	124 511	641 997	712 790	1 335 825	45 415
3331	Agriculture, construction, & mining machinery mfg	-	24	14	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	9	8	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	9	8	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	15	6	930	36 445	541	1 013	19 417	94 686	92 192	181 905	6 045
333132	Oil & gas field machinery & equipment mfg	-	15	6	930	36 445	541	1 013	19 417	94 686	92 192	181 905	6 045
3332	Industrial machinery mfg ..	3	22	11	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	19	10	f	D	D	D	D	D	D	D	3 271
333298	All other industrial machinery mfg	1	12	9	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	12	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	12	3	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	9	2	f	D	D	D	D	D	D	D	2 520
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	15	7	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	15	7	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TULSA COUNTY, OK—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	—	39	18	2 162	85 885	1 179	2 347	34 439	213 576	262 340	471 017	D
33391	Pump & compressor mfg	—	12	7	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	5	5	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	5	4	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg	—	3	3	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	22	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	54	18	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	26	9	1 543	54 887	987	1 768	24 654	98 611	122 897	217 660	D
33451	Navigational, measuring, medical, & control instruments mfg	2	26	9	1 543	54 887	987	1 768	24 654	98 611	122 897	217 660	D
334511	Search, detection, navigation, & guidance instrument mfg	—	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	30	13	1 191	34 926	785	1 622	19 206	108 648	103 785	216 438	2 886
3353	Electrical equipment mfg	—	18	8	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	18	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	36	18	3 964	161 895	2 726	5 882	92 418	386 274	305 867	706 185	D
3364	Aerospace product & parts mfg	—	16	12	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	16	12	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	1	3	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	9	5	g	D	D	D	D	D	D	D	9 629
337	Furniture & related product mfg	1	36	9	g	D	D	D	D	D	D	D	2 364
3372	Office furniture (including fixtures) mfg	—	10	5	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	10	5	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	5	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	95	19	1 954	39 900	1 152	1 952	22 146	191 796	125 404	319 578	9 118
3399	Other miscellaneous mfg	2	50	13	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	2	15	5	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	2	15	5	g	D	D	D	D	D	D	D	D
	WAGONER COUNTY, OK												
31-33	Manufacturing	6	66	18	1 924	50 779	1 457	2 849	32 995	266 222	175 009	432 673	D
332	Fabricated metal product mfg	—	25	5	935	20 262	762	1 403	14 260	39 870	39 235	80 432	4 121
3326	Spring & wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D
	WASHINGTON COUNTY, OK												
31-33	Manufacturing	—	48	8	1 327	50 036	880	1 696	20 694	106 230	79 292	183 795	10 759
333	Machinery mfg	—	10	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	—	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WOODWARD COUNTY, OK Manufacturing	-	30	5	591	21 469	384	720	12 765	121 969	139 518	260 510	8 772

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ADA, OK Manufacturing	1	34	9	1 469	28 331	1 211	1 774	20 212	44 306	97 559	140 591	D
326	Plastics & rubber products mfg	-	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31-33	ALTUS, OK Manufacturing	-	9	2	f	D	D	D	D	D	D	D	D
31-33	ARDMORE, OK Manufacturing	6	29	7	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
31-33	BARTLESVILLE, OK * Manufacturing	-	31	4	930	40 213	560	1 102	13 259	86 510	55 212	139 722	9 765
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	BIXBY, OK * Manufacturing	1	21	6	596	13 495	514	1 124	9 712	27 959	18 345	45 548	1 827
31-33	BLACKWELL, OK Manufacturing	1	11	8	f	D	D	D	D	D	D	D	D
31-33	BRISTOW, OK Manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROKEN ARROW, OK *													
31-33	Manufacturing	-	129	41	4 191	136 837	2 753	5 777	72 181	340 699	278 919	614 913	21 428
326	Plastics & rubber products mfg	-	12	6	f	D	D	D	D	D	D	D	2 805
332	Fabricated metal product mfg	-	42	10	731	24 208	524	1 167	13 693	45 384	42 438	90 091	3 160
333	Machinery mfg	-	15	8	g	D	D	D	D	D	D	D	11 948
CATOOSA, OK *													
31-33	Manufacturing	-	17	8	712	23 994	496	1 289	16 898	65 439	37 500	99 811	4 884
CHICKASHA, OK													
31-33	Manufacturing	-	34	9	2 093	54 705	1 830	3 797	44 922	347 937	199 394	543 781	7 080
332	Fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLAREMORE, OK													
31-33	Manufacturing	1	43	12	1 730	58 068	1 273	2 360	29 695	181 116	143 018	326 892	9 903
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	2	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
CLINTON, OK *													
31-33	Manufacturing	1	7	3	f	D	D	D	D	D	D	D	D
311	Food mfg	1	3	2	f	D	D	D	D	D	D	D	D
DEL CITY, OK													
31-33	Manufacturing	-	10	6	687	14 755	497	920	9 969	28 748	23 403	52 222	1 265
DUNCAN, OK													
31-33	Manufacturing	-	34	6	1 377	37 622	1 120	2 174	30 105	279 551	142 321	420 169	11 920
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
DURANT, OK													
31-33	Manufacturing	1	18	8	f	D	D	D	D	D	D	D	3 680
EDMOND, OK													
31-33	Manufacturing	2	39	8	929	23 246	581	1 029	13 176	56 473	35 202	91 000	3 716
EL RENO, OK													
31-33	Manufacturing	2	18	7	f	D	D	D	D	D	D	D	1 850

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
ENID, OK														
31-33	Manufacturing	-	54	10	g	D	D	D	D	D	D	D	2 674	
GUYMON, OK														
31-33	Manufacturing	-	9	5	g	D	D	D	D	D	D	D	D	
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D	
HENRYETTA, OK														
31-33	Manufacturing	-	10	3		524	17 155	467	747	14 888	52 322	27 965	76 168	D
LAWTON, OK														
31-33	Manufacturing	-	45	11	h		D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D	D
MCALESTER, OK														
31-33	Manufacturing	-	18	4		718	16 597	620	1 139	13 196	79 959	106 791	184 485	2 205
MADILL, OK														
31-33	Manufacturing	-	8	4		663	10 859	621	1 128	9 770	19 159	26 877	46 001	323
MIAMI, OK														
31-33	Manufacturing	-	30	10		1 207	28 201	922	1 523	15 673	76 290	108 526	183 171	2 258
MIDWEST CITY, OK														
31-33	Manufacturing	-	18	6	f		D	D	D	D	D	D	D	1 713
MUSKOGEE, OK														
31-33	Manufacturing	-	61	18		3 476	117 439	2 953	5 794	94 196	475 830	286 196	760 679	21 505
322	Paper mfg	-	5	2	g	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	6	f	D	D	D	D	D	D	D	D	D
NOBLE, OK														
31-33	Manufacturing	1	7	4		711	13 353	540	1 125	8 118	28 620	27 079	53 514	861
327	Nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	D
NORMAN, OK														
31-33	Manufacturing	-	83	17		2 442	71 592	1 811	3 829	42 735	331 946	339 043	679 616	12 012
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA CITY, OK *												
31-33	Manufacturing	-	759	234	38 354	1 251 084	27 355	52 853	793 704	4 451 920	5 202 863	9 658 141	197 652
311	Food mfg	-	37	18	2 652	73 302	1 689	3 154	40 722	216 200	394 259	615 904	13 291
3116	Meat product mfg	-	10	5	732	20 587	555	929	11 937	48 543	160 519	207 987	4 749
31161	Animal slaughtering & processing	-	10	5	732	20 587	555	929	11 937	48 543	160 519	207 987	4 749
311612	Meat processed from carcasses	-	7	5	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	11	3	f	D	D	D	D	D	D	D	2 259
31181	Bread & bakery product mfg	-	9	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	5	4	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	2	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	3	12	7	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	3	12	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	124	22	1 861	53 639	1 337	2 446	35 132	132 334	83 430	209 737	6 579
3231	Printing & related support activities	1	124	22	1 861	53 639	1 337	2 446	35 132	132 334	83 430	209 737	6 579
32311	Printing	1	107	20	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	58	11	921	28 479	658	1 208	18 564	65 327	59 520	118 686	4 110
326	Plastics & rubber products mfg	-	34	14	3 363	120 374	3 011	5 764	90 274	282 319	279 268	563 697	18 596
3261	Plastics product mfg	1	29	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	19	9	925	24 137	646	1 203	12 840	53 497	83 043	135 449	D
326199	All other plastics product mfg	-	18	9	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	4	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	24	14	762	19 116	587	1 248	13 324	44 776	42 190	87 494	3 144
332	Fabricated metal product mfg	-	149	46	5 157	166 019	3 582	7 597	100 915	417 409	550 445	965 767	29 158
3323	Architectural & structural metals mfg	-	33	16	2 192	66 907	1 410	2 883	35 720	183 299	187 375	377 753	5 468
33231	Plate work & fabricated structural product mfg ..	1	13	6	683	23 597	422	967	12 047	70 364	95 554	168 342	D
33232	Ornamental & architectural metal products mfg	-	20	10	1 509	43 310	988	1 916	23 673	112 935	91 821	209 411	D
332321	Metal window & door mfg	-	4	3	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	52	9	f	D	D	D	D	D	D	D	4 774
3329	Other fabricated metal product mfg	-	26	12	1 632	55 644	1 210	2 671	32 093	147 534	166 346	308 795	11 697
33291	Metal valve mfg	1	10	8	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ..	1	8	7	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	73	24	3 610	105 221	2 576	4 756	62 980	242 351	316 315	538 212	D
3331	Agriculture, construction, & mining machinery mfg	-	25	11	1 533	45 665	1 113	1 682	29 342	69 637	147 450	202 180	D
33312	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	1	20	9	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	1	20	9	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	4	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	5	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	5	4	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OKLAHOMA CITY, OK * —Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	20	5	985	29 557	609	1 414	14 826	83 650	91 162	169 846	2 409
33391	Pump & compressor mfg	-	13	4	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	29	11	7 261	304 632	4 083	7 485	157 555	2 164 871	965 069	3 156 340	68 176
3341	Computer & peripheral equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	2	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	5	1	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	11	3	f	D	D	D	D	D	D	D	1 254
336	Transportation equipment mfg	-	45	24	8 196	275 186	6 808	13 603	215 560	609 448	2 074 116	2 687 187	26 402
3361	Motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	31	17	h	D	D	D	D	D	D	D	12 907
33631	Motor vehicle gasoline engine & engine parts mfg	-	6	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	47	15	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	72	14	g	D	D	D	D	D	D	D	2 608
3399	Other miscellaneous mfg ..	1	39	12	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	11	6	577	9 725	362	594	5 605	46 941	31 065	77 279	1 438
339999	All other miscellaneous mfg	-	7	4	f	D	D	D	D	D	D	D	D
	PAULS VALLEY, OK												
31-33	Manufacturing	-	9	4	f	D	D	D	D	D	D	D	D
	PERRY, OK												
31-33	Manufacturing	-	10	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PONCA CITY, OK *													
31-33	Manufacturing	-	45	17	g	D	D	D	D	D	D	D	31 267
332	Fabricated metal product mfg	-	9	3	709	14 667	565	1 063	10 871	46 423	24 938	71 436	D
3323	Architectural & structural metals mfg	-	3	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	5	798	27 751	618	1 351	17 648	116 093	50 672	167 147	D
3331	Agriculture, construction, & mining machinery mfg.	-	2	2	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
POTEAU, OK													
31-33	Manufacturing	-	16	6	1 011	22 941	810	1 419	15 335	47 306	84 567	131 313	2 383
PRYOR CREEK, OK													
31-33	Manufacturing	-	29	15	2 126	69 899	1 633	3 099	52 937	269 835	255 202	520 777	27 769
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
SAND SPRINGS, OK *													
31-33	Manufacturing	-	35	16	2 122	67 272	1 646	3 695	46 430	204 106	279 777	487 661	29 384
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
SAPULPA, OK													
31-33	Manufacturing	1	36	11	1 648	50 323	1 321	2 912	40 301	164 086	94 295	265 595	21 889
327	Nonmetallic mineral product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
SEMINOLE, OK													
31-33	Manufacturing	-	18	4	1 439	28 355	1 184	2 148	21 691	70 825	168 612	229 129	657
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D
SHAWNEE, OK													
31-33	Manufacturing	-	41	12	2 799	96 252	2 268	4 892	71 973	272 407	274 378	545 470	14 595
326	Plastics & rubber products mfg	-	6	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STILLWATER, OK													
31-33	Manufacturing	-	28	9	2 195	68 354	1 655	3 338	45 433	438 949	390 561	814 628	24 322
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
STILWELL, OK													
31-33	Manufacturing	-	6	4	980	18 492	785	1 552	11 476	47 612	89 530	137 372	D
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
TULSA, OK *													
31-33	Manufacturing	1	872	281	29 436	986 640	19 670	40 027	553 669	2 656 935	2 849 331	5 526 131	166 291
311	Food mfg	-	12	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	7	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	6	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	126	17	1 521	42 618	1 097	2 088	25 416	82 504	65 141	147 706	D
3231	Printing & related support activities	3	126	17	1 521	42 618	1 097	2 088	25 416	82 504	65 141	147 706	D
32311	Printing	3	110	16	1 400	38 769	1 009	1 938	23 231	74 833	63 189	138 080	D
323110	Commercial lithographic printing	3	44	12	935	27 034	693	1 375	16 632	53 820	45 944	100 068	6 510
324	Petroleum & coal products mfg	-	5	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	38	14	879	24 834	674	1 320	14 790	62 718	76 110	136 977	2 943
3261	Plastics product mfg	1	27	9	644	18 413	499	981	11 206	49 312	66 178	114 299	D
327	Nonmetallic mineral product mfg	-	24	13	1 685	73 472	1 385	3 056	57 504	184 838	112 925	294 714	13 353
3272	Glass & glass product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	2	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	14	8	584	16 338	462	855	11 043	43 690	45 884	89 803	2 507
332	Fabricated metal product mfg	1	264	88	6 503	210 876	4 811	9 960	133 977	455 067	377 329	829 631	34 557
3323	Architectural & structural metals mfg	2	45	15	1 141	35 927	777	1 551	19 461	73 808	74 320	150 469	4 025
33231	Plate work & fabricated structural product mfg	1	16	6	627	21 654	394	860	10 690	48 477	54 921	105 652	2 162
33232	Ornamental & architectural metal products mfg	3	29	9	514	14 273	383	691	8 771	25 331	19 399	44 817	1 863
3324	Boiler, tank, & shipping container mfg	-	29	22	1 506	50 910	1 080	2 310	32 496	99 395	134 376	231 012	D
33241	Power boiler & heat exchanger mfg	-	18	15	1 097	39 010	787	1 705	25 400	71 528	113 286	182 814	5 488
332410	Power boiler & heat exchanger mfg	-	18	15	1 097	39 010	787	1 705	25 400	71 528	113 286	182 814	5 488
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	96	17	1 413	45 728	1 108	2 124	32 441	101 813	50 991	151 540	13 638
33271	Machine shops	1	87	13	1 052	33 470	831	1 550	24 363	75 249	32 283	106 253	9 945
332710	Machine shops	1	87	13	1 052	33 470	831	1 550	24 363	75 249	32 283	106 253	9 945
3328	Coating, engraving, heat treating, & allied activities	4	34	14	719	22 092	581	1 204	14 718	48 629	21 679	70 815	D
33281	Coating, engraving, heat treating, & allied activities	4	34	14	719	22 092	581	1 204	14 718	48 629	21 679	70 815	D
3329	Other fabricated metal product mfg	1	33	11	1 087	36 147	782	1 815	22 274	88 977	68 175	155 700	D
33299	All other fabricated metal product mfg	-	25	6	755	23 643	603	1 441	17 214	56 511	51 837	107 369	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TULSA, OK *—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	115	46	4 841	183 509	2 703	5 552	80 847	427 893	502 242	920 575	20 820
3331	Agriculture, construction, & mining machinery mfg....	—	17	8	1 008	34 533	630	1 280	19 760	65 514	112 657	173 442	4 055
33312	Construction machinery mfg	—	7	6	f	D	D	D	D	D	D	D	3 518
333120	Construction machinery mfg	—	7	6	f	D	D	D	D	D	D	D	3 518
3332	Industrial machinery mfg ..	4	22	10	764	32 203	417	835	14 671	88 548	77 158	166 492	D
33329	Other industrial machinery mfg	1	19	9	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	12	6	756	29 343	383	986	11 877	59 509	35 594	89 858	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	12	6	756	29 343	383	986	11 877	59 509	35 594	89 858	D
3339	Other general-purpose machinery mfg	—	35	16	1 775	70 052	954	1 868	26 512	170 147	232 552	400 012	8 048
33391	Pump & compressor mfg	—	11	6	746	31 427	405	899	12 396	81 514	126 009	206 643	D
33399	All other general-purpose machinery mfg	—	20	7	f	D	D	D	D	D	D	D	1 731
334	Computer & electronic product mfg	2	38	14	2 124	69 342	1 396	2 793	32 125	119 759	140 226	256 499	7 690
3345	Navigational, measuring, medical, & control instruments mfg	2	16	6	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	16	6	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	26	12	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	26	16	h	D	D	D	D	D	D	D	22 024
3364	Aerospace product & parts mfg	—	12	10	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	12	10	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	1	3	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	7	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	30	7	g	D	D	D	D	D	D	D	2 046
3372	Office furniture (including fixtures) mfg	—	8	4	f	D	D	D	D	D	D	D	1 479
33721	Office furniture (including fixtures) mfg	—	8	4	f	D	D	D	D	D	D	D	1 479
337212	Custom architectural woodwork & millwork mfg	—	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	77	15	1 697	33 446	985	1 698	19 079	175 303	116 909	294 947	8 857
3399	Other miscellaneous mfg ..	2	40	10	1 296	24 386	690	1 212	13 026	150 387	106 607	259 212	7 195
33992	Sporting & athletic goods mfg	2	11	3	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	2	11	3	f	D	D	D	D	D	D	D	D
	VINITA, OK												
31-33	Manufacturing	—	7	5	876	19 545	746	1 527	12 472	69 629	50 310	119 471	5 348
	WAGONER, OK												
31-33	Manufacturing	—	14	6	956	19 295	798	1 617	13 154	46 653	43 409	90 571	3 378
332	Fabricated metal product mfg	—	3	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)				
	WEATHERFORD, OK											
31-33	Manufacturing	-	14	3	f	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
OKLAHOMA		OKLAHOMA—Con.	
Companies ¹	number.. 3 814	Quantity of electricity purchased for heat and power	1,000 kWh.. 8 789 704
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
All establishments	number.. 4 087	Total value of shipments	\$1,000.. 37 453 197
Establishments with 1 to 19 employees	number.. 2 896	Value of resales	\$1,000.. 1 188 644
Establishments with 20 to 99 employees	number.. 837	Value added	\$1,000.. 17 233 699
Establishments with 100 employees or more	number.. 354	Total inventories, beginning of year	\$1,000.. 3 761 184
All employees	number.. 164 060	Finished goods inventories, beginning of year	\$1,000.. 1 383 974
Total compensation ²	\$1,000.. 6 314 595	Work-in-process inventories, beginning of year	\$1,000.. 1 034 675
Annual payroll	\$1,000.. 4 963 236	Materials and supplies inventories, beginning of year	\$1,000.. 1 342 535
Total fringe benefits	\$1,000.. 1 351 359	Total inventories, end of year	\$1,000.. 3 931 609
Production workers, average for year	number.. 122 705	Finished goods inventories, end of year	\$1,000.. 1 439 449
Production workers on March 12	number.. 121 865	Work-in-process inventories, end of year	\$1,000.. 1 022 421
Production workers on May 12	number.. 122 256	Materials and supplies inventories, end of year	\$1,000.. 1 469 739
Production workers on August 12	number.. 123 002	Gross book value of total assets at beginning of year	\$1,000.. 13 232 789
Production workers on November 12	number.. 123 697	Total capital expenditures (new and used)	\$1,000.. 1 113 680
Production-worker hours	1,000.. 242 407	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 126 833
Production-worker wages	\$1,000.. 3 229 468	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 986 847
Total cost of materials	\$1,000.. 20 259 932	Total retirements ²	\$1,000.. 362 510
Cost of materials, parts, containers, etc., consumed	\$1,000.. 18 306 165	Gross book value of total assets at end of year	\$1,000.. 13 983 959
Cost of resales	\$1,000.. 939 326	Total depreciation during year ²	\$1,000.. 816 540
Cost of fuels	\$1,000.. 291 358	Total rental payments ²	\$1,000.. 187 075
Cost of purchased electricity	\$1,000.. 320 436	Buildings and other structures rental payments ²	\$1,000.. 83 784
Cost of contract work	\$1,000.. 402 647	Machinery and equipment rental payments ²	\$1,000.. 103 291

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

OKLAHOMA

Bartlesville is in Osage and Washington Counties.

Bixby is in Tulsa and Wagoner Counties.

Broken Arrow is in Tulsa and Wagoner Counties.

Catoosa is in Rogers and Wagoner Counties.

Clinton is in Custer and Washita Counties.

Collinsville is in Rogers and Tulsa Counties.

Davis is in Garvin and Murray Counties.

Drumright is in Creek and Payne Counties.

Oklahoma City is in Canadian, Cleveland, Oklahoma, and Pottawatomie Counties; it was erroneously reported in McClain County for the 1992 Economic Census.

Owasso is in Rogers and Tulsa Counties.

Piedmont is in Canadian and Kingfisher Counties.

Ponca City is in Kay and Osage Counties.

Purcell is in Cleveland and McClain Counties.

Sand Springs is in Osage and Tulsa Counties.

Skiatook is in Osage and Tulsa Counties.

Stroud is in Creek and Lincoln Counties.

Tulsa is in Osage, Rogers, and Tulsa Counties.

Appendix E. Metropolitan Areas

OKLAHOMA

Enid, OK MSA

Garfield County, OK

Fort Smith, AR—OK MSA

Crawford County, AR

Sebastian County, AR

Sequoyah County, OK

Lawton, OK MSA

Comanche County, OK

Oklahoma City, OK MSA

Canadian County, OK

Cleveland County, OK

Logan County, OK

McClain County, OK

Oklahoma County, OK

Pottawatomie County, OK

Tulsa, OK MSA

Creek County, OK

Osage County, OK

Rogers County, OK

Tulsa County, OK

Wagoner County, OK

Oregon

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OREGON													
31-33	Manufacturing	-	5 768	1 675	213 111	7 095 286	158 506	316 808	4 545 793	25 077 180	22 770 601	47 665 990	2 715 770
311	Food mfg.....	1	440	159	21 567	546 661	16 760	31 106	359 436	2 036 915	2 627 276	4 662 101	138 198
3111	Animal food mfg.....	1	15	4	275	9 036	158	320	4 205	51 212	74 507	124 997	1 271
31111	Animal food mfg.....	1	15	4	275	9 036	158	320	4 205	51 212	74 507	124 997	1 271
311119	Other animal food mfg.....	1	15	4	275	9 036	158	320	4 205	51 212	74 507	124 997	1 271
3112	Grain & oilseed milling	2	15	7	454	15 851	357	737	11 519	73 647	205 799	279 472	2 851
31121	Flour milling & malt mfg .	-	7	3	146	5 480	104	240	3 466	16 246	100 717	117 509	298
311211	Flour milling	-	5	3	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	5	2	202	5 987	170	312	5 062	20 440	85 336	105 493	235
311225	Fats & oils refining & blending.....	-	3	2	c	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	9	3	2	106	4 384	83	185	2 991	36 961	19 746	56 470	2 318
311230	Breakfast cereal mfg..	9	3	2	106	4 384	83	185	2 991	36 961	19 746	56 470	2 318
3113	Sugar & confectionery product mfg.....	-	40	3	490	12 563	406	808	9 976	43 650	64 190	110 054	993
31131	Sugar mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	5	20	1	112	1 353	79	99	827	2 488	1 995	4 773	162
311330	Confectionery mfg from purchased chocolate.....	5	20	1	112	1 353	79	99	827	2 488	1 995	4 773	162
3114	Fruit & vegetable preserving & specialty food mfg.....	-	74	43	9 295	224 627	8 047	14 877	158 067	911 643	939 681	1 858 387	56 744
31141	Frozen food mfg.....	-	30	26	7 017	168 559	6 107	11 482	123 298	739 345	748 843	1 497 095	44 350
311411	Frozen fruit, juice, & vegetable mfg.....	-	26	24	i	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	3	44	17	2 278	56 068	1 940	3 395	34 769	172 298	190 838	361 292	12 394
311421	Fruit & vegetable canning	3	34	15	1 725	42 364	1 509	2 657	28 438	139 265	152 234	287 547	9 113
311423	Dried & dehydrated food mfg	-	7	2	533	13 393	416	719	6 107	31 725	37 310	71 143	D
3115	Dairy product mfg	-	31	21	1 879	52 962	1 142	2 273	28 281	181 209	485 441	661 565	22 293
31151	Dairy product (except frozen) mfg	-	26	19	1 728	49 688	1 045	2 106	26 529	171 156	466 276	632 565	21 496
311511	Fluid milk mfg.....	-	18	15	1 227	38 023	653	1 282	19 913	125 668	339 295	464 317	17 935
311513	Cheese mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	-	5	2	151	3 274	97	167	1 752	10 053	19 165	29 000	797
311520	Ice cream & frozen dessert mfg.....	-	5	2	151	3 274	97	167	1 752	10 053	19 165	29 000	797
3116	Meat product mfg.....	2	59	17	1 979	43 319	1 613	3 151	30 410	115 739	249 061	363 713	6 236
31161	Animal slaughtering & processing.....	2	59	17	1 979	43 319	1 613	3 151	30 410	115 739	249 061	363 713	6 236
311611	Animal (except poultry) slaughtering	1	23	4	378	8 913	330	602	7 055	16 947	85 572	102 925	715
311612	Meat processed from carcasses	3	26	11	1 069	24 447	889	1 741	16 421	68 626	119 217	186 994	5 028
311615	Poultry processing....	-	4	1	e	D	D	D	D	D	D	D	134
3117	Seafood product preparation & packaging..	4	27	10	1 074	21 716	948	1 705	16 427	40 398	81 623	122 309	3 343
31171	Seafood product preparation & packaging	4	27	10	1 074	21 716	948	1 705	16 427	40 398	81 623	122 309	3 343
311712	Fresh & frozen seafood processing ..	4	21	9	1 020	20 620	904	1 628	15 661	37 638	79 034	116 958	3 211
3118	Bakeries & tortilla mfg.....	-	130	38	4 659	132 196	3 101	5 591	82 606	385 348	336 637	721 906	28 342
31181	Bread & bakery product mfg.....	1	101	27	3 198	86 346	1 890	3 263	47 133	233 194	168 406	401 624	14 940
311811	Retail bakeries.....	4	48	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	49	22	2 669	77 820	1 555	2 735	41 967	211 489	150 771	362 313	13 467
311813	Frozen cakes, pies, & other pastries mfg ...	9	4	1	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	21	7	1 097	37 841	929	1 850	29 814	127 547	138 264	265 823	D
311821	Cookie & cracker mfg .	-	10	3	690	28 113	592	1 150	22 781	82 592	62 498	144 854	4 582
311822	Flour mixes & dough mfg from purchased flour	-	8	4	401	9 559	332	692	6 904	43 738	74 925	118 908	D
31183	Tortilla mfg	1	8	4	364	8 009	282	478	5 659	24 607	29 967	54 459	D
311830	Tortilla mfg	1	8	4	364	8 009	282	478	5 659	24 607	29 967	54 459	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	49	16	1 462	34 391	988	1 644	17 945	234 069	190 337	419 698	16 125
31191	Snack food mfg	5	8	4	e	D	D	D	D	D	D	D	5 670
311919	Other snack food mfg	5	6	3	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	8	1	111	3 304	78	137	2 017	72 335	50 825	120 995	D
311920	Coffee & tea mfg	—	8	1	111	3 304	78	137	2 017	72 335	50 825	120 995	D
31194	Seasoning & dressing mfg	3	9	4	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	4	7	3	221	5 078	153	249	2 850	17 772	21 287	38 773	D
31199	All other food mfg	1	22	6	565	9 990	415	781	6 487	47 989	62 945	109 236	2 227
311991	Perishable prepared food mfg	—	13	4	441	7 118	313	615	4 614	40 277	52 646	91 223	1 467
311999	All other miscellaneous food mfg	5	9	2	124	2 872	102	166	1 873	7 712	10 299	18 013	760
312	Beverage & tobacco product mfg	2	96	27	2 268	67 228	1 150	2 039	31 501	259 474	362 818	619 956	18 127
3121	Beverage mfg	2	96	27	2 268	67 228	1 150	2 039	31 501	259 474	362 818	619 956	18 127
31211	Soft drink & ice mfg	2	26	11	1 110	34 393	530	1 005	14 024	128 003	152 810	384 385	9 539
312111	Soft drink mfg	2	9	9	978	31 787	437	856	12 550	120 859	247 593	369 014	8 885
31212	Breweries	1	26	9	789	24 469	468	797	14 194	104 356	79 622	184 106	6 292
312120	Breweries	1	26	9	789	24 469	468	797	14 194	104 356	79 622	184 106	6 292
31213	Wineries	6	42	6	e	D	D	D	D	D	D	D	D
312130	Wineries	6	42	6	e	D	D	D	D	D	D	D	D
313	Textile mills	1	24	4	243	4 769	179	332	3 579	11 681	14 954	27 573	754
3132	Fabric mills	1	11	2	147	2 677	101	184	2 138	6 894	10 060	16 600	374
31321	Broadwoven fabric mills	1	6	2	111	2 181	70	142	1 757	5 958	9 291	14 905	261
313210	Broadwoven fabric mills	1	6	2	111	2 181	70	142	1 757	5 958	9 291	14 905	261
314	Textile product mills	3	97	15	1 161	21 951	906	1 622	14 010	33 104	41 037	74 342	2 139
3141	Textile furnishings mills	2	30	6	458	9 290	366	733	6 206	12 010	19 420	31 517	884
31412	Curtain & linen mills	2	30	6	458	9 290	366	733	6 206	12 010	19 420	31 517	884
314121	Curtain & drapery mills	1	24	4	228	3 827	172	282	2 185	7 080	6 721	13 841	D
314129	Other household textile product mills	3	6	2	230	5 463	194	451	4 021	4 930	12 699	17 676	D
3149	Other textile product mills	3	67	9	703	12 661	540	889	7 804	21 094	21 617	42 825	1 255
31491	Textile bag & canvas mills	3	38	6	448	8 046	350	567	5 024	11 874	14 251	26 413	749
314911	Textile bag mills	5	7	2	197	2 733	168	239	1 681	3 841	7 521	11 617	279
314912	Canvas & related product mills	2	31	4	251	5 313	182	328	3 343	8 033	6 730	14 796	470
31499	All other textile product mills	4	29	3	255	4 615	190	322	2 780	9 220	7 366	16 412	506
314999	All other miscellaneous textile product mills	4	28	3	c	D	D	D	D	D	D	D	D
315	Apparel mfg	2	82	19	1 903	32 532	1 686	3 108	25 376	65 452	41 361	105 281	1 631
3151	Apparel knitting mills	3	3	2	c	D	D	D	D	D	D	D	190
31519	Other apparel knitting mills	3	3	2	c	D	D	D	D	D	D	D	190
315191	Outerwear knitting mills	3	3	2	c	D	D	D	D	D	D	D	190
3152	Cut & sew apparel mfg	2	57	17	1 553	25 182	1 389	2 486	20 132	50 321	27 623	77 401	1 224
31521	Cut & sew apparel contractors	1	28	8	871	13 465	821	1 363	11 795	18 558	2 310	20 589	574
315211	Men's & boys' cut & sew apparel contractors	—	4	2	206	2 920	186	192	2 299	4 591	596	5 073	—
315212	Women's, girls', & infants' cut & sew apparel contractors	1	24	6	665	10 545	635	1 171	9 496	13 967	1 714	15 516	574
31522	Men's & boys' cut & sew apparel mfg	2	13	6	545	9 420	460	938	6 663	26 394	20 569	46 774	564
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	8	2	2	c	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	7	2	148	3 264	128	228	1 611	6 457	5 028	11 456	62
31523	Women's & girls' cut & sew apparel mfg	3	13	3	110	1 835	84	145	1 278	4 552	4 056	8 534	46
3159	Apparel accessories & other apparel mfg	3	22	—	c	D	D	D	D	D	D	D	217
31599	Apparel accessories & other apparel mfg	3	22	—	c	D	D	D	D	D	D	D	217

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
316	Leather & allied product mfg .	1	29	5	457	10 013	366	699	6 456	24 480	15 280	39 648	1 960
3162	Footwear mfg	—	4	2	c	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	4	2	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	—	1	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	20	3	194	3 361	158	292	2 147	7 275	7 739	15 027	635
31699	Other leather & allied product mfg	1	20	3	194	3 361	158	292	2 147	7 275	7 739	15 027	635
316999	All other leather good mfg	1	11	1	111	1 990	90	180	1 287	4 287	5 029	9 413	511
321	Wood product mfg	—	600	301	38 088	1 132 361	33 128	68 516	901 621	2 666 869	5 791 914	8 432 222	255 755
3211	Sawmills & wood preservation	—	156	91	11 051	356 242	9 748	19 951	290 960	874 115	2 382 723	3 237 510	124 048
32111	Sawmills & wood preservation	—	156	91	11 051	356 242	9 748	19 951	290 960	874 115	2 382 723	3 237 510	124 048
321113	Sawmills	—	146	83	10 730	345 246	9 512	19 446	283 887	840 920	2 293 665	3 117 015	117 076
321114	Wood preservation	—	10	8	321	10 996	236	505	7 073	33 195	89 058	120 495	6 972
3212	Veneer, plywood, & engineered wood product mfg	1	130	100	14 009	446 539	12 268	26 647	360 649	1 108 228	2 214 087	3 310 945	97 556
32121	Veneer, plywood, & engineered wood product mfg	1	130	100	14 009	446 539	12 268	26 647	360 649	1 108 228	2 214 087	3 310 945	97 556
321211	Hardwood veneer & plywood mfg	2	12	9	1 960	58 747	1 733	3 690	43 826	123 326	287 388	404 362	7 033
321212	Softwood veneer & plywood mfg	1	44	39	7 135	223 959	6 391	14 024	193 223	494 651	1 047 406	1 542 573	49 773
321213	Engineered wood member (except truss) mfg	—	15	15	1 559	47 251	1 397	3 092	39 234	174 171	452 729	619 581	9 726
321214	Truss mfg	2	30	13	686	18 724	528	1 050	11 916	36 148	43 185	79 431	1 431
321219	Reconstituted wood product mfg	—	29	24	2 669	97 858	2 219	4 791	72 450	279 932	383 379	664 998	29 593
3219	Other wood product mfg	—	314	110	13 028	329 580	11 112	21 918	250 012	684 526	1 195 104	1 883 767	34 151
32191	Millwork	1	145	68	8 052	206 285	6 959	14 227	161 057	847 596	847 596	1 256 051	26 135
321911	Wood window & door mfg	—	45	23	3 267	82 913	2 819	5 695	64 887	181 305	284 912	458 881	6 916
321912	Cut stock, resawing lumber, & planing	1	75	32	3 380	88 589	2 946	6 262	70 352	157 977	428 296	595 516	16 181
321918	Other millwork (including flooring)	2	25	13	1 405	34 783	1 194	2 270	25 818	66 084	134 388	201 654	3 038
32192	Wood container & pallet mfg	1	47	10	539	11 118	453	838	7 809	24 170	37 796	61 650	1 544
321920	Wood container & pallet mfg	1	47	10	539	11 118	453	838	7 809	24 170	37 796	61 650	1 544
32199	All other wood product mfg	—	122	32	4 437	112 177	3 700	6 853	81 146	254 990	309 712	566 066	6 472
321991	Manufactured home (mobile home) mfg	—	12	12	3 190	86 838	2 711	5 111	63 139	202 081	255 998	458 995	3 342
321992	Prefabricated wood building mfg	1	25	6	353	8 344	256	440	5 437	16 304	18 017	34 306	876
321999	All other miscellaneous wood product mfg	5	85	14	894	16 995	733	1 302	12 570	36 605	35 697	72 765	2 254
322	Paper mfg	—	60	39	7 854	361 797	6 211	12 526	256 755	1 184 466	1 460 182	2 664 944	116 866
3221	Pulp, paper, & paperboard mills	—	12	12	5 169	265 275	4 156	8 294	194 821	943 240	1 141 018	2 103 366	101 110
32211	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
322110	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
32212	Paper mills	—	6	6	h	D	D	D	D	D	D	D	67 247
322121	Paper (except newsprint) mills	—	4	4	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	5	5	1 810	98 535	1 431	2 864	66 477	250 011	526 043	777 001	D
322130	Paperboard mills	—	5	5	1 810	98 535	1 431	2 864	66 477	250 011	526 043	777 001	D
3222	Converted paper product mfg	—	48	27	2 685	96 522	2 055	4 232	61 934	241 226	319 164	561 578	15 756
32221	Paperboard container mfg	—	17	13	1 238	46 767	920	1 869	29 293	112 275	157 218	268 227	6 226
322211	Corrugated & solid fiber box mfg	—	9	7	904	35 116	664	1 326	22 085	84 772	131 367	215 614	3 624
322212	Folding paperboard box mfg	2	7	5	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	16	8	851	32 002	675	1 436	22 056	87 918	134 323	225 224	6 785
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	1	8	2	235	9 840	184	393	6 372	25 959	26 352	53 044	3 629
322224	Uncoated paper & multiwall bag mfg	—	5	4	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	9	4	463	13 386	359	739	7 962	32 468	23 450	55 407	2 427
322232	Envelope mfg	1	4	3	351	10 543	271	586	6 154	21 924	19 985	41 471	2 277

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	OREGON—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32229	Other converted paper product mfg.....	-	6	2	133	4 367	101	188	2 623	8 565	4 173	12 720	318
322299	All other converted paper product mfg ...	-	6	2	133	4 367	101	188	2 623	8 565	4 173	12 720	318
323	Printing & related support activities.....	1	620	99	8 786	268 798	6 414	11 824	171 112	588 236	413 205	999 425	44 878
3231	Printing & related support activities.....	1	620	99	8 786	268 798	6 414	11 824	171 112	588 236	413 205	999 425	44 878
32311	Printing.....	1	548	85	7 830	234 580	5 665	10 355	146 872	526 731	398 015	922 079	40 594
323110	Commercial lithographic printing ..	-	263	44	4 038	131 396	2 872	5 193	82 243	278 749	236 369	513 945	21 215
323112	Commercial flexographic printing ..	-	12	8	375	11 770	248	451	5 636	32 905	36 275	68 651	5 142
323113	Commercial screen printing.....	4	61	4	505	10 882	370	635	6 306	24 637	18 453	43 004	1 750
323114	Quick printing.....	1	124	5	736	16 435	576	931	12 068	41 275	15 952	57 195	2 312
323116	Manifold business form printing.....	2	20	14	962	31 295	686	1 400	19 723	78 603	45 926	124 076	4 136
323117	Book printing.....	4	9	4	415	13 537	321	646	9 319	29 950	21 176	51 063	3 552
323118	Blankbook, looseleaf binder, & device mfg ..	9	7	3	378	8 558	301	623	5 743	17 654	12 417	29 963	D
323119	Other commercial printing.....	6	43	3	386	9 885	263	438	5 251	21 098	9 605	30 476	1 275
32312	Support activities for printing.....	-	72	14	956	34 218	749	1 469	24 240	61 505	15 190	77 346	4 284
323121	Tradebinding & related work.....	-	28	6	380	11 416	313	650	8 452	18 597	5 714	24 652	804
323122	Prepress services	-	44	8	576	22 802	436	819	15 788	42 908	9 476	52 694	3 480
324	Petroleum & coal products mfg.....	5	22	12	769	32 534	535	1 131	19 994	127 077	216 899	346 384	14 971
3241	Petroleum & coal products mfg.....	5	22	12	769	32 534	535	1 131	19 994	127 077	216 899	346 384	14 971
32412	Asphalt paving, roofing, & saturated materials mfg.....	6	13	10	638	27 609	463	991	17 423	92 982	149 477	244 014	12 505
324121	Asphalt paving mixture & block mfg.....	5	9	6	333	14 555	251	525	9 356	43 415	58 510	102 345	8 695
324122	Asphalt shingle & coating materials mfg.....	6	4	4	305	13 054	212	466	8 067	49 567	90 967	141 669	3 810
325	Chemical mfg.....	1	161	54	3 806	139 044	2 205	4 172	63 360	584 770	569 986	1 154 639	80 135
3251	Basic chemical mfg.....	1	23	8	614	25 917	398	784	14 115	136 928	77 280	211 998	10 996
32513	Dye & pigment mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	1	7	3	234	11 045	138	274	5 815	58 658	48 034	106 340	7 858
325181	Alkalies & chlorine mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	5	3	189	6 543	160	327	4 857	51 878	24 149	74 145	D
325191	Gum & wood chemical mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	16	8	e	D	D	D	D	D	D	D	12 835
32521	Resin & synthetic rubber mfg.....	-	14	8	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	-	13	8	450	18 750	259	477	9 003	57 241	133 471	192 467	12 646
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	4	10	3	175	6 427	120	266	4 024	38 015	33 407	70 540	2 752
32531	Fertilizer mfg.....	3	6	3	156	5 735	109	247	3 633	28 608	29 838	57 533	2 408
3254	Pharmaceutical & medicine mfg.....	4	26	13	869	25 923	487	820	11 454	75 636	39 514	113 640	10 511
32541	Pharmaceutical & medicine mfg.....	4	26	13	869	25 923	487	820	11 454	75 636	39 514	113 640	10 511
325411	Medicinal & botanical mfg.....	-	6	3	176	5 504	90	165	2 462	16 579	10 478	25 899	D
325412	Pharmaceutical preparation mfg.....	6	10	4	343	8 885	218	338	4 503	33 840	17 852	51 626	2 328
325413	In-vitro diagnostic substance mfg.....	2	5	4	267	9 759	125	220	3 103	19 837	7 288	26 905	1 171
3255	Paint, coating, & adhesive mfg.....	-	23	8	e	D	D	D	D	D	D	D	2 610
32551	Paint & coating mfg.....	-	18	6	400	14 990	183	350	5 320	57 048	65 032	122 140	1 654
325510	Paint & coating mfg...	-	18	6	400	14 990	183	350	5 320	57 048	65 032	122 140	1 654
3256	Soap, cleaning compound, & toilet preparation mfg ..	7	27	3	e	D	D	D	D	D	D	D	2 408
32561	Soap & cleaning compound mfg.....	8	19	3	c	D	D	D	D	D	D	D	2 167
325611	Soap & other detergent mfg.....	9	9	1	135	6 059	44	88	1 243	15 393	9 459	24 808	1 664

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	1	36	11	892	29 840	528	1 071	12 458	147 422	138 183	288 612	38 023
32591	Printing ink mfg	1	10	5	242	9 132	109	234	3 508	20 502	27 985	47 482	547
325910	Printing ink mfg	1	10	5	242	9 132	109	234	3 508	20 502	27 985	47 482	547
32599	All other chemical product & preparation mfg	2	26	6	650	20 708	419	837	8 950	126 920	110 198	241 130	37 476
325992	Photographic film, paper, plate, & chemical mfg	—	3	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	4	17	5	270	13 559	133	285	4 814	62 860	39 156	102 813	D
326	Plastics & rubber products mfg	1	246	80	7 532	199 276	5 762	10 600	123 006	510 172	542 985	1 047 418	38 498
3261	Plastics product mfg	1	192	66	6 437	166 898	4 891	8 857	101 561	421 715	464 256	880 750	31 258
32611	Unsupported plastics film, sheet, & bag mfg ..	—	13	5	586	23 971	463	929	15 274	55 239	49 952	101 688	3 079
326113	Unsupported plastics film & sheet (except packaging) mfg	—	10	5	557	23 393	440	897	14 865	53 758	47 970	98 223	2 900
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	25	9	639	17 347	472	921	11 371	44 864	85 790	131 870	6 420
326121	Unsupported plastics profile shape mfg	2	15	4	301	7 568	204	382	4 190	14 516	13 971	29 109	2 580
326122	Plastics pipe & pipe fitting mfg	—	10	5	338	9 779	268	539	7 181	30 348	71 819	102 761	3 840
32614	Polystyrene foam product mfg	2	7	3	173	4 761	127	249	2 840	12 241	15 820	28 291	738
326140	Polystyrene foam product mfg	2	7	3	173	4 761	127	249	2 840	12 241	15 820	28 291	738
32615	Urethane & other foam product (except polystyrene) mfg	1	11	3	200	4 584	158	260	2 674	15 985	22 865	38 274	947
326150	Urethane & other foam product (except polystyrene) mfg	1	11	3	200	4 584	158	260	2 674	15 985	22 865	38 274	947
32619	Other plastics product mfg	1	127	45	4 756	114 104	3 607	6 382	67 967	285 860	282 950	565 700	19 733
326191	Plastics plumbing fixture mfg	1	8	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	117	42	4 442	107 673	3 382	5 935	63 871	261 890	268 296	526 694	19 217
3262	Rubber product mfg	1	54	14	1 095	32 378	871	1 743	21 445	88 457	78 729	166 668	7 240
32621	Tire mfg	—	19	3	e	D	D	D	D	D	D	D	D
326212	Tire retreading	—	14	3	422	11 075	355	742	8 304	25 906	29 377	55 218	D
32629	Other rubber product mfg	1	32	11	589	18 897	454	903	11 789	47 249	40 083	86 861	2 868
326291	Rubber product mfg for mechanical use	1	14	7	277	9 102	224	439	5 893	20 639	15 950	36 633	1 771
326299	All other rubber product mfg	—	18	4	312	9 795	230	464	5 896	26 610	24 133	50 228	1 097
327	Nonmetallic mineral product mfg	2	252	60	4 746	153 874	3 600	7 159	106 777	427 934	349 673	776 835	37 323
3271	Clay product & refractory mfg	4	43	5	303	6 612	248	410	4 162	10 308	4 493	15 608	D
32711	Pottery, ceramics, & plumbing fixture mfg ..	3	32	4	195	3 891	158	276	2 658	6 712	2 531	9 144	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	5	29	3	c	D	D	D	D	D	D	D	248
32712	Clay building material & refractories mfg	5	11	1	108	2 721	90	134	1 504	3 596	1 962	6 464	430
3272	Glass & glass product mfg ..	—	55	13	1 191	39 441	907	1 670	28 394	99 736	88 485	188 147	5 137
32721	Glass & glass product mfg	—	55	13	1 191	39 441	907	1 670	28 394	99 736	88 485	188 147	5 137
327211	Flat glass mfg	—	2	2	c	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	1	22	3	e	D	D	D	D	D	D	D	1 518
327213	Glass container mfg ..	—	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	30	7	580	16 511	424	720	11 334	32 899	50 958	84 524	3 169

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OREGON—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	122	34	2 584	84 578	1 921	3 934	56 353	232 214	201 867	434 363	17 855
32731	Cement mfg	—	3	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	—	3	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	2	66	19	1 371	46 114	1 099	2 331	33 999	119 325	118 968	238 013	10 219
327320	Ready-mix concrete mfg	2	66	19	1 371	46 114	1 099	2 331	33 999	119 325	118 968	238 013	10 219
32733	Concrete pipe, brick, & block mfg	2	22	8	f	D	D	D	D	D	D	D	4 193
327331	Concrete block & brick mfg	4	14	3	240	8 014	162	313	4 747	21 804	23 840	45 559	2 624
327332	Concrete pipe mfg	—	8	5	e	D	D	D	D	D	D	D	1 569
32739	Other concrete product mfg	4	31	6	518	15 983	326	643	8 504	44 382	29 590	75 857	D
327390	Other concrete product mfg	4	31	6	518	15 983	326	643	8 504	44 382	29 590	75 857	D
3274	Lime & gypsum product mfg	1	6	3	149	4 737	125	230	3 657	15 940	14 314	30 222	D
3279	Other nonmetallic mineral product mfg	1	26	5	519	18 506	399	915	14 211	69 736	40 514	108 495	10 706
32799	All other nonmetallic mineral product mfg ...	1	22	4	486	17 477	377	873	13 655	67 425	39 599	105 223	10 586
327993	Mineral wool mfg	1	3	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	81	47	10 902	409 329	8 182	17 159	279 463	1 005 642	1 248 202	2 204 677	102 502
3311	Iron & steel mills & ferroalloy mfg	—	5	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	5	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	5	2	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	2	6	3	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	8	7	1 197	47 071	933	1 985	32 160	109 237	407 109	504 241	D
33131	Alumina & aluminum production & processing	—	8	7	1 197	47 071	933	1 985	32 160	109 237	407 109	504 241	D
331312	Primary aluminum production	—	2	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	7	6	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	2	2	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	5	4	1 829	95 748	1 008	2 447	60 277	256 140	201 318	433 859	7 293
331491	Other nonferrous metal rolling, drawing, & extruding	—	3	3	g	D	D	D	D	D	D	D	D
3315	Foundries	—	55	29	5 968	182 306	4 831	9 714	130 441	481 446	262 621	738 594	22 154
33151	Ferrous metal foundries ..	—	19	13	3 849	121 783	3 127	6 516	87 704	312 622	180 142	491 959	13 980
331511	Iron foundries	2	9	4	e	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	3	3	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	7	6	1 144	41 990	977	1 883	29 554	103 991	108 712	215 554	7 169
33152	Nonferrous metal foundries	—	36	16	2 119	60 523	1 704	3 198	42 737	168 824	82 479	246 635	8 174
331521	Aluminum die-casting foundries	—	5	3	237	7 010	203	392	5 256	18 980	11 948	30 917	D
331522	Nonferrous (except aluminum) die-casting foundries	—	6	3	802	23 793	677	1 259	17 666	59 083	46 614	100 878	4 516
331525	Copper foundries (except die-casting) ..	3	11	5	228	5 784	202	382	4 581	13 533	4 537	16 702	201
331528	Other nonferrous foundries (except die-casting)	—	6	3	f	D	D	D	D	D	D	D	1 397

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	OREGON—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg.....	1	929	240	18 873	598 261	14 249	28 031	385 077	1 371 270	1 100 654	2 448 465	107 862
3321	Forging & stamping.....	3	30	12	748	25 156	553	1 059	14 257	50 696	43 441	93 973	8 821
33211	Forging & stamping.....	3	30	12	748	25 156	553	1 059	14 257	50 696	43 441	93 973	8 821
332111	Iron & steel forging.....	3	8	1	107	3 020	86	164	2 181	7 860	4 055	11 732	180
332116	Metal stamping.....	3	17	9	552	19 351	403	761	10 356	36 881	31 230	68 060	8 308
3322	Cutlery & handtool mfg....	—	31	10	2 213	74 615	1 627	3 463	45 870	262 706	180 205	432 710	13 255
33221	Cutlery & handtool mfg..	—	31	10	2 213	74 615	1 627	3 463	45 870	262 706	180 205	432 710	13 255
332211	Cutlery & flatware (except precious) mfg.....	1	4	1	c	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg..	—	17	4	f	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg.....	—	10	5	1 138	42 382	816	1 573	23 676	149 027	103 329	251 763	4 253
3323	Architectural & structural metals mfg.....	1	215	75	5 701	182 926	4 162	8 275	113 870	394 174	443 044	826 471	19 053
33231	Plate work & fabricated structural product mfg..	1	78	25	1 812	67 818	1 242	2 636	40 280	138 360	175 398	306 304	5 867
332311	Prefabricated metal building & component mfg.....	2	7	4	162	5 476	95	205	3 156	12 002	18 537	30 735	479
332312	Fabricated structural metal mfg.....	1	62	20	1 555	59 462	1 076	2 285	35 147	123 537	149 394	265 204	5 281
33232	Ornamental & architectural metal products mfg.....	1	137	50	3 889	115 108	2 920	5 639	73 590	255 814	267 646	520 167	13 186
332321	Metal window & door mfg.....	—	20	12	1 304	34 957	1 011	2 040	22 699	82 352	122 183	203 966	2 508
332322	Sheet metal work mfg..	—	84	34	2 200	67 006	1 632	3 051	42 657	146 436	120 454	264 427	7 839
332323	Ornamental & architectural metal work mfg.....	4	33	4	385	13 145	277	548	8 234	27 026	25 009	51 774	2 839
3324	Boiler, tank, & shipping container mfg.....	—	26	10	852	32 985	622	1 278	21 517	58 892	89 027	148 270	7 323
33241	Power boiler & heat exchanger mfg.....	—	8	4	364	14 567	233	478	8 323	27 720	23 884	51 720	D
332410	Power boiler & heat exchanger mfg.....	—	8	4	364	14 567	233	478	8 323	27 720	23 884	51 720	D
33242	Metal tank (heavy gauge) mfg.....	—	8	4	290	10 555	221	451	6 404	12 682	19 152	33 012	760
332420	Metal tank (heavy gauge) mfg.....	—	8	4	290	10 555	221	451	6 404	12 682	19 152	33 012	760
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	10	2	198	7 863	168	349	6 790	18 490	45 991	63 538	D
332431	Metal can mfg.....	—	3	1	c	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	—	11	5	572	14 744	464	817	7 468	60 072	44 632	100 898	2 472
33251	Hardware mfg.....	—	11	5	572	14 744	464	817	7 468	60 072	44 632	100 898	2 472
332510	Hardware mfg.....	—	11	5	572	14 744	464	817	7 468	60 072	44 632	100 898	2 472
3326	Spring & wire product mfg..	1	32	14	1 051	26 670	838	1 590	18 685	53 419	37 216	92 076	3 563
33261	Spring & wire product mfg.....	1	32	14	1 051	26 670	838	1 590	18 685	53 419	37 216	92 076	3 563
332612	Spring (light gauge) mfg.....	1	4	3	169	5 671	126	246	3 748	10 040	5 780	15 511	D
332618	Other fabricated wire product mfg.....	1	25	10	836	19 674	681	1 287	14 128	40 639	28 939	71 422	2 936
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	369	62	4 339	140 681	3 360	6 268	95 551	274 612	131 586	405 172	31 284
33271	Machine shops.....	1	339	49	3 553	114 790	2 706	5 015	76 863	224 174	106 412	329 428	24 552
332710	Machine shops.....	1	339	49	3 553	114 790	2 706	5 015	76 863	224 174	106 412	329 428	24 552
33272	Turned product & screw, nut, & bolt mfg.....	2	30	13	786	25 891	654	1 253	18 688	50 438	25 174	75 744	6 732
332721	Precision turned product mfg.....	—	22	9	561	18 739	467	896	13 624	36 977	12 124	49 235	4 551
332722	Bolt, nut, screw, rivet, & washer mfg.....	7	8	4	225	7 152	187	357	5 064	13 461	13 050	26 509	2 181
3328	Coating, engraving, heat treating, & allied activities.	2	92	26	1 444	39 054	1 171	2 262	27 061	94 208	34 872	129 525	13 916
33281	Coating, engraving, heat treating, & allied activities.....	2	92	26	1 444	39 054	1 171	2 262	27 061	94 208	34 872	129 525	13 916
332811	Metal heat treating....	—	12	4	185	6 097	133	300	3 964	25 974	7 192	33 442	9 361
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	3	37	11	612	15 958	513	968	11 204	37 119	17 181	54 264	2 846
332813	Electroplating, plating, polishing, anodizing, & coloring.....	3	43	11	647	16 999	525	994	11 893	31 115	10 499	41 819	1 709

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	1	123	26	1 953	61 430	1 452	3 019	40 798	122 491	96 631	219 370	8 175
33291	Metal valve mfg	1	10	2	256	7 655	198	449	5 124	21 612	15 786	36 734	1 692
332912	Fluid power valve & hose fitting mfg	—	3	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	113	24	1 697	53 775	1 254	2 570	35 674	100 879	80 845	182 636	6 483
332996	Fabricated pipe & pipe fitting mfg	—	20	7	683	20 658	469	995	13 779	36 258	46 039	82 969	3 290
332997	Industrial pattern mfg	2	11	3	121	5 420	102	195	4 132	9 072	1 922	10 998	348
332999	All other miscellaneous fabricated metal product mfg	1	71	13	755	23 261	581	1 176	15 252	45 250	29 875	75 664	2 264
333	Machinery mfg	1	437	136	13 860	497 842	8 938	17 814	267 932	1 097 988	992 684	2 083 087	74 002
3331	Agriculture, construction, & mining machinery mfg	1	63	24	2 489	85 648	1 731	3 546	52 922	154 302	225 839	378 232	16 614
33311	Agricultural implement mfg	4	35	11	705	18 902	552	1 115	13 503	36 466	47 375	82 822	4 599
333111	Farm machinery & equipment mfg	4	33	10	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	24	9	1 103	38 259	745	1 495	23 615	53 037	82 879	137 797	6 872
333120	Construction machinery mfg	—	24	9	1 103	38 259	745	1 495	23 615	53 037	82 879	137 797	6 872
33313	Mining & oil & gas field machinery mfg	—	4	4	681	28 487	434	936	15 804	64 799	95 585	157 613	5 143
333131	Mining machinery & equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	97	38	3 243	120 952	1 814	3 579	56 496	332 186	230 643	563 129	19 521
33321	Sawmill & woodworking machinery mfg	—	33	17	g	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	33	17	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	62	20	1 785	69 376	897	1 678	30 565	240 859	145 568	384 253	16 405
333291	Paper industry machinery mfg	1	10	6	435	15 470	242	474	7 632	31 288	23 788	54 182	3 191
333294	Food product machinery mfg	5	17	5	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	4	2	c	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	28	7	752	34 523	339	648	13 062	93 393	68 653	158 777	4 218
3333	Commercial & service industry machinery mfg	—	37	12	1 583	56 194	1 103	2 183	29 612	126 822	102 619	229 544	5 762
33331	Commercial & service industry machinery mfg	—	37	12	1 583	56 194	1 103	2 183	29 612	126 822	102 619	229 544	5 762
333314	Optical instrument & lens mfg	—	11	2	582	23 117	452	867	12 989	43 242	44 322	87 129	2 607
333319	Other commercial & service industry machinery mfg	—	21	9	935	30 483	609	1 245	15 707	77 116	54 984	132 801	2 803
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	27	6	1 649	54 504	1 214	2 717	37 324	76 359	135 085	212 475	5 069
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	27	6	1 649	54 504	1 214	2 717	37 324	76 359	135 085	212 475	5 069
333411	Air purification equipment mfg	1	8	1	e	D	D	D	D	D	D	D	1 247
333412	Industrial & commercial fan & blower mfg	—	4	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	1	8	4	478	14 862	397	741	11 285	25 233	26 423	52 221	D
3335	Metalworking machinery mfg	2	100	18	1 368	47 046	804	1 463	24 474	104 558	56 398	148 682	11 201
33351	Metalworking machinery mfg	2	100	18	1 368	47 046	804	1 463	24 474	104 558	56 398	148 682	11 201
333511	Industrial mold mfg	2	34	6	378	13 810	287	545	9 796	25 075	7 324	32 484	2 233
333512	Machine tool (metal cutting types) mfg	2	7	3	274	9 823	152	346	4 634	25 265	22 888	48 125	1 123
333514	Special die & tool, die set, jig, & fixture mfg	4	38	3	187	6 894	158	254	4 941	11 029	3 361	14 407	1 135
333515	Cutting tool & machine tool accessory mfg	7	14	2	141	3 684	105	156	2 538	6 491	2 818	9 204	D
333518	Other metalworking machinery mfg	—	4	3	338	11 339	63	87	1 541	33 702	18 698	40 393	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	2	9	4	304	9 574	238	440	6 519	19 333	9 423	29 182	1 455
33361	Engine, turbine, & power transmission equipment mfg	2	9	4	304	9 574	238	440	6 519	19 333	9 423	29 182	1 455
333613	Mechanical power transmission equipment mfg	—	6	2	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	104	34	3 224	123 924	2 034	3 886	60 585	284 428	232 677	521 843	14 380
33391	Pump & compressor mfg	—	9	4	535	20 269	302	644	10 053	65 396	61 004	131 811	1 098
333911	Pump & pumping equipment mfg	—	6	3	491	18 928	274	586	9 278	61 768	56 609	124 218	830
33392	Material handling equipment mfg	—	30	12	1 209	45 488	788	1 421	21 430	104 236	76 857	177 336	7 627
333922	Conveyor & conveying equipment mfg	—	14	8	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	14	4	599	25 302	342	657	10 662	57 853	34 249	91 125	D
33399	All other general-purpose machinery mfg	2	65	18	1 480	58 167	944	1 821	29 102	114 796	94 816	212 696	5 655
333991	Power-driven handtool mfg	1	4	2	e	D	D	D	D	D	D	D	898
333994	Industrial process furnace & oven mfg	—	5	3	184	11 096	89	194	3 122	11 900	20 953	33 223	290
333995	Fluid power cylinder & actuator mfg	—	9	5	305	11 086	207	449	6 645	28 594	13 026	41 713	1 772
333999	All other miscellaneous general-purpose machinery mfg	4	36	5	518	15 696	338	515	7 666	28 035	26 975	57 765	1 992
334	Computer & electronic product mfg	—	310	121	37 684	1 645 878	23 361	51 089	874 691	10 527 280	4 173 095	14 631 993	1 577 846
3341	Computer & peripheral equipment mfg	—	45	15	11 956	643 125	7 720	19 906	383 915	1 587 411	2 033 879	3 561 250	186 734
33411	Computer & peripheral equipment mfg	—	45	15	11 956	643 125	7 720	19 906	383 915	1 587 411	2 033 879	3 561 250	186 734
334111	Electronic computer mfg	1	12	6	g	D	D	D	D	D	D	D	18 582
334113	Computer terminal mfg	—	6	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	23	6	9 977	549 598	6 602	17 618	342 269	1 063 085	1 357 495	2 394 178	166 370
3342	Communications equipment mfg	1	32	11	2 268	83 213	1 118	2 147	28 534	242 307	238 578	484 613	22 820
33421	Telephone apparatus mfg	—	8	2	869	32 343	367	556	9 516	127 940	156 342	287 641	D
334210	Telephone apparatus mfg	—	8	2	869	32 343	367	556	9 516	127 940	156 342	287 641	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	14	7	776	32 019	398	905	11 220	70 189	46 528	116 946	6 719
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	14	7	776	32 019	398	905	11 220	70 189	46 528	116 946	6 719
33429	Other communications equipment mfg	2	10	2	623	18 851	353	686	7 798	44 178	35 708	80 026	D
334290	Other communications equipment mfg	2	10	2	623	18 851	353	686	7 798	44 178	35 708	80 026	D
3343	Audio & video equipment mfg	5	11	5	362	8 572	266	479	4 626	15 552	22 272	37 621	772
33431	Audio & video equipment mfg	5	11	5	362	8 572	266	479	4 626	15 552	22 272	37 621	772
334310	Audio & video equipment mfg	5	11	5	362	8 572	266	479	4 626	15 552	22 272	37 621	772
3344	Semiconductor & other electronic component mfg	—	118	56	15 182	556 366	10 534	21 060	336 842	7 466 497	1 129 869	8 560 629	1 275 262
33441	Semiconductor & other electronic component mfg	—	118	56	15 182	556 366	10 534	21 060	336 842	7 466 497	1 129 869	8 560 629	1 275 262
334412	Bare printed circuit board mfg	—	28	10	2 518	74 494	2 036	4 363	51 117	138 502	116 242	253 006	27 936
334413	Semiconductor & related device mfg	—	28	17	8 330	359 103	5 702	11 171	226 445	7 078 696	812 230	7 859 672	1 232 723
334416	Electronic coil, transformer, & other inductor mfg	2	11	5	627	13 427	468	938	7 565	26 357	10 486	36 523	1 745
334417	Electronic connector mfg	8	3	3	198	5 500	152	281	3 347	13 303	8 061	21 677	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg—Con.												
334418	Printed circuit assembly (electronic assembly) mfg	1	17	11	1 692	53 996	911	1 872	21 324	107 971	121 784	228 723	6 110
334419	Other electronic component mfg	1	28	9	1 736	48 209	1 225	2 360	26 344	97 839	59 817	155 958	5 730
3345	Navigational, measuring, medical, & control instruments mfg	—	85	31	7 583	343 965	3 458	6 947	113 529	1 186 335	721 485	1 930 965	82 049
33451	Navigational, measuring, medical, & control instruments mfg	—	85	31	7 583	343 965	3 458	6 947	113 529	1 186 335	721 485	1 930 965	82 049
334510	Electromedical & electrotherapeutic apparatus mfg	—	9	5	836	36 273	349	708	9 952	85 470	46 706	132 290	2 576
334511	Search, detection, navigation, & guidance instrument mfg	—	11	5	984	39 081	433	779	11 228	143 474	79 303	238 046	9 243
334513	Industrial process control instrument mfg	5	8	2	141	6 640	54	103	1 750	9 686	5 568	14 426	268
334514	Totalizing fluid meter & counting device mfg	—	4	2	174	4 853	110	246	1 941	10 650	13 877	23 218	215
334515	Electricity measuring & testing instrument mfg	—	22	9	4 784	228 921	2 218	4 420	80 121	872 917	545 498	1 427 553	67 564
334516	Analytical laboratory instrument mfg	—	10	2	266	12 557	123	361	4 648	30 216	8 921	38 994	771
334519	Other measuring & controlling device mfg	—	13	6	354	13 888	156	302	3 558	29 426	18 483	48 699	1 221
3346	Mfg & reproducing magnetic & optical media	7	19	3	333	10 637	265	550	7 245	29 178	27 012	56 915	10 209
33461	Mfg & reproducing magnetic & optical media	7	19	3	333	10 637	265	550	7 245	29 178	27 012	56 915	10 209
334613	Magnetic & optical recording media mfg	6	8	2	228	7 342	184	362	5 088	18 729	21 575	41 016	8 379
335	Electrical equipment, appliance, & component mfg	1	72	19	1 730	58 030	1 161	2 338	31 364	183 652	174 735	355 018	6 408
3351	Electric lighting equipment mfg	2	10	2	c	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	2	1	c	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	2	1	c	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	3	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	3	38	8	627	20 109	388	700	9 723	46 845	52 529	99 765	2 439
33531	Electrical equipment mfg	3	38	8	627	20 109	388	700	9 723	46 845	52 529	99 765	2 439
335311	Power, distribution, & specialty transformer mfg	—	3	1	c	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	2	10	2	137	4 669	103	184	2 961	15 151	15 420	30 617	321
335314	Relay & industrial control mfg	2	20	4	295	9 643	153	256	3 335	16 501	15 999	32 741	1 390
3359	Other electrical equipment & component mfg	—	21	8	823	30 511	560	1 174	16 390	118 576	109 496	224 242	2 995
33591	Battery mfg	—	2	1	c	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	1	c	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	4	3	362	17 711	237	551	8 519	73 537	54 984	126 022	D
335921	Fiber optic cable mfg	—	1	1	c	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	3	2	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	10	4	c	D	D	D	D	D	D	D	433
335999	All other miscellaneous electrical equipment & component mfg	2	10	4	c	D	D	D	D	D	D	D	433

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	242	86	15 833	521 692	13 092	25 621	402 856	1 544 256	2 000 467	3 538 256	48 908
3361	Motor vehicle mfg	-	9	3	2 353	80 593	2 104	3 830	73 190	581 333	948 193	1 520 939	D
33611	Automobile & light duty motor vehicle mfg	-	5	1	e	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	e	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	4	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	4	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	59	25	4 157	98 085	3 507	6 932	69 566	209 977	409 341	620 333	6 847
33621	Motor vehicle body & trailer mfg	1	59	25	4 157	98 085	3 507	6 932	69 566	209 977	409 341	620 333	6 847
336211	Motor vehicle body mfg	2	19	4	534	14 836	329	671	7 825	19 784	53 270	74 238	1 668
336212	Truck trailer mfg	1	7	3	197	5 802	161	378	4 316	9 415	20 796	30 365	633
336213	Motor home mfg	-	5	5	1 768	39 374	1 595	3 328	32 045	100 008	205 430	306 395	2 311
336214	Travel trailer & camper mfg	1	28	13	1 658	38 073	1 422	2 555	25 380	80 770	129 845	209 335	2 235
3363	Motor vehicle parts mfg ...	1	67	20	2 615	91 660	1 914	3 389	57 156	227 047	216 977	444 488	15 223
33631	Motor vehicle gasoline engine & engine parts mfg	9	12	2	211	8 657	172	378	5 288	19 621	27 684	47 486	2 606
336312	Gasoline engine & engine parts mfg	9	12	2	211	8 657	172	378	5 288	19 621	27 684	47 486	2 606
33632	Motor vehicle electrical & electronic equipment mfg	1	16	7	587	14 433	418	735	8 123	34 770	20 690	55 675	1 696
336322	Other motor vehicle electrical & electronic equipment mfg	1	15	7	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	9	4	642	23 669	428	809	12 272	54 780	47 717	108 876	5 557
336350	Motor vehicle transmission & power train parts mfg	-	9	4	642	23 669	428	809	12 272	54 780	47 717	108 876	5 557
33639	Other motor vehicle parts mfg	-	21	6	1 044	41 438	791	1 258	29 493	112 009	113 097	218 614	5 170
336399	All other motor vehicle parts mfg	-	21	6	1 044	41 438	791	1 258	29 493	112 009	113 097	218 614	5 170
3364	Aerospace product & parts mfg	-	33	9	2 487	104 252	1 917	3 737	84 046	264 041	109 639	370 459	14 314
33641	Aerospace product & parts mfg	-	33	9	2 487	104 252	1 917	3 737	84 046	264 041	109 639	370 459	14 314
336411	Aircraft mfg	7	6	2	c	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	24	7	g	D	D	D	D	D	D	D	14 061
3365	Railroad rolling stock mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	1	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	43	16	2 248	86 541	1 957	4 367	71 420	161 308	128 119	286 779	2 862
33661	Ship & boat building	1	43	16	2 248	86 541	1 957	4 367	71 420	161 308	128 119	286 779	2 862
336611	Ship building & repairing	1	22	10	1 581	70 421	1 388	3 257	59 311	128 680	74 879	203 559	2 146
336612	Boat building	1	21	6	667	16 120	569	1 110	12 109	32 628	53 240	83 220	716
3369	Other transportation equipment mfg	-	29	12	f	D	D	D	D	D	D	D	1 336
33699	Other transportation equipment mfg	-	29	12	f	D	D	D	D	D	D	D	1 336
336991	Motorcycle, bicycle, & parts mfg	-	14	5	c	D	D	D	D	D	D	D	735
336999	All other transportation equipment mfg	-	15	7	566	13 620	456	957	9 838	31 502	32 978	63 859	601
337	Furniture & related product mfg	1	376	69	6 081	149 654	4 661	8 886	99 193	298 328	259 821	561 086	12 049
3371	Household & institutional furniture & kitchen cabinet mfg	2	293	46	4 385	97 741	3 570	6 928	69 992	185 362	180 562	370 209	7 360
33711	Wood kitchen cabinet & counter top mfg	1	172	22	2 153	49 826	1 687	3 123	35 257	87 984	81 822	174 330	3 020
337110	Wood kitchen cabinet & counter top mfg ...	1	172	22	2 153	49 826	1 687	3 123	35 257	87 984	81 822	174 330	3 020
33712	Household & institutional furniture mfg	2	121	24	2 232	47 915	1 883	3 805	34 735	97 378	98 740	195 879	4 340
337121	Upholstered household furniture mfg	2	30	5	663	14 314	598	1 209	11 415	28 358	27 816	56 185	891
337122	Nonupholstered wood household furniture mfg	1	72	14	1 311	27 388	1 097	2 242	19 517	57 118	63 733	120 485	3 108
337127	Institutional furniture mfg	4	11	3	190	5 040	144	279	3 121	9 742	5 096	14 979	279

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	OREGON—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	2	71	19	1 421	44 071	896	1 571	24 249	92 245	58 552	149 623	4 207
33721	Office furniture (including fixtures) mfg	2	71	19	1 421	44 071	896	1 571	24 249	92 245	58 552	149 623	4 207
337211	Wood office furniture mfg	1	12	2	182	4 022	109	197	2 105	16 684	4 480	21 096	992
337212	Custom architectural woodwork & millwork mfg	—	22	6	302	8 010	220	370	4 887	13 822	12 281	25 822	726
337215	Showcase, partition, shelving, & locker mfg	2	34	11	915	31 456	548	976	16 873	60 525	40 956	100 643	2 394
3379	Other furniture related product mfg	—	12	4	275	7 842	195	387	4 952	20 721	20 707	41 254	482
33791	Mattress mfg	—	8	3	212	6 075	170	346	4 541	19 635	19 623	39 081	445
337910	Mattress mfg	—	8	3	212	6 075	170	346	4 541	19 635	19 623	39 081	445
339	Miscellaneous mfg	2	592	83	8 968	243 762	5 960	11 036	122 234	528 134	373 373	892 640	34 958
3391	Medical equipment & supplies mfg	2	229	27	3 211	101 617	2 192	4 414	50 242	227 980	128 599	354 885	15 144
33911	Medical equipment & supplies mfg	2	229	27	3 211	101 617	2 192	4 414	50 242	227 980	128 599	354 885	15 144
339111	Laboratory apparatus & furniture mfg	1	6	1	178	4 947	143	265	3 125	10 951	7 710	18 663	86
339112	Surgical & medical instrument mfg	4	19	5	303	9 186	176	714	3 533	29 567	9 023	38 727	1 624
339113	Surgical appliance & supplies mfg	4	20	3	215	6 345	124	214	2 667	15 043	9 663	25 125	505
339114	Dental equipment & supplies mfg	1	38	11	1 651	60 658	1 155	2 185	28 388	126 295	80 024	203 824	11 144
339115	Ophthalmic goods mfg	1	9	3	266	5 420	158	329	3 363	13 478	9 825	23 333	733
339116	Dental laboratories ...	5	137	4	598	15 061	436	707	9 166	32 646	12 354	45 213	1 052
3399	Other miscellaneous mfg ..	2	363	56	5 757	142 145	3 768	6 622	71 992	300 154	244 774	537 755	19 814
33991	Jewelry & silverware mfg	5	36	3	207	4 129	136	224	2 201	9 610	6 757	16 203	247
339911	Jewelry (except costume) mfg	5	30	3	200	3 990	130	212	2 123	9 359	6 551	15 750	243
33992	Sporting & athletic goods mfg	1	85	15	1 552	38 092	1 121	1 988	21 980	97 069	67 672	159 804	7 840
339920	Sporting & athletic goods mfg	1	85	15	1 552	38 092	1 121	1 988	21 980	97 069	67 672	159 804	7 840
33993	Doll, toy, & game mfg ...	1	38	7	858	16 833	675	925	9 928	25 625	46 337	72 582	1 239
339932	Game, toy, & children's vehicle mfg	1	31	6	821	16 204	642	863	9 444	24 565	45 744	70 909	D
33994	Office supplies (except paper) mfg	2	20	3	202	5 384	123	208	2 270	10 615	13 464	23 705	591
33995	Sign mfg	3	98	13	1 231	36 329	721	1 378	16 538	73 695	49 660	122 013	4 878
339950	Sign mfg	3	98	13	1 231	36 329	721	1 378	16 538	73 695	49 660	122 013	4 878
33999	All other miscellaneous mfg	3	86	15	1 707	41 378	992	1 899	19 075	83 540	60 884	143 448	5 019
339991	Gasket, packing, & sealing device mfg ...	1	7	3	219	5 584	145	312	2 741	11 383	5 773	17 129	543
339992	Musical instrument mfg	—	14	1	232	7 945	122	280	2 918	13 924	8 072	21 419	382
339994	Broom, brush, & mop mfg	—	4	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	5	59	9	832	18 315	411	696	7 587	39 560	32 870	72 232	3 691

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EUGENE-SPRINGFIELD, OR MSA												
	Manufacturing	1	624	172	19 262	589 761	14 171	27 327	383 133	1 674 933	2 225 216	3 881 838	758 149
311	Food mfg.....	2	55	15	1 872	41 345	1 296	2 212	25 611	165 440	155 095	319 794	7 964
3114	Fruit & vegetable preserving & specialty food mfg.....	1	8	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	1	7	2	298	4 484	293	407	4 350	15 771	15 498	31 233	1 278
311421	Fruit & vegetable canning.....	1	7	2	298	4 484	293	407	4 350	15 771	15 498	31 233	1 278
3116	Meat product mfg.....	-	5	1	e	D	D	D	D	D	D	D	163
31161	Animal slaughtering & processing.....	-	5	1	e	D	D	D	D	D	D	D	163
311615	Poultry processing.....	-	2	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	15	4	605	15 626	320	465	7 116	56 547	29 055	85 620	1 013
31181	Bread & bakery product mfg.....	-	11	4	590	15 240	309	432	6 863	53 625	27 285	80 924	957
311812	Commercial bakeries..	-	6	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	80	46	5 765	179 667	4 946	10 740	141 114	487 065	1 068 926	1 540 448	74 339
3211	Sawmills & wood preservation.....	-	19	14	1 765	64 132	1 485	3 204	48 159	180 940	455 320	626 717	46 057
32111	Sawmills & wood preservation.....	-	19	14	1 765	64 132	1 485	3 204	48 159	180 940	455 320	626 717	46 057
321113	Sawmills.....	-	17	12	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	3	23	22	3 427	101 601	3 010	6 611	83 144	278 115	572 908	845 145	26 761
32121	Veneer, plywood, & engineered wood product mfg.....	3	23	22	3 427	101 601	3 010	6 611	83 144	278 115	572 908	845 145	26 761
321211	Hardwood veneer & plywood mfg.....	5	5	5	896	26 493	771	1 686	20 098	50 549	118 049	164 192	4 396
321212	Softwood veneer & plywood mfg.....	6	8	7	1 430	37 425	1 251	2 711	31 786	93 923	207 000	301 556	6 826
321213	Engineered wood member (except truss) mfg.....	-	6	6	804	25 877	746	1 686	22 565	114 200	208 852	320 859	D
321219	Reconstituted wood product mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg....	3	38	10	573	13 934	451	925	9 811	28 010	40 698	68 586	1 521
32191	Millwork.....	-	15	5	256	6 427	209	425	4 680	14 315	20 734	34 854	348
32199	All other wood product mfg.....	6	20	5	306	7 383	232	483	5 033	13 417	19 702	33 195	1 140
322	Paper mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	52	8	696	19 710	465	760	10 333	37 891	20 750	58 436	D
3231	Printing & related support activities.....	-	52	8	696	19 710	465	760	10 333	37 891	20 750	58 436	D
32311	Printing.....	-	49	8	690	19 559	460	753	10 223	37 593	20 680	58 068	D
323110	Commercial lithographic printing..	-	19	5	357	10 631	234	333	4 752	19 240	8 396	27 531	D
325	Chemical mfg.....	-	19	9	667	25 450	355	657	12 658	112 929	137 091	249 024	D
326	Plastics & rubber products mfg.....	-	24	7	403	11 017	314	584	7 262	24 664	42 046	66 716	D
3261	Plastics product mfg.....	-	18	4	276	7 725	212	376	4 842	15 786	29 442	45 191	D
327	Nonmetallic mineral product mfg.....	9	31	3	376	10 104	290	559	6 783	28 888	30 760	59 421	D
3273	Cement & concrete product mfg.....	9	12	2	314	8 807	239	489	5 870	25 337	27 750	52 819	D
332	Fabricated metal product mfg.....	2	90	20	1 301	41 370	933	1 805	25 214	79 380	84 855	164 044	12 073
3323	Architectural & structural metals mfg.....	4	24	6	366	14 836	277	545	9 222	28 780	31 593	60 853	3 533
33232	Ornamental & architectural metal products mfg.....	6	18	5	288	11 322	221	425	7 604	22 483	21 714	44 327	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	30	4	303	10 169	221	392	5 350	24 294	17 137	41 569	6 692
33271	Machine shops.....	-	30	4	303	10 169	221	392	5 350	24 294	17 137	41 569	6 692
332710	Machine shops.....	-	30	4	303	10 169	221	392	5 350	24 294	17 137	41 569	6 692
3329	Other fabricated metal product mfg.....	1	17	4	349	8 715	209	471	5 482	11 983	26 174	37 379	D
33299	All other fabricated metal product mfg.....	1	16	4	e	D	D	D	D	D	D	D	708

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EUGENE-SPRINGFIELD, OR MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	49	18	1 511	50 993	961	1 922	26 175	98 785	89 130	185 313	6 763
3331	Agriculture, construction, & mining machinery mfg....	1	9	6	498	14 731	344	699	9 479	29 188	42 681	70 029	3 157
3332	Industrial machinery mfg ..	—	10	4	421	15 697	220	446	5 197	28 916	17 900	46 665	715
33321	Sawmill & woodworking machinery mfg	—	5	3	371	14 234	187	389	4 527	27 453	15 608	42 831	421
333210	Sawmill & woodworking machinery mfg	—	5	3	371	14 234	187	389	4 527	27 453	15 608	42 831	421
3339	Other general-purpose machinery mfg	—	11	5	357	13 370	221	479	7 062	25 262	16 772	41 475	1 956
334	Computer & electronic product mfg.....	2	17	8	1 610	64 573	1 079	1 159	36 229	110 947	78 317	191 973	D
3341	Computer & peripheral equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	4	2	637	31 142	554	209	25 926	4 408	5 472	12 290	D
33441	Semiconductor & other electronic component mfg	2	4	2	637	31 142	554	209	25 926	4 408	5 472	12 290	D
334413	Semiconductor & related device mfg ...	9	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	32	12	2 119	53 111	1 585	3 072	36 916	272 538	253 436	527 911	4 723
3361	Motor vehicle mfg	—	3	1	e	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	3	1	e	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	1	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	12	8	g	D	D	D	D	D	D	D	2 809
33621	Motor vehicle body & trailer mfg	1	12	8	g	D	D	D	D	D	D	D	2 809
336211	Motor vehicle body mfg	—	2	1	e	D	D	D	D	D	D	D	D
336213	Motor home mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	3	6	4	263	6 549	205	379	4 029	12 963	18 131	31 110	657
337	Furniture & related product mfg	1	50	12	1 099	29 101	845	1 796	17 149	57 064	54 905	112 623	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	39	7	793	20 111	639	1 461	12 713	37 322	42 791	80 920	D
33711	Wood kitchen cabinet & counter top mfg	1	21	4	266	7 729	212	432	4 384	13 781	10 482	24 262	D
337110	Wood kitchen cabinet & counter top mfg ...	1	21	4	266	7 729	212	432	4 384	13 781	10 482	24 262	D
33712	Household & institutional furniture mfg	1	18	3	527	12 382	427	1 029	8 329	23 541	32 309	56 658	D
337122	Nonupholstered wood household furniture mfg	1	14	3	518	12 259	419	1 017	8 228	23 312	32 028	56 162	D
3372	Office furniture (including fixtures) mfg	—	11	5	306	8 990	206	335	4 436	19 742	12 114	31 703	D
33721	Office furniture (including fixtures) mfg	—	11	5	306	8 990	206	335	4 436	19 742	12 114	31 703	D
339	Miscellaneous mfg.....	6	74	6	748	15 616	344	582	6 854	29 205	24 166	51 983	D
3399	Other miscellaneous mfg ..	6	46	5	633	13 105	267	459	5 519	23 443	21 009	43 166	D
33999	All other miscellaneous mfg	7	13	2	321	5 144	88	166	1 731	9 338	11 207	19 947	D
339999	All other miscellaneous mfg	7	8	2	305	4 853	75	144	1 510	8 708	10 848	18 916	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MEDFORD—ASHLAND, OR MSA													
31-33	Manufacturing	1	301	70	7 428	201 656	5 740	11 493	141 146	512 491	913 317	1 424 011	68 709
311	Food mfg	1	22	7	409	10 710	271	453	4 726	28 728	50 391	79 130	5 151
321	Wood product mfg	—	48	25	3 077	91 701	2 705	5 721	77 622	203 051	610 939	808 914	11 360
3211	Sawmills & wood preservation	—	6	5	325	11 164	275	604	8 797	20 806	96 351	117 886	1 869
32111	Sawmills & wood preservation	—	6	5	325	11 164	275	604	8 797	20 806	96 351	117 886	1 869
321113	Sawmills	—	5	4	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	16	12	1 848	60 107	1 665	3 589	51 869	152 374	429 087	577 877	8 743
32121	Veneer, plywood, & engineered wood product mfg	—	16	12	1 848	60 107	1 665	3 589	51 869	152 374	429 087	577 877	8 743
321211	Hardwood veneer & plywood mfg	—	1	1	e	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	—	8	7	1 113	36 067	1 051	2 329	33 243	70 072	234 395	300 520	4 512
321219	Reconstituted wood product mfg	—	4	3	257	9 082	198	379	6 192	29 805	40 415	71 411	D
3219	Other wood product mfg	—	26	8	904	20 430	765	1 528	16 956	29 871	85 501	113 151	748
32191	Millwork	—	11	5	739	17 444	629	1 330	14 940	23 518	77 501	98 808	399
321911	Wood window & door mfg	—	3	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	36	5	589	14 691	436	753	9 454	27 592	19 790	47 296	3 955
3231	Printing & related support activities	5	36	5	589	14 691	436	753	9 454	27 592	19 790	47 296	3 955
32311	Printing	5	34	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	9	4	483	10 378	357	701	6 651	78 661	92 253	173 223	D
3259	Other chemical product mfg	—	2	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	2	1	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	34	2	291	6 786	214	349	4 516	13 393	8 226	21 743	1 859
333	Machinery mfg	1	19	4	371	11 762	264	567	6 937	30 448	17 238	48 852	1 168
334	Computer & electronic product mfg	2	9	7	925	25 858	565	1 302	12 803	59 291	38 233	97 493	7 405
3344	Semiconductor & other electronic component mfg	—	3	3	571	9 771	413	962	8 437	22 122	14 398	36 242	D
33441	Semiconductor & other electronic component mfg	—	3	3	571	9 771	413	962	8 437	22 122	14 398	36 242	D
334412	Bare printed circuit board mfg	—	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	32	4	297	6 924	218	372	4 372	13 977	5 770	19 666	696
PORTLAND—SALEM, OR—WA CMSA													
31-33	Manufacturing	—	3 828	1 170	149 132	5 101 996	107 876	213 841	3 120 336	20 335 240	15 291 633	35 464 372	2 016 207
	Portland—Salem, OR—WA CMSA (OR Part)	—	3 407	1 039	129 595	4 386 764	92 560	183 708	2 630 978	18 349 799	13 385 498	31 610 060	1 501 888
	Portland—Salem, OR—WA CMSA (WA Part)	—	421	131	19 537	715 232	15 316	30 133	489 358	1 985 441	1 906 135	3 854 312	514 319
311	Food mfg	1	244	107	12 295	353 235	9 086	17 599	219 058	1 240 619	1 778 639	3 016 301	92 405
312	Beverage & tobacco product mfg	1	55	16	1 562	48 081	763	1 392	22 598	176 277	265 102	439 487	D
313	Textile mills	—	19	5	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	58	13	964	18 506	757	1 395	11 907	25 660	35 100	61 069	D
315	Apparel mfg	—	57	21	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	1	22	5	453	9 997	362	698	6 453	24 391	15 036	39 301	D
321	Wood product mfg	—	238	98	8 923	243 127	7 534	14 829	178 779	564 198	1 250 612	1 814 835	38 654
322	Paper mfg	—	58	40	i	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	452	80	6 910	225 235	5 072	9 771	145 199	495 891	377 496	868 843	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND–SALEM, OR–WA CMSA—Con. Manufacturing—Con.												
324	Petroleum & coal products mfg.....	5	17	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	130	45	2 885	116 588	1 585	3 035	47 406	428 890	353 217	780 773	D
326	Plastics & rubber products mfg.....	1	183	70	6 748	177 873	5 099	9 716	109 625	430 174	456 972	885 641	D
327	Nonmetallic mineral product mfg.....	—	144	41	3 472	119 229	2 689	5 597	85 151	342 917	273 094	612 735	D
331	Primary metal mfg.....	—	58	35	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	699	210	17 005	545 931	12 860	25 578	352 473	1 275 386	1 009 001	2 260 083	92 992
333	Machinery mfg.....	—	316	101	11 264	419 441	7 190	14 435	224 568	907 962	868 122	1 783 878	61 377
334	Computer & electronic product mfg.....	—	246	102	34 951	1 412 942	22 292	45 765	737 756	10 469 852	4 278 269	14 645 263	D
335	Electrical equipment, appliance, & component mfg.....	1	58	19	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	140	52	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	2	254	44	4 033	103 741	3 061	5 868	70 017	207 590	173 787	383 835	D
339	Miscellaneous mfg.....	1	380	57	6 622	192 011	4 509	8 501	95 521	427 182	300 406	719 649	27 701
31-33	Portland–Vancouver, OR–WA PMSA Manufacturing	—	3 363	1 025	134 123	4 684 217	96 066	190 898	2 851 556	19 245 780	13 780 856	32 874 201	1 902 986
	Portland–Vancouver, OR–WA PMSA (OR Part).....	—	2 942	894	114 586	3 968 985	80 750	160 765	2 362 198	17 260 339	11 874 721	29 019 889	1 388 667
	Portland–Vancouver, OR–WA PMSA (WA Part).....	—	421	131	19 537	715 232	15 316	30 133	489 358	1 985 441	1 906 135	3 854 312	514 319
311	Food mfg.....	—	201	83	8 563	261 857	6 035	11 786	154 842	994 995	1 241 953	2 234 222	75 331
3112	Grain & oilseed milling	—	8	4	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	—	28	15	1 456	45 513	1 113	2 249	21 903	144 179	122 812	270 763	4 256
31141	Frozen food mfg.....	—	11	8	757	25 534	550	1 169	11 177	86 028	73 830	164 562	2 690
311411	Frozen fruit, juice, & vegetable mfg.....	—	9	6	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	—	17	7	699	19 979	563	1 080	10 726	58 151	48 982	106 201	1 566
311421	Fruit & vegetable canning.....	—	15	7	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	—	13	12	847	26 475	528	1 075	15 170	109 563	278 495	387 310	15 092
31151	Dairy product (except frozen) mfg.....	—	12	11	f	D	D	D	D	D	D	D	15 092
311511	Fluid milk mfg.....	—	10	9	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	3	27	10	674	15 717	543	989	10 514	43 752	119 493	162 986	2 589
31161	Animal slaughtering & processing.....	3	27	10	674	15 717	543	989	10 514	43 752	119 493	162 986	2 589
311612	Meat processed from carcasses.....	5	18	7	f	D	D	D	D	D	D	D	2 407
3118	Bakeries & tortilla mfg.....	—	72	26	3 387	104 060	2 284	4 290	67 580	282 751	244 209	526 805	25 434
31181	Bread & bakery product mfg.....	1	58	21	2 436	69 288	1 472	2 689	39 366	174 918	138 127	313 055	D
311811	Retail bakeries.....	3	22	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	—	33	17	2 024	62 139	1 216	2 240	34 882	156 350	122 456	278 846	12 448
31182	Cookie, cracker, & pasta mfg.....	—	12	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.....	—	8	3	683	28 124	587	1 149	22 787	82 623	62 523	144 912	D
3119	Other food mfg.....	1	27	12	1 600	48 649	1 170	2 411	27 799	326 769	274 423	596 548	19 691
31191	Snack food mfg.....	1	3	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.....	1	2	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	—	11	5	447	7 732	322	638	5 082	41 440	57 756	97 387	1 493
311991	Perishable prepared food mfg.....	—	8	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	—	42	13	1 413	44 019	684	1 264	20 680	158 369	239 319	396 092	10 104
3121	Beverage mfg	—	42	13	1 413	44 019	684	1 264	20 680	158 369	239 319	396 092	10 104
31211	Soft drink & ice mfg	—	8	5	658	20 970	320	604	8 652	61 752	171 074	233 340	D
312111	Soft drink mfg	—	4	4	607	19 864	283	549	8 073	58 396	166 470	225 370	4 944
31212	Breweries	—	11	4	534	18 525	287	561	10 542	80 943	56 624	137 743	D
312120	Breweries	—	11	4	534	18 525	287	561	10 542	80 943	56 624	137 743	D
313	Textile mills	—	17	4	510	15 483	387	642	11 210	30 045	55 825	86 333	D
3132	Fabric mills	—	10	3	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	6	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	6	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	50	10	830	15 774	650	1 201	10 109	21 810	31 518	53 674	1 510
3141	Textile furnishings mills	2	19	4	382	7 929	311	635	5 446	9 041	16 457	25 635	805
31412	Curtain & linen mills	2	19	4	382	7 929	311	635	5 446	9 041	16 457	25 635	805
3149	Other textile product mills	4	31	6	448	7 845	339	566	4 663	12 769	15 061	28 039	705
31491	Textile bag & canvas mills	4	18	4	e	D	D	D	D	D	D	D	409
315	Apparel mfg	—	48	17	1 903	33 693	1 682	3 446	26 742	79 432	83 245	162 069	D
3152	Cut & sew apparel mfg	—	35	15	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	18	8	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	1	14	6	672	10 227	629	1 145	9 182	13 205	1 298	14 411	D
31522	Men's & boys' cut & sew apparel mfg	—	7	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	7	3	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	4	3	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	16	5	413	9 167	328	641	5 868	22 534	13 190	35 590	D
321	Wood product mfg	—	189	72	5 952	161 443	5 015	9 603	119 318	389 887	864 847	1 256 602	26 246
3211	Sawmills & wood preservation	—	40	19	2 272	69 370	1 993	4 076	56 645	189 584	591 209	782 692	15 448
32111	Sawmills & wood preservation	—	40	19	2 272	69 370	1 993	4 076	56 645	189 584	591 209	782 692	15 448
321113	Sawmills	—	35	15	2 062	62 102	1 847	3 772	52 388	166 931	526 525	693 690	14 538
3212	Veneer, plywood, & engineered wood product mfg	2	29	16	940	26 428	747	1 513	17 754	56 485	87 415	144 003	2 400
32121	Veneer, plywood, & engineered wood product mfg	2	29	16	940	26 428	747	1 513	17 754	56 485	87 415	144 003	2 400
321214	Truss mfg	3	16	11	524	15 158	386	755	8 540	32 279	32 539	64 991	1 119
3219	Other wood product mfg	1	120	37	2 740	65 645	2 275	4 014	44 919	143 818	186 223	329 907	8 398
32191	Millwork	1	54	22	1 445	39 331	1 216	2 275	26 780	84 790	109 029	193 502	6 145
321911	Wood window & door mfg	1	20	8	612	17 709	509	957	11 579	42 091	41 322	83 708	1 621
321912	Cut stock, resawing lumber, & planing	—	22	9	517	13 757	452	856	10 272	26 496	39 588	65 308	4 000
321918	Other millwork (including flooring)	—	12	5	316	7 865	255	462	4 929	16 203	28 119	44 486	524
32192	Wood container & pallet mfg	—	23	8	418	8 766	353	631	6 066	17 522	32 244	49 680	1 277
321920	Wood container & pallet mfg	—	23	8	418	8 766	353	631	6 066	17 522	32 244	49 680	1 277
32199	All other wood product mfg	1	43	7	877	17 548	706	1 108	12 073	41 506	44 950	86 725	976
321991	Manufactured home (mobile home) mfg	—	2	2	e	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	6	33	4	337	5 126	277	419	3 830	10 681	8 553	19 476	639

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND-SALEM, OR-WA CMSA—Con. Portland-Vancouver, OR-WA PMSA—Con. Manufacturing—Con.												
322	Paper mfg	—	55	38	7 466	301 557	6 075	11 968	220 025	1 135 865	1 163 372	2 311 160	D
3221	Pulp, paper, & paperboard mills	—	6	6	4 113	184 440	3 433	6 789	142 605	775 319	748 489	1 535 651	D
32212	Paper mills	—	6	6	4 113	184 440	3 433	6 789	142 605	775 319	748 489	1 535 651	D
322121	Paper (except newsprint) mills	—	4	4	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	49	32	3 353	117 117	2 642	5 179	77 420	360 546	414 883	775 509	D
32221	Paperboard container mfg	—	17	13	1 248	46 454	957	1 834	30 678	110 794	170 660	280 583	D
322211	Corrugated & solid fiber box mfg	—	8	6	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	16	11	1 306	47 442	1 050	2 171	32 995	127 855	171 092	301 201	D
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	6	6	663	22 045	544	1 052	15 764	53 352	63 989	117 344	D
32223	Stationery product mfg ..	1	9	5	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	1	5	4	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	7	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	417	76	6 502	213 655	4 763	9 138	137 484	464 175	361 950	820 976	34 530
3231	Printing & related support activities	1	417	76	6 502	213 655	4 763	9 138	137 484	464 175	361 950	820 976	34 530
32311	Printing	1	359	63	5 609	180 919	4 064	7 739	114 259	405 234	347 421	746 851	30 365
323110	Commercial lithographic printing ..	—	161	30	2 924	107 327	2 084	4 025	68 460	219 327	229 298	444 843	15 325
323112	Commercial flexographic printing ..	—	9	8	336	10 870	212	407	5 113	31 260	34 400	65 162	D
323113	Commercial screen printing	4	36	4	412	9 470	301	536	5 482	21 125	14 309	35 333	1 448
323114	Quick printing	1	87	4	544	13 355	418	735	9 940	34 658	12 346	46 961	2 351
323116	Manifold business form printing	—	14	8	463	16 414	357	753	10 634	47 152	20 579	67 422	2 799
323118	Blankbook, looseleaf binder, & device mfg ..	9	5	3	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	5	36	4	369	9 742	251	434	5 142	23 322	15 508	38 018	1 194
32312	Support activities for printing	—	58	13	893	32 736	699	1 399	23 225	58 941	14 529	74 125	4 165
323121	Tradebinding & related work	—	24	6	373	11 309	307	642	8 368	18 328	5 653	24 321	796
323122	Prepress services	—	34	7	520	21 427	392	757	14 857	40 613	8 876	49 804	3 369
324	Petroleum & coal products mfg	4	14	6	429	16 961	290	623	10 558	77 567	143 905	223 382	5 562
3241	Petroleum & coal products mfg	4	14	6	429	16 961	290	623	10 558	77 567	143 905	223 382	5 562
32412	Asphalt paving, roofing, & saturated materials mfg	4	6	4	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	5	3	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	118	38	2 578	102 885	1 402	2 643	42 874	380 688	300 148	679 936	47 733
3251	Basic chemical mfg	1	19	5	369	16 741	217	433	8 522	90 324	61 901	152 259	19 195
3254	Pharmaceutical & medicine mfg	5	18	11	703	21 802	396	598	9 145	61 129	33 925	94 678	5 585
32541	Pharmaceutical & medicine mfg	5	18	11	703	21 802	396	598	9 145	61 129	33 925	94 678	5 585
325413	In-vitro diagnostic substance mfg	3	5	5	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	19	4	393	17 157	213	451	6 401	62 885	64 628	127 146	D
3259	Other chemical product mfg	2	32	12	616	27 285	292	624	9 880	103 366	86 963	189 245	D
32599	All other chemical product & preparation mfg	3	22	7	374	18 153	183	390	6 372	82 864	58 978	141 763	D
325998	All other miscellaneous chemical product & preparation mfg	3	14	7	313	16 461	142	319	5 461	78 020	53 532	131 335	6 679

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	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	158	66	6 286	166 815	4 710	8 956	101 507	402 481	428 323	829 259	35 239
3261	Plastics product mfg	1	128	55	5 392	139 662	3 994	7 511	83 518	328 917	366 518	694 458	28 536
32611	Unsupported plastics film, sheet, & bag mfg ..	1	9	3	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	20	8	618	16 825	432	854	10 426	32 550	57 736	93 414	9 481
326121	Unsupported plastics profile shape mfg	1	12	3	278	7 199	190	374	4 041	14 770	12 592	27 962	D
326122	Plastics pipe & pipe fitting mfg	1	8	5	340	9 626	242	480	6 385	17 780	45 144	65 452	D
32619	Other plastics product mfg	1	81	37	4 071	104 437	3 009	5 520	61 745	247 063	242 671	485 969	16 284
326199	All other plastics product mfg	1	79	37	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	30	11	894	27 153	716	1 445	17 989	73 564	61 805	134 801	6 703
32621	Tire mfg	-	7	2	371	9 662	313	641	7 256	22 256	24 448	46 595	D
326212	Tire retreading	-	7	2	371	9 662	313	641	7 256	22 256	24 448	46 595	D
32629	Other rubber product mfg	-	20	9	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	124	37	3 254	112 855	2 525	5 295	80 623	324 713	262 642	584 360	D
3272	Glass & glass product mfg .	-	35	13	1 091	35 640	813	1 556	24 787	101 694	91 599	193 103	D
32721	Glass & glass product mfg	-	35	13	1 091	35 640	813	1 556	24 787	101 694	91 599	193 103	D
327215	Glass product mfg made of purchased glass	-	23	7	552	16 139	382	677	10 594	32 936	50 932	84 640	D
3273	Cement & concrete product mfg	-	47	15	g	D	D	D	D	D	D	D	10 882
32732	Ready-mix concrete mfg .	-	20	9	778	33 161	658	1 548	25 791	86 039	77 500	163 857	6 673
327320	Ready-mix concrete mfg	-	20	9	778	33 161	658	1 548	25 791	86 039	77 500	163 857	6 673
32733	Concrete pipe, brick, & block mfg	1	12	4	347	10 722	245	520	6 334	29 086	24 467	51 836	2 675
327332	Concrete pipe mfg	-	7	4	e	D	D	D	D	D	D	D	1 402
3279	Other nonmetallic mineral product mfg	1	19	4	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	1	16	3	439	15 850	341	814	12 404	61 317	38 399	97 735	D
327993	Mineral wool mfg	1	2	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	50	30	7 697	271 684	6 074	12 487	187 957	650 669	783 726	1 408 067	93 325
3311	Iron & steel mills & ferroalloy mfg	-	3	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	2	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	5	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	10	9	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	10	9	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	2	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	3	3	e	D	D	D	D	D	D	D	D
3315	Foundries	-	29	16	4 746	147 243	3 805	7 757	105 396	395 795	204 436	601 151	D
33151	Ferrous metal foundries .	-	13	9	3 737	118 927	3 030	6 312	85 664	309 616	175 036	483 762	D
331512	Steel investment foundries	-	3	3	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	4	4	1 112	41 193	948	1 807	29 172	105 940	106 713	215 390	D
33152	Nonferrous metal foundries	-	16	7	1 009	28 316	775	1 445	19 732	86 179	29 400	117 389	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND-SALEM, OR-WA CMSA—Con. Portland-Vancouver, OR-WA PMSA—Con. Manufacturing—Con.												
332	Fabricated metal product mfg	1	625	183	15 146	493 384	11 442	22 932	320 248	1 125 746	844 544	1 953 603	83 066
3321	Forging & stamping	3	22	9	609	21 407	448	884	11 726	43 430	36 113	79 452	7 339
33211	Forging & stamping	3	22	9	609	21 407	448	884	11 726	43 430	36 113	79 452	7 339
332116	Metal stamping	3	11	6	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	20	9	2 238	74 615	1 662	3 609	46 301	261 230	179 544	430 659	13 037
33221	Cutlery & handtool mfg	—	20	9	2 238	74 615	1 662	3 609	46 301	261 230	179 544	430 659	13 037
332212	Hand & edge tool mfg	—	12	5	g	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	—	7	3	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	148	55	4 294	140 773	3 130	6 191	87 846	290 435	287 455	570 258	10 402
33231	Plate work & fabricated structural product mfg	1	57	20	1 197	46 753	870	1 802	29 176	84 197	110 213	187 901	2 988
332312	Fabricated structural metal mfg	1	47	17	1 095	43 900	789	1 674	27 314	79 833	106 827	180 225	2 843
33232	Ornamental & architectural metal products mfg	—	91	35	3 097	94 020	2 260	4 389	58 670	206 238	177 242	382 357	7 414
332321	Metal window & door mfg	—	10	6	1 019	28 648	782	1 568	18 478	72 780	83 309	156 948	1 921
332322	Sheet metal work mfg	—	56	28	1 838	59 136	1 313	2 510	36 795	115 948	83 219	197 933	4 970
3324	Boiler, tank, & shipping container mfg	—	17	10	866	33 721	625	1 311	22 212	62 018	96 882	159 289	7 757
33241	Power boiler & heat exchanger mfg	—	6	4	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	6	4	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	5	3	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	5	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
33251	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
332510	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
3326	Spring & wire product mfg	1	24	11	893	24 629	709	1 411	17 290	49 973	34 189	85 637	3 253
33261	Spring & wire product mfg	1	24	11	893	24 629	709	1 411	17 290	49 973	34 189	85 637	3 253
332618	Other fabricated wire product mfg	1	17	7	678	17 633	552	1 108	12 733	37 193	25 912	64 983	2 626
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	251	43	3 307	109 133	2 528	4 769	73 833	209 264	92 823	300 396	21 340
33271	Machine shops	1	228	35	2 761	90 096	2 095	3 939	61 022	174 053	75 995	248 290	15 771
332710	Machine shops	1	228	35	2 761	90 096	2 095	3 939	61 022	174 053	75 995	248 290	15 771
33272	Turned product & screw, nut, & bolt mfg	2	23	8	546	19 037	433	830	12 811	35 211	16 828	52 106	5 569
332721	Precision turned product mfg	—	18	6	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	2	62	21	1 088	30 287	881	1 720	21 189	77 867	29 467	107 585	11 865
33281	Coating, engraving, heat treating, & allied activities	2	62	21	1 088	30 287	881	1 720	21 189	77 867	29 467	107 585	11 865
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	24	9	502	13 172	414	775	9 264	29 841	15 157	44 929	1 757
332813	Electroplating, plating, polishing, anodizing, & coloring	3	29	8	414	11 376	339	655	8 122	22 747	7 573	30 440	D
3329	Other fabricated metal product mfg	—	73	21	1 450	49 671	1 127	2 352	33 477	105 458	71 158	177 611	6 559
33291	Metal valve mfg	—	6	3	333	11 669	251	568	7 493	29 888	22 581	51 596	D
33299	All other fabricated metal product mfg	1	67	18	1 117	38 002	876	1 784	25 984	75 570	48 577	126 015	D
332996	Fabricated pipe & pipe fitting mfg	—	14	4	429	14 954	340	696	10 404	30 192	28 663	59 940	3 093
332999	All other miscellaneous fabricated metal product mfg	1	41	11	543	16 881	419	859	11 010	33 984	17 460	52 197	1 206

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	PORTLAND—SALEM, OR—WA CMSA—Con.												
	Portland—Vancouver, OR—WA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	270	87	10 376	392 323	6 582	13 242	207 612	858 453	812 880	1 679 119	57 280
3331	Agriculture, construction, & mining machinery mfg	-	18	8	1 292	51 270	870	1 838	30 319	93 312	148 767	240 484	11 293
33312	Construction machinery mfg	-	7	3	503	19 798	325	642	12 160	23 032	44 985	68 075	D
333120	Construction machinery mfg	-	7	3	503	19 798	325	642	12 160	23 032	44 985	68 075	D
33313	Mining & oil & gas field machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	-	64	28	2 693	104 683	1 441	2 800	48 926	271 829	225 915	498 201	16 658
33321	Sawmill & woodworking machinery mfg	-	19	10	f	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	-	19	10	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	43	18	1 950	79 757	940	1 750	34 797	239 463	175 747	414 837	D
333291	Paper industry machinery mfg	-	13	9	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	20	7	1 057	47 328	515	913	19 808	96 483	104 503	199 237	D
3333	Commercial & service industry machinery mfg	-	28	9	1 377	48 748	914	1 788	24 756	109 644	85 381	197 197	5 184
33331	Commercial & service industry machinery mfg	-	28	9	1 377	48 748	914	1 788	24 756	109 644	85 381	197 197	5 184
333314	Optical instrument & lens mfg	-	8	2	560	22 068	441	852	12 599	39 490	43 357	82 534	2 549
333319	Other commercial & service industry machinery mfg	-	16	6	731	23 936	456	904	11 726	71 081	38 800	110 297	2 528
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	17	6	1 658	55 932	1 207	2 740	37 066	91 871	130 122	222 574	7 290
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	17	6	1 658	55 932	1 207	2 740	37 066	91 871	130 122	222 574	7 290
333412	Industrial & commercial fan & blower mfg	-	3	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	6	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	67	9	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	3	67	9	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	70	24	2 536	102 217	1 567	2 999	47 273	238 895	194 243	438 886	12 630
33391	Pump & compressor mfg	-	6	5	633	24 569	345	723	11 081	76 880	64 678	147 487	D
333911	Pump & pumping equipment mfg	-	4	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	18	8	960	36 269	624	1 048	16 292	77 097	56 903	130 455	7 418
333922	Conveyor & conveying equipment mfg	-	6	4	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	11	4	656	26 833	380	710	11 612	53 846	39 200	92 382	D
33399	All other general-purpose machinery mfg	2	46	11	943	41 379	598	1 228	19 900	84 918	72 662	160 944	D
333991	Power-driven handtool mfg	1	3	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	6	25	2	253	9 947	158	299	4 368	17 906	16 645	37 538	1 361
334	Computer & electronic product mfg	-	230	96	32 924	1 345 018	20 764	42 754	702 616	10 262 041	4 181 252	14 340 382	1 179 208
3341	Computer & peripheral equipment mfg	-	32	14	8 922	397 371	5 980	12 156	227 007	1 373 151	1 799 461	3 097 327	134 556
33411	Computer & peripheral equipment mfg	-	32	14	8 922	397 371	5 980	12 156	227 007	1 373 151	1 799 461	3 097 327	134 556
334111	Electronic computer mfg	1	9	6	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	-	4	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	16	5	i	D	D	D	D	D	D	D	114 328

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3342	Communications equipment mfg	-	21	7	1 712	62 802	807	1 419	20 355	205 161	202 997	410 577	D
33421	Telephone apparatus mfg	-	7	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	7	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	7	4	359	14 884	150	302	4 148	36 985	22 182	58 205	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	7	4	359	14 884	150	302	4 148	36 985	22 182	58 205	D
33429	Other communications equipment mfg	-	7	1	e	D	D	D	D	D	D	D	1 161
334290	Other communications equipment mfg	-	7	1	e	D	D	D	D	D	D	D	1 161
3343	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
33431	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
334310	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
3344	Semiconductor & other electronic component mfg	-	94	51	15 208	568 691	10 634	22 291	346 097	7 581 138	1 380 938	8 913 955	940 635
33441	Semiconductor & other electronic component mfg	-	94	51	15 208	568 691	10 634	22 291	346 097	7 581 138	1 380 938	8 913 955	940 635
334412	Bare printed circuit board mfg	-	21	7	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	25	18	8 814	371 315	6 190	13 423	246 125	7 155 236	1 057 978	8 168 363	897 566
334414	Electronic capacitor mfg	-	1	1	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	2	9	5	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	9	7	1 287	45 310	708	1 408	16 769	91 084	96 449	187 138	4 981
334419	Other electronic component mfg	1	24	10	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	60	18	6 395	296 641	2 842	5 717	98 630	1 046 673	644 140	1 706 615	D
33451	Navigational, measuring, medical, & control instruments mfg	-	60	18	6 395	296 641	2 842	5 717	98 630	1 046 673	644 140	1 706 615	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	6	4	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	6	3	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	18	7	4 656	222 762	2 154	4 303	78 304	845 212	532 612	1 387 035	67 107
335	Electrical equipment, appliance, & component mfg	1	55	19	1 580	53 172	1 033	2 046	27 113	162 640	131 234	289 591	D
3353	Electrical equipment mfg ..	3	31	9	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	3	31	9	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	18	6	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	13	7	687	25 376	442	899	12 322	99 948	77 687	173 901	1 892
33599	All other electrical equipment & component mfg	3	8	4	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	3	8	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	128	50	10 446	395 182	8 650	16 913	310 376	1 105 248	1 388 819	2 488 502	39 230
3361	Motor vehicle mfg	—	4	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	3	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	3	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	24	7	f	D	D	D	D	D	D	D	1 436
33621	Motor vehicle body & trailer mfg	2	24	7	f	D	D	D	D	D	D	D	1 436
336214	Travel trailer & camper mfg	2	10	4	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	39	17	g	D	D	D	D	D	D	D	14 203
33632	Motor vehicle electrical & electronic equipment mfg	—	5	3	320	10 494	213	450	5 782	27 068	14 616	41 852	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	4	3	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	7	4	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	7	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	14	7	g	D	D	D	D	D	D	D	4 989
336399	All other motor vehicle parts mfg	—	14	7	g	D	D	D	D	D	D	D	4 989
3364	Aerospace product & parts mfg	—	21	6	2 261	98 939	1 771	3 427	81 261	245 720	95 864	336 397	13 124
33641	Aerospace product & parts mfg	—	21	6	2 261	98 939	1 771	3 427	81 261	245 720	95 864	336 397	13 124
336413	Other aircraft part & auxiliary equipment mfg	—	17	5	2 214	96 679	1 749	3 377	80 361	244 370	93 294	331 604	13 029
3365	Railroad rolling stock mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	23	11	1 606	70 405	1 384	3 243	58 039	139 613	69 131	207 303	2 130
33661	Ship & boat building	1	23	11	1 606	70 405	1 384	3 243	58 039	139 613	69 131	207 303	2 130
336611	Ship building & repairing	1	14	9	1 514	68 478	1 302	3 135	56 605	134 668	65 843	200 511	2 046
3369	Other transportation equipment mfg	—	16	7	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	16	7	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	—	10	4	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	217	43	3 752	98 335	2 841	5 509	65 988	197 788	164 695	364 923	7 304
3371	Household & institutional furniture & kitchen cabinet mfg	1	161	28	2 570	59 999	2 106	4 115	43 989	112 878	105 424	221 649	D
33711	Wood kitchen cabinet & counter top mfg	1	97	12	1 378	34 121	1 055	2 023	23 949	61 592	54 715	119 497	1 805
337110	Wood kitchen cabinet & counter top mfg ...	1	97	12	1 378	34 121	1 055	2 023	23 949	61 592	54 715	119 497	1 805
33712	Household & institutional furniture mfg	2	64	16	1 192	25 878	1 051	2 092	20 040	51 286	50 709	102 152	D
337121	Upholstered household furniture mfg	2	21	5	610	13 458	552	1 139	10 727	26 835	25 951	52 796	D
337122	Nonupholstered wood household furniture mfg	2	29	5	380	8 055	339	670	6 328	16 372	18 469	34 886	490
3372	Office furniture (including fixtures) mfg	2	44	11	f	D	D	D	D	D	D	D	3 377
33721	Office furniture (including fixtures) mfg	2	44	11	f	D	D	D	D	D	D	D	3 377
337215	Showcase, partition, shelving, & locker mfg	3	26	8	628	23 207	360	685	12 945	41 888	29 557	70 768	2 105
3379	Other furniture related product mfg	—	12	4	e	D	D	D	D	D	D	D	D

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	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	339	52	6 103	178 955	4 134	7 809	87 806	400 634	283 469	676 359	23 507
3391	Medical equipment & supplies mfg	2	134	20	2 441	81 754	1 668	3 466	39 729	191 536	99 229	288 832	13 125
33911	Medical equipment & supplies mfg	2	134	20	2 441	81 754	1 668	3 466	39 729	191 536	99 229	288 832	13 125
339114	Dental equipment & supplies mfg	—	26	8	1 277	49 673	875	1 639	22 669	108 143	57 532	163 216	9 974
339116	Dental laboratories	4	73	3	385	10 078	291	504	6 687	22 096	7 585	29 905	D
3399	Other miscellaneous mfg	1	205	32	3 662	97 201	2 466	4 343	48 077	209 098	184 240	387 527	10 382
33992	Sporting & athletic goods mfg	1	47	9	830	23 041	594	1 088	12 357	67 574	50 218	113 030	3 593
339920	Sporting & athletic goods mfg	1	47	9	830	23 041	594	1 088	12 357	67 574	50 218	113 030	3 593
33993	Doll, toy, & game mfg	—	12	3	614	11 593	471	532	6 290	14 749	42 416	57 816	D
339932	Game, toy, & children's vehicle mfg	—	9	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	2	62	6	809	25 305	476	963	11 578	50 956	33 474	83 957	D
339950	Sign mfg	2	62	6	809	25 305	476	963	11 578	50 956	33 474	83 957	D
33999	All other miscellaneous mfg	1	52	12	1 221	31 613	806	1 563	15 620	64 380	43 083	106 610	D
339994	Broom, brush, & mop mfg	—	3	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	36	6	385	9 401	259	423	4 752	22 210	15 841	37 865	D
	Salem, OR PMSA												
31-33	Manufacturing	1	465	145	15 009	417 779	11 810	22 943	268 780	1 089 460	1 510 777	2 590 171	113 221
311	Food mfg	1	43	24	3 732	91 378	3 051	5 813	64 216	245 624	536 686	782 079	17 074
3114	Fruit & vegetable preserving & specialty food mfg	2	14	13	2 813	70 644	2 375	4 746	51 692	194 692	435 974	630 963	11 341
31141	Frozen food mfg	—	9	9	2 276	53 263	1 924	3 847	40 181	142 064	370 713	516 058	9 041
311411	Frozen fruit, juice, & vegetable mfg	—	9	9	2 276	53 263	1 924	3 847	40 181	142 064	370 713	516 058	9 041
31142	Fruit & vegetable canning, pickling, & drying	8	5	4	537	17 381	451	899	11 511	52 628	65 261	114 905	2 300
311421	Fruit & vegetable canning	8	4	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	9	4	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	7	4	e	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	49	26	2 971	81 684	2 519	5 226	59 461	174 311	385 765	558 233	12 408
3211	Sawmills & wood preservation	—	7	3	377	10 675	343	792	9 101	25 689	70 722	95 391	D
32111	Sawmills & wood preservation	—	7	3	377	10 675	343	792	9 101	25 689	70 722	95 391	D
321113	Sawmills	—	6	3	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	9	8	511	15 493	427	962	12 092	30 763	145 171	173 534	5 651
32121	Veneer, plywood, & engineered wood product mfg	—	9	8	511	15 493	427	962	12 092	30 763	145 171	173 534	5 651
3219	Other wood product mfg	—	33	15	2 083	55 516	1 749	3 472	38 268	117 859	169 872	289 308	D
32191	Millwork	1	12	5	443	11 032	365	827	8 163	22 171	50 690	74 465	1 637
321911	Wood window & door mfg	1	3	3	275	6 994	222	569	5 238	14 537	12 359	26 995	750
32199	All other wood product mfg	—	12	8	1 556	42 870	1 314	2 508	28 941	93 169	117 124	210 250	2 482
321991	Manufactured home (mobile home) mfg	—	6	6	1 447	39 832	1 235	2 327	26 613	85 914	109 804	195 753	2 084
323	Printing & related support activities	2	35	4	408	11 580	309	633	7 715	31 716	15 546	47 867	D
3231	Printing & related support activities	2	35	4	408	11 580	309	633	7 715	31 716	15 546	47 867	D
32311	Printing	2	32	4	402	11 464	303	626	7 626	31 497	15 496	47 597	D
323110	Commercial lithographic printing	3	19	3	265	7 468	197	425	5 126	20 368	9 136	29 996	D
325	Chemical mfg	1	12	7	307	13 703	183	392	4 532	48 202	53 069	100 837	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Salem, OR PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	3	25	4	462	11 058	389	760	8 118	27 693	28 649	56 382	D
3261	Plastics product mfg	2	21	4	429	9 999	365	714	7 631	24 454	26 271	50 774	D
32619	Other plastics product mfg	2	14	3	381	8 813	327	648	6 773	19 543	22 096	41 645	D
326199	All other plastics product mfg	1	11	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	74	27	1 859	52 547	1 418	2 646	32 225	149 640	164 457	306 480	9 926
3323	Architectural & structural metals mfg	—	28	17	1 066	30 054	782	1 544	18 563	85 622	116 691	198 151	5 641
33231	Plate work & fabricated structural product mfg ..	—	10	6	441	14 130	275	568	7 671	43 483	48 239	90 078	2 152
332312	Fabricated structural metal mfg	—	7	3	335	10 219	201	416	5 408	35 070	34 245	67 494	D
33232	Ornamental & architectural metal products mfg	—	18	11	625	15 924	507	976	10 892	42 139	68 452	108 073	3 489
332322	Sheet metal work mfg ..	—	10	6	408	10 952	334	613	7 620	32 374	42 715	73 726	2 828
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	28	6	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	25	4	315	9 755	243	463	7 305	17 348	7 718	25 254	1 811
332710	Machine shops	1	25	4	315	9 755	243	463	7 305	17 348	7 718	25 254	1 811
333	Machinery mfg	2	46	14	888	27 118	608	1 193	16 956	49 509	55 242	104 759	4 097
3331	Agriculture, construction, & mining machinery mfg	1	14	5	328	9 724	234	473	6 498	12 446	19 932	32 862	1 209
3332	Industrial machinery mfg ..	3	10	5	370	12 295	245	468	7 319	26 188	20 101	46 056	2 332
334	Computer & electronic product mfg	—	16	6	2 027	67 924	1 528	3 011	35 140	207 811	97 017	304 881	D
3344	Semiconductor & other electronic component mfg	—	10	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	10	4	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	—	2	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ..	—	5	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	6	37	1	281	5 406	220	359	4 029	9 802	9 092	18 912	D
339	Miscellaneous mfg	1	41	5	519	13 056	375	692	7 715	26 548	16 937	43 290	4 194
3399	Other miscellaneous mfg ..	1	26	3	386	9 552	284	520	5 724	19 900	12 991	32 559	3 570
33992	Sporting & athletic goods mfg	—	5	1	276	6 919	211	388	4 292	13 940	9 434	23 002	D
339920	Sporting & athletic goods mfg	—	5	1	276	6 919	211	388	4 292	13 940	9 434	23 002	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BENTON COUNTY, OR													
31-33	Manufacturing	-	106	30	8 547	494 513	6 417	16 572	359 546	736 220	671 989	1 391 885	122 316
321	Wood product mfg	-	10	9	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	15	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
CLACKAMAS COUNTY, OR													
31-33	Manufacturing	-	589	150	18 655	632 164	12 495	24 579	333 555	1 723 547	1 968 018	3 667 422	147 613
311	Food mfg	-	31	9	825	22 906	690	1 256	17 987	76 610	147 442	224 309	D
321	Wood product mfg	-	40	13	1 344	35 323	1 166	2 248	26 564	80 924	191 804	273 076	D
3211	Sawmills & wood preservation	-	11	5	717	17 969	654	1 264	15 153	46 559	156 213	203 162	D
32111	Sawmills & wood preservation	-	11	5	717	17 969	654	1 264	15 153	46 559	156 213	203 162	D
321113	Sawmills	-	11	5	717	17 969	654	1 264	15 153	46 559	156 213	203 162	D
322	Paper mfg	-	10	4	843	31 579	674	1 326	22 445	76 066	142 059	214 403	13 367
331	Primary metal mfg	-	10	7	g	D	D	D	D	D	D	D	D
3315	Foundries	-	8	6	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	3	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	5	3	814	22 898	608	1 123	15 573	76 064	24 009	101 940	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	154	38	3 804	125 762	2 782	5 518	76 268	324 648	213 170	538 190	22 299
3322	Cutlery & handtool mfg	-	7	3	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	7	3	g	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	5	2	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	34	10	858	26 945	601	1 260	16 185	56 576	47 336	104 007	D
33232	Ornamental & architectural metal products mfg	-	23	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	56	5	532	16 837	405	715	11 362	31 459	13 728	45 168	D
333	Machinery mfg	1	60	19	2 285	84 955	1 497	3 332	47 481	143 220	179 531	324 388	7 362
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	2	f	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	17	10	794	34 375	485	1 035	16 527	74 725	67 785	143 495	2 692
33399	All other general-purpose machinery mfg	2	12	6	568	25 142	366	786	12 953	51 128	42 245	96 973	D
334	Computer & electronic product mfg	-	30	13	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	4	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	14	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	14	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	29	9	1 241	39 925	868	1 572	20 792	108 943	89 900	200 189	D
3363	Motor vehicle parts mfg	-	11	5	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CLACKAMAS COUNTY, OR—Con.												
339	Manufacturing—Con. Miscellaneous mfg.....	2	54	8	f	D	D	D	D	D	D	D	D
31-33	CLATSOP COUNTY, OR												
	Manufacturing	2	49	12	858	21 181	707	1 234	14 531	50 910	91 992	142 407	2 765
31-33	COLUMBIA COUNTY, OR												
	Manufacturing	—	57	18	3 079	128 360	2 563	5 135	98 571	523 317	468 866	1 008 528	53 393
321	Wood product mfg.....	—	9	6	f	D	D	D	D	D	D	D	3 150
322	Paper mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	—	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	—	2	2	g	D	D	D	D	D	D	D	D
31-33	COOS COUNTY, OR												
	Manufacturing	1	104	17	1 937	57 607	1 627	3 157	44 759	114 109	277 307	391 192	10 155
321	Wood product mfg.....	—	29	7	897	27 623	785	1 577	22 846	66 264	183 954	249 733	D
31-33	CROOK COUNTY, OR												
	Manufacturing	2	21	8	1 506	39 416	1 324	2 578	31 175	76 056	145 550	225 283	6 485
321	Wood product mfg.....	2	8	7	g	D	D	D	D	D	D	D	6 095
3219	Other wood product mfg....	—	5	4	g	D	D	D	D	D	D	D	D
32191	Millwork.....	—	4	4	g	D	D	D	D	D	D	D	D
31-33	CURRY COUNTY, OR												
	Manufacturing	1	32	4	727	26 201	618	1 326	21 141	39 932	79 832	116 178	D
321	Wood product mfg.....	—	7	3	f	D	D	D	D	D	D	D	D
31-33	DESCHUTES COUNTY, OR												
	Manufacturing	1	202	43	4 884	129 526	3 868	7 378	84 063	328 630	375 108	698 602	18 103
321	Wood product mfg.....	1	28	15	1 985	50 560	1 676	3 385	38 103	119 465	195 330	312 417	6 117
3219	Other wood product mfg....	1	22	11	1 538	38 326	1 310	2 624	28 908	93 127	150 916	241 991	5 167
32191	Millwork.....	1	16	9	g	D	D	D	D	D	D	D	4 592
321911	Wood window & door mfg.....	—	8	4	838	20 465	726	1 456	15 657	58 797	79 529	134 100	1 857
336	Transportation equipment mfg.....	1	12	4	611	12 783	519	1 116	8 860	39 426	71 887	109 201	D
339	Miscellaneous mfg.....	2	32	4	560	15 400	371	660	7 064	27 236	27 486	55 150	1 285
31-33	DOUGLAS COUNTY, OR												
	Manufacturing	—	157	51	7 141	226 417	6 043	11 899	177 947	533 864	944 784	1 494 702	50 376
321	Wood product mfg.....	—	43	26	4 660	149 245	4 227	8 386	127 788	366 782	652 984	1 022 272	40 508
3211	Sawmills & wood preservation.....	—	19	13	2 045	66 065	1 831	3 336	54 547	130 448	373 098	497 452	27 527
32111	Sawmills & wood preservation.....	—	19	13	2 045	66 065	1 831	3 336	54 547	130 448	373 098	497 452	27 527
321113	Sawmills.....	—	19	13	2 045	66 065	1 831	3 336	54 547	130 448	373 098	497 452	27 527
3212	Veneer, plywood, & engineered wood product mfg.....	—	11	10	2 362	77 945	2 182	4 627	69 234	227 361	259 739	495 741	11 464
32121	Veneer, plywood, & engineered wood product mfg.....	—	11	10	2 362	77 945	2 182	4 627	69 234	227 361	259 739	495 741	11 464
321212	Softwood veneer & plywood mfg.....	—	5	5	g	D	D	D	D	D	D	D	D
31-33	HOOD RIVER COUNTY, OR												
	Manufacturing	2	58	15	1 128	27 164	886	1 597	18 611	67 747	88 882	157 457	3 406

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON COUNTY, OR													
31-33	Manufacturing	1	301	70	7 428	201 656	5 740	11 493	141 146	512 491	913 317	1 424 011	68 709
321	Wood product mfg	-	48	25	3 077	91 701	2 705	5 721	77 622	203 051	610 939	808 914	11 360
3212	Veneer, plywood, & engineered wood product mfg	-	16	12	1 848	60 107	1 665	3 589	51 869	152 374	429 087	577 877	8 743
32121	Veneer, plywood, & engineered wood product mfg	-	16	12	1 848	60 107	1 665	3 589	51 869	152 374	429 087	577 877	8 743
321212	Softwood veneer & plywood mfg	-	8	7	1 113	36 067	1 051	2 329	33 243	70 072	234 395	300 520	4 512
3219	Other wood product mfg ...	-	26	8	904	20 430	765	1 528	16 956	29 871	85 501	113 151	748
32191	Millwork	-	11	5	739	17 444	629	1 330	14 940	23 518	77 501	98 808	399
323	Printing & related support activities	5	36	5	589	14 691	436	753	9 454	27 592	19 790	47 296	3 955
3231	Printing & related support activities	5	36	5	589	14 691	436	753	9 454	27 592	19 790	47 296	3 955
32311	Printing	5	34	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	9	7	925	25 858	565	1 302	12 803	59 291	38 233	97 493	7 405
3344	Semiconductor & other electronic component mfg	-	3	3	571	9 771	413	962	8 437	22 122	14 398	36 242	D
33441	Semiconductor & other electronic component mfg	-	3	3	571	9 771	413	962	8 437	22 122	14 398	36 242	D
JEFFERSON COUNTY, OR													
31-33	Manufacturing	-	21	8	1 793	52 203	1 530	3 383	41 401	77 215	269 868	351 261	8 621
321	Wood product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	4	1	g	D	D	D	D	D	D	D	D
32191	Millwork	-	2	1	g	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing	-	1	1	g	D	D	D	D	D	D	D	D
JOSEPHINE COUNTY, OR													
31-33	Manufacturing	-	117	29	2 812	76 804	2 163	4 439	51 990	192 104	238 069	439 641	5 963
321	Wood product mfg	-	20	8	1 063	29 012	948	2 070	24 704	59 399	140 457	199 566	1 494
334	Computer & electronic product mfg	-	9	5	598	20 037	376	872	9 600	73 711	40 058	120 966	D
KLAMATH COUNTY, OR													
31-33	Manufacturing	1	72	26	3 013	86 079	2 500	4 787	60 690	218 312	346 449	562 564	11 703
321	Wood product mfg	1	16	12	1 930	64 026	1 694	3 367	45 727	160 523	267 023	425 514	9 337
3212	Veneer, plywood, & engineered wood product mfg	-	7	7	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	7	7	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	6	3	f	D	D	D	D	D	D	D	D
32191	Millwork	-	5	3	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LANE COUNTY, OR													
31-33	Manufacturing	1	624	172	19 262	589 761	14 171	27 327	383 133	1 674 933	2 225 216	3 881 838	758 149
311	Food mfg	2	55	15	1 872	41 345	1 296	2 212	25 611	165 440	155 095	319 794	7 964
3118	Bakeries & tortilla mfg	-	15	4	605	15 626	320	465	7 116	56 547	29 055	85 620	1 013
31181	Bread & bakery product mfg	-	11	4	590	15 240	309	432	6 863	53 625	27 285	80 924	957
311812	Commercial bakeries	-	6	4	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	80	46	5 765	179 667	4 946	10 740	141 114	487 065	1 068 926	1 540 448	74 339
3211	Sawmills & wood preservation	-	19	14	1 765	64 132	1 485	3 204	48 159	180 940	455 320	626 717	46 057
32111	Sawmills & wood preservation	-	19	14	1 765	64 132	1 485	3 204	48 159	180 940	455 320	626 717	46 057
321113	Sawmills	-	17	12	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	3	23	22	3 427	101 601	3 010	6 611	83 144	278 115	572 908	845 145	26 761
32121	Veneer, plywood, & engineered wood product mfg	3	23	22	3 427	101 601	3 010	6 611	83 144	278 115	572 908	845 145	26 761
321211	Hardwood veneer & plywood mfg	5	5	5	896	26 493	771	1 686	20 098	50 549	118 049	164 192	4 396
321212	Softwood veneer & plywood mfg	6	8	7	1 430	37 425	1 251	2 711	31 786	93 923	207 000	301 556	6 826
321213	Engineered wood member (except truss) mfg	-	6	6	804	25 877	746	1 686	22 565	114 200	208 852	320 859	D
3219	Other wood product mfg	3	38	10	573	13 934	451	925	9 811	28 010	40 698	68 586	1 521
322	Paper mfg	-	5	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	52	8	696	19 710	465	760	10 333	37 891	20 750	58 436	D
3231	Printing & related support activities	-	52	8	696	19 710	465	760	10 333	37 891	20 750	58 436	D
32311	Printing	-	49	8	690	19 559	460	753	10 223	37 593	20 680	58 068	D
325	Chemical mfg	-	19	9	667	25 450	355	657	12 658	112 929	137 091	249 024	D
332	Fabricated metal product mfg	2	90	20	1 301	41 370	933	1 805	25 214	79 380	84 855	164 044	12 073
333	Machinery mfg	1	49	18	1 511	50 993	961	1 922	26 175	98 785	89 130	185 313	6 763
334	Computer & electronic product mfg	2	17	8	1 610	64 573	1 079	1 159	36 229	110 947	78 317	191 973	D
3341	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	4	2	637	31 142	554	209	25 926	4 408	5 472	12 290	D
33441	Semiconductor & other electronic component mfg	2	4	2	637	31 142	554	209	25 926	4 408	5 472	12 290	D
336	Transportation equipment mfg	-	32	12	2 119	53 111	1 585	3 072	36 916	272 538	253 436	527 911	4 723
3362	Motor vehicle body & trailer mfg	1	12	8	g	D	D	D	D	D	D	D	2 809
33621	Motor vehicle body & trailer mfg	1	12	8	g	D	D	D	D	D	D	D	2 809
336213	Motor home mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	50	12	1 099	29 101	845	1 796	17 149	57 064	54 905	112 623	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	39	7	793	20 111	639	1 461	12 713	37 322	42 791	80 920	D
33712	Household & institutional furniture mfg	1	18	3	527	12 382	427	1 029	8 329	23 541	32 309	56 658	D
337122	Nonupholstered wood household furniture mfg	1	14	3	518	12 259	419	1 017	8 228	23 312	32 028	56 162	D
339	Miscellaneous mfg	6	74	6	748	15 616	344	582	6 854	29 205	24 166	51 983	D
3399	Other miscellaneous mfg	6	46	5	633	13 105	267	459	5 519	23 443	21 009	43 166	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINCOLN COUNTY, OR													
31-33	Manufacturing	-	59	6	1 060	34 407	843	1 460	17 834	72 985	181 688	255 211	12 469
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
LINN COUNTY, OR													
31-33	Manufacturing	-	184	72	9 794	347 805	7 366	15 445	235 499	933 718	1 005 905	1 918 832	53 756
311	Food mfg	-	10	3	953	21 371	773	1 532	12 812	63 398	43 645	107 398	3 721
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	36	22	2 339	75 456	1 953	4 419	55 716	175 628	345 532	523 584	18 593
3211	Sawmills & wood preservation	-	10	5	535	17 578	477	1 104	14 294	31 723	108 374	141 375	710
32111	Sawmills & wood preservation	-	10	5	535	17 578	477	1 104	14 294	31 723	108 374	141 375	710
321113	Sawmills	-	10	5	535	17 578	477	1 104	14 294	31 723	108 374	141 375	710
3212	Veneer, plywood, & engineered wood product mfg	-	16	13	1 348	44 756	1 072	2 489	32 225	107 876	198 492	305 070	17 524
32121	Veneer, plywood, & engineered wood product mfg	-	16	13	1 348	44 756	1 072	2 489	32 225	107 876	198 492	305 070	17 524
321212	Softwood veneer & plywood mfg	-	6	5	f	D	D	D	D	D	D	D	9 953
321219	Reconstituted wood product mfg	-	6	6	593	21 625	484	1 128	16 257	64 461	78 927	143 811	7 478
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	11	7	2 652	120 314	1 699	3 747	78 285	315 767	249 604	537 097	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	3	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	3	3	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	3	3	g	D	D	D	D	D	D	D	D
3315	Foundries	-	7	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	7	4	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	38	10	544	17 650	441	823	12 366	30 983	18 732	49 616	1 815
336	Transportation equipment mfg	-	10	3	f	D	D	D	D	D	D	D	827
3362	Motor vehicle body & trailer mfg	-	3	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	1	f	D	D	D	D	D	D	D	D
336213	Motor home mfg	-	1	1	f	D	D	D	D	D	D	D	D
MALHEUR COUNTY, OR													
31-33	Manufacturing	-	28	4	g	D	D	D	D	D	D	D	D
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION COUNTY, OR													
31-33	Manufacturing	1	402	124	12 651	354 386	9 815	18 747	219 154	942 572	1 297 919	2 232 772	D
311	Food mfg	1	41	22	h	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	2	12	11	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	8	8	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	8	8	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	39	19	2 409	64 945	2 019	4 098	45 326	136 796	265 034	400 898	D
3219	Other wood product mfg	—	28	13	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	10	7	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg	—	6	6	1 447	39 832	1 235	2 327	26 613	85 914	109 804	195 753	2 084
332	Fabricated metal product mfg	—	62	25	1 677	47 097	1 267	2 327	27 811	141 855	153 255	287 450	D
3323	Architectural & structural metals mfg	—	23	16	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	17	11	f	D	D	D	D	D	D	D	3 489
333	Machinery mfg	3	40	10	597	17 756	411	800	11 141	34 187	37 899	72 138	D
334	Computer & electronic product mfg	—	14	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	8	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	5	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	36	5	514	12 920	370	684	7 636	26 232	16 653	42 692	D
MORROW COUNTY, OR													
31-33	Manufacturing	—	10	4	741	20 875	662	1 423	17 207	85 340	100 527	183 396	4 666
311	Food mfg	—	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	3	2	f	D	D	D	D	D	D	D	D
MULTNOMAH COUNTY, OR													
31-33	Manufacturing	—	1 309	399	47 763	1 600 386	35 901	71 781	1 085 297	4 195 494	4 565 939	8 715 415	323 031
311	Food mfg	—	92	48	4 565	138 942	2 977	5 665	78 506	533 297	596 381	1 125 794	40 095
3114	Fruit & vegetable preserving & specialty food mfg	—	7	6	727	19 716	536	1 083	9 069	78 897	53 653	132 877	2 844
3115	Dairy product mfg	—	6	6	571	19 325	324	656	10 324	77 873	127 264	204 157	12 955
31151	Dairy product (except frozen) mfg	—	6	6	571	19 325	324	656	10 324	77 873	127 264	204 157	12 955
311511	Fluid milk mfg	—	5	5	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	39	18	2 058	64 388	1 303	2 428	39 495	147 683	122 584	270 331	12 822
31181	Bread & bakery product mfg	—	33	16	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	24	14	1 450	41 355	757	1 405	18 928	98 451	55 749	154 241	9 273
31182	Cookie, cracker, & pasta mfg	—	5	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	2	13	7	580	16 987	340	597	7 407	157 034	99 750	254 322	9 480
312	Beverage & tobacco product mfg	—	13	6	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	13	6	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	4	3	f	D	D	D	D	D	D	D	D
31212	Breweries	—	7	3	f	D	D	D	D	D	D	D	D
312120	Breweries	—	7	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	3	29	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	27	10	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	18	8	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	49	13	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	38	10	625	13 492	514	953	9 387	25 891	32 330	58 395	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MULTNOMAH COUNTY, OR—Con.												
	Manufacturing—Con.												
322	Paper mfg	—	19	16	1 433	53 974	1 097	2 249	35 171	138 091	189 479	329 324	9 623
3222	Converted paper product mfg	—	19	16	1 433	53 974	1 097	2 249	35 171	138 091	189 479	329 324	9 623
32221	Paperboard container mfg	—	8	7	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	5	5	617	24 549	488	1 085	16 784	71 696	101 803	176 148	5 905
323	Printing & related support activities	1	238	48	4 228	145 205	3 186	6 275	97 006	310 623	229 498	538 438	19 396
3231	Printing & related support activities	1	238	48	4 228	145 205	3 186	6 275	97 006	310 623	229 498	538 438	19 396
32311	Printing	1	194	36	3 425	115 404	2 553	5 004	75 701	256 808	216 083	470 553	15 738
323110	Commercial lithographic printing	—	95	17	1 999	77 471	1 457	2 876	50 806	170 671	162 045	330 907	9 874
32312	Support activities for printing	—	44	12	803	29 801	633	1 271	21 305	53 815	13 415	67 885	3 658
325	Chemical mfg	2	51	15	1 166	43 740	664	1 239	19 746	160 227	152 650	313 117	14 678
326	Plastics & rubber products mfg	1	51	19	1 591	45 185	1 244	2 519	28 263	105 433	100 696	204 650	D
3261	Plastics product mfg	2	36	11	912	24 680	686	1 389	14 406	57 995	51 153	108 072	D
3262	Rubber product mfg	—	15	8	679	20 505	558	1 130	13 857	47 438	49 543	96 578	D
327	Nonmetallic mineral product mfg	1	45	16	1 371	49 080	1 089	2 281	35 299	130 307	87 858	218 398	D
3273	Cement & concrete product mfg	1	14	6	651	25 650	505	1 164	17 784	66 414	54 069	119 622	D
331	Primary metal mfg	—	22	14	4 303	152 426	3 424	7 209	107 028	305 442	477 462	757 733	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	7	6	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	7	6	f	D	D	D	D	D	D	D	D
3315	Foundries	—	13	6	2 689	82 675	2 256	4 761	63 460	232 541	140 277	371 670	D
33151	Ferrous metal foundries	—	6	4	h	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	227	79	5 675	186 473	4 428	9 007	128 048	446 334	346 154	787 293	26 935
3322	Cutlery & handtool mfg	—	9	4	f	D	D	D	D	D	D	D	5 637
33221	Cutlery & handtool mfg	—	9	4	f	D	D	D	D	D	D	D	5 637
332212	Hand & edge tool mfg	—	7	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	46	18	1 367	45 618	1 002	2 064	28 928	110 076	102 247	212 609	3 443
33232	Ornamental & architectural metal products mfg	—	28	12	1 042	31 748	767	1 519	20 401	74 043	72 057	146 606	2 074
332321	Metal window & door mfg	—	4	3	628	18 063	480	939	11 361	47 113	58 995	106 911	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	78	20	1 253	43 920	1 004	1 954	31 062	90 002	45 401	134 746	D
33271	Machine shops	1	72	18	1 113	39 353	891	1 762	28 279	80 611	39 445	119 324	6 444
332710	Machine shops	1	72	18	1 113	39 353	891	1 762	28 279	80 611	39 445	119 324	6 444
3328	Coating, engraving, heat treating, & allied activities	4	34	14	698	20 071	570	1 110	14 191	46 209	19 017	65 195	4 052
33281	Coating, engraving, heat treating, & allied activities	4	34	14	698	20 071	570	1 110	14 191	46 209	19 017	65 195	4 052
3329	Other fabricated metal product mfg	1	27	9	663	23 895	528	1 074	16 312	50 459	34 474	86 131	3 820
33299	All other fabricated metal product mfg	1	26	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	83	26	3 212	121 449	2 139	4 387	68 906	290 667	251 597	547 155	17 146
3331	Agriculture, construction, & mining machinery mfg	—	6	4	745	29 726	521	1 119	17 836	64 111	96 305	159 502	D
33313	Mining & oil & gas field machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	1	24	10	574	19 102	367	791	10 889	33 989	34 620	67 709	1 106
3339	Other general-purpose machinery mfg	—	18	4	928	39 246	531	1 073	18 052	108 474	72 820	186 672	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
MULTNOMAH COUNTY, OR—Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	40	8	h	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg.....	-	14	5	h	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg.....	-	14	5	h	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg...	-	5	3	h	D	D	D	D	D	D	D	D	
334419	Other electronic component mfg.....	-	5	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg.....	-	52	25		8 124	320 191	6 974	13 851	269 080	911 494	1 211 548	2 116 794	27 713
3361	Motor vehicle mfg.....	-	3	1	g	D	D	D	D	D	D	D	D	
33612	Heavy duty truck mfg...	-	2	1	g	D	D	D	D	D	D	D	D	
336120	Heavy duty truck mfg..	-	2	1	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg...	-	17	7	g	D	D	D	D	D	D	D	5 204	
33639	Other motor vehicle parts mfg.....	-	4	3	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg.....	-	4	3	f	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg.....	-	6	3	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg.....	-	6	3	g	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg.....	-	4	3	g	D	D	D	D	D	D	D	D	
3365	Railroad rolling stock mfg..	-	1	1	g	D	D	D	D	D	D	D	D	
33651	Railroad rolling stock mfg.....	-	1	1	g	D	D	D	D	D	D	D	D	
336510	Railroad rolling stock mfg.....	-	1	1	g	D	D	D	D	D	D	D	D	
3366	Ship & boat building.....	1	16	8	g	D	D	D	D	D	D	D	1 931	
33661	Ship & boat building....	1	16	8	g	D	D	D	D	D	D	D	1 931	
336611	Ship building & repairing.....	1	12	7	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	2	88	20		1 406	40 677	958	1 787	25 290	79 411	60 083	138 833	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	4	56	10	f	D	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	1	24	7		602	20 819	344	636	11 573	36 356	23 871	59 660	D
33721	Office furniture (including fixtures) mfg.....	1	24	7		602	20 819	344	636	11 573	36 356	23 871	59 660	D
339	Miscellaneous mfg.....	3	141	16		1 901	45 797	1 309	2 389	26 085	98 887	66 701	161 219	D
3399	Other miscellaneous mfg..	3	95	12		1 436	34 275	997	1 788	18 762	72 273	53 259	121 032	D
33999	All other miscellaneous mfg.....	1	26	6		690	15 809	489	914	9 270	33 937	24 924	58 398	D
POLK COUNTY, OR														
31-33	Manufacturing.....	-	63	21		2 358	63 393	1 995	4 196	49 626	146 888	212 858	357 399	D
321	Wood product mfg.....	-	10	7		562	16 739	500	1 128	14 135	37 515	120 731	157 335	D
334	Computer & electronic product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
TILLAMOOK COUNTY, OR														
31-33	Manufacturing.....	-	31	10		1 227	32 536	1 052	2 103	23 946	100 214	222 280	317 821	8 204
311	Food mfg.....	-	8	4	f	D	D	D	D	D	D	D	D	3 619

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UMATILLA COUNTY, OR													
31-33	Manufacturing	-	75	24	4 623	107 216	4 047	7 301	83 714	369 047	421 605	790 586	23 181
311	Food mfg.....	-	21	10	2 914	63 707	2 625	4 711	50 275	248 709	270 474	521 125	16 752
3114	Fruit & vegetable preserving & specialty food mfg.....	-	8	6	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	5	5	2 294	48 305	2 110	3 761	39 601	196 080	134 388	330 730	14 571
311411	Frozen fruit, juice, & vegetable mfg.....	-	5	5	2 294	48 305	2 110	3 761	39 601	196 080	134 388	330 730	14 571
321	Wood product mfg.....	-	9	4	854	23 919	718	1 391	19 695	61 610	71 149	132 552	3 970
UNION COUNTY, OR													
31-33	Manufacturing	-	28	8	1 250	37 170	1 107	2 261	29 363	86 245	186 165	273 921	6 776
321	Wood product mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
WASCO COUNTY, OR													
31-33	Manufacturing	-	26	6	751	28 117	600	1 246	20 491	103 750	283 774	374 728	4 455
331	Primary metal mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production.....	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, OR													
31-33	Manufacturing	-	828	279	38 997	1 413 208	25 297	50 407	722 135	10 277 614	4 139 522	14 360 234	759 164
311	Food mfg.....	1	37	11	1 441	38 442	978	1 917	21 003	167 606	172 053	342 950	5 502
321	Wood product mfg.....	1	36	19	1 361	38 800	1 151	2 149	28 904	97 709	162 018	260 481	9 174
3219	Other wood product mfg...	2	26	12	726	18 492	609	1 056	12 674	40 614	52 840	93 518	D
322	Paper mfg.....	-	10	5	569	20 350	422	835	12 313	48 781	77 222	126 299	D
3222	Converted paper product mfg.....	-	10	5	569	20 350	422	835	12 313	48 781	77 222	126 299	D
323	Printing & related support activities.....	1	91	20	1 458	45 472	1 036	1 982	26 921	111 534	70 893	181 404	D
3231	Printing & related support activities.....	1	91	20	1 458	45 472	1 036	1 982	26 921	111 534	70 893	181 404	D
32311	Printing.....	1	84	19	1 382	42 758	982	1 872	25 175	106 842	69 877	175 697	D
325	Chemical mfg.....	5	26	9	589	23 031	293	549	8 540	90 573	39 794	130 900	D
326	Plastics & rubber products mfg.....	2	45	19	2 673	66 823	2 093	3 641	41 007	167 404	202 329	366 296	13 941
3261	Plastics product mfg.....	2	38	18	2 606	64 897	2 044	3 538	39 854	163 150	198 936	358 602	13 366
32619	Other plastics product mfg.....	2	28	15	2 296	56 945	1 803	3 090	34 665	142 553	161 098	300 208	11 272
326199	All other plastics product mfg.....	2	27	15	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	31	9	790	26 121	562	1 150	17 691	68 882	95 128	162 304	11 374
332	Fabricated metal product mfg.....	1	142	44	3 933	128 849	2 903	5 936	80 088	254 949	209 532	453 459	27 041
3323	Architectural & structural metals mfg.....	-	38	15	1 444	47 119	1 054	1 981	28 343	84 393	106 087	183 105	2 711
33232	Ornamental & architectural metal products mfg.....	-	24	11	g	D	D	D	D	D	D	D	1 784
332322	Sheet metal work mfg.	-	19	10	873	25 855	646	1 146	15 555	53 904	43 200	96 404	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	63	14	924	32 293	668	1 364	20 651	58 845	20 824	78 588	6 473
33271	Machine shops.....	1	55	13	840	29 206	596	1 209	18 549	53 476	18 789	71 198	5 216
332710	Machine shops.....	1	55	13	840	29 206	596	1 209	18 549	53 476	18 789	71 198	5 216

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON COUNTY, OR—Con. Manufacturing—Con.												
333	Machinery mfg	-	68	25	3 205	127 337	1 938	3 814	63 864	312 045	280 737	590 736	24 462
3331	Agriculture, construction, & mining machinery mfg	-	5	4	527	21 123	334	692	12 167	28 410	51 697	79 452	D
3332	Industrial machinery mfg	-	18	10	1 246	52 806	611	1 215	22 522	194 002	126 910	320 889	12 450
33329	Other industrial machinery mfg	-	16	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	-	9	3	805	29 858	596	1 166	16 330	45 698	60 934	106 686	3 229
33331	Commercial & service industry machinery mfg	-	9	3	805	29 858	596	1 166	16 330	45 698	60 934	106 686	3 229
333314	Optical instrument & lens mfg	-	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	119	60	17 940	756 349	10 378	21 509	345 935	8 646 135	2 536 539	11 137 604	629 442
3341	Computer & peripheral equipment mfg	1	20	11	h	D	D	D	D	D	D	D	36 468
33411	Computer & peripheral equipment mfg	1	20	11	h	D	D	D	D	D	D	D	36 468
334111	Electronic computer mfg	1	8	6	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	-	3	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	8	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	12	6	g	D	D	D	D	D	D	D	16 229
33421	Telephone apparatus mfg	-	6	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	6	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	49	29	i	D	D	D	D	D	D	D	498 839
33441	Semiconductor & other electronic component mfg	-	49	29	i	D	D	D	D	D	D	D	498 839
334412	Bare printed circuit board mfg	-	14	4	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	11	9	h	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	5	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	28	12	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	28	12	i	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	13	7	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	19	9	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	28	9	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	51	15	1 484	35 489	1 169	2 386	25 424	76 689	66 493	145 794	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	42	11	1 202	27 212	996	2 050	20 859	53 596	51 630	108 076	D
33711	Wood kitchen cabinet & counter top mfg	-	23	4	578	13 208	435	877	9 887	25 702	26 070	54 691	D
337110	Wood kitchen cabinet & counter top mfg	-	23	4	578	13 208	435	877	9 887	25 702	26 070	54 691	D
33712	Household & institutional furniture mfg	1	19	7	624	14 004	561	1 173	10 972	27 894	25 560	53 385	D
339	Miscellaneous mfg	1	84	18	1 896	54 404	1 230	2 474	23 678	120 386	110 544	230 812	D
3391	Medical equipment & supplies mfg	2	38	7	537	16 108	381	1 132	8 080	43 386	24 160	67 079	1 772
33911	Medical equipment & supplies mfg	2	38	7	537	16 108	381	1 132	8 080	43 386	24 160	67 079	1 772
3399	Other miscellaneous mfg	-	46	11	1 359	38 296	849	1 342	15 598	77 000	86 384	163 733	D
33993	Doll, toy, & game mfg	-	6	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	5	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	YAMHILL COUNTY, OR												
31-33	Manufacturing	-	159	48	6 092	194 867	4 494	8 863	122 640	540 367	732 376	1 268 290	105 466
311	Food mfg.....	1	17	7	633	17 986	488	983	11 798	51 004	128 238	177 746	8 517
321	Wood product mfg.....	-	19	7	956	29 282	797	1 580	21 995	81 117	223 628	303 606	2 589
3219	Other wood product mfg...	-	11	3	f	D	D	D	D	D	D	D	434
331	Primary metal mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	14	6	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	8	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	8	3	g	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg.....	-	4	3	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALBANY, OR *												
31-33	Manufacturing	-	68	23	3 538	124 181	2 691	5 529	79 099	345 138	294 008	630 696	23 698
311	Food mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	4	3	745	25 685	622	1 461	20 310	76 036	100 130	177 137	D
331	Primary metal mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	2	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BEAVERTON, OR													
31-33	Manufacturing	-	135	45	9 717	383 371	5 200	9 883	148 852	1 336 393	965 574	2 310 131	91 999
311	Food mfg	-	10	7	934	22 086	585	1 157	13 017	111 765	106 719	216 752	3 641
334	Computer & electronic product mfg	-	31	15	6 301	286 530	2 994	6 029	96 527	985 197	670 541	1 665 851	73 106
3344	Semiconductor & other electronic component mfg	-	9	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	9	6	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	10	7	4 909	236 789	2 232	4 504	80 883	870 970	555 506	1 435 012	D
33451	Navigational, measuring, medical, & control instruments mfg	-	10	7	4 909	236 789	2 232	4 504	80 883	870 970	555 506	1 435 012	D
334515	Electricity measuring & testing instrument mfg	-	7	5	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	20	3	798	20 122	551	746	9 392	38 346	54 123	92 839	D
3399	Other miscellaneous mfg ..	-	11	2	743	18 044	527	709	8 703	30 911	51 866	83 133	D
33993	Doll, toy, & game mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	2	1	f	D	D	D	D	D	D	D	D
BEND, OR													
31-33	Manufacturing	-	119	27	3 422	87 421	2 776	5 279	58 868	225 835	273 669	496 272	11 504
321	Wood product mfg	-	16	10	1 381	35 733	1 164	2 368	26 821	92 910	144 082	234 572	3 077
3219	Other wood product mfg ...	-	13	7	g	D	D	D	D	D	D	D	D
32191	Millwork	-	11	6	925	22 602	807	1 607	17 471	59 232	91 577	148 617	D
321911	Wood window & door mfg	-	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	2	f	D	D	D	D	D	D	D	D
BROOKINGS, OR													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
CANBY, OR													
31-33	Manufacturing	-	25	8	755	24 449	590	1 119	16 288	67 452	79 112	145 024	D
COOS BAY, OR													
31-33	Manufacturing	1	29	5	622	16 315	508	956	12 412	16 077	65 305	84 369	1 599
CORVALLIS, OR													
31-33	Manufacturing	-	51	11	6 510	420 490	4 738	13 258	302 265	553 900	357 295	895 767	D
334	Computer & electronic product mfg	-	10	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	1	i	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	i	D	D	D	D	D	D	D	D
DALLAS, OR													
31-33	Manufacturing	-	8	5	1 100	29 428	982	2 272	24 908	52 829	84 376	136 456	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EUGENE, OR													
31-33	Manufacturing	2	340	90	9 524	277 085	6 647	11 820	162 598	614 945	712 334	1 330 294	D
311	Food mfg	1	35	10	1 184	27 605	783	1 191	15 433	97 901	89 874	187 319	5 947
3118	Bakeries & tortilla mfg	-	11	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	8	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	5	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	30	18	1 708	46 932	1 484	3 177	37 335	119 014	269 803	390 838	9 577
3212	Veneer, plywood, & engineered wood product mfg	2	9	9	1 269	35 039	1 138	2 455	29 020	88 599	215 523	305 462	4 199
32121	Veneer, plywood, & engineered wood product mfg	2	9	9	1 269	35 039	1 138	2 455	29 020	88 599	215 523	305 462	4 199
321212	Softwood veneer & plywood mfg	6	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	38	6	532	15 891	362	563	8 099	29 292	14 709	43 846	D
3231	Printing & related support activities	-	38	6	532	15 891	362	563	8 099	29 292	14 709	43 846	D
32311	Printing	-	36	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	43	9	705	19 223	488	928	11 419	31 280	37 506	68 004	D
333	Machinery mfg	1	29	13	1 043	35 371	657	1 298	16 788	71 202	63 063	132 553	4 073
334	Computer & electronic product mfg	2	13	6	1 546	62 430	1 037	1 101	35 157	107 915	75 923	186 620	D
3341	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	25	8	796	20 534	632	1 388	12 881	38 309	41 669	80 741	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	19	5	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	12	3	512	12 143	414	1 007	8 136	23 092	31 862	55 777	D
337122	Nonupholstered wood household furniture mfg	1	11	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	6	56	5	669	14 189	294	499	6 097	26 132	22 590	47 473	D
3399	Other miscellaneous mfg ..	6	33	5	591	12 449	235	413	5 109	22 237	20 177	41 093	D
FOREST GROVE, OR													
31-33	Manufacturing	1	37	15	1 925	70 613	1 418	2 756	38 439	141 089	126 640	271 625	18 551
334	Computer & electronic product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	3	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	2	2	g	D	D	D	D	D	D	D	D
GRANTS PASS, OR													
31-33	Manufacturing	-	58	20	1 816	45 966	1 457	3 019	33 434	125 680	161 203	295 291	3 647
321	Wood product mfg	1	8	4	635	16 952	563	1 330	14 315	33 889	86 232	118 907	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRESHAM, OR													
31-33	Manufacturing	—	82	25	5 338	183 203	4 026	7 833	143 239	476 797	334 733	795 574	33 880
332	Fabricated metal product mfg	1	13	3	612	17 356	483	938	11 089	38 742	36 600	75 533	D
3323	Architectural & structural metals mfg	1	5	3	f	D	D	D	D	D	D	D	1 243
33232	Ornamental & architectural metal products mfg	—	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	5	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	3	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	2	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
HERMISTON, OR													
31-33	Manufacturing	—	15	5	1 320	31 279	1 172	2 091	26 605	96 964	110 854	208 519	8 405
311	Food mfg	—	3	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	—	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	—	2	2	f	D	D	D	D	D	D	D	D
HILLSBORO, OR													
31-33	Manufacturing	1	173	55	8 734	339 364	5 874	12 128	178 697	788 238	1 199 267	1 977 296	383 320
332	Fabricated metal product mfg	—	34	7	708	24 660	523	1 101	15 219	50 190	33 963	83 472	8 638
334	Computer & electronic product mfg	—	31	19	5 405	235 493	3 595	7 748	125 078	550 529	984 292	1 525 709	347 839
3341	Computer & peripheral equipment mfg	—	7	6	2 920	99 630	2 254	5 092	57 213	195 503	731 124	924 866	26 700
33411	Computer & peripheral equipment mfg	—	7	6	2 920	99 630	2 254	5 092	57 213	195 503	731 124	924 866	26 700
334111	Electronic computer mfg	2	3	3	f	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	2	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	16	10	g	D	D	D	D	D	D	D	316 848
33441	Semiconductor & other electronic component mfg	1	16	10	g	D	D	D	D	D	D	D	316 848
334413	Semiconductor & related device mfg	—	5	5	g	D	D	D	D	D	D	D	315 375
HOOD RIVER, OR													
31-33	Manufacturing	1	31	6	638	14 062	479	817	8 955	38 303	29 737	68 285	D
JUNCTION CITY, OR													
31-33	Manufacturing	—	12	4	f	D	D	D	D	D	D	D	1 661
336	Transportation equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KLAMATH FALLS, OR													
31-33	Manufacturing	-	37	15	1 685	44 225	1 373	2 567	30 117	123 925	153 688	275 570	6 518
321	Wood product mfg	-	6	5	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
LAKE OSWEGO, OR *													
31-33	Manufacturing	2	54	13	1 083	36 291	651	1 397	16 598	70 004	58 615	127 751	3 626
LEBANON, OR													
31-33	Manufacturing	-	22	8	909	33 440	732	1 560	23 506	88 171	105 065	193 206	D
MCMINNVILLE, OR													
31-33	Manufacturing	-	51	20	2 318	66 919	1 782	3 719	45 135	193 283	295 879	491 426	77 367
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
MEDFORD, OR													
31-33	Manufacturing	-	74	15	2 007	61 921	1 489	2 961	40 160	132 508	211 365	344 759	13 022
321	Wood product mfg	-	7	4	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
MILWAUKIE, OR *													
31-33	Manufacturing	-	58	24	4 353	146 684	3 040	6 465	84 267	365 995	314 188	679 121	16 766
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	1	f	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	9	1 407	51 012	1 013	1 979	28 984	164 891	111 230	275 332	6 008
3322	Cutlery & handtool mfg	-	3	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	3	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	6	1 259	46 277	834	2 022	27 047	66 808	125 842	192 577	4 442
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEWBERG, OR													
31-33	Manufacturing	-	42	12	2 497	92 900	1 750	3 353	52 814	250 454	199 618	448 416	23 759
339	Miscellaneous mfg	-	6	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ONTARIO, OR													
31-33	Manufacturing	-	14	2	f	D	D	D	D	D	D	D	D
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
OREGON CITY, OR													
31-33	Manufacturing	-	31	11	964	36 784	671	1 242	22 446	90 863	110 872	200 193	8 787
PENDLETON, OR													
31-33	Manufacturing	-	17	7	731	18 622	591	1 021	12 121	69 300	151 439	219 294	2 154
PORTLAND, OR *													
31-33	Manufacturing	-	1 144	345	39 059	1 310 563	29 273	58 564	873 618	3 465 307	3 947 480	7 385 072	D
311	Food mfg.....	-	82	44	4 322	132 644	2 772	5 281	74 232	456 477	535 277	989 714	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	6	6	571	19 325	324	656	10 324	77 873	127 264	204 157	12 955
31151	Dairy product (except frozen) mfg.....	-	6	6	571	19 325	324	656	10 324	77 873	127 264	204 157	12 955
311511	Fluid milk mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	36	18	2 053	64 311	1 299	2 424	39 457	147 474	122 453	269 991	D
31181	Bread & bakery product mfg.....	-	30	16	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	22	14	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	11	6	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	11	6	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	24	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	1	27	10	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	1	18	8	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	43	10	755	15 913	630	1 174	11 642	29 642	48 065	77 918	D
3219	Other wood product mfg...	1	34	9	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	18	15	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	18	15	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	-	5	5	617	24 549	488	1 085	16 784	71 696	101 803	176 148	5 905
323	Printing & related support activities.....	-	214	41	3 459	122 259	2 570	4 901	81 161	248 947	169 715	418 713	15 760
3231	Printing & related support activities.....	-	214	41	3 459	122 259	2 570	4 901	81 161	248 947	169 715	418 713	15 760
32311	Printing.....	-	172	29	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	-	89	16	g	D	D	D	D	D	D	D	9 546
32312	Support activities for printing.....	-	42	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	45	13	1 023	39 288	549	1 025	16 838	149 965	145 378	295 519	13 847
326	Plastics & rubber products mfg.....	1	40	11	764	22 774	579	1 052	13 288	56 408	54 054	109 801	D
327	Nonmetallic mineral product mfg.....	1	38	14	1 043	35 831	803	1 692	24 428	89 827	67 653	157 323	D
3273	Cement & concrete product mfg.....	-	11	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND, OR *—Con. Manufacturing—Con.												
331	Primary metal mfg	—	20	13	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	6	5	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	6	5	f	D	D	D	D	D	D	D	D
3315	Foundries	—	12	6	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	4	h	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	199	69	4 522	154 195	3 492	7 073	105 547	359 577	275 260	629 962	20 772
3322	Cutlery & handtool mfg	—	8	4	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	8	4	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	6	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	39	15	818	30 622	570	1 211	19 452	75 870	68 043	144 027	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	66	18	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	61	16	884	30 139	699	1 333	20 981	54 873	20 579	74 875	D
332710	Machine shops	1	61	16	884	30 139	699	1 333	20 981	54 873	20 579	74 875	D
3328	Coating, engraving, heat treating, & allied activities	4	33	13	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	4	33	13	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	1	25	8	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	25	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	74	24	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	—	6	4	745	29 726	521	1 119	17 836	64 111	96 305	159 502	D
33313	Mining & oil & gas field machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	2	23	9	f	D	D	D	D	D	D	D	1 106
3339	Other general-purpose machinery mfg	—	16	4	634	23 617	432	874	13 349	77 304	53 908	137 149	D
334	Computer & electronic product mfg	—	34	5	2 886	98 073	2 158	4 756	63 734	274 223	265 538	537 648	D
3344	Semiconductor & other electronic component mfg	—	10	3	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	10	3	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	2	1	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	4	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	42	22	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	2	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	15	7	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	4	3	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	14	7	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	14	7	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	10	6	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND, OR *—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	73	18	1 271	36 731	858	1 608	22 761	72 277	54 766	126 358	D
3371	Household & institutional furniture & kitchen cabinet mfg	4	46	9	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	19	6	525	17 965	294	544	9 867	31 079	20 124	50 628	D
33721	Office furniture (including fixtures) mfg	1	19	6	525	17 965	294	544	9 867	31 079	20 124	50 628	D
339	Miscellaneous mfg	4	118	11	1 118	29 434	740	1 314	15 832	60 704	40 846	101 148	2 967
3399	Other miscellaneous mfg ..	4	83	8	f	D	D	D	D	D	D	D	D
	PRINEVILLE, OR												
31-33	Manufacturing	2	14	5	f	D	D	D	D	D	D	D	3 815
321	Wood product mfg	2	5	4	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	—	4	3	f	D	D	D	D	D	D	D	D
32191	Millwork	—	3	3	f	D	D	D	D	D	D	D	D
	REDMOND, OR												
31-33	Manufacturing	3	39	13	1 196	34 305	899	1 715	20 645	88 579	90 457	177 450	5 876
321	Wood product mfg	5	8	4	562	13 543	479	948	10 452	25 077	49 354	74 461	D
	ROSEBURG, OR												
31-33	Manufacturing	5	38	9	811	22 162	573	1 044	13 173	54 371	66 162	122 187	3 802
	ST. HELENS, OR												
31-33	Manufacturing	—	9	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
	SALEM, OR *												
31-33	Manufacturing	2	224	76	7 085	211 359	5 331	10 075	122 142	644 920	592 125	1 226 047	D
311	Food mfg	2	25	16	1 721	44 252	1 434	2 597	30 610	158 773	181 101	336 477	9 055
3114	Fruit & vegetable preserving & specialty food mfg	4	8	7	960	26 788	863	1 690	19 959	114 075	97 438	208 459	D
332	Fabricated metal product mfg	—	36	19	1 452	41 705	1 109	2 041	25 106	127 602	135 304	254 833	D
3323	Architectural & structural metals mfg	—	15	12	841	23 922	612	1 197	14 768	72 065	91 699	159 335	5 077
334	Computer & electronic product mfg	—	11	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	5	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	30	5	501	12 709	360	673	7 530	25 723	16 390	41 913	4 156

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPRINGFIELD, OR													
31-33	Manufacturing	2	87	27	3 334	123 265	2 624	5 390	88 414	373 038	547 815	915 305	D
321	Wood product mfg	3	12	7	1 497	50 435	1 253	2 711	39 725	116 799	249 580	362 393	16 250
3211	Sawmills & wood preservation	-	3	2	f	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	3	2	f	D	D	D	D	D	D	D	D
321113	Sawmills	-	3	2	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	6	4	4	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	6	4	4	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	8	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
STAYTON, OR													
31-33	Manufacturing	-	19	9	1 443	36 909	1 117	2 395	24 586	107 883	313 813	422 599	3 822
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
TIGARD, OR													
31-33	Manufacturing	2	110	37	3 706	125 496	2 421	5 029	65 109	290 001	276 645	566 387	25 624
332	Fabricated metal product mfg	2	20	8	976	27 278	760	1 706	18 235	54 285	73 125	118 109	4 425
333	Machinery mfg	-	10	5	770	25 110	481	943	13 257	34 457	57 085	93 126	2 316
334	Computer & electronic product mfg	2	13	9	857	37 081	365	700	13 060	109 877	60 635	178 636	10 624
3345	Navigational, measuring, medical, & control instruments mfg	-	5	3	549	24 736	204	375	7 267	85 873	41 417	134 728	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	3	549	24 736	204	375	7 267	85 873	41 417	134 728	D
TILLAMOOK, OR													
31-33	Manufacturing	-	10	3	627	18 568	540	1 182	13 696	60 629	169 935	226 196	3 229
TOLEDO, OR													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
TROUTDALE, OR													
31-33	Manufacturing	-	18	7	545	20 945	441	885	14 405	36 628	119 715	155 702	5 172

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TUALATIN, OR *												
31-33	Manufacturing	2	125	65	5 023	151 818	3 572	6 688	87 617	364 262	316 673	681 956	29 436
326	Plastics & rubber products mfg	6	13	7	775	21 357	572	830	13 495	49 576	50 941	100 408	5 551
3261	Plastics product mfg	6	10	7	756	20 689	560	804	13 210	48 031	50 075	97 978	D
32619	Other plastics product mfg	9	6	5	610	16 767	457	623	11 042	36 815	32 432	69 018	4 841
326199	All other plastics product mfg	9	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	38	17	1 260	40 533	922	1 819	25 150	75 293	54 866	129 887	3 595
3323	Architectural & structural metals mfg	-	15	9	f	D	D	D	D	D	D	D	1 157
33232	Ornamental & architectural metal products mfg	-	10	6	693	19 460	514	971	11 651	39 035	37 060	75 226	933
332322	Sheet metal work mfg	-	8	5	f	D	D	D	D	D	D	D	D
	WILSONVILLE, OR *												
31-33	Manufacturing	-	53	28	4 066	153 240	2 010	4 120	46 920	579 201	760 436	1 319 656	66 467
334	Computer & electronic product mfg	-	10	7	h	D	D	D	D	D	D	D	59 639
3341	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
	WOODBURN, OR												
31-33	Manufacturing	1	26	12	1 852	49 317	1 488	2 781	31 079	92 964	196 024	288 325	7 996
321	Wood product mfg	-	6	6	1 073	26 985	938	1 664	18 760	56 144	118 902	173 873	1 841
3219	Other wood product mfg ...	-	4	4	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
OREGON		OREGON—Con.	
Companies ¹	5 428	Quantity of electricity purchased for heat and power	15 278 998
		Quantity of electricity generated less sold for heat and power	681 514
All establishments	5 768	Total value of shipments	47 665 990
Establishments with 1 to 19 employees	4 093	Value of resales	1 658 664
Establishments with 20 to 99 employees	1 204	Value added	25 077 180
Establishments with 100 employees or more	471	Total inventories, beginning of year	5 124 342
All employees	213 111	Finished goods inventories, beginning of year	1 829 981
Total compensation ²	8 891 591	Work-in-process inventories, beginning of year	1 364 488
Annual payroll	7 095 286	Materials and supplies inventories, beginning of year	1 929 873
Total fringe benefits	1 796 305	Total inventories, end of year	5 398 261
Production workers, average for year	158 506	Finished goods inventories, end of year	1 897 536
Production workers on March 12	153 945	Work-in-process inventories, end of year	1 398 994
Production workers on May 12	156 685	Materials and supplies inventories, end of year	2 101 731
Production workers on August 12	164 317	Gross book value of total assets at beginning of year	22 006 876
Production workers on November 12	159 077	Total capital expenditures (new and used)	2 715 770
Production-worker hours	316 808	Capital expenditures for buildings and other structures (new and used)	623 652
Production-worker wages	4 545 793	Capital expenditures for machinery and equipment (new and used)	2 092 118
Total cost of materials	22 770 601	Total retirements ²	869 955
Cost of materials, parts, containers, etc., consumed	19 948 345	Gross book value of total assets at end of year	23 852 691
Cost of resales	1 387 786	Total depreciation during year ²	1 670 460
Cost of fuels	257 879	Total rental payments ²	406 686
Cost of purchased electricity	547 579	Buildings and other structures rental payments ²	203 457
Cost of contract work	629 012	Machinery and equipment rental payments ²	203 229

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

OREGON

Albany is in Benton and Linn Counties.

Lake Oswego is in Clackamas, Multnomah, and Washington Counties.

Milwaukie is in Clackamas and Multnomah Counties.

Portland is in Clackamas, Multnomah, and Washington Counties.

Salem is in Marion and Polk Counties.

Tualatin is in Clackamas and Washington Counties.

Wilsonville is in Clackamas and Washington Counties.

Appendix E. Metropolitan Areas

OREGON

Eugene—Springfield, OR MSA

Lane County, OR

Medford—Ashland, OR MSA

Jackson County, OR

Portland—Vancouver, OR—WA PMSA

Clackamas County, OR

Columbia County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Clark County, WA

Portland—Salem, OR—WA CMSA

Portland—Vancouver, OR—WA PMSA

Clackamas County, OR

Columbia County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Clark County, WA

Salem, OR PMSA

Marion County, OR

Polk County, OR

Salem, OR PMSA

Marion County, OR

Polk County, OR

Pennsylvania

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA													
31-33	Manufacturing	1	17 128	6 357	826 521	27 641 293	597 544	1 198 200	17 045 095	86 212 087	86 722 271	172 193 216	6 902 381
311	Food mfg	1	1 368	462	75 758	2 273 634	53 969	108 297	1 434 428	9 130 026	11 313 014	20 374 271	597 011
3111	Animal food mfg	1	82	25	2 647	90 852	1 651	3 499	43 982	294 173	751 891	1 041 222	44 657
31111	Animal food mfg	1	82	25	2 647	90 852	1 651	3 499	43 982	294 173	751 891	1 041 222	44 657
311111	Dog & cat food mfg	-	7	6	1 217	44 630	1 029	2 296	29 240	167 573	325 398	491 200	35 848
311119	Other animal food mfg	3	75	19	1 430	46 222	622	1 203	14 742	126 600	426 493	550 022	8 809
3112	Grain & oilseed milling	-	29	6	1 323	64 870	1 035	2 200	51 767	597 226	483 888	1 035 955	D
31121	Flour milling & malt mfg	1	24	3	e	D	D	D	D	D	D	D	D
311211	Flour milling	1	22	3	e	D	D	D	D	D	D	D	3 340
31123	Breakfast cereal mfg	-	3	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	160	47	13 199	439 184	10 338	21 087	301 540	1 910 578	1 988 909	3 871 460	75 909
31132	Chocolate & confectionery mfg from cacao beans	-	19	5	4 829	214 095	3 483	6 621	134 272	803 227	1 030 419	1 829 692	15 244
311320	Chocolate & confectionery mfg from cacao beans	-	19	5	4 829	214 095	3 483	6 621	134 272	803 227	1 030 419	1 829 692	15 244
31133	Confectionery mfg from purchased chocolate	1	91	32	6 519	174 230	5 346	11 046	132 535	850 304	814 144	1 640 638	38 202
311330	Confectionery mfg from purchased chocolate	1	91	32	6 519	174 230	5 346	11 046	132 535	850 304	814 144	1 640 638	38 202
31134	Nonchocolate confectionery mfg	-	50	10	1 851	50 859	1 509	3 420	34 733	257 047	144 346	401 130	22 463
311340	Nonchocolate confectionery mfg	-	50	10	1 851	50 859	1 509	3 420	34 733	257 047	144 346	401 130	22 463
3114	Fruit & vegetable preserving & specialty food mfg	3	58	33	7 653	221 020	6 261	12 575	165 701	1 248 284	889 773	2 144 377	63 558
31141	Frozen food mfg	2	26	15	2 142	54 096	1 859	3 515	40 683	214 404	210 752	425 642	21 875
311411	Frozen fruit, juice, & vegetable mfg	2	6	4	418	11 737	362	772	9 296	34 949	51 606	87 020	4 132
311412	Frozen specialty food mfg	2	20	11	1 724	42 359	1 497	2 743	31 387	179 455	159 146	338 622	17 743
31142	Fruit & vegetable canning, pickling, & drying	3	32	18	5 511	166 924	4 402	9 060	125 018	1 033 880	679 021	1 718 735	41 683
311421	Fruit & vegetable canning	1	28	14	g	D	D	D	D	D	D	D	D
311422	Specialty canning	4	3	3	2 985	99 759	2 347	4 782	79 494	774 945	354 714	1 128 230	27 272
311423	Dried & dehydrated food mfg	9	1	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	126	56	7 599	247 649	4 436	9 005	134 466	880 245	1 988 542	2 860 109	89 370
31151	Dairy product (except frozen) mfg	2	86	48	6 279	209 249	3 593	7 186	113 162	712 330	1 756 582	2 465 163	72 977
311511	Fluid milk mfg	2	50	32	3 858	132 327	1 678	3 390	53 843	332 376	865 006	1 194 937	35 897
311513	Cheese mfg	-	26	10	1 995	63 706	1 614	3 140	50 854	318 046	640 102	966 208	32 408
311514	Dry, condensed, & evaporated dairy product mfg	4	8	5	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	2	40	8	1 320	38 400	843	1 819	21 304	167 915	231 960	394 946	16 393
311520	Ice cream & frozen dessert mfg	2	40	8	1 320	38 400	843	1 819	21 304	167 915	231 960	394 946	16 393
3116	Meat product mfg	1	158	87	14 755	407 173	11 658	24 625	268 632	1 026 523	3 107 790	4 137 792	69 927
31161	Animal slaughtering & processing	1	158	87	14 755	407 173	11 658	24 625	268 632	1 026 523	3 107 790	4 137 792	69 927
311611	Animal (except poultry) slaughtering	-	56	23	4 923	148 478	3 576	7 458	92 119	282 092	1 464 400	1 750 503	32 140
311612	Meat processed from carcasses	2	74	46	5 169	149 440	3 968	7 946	97 528	428 093	1 061 078	1 490 660	25 473
311613	Rendering & meat byproduct processing	1	9	4	301	11 007	176	398	6 094	53 683	74 305	127 918	3 954
311615	Poultry processing	-	19	14	4 362	98 248	3 938	8 823	72 891	262 655	508 007	768 711	8 360
3117	Seafood product preparation & packaging	-	9	4	900	25 818	615	1 277	14 446	55 023	141 740	196 730	D
31171	Seafood product preparation & packaging	-	9	4	900	25 818	615	1 277	14 446	55 023	141 740	196 730	D
311712	Fresh & frozen seafood processing	-	5	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	597	132	18 641	516 062	12 341	22 781	320 879	2 071 364	1 051 815	3 139 838	86 660
31181	Bread & bakery product mfg	2	541	106	14 107	364 693	8 668	15 157	205 401	1 342 900	628 471	1 966 160	54 204
311811	Retail bakeries	4	378	31	2 759	34 082	1 555	1 981	17 255	73 596	42 372	116 212	3 713
311812	Commercial bakeries	2	144	61	8 653	246 662	4 796	8 650	123 719	917 819	379 492	1 292 294	35 172
311813	Frozen cakes, pies, & other pastries mfg	-	19	14	2 695	83 949	2 317	4 526	64 427	351 485	206 607	557 654	15 319
31182	Cookie, cracker, & pasta mfg	-	53	25	4 498	150 596	3 645	7 568	114 981	727 348	422 196	1 171 416	32 386
311821	Cookie & cracker mfg	-	28	16	3 708	128 013	3 024	6 413	99 098	610 003	347 188	981 507	27 434
311822	Flour mixes & dough mfg from purchased flour	-	9	6	437	11 670	326	636	7 601	70 816	31 786	100 335	2 249
311823	Dry pasta mfg	2	16	3	353	10 913	295	519	8 282	46 529	43 222	89 574	2 703

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg.....	1	149	72	9 041	261 006	5 634	11 248	133 015	1 046 610	908 666	1 946 788	123 739
31191	Snack food mfg.....	—	59	39	6 253	184 324	3 765	7 853	89 688	707 708	491 782	1 201 009	36 115
311911	Roasted nuts & peanut butter mfg.....	1	5	3	220	5 712	105	209	1 761	13 707	30 703	44 095	925
311919	Other snack food mfg..	—	54	36	6 033	178 612	3 660	7 644	87 927	694 001	461 079	1 156 914	35 190
31192	Coffee & tea mfg.....	—	5	2	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	—	5	2	c	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg.....	—	6	4	203	7 574	91	187	2 925	95 432	51 379	151 325	D
311930	Flavoring syrup & concentrate mfg.....	—	6	4	203	7 574	91	187	2 925	95 432	51 379	151 325	D
31194	Seasoning & dressing mfg.....	6	22	8	f	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	5	13	1	c	D	D	D	D	D	D	D	D
311942	Spice & extract mfg...	7	9	7	578	21 136	325	656	10 895	52 494	40 394	93 697	D
31199	All other food mfg.....	2	57	19	1 673	38 467	1 189	2 079	22 678	112 740	252 124	364 898	10 444
311991	Perishable prepared food mfg.....	1	20	7	850	19 152	610	1 074	11 389	48 357	54 579	102 690	2 704
311999	All other miscellaneous food mfg.....	2	37	12	823	19 315	579	1 005	11 289	64 383	197 545	262 208	7 740
312	Beverage & tobacco product mfg.....	3	132	48	7 097	232 866	4 301	8 392	131 801	1 248 715	1 445 543	2 688 042	65 431
3121	Beverage mfg.....	4	123	41	6 217	207 073	3 562	6 867	111 149	1 023 142	1 261 561	2 277 385	59 072
31211	Soft drink & ice mfg.....	3	67	25	4 247	140 155	2 168	4 483	63 079	810 931	1 003 951	1 807 524	41 867
312111	Soft drink mfg.....	3	33	20	3 935	133 715	1 987	4 142	59 645	788 938	977 152	1 758 659	40 036
312112	Bottled water mfg.....	9	6	2	117	2 312	71	128	1 295	13 044	22 118	35 156	841
312113	Ice mfg.....	3	28	3	195	4 128	110	213	2 139	8 949	4 681	13 709	990
31212	Breweries.....	4	36	14	1 726	59 980	1 284	2 163	45 314	177 154	226 518	404 231	15 157
312120	Breweries.....	4	36	14	1 726	59 980	1 284	2 163	45 314	177 154	226 518	404 231	15 157
31213	Wineries.....	8	19	1	c	D	D	D	D	D	D	D	D
312130	Wineries.....	8	19	1	c	D	D	D	D	D	D	D	D
31214	Distilleries.....	9	1	1	c	D	D	D	D	D	D	D	D
312140	Distilleries.....	9	1	1	c	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	—	9	7	880	25 793	739	1 525	20 652	225 573	183 982	410 657	6 359
31222	Tobacco product mfg...	—	8	6	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg.....	—	8	6	f	D	D	D	D	D	D	D	D
313	Textile mills.....	3	223	125	14 080	351 417	11 494	23 633	248 892	856 530	852 943	1 704 867	66 779
3131	Fiber, yarn, & thread mills..	1	28	17	1 574	31 255	1 399	2 686	23 784	49 514	73 074	122 113	4 882
31311	Fiber, yarn, & thread mills.....	1	28	17	1 574	31 255	1 399	2 686	23 784	49 514	73 074	122 113	4 882
313111	Yarn spinning mills...	—	8	3	593	11 417	547	1 040	9 636	14 473	8 813	22 649	492
313112	Yarn texturing, throwing, & twisting mills.....	—	14	9	615	12 463	538	1 013	9 230	16 822	44 935	62 067	3 534
313113	Thread mills.....	1	6	5	366	7 375	314	633	4 918	18 219	19 326	37 397	856
3132	Fabric mills.....	2	115	67	9 394	235 530	7 678	15 825	168 933	547 451	546 503	1 090 796	48 181
31321	Broadwoven fabric mills..	2	43	24	3 352	85 636	2 786	5 929	64 168	210 863	241 028	450 726	28 844
313210	Broadwoven fabric mills.....	2	43	24	3 352	85 636	2 786	5 929	64 168	210 863	241 028	450 726	28 844
31322	Narrow fabric mills & schiffli machine embroidery.....	—	35	17	2 621	66 071	2 098	4 244	43 433	121 321	85 864	205 474	6 234
313221	Narrow fabric mills....	—	29	16	g	D	D	D	D	D	D	D	5 726
313222	Schiffli machine embroidery.....	—	6	1	e	D	D	D	D	D	D	D	508
31323	Nonwoven fabric mills....	—	13	9	1 608	40 821	1 301	2 559	29 043	101 685	107 220	210 142	6 520
313230	Nonwoven fabric mills..	—	13	9	1 608	40 821	1 301	2 559	29 043	101 685	107 220	210 142	6 520
31324	Knit fabric mills.....	5	24	17	1 813	43 002	1 493	3 093	32 289	113 582	112 391	224 454	6 583
313241	Weft knit fabric mills..	3	17	11	1 156	27 747	991	2 068	22 113	53 180	62 967	113 824	3 950
313249	Other knit fabric & lace mills.....	7	7	6	657	15 255	502	1 025	10 176	60 402	49 424	110 630	2 633
3133	Textile & fabric finishing & fabric coating mills.....	6	80	41	3 112	84 632	2 417	5 122	56 175	259 565	233 366	491 958	13 716
31331	Textile & fabric finishing mills.....	6	66	34	2 631	69 802	2 096	4 598	47 447	227 659	194 471	422 215	12 179
313311	Broadwoven fabric finishing mills.....	5	39	16	1 152	31 237	859	1 889	21 021	84 324	120 372	205 748	5 088
313312	Textile & fabric finishing mills.....	7	27	18	1 479	38 565	1 237	2 709	26 426	143 335	74 099	216 467	7 091
31332	Fabric coating mills.....	2	14	7	481	14 830	321	524	8 728	31 906	38 895	69 743	1 537
313320	Fabric coating mills...	2	14	7	481	14 830	321	524	8 728	31 906	38 895	69 743	1 537

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PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	1	290	70	8 029	189 894	6 210	11 872	119 834	438 797	591 430	1 028 084	25 114
3141	Textile furnishings mills	1	123	25	4 610	118 459	3 626	7 407	78 079	290 719	445 747	740 783	17 949
31411	Carpet & rug mills	—	8	4	1 830	66 306	1 413	3 287	43 237	165 427	230 215	395 160	13 645
314110	Carpet & rug mills	—	8	4	1 830	66 306	1 413	3 287	43 237	165 427	230 215	395 160	13 645
31412	Curtain & linen mills	2	115	21	2 780	52 153	2 213	4 120	34 842	125 292	215 532	345 623	4 304
314121	Curtain & drapery mills	—	84	8	883	14 266	722	1 143	8 936	38 225	33 227	73 262	507
314129	Other household textile product mills	2	31	13	1 897	37 887	1 491	2 977	25 906	87 067	182 305	272 361	3 797
3149	Other textile product mills	2	167	45	3 419	71 435	2 584	4 465	41 755	148 078	145 683	287 301	7 165
31491	Textile bag & canvas mills	2	74	12	914	21 736	707	1 232	12 444	41 330	35 064	75 528	1 927
314911	Textile bag mills	—	12	4	339	7 057	272	458	3 839	13 884	8 594	22 496	245
314912	Canvas & related product mills	3	62	8	575	14 679	435	774	8 605	27 446	26 470	53 032	1 682
31499	All other textile product mills	2	93	33	2 505	49 699	1 877	3 233	29 311	106 748	110 619	211 773	5 238
314991	Rope, cordage, & twine mills	1	9	4	355	10 241	219	467	4 881	26 422	48 791	74 638	953
314999	All other miscellaneous textile product mills	2	84	29	2 150	39 458	1 658	2 766	24 430	80 326	61 828	137 135	4 285
315	Apparel mfg	2	751	371	40 776	755 724	33 595	61 310	545 047	2 010 332	1 759 057	3 717 401	43 344
3151	Apparel knitting mills	—	61	34	4 451	90 580	3 748	7 211	65 076	276 093	192 708	462 718	9 039
31511	Hosiery & sock mills	—	13	4	642	13 603	566	1 120	11 484	65 902	29 272	94 515	2 251
315119	Other hosiery & sock mills	—	7	3	567	12 556	508	999	10 599	64 272	27 498	91 064	2 146
31519	Other apparel knitting mills	—	48	30	3 809	76 977	3 182	6 091	53 592	210 191	163 436	368 203	6 788
315191	Outerwear knitting mills	1	35	21	1 694	34 759	1 443	2 551	22 762	78 615	100 404	170 311	1 505
315192	Underwear & nightwear knitting mills	—	13	9	2 115	42 218	1 739	3 540	30 830	131 576	63 032	197 892	5 283
3152	Cut & sew apparel mfg	2	589	307	32 663	588 159	26 930	48 469	426 599	1 583 268	1 403 290	2 934 669	28 408
31521	Cut & sew apparel contractors	5	337	164	12 296	190 305	11 276	20 411	162 374	326 073	75 313	400 497	11 109
315211	Men's & boys' cut & sew apparel contractors	5	44	33	2 376	35 789	2 182	3 686	29 401	79 972	18 209	98 212	1 910
315212	Women's, girls', & infants' cut & sew apparel contractors	5	293	131	9 920	154 516	9 094	16 725	132 973	246 101	57 104	302 285	9 199
31522	Men's & boys' cut & sew apparel mfg	4	94	59	8 101	151 380	6 991	13 046	113 421	434 745	393 479	821 807	8 665
315221	Men's & boys' cut & sew underwear & nightwear mfg	8	6	6	445	6 389	394	710	5 138	16 344	10 851	27 829	340
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	3	20	16	3 380	74 378	2 738	5 119	49 254	181 266	207 820	381 586	2 773
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	5	27	20	2 350	35 504	2 137	3 910	30 555	158 657	111 669	270 819	2 924
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	5	12	6	996	20 100	927	1 864	17 396	42 508	31 136	73 410	1 354
315225	Men's & boys' cut & sew work clothing mfg	9	6	2	145	2 785	130	234	2 254	8 523	6 631	15 187	183
315228	Men's & boys' cut & sew other outerwear mfg	3	23	9	785	12 224	665	1 209	8 824	27 447	25 372	52 976	1 091
31523	Women's & girls' cut & sew apparel mfg	1	126	69	11 348	232 025	7 988	13 912	142 235	781 750	906 107	1 644 331	6 352
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	18	14	3 031	48 480	1 927	3 271	32 412	223 851	251 334	490 916	498
315232	Women's & girls' cut & sew blouse & shirt mfg	3	30	19	1 748	29 645	1 499	2 717	22 426	98 452	76 920	172 078	1 080
315233	Women's & girls' cut & sew dress mfg	—	22	9	1 235	20 729	1 012	2 088	17 563	105 807	202 146	307 058	1 882
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	17	6	2 003	74 233	943	1 351	29 467	229 968	281 749	455 552	1 613
315239	Women's & girls' cut & sew other outerwear mfg	1	39	21	3 331	58 938	2 607	4 485	40 367	123 672	93 958	218 727	1 279
31529	Other cut & sew apparel mfg	2	32	15	918	14 449	675	1 100	8 569	40 700	28 391	68 034	2 282
315299	All other cut & sew apparel mfg	2	25	14	862	13 707	643	1 051	8 144	39 323	27 313	65 547	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	101	30	3 662	76 985	2 917	5 630	53 372	150 971	163 059	320 014	5 897
31599	Apparel accessories & other apparel mfg	1	101	30	3 662	76 985	2 917	5 630	53 372	150 971	163 059	320 014	5 897
315991	Hat, cap, & millinery mfg	1	18	9	1 508	32 684	1 240	2 315	23 469	59 904	52 443	116 366	2 001
315992	Glove & mitten mfg ...	1	3	3	217	3 254	183	348	2 442	5 881	5 892	11 814	D
315993	Men's & boys' neckwear mfg	6	4	2	113	2 754	92	158	1 542	6 506	5 469	11 973	D
315999	Other apparel accessories & other apparel mfg	—	76	16	1 824	38 293	1 402	2 809	25 919	78 680	99 255	179 861	3 752
316	Leather & allied product mfg .	—	73	26	5 199	105 925	4 426	8 464	78 783	222 363	467 577	676 577	7 106
3161	Leather & hide tanning & finishing	—	19	8	2 332	50 898	2 058	3 973	42 677	98 007	356 085	442 032	4 195
31611	Leather & hide tanning & finishing	—	19	8	2 332	50 898	2 058	3 973	42 677	98 007	356 085	442 032	4 195
316110	Leather & hide tanning & finishing	—	19	8	2 332	50 898	2 058	3 973	42 677	98 007	356 085	442 032	4 195
3162	Footwear mfg	—	29	17	2 705	51 600	2 228	4 224	33 832	115 724	104 669	218 921	2 809
31621	Footwear mfg	—	29	17	2 705	51 600	2 228	4 224	33 832	115 724	104 669	218 921	2 809
316211	Rubber & plastics footwear mfg	—	4	3	460	11 040	338	685	5 520	23 007	26 057	48 018	D
316213	Men's footwear (except athletic) mfg .	1	12	6	1 556	28 984	1 347	2 548	20 339	66 612	60 337	124 374	1 942
316219	Other footwear mfg ...	—	12	7	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	3	25	1	162	3 427	140	267	2 274	8 632	6 823	15 624	102
31699	Other leather & allied product mfg	3	25	1	162	3 427	140	267	2 274	8 632	6 823	15 624	102
316999	All other leather good mfg	2	15	1	113	2 615	99	186	1 701	6 776	5 342	12 284	59
321	Wood product mfg	1	997	263	24 470	577 732	20 014	37 246	411 107	1 371 048	1 935 708	3 292 725	91 534
3211	Sawmills & wood preservation	2	361	72	5 271	111 926	4 458	7 824	81 923	329 594	583 822	905 154	27 468
32111	Sawmills & wood preservation	2	361	72	5 271	111 926	4 458	7 824	81 923	329 594	583 822	905 154	27 468
321113	Sawmills	3	342	64	4 965	103 922	4 212	7 342	76 718	294 922	432 503	720 675	24 938
321114	Wood preservation ...	—	19	8	306	8 004	246	482	5 205	34 672	151 319	184 479	2 530
3212	Veneer, plywood, & engineered wood product mfg	2	56	28	3 056	88 503	2 539	5 270	67 102	218 234	230 334	447 380	20 027
32121	Veneer, plywood, & engineered wood product mfg	2	56	28	3 056	88 503	2 539	5 270	67 102	218 234	230 334	447 380	20 027
321211	Hardwood veneer & plywood mfg	7	11	8	f	D	D	D	D	D	D	D	4 695
321214	Truss mfg	1	29	14	819	23 249	613	1 261	15 021	44 881	59 660	104 335	D
321219	Reconstituted wood product mfg	—	15	6	1 330	43 354	1 132	2 354	34 858	135 748	108 960	243 664	11 836
3219	Other wood product mfg ...	1	580	163	16 143	377 303	13 017	24 152	262 082	823 220	1 121 552	1 940 191	44 039
32191	Millwork	1	212	59	6 307	147 888	5 105	9 667	106 804	319 754	434 791	751 576	23 031
321911	Wood window & door mfg	1	54	17	2 362	58 524	1 862	3 269	39 700	131 327	143 929	275 300	7 540
321912	Cut stock, resawing lumber, & planing....	1	79	24	2 691	62 442	2 308	4 690	48 407	136 045	225 647	359 023	13 109
321918	Other millwork (including flooring) ...	2	79	18	1 254	26 922	935	1 708	18 697	52 382	65 215	117 253	2 382
32192	Wood container & pallet mfg	2	182	41	2 633	50 068	2 256	4 172	37 182	108 303	136 655	244 062	6 740
321920	Wood container & pallet mfg	2	182	41	2 633	50 068	2 256	4 172	37 182	108 303	136 655	244 062	6 740
32199	All other wood product mfg	1	186	63	7 203	179 347	5 656	10 313	118 096	395 163	550 106	944 553	14 268
321991	Manufactured home (mobile home) mfg ..	1	19	18	3 031	80 012	2 438	4 397	54 245	188 158	262 262	450 964	5 813
321992	Prefabricated wood building mfg	—	55	28	3 025	75 434	2 264	4 108	45 799	150 702	221 511	371 979	5 575
321999	All other miscellaneous wood product mfg ...	1	112	17	1 147	23 901	954	1 808	18 052	56 303	66 333	121 610	2 880
322	Paper mfg	—	328	232	32 228	1 101 410	24 523	50 980	723 142	4 535 220	4 414 091	8 901 062	445 926
3221	Pulp, paper, & paperboard mills	—	26	26	9 235	340 123	7 674	16 550	254 213	2 388 851	1 608 823	3 952 613	253 114
32212	Paper mills	—	13	13	8 126	292 981	6 792	14 440	219 613	2 237 353	1 471 254	3 664 031	241 010
322121	Paper (except newsprint) mills	—	12	12	i	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	13	13	1 109	47 142	882	2 110	34 600	151 498	137 569	288 582	12 104
322130	Paperboard mills	—	13	13	1 109	47 142	882	2 110	34 600	151 498	137 569	288 582	12 104

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	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg.....	1	302	206	22 993	761 287	16 849	34 430	468 929	2 146 369	2 805 268	4 948 449	192 812
32221	Paperboard container mfg.....	—	163	119	10 545	346 121	8 037	16 865	221 463	834 449	1 163 127	1 996 904	86 024
322211	Corrugated & solid fiber box mfg.....	—	91	68	6 428	223 223	4 688	9 720	132 601	531 298	798 284	1 330 501	52 982
322212	Folding paperboard box mfg.....	2	41	26	2 279	72 598	1 833	3 866	50 924	167 891	193 222	359 367	25 909
322213	Setup paperboard box mfg.....	2	14	11	604	13 896	486	971	9 710	32 729	23 317	55 447	2 074
322214	Fiber can, tube, drum, & similar products mfg.....	—	13	10	512	15 375	401	819	11 276	38 113	47 715	86 312	1 240
322215	Nonfolding sanitary food container mfg....	—	4	4	722	21 029	629	1 489	16 952	64 418	100 589	165 277	3 819
32222	Paper bag & coated & treated paper mfg.....	—	49	33	4 538	176 307	3 163	6 379	104 399	675 274	775 897	1 451 252	32 685
322221	Coated & laminated packaging paper & plastics film mfg.....	9	4	3	140	4 321	109	247	3 218	15 618	26 466	42 071	1 768
322222	Coated & laminated paper mfg.....	—	32	22	3 066	124 015	2 055	4 040	70 829	544 282	590 026	1 135 756	24 767
322223	Plastics, foil, & coated paper bag mfg.....	—	4	4	628	23 097	471	996	14 276	65 116	61 255	125 600	3 028
322224	Uncoated paper & multiwall bag mfg....	—	4	2	218	5 960	181	359	4 438	14 663	26 343	40 933	D
322225	Laminated aluminum foil mfg for flexible packaging uses.....	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg... 1	42	24	3 930	112 715	2 709	5 726	67 678	262 021	411 673	669 916	21 490	
322231	Die-cut paper & paperboard office supplies mfg.....	1	20	8	413	11 441	260	539	6 721	31 739	117 871	149 998	3 357
322232	Envelope mfg.....	1	13	11	2 535	73 376	1 697	3 663	41 561	148 945	197 095	345 144	13 832
322233	Stationery, tablet, & related product mfg... 1	9	5	982	27 898	752	1 524	19 396	81 337	96 707	174 774	4 301	
32229	Other converted paper product mfg.....	1	48	30	3 980	126 144	2 940	5 460	75 389	374 625	454 571	830 377	52 613
322291	Sanitary paper product mfg.....	1	11	9	1 620	63 771	1 216	2 408	42 290	201 955	250 359	449 100	40 559
322299	All other converted paper product mfg... 2	37	21	2 360	62 373	1 724	3 052	33 099	172 670	204 212	381 277	12 054	
323	Printing & related support activities.....	1	1 795	422	51 438	1 631 388	37 676	73 736	1 057 265	3 797 675	2 474 133	6 260 876	335 319
3231	Printing & related support activities.....	1	1 795	422	51 438	1 631 388	37 676	73 736	1 057 265	3 797 675	2 474 133	6 260 876	335 319
32311	Printing.....	1	1 601	375	45 942	1 453 055	33 426	65 352	939 736	3 462 981	2 382 455	5 834 328	316 915
323110	Commercial lithographic printing... 1	826	217	26 758	889 791	19 553	38 762	587 717	2 012 903	1 323 623	3 335 070	202 331	
323111	Commercial gravure printing.....	2	18	8	1 057	43 898	810	1 902	30 695	106 448	123 671	229 920	9 702
323112	Commercial flexographic printing... 3	31	11	1 462	48 754	954	1 798	25 402	118 684	99 441	216 384	6 152	
323113	Commercial screen printing.....	2	149	28	2 152	44 096	1 650	2 884	26 909	84 896	54 091	139 517	5 138
323114	Quick printing.....	2	304	14	1 910	47 486	1 306	2 077	28 218	106 788	53 044	159 720	6 812
323115	Digital printing.....	2	20	5	314	10 212	185	362	5 200	21 752	10 652	32 491	3 233
323116	Manifold business form printing.....	1	61	42	4 538	135 460	3 215	6 340	85 569	476 626	448 403	919 526	25 726
323117	Book printing.....	—	33	20	4 176	130 605	3 329	6 765	92 077	284 387	127 529	410 000	46 287
323118	Blankbook, looseleaf binder, & device mfg... 1	11	9	1 600	42 089	1 022	1 875	22 765	109 540	58 147	167 105	3 638	
323119	Other commercial printing.....	6	148	21	1 975	60 664	1 402	2 587	35 184	140 957	83 854	224 595	7 896
32312	Support activities for printing.....	1	194	47	5 496	178 333	4 250	8 384	117 529	334 694	91 678	426 548	18 404
323121	Tradebinding & related work.....	—	48	15	1 384	40 482	1 073	2 341	26 201	73 281	26 590	100 510	4 446
323122	Prepress services.... 1	146	32	4 112	137 851	3 177	6 043	91 328	261 413	65 088	326 038	13 958	
324	Petroleum & coal products mfg.....	—	165	52	7 329	362 733	4 987	11 686	233 439	1 737 673	7 711 989	9 447 025	593 616
3241	Petroleum & coal products mfg.....	—	165	52	7 329	362 733	4 987	11 686	233 439	1 737 673	7 711 989	9 447 025	593 616
32411	Petroleum refineries... 1	17	16	4 017	226 040	2 536	6 262	142 948	1 269 252	6 906 555	8 172 937	561 293	
324110	Petroleum refineries... 1	17	16	4 017	226 040	2 536	6 262	142 948	1 269 252	6 906 555	8 172 937	561 293	
32412	Asphalt paving, roofing, & saturated materials mfg.....	2	111	13	1 184	45 633	933	2 005	32 443	234 668	405 194	639 941	18 455
324121	Asphalt paving mixture & block mfg.....	2	95	7	693	25 651	559	1 152	18 765	155 049	230 523	384 419	11 254
324122	Asphalt shingle & coating materials mfg.....	2	16	6	491	19 982	374	853	13 678	79 619	174 671	255 522	7 201

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PENNSYLVANIA—Con. Manufacturing— Con.												
324	Petroleum & coal products mfg—Con.												
3241	Petroleum & coal products mfg—Con.												
32419	Other petroleum & coal products mfg	1	37	23	2 128	91 060	1 518	3 419	58 048	233 753	400 240	634 147	13 868
324191	Petroleum lubricating oil & grease mfg	1	30	18	953	37 482	523	1 006	14 599	143 713	206 059	350 270	4 409
324199	All other petroleum & coal products mfg	—	7	5	1 175	53 578	995	2 413	43 449	90 040	194 181	283 877	9 459
325	Chemical mfg	—	616	277	33 111	1 556 397	19 235	39 148	743 322	11 150 970	8 136 097	19 295 648	905 322
3251	Basic chemical mfg	1	124	50	5 475	243 427	3 129	6 514	127 474	1 150 564	1 237 932	2 376 937	138 973
32511	Petrochemical mfg	—	2	2	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	—	2	2	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	1	33	6	f	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	1	33	6	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	23	12	1 566	68 066	868	1 746	32 820	182 811	126 615	308 904	21 423
325131	Inorganic dye & pigment mfg	—	7	6	803	35 196	460	1 047	17 061	93 019	59 048	152 211	9 364
325132	Synthetic organic dye & pigment mfg	1	16	6	763	32 870	408	699	15 759	89 792	67 567	156 693	12 059
32518	Other basic inorganic chemical mfg	—	31	12	1 078	49 557	723	1 605	30 616	237 639	241 600	481 030	36 447
325188	All other basic inorganic chemical mfg	—	31	12	1 078	49 557	723	1 605	30 616	237 639	241 600	481 030	36 447
32519	Other basic organic chemical mfg	1	35	18	1 792	79 756	1 120	2 259	45 211	430 102	510 964	939 087	36 066
325192	Cyclic crude & intermediate mfg	—	4	4	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	28	14	1 292	54 514	759	1 540	28 138	311 751	415 608	724 736	27 856
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	32	24	3 396	182 337	1 875	4 124	87 153	548 691	1 008 742	1 549 566	79 433
32521	Resin & synthetic rubber mfg	—	30	24	h	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	24	22	3 226	172 691	1 780	3 952	83 157	501 712	950 447	1 444 367	D
325212	Synthetic rubber mfg	—	6	2	c	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	1	36	8	903	29 041	591	1 213	15 522	103 028	173 210	276 059	7 947
32531	Fertilizer mfg	1	29	6	562	15 965	426	886	11 165	74 510	145 472	220 740	5 892
325311	Nitrogenous fertilizer mfg	2	6	2	c	D	D	D	D	D	D	D	3 387
325314	Fertilizer (mixing only) mfg	1	21	3	410	11 035	324	688	7 987	42 676	111 120	153 959	D
32532	Pesticide & other agricultural chemical mfg	2	7	2	341	13 076	165	327	4 357	28 518	27 738	55 319	2 055
325320	Pesticide & other agricultural chemical mfg	2	7	2	341	13 076	165	327	4 357	28 518	27 738	55 319	2 055
3254	Pharmaceutical & medicine mfg	—	74	48	11 901	684 206	6 633	13 561	310 051	7 490 719	3 745 811	11 273 113	556 469
32541	Pharmaceutical & medicine mfg	—	74	48	11 901	684 206	6 633	13 561	310 051	7 490 719	3 745 811	11 273 113	556 469
325411	Medicinal & botanical mfg	—	12	7	1 038	58 313	617	1 267	29 524	502 713	236 363	745 778	51 054
325412	Pharmaceutical preparation mfg	—	34	22	8 567	512 283	5 021	10 468	252 475	6 616 737	3 279 676	9 954 865	478 569
325413	In-vitro diagnostic substance mfg	—	5	3	217	7 260	143	268	3 487	16 201	6 654	23 402	848
325414	Biological product (except diagnostic) mfg	2	23	16	2 079	106 350	852	1 558	24 565	355 068	223 118	549 068	25 998
3255	Paint, coating, & adhesive mfg	1	104	45	3 916	159 932	2 067	4 074	66 370	664 282	712 273	1 381 499	39 858
32551	Paint & coating mfg	1	69	33	3 048	125 796	1 582	2 976	50 617	495 885	517 622	1 016 830	24 495
325510	Paint & coating mfg	1	69	33	3 048	125 796	1 582	2 976	50 617	495 885	517 622	1 016 830	24 495
32552	Adhesive mfg	2	35	12	868	34 136	485	1 098	15 753	168 397	194 651	364 669	15 363
325520	Adhesive mfg	2	35	12	868	34 136	485	1 098	15 753	168 397	194 651	364 669	15 363
3256	Soap, cleaning compound, & toilet preparation mfg	2	98	36	2 839	91 708	1 833	3 486	45 136	366 723	379 351	746 566	31 838
32561	Soap & cleaning compound mfg	2	83	33	2 511	82 161	1 615	3 092	41 112	317 892	355 345	673 905	30 743
325611	Soap & other detergent mfg	1	38	12	898	27 673	594	1 108	15 944	122 804	131 083	254 896	4 985
325612	Polish & other sanitation good mfg	2	36	14	1 174	34 049	791	1 414	15 925	87 143	105 458	193 289	7 328
325613	Surface active agent mfg	4	9	7	439	20 439	230	570	9 243	107 945	118 804	225 720	18 430
32562	Toilet preparation mfg	2	15	3	328	9 547	218	394	4 024	48 831	24 006	72 661	1 095
325620	Toilet preparation mfg	2	15	3	328	9 547	218	394	4 024	48 831	24 006	72 661	1 095

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	2	148	66	4 681	165 746	3 107	6 176	91 616	826 963	878 778	1 691 908	50 804
32591	Printing ink mfg	3	23	11	528	22 056	281	636	10 328	91 527	70 483	157 948	6 862
325910	Printing ink mfg	3	23	11	528	22 056	281	636	10 328	91 527	70 483	157 948	6 862
32592	Explosives mfg	3	6	3	346	9 113	262	425	6 391	17 251	16 963	34 056	824
325920	Explosives mfg	3	6	3	346	9 113	262	425	6 391	17 251	16 963	34 056	824
32599	All other chemical product & preparation mfg	1	119	52	3 807	134 577	2 564	5 115	74 897	718 185	791 332	1 499 904	43 118
325991	Custom compounding of purchased resin...	1	41	19	g	D	D	D	D	D	D	D	13 481
325992	Photographic film, paper, plate, & chemical mfg	-	17	5	f	D	D	D	D	D	D	D	9 885
325998	All other miscellaneous chemical product & preparation mfg	2	61	28	1 667	60 857	993	2 087	30 647	321 779	370 954	684 407	19 752
326	Plastics & rubber products mfg	1	779	450	50 370	1 553 957	39 270	79 084	1 026 340	4 402 714	4 059 560	8 414 514	465 041
3261	Plastics product mfg	1	662	398	45 094	1 381 518	35 444	71 319	922 115	3 928 759	3 667 150	7 555 118	437 601
32611	Unsupported plastics film, sheet, & bag mfg ..	1	65	40	5 111	161 901	4 050	8 499	114 888	532 849	604 772	1 136 086	40 242
326111	Unsupported plastics bag mfg	3	21	14	1 755	49 191	1 480	3 285	38 707	128 012	145 558	273 795	10 343
326112	Unsupported plastics packaging film & sheet mfg	1	6	3	420	13 749	338	531	8 826	26 617	38 057	64 078	4 801
326113	Unsupported plastics film & sheet (except packaging) mfg	-	38	23	2 936	98 961	2 232	4 683	67 355	378 220	421 157	798 213	25 098
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	54	29	2 824	91 825	2 168	4 624	56 632	249 902	329 095	575 965	25 354
326121	Unsupported plastics profile shape mfg	3	39	18	2 041	66 228	1 577	3 351	41 244	145 977	139 887	287 735	16 117
326122	Plastics pipe & pipe fitting mfg	-	15	11	783	25 597	591	1 273	15 388	103 925	189 208	288 230	9 237
32613	Laminated plastics plate, sheet, & shape mfg	5	17	9	518	19 005	386	883	12 499	48 543	33 894	82 891	3 684
326130	Laminated plastics plate, sheet, & shape mfg	5	17	9	518	19 005	386	883	12 499	48 543	33 894	82 891	3 684
32614	Polystyrene foam product mfg	-	20	12	2 311	79 142	1 872	3 890	53 948	170 315	320 228	494 542	81 955
326140	Polystyrene foam product mfg	-	20	12	2 311	79 142	1 872	3 890	53 948	170 315	320 228	494 542	81 955
32615	Urethane & other foam product (except polystyrene) mfg	3	29	21	1 539	43 696	1 171	2 166	25 435	150 288	257 157	407 750	7 500
326150	Urethane & other foam product (except polystyrene) mfg	3	29	21	1 539	43 696	1 171	2 166	25 435	150 288	257 157	407 750	7 500
32616	Plastics bottle mfg	-	32	26	2 294	64 485	1 856	3 510	44 648	216 265	203 077	418 057	25 892
326160	Plastics bottle mfg	-	32	26	2 294	64 485	1 856	3 510	44 648	216 265	203 077	418 057	25 892
32619	Other plastics product mfg	-	445	261	30 497	921 464	23 941	47 747	614 065	2 560 597	1 918 927	4 439 827	252 974
326191	Plastics plumbing fixture mfg	-	18	7	748	17 061	623	1 219	13 430	47 406	29 753	76 687	2 059
326192	Resilient floor covering mfg	-	3	3	2 141	109 238	1 683	3 470	89 094	581 645	268 518	829 450	29 846
326199	All other plastics product mfg	1	424	251	27 608	795 165	21 635	43 058	511 541	1 931 546	1 620 656	3 533 690	221 069
3262	Rubber product mfg	-	117	52	5 276	172 439	3 826	7 765	104 225	473 955	392 410	859 396	27 440
32621	Tire mfg	-	45	11	1 645	47 590	1 343	2 733	34 992	123 662	116 763	235 406	5 596
326211	Tire mfg (except retreading)	-	12	5	1 294	38 826	1 085	2 142	29 206	107 113	91 894	193 987	4 426
326212	Tire retreading	1	33	6	351	8 764	258	591	5 786	16 549	24 869	41 419	1 170
32622	Rubber & plastics hoses & belting mfg	-	7	6	470	17 769	351	749	10 221	41 019	22 879	63 652	2 345
326220	Rubber & plastics hoses & belting mfg..	-	7	6	470	17 769	351	749	10 221	41 019	22 879	63 652	2 345
32629	Other rubber product mfg	-	65	35	3 161	107 080	2 132	4 283	59 012	309 274	252 768	560 338	19 499
326291	Rubber product mfg for mechanical use	-	24	13	1 086	36 134	776	1 510	21 222	101 198	45 264	145 448	6 809
326299	All other rubber product mfg	-	41	22	2 075	70 946	1 356	2 773	37 790	208 076	207 504	414 890	12 690

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	820	292	33 342	1 116 648	26 203	53 939	803 082	3 547 648	2 545 719	6 095 887	444 700
3271	Clay product & refractory mfg	-	127	65	6 741	196 307	5 429	10 527	145 522	516 403	328 751	852 159	35 517
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	65	25	3 311	84 531	2 755	4 869	64 888	199 892	83 525	282 810	7 875
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	4	2	f	D	D	D	D	D	D	D	312
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	46	15	1 690	35 056	1 416	2 434	26 910	83 361	28 630	111 473	1 692
327113	Porcelain electrical supply mfg	1	15	8	g	D	D	D	D	D	D	D	5 871
32712	Clay building material & refractories mfg	-	62	40	3 430	111 776	2 674	5 658	80 634	316 511	245 226	569 349	27 642
327121	Brick & structural clay tile mfg	-	13	9	726	22 180	543	1 128	16 394	53 885	31 121	86 361	3 630
327122	Ceramic wall & floor tile mfg	-	3	1	e	D	D	D	D	D	D	D	D
327123	Other structural clay product mfg	-	5	2	c	D	D	D	D	D	D	D	D
327124	Clay refractory mfg ...	-	24	17	878	29 574	640	1 318	18 437	72 380	79 155	152 264	4 360
327125	Nonclay refractory mfg	-	17	11	1 221	47 544	929	2 012	34 728	137 536	126 508	270 586	17 596
3272	Glass & glass product mfg	-	110	52	13 035	466 397	10 754	22 335	351 063	1 703 752	1 114 629	2 813 535	284 715
32721	Glass & glass product mfg	-	110	52	13 035	466 397	10 754	22 335	351 063	1 703 752	1 114 629	2 813 535	284 715
327211	Flat glass mfg	-	4	4	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	28	15	6 602	237 913	5 479	11 730	180 127	834 253	430 325	1 249 877	231 681
327213	Glass container mfg ..	-	6	6	h	D	D	D	D	D	D	D	18 948
327215	Glass product mfg made of purchased glass	1	72	27	2 793	90 517	2 136	4 438	59 081	362 990	411 176	771 945	D
3273	Cement & concrete product mfg	1	433	128	9 299	298 316	6 769	14 216	197 161	897 513	778 932	1 673 073	83 476
32731	Cement mfg	-	22	14	1 645	67 596	1 159	2 481	44 252	336 027	208 625	548 076	29 010
327310	Cement mfg	-	22	14	1 645	67 596	1 159	2 481	44 252	336 027	208 625	548 076	29 010
32732	Ready-mix concrete mfg.	2	200	49	2 827	90 332	2 148	4 406	64 251	228 892	270 999	501 777	20 450
327320	Ready-mix concrete mfg	2	200	49	2 827	90 332	2 148	4 406	64 251	228 892	270 999	501 777	20 450
32733	Concrete pipe, brick, & block mfg	1	75	22	1 574	46 802	1 039	2 373	28 543	121 538	120 706	239 478	14 157
327331	Concrete block & brick mfg	1	68	18	1 342	39 000	849	1 902	22 959	100 661	105 947	204 243	11 966
327332	Concrete pipe mfg	1	7	4	232	7 802	190	471	5 584	20 877	14 759	35 235	2 191
32739	Other concrete product mfg	1	136	43	3 253	93 586	2 423	4 956	60 115	211 056	178 602	383 742	19 859
327390	Other concrete product mfg	1	136	43	3 253	93 586	2 423	4 956	60 115	211 056	178 602	383 742	19 859
3274	Lime & gypsum product mfg	-	15	6	508	17 943	387	867	13 328	50 028	56 612	108 563	3 806
32741	Lime mfg	-	9	5	446	17 111	336	791	12 686	46 537	55 503	103 953	3 723
327410	Lime mfg	-	9	5	446	17 111	336	791	12 686	46 537	55 503	103 953	3 723
3279	Other nonmetallic mineral product mfg	1	135	41	3 759	137 685	2 864	5 994	96 008	379 952	266 795	648 557	37 186
32791	Abrasive product mfg ...	1	24	14	783	27 864	552	1 162	16 576	83 299	62 301	145 918	6 022
327910	Abrasive product mfg ..	1	24	14	783	27 864	552	1 162	16 576	83 299	62 301	145 918	6 022
32799	All other nonmetallic mineral product mfg ...	1	111	27	2 976	109 821	2 312	4 832	79 432	296 653	204 494	502 639	31 164
327991	Cut stone & stone product mfg	1	43	6	672	19 190	530	1 210	14 994	55 825	34 074	89 322	3 573
327992	Ground or treated mineral & earth mfg ..	4	29	6	516	14 981	388	818	9 531	51 997	41 366	93 081	4 726
327993	Mineral wool mfg	-	20	10	1 432	60 880	1 205	2 409	49 137	149 464	101 538	252 595	18 288
327999	All other miscellaneous nonmetallic mineral product mfg	-	19	5	356	14 770	189	395	5 770	39 367	27 516	67 641	4 577
331	Primary metal mfg	-	421	308	63 253	2 584 007	49 349	103 203	1 867 747	6 321 926	10 819 000	17 057 715	613 989
3311	Iron & steel mills & ferroalloy mfg	-	48	46	26 020	1 291 123	20 388	42 282	951 500	2 917 496	5 690 043	8 559 009	313 013
33111	Iron & steel mills & ferroalloy mfg	-	48	46	26 020	1 291 123	20 388	42 282	951 500	2 917 496	5 690 043	8 559 009	313 013
331111	Iron & steel mills	-	44	43	25 821	1 283 117	20 249	41 967	946 290	2 886 486	5 668 621	8 506 463	D
331112	Electrometallurgical ferroalloy product mfg	-	4	3	199	8 006	139	315	5 210	31 010	21 422	52 546	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3312	Steel product mfg from purchased steel	-	60	56	8 539	312 994	6 491	13 562	224 855	946 493	1 619 623	2 562 046	53 839
33121	Iron & steel pipes & tubes mfg from purchased steel	-	20	20	3 493	136 314	2 846	5 978	100 123	494 841	757 366	1 242 778	22 738
331210	Iron & steel pipes & tubes mfg from purchased steel	-	20	20	3 493	136 314	2 846	5 978	100 123	494 841	757 366	1 242 778	22 738
33122	Rolling & drawing of purchased steel	-	40	36	5 046	176 680	3 645	7 584	124 732	451 652	862 257	1 319 268	31 101
331221	Cold-rolled steel shape mfg	-	20	17	2 695	102 902	1 931	3 887	75 558	238 749	662 178	903 771	19 761
331222	Steel wire drawing	-	20	19	2 351	73 778	1 714	3 697	49 174	212 903	200 079	415 497	11 340
3313	Alumina & aluminum production & processing ..	-	23	20	4 240	160 937	3 370	7 088	115 636	511 051	1 166 506	1 657 018	60 792
33131	Alumina & aluminum production & processing	-	23	20	4 240	160 937	3 370	7 088	115 636	511 051	1 166 506	1 657 018	60 792
331314	Secondary smelting & alloying of aluminum ..	-	10	7	273	8 958	202	414	5 923	48 240	136 246	182 609	15 422
331315	Aluminum sheet, plate, & foil mfg	-	4	4	1 656	74 070	1 257	2 706	52 351	183 390	534 313	702 092	D
331316	Aluminum extruded product mfg	-	6	6	1 702	55 137	1 464	3 047	41 944	213 702	305 686	516 472	9 493
331319	Other aluminum rolling & drawing	-	3	3	609	22 772	447	921	15 418	65 719	190 261	255 845	D
3314	Nonferrous metal (except aluminum) production & processing	-	83	59	9 436	356 825	6 832	14 887	237 140	973 572	1 715 567	2 689 064	115 864
33141	Nonferrous metal (except aluminum) smelting & refining	-	15	9	1 700	75 090	1 242	2 966	48 249	270 444	269 532	544 224	38 774
331419	Other nonferrous metal primary smelting & refining	-	15	9	1 700	75 090	1 242	2 966	48 249	270 444	269 532	544 224	38 774
33142	Copper rolling, drawing, extruding, & alloying ...	-	18	18	3 124	114 118	2 153	4 696	74 448	275 342	868 082	1 150 546	14 678
331421	Copper rolling, drawing, & extruding ..	-	13	13	2 667	98 518	1 851	4 053	64 416	224 983	580 766	809 684	12 455
331423	Secondary smelting, refining, & alloying of copper	-	5	5	457	15 600	302	643	10 032	50 359	287 316	340 862	2 223
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	50	32	4 612	167 617	3 437	7 225	114 443	427 786	577 953	994 294	62 412
331491	Other nonferrous metal rolling, drawing, & extruding	3	24	15	1 597	57 665	1 042	2 310	34 759	139 642	209 860	342 868	24 929
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	26	17	3 015	109 952	2 395	4 915	79 684	288 144	368 093	651 426	37 483
3315	Foundries	-	207	127	15 018	462 128	12 268	25 384	338 616	973 314	627 261	1 590 578	70 481
33151	Ferrous metal foundries ..	-	105	75	9 249	281 016	7 634	15 798	207 773	614 851	377 598	983 149	44 108
331511	Iron foundries	-	64	47	5 817	186 098	4 736	10 052	137 837	399 060	248 353	643 893	34 409
331512	Steel investment foundries	-	12	10	1 096	30 809	947	1 920	22 096	79 537	34 508	112 074	2 100
331513	Steel foundries (except investment)	-	29	18	2 336	64 109	1 951	3 826	47 840	136 254	94 737	227 182	7 599
33152	Nonferrous metal foundries	-	102	52	5 769	181 112	4 634	9 586	130 843	358 463	249 663	607 429	26 373
331521	Aluminum die-casting foundries	-	12	8	1 741	58 134	1 495	3 138	46 538	122 936	105 529	227 610	11 366
331522	Nonferrous (except aluminum) die-casting foundries	-	13	7	1 181	37 362	806	1 540	21 823	64 342	25 879	89 506	4 199
331524	Aluminum foundries (except die-casting) ..	-	45	22	1 741	50 516	1 455	3 009	37 641	94 798	65 470	161 046	6 341
331525	Copper foundries (except die-casting) ..	-	25	13	875	27 151	698	1 445	18 903	62 517	29 396	92 802	3 367
331528	Other nonferrous foundries (except die-casting)	-	7	2	231	7 949	180	454	5 938	13 870	23 389	36 465	1 100
332	Fabricated metal product mfg	-	3 185	1 096	103 927	3 360 149	78 183	155 549	2 141 659	7 885 139	6 737 366	14 593 912	560 976
3321	Forging & stamping	-	184	113	12 947	436 030	9 965	21 342	286 575	993 571	869 411	1 876 108	79 485
33211	Forging & stamping	-	184	113	12 947	436 030	9 965	21 342	286 575	993 571	869 411	1 876 108	79 485
332111	Iron & steel forging ...	1	35	22	3 026	113 445	2 210	4 707	72 111	270 322	213 222	486 010	16 728
332112	Nonferrous forging ...	-	8	4	519	23 263	388	1 086	17 200	43 591	58 242	110 527	1 679
332114	Custom roll forming ...	-	21	8	763	27 097	496	1 024	15 550	75 439	94 092	170 411	2 916
332115	Crown & closure mfg. ...	-	6	4	698	26 327	644	1 434	21 771	86 781	70 010	158 295	4 919
332116	Metal stamping	1	83	51	4 821	154 748	3 695	7 623	93 975	325 049	282 521	607 209	33 486
332117	Powder metallurgy part mfg	-	31	24	3 120	91 150	2 532	5 468	65 968	192 389	151 324	343 656	19 757

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3322	Cutlery & handtool mfg	1	96	37	3 950	118 012	3 028	6 160	73 115	327 687	207 545	530 696	16 840
33221	Cutlery & handtool mfg . . .	1	96	37	3 950	118 012	3 028	6 160	73 115	327 687	207 545	530 696	16 840
332211	Cutlery & flatware (except precious) mfg	3	13	5	650	17 888	472	863	11 314	63 663	20 354	83 650	3 636
332212	Hand & edge tool mfg	—	66	23	2 649	82 325	2 025	4 155	48 790	212 026	168 732	378 894	9 522
332213	Saw blade & handsaw mfg	3	12	5	350	11 419	286	634	8 446	19 889	12 371	31 849	D
332214	Kitchen utensil, pot, & pan mfg	—	5	4	301	6 380	245	508	4 565	32 109	6 088	36 303	D
3323	Architectural & structural metals mfg	—	628	255	21 891	692 978	16 392	32 188	423 251	1 570 508	1 633 976	3 177 743	67 321
33231	Plate work & fabricated structural product mfg	—	255	114	8 610	282 492	6 463	11 901	172 590	689 513	726 559	1 397 476	25 808
332311	Prefabricated metal building & component mfg	—	18	8	474	14 097	333	748	7 510	41 719	58 003	99 703	1 826
332312	Fabricated structural metal mfg	—	151	69	5 530	178 156	4 199	7 532	110 055	466 688	545 295	1 000 433	15 955
332313	Plate work mfg	1	86	37	2 606	90 239	1 931	3 621	55 025	181 106	123 261	297 340	8 027
33232	Ornamental & architectural metal products mfg	—	373	141	13 281	410 486	9 929	20 287	250 661	880 995	907 417	1 780 267	41 513
332321	Metal window & door mfg	—	66	34	4 464	128 385	3 248	6 644	76 738	295 799	406 980	704 236	10 678
332322	Sheet metal work mfg	1	209	82	6 985	223 828	5 407	10 854	140 209	462 424	413 768	866 857	25 955
332323	Ornamental & architectural metal work mfg	1	98	25	1 832	58 273	1 274	2 789	33 714	122 772	86 669	209 174	4 880
3324	Boiler, tank, & shipping container mfg	—	101	67	5 592	198 784	3 909	7 885	116 085	466 693	709 504	1 175 722	22 115
33241	Power boiler & heat exchanger mfg	—	18	15	1 392	50 973	744	1 308	19 207	80 767	130 879	217 651	4 231
332410	Power boiler & heat exchanger mfg	—	18	15	1 392	50 973	744	1 308	19 207	80 767	130 879	217 651	4 231
33242	Metal tank (heavy gauge) mfg	—	36	29	2 079	76 575	1 422	2 859	43 943	179 644	139 547	315 918	6 204
332420	Metal tank (heavy gauge) mfg	—	36	29	2 079	76 575	1 422	2 859	43 943	179 644	139 547	315 918	6 204
33243	Metal can, box, & other metal container (light gauge) mfg	—	47	23	2 121	71 236	1 743	3 718	52 935	206 282	439 078	642 153	11 680
332431	Metal can mfg	—	14	10	1 198	44 002	1 003	2 267	34 459	127 348	339 187	463 886	8 763
332439	Other metal container mfg	2	33	13	923	27 234	740	1 451	18 476	78 934	99 891	178 267	2 917
3325	Hardware mfg	—	35	20	2 990	85 620	2 167	4 338	51 785	221 968	147 943	369 406	26 195
33251	Hardware mfg	—	35	20	2 990	85 620	2 167	4 338	51 785	221 968	147 943	369 406	26 195
332510	Hardware mfg	—	35	20	2 990	85 620	2 167	4 338	51 785	221 968	147 943	369 406	26 195
3326	Spring & wire product mfg	—	110	45	5 895	174 223	4 426	8 902	114 929	430 232	402 030	836 212	28 168
33261	Spring & wire product mfg	—	110	45	5 895	174 223	4 426	8 902	114 929	430 232	402 030	836 212	28 168
332611	Spring (heavy gauge) mfg	—	15	9	901	29 784	702	1 452	19 318	86 732	105 623	188 712	4 230
332612	Spring (light gauge) mfg	—	17	9	1 077	38 174	796	1 510	25 072	108 176	63 714	172 801	10 653
332618	Other fabricated wire product mfg	—	78	27	3 917	106 265	2 928	5 940	70 539	235 324	232 693	474 699	13 285
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	1 384	315	25 753	852 010	20 234	39 540	585 510	1 755 590	801 772	2 556 884	153 227
33271	Machine shops	1	1 220	240	18 105	578 738	14 132	26 807	389 510	1 130 829	478 685	1 613 599	85 307
332710	Machine shops	1	1 220	240	18 105	578 738	14 132	26 807	389 510	1 130 829	478 685	1 613 599	85 307
33272	Turned product & screw, nut, & bolt mfg	—	164	75	7 648	273 272	6 102	12 733	196 000	624 761	323 087	943 285	67 920
332721	Precision turned product mfg	—	116	50	3 531	108 157	2 925	6 177	78 378	236 513	126 528	361 958	31 884
332722	Bolt, nut, screw, rivet, & washer mfg	—	48	25	4 117	165 115	3 177	6 556	117 622	388 248	196 559	581 327	36 036
3328	Coating, engraving, heat treating, & allied activities	—	267	86	5 541	173 515	4 269	8 419	112 665	442 298	612 125	1 050 992	68 615
33281	Coating, engraving, heat treating, & allied activities	—	267	86	5 541	173 515	4 269	8 419	112 665	442 298	612 125	1 050 992	68 615
332811	Metal heat treating	—	45	16	1 110	37 180	852	1 687	23 714	91 508	30 951	118 027	16 203
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	101	39	2 308	70 666	1 821	3 682	49 324	228 136	517 484	746 262	44 685
332813	Electroplating, plating, polishing, anodizing, & coloring	1	121	31	2 123	65 669	1 596	3 050	39 627	122 654	63 690	186 703	7 727

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	—	380	158	19 368	628 977	13 793	26 775	377 744	1 676 592	1 353 060	3 020 149	99 010
33291	Metal valve mfg.....	—	87	57	8 420	296 117	5 772	11 828	165 210	809 291	557 923	1 347 358	50 323
332911	Industrial valve mfg....	1	48	32	3 018	121 940	1 773	3 584	53 842	300 316	191 635	487 211	21 130
332912	Fluid power valve & hose fitting mfg.....	1	14	8	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	—	20	14	3 682	115 207	2 851	5 947	79 945	315 449	174 794	479 829	21 145
33299	All other fabricated metal product mfg.....	—	293	101	10 948	332 860	8 021	14 947	212 534	867 301	795 137	1 672 791	48 687
332991	Ball & roller bearing mfg.....	—	8	8	1 472	53 316	1 218	2 420	40 142	204 913	97 839	303 759	8 891
332993	Ammunition (except small arms) mfg.....	—	6	5	1 308	43 538	900	1 691	22 942	106 809	104 748	213 013	4 187
332996	Fabricated pipe & pipe fitting mfg.....	—	47	21	1 948	62 235	1 415	2 638	37 861	159 950	101 705	262 005	10 159
332997	Industrial pattern mfg.	1	54	5	425	11 577	331	562	9 113	20 041	4 518	24 535	1 174
332998	Enameled iron & metal sanitary ware mfg....	—	3	3	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	—	162	57	4 904	139 549	3 474	6 643	88 549	315 200	388 500	704 225	18 471
333	Machinery mfg.....	1	1 531	626	73 453	2 763 432	47 288	94 046	1 517 622	6 813 741	5 799 075	12 632 173	413 016
3331	Agriculture, construction, & mining machinery mfg....	1	106	45	11 154	425 377	7 910	15 532	266 093	1 192 301	1 239 649	2 447 660	75 501
33311	Agricultural implement mfg.....	—	47	10	2 198	76 779	1 829	3 416	61 876	165 531	169 792	331 221	8 478
333111	Farm machinery & equipment mfg.....	—	37	7	1 878	66 431	1 568	2 880	54 527	121 895	127 869	246 915	6 704
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	—	10	3	320	10 348	261	536	7 349	43 636	41 923	84 306	1 774
33312	Construction machinery mfg.....	—	23	14	5 863	226 684	4 224	8 130	142 673	693 914	633 505	1 361 449	52 099
333120	Construction machinery mfg.....	—	23	14	5 863	226 684	4 224	8 130	142 673	693 914	633 505	1 361 449	52 099
33313	Mining & oil & gas field machinery mfg.....	3	36	21	3 093	121 914	1 857	3 986	61 544	332 856	436 352	754 990	14 924
333131	Mining machinery & equipment mfg.....	3	27	16	2 821	111 992	1 673	3 585	56 276	308 715	407 771	703 377	13 355
333132	Oil & gas field machinery & equipment mfg.....	—	9	5	272	9 922	184	401	5 268	24 141	28 581	51 613	1 569
3332	Industrial machinery mfg..	1	216	90	10 887	385 645	5 597	11 249	166 630	955 505	955 051	1 887 611	48 909
33321	Sawmill & woodworking machinery mfg.....	1	11	4	151	4 518	108	218	2 663	9 583	6 649	16 367	103
333210	Sawmill & woodworking machinery mfg.....	1	11	4	151	4 518	108	218	2 663	9 583	6 649	16 367	103
33322	Plastics & rubber industry machinery mfg.....	2	28	12	1 413	62 757	830	1 713	29 217	132 892	161 164	288 323	6 650
333220	Plastics & rubber industry machinery mfg.....	2	28	12	1 413	62 757	830	1 713	29 217	132 892	161 164	288 323	6 650
33329	Other industrial machinery mfg.....	1	177	74	9 323	318 370	4 659	9 318	134 750	813 030	787 238	1 582 921	42 156
333291	Paper industry machinery mfg.....	—	18	7	1 322	50 325	684	1 356	23 474	102 117	67 887	160 679	3 346
333292	Textile machinery mfg.	5	22	8	506	16 719	296	575	8 190	28 954	31 505	60 611	1 632
333293	Printing machinery & equipment mfg.....	—	25	12	1 117	43 183	625	1 261	20 178	139 934	147 574	285 300	6 431
333294	Food product machinery mfg.....	1	19	9	461	17 071	277	562	7 652	30 530	29 516	59 911	D
333295	Semiconductor machinery mfg.....	—	7	4	2 797	69 935	1 072	2 163	19 517	264 817	288 910	543 864	D
333298	All other industrial machinery mfg.....	1	86	34	3 120	121 137	1 705	3 401	55 739	246 678	221 846	472 556	18 680
3333	Commercial & service industry machinery mfg..	1	110	42	3 990	147 443	2 643	5 131	79 939	442 708	259 437	702 958	20 248
33331	Commercial & service industry machinery mfg.....	1	110	42	3 990	147 443	2 643	5 131	79 939	442 708	259 437	702 958	20 248
333311	Automatic vending machine mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg.....	—	3	1	c	D	D	D	D	D	D	D	D
333313	Office machinery mfg.	—	5	3	483	21 563	310	622	11 535	104 976	14 741	119 489	D
333314	Optical instrument & lens mfg.....	—	22	7	634	26 231	412	836	14 474	73 913	29 390	97 985	4 389

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31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3333	Commercial & service industry machinery mfg—Con.												
33331	Commercial & service industry machinery mfg—Con.												
333315	Photographic & photocopying equipment mfg	7	20	6	513	19 009	358	632	10 233	44 335	31 508	77 234	4 164
333319	Other commercial & service industry machinery mfg	1	57	23	1 957	68 124	1 259	2 431	35 089	189 129	154 741	347 644	6 786
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	107	58	7 198	277 571	4 925	9 950	143 615	922 371	675 422	1 591 209	38 849
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	107	58	7 198	277 571	4 925	9 950	143 615	922 371	675 422	1 591 209	38 849
333411	Air purification equipment mfg	1	15	5	385	10 921	273	540	4 710	34 676	36 622	70 566	4 883
333412	Industrial & commercial fan & blower mfg	1	11	7	513	18 029	341	658	10 571	43 922	33 454	77 021	1 556
333414	Heating equipment (except warm air furnaces) mfg	1	40	20	2 449	81 724	1 486	3 031	38 510	253 868	190 123	440 547	6 526
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	41	26	3 851	166 897	2 825	5 721	89 824	589 905	415 223	1 003 075	25 884
3335	Metalworking machinery mfg	1	600	195	16 002	608 426	11 658	23 990	397 457	1 182 869	700 182	1 886 135	79 101
33351	Metalworking machinery mfg	1	600	195	16 002	608 426	11 658	23 990	397 457	1 182 869	700 182	1 886 135	79 101
333511	Industrial mold mfg	1	144	48	3 589	152 622	2 899	6 300	113 354	292 246	129 116	425 621	24 001
333512	Machine tool (metal cutting types) mfg	—	17	11	999	44 783	532	990	18 815	90 302	93 748	178 605	3 084
333513	Machine tool (metal forming types) mfg	1	8	7	524	20 635	342	724	11 046	34 901	32 903	67 645	2 130
333514	Special die & tool, die set, jig, & fixture mfg	1	287	85	6 098	215 563	4 799	9 873	157 479	382 616	150 072	525 137	27 328
333515	Cutting tool & machine tool accessory mfg	—	107	26	2 975	100 287	2 115	4 106	62 805	212 560	118 120	334 720	17 363
333516	Rolling mill machinery & equipment mfg	1	16	7	782	31 114	378	790	12 806	92 658	79 061	177 530	1 918
333518	Other metalworking machinery mfg	1	21	11	1 035	43 422	593	1 207	21 152	77 586	97 162	176 877	3 277
3336	Engine, turbine, & power transmission equipment mfg	—	39	21	3 056	124 614	1 993	4 341	71 364	267 647	168 227	420 468	26 461
33361	Engine, turbine, & power transmission equipment mfg	—	39	21	3 056	124 614	1 993	4 341	71 364	267 647	168 227	420 468	26 461
333611	Turbine & turbine generator set unit mfg	—	6	4	908	35 330	540	1 261	17 331	58 960	63 537	119 718	5 523
333612	Speed changer, industrial high-speed drive, & gear mfg	—	12	6	766	39 154	514	1 296	21 819	74 815	46 702	124 666	9 677
333613	Mechanical power transmission equipment mfg	1	11	6	1 007	37 951	660	1 262	23 846	104 149	34 148	126 967	8 961
333618	Other engine equipment mfg	1	10	5	375	12 179	279	522	8 368	29 723	23 840	49 117	2 300
3339	Other general-purpose machinery mfg	1	353	175	21 166	794 356	12 562	23 853	392 524	1 850 340	1 801 107	3 696 132	123 947
33391	Pump & compressor mfg	2	43	28	5 444	234 539	3 137	5 915	117 258	473 549	382 356	865 640	37 709
333911	Pump & pumping equipment mfg	1	25	15	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	2	16	12	2 954	125 594	1 702	3 136	63 988	310 148	220 981	534 230	23 706
333913	Measuring & dispensing pump mfg	—	2	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	96	47	6 424	199 623	4 067	7 195	103 330	487 695	594 569	1 085 642	43 316
333921	Elevator & moving stairway mfg	—	13	4	642	21 027	394	739	11 235	27 398	64 049	91 708	1 497
333922	Conveyor & conveying equipment mfg	—	49	23	1 741	67 439	961	2 048	32 480	169 657	132 768	301 509	8 392
333923	Overhead traveling crane, hoist, & monorail system mfg	—	18	13	3 507	92 884	2 359	3 712	49 325	259 677	359 239	621 634	29 439
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	16	7	534	18 273	353	696	10 290	30 963	38 513	70 791	3 988

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	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	—	214	100	9 298	360 194	5 358	10 743	171 936	889 096	824 182	1 744 850	42 922
333991	Power-driven handtool mfg	—	6	3	677	27 298	426	967	15 296	104 683	60 276	165 989	D
333992	Welding & soldering equipment mfg	1	16	6	885	33 352	583	1 150	19 563	60 673	99 737	162 264	3 560
333993	Packaging machinery mfg	—	39	23	1 401	53 821	849	1 637	26 954	180 644	85 454	276 180	4 411
333994	Industrial process furnace & oven mfg ..	1	31	15	1 128	39 576	574	1 130	14 403	91 574	100 546	195 485	4 532
333995	Fluid power cylinder & actuator mfg	1	14	5	248	6 923	146	289	3 949	13 269	15 781	28 939	860
333996	Fluid power pump & motor mfg	—	5	2	f	D	D	D	D	D	D	D	3 706
333999	All other miscellaneous general-purpose machinery mfg	1	100	45	4 200	167 270	2 345	4 897	78 222	364 793	372 078	751 507	21 719
334	Computer & electronic product mfg	1	815	374	61 585	2 325 810	36 759	73 071	1 045 761	8 362 700	4 456 334	12 840 103	531 873
3341	Computer & peripheral equipment mfg	2	74	28	3 222	123 226	1 286	2 655	43 314	304 249	313 062	612 496	D
33411	Computer & peripheral equipment mfg	2	74	28	3 222	123 226	1 286	2 655	43 314	304 249	313 062	612 496	D
334111	Electronic computer mfg	2	15	5	510	22 347	184	377	7 069	63 875	51 695	111 957	D
334113	Computer terminal mfg	6	6	4	c	D	D	D	D	D	D	D	955
334119	Other computer peripheral equipment mfg	1	50	17	2 429	91 680	989	2 032	31 064	220 543	239 732	458 506	11 199
3342	Communications equipment mfg	3	97	47	10 056	445 510	4 444	7 899	132 740	853 056	713 635	1 578 203	44 826
33421	Telephone apparatus mfg	—	16	9	1 834	121 834	568	919	17 502	129 165	179 976	342 638	2 671
334210	Telephone apparatus mfg	—	16	9	1 834	121 834	568	919	17 502	129 165	179 976	342 638	2 671
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	56	30	6 833	277 684	3 171	5 647	99 033	656 247	484 646	1 120 199	37 283
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	56	30	6 833	277 684	3 171	5 647	99 033	656 247	484 646	1 120 199	37 283
33429	Other communications equipment mfg	1	25	8	1 389	45 992	705	1 333	16 205	67 644	49 013	115 366	4 872
334290	Other communications equipment mfg	1	25	8	1 389	45 992	705	1 333	16 205	67 644	49 013	115 366	4 872
3343	Audio & video equipment mfg	—	13	4	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	13	4	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	13	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	307	160	25 714	891 901	18 812	36 902	502 145	5 177 731	1 775 826	6 949 377	321 764
33441	Semiconductor & other electronic component mfg	—	307	160	25 714	891 901	18 812	36 902	502 145	5 177 731	1 775 826	6 949 377	321 764
334411	Electron tube mfg	—	11	6	2 074	73 892	1 631	3 506	52 917	237 030	256 052	489 474	9 003
334412	Bare printed circuit board mfg	3	40	12	892	23 551	667	1 216	12 481	48 233	26 923	73 628	4 048
334413	Semiconductor & related device mfg ...	—	52	26	7 916	379 774	5 349	10 319	182 225	3 514 498	622 005	4 142 733	230 447
334414	Electronic capacitor mfg	—	8	4	g	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	1	9	7	948	27 354	571	1 111	12 394	61 915	25 625	88 492	2 428
334416	Electronic coil, transformer, & other inductor mfg	4	21	13	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	39	30	5 038	160 714	4 242	8 150	119 126	766 033	387 685	1 157 306	35 532
334418	Printed circuit assembly (electronic assembly) mfg	1	37	25	2 283	62 077	1 616	3 213	31 005	132 827	152 020	280 093	10 462
334419	Other electronic component mfg	3	90	37	4 489	112 562	3 248	6 441	61 592	256 506	157 145	412 791	15 869

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PENNSYLVANIA—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	1	289	125	17 593	696 208	8 563	17 000	250 595	1 615 383	969 474	2 592 978	70 424
33451	Navigational, measuring, medical, & control instruments mfg	1	289	125	17 593	696 208	8 563	17 000	250 595	1 615 383	969 474	2 592 978	70 424
334510	Electromedical & electrotherapeutic apparatus mfg	—	18	11	1 835	84 163	549	1 059	14 578	148 157	93 517	247 061	11 395
334511	Search, detection, navigation, & guidance instrument mfg	2	24	8	947	35 325	445	920	13 402	83 829	39 130	118 584	3 207
334512	Automatic environmental control mfg	3	24	8	953	25 844	767	1 392	17 897	24 669	34 061	61 132	1 571
334513	Industrial process control instrument mfg	2	67	27	5 148	225 245	2 095	4 179	72 413	600 956	314 363	916 310	18 447
334514	Totalizing fluid meter & counting device mfg	—	15	9	2 058	77 148	1 245	2 592	37 667	286 213	157 503	444 962	12 274
334515	Electricity measuring & testing instrument mfg	1	33	13	961	33 846	541	961	13 236	73 725	45 225	121 139	4 851
334516	Analytical laboratory instrument mfg	1	52	22	2 708	103 964	1 218	2 484	35 377	216 344	144 535	361 626	10 749
334518	Watch, clock, & part mfg	6	7	4	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	1	45	22	2 730	101 076	1 544	3 086	41 581	160 486	123 828	282 695	6 812
3346	Mfg & reproducing magnetic & optical media	1	35	10	h	D	D	D	D	D	D	D	26 810
33461	Mfg & reproducing magnetic & optical media	1	35	10	h	D	D	D	D	D	D	D	26 810
334611	Software reproducing	6	5	2	c	D	D	D	D	D	D	D	2 013
334612	Prerecorded CD (except software), tape, & record reproducing	1	19	7	2 604	89 310	2 126	5 662	74 109	214 832	132 687	351 897	22 805
335	Electrical equipment, appliance, & component mfg	—	378	188	28 820	935 903	20 224	41 923	564 037	2 740 115	2 440 390	5 186 779	174 877
3351	Electric lighting equipment mfg	—	83	37	5 031	138 028	3 932	8 003	98 574	432 294	478 641	921 996	17 619
33511	Electric lamp bulb & part mfg	—	8	5	1 638	56 979	1 382	2 970	47 434	188 607	186 304	382 502	8 021
335110	Electric lamp bulb & part mfg	—	8	5	1 638	56 979	1 382	2 970	47 434	188 607	186 304	382 502	8 021
33512	Lighting fixture mfg	1	75	32	3 393	81 049	2 550	5 033	51 140	243 687	292 337	539 494	9 598
335121	Residential electric lighting fixture mfg	1	40	16	1 824	38 204	1 412	2 761	24 456	105 259	136 204	245 791	4 320
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	20	9	1 019	27 076	775	1 552	17 493	75 682	111 521	185 442	3 204
335129	Other lighting equipment mfg	1	15	7	550	15 769	363	720	9 191	62 746	44 612	108 261	2 074
3352	Household appliance mfg	—	6	5	924	18 379	713	1 323	10 421	218 184	42 979	259 216	2 390
33521	Small electrical appliance mfg	—	4	4	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	3	3	e	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	151	63	7 931	268 053	5 199	10 406	141 377	646 146	589 456	1 250 105	29 341
33531	Electrical equipment mfg	1	151	63	7 931	268 053	5 199	10 406	141 377	646 146	589 456	1 250 105	29 341
335311	Power, distribution, & specialty transformer mfg	4	10	4	142	3 493	97	177	2 101	6 454	7 825	14 304	549
335312	Motor & generator mfg	2	42	22	2 960	86 772	2 501	5 242	62 720	190 957	162 329	351 755	9 820
335313	Switchgear & switchboard apparatus mfg	—	25	11	1 950	78 898	1 161	2 285	43 415	224 064	167 460	400 700	5 830
335314	Relay & industrial control mfg	—	74	26	2 879	98 890	1 440	2 702	33 141	224 671	251 842	483 346	13 142
3359	Other electrical equipment & component mfg	—	138	83	14 934	511 443	10 380	22 191	313 665	1 443 491	1 329 314	2 755 462	125 527
33591	Battery mfg	—	7	6	4 014	136 969	2 793	5 852	89 390	369 230	246 865	601 091	31 227
335911	Storage battery mfg	—	5	5	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	1	15	15	3 118	94 184	1 940	4 318	51 230	189 842	397 639	590 695	20 664
335929	Other communication & energy wire mfg	1	14	14	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PENNSYLVANIA—Con. Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33593	Wiring device mfg	—	55	32	4 664	161 484	3 396	6 816	99 503	574 195	400 697	972 057	25 097
335931	Current-carrying wiring device mfg	—	43	23	3 344	119 503	2 327	4 683	69 734	416 835	241 525	654 820	18 161
335932	Noncurrent-carrying wiring device mfg	—	12	9	1 320	41 981	1 069	2 133	29 769	157 360	159 172	317 237	6 936
33599	All other electrical equipment & component mfg	1	61	30	3 138	118 806	2 251	5 205	73 542	310 224	284 113	591 619	48 539
335991	Carbon & graphite product mfg	—	18	13	1 886	79 117	1 439	3 575	54 680	189 692	183 171	372 443	43 961
335999	All other miscellaneous electrical equipment & component mfg	2	43	17	1 252	39 689	812	1 630	18 862	120 532	100 942	219 176	4 578
336	Transportation equipment mfg	—	400	188	52 398	2 159 150	37 086	79 956	1 360 658	5 407 081	5 806 455	10 843 428	314 946
3361	Motor vehicle mfg	—	11	2	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	6	1	c	D	D	D	D	D	D	D	320
336112	Light truck & utility vehicle mfg	—	2	1	c	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	5	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	5	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	114	52	7 725	205 818	5 941	11 882	134 596	462 873	700 736	1 166 170	23 645
33621	Motor vehicle body & trailer mfg	1	114	52	7 725	205 818	5 941	11 882	134 596	462 873	700 736	1 166 170	23 645
336211	Motor vehicle body mfg	2	63	27	4 357	118 354	3 184	6 389	72 282	238 242	313 082	556 589	19 014
336212	Truck trailer mfg	—	14	9	g	D	D	D	D	D	D	D	D
336213	Motor home mfg	—	1	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	36	15	1 892	47 322	1 552	2 665	30 857	104 456	146 892	249 011	2 889
3363	Motor vehicle parts mfg	—	168	85	19 612	751 788	15 228	32 031	546 957	1 936 707	1 776 883	3 699 672	158 380
33631	Motor vehicle gasoline engine & engine parts mfg	3	26	8	1 099	36 699	930	1 738	27 006	82 746	58 282	140 194	5 844
336311	Carburetor, piston, piston ring, & valve mfg	2	8	4	659	22 823	575	1 151	18 446	52 543	16 937	68 218	2 998
336312	Gasoline engine & engine parts mfg	5	18	4	440	13 876	355	587	8 560	30 203	41 345	71 976	2 846
33632	Motor vehicle electrical & electronic equipment mfg	1	44	26	3 697	122 581	2 921	5 655	84 434	502 772	451 508	964 592	69 523
336321	Vehicular lighting equipment mfg	—	4	3	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	40	23	h	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	8	3	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	8	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	6	6	3 217	96 680	1 837	5 815	54 457	251 987	126 237	377 608	D
336340	Motor vehicle brake system mfg	—	6	6	3 217	96 680	1 837	5 815	54 457	251 987	126 237	377 608	D
33635	Motor vehicle transmission & power train parts mfg	1	11	6	1 391	55 445	1 036	2 036	42 105	198 687	114 002	313 631	10 463
336350	Motor vehicle transmission & power train parts mfg	1	11	6	1 391	55 445	1 036	2 036	42 105	198 687	114 002	313 631	10 463
33636	Motor vehicle seating & interior trim mfg	—	11	2	e	D	D	D	D	D	D	D	2 358
336360	Motor vehicle seating & interior trim mfg	—	11	2	e	D	D	D	D	D	D	D	2 358
33637	Motor vehicle metal stamping	—	16	11	2 702	140 454	2 236	5 539	113 450	246 816	212 077	444 671	18 188
336370	Motor vehicle metal stamping	—	16	11	2 702	140 454	2 236	5 539	113 450	246 816	212 077	444 671	18 188
33639	Other motor vehicle parts mfg	—	46	23	5 403	240 060	4 458	8 425	181 451	521 407	639 647	1 158 721	27 081
336391	Motor vehicle air-conditioning mfg	—	3	2	197	7 123	98	180	2 292	20 076	28 876	49 258	227
336399	All other motor vehicle parts mfg	—	43	21	5 206	232 937	4 360	8 245	179 159	501 331	610 771	1 109 463	26 854

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	-	38	19	8 351	454 417	4 531	9 625	199 261	652 073	856 862	1 284 556	28 927
33641	Aerospace product & parts mfg	-	38	19	8 351	454 417	4 531	9 625	199 261	652 073	856 862	1 284 556	28 927
336411	Aircraft mfg	-	7	4	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	7	5	1 305	62 239	983	2 009	37 538	127 404	203 333	320 743	7 152
336413	Other aircraft part & auxiliary equipment mfg	-	24	10	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	27	21	10 599	470 287	7 365	19 150	287 368	1 530 123	1 586 111	2 961 970	64 558
33651	Railroad rolling stock mfg	-	27	21	10 599	470 287	7 365	19 150	287 368	1 530 123	1 586 111	2 961 970	64 558
336510	Railroad rolling stock mfg	-	27	21	10 599	470 287	7 365	19 150	287 368	1 530 123	1 586 111	2 961 970	64 558
3366	Ship & boat building	5	13	4	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	5	13	4	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing	5	10	4	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	29	5	4 211	185 553	2 957	4 654	123 584	514 791	461 281	995 992	D
33699	Other transportation equipment mfg	-	29	5	4 211	185 553	2 957	4 654	123 584	514 791	461 281	995 992	D
336991	Motorcycle, bicycle, & parts mfg	-	10	2	h	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	3	2	g	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	6	16	1	c	D	D	D	D	D	D	D	326
337	Furniture & related product mfg	1	854	206	24 571	654 389	18 961	37 070	435 293	1 570 896	1 252 237	2 819 727	68 969
3371	Household & institutional furniture & kitchen cabinet mfg	1	617	115	15 255	379 789	12 076	23 262	263 478	800 862	684 735	1 488 600	31 481
33711	Wood kitchen cabinet & counter top mfg	1	326	52	7 059	177 919	5 579	11 108	131 239	373 773	264 529	641 505	12 726
337110	Wood kitchen cabinet & counter top mfg ...	1	326	52	7 059	177 919	5 579	11 108	131 239	373 773	264 529	641 505	12 726
33712	Household & institutional furniture mfg	2	291	63	8 196	201 870	6 497	12 154	132 239	427 089	420 206	847 095	18 755
337121	Upholstered household furniture mfg	3	60	6	1 103	24 387	933	1 560	16 653	43 479	52 210	96 296	1 228
337122	Nonupholstered wood household furniture mfg	3	158	25	2 914	63 070	2 486	4 646	46 667	129 478	105 338	233 784	6 136
337124	Metal household furniture mfg	4	19	9	1 761	40 809	1 531	2 794	30 476	90 390	86 802	177 915	6 038
337125	Household furniture (except wood & metal) mfg	-	8	3	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	43	19	1 927	61 620	1 248	2 506	32 128	125 726	136 743	263 498	4 509
337129	Wood television, radio, & sewing machine cabinet mfg	-	3	1	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	189	74	7 455	230 878	5 451	10 884	140 942	595 178	447 191	1 041 364	33 796
33721	Office furniture (including fixtures) mfg	2	189	74	7 455	230 878	5 451	10 884	140 942	595 178	447 191	1 041 364	33 796
337211	Wood office furniture mfg	3	20	11	1 006	29 410	762	1 692	19 503	63 403	50 433	114 697	4 281
337212	Custom architectural woodwork & millwork mfg	1	61	20	1 356	42 886	945	1 865	24 475	83 960	59 556	144 124	3 992
337214	Office furniture (except wood) mfg	1	17	10	2 307	79 669	1 633	3 445	49 858	297 340	193 497	490 055	18 764
337215	Showcase, partition, shelving, & locker mfg	3	91	33	2 786	78 913	2 111	3 882	47 106	150 475	143 705	292 488	6 759
3379	Other furniture related product mfg	-	48	17	1 861	43 722	1 434	2 924	30 873	174 856	120 311	289 763	3 692
33791	Mattress mfg	-	25	11	779	21 821	602	1 145	12 719	77 701	62 744	140 100	1 499
337910	Mattress mfg	-	25	11	779	21 821	602	1 145	12 719	77 701	62 744	140 100	1 499
33792	Blind & shade mfg	-	23	6	1 082	21 901	832	1 779	18 154	97 155	57 567	149 663	2 193
337920	Blind & shade mfg	-	23	6	1 082	21 901	832	1 779	18 154	97 155	57 567	149 663	2 193

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PENNSYLVANIA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	1 207	281	35 287	1 048 728	23 791	45 595	555 836	2 660 778	1 704 553	4 322 400	137 492
3391	Medical equipment & supplies mfg.....	1	536	120	16 041	523 258	9 822	18 956	242 482	1 261 051	671 647	1 921 671	71 540
33911	Medical equipment & supplies mfg.....	1	536	120	16 041	523 258	9 822	18 956	242 482	1 261 051	671 647	1 921 671	71 540
339111	Laboratory apparatus & furniture mfg.....	—	35	16	1 874	69 665	1 035	2 034	31 381	134 295	77 604	220 993	6 530
339112	Surgical & medical instrument mfg.....	1	94	37	6 537	222 132	4 000	7 609	104 962	576 969	212 390	772 566	30 105
339113	Surgical appliance & supplies mfg.....	1	86	34	3 854	121 449	2 141	4 269	47 479	281 668	261 405	542 576	20 584
339114	Dental equipment & supplies mfg.....	—	44	16	1 909	67 080	1 258	2 663	32 117	177 124	77 277	250 937	7 233
339115	Ophthalmic goods mfg.....	5	31	6	565	12 932	436	873	8 668	30 783	19 337	49 276	4 822
339116	Dental laboratories...	6	246	11	1 302	30 000	952	1 508	17 875	60 212	23 634	85 323	2 266
3399	Other miscellaneous mfg..	1	671	161	19 246	525 470	13 969	26 639	313 354	1 399 727	1 032 906	2 400 729	65 952
33991	Jewelry & silverware mfg.....	2	88	6	918	22 421	523	922	10 407	52 590	91 522	144 804	1 291
339911	Jewelry (except costume) mfg.....	2	59	5	752	19 164	426	772	8 865	45 986	84 261	131 138	1 030
339914	Costume jewelry & novelty mfg.....	2	15	1	100	1 826	46	75	695	3 409	3 479	6 777	167
33992	Sporting & athletic goods mfg.....	2	79	24	2 558	64 970	1 948	3 372	42 853	171 718	197 197	373 177	11 293
339920	Sporting & athletic goods mfg.....	2	79	24	2 558	64 970	1 948	3 372	42 853	171 718	197 197	373 177	11 293
33993	Doll, toy, & game mfg....	1	59	22	1 900	43 225	1 410	2 656	25 989	124 042	81 723	202 680	3 949
339931	Doll & stuffed toy mfg..	—	11	3	156	3 213	119	186	1 914	6 064	4 375	10 348	52
339932	Game, toy, & children's vehicle mfg.....	1	48	19	1 744	40 012	1 291	2 470	24 075	117 978	77 348	192 332	3 897
33994	Office supplies (except paper) mfg.....	—	45	12	2 100	49 063	1 685	3 258	34 611	270 912	129 016	379 170	9 764
339941	Pen & mechanical pencil mfg.....	—	4	2	127	3 363	89	191	2 133	7 342	6 703	14 021	95
339942	Lead pencil & art good mfg.....	—	6	4	1 282	28 041	1 169	2 189	22 287	202 889	83 407	264 603	D
339943	Marking device mfg....	5	26	2	356	7 882	222	428	4 793	16 690	8 150	24 724	D
339944	Carbon paper & inked ribbon mfg.....	—	9	4	335	9 777	205	450	5 398	43 991	30 756	75 822	1 370
33995	Sign mfg.....	2	217	37	3 672	110 596	2 525	4 884	57 564	226 160	157 862	382 629	8 992
339950	Sign mfg.....	2	217	37	3 672	110 596	2 525	4 884	57 564	226 160	157 862	382 629	8 992
33999	All other miscellaneous mfg.....	1	183	60	8 098	235 195	5 878	11 547	141 930	554 305	375 586	918 269	30 663
339991	Gasket, packing, & sealing device mfg....	4	31	13	1 299	42 146	862	1 753	21 010	89 860	60 982	149 792	5 029
339992	Musical instrument mfg.....	—	23	6	1 117	33 748	861	1 672	20 703	77 914	30 631	107 011	3 256
339993	Fastener, button, needle, & pin mfg....	1	7	2	114	3 433	66	131	1 356	5 149	10 491	16 293	431
339994	Broom, brush, & mop mfg.....	2	13	6	799	23 017	588	1 110	12 396	53 337	40 830	91 319	3 023
339995	Burial casket mfg....	—	10	6	977	28 230	766	1 706	21 758	59 245	36 536	95 500	3 614
339999	All other miscellaneous mfg.....	1	99	27	3 792	104 621	2 735	5 175	64 707	268 800	196 116	458 354	15 310

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLENTOWN-BETHLEHEM-EASTON, PA MSA												
	Manufacturing	-	920	370	45 167	1 499 534	32 334	64 045	899 046	6 886 409	3 757 234	10 640 324	442 235
311	Food mfg	-	62	21	3 372	118 761	2 505	4 864	76 983	563 956	636 937	1 207 973	121 243
3111	Animal food mfg	-	5	2	395	16 628	383	748	11 850	83 420	106 704	189 234	D
31111	Animal food mfg	-	5	2	395	16 628	383	748	11 850	83 420	106 704	189 234	D
311111	Dog & cat food mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	7	3	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	1	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	7	3	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	6	3	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	29	4	886	29 926	521	1 034	15 082	85 302	40 532	125 258	7 708
31181	Bread & bakery product mfg	-	29	4	886	29 926	521	1 034	15 082	85 302	40 532	125 258	7 708
311812	Commercial bakeries ..	-	8	2	538	20 562	247	515	7 561	44 202	27 356	71 518	D
3119	Other food mfg	1	8	6	391	11 004	265	499	6 029	107 982	53 641	166 422	D
312	Beverage & tobacco product mfg	-	9	4	739	31 714	474	776	19 667	82 380	142 736	225 498	6 974
3121	Beverage mfg	-	9	4	739	31 714	474	776	19 667	82 380	142 736	225 498	6 974
31211	Soft drink & ice mfg	-	4	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	3	3	e	D	D	D	D	D	D	D	D
31212	Breweries	-	4	1	e	D	D	D	D	D	D	D	D
312120	Breweries	-	4	1	e	D	D	D	D	D	D	D	D
313	Textile mills	4	24	15	1 187	31 433	978	2 008	20 762	73 594	69 313	143 380	4 038
3131	Fiber, yarn, & thread mills ..	-	3	2	e	D	D	D	D	D	D	D	216
31311	Fiber, yarn, & thread mills	-	3	2	e	D	D	D	D	D	D	D	216
3132	Fabric mills	5	12	8	515	14 022	443	843	10 080	31 700	38 366	70 505	2 173
31324	Knit fabric mills	5	7	4	250	6 419	226	428	4 742	15 819	12 968	28 406	1 062
3133	Textile & fabric finishing & fabric coating mills	6	9	5	e	D	D	D	D	D	D	D	1 649
31331	Textile & fabric finishing mills	6	8	5	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	20	6	892	18 577	576	1 138	9 535	46 395	77 993	127 729	1 108
3141	Textile furnishings mills	5	5	3	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	5	5	3	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	9	2	1	e	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	15	3	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	7	3	278	7 142	228	440	4 203	18 719	37 885	56 576	487
315	Apparel mfg	1	142	66	6 366	105 440	5 597	10 695	83 433	211 937	125 994	337 270	5 107
3151	Apparel knitting mills	-	8	4	460	7 854	370	766	5 988	14 891	15 680	30 631	905
31519	Other apparel knitting mills	-	7	4	e	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	-	3	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	128	58	5 015	77 004	4 534	8 291	61 896	172 895	69 494	239 747	2 350
31521	Cut & sew apparel contractors	3	95	41	3 429	51 370	3 166	6 007	44 019	99 310	16 042	113 175	1 722
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	92	39	3 367	50 662	3 109	5 908	43 404	98 210	15 875	111 908	1 701
31523	Women's & girls' cut & sew apparel mfg	-	23	13	1 376	22 511	1 200	1 959	15 518	48 488	44 862	92 507	572
315232	Women's & girls' cut & sew blouse & shirt mfg	1	8	6	261	3 660	242	413	2 861	7 060	7 633	14 507	161
315239	Women's & girls' cut & sew other outerwear mfg	-	10	6	1 042	17 698	901	1 431	11 924	39 199	35 794	74 427	343
3159	Apparel accessories & other apparel mfg	-	6	4	891	20 582	693	1 638	15 549	24 151	40 820	66 892	1 852
31599	Apparel accessories & other apparel mfg	-	6	4	891	20 582	693	1 638	15 549	24 151	40 820	66 892	1 852
315999	Other apparel accessories & other apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	22	7	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	5	18	6	e	D	D	D	D	D	D	D	671

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLENTOWN-BETHLEHEM-EASTON, PA MSA—Con. Manufacturing—Con.												
322	Paper mfg	—	10	8	803	23 183	608	1 206	13 910	65 155	64 183	129 315	4 628
3222	Converted paper product mfg	—	10	8	803	23 183	608	1 206	13 910	65 155	64 183	129 315	4 628
32221	Paperboard container mfg	—	6	5	421	12 859	307	675	7 631	38 159	32 615	70 911	3 150
322211	Corrugated & solid fiber box mfg	—	4	3	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	87	19	2 965	89 507	2 029	4 252	58 726	195 730	105 942	301 407	8 603
3231	Printing & related support activities	1	87	19	2 965	89 507	2 029	4 252	58 726	195 730	105 942	301 407	8 603
32311	Printing	1	79	17	2 821	85 623	1 928	4 043	56 216	187 825	104 254	291 848	8 367
323110	Commercial lithographic printing ..	2	41	11	1 150	41 227	814	2 061	31 337	77 723	48 689	126 684	4 433
323118	Blankbook, looseleaf binder, & device mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	40	16	1 195	44 281	801	1 807	25 369	151 051	107 203	260 661	20 658
3251	Basic chemical mfg	—	18	7	645	23 864	431	1 031	15 799	103 887	68 850	173 478	12 051
32513	Dye & pigment mfg	—	3	3	270	10 705	229	552	8 655	32 815	20 322	54 000	D
325131	Inorganic dye & pigment mfg	—	3	3	270	10 705	229	552	8 655	32 815	20 322	54 000	D
3259	Other chemical product mfg	4	6	4	310	8 997	226	475	5 197	22 442	17 827	40 162	448
32599	All other chemical product & preparation mfg	4	6	4	310	8 997	226	475	5 197	22 442	17 827	40 162	448
325991	Custom compounding of purchased resin ...	4	3	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	49	31	3 506	102 245	2 805	5 800	68 792	281 742	264 384	533 449	42 698
3261	Plastics product mfg	1	46	30	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	30	19	2 804	81 659	2 251	4 652	55 503	230 973	205 706	425 415	38 914
326192	Resilient floor covering mfg	—	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	28	17	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	56	22	1 755	60 320	1 300	2 683	40 424	272 563	158 186	433 864	18 764
3273	Cement & concrete product mfg	—	30	12	1 153	42 895	820	1 697	28 212	231 654	132 180	366 500	15 470
32731	Cement mfg	—	7	6	781	31 895	544	1 112	20 947	208 900	108 786	320 312	13 269
327310	Cement mfg	—	7	6	781	31 895	544	1 112	20 947	208 900	108 786	320 312	13 269
3279	Other nonmetallic mineral product mfg	1	12	7	340	10 061	253	529	6 941	25 859	19 510	45 410	1 987
32799	All other nonmetallic mineral product mfg ...	1	11	6	e	D	D	D	D	D	D	D	1 987
331	Primary metal mfg	1	23	19	2 775	100 753	2 078	4 505	72 860	215 588	267 035	497 415	20 178
3311	Iron & steel mills & ferroalloy mfg	—	3	3	495	23 613	319	763	16 383	11 579	84 045	111 210	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	495	23 613	319	763	16 383	11 579	84 045	111 210	D
331111	Iron & steel mills	—	3	3	495	23 613	319	763	16 383	11 579	84 045	111 210	D
3314	Nonferrous metal (except aluminum) production & processing	—	6	3	435	8 779	309	525	6 843	43 109	27 426	70 924	6 757
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	4	2	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	10	9	1 548	55 898	1 220	2 730	41 817	114 675	73 647	184 631	8 881
33151	Ferrous metal foundries ..	—	6	6	1 152	45 184	901	2 059	34 522	91 759	58 689	146 873	7 482
331511	Iron foundries	—	5	5	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	4	3	396	10 714	319	671	7 295	22 916	14 958	37 758	1 399

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLENTOWN-BETHLEHEM-EASTON, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	137	46	3 812	132 391	2 606	5 254	77 462	301 602	199 544	494 194	16 663
3323	Architectural & structural metals mfg	1	24	8	468	14 901	307	601	8 102	31 815	37 202	69 143	1 763
3324	Boiler, tank, & shipping container mfg	—	5	4	371	12 740	239	527	7 035	35 906	32 494	65 437	1 223
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	61	14	1 252	41 525	931	1 835	28 929	82 421	23 850	106 094	6 818
33271	Machine shops	1	53	13	1 167	38 461	874	1 718	26 936	76 188	21 355	97 309	6 383
332710	Machine shops	1	53	13	1 167	38 461	874	1 718	26 936	76 188	21 355	97 309	6 383
3328	Coating, engraving, heat treating, & allied activities	—	16	6	523	18 347	385	778	11 625	41 636	53 536	94 365	1 396
33281	Coating, engraving, heat treating, & allied activities	—	16	6	523	18 347	385	778	11 625	41 636	53 536	94 365	1 396
332813	Electroplating, plating, polishing, anodizing, & coloring	—	10	2	273	10 537	193	379	6 472	22 297	29 523	51 909	433
3329	Other fabricated metal product mfg	1	22	9	862	34 170	484	950	15 185	85 078	41 004	122 763	4 442
33291	Metal valve mfg	1	10	6	653	27 808	330	646	11 258	74 244	33 813	104 546	3 752
332919	Other metal valve & pipe fitting mfg	1	5	3	547	23 894	271	544	9 602	63 479	25 653	86 047	D
333	Machinery mfg	—	54	33	3 060	124 381	1 801	3 353	57 741	408 166	288 400	701 581	13 363
3332	Industrial machinery mfg ..	1	15	11	1 024	40 110	591	1 193	18 597	70 242	120 795	197 102	2 853
33329	Other industrial machinery mfg	1	13	11	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	2	6	6	655	25 451	418	840	14 130	39 060	49 336	92 385	2 458
3333	Commercial & service industry machinery mfg ..	—	7	2	e	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	7	2	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	4	3	260	10 582	164	326	5 778	6 362	14 372	20 375	692
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	3	4	3	260	10 582	164	326	5 778	6 362	14 372	20 375	692
3339	Other general-purpose machinery mfg	—	18	11	1 078	45 881	582	944	17 887	206 941	127 090	335 011	5 204
33392	Material handling equipment mfg	—	6	4	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	11	7	815	34 076	466	699	14 122	162 484	104 071	267 966	4 820
333996	Fluid power pump & motor mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	35	15	h	D	D	D	D	D	D	D	108 257
3344	Semiconductor & other electronic component mfg	—	14	8	h	D	D	D	D	D	D	D	104 428
33441	Semiconductor & other electronic component mfg	—	14	8	h	D	D	D	D	D	D	D	104 428
334413	Semiconductor & related device mfg ...	—	5	5	g	D	D	D	D	D	D	D	103 671
3345	Navigational, measuring, medical, & control instruments mfg	1	15	7	513	22 969	203	342	5 063	31 424	15 690	47 861	3 668
33451	Navigational, measuring, medical, & control instruments mfg	1	15	7	513	22 969	203	342	5 063	31 424	15 690	47 861	3 668
334516	Analytical laboratory instrument mfg	—	5	4	281	14 268	93	146	2 666	14 620	7 869	22 851	2 349
335	Electrical equipment, appliance, & component mfg	1	23	6	965	42 842	435	898	11 473	143 995	108 181	251 320	7 559
3359	Other electrical equipment & component mfg	—	8	3	735	35 458	280	607	7 337	122 460	89 688	211 241	D
33593	Wiring device mfg	—	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLENTOWN—BETHLEHEM—EASTON, PA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	18	8	2 409	100 394	1 356	3 041	71 986	331 203	462 066	795 126	17 318
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	8	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	8	2	2	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	9	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	35	10	1 140	39 873	774	1 604	20 599	100 679	59 095	160 717	2 388
3371	Household & institutional furniture & kitchen cabinet mfg	1	24	7	860	30 816	567	1 210	15 587	80 391	41 218	122 638	D
33712	Household & institutional furniture mfg	1	14	4	737	27 555	475	1 022	13 341	74 795	37 323	113 148	1 047
337127	Institutional furniture mfg	—	4	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	8	9	3	e	D	D	D	D	D	D	D	1 135
33721	Office furniture (including fixtures) mfg	8	9	3	e	D	D	D	D	D	D	D	1 135
339	Miscellaneous mfg	—	63	16	4 375	127 954	3 176	5 888	71 806	452 579	181 860	605 360	21 363
3391	Medical equipment & supplies mfg	—	26	4	1 937	65 817	1 106	1 940	27 028	172 711	64 513	232 654	10 081
33911	Medical equipment & supplies mfg	—	26	4	1 937	65 817	1 106	1 940	27 028	172 711	64 513	232 654	10 081
339112	Surgical & medical instrument mfg	—	6	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	37	12	2 438	62 137	2 070	3 948	44 778	279 868	117 347	372 706	11 282
33994	Office supplies (except paper) mfg	—	2	1	g	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	—	1	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	14	9	1 258	37 151	985	1 934	23 974	86 970	37 816	122 438	4 027
339992	Musical instrument mfg	—	6	3	891	27 674	700	1 362	17 341	61 507	22 900	82 752	D
	ALTOONA, PA MSA												
31-33	Manufacturing	—	157	61	8 966	251 710	6 960	13 419	165 544	865 111	722 732	1 592 437	59 065
311	Food mfg	3	25	11	1 001	20 483	729	1 183	11 017	56 458	79 426	136 446	5 837
3113	Sugar & confectionery product mfg	8	5	3	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	8	4	2	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	8	4	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	18	5	397	9 287	328	556	6 092	23 614	38 583	62 302	999
3219	Other wood product mfg	—	10	2	282	6 898	240	410	4 621	17 841	25 416	43 279	612
322	Paper mfg	—	6	5	1 444	52 580	1 155	2 417	38 867	199 478	158 739	361 329	D
3221	Pulp, paper, & paperboard mills	—	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	4	3	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	2	2	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	14	4	381	8 165	288	505	4 757	17 471	15 794	32 203	D
3231	Printing & related support activities	1	14	4	381	8 165	288	505	4 757	17 471	15 794	32 203	D
32311	Printing	1	13	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALTOONA, PA MSA— Con. Manufacturing— Con.												
325	Chemical mfg	-	6	2	508	14 959	326	623	7 958	67 738	52 155	120 829	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	3	1	e	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	3	1	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	12	5	642	21 470	490	978	15 116	65 821	52 962	120 122	1 815
3272	Glass & glass product mfg .	-	3	3	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	3	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	3	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	536	19 766	367	889	12 982	44 031	84 073	127 221	D
3314	Nonferrous metal (except aluminum) production & processing	-	3	3	536	19 766	367	889	12 982	44 031	84 073	127 221	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	4	778	23 965	651	1 225	16 827	84 449	47 710	133 355	4 520
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	5	3	358	11 052	308	592	7 549	32 092	21 568	53 384	1 553
33272	Turned product & screw, nut, & bolt mfg	-	2	2	e	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	2	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	e	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	663	25 791	452	877	14 996	57 957	26 759	84 485	1 558
3332	Industrial machinery mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	381	9 048	313	703	6 292	34 626	37 967	74 501	D
3359	Other electrical equipment & component mfg	-	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	18	4	326	7 065	282	543	3 732	19 259	11 523	30 124	123
3399	Other miscellaneous mfg ..	-	9	4	299	6 607	262	522	3 501	18 090	10 922	28 338	53
	ERIE, PA MSA												
31-33	Manufacturing	-	570	253	32 813	1 142 349	24 172	53 363	739 324	3 128 326	2 621 289	5 779 337	202 249
311	Food mfg	3	26	10	1 400	31 715	910	1 951	20 913	93 678	127 145	220 813	14 022
3114	Fruit & vegetable preserving & specialty food mfg	9	2	2	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	9	1	1	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	9	1	1	e	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging..	-	1	1	e	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ERIE, PA MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	3	10	4	382	8 331	274	614	6 031	30 937	18 724	49 721	730
31181	Bread & bakery product mfg	3	10	4	382	8 331	274	614	6 031	30 937	18 724	49 721	730
312	Beverage & tobacco product mfg	—	5	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	5	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	20	6	359	6 619	270	476	4 760	15 657	18 431	33 538	1 228
3219	Other wood product mfg	1	14	4	284	5 166	206	356	3 529	11 837	12 039	23 293	813
322	Paper mfg	—	5	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	6	34	4	389	10 380	290	542	7 066	23 660	16 613	40 222	1 870
3231	Printing & related support activities	6	34	4	389	10 380	290	542	7 066	23 660	16 613	40 222	1 870
32311	Printing	6	34	4	389	10 380	290	542	7 066	23 660	16 613	40 222	1 870
323110	Commercial lithographic printing	3	17	3	253	6 543	193	377	4 688	13 641	8 457	22 126	1 132
324	Petroleum & coal products mfg	—	3	3	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	3	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	11	2	288	12 330	176	323	6 273	43 124	28 146	73 296	2 725
326	Plastics & rubber products mfg	1	64	47	5 734	162 213	4 607	9 036	106 115	415 630	348 918	762 787	42 821
3261	Plastics product mfg	1	58	41	5 061	136 961	4 162	8 093	91 728	343 145	317 060	658 936	39 082
32619	Other plastics product mfg	—	48	34	4 528	117 829	3 756	7 372	82 444	291 023	243 999	533 546	33 888
326199	All other plastics product mfg	—	48	34	4 528	117 829	3 756	7 372	82 444	291 023	243 999	533 546	33 888
3262	Rubber product mfg	—	6	6	673	25 252	445	943	14 387	72 485	31 858	103 851	3 739
32629	Other rubber product mfg	—	4	4	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	3	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	19	13	1 942	67 085	1 438	3 116	46 379	150 753	109 175	257 148	11 997
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	15	9	1 148	40 189	950	1 994	30 609	98 158	67 539	165 425	8 070
33151	Ferrous metal foundries	—	7	4	504	18 874	380	867	13 262	50 929	31 475	82 370	6 818
331511	Iron foundries	—	5	4	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	8	5	644	21 315	570	1 127	17 347	47 229	36 064	83 055	1 252
331521	Aluminum die-casting foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	169	69	6 416	205 713	4 766	9 636	131 171	454 640	358 453	825 669	25 883
3321	Forging & stamping	—	15	10	1 215	42 518	873	1 938	29 951	80 033	105 192	194 175	2 642
33211	Forging & stamping	—	15	10	1 215	42 518	873	1 938	29 951	80 033	105 192	194 175	2 642
332111	Iron & steel forging	—	6	4	293	10 111	199	470	6 415	21 133	25 569	46 637	D
332114	Custom roll forming	—	1	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	3	7	4	e	D	D	D	D	D	D	D	1 632
3323	Architectural & structural metals mfg	1	24	11	928	27 651	711	1 372	17 139	71 695	38 562	109 539	2 180
33231	Plate work & fabricated structural product mfg	—	11	4	484	15 586	370	658	9 354	47 993	27 493	74 987	903
332312	Fabricated structural metal mfg	—	8	3	e	D	D	D	D	D	D	D	801
33232	Ornamental & architectural metal products mfg	2	13	7	444	12 065	341	714	7 785	23 702	11 069	34 552	1 277
332322	Sheet metal work mfg	2	10	5	382	10 266	302	632	6 897	20 196	9 270	29 329	1 006

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ERIE, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	7	5	362	11 236	269	391	4 638	11 642	47 469	64 097	2 615
33241	Power boiler & heat exchanger mfg	—	2	2	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	2	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	—	4	2	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	4	2	e	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	—	2	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	65	19	1 880	53 418	1 538	3 185	38 754	105 715	59 791	165 779	8 581
33271	Machine shops	—	53	12	1 449	42 477	1 202	2 434	30 024	80 790	47 518	128 548	6 083
332710	Machine shops	—	53	12	1 449	42 477	1 202	2 434	30 024	80 790	47 518	128 548	6 083
33272	Turned product & screw, nut, & bolt mfg	—	12	7	431	10 941	336	751	8 730	24 925	12 273	37 231	2 498
332721	Precision turned product mfg	—	11	6	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	—	26	8	472	13 645	370	667	8 657	27 063	10 756	37 836	1 494
33281	Coating, engraving, heat treating, & allied activities	—	26	8	472	13 645	370	667	8 657	27 063	10 756	37 836	1 494
332813	Electroplating, plating, polishing, anodizing, & coloring	—	17	5	358	11 133	285	501	7 129	21 226	8 115	29 453	1 150
3329	Other fabricated metal product mfg	—	21	12	1 033	36 271	622	1 285	17 735	109 556	69 480	178 241	3 775
33291	Metal valve mfg	—	12	10	927	33 172	542	1 132	15 576	102 504	66 681	168 289	3 479
332911	Industrial valve mfg	—	9	7	544	18 598	324	646	8 195	39 839	27 578	67 207	2 415
333	Machinery mfg	1	102	43	3 358	137 491	2 256	4 983	83 931	278 638	200 940	477 931	16 867
3335	Metalworking machinery mfg	1	64	27	1 693	80 503	1 303	2 975	54 921	144 737	101 855	246 437	8 965
33351	Metalworking machinery mfg	1	64	27	1 693	80 503	1 303	2 975	54 921	144 737	101 855	246 437	8 965
333511	Industrial mold mfg	—	37	20	1 125	57 425	930	2 250	41 948	100 322	49 629	149 323	7 059
333518	Other metalworking machinery mfg	3	3	3	266	11 415	156	314	6 032	24 921	41 858	67 486	761
3339	Other general-purpose machinery mfg	—	18	9	1 104	37 036	604	1 323	18 504	89 882	66 022	153 889	4 572
33399	All other general-purpose machinery mfg	—	10	6	840	29 291	457	984	14 748	72 469	54 828	125 131	3 736
333999	All other miscellaneous general-purpose machinery mfg	—	5	4	633	25 441	324	732	12 870	64 338	50 682	112 819	D
334	Computer & electronic product mfg	1	16	11	1 578	48 567	1 049	1 908	23 447	105 730	72 244	180 936	5 472
3344	Semiconductor & other electronic component mfg	3	13	8	1 016	22 975	731	1 210	11 397	52 061	40 168	94 641	D
33441	Semiconductor & other electronic component mfg	3	13	8	1 016	22 975	731	1 210	11 397	52 061	40 168	94 641	D
334417	Electronic connector mfg	—	1	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	8	3	3	338	7 186	236	368	3 942	7 761	15 046	24 931	D
3345	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	17	9	554	14 926	418	709	9 335	31 311	23 346	54 344	641
3359	Other electrical equipment & component mfg	—	8	4	336	9 605	261	483	6 163	19 582	13 003	32 166	325
33593	Wiring device mfg	—	5	3	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	4	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ERIE, PA MSA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	11	5	i	D	D	D	D	D	D	D	50 944
3363	Motor vehicle parts mfg ...	-	5	2		272	9 393	227	428	7 185	28 015	49 632	76 358
3365	Railroad rolling stock mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	i	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	15	8		695	16 552	567	1 114	10 851	26 245	24 813	51 249
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	4		491	9 785	425	838	7 744	12 649	12 733	25 438
33712	Household & institutional furniture mfg	-	7	4	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	31	13		1 650	54 472	965	1 971	25 979	101 584	51 809	165 482
3391	Medical equipment & supplies mfg	-	15	3		1 008	40 609	469	975	17 545	72 310	30 573	114 932
33911	Medical equipment & supplies mfg	-	15	3		1 008	40 609	469	975	17 545	72 310	30 573	114 932
339111	Laboratory apparatus & furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	16	10		642	13 863	496	996	8 434	29 274	21 236	50 550
33993	Doll, toy, & game mfg ...	-	5	4		376	8 295	298	677	4 987	17 075	14 277	31 306
339932	Game, toy, & children's vehicle mfg	-	5	4		376	8 295	298	677	4 987	17 075	14 277	31 306
HARRISBURG-LEBANON-CARLISLE, PA MSA													
31-33	Manufacturing	-	674	265		38 896	1 240 557	29 572	59 978	851 786	3 966 054	4 804 642	8 691 249
311	Food mfg	1	69	31		9 461	347 541	7 339	14 518	239 925	1 499 466	2 141 744	3 594 411
3112	Grain & oilseed milling	-	8	2		535	22 162	395	825	16 263	304 334	228 515	520 723
31123	Breakfast cereal mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	8	3	i	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	1	1	h	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	1	1	h	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	-	2	2	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	2	2	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	8	6		628	19 120	383	828	10 442	70 470	212 701	273 012
31151	Dairy product (except frozen) mfg	-	6	5	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	14	9		1 679	35 062	1 433	2 926	27 492	119 905	301 757	423 743
31161	Animal slaughtering & processing	5	14	9		1 679	35 062	1 433	2 926	27 492	119 905	301 757	423 743
311612	Meat processed from carcasses	8	9	6		507	11 354	410	878	8 378	76 134	172 820	251 068
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	2 770
3117	Seafood product preparation & packaging ..	-	1	1	e	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	1	1	e	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	5	17	6		766	19 509	603	1 032	13 902	90 330	54 875	144 731
31181	Bread & bakery product mfg	7	16	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	9	4	3	e	D	D	D	D	D	D	D	D
313	Textile mills	-	7	4		651	12 605	528	1 210	9 440	21 492	21 224	40 209
3132	Fabric mills	-	4	3	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	17	3	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	10	2	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARRISBURG—LEBANON—CARLISLE, PA MSA—Con. Manufacturing—Con.												
315	Apparel mfg	6	26	15	1 189	16 895	1 079	1 978	13 964	28 053	22 008	50 064	793
3152	Cut & sew apparel mfg	7	18	11	927	13 473	846	1 607	11 036	22 811	16 606	39 386	617
31521	Cut & sew apparel contractors	5	11	8	601	8 244	552	1 062	6 887	11 927	3 763	15 821	239
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	11	8	601	8 244	552	1 062	6 887	11 927	3 763	15 821	239
316	Leather & allied product mfg .	1	8	4	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	1	7	4	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	1	7	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	35	7	1 268	35 493	1 016	2 263	23 361	48 796	95 692	145 978	7 147
3219	Other wood product mfg ...	—	24	5	1 013	27 015	803	1 788	17 465	33 651	70 768	106 484	5 549
32191	Millwork	—	8	3	f	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing	—	2	1	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	1	13	1	368	8 819	274	534	4 692	16 476	19 192	36 112	D
321992	Prefabricated wood building mfg	—	4	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	10	8	1 535	49 802	1 169	2 307	33 415	233 351	299 447	534 985	14 308
3222	Converted paper product mfg	—	8	6	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	3	2	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	—	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	104	26	3 149	89 751	2 000	4 635	59 414	174 583	124 090	301 007	29 190
3231	Printing & related support activities	—	104	26	3 149	89 751	2 000	4 635	59 414	174 583	124 090	301 007	29 190
32311	Printing	—	95	25	3 026	86 445	1 908	4 463	57 388	168 828	122 388	293 559	29 000
323110	Commercial lithographic printing ..	—	52	16	2 396	71 478	1 434	3 644	47 756	131 800	103 050	237 326	26 028
325	Chemical mfg	—	11	4	658	24 399	434	991	16 351	68 600	150 617	220 899	10 324
3254	Pharmaceutical & medicine mfg	—	2	1	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	1	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	31	16	2 966	95 270	2 222	4 238	60 001	251 390	295 153	540 758	15 091
3261	Plastics product mfg	—	25	13	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	8	3	399	10 420	363	684	8 898	27 544	38 066	65 633	2 003
326121	Unsupported plastics profile shape mfg	—	6	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	11	5	978	26 593	823	1 474	20 414	58 134	59 277	116 414	2 608
326199	All other plastics product mfg	—	10	5	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	6	3	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	3	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	3	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	26	10	1 220	42 045	971	2 212	31 036	184 429	115 648	299 338	19 388
3272	Glass & glass product mfg .	—	6	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	6	2	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	14	4	260	7 795	215	448	5 712	27 307	24 743	51 737	D
3279	Other nonmetallic mineral product mfg	—	4	3	301	10 683	245	573	8 455	38 305	25 700	63 833	3 205

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARRISBURG-LEBANON-CARLISLE, PA MSA—Con. Manufacturing—Con.												
331	Primary metal mfg	-	15	13	2 883	117 223	2 408	4 983	93 440	252 096	459 252	705 315	23 509
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	10	8	956	28 739	812	1 717	22 493	59 221	37 473	95 677	D
33151	Ferrous metal foundries ..	-	9	7	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	5	4	529	16 309	437	870	12 157	35 597	21 796	56 468	2 070
332	Fabricated metal product mfg	-	98	39	2 551	75 927	2 027	4 032	53 209	214 370	214 670	426 852	14 093
3322	Cutlery & handtool mfg	-	2	2	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	28	11	652	16 995	474	753	10 681	51 012	50 755	102 039	1 427
33231	Plate work & fabricated structural product mfg ..	1	13	7	461	11 881	341	504	7 428	41 688	43 674	85 455	619
332312	Fabricated structural metal mfg	-	9	5	398	9 558	296	413	5 730	38 439	40 645	79 182	503
3324	Boiler, tank, & shipping container mfg	-	4	4	e	D	D	D	D	D	D	D	711
33242	Metal tank (heavy gauge) mfg	-	3	3	255	9 401	207	506	8 072	19 539	17 035	36 760	D
332420	Metal tank (heavy gauge) mfg	-	3	3	255	9 401	207	506	8 072	19 539	17 035	36 760	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	43	12	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	42	12	627	20 300	521	1 025	13 770	43 686	13 860	57 222	3 165
332710	Machine shops	2	42	12	627	20 300	521	1 025	13 770	43 686	13 860	57 222	3 165
333	Machinery mfg	-	53	30	3 389	109 181	2 281	4 460	66 720	319 480	314 906	615 233	19 649
3331	Agriculture, construction, & mining machinery mfg	-	9	6	1 023	34 800	687	1 390	21 975	124 742	192 447	317 085	5 544
33311	Agricultural implement mfg	-	5	3	e	D	D	D	D	D	D	D	1 200
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	5	4	315	12 688	143	307	5 236	37 386	33 396	63 564	6 924
33329	Other industrial machinery mfg	-	5	4	315	12 688	143	307	5 236	37 386	33 396	63 564	6 924
3335	Metalworking machinery mfg	1	23	11	1 317	36 705	985	1 924	25 375	89 399	32 194	115 270	3 365
33351	Metalworking machinery mfg	1	23	11	1 317	36 705	985	1 924	25 375	89 399	32 194	115 270	3 365
333514	Special die & tool, die set, jig, & fixture mfg ..	2	9	3	350	9 301	264	566	6 673	22 249	9 098	28 904	557
333515	Cutting tool & machine tool accessory mfg ..	-	9	5	810	21 550	621	1 134	15 598	55 368	17 479	68 958	2 080
334	Computer & electronic product mfg	1	32	17	2 243	65 632	1 660	3 356	40 831	182 839	99 196	280 109	8 845
3344	Semiconductor & other electronic component mfg	1	22	14	2 060	61 366	1 537	3 143	38 434	175 279	91 411	264 662	8 557
33441	Semiconductor & other electronic component mfg	1	22	14	2 060	61 366	1 537	3 143	38 434	175 279	91 411	264 662	8 557
334417	Electronic connector mfg	-	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	14	10	1 515	40 287	1 071	2 268	21 859	85 583	57 202	141 232	6 481
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	1 295
3359	Other electrical equipment & component mfg	-	2	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARRISBURG—LEBANON—CARLISLE, PA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	19	7	1 065	34 370	857	1 988	25 809	73 824	83 290	154 383	3 311
3362	Motor vehicle body & trailer mfg	-	5	3	274	8 614	212	574	6 848	19 960	20 176	39 845	1 344
33621	Motor vehicle body & trailer mfg	-	5	3	274	8 614	212	574	6 848	19 960	20 176	39 845	1 344
336211	Motor vehicle body mfg	-	5	3	274	8 614	212	574	6 848	19 960	20 176	39 845	1 344
3364	Aerospace product & parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	36	12	1 076	25 641	691	1 372	14 910	51 913	55 886	108 341	1 696
3371	Household & institutional furniture & kitchen cabinet mfg	1	28	8	839	19 596	527	1 072	11 589	41 424	44 002	86 145	760
33711	Wood kitchen cabinet & counter top mfg	3	17	6	607	13 334	392	786	8 547	20 303	18 180	41 416	661
337110	Wood kitchen cabinet & counter top mfg	3	17	6	607	13 334	392	786	8 547	20 303	18 180	41 416	661
339	Miscellaneous mfg	1	58	13	1 175	25 883	936	1 596	17 115	67 016	47 862	114 190	3 454
3391	Medical equipment & supplies mfg	4	30	5	337	7 880	229	394	4 214	12 998	7 426	20 625	597
33911	Medical equipment & supplies mfg	4	30	5	337	7 880	229	394	4 214	12 998	7 426	20 625	597
3399	Other miscellaneous mfg	-	28	8	838	18 003	707	1 202	12 901	54 018	40 436	93 565	2 857
33993	Doll, toy, & game mfg	-	3	1	e	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	2	1	e	D	D	D	D	D	D	D	D
	JOHNSTOWN, PA MSA												
31-33	Manufacturing	2	271	101	12 231	303 420	8 734	16 025	192 800	816 628	1 158 068	1 993 547	47 991
311	Food mfg	-	21	6	855	25 190	507	993	11 148	73 212	136 489	210 351	8 603
3115	Dairy product mfg	-	6	3	509	16 239	242	415	5 374	41 782	106 436	148 656	5 813
31151	Dairy product (except frozen) mfg	-	4	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	9	2	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	2	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	2	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	12	7	2 233	33 262	1 292	1 844	22 854	166 744	148 847	331 116	D
3152	Cut & sew apparel mfg	-	10	7	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	4	2	e	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	4	4	g	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	43	11	726	14 823	558	943	10 369	32 876	45 397	78 333	3 231
3211	Sawmills & wood preservation	3	26	5	325	5 840	248	396	3 938	15 659	20 433	36 020	1 971
32111	Sawmills & wood preservation	3	26	5	325	5 840	248	396	3 938	15 659	20 433	36 020	1 971
321113	Sawmills	3	25	5	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	15	5	e	D	D	D	D	D	D	D	D
32191	Millwork	1	13	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	12	5	254	4 906	204	352	2 886	11 154	9 110	20 171	1 490
327	Nonmetallic mineral product mfg	2	21	7	383	10 839	284	598	7 765	25 006	16 866	41 929	1 285

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSTOWN, PA MSA													
—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	10	8	1 263	37 845	1 005	1 944	25 408	109 031	147 119	255 155	8 171
3311	Iron & steel mills & ferroalloy mfg	—	3	3	603	20 679	500	1 004	13 367	77 131	125 075	202 234	6 259
33111	Iron & steel mills & ferroalloy mfg	—	3	3	603	20 679	500	1 004	13 367	77 131	125 075	202 234	6 259
331111	Iron & steel mills	—	3	3	603	20 679	500	1 004	13 367	77 131	125 075	202 234	6 259
3315	Foundries	—	5	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	3	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	3	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	38	15	1 355	37 269	974	1 952	23 012	73 025	75 817	153 458	4 587
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	16	5	e	D	D	D	D	D	D	D	1 637
33271	Machine shops	—	13	3	300	7 161	265	655	5 997	13 946	13 333	27 283	D
332710	Machine shops	—	13	3	300	7 161	265	655	5 997	13 946	13 333	27 283	D
333	Machinery mfg	4	20	6	1 092	32 656	772	1 623	19 931	83 625	81 333	172 272	6 050
3331	Agriculture, construction, & mining machinery mfg	—	6	2	553	15 333	447	962	10 831	41 856	24 810	67 801	D
33311	Agricultural implement mfg	—	3	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	7	6	3	463	15 336	268	559	7 832	38 427	49 516	93 974	2 951
33391	Pump & compressor mfg	9	2	2	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	9	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	9	5	277	5 475	210	377	2 793	13 204	9 663	22 493	1 318
336	Transportation equipment mfg	1	20	17	2 516	73 348	2 031	3 853	50 047	173 132	328 006	493 756	6 749
3362	Motor vehicle body & trailer mfg	2	11	10	1 179	30 287	977	1 836	20 900	77 283	97 183	172 721	2 525
33621	Motor vehicle body & trailer mfg	2	11	10	1 179	30 287	977	1 836	20 900	77 283	97 183	172 721	2 525
336211	Motor vehicle body mfg	7	9	8	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	9	2	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	9	2	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	9	2	2	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333
33651	Railroad rolling stock mfg	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333
336510	Railroad rolling stock mfg	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333
LANCASTER, PA MSA													
31-33	Manufacturing	—	918	370	52 908	1 752 047	40 403	79 651	1 178 496	5 658 468	5 052 520	10 585 384	443 196
311	Food mfg	1	110	53	9 007	281 870	6 462	13 467	190 112	1 249 595	1 399 364	2 616 818	73 957
3111	Animal food mfg	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
31111	Animal food mfg	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
311119	Other animal food mfg	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
3112	Grain & oilseed milling	—	5	1	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	—	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	—	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	10	5	g	D	D	D	D	D	D	D	18 217
31132	Chocolate & confectionery mfg from cacao beans	—	2	2	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans	—	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	—	5	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	—	5	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	9	4	3	459	11 312	399	949	8 869	67 996	29 877	96 858	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LANCASTER, PA MSA —Con.												
31-33	Manufacturing— Con.												
311	Food mfg—Con.												
3115	Dairy product mfg	—	9	5	1 294	39 017	784	1 652	23 311	152 402	234 185	381 643	15 362
31151	Dairy product (except frozen) mfg	—	5	2	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	—	3	1	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	—	4	3	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	—	4	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	11	7	1 546	36 623	1 183	2 643	26 375	60 214	157 223	216 946	4 044
31161	Animal slaughtering & processing	—	11	7	1 546	36 623	1 183	2 643	26 375	60 214	157 223	216 946	4 044
311612	Meat processed from carcasses	1	5	4	481	15 641	331	780	9 046	26 549	54 446	80 577	2 769
311615	Poultry processing	—	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	29	8	1 317	43 497	981	1 861	34 352	174 749	75 958	253 674	7 021
31181	Bread & bakery product mfg	—	24	6	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	5	2	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	3	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	1	25	18	1 509	33 190	1 069	1 715	19 451	116 188	217 012	333 382	8 522
31191	Snack food mfg	—	15	11	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	15	11	f	D	D	D	D	D	D	D	D
31199	All other food mfg	1	8	6	599	13 676	438	720	7 698	48 608	164 707	213 301	D
311999	All other miscellaneous food mfg	1	7	5	e	D	D	D	D	D	D	D	4 405
312	Beverage & tobacco product mfg	2	9	6	276	7 089	152	265	4 160	19 670	29 570	49 352	1 433
313	Textile mills	3	8	6	718	19 184	597	1 160	13 604	46 730	30 901	77 512	D
3132	Fabric mills	1	6	5	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	3	4	4	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	3	4	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	39	20	2 897	60 262	2 396	4 710	42 372	119 492	141 244	253 635	2 582
3151	Apparel knitting mills	—	3	3	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	2	2	e	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	2	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	32	15	1 476	25 662	1 301	2 553	20 681	51 890	47 162	98 790	742
31521	Cut & sew apparel contractors	6	17	6	598	11 315	524	1 160	9 307	16 688	1 723	18 371	229
315212	Women's, girls', & infants' cut & sew apparel contractors	6	15	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	8	5	607	10 212	540	951	8 166	28 329	42 129	69 945	207
3159	Apparel accessories & other apparel mfg	—	4	2	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	—	4	2	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	63	17	2 491	64 298	1 963	3 396	43 345	135 771	171 329	307 009	6 044
3219	Other wood product mfg	—	51	14	2 360	61 251	1 865	3 195	41 301	129 868	150 033	279 893	5 302
32191	Millwork	—	12	5	1 130	29 094	857	1 329	19 657	49 669	41 400	90 561	3 431
321911	Wood window & door mfg	—	5	3	965	25 993	760	1 163	17 715	46 135	34 383	80 003	D
32199	All other wood product mfg	—	32	6	1 100	29 239	893	1 660	19 429	73 457	100 478	174 448	1 376
321991	Manufactured home (mobile home) mfg	—	5	5	906	24 913	731	1 357	16 219	63 293	85 604	149 233	871
322	Paper mfg	—	13	11	885	30 643	629	1 337	16 174	79 577	104 577	184 988	4 720
3222	Converted paper product mfg	—	13	11	885	30 643	629	1 337	16 174	79 577	104 577	184 988	4 720
32221	Paperboard container mfg	—	7	6	516	19 786	347	693	9 081	49 853	71 277	121 555	D
322211	Corrugated & solid fiber box mfg	—	6	5	e	D	D	D	D	D	D	D	2 439
32229	Other converted paper product mfg	—	3	2	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	—	3	2	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LANCASTER, PA MSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	-	95	42	6 833	247 405	5 491	10 873	179 908	652 431	448 137	1 098 060	61 469
3231	Printing & related support activities.....	-	95	42	6 833	247 405	5 491	10 873	179 908	652 431	448 137	1 098 060	61 469
32311	Printing	-	79	34	6 392	234 341	5 177	10 312	172 100	629 688	443 909	1 071 110	59 568
323110	Commercial lithographic printing ..	-	41	19	4 784	181 673	3 931	7 703	133 660	504 358	336 343	837 012	50 500
323111	Commercial gravure printing	-	1	1	e	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	3	3	259	7 917	185	328	5 412	28 048	55 064	84 149	D
323117	Book printing.....	1	5	4	596	19 881	497	1 100	15 830	42 490	16 448	58 914	2 594
32312	Support activities for printing	1	16	8	441	13 064	314	561	7 808	22 743	4 228	26 950	1 901
323122	Prepress services	1	13	6	350	9 644	240	407	5 506	16 588	3 352	19 915	D
325	Chemical mfg	-	29	12	2 255	96 353	1 625	2 793	61 757	1 025 984	199 891	1 187 310	63 379
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	6	2	306	9 839	213	435	5 343	27 230	23 011	50 315	1 407
3254	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	4	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	31	23	4 281	169 493	3 702	7 665	134 104	473 231	406 031	861 881	82 105
3261	Plastics product mfg	-	23	18	3 878	153 046	3 398	6 950	123 803	429 359	378 010	790 021	78 746
32614	Polystyrene foam product mfg	-	1	1	g	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	14	9	2 438	114 505	2 060	4 215	90 380	377 192	211 474	571 583	D
326192	Resilient floor covering mfg	-	1	1	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	12	7	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	8	5	403	16 447	304	715	10 301	43 872	28 021	71 860	3 359
327	Nonmetallic mineral product mfg	-	26	10	1 329	47 340	1 124	2 113	37 908	97 024	95 193	189 753	19 052
3273	Cement & concrete product mfg	-	15	8	655	21 112	545	1 055	15 994	33 474	55 620	86 435	D
32739	Other concrete product mfg	-	7	4	393	12 363	336	579	9 669	18 141	30 877	46 741	D
327390	Other concrete product mfg	-	7	4	393	12 363	336	579	9 669	18 141	30 877	46 741	D
3279	Other nonmetallic mineral product mfg	-	6	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	6	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	26	18	2 921	105 858	2 316	4 931	75 504	251 979	534 418	766 803	47 575
3313	Alumina & aluminum production & processing ..	-	3	3	1 090	51 286	828	1 700	36 291	118 033	404 599	502 862	D
33131	Alumina & aluminum production & processing.....	-	3	3	1 090	51 286	828	1 700	36 291	118 033	404 599	502 862	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	19	11	1 416	38 175	1 210	2 619	28 923	78 666	34 914	113 611	3 043
33151	Ferrous metal foundries .	-	7	5	922	24 465	787	1 764	19 372	47 797	19 331	67 131	858
331511	Iron foundries	-	6	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	12	6	494	13 710	423	855	9 551	30 869	15 583	46 480	2 185
332	Fabricated metal product mfg	-	154	60	7 280	235 346	5 656	11 102	147 387	540 152	411 737	938 876	33 081
3323	Architectural & structural metals mfg	-	34	18	2 075	68 258	1 632	3 033	43 495	148 655	142 978	284 008	6 938
33231	Plate work & fabricated structural product mfg ..	-	17	10	1 286	41 994	1 045	1 714	26 289	93 065	80 186	165 854	3 623
332312	Fabricated structural metal mfg	-	13	8	1 142	37 181	931	1 507	23 035	81 902	72 495	147 169	3 430
33232	Ornamental & architectural metal products mfg	-	17	8	789	26 264	587	1 319	17 206	55 590	62 792	118 154	3 315
332322	Sheet metal work mfg .	-	10	5	645	22 231	477	1 063	14 511	44 680	52 831	97 291	2 557
3324	Boiler, tank, & shipping container mfg	-	4	3	345	11 794	278	626	8 558	28 276	21 082	48 221	575

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LANCASTER, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	3	13	5	350	9 752	260	523	6 233	19 548	18 393	37 710	1 395
33261	Spring & wire product mfg	3	13	5	350	9 752	260	523	6 233	19 548	18 393	37 710	1 395
332618	Other fabricated wire product mfg	3	13	5	350	9 752	260	523	6 233	19 548	18 393	37 710	1 395
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	68	19	1 363	42 379	1 083	2 123	27 509	72 554	40 066	112 415	7 159
33271	Machine shops	1	51	9	593	18 046	440	783	11 630	30 210	14 076	44 600	1 965
332710	Machine shops	1	51	9	593	18 046	440	783	11 630	30 210	14 076	44 600	1 965
33272	Turned product & screw, nut, & bolt mfg	—	17	10	770	24 333	643	1 340	15 879	42 344	25 990	67 815	5 194
332721	Precision turned product mfg	—	14	8	692	21 604	587	1 215	14 144	39 039	21 454	60 175	D
3329	Other fabricated metal product mfg	—	15	8	2 535	87 145	1 958	3 936	52 733	235 745	153 651	385 481	14 209
33291	Metal valve mfg	—	2	2	g	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	13	6	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	77	29	3 125	122 120	2 252	4 100	80 523	268 509	250 855	515 601	13 394
3331	Agriculture, construction, & mining machinery mfg	—	23	6	1 185	49 074	989	1 674	40 898	75 759	90 897	162 174	3 836
33311	Agricultural implement mfg	—	20	3	1 090	45 986	934	1 550	39 209	69 150	84 906	149 631	2 947
333111	Farm machinery & equipment mfg	—	18	3	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	1	11	3	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	6	569	21 454	300	639	7 855	80 397	83 799	160 928	2 947
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	6	569	21 454	300	639	7 855	80 397	83 799	160 928	2 947
333414	Heating equipment (except warm air furnaces) mfg	—	5	4	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	15	5	334	11 231	264	435	8 110	14 810	4 254	19 217	1 305
33351	Metalworking machinery mfg	3	15	5	334	11 231	264	435	8 110	14 810	4 254	19 217	1 305
3339	Other general-purpose machinery mfg	1	16	8	617	21 106	458	845	14 397	57 001	38 128	97 276	2 331
33399	All other general-purpose machinery mfg	—	7	3	340	11 288	271	526	8 396	31 368	11 128	42 426	599
333999	All other miscellaneous general-purpose machinery mfg	—	5	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	23	13	2 253	86 083	1 427	2 764	39 565	289 543	179 697	476 711	11 275
3342	Communications equipment mfg	—	3	3	f	D	D	D	D	D	D	D	4 564
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	11	8	1 199	48 794	952	1 911	28 254	135 606	65 359	205 376	4 845
33441	Semiconductor & other electronic component mfg	1	11	8	1 199	48 794	952	1 911	28 254	135 606	65 359	205 376	4 845
334411	Electron tube mfg	—	1	1	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	3	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	4	3	3	267	11 344	209	593	7 461	27 244	21 777	49 117	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LANCASTER, PA MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	5	2	307	7 822	167	241	3 301	17 399	9 973	28 104	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	2	307	7 822	167	241	3 301	17 399	9 973	28 104	D
335	Electrical equipment, appliance, & component mfg	—	16	8	1 866	52 761	1 234	2 602	34 493	136 543	256 834	393 448	9 503
3353	Electrical equipment mfg ..	—	5	3	480	11 314	348	651	5 228	11 787	35 398	46 219	D
33531	Electrical equipment mfg	—	5	3	480	11 314	348	651	5 228	11 787	35 398	46 219	D
335312	Motor & generator mfg	—	2	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	7	5	1 371	41 179	874	1 932	29 077	124 064	220 762	345 840	8 036
33592	Communication & energy wire & cable mfg	—	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	3	2	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	28	10	1 390	41 663	1 008	1 906	25 017	98 244	260 032	359 349	3 265
3362	Motor vehicle body & trailer mfg	—	12	6	775	22 772	590	1 044	14 227	41 052	60 117	103 500	475
33621	Motor vehicle body & trailer mfg	—	12	6	775	22 772	590	1 044	14 227	41 052	60 117	103 500	475
336211	Motor vehicle body mfg	—	4	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	7	4	402	10 024	312	499	6 291	16 144	26 549	42 860	222
3363	Motor vehicle parts mfg ...	1	7	3	e	D	D	D	D	D	D	D	2 472
337	Furniture & related product mfg	2	86	17	1 982	55 967	1 537	2 920	36 961	106 948	87 129	194 533	3 218
3371	Household & institutional furniture & kitchen cabinet mfg	3	79	13	1 672	46 118	1 288	2 455	31 716	84 993	65 259	150 737	2 402
33711	Wood kitchen cabinet & counter top mfg	2	43	9	1 009	30 451	749	1 563	20 673	51 420	29 695	81 240	1 222
337110	Wood kitchen cabinet & counter top mfg ...	2	43	9	1 009	30 451	749	1 563	20 673	51 420	29 695	81 240	1 222
33712	Household & institutional furniture mfg	4	36	4	663	15 667	539	892	11 043	33 573	35 564	69 497	1 180
337122	Nonupholstered wood household furniture mfg	7	30	2	366	7 870	314	513	6 078	21 340	21 083	42 730	806
3379	Other furniture related product mfg	—	3	2	e	D	D	D	D	D	D	D	464
33791	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	464
337910	Mattress mfg	—	3	2	e	D	D	D	D	D	D	D	464
339	Miscellaneous mfg	2	59	11	792	22 581	581	1 183	12 350	49 763	28 223	79 264	2 573
3391	Medical equipment & supplies mfg	2	18	5	376	13 304	254	609	6 726	31 305	16 614	49 017	1 769
33911	Medical equipment & supplies mfg	2	18	5	376	13 304	254	609	6 726	31 305	16 614	49 017	1 769
3399	Other miscellaneous mfg ...	2	41	6	416	9 277	327	574	5 624	18 458	11 609	30 247	804
	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA												
31-33	Manufacturing	1	29 610	8 242	837 259	29 316 270	556 831	1 099 707	14 974 104	88 559 145	75 447 144	164 000 119	5 662 912
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (CT Part)	1	3 136	1 014	126 073	5 105 182	77 123	159 649	2 450 980	15 589 132	10 842 000	26 362 516	999 073
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (NJ Part)	1	9 881	3 185	336 041	12 775 550	224 381	456 137	6 591 608	41 940 178	37 053 679	78 851 460	2 605 396
	New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA (NY Part)	2	16 565	4 039	374 810	11 425 439	255 150	483 656	5 928 336	31 004 045	27 448 245	58 649 812	2 055 055

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA—Con.												
	Manufacturing—Con.												
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (PA Part)	–	28	4	335	10 099	177	265	3 180	25 790	103 220	136 331	3 388
311	Food mfg.....	2	2 571	447	l	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	2	100	32	i	D	D	D	D	D	D	D	D
313	Textile mills.....	3	922	248	j	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	809	173	j	D	D	D	D	D	D	D	D
315	Apparel mfg.....	3	4 418	1 362	m	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.....	1	230	55	i	D	D	D	D	D	D	D	D
321	Wood product mfg.....	4	326	66	h	D	D	D	D	D	D	D	D
322	Paper mfg.....	1	490	276	k	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	3 936	722	l	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	1	118	27	h	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	1 205	587	l	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	1 052	540	l	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	617	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	–	286	135	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	3 722	960	80 405	2 878 544	58 220	121 941	1 709 920	6 078 011	4 482 749	10 584 180	356 089
333	Machinery mfg.....	1	1 672	489	k	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	1 402	576	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	637	297	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	–	450	166	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	1 452	259	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	3 195	649	l	D	D	D	D	D	D	D	D
31-33	Newburgh, NY–PA PMSA												
	Manufacturing.....	1	374	111	11 157	325 859	8 255	16 021	206 882	795 085	1 166 776	1 970 201	64 771
	Newburgh, NY–PA PMSA (NY Part).....	1	346	107	j	D	D	D	D	D	D	D	D
	Newburgh, NY–PA PMSA (PA Part).....	–	28	4	e	D	D	D	D	D	D	D	D
311	Food mfg.....	1	23	6	296	6 321	232	306	4 338	30 581	49 176	79 646	1 757
313	Textile mills.....	5	13	5	406	9 687	339	567	6 450	23 330	20 533	43 592	2 791
3133	Textile & fabric finishing & fabric coating mills.....	7	8	4	e	D	D	D	D	D	D	D	1 754
31331	Textile & fabric finishing mills.....	9	5	3	e	D	D	D	D	D	D	D	1 193
313311	Broadwoven fabric finishing mills.....	9	3	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	4	18	8	e	D	D	D	D	D	D	D	190
3152	Cut & sew apparel mfg.....	4	15	8	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	5	20	4	388	10 425	303	564	6 337	23 837	29 763	54 148	1 989
3219	Other wood product mfg.....	7	16	2	302	7 877	240	438	4 795	18 646	22 935	42 071	D

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	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.												
	Newburgh, NY—PA PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	1	14	7	871	25 272	669	1 360	17 937	55 889	88 147	148 418	2 979
3222	Converted paper product mfg	1	13	6	f	D	D	D	D	D	D	D	2 979
32221	Paperboard container mfg	3	7	3	303	7 722	178	273	3 324	11 150	17 722	28 890	1 181
322211	Corrugated & solid fiber box mfg	3	6	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	4	2	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	3	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	48	3	e	D	D	D	D	D	D	D	932
3231	Printing & related support activities	2	48	3	e	D	D	D	D	D	D	D	932
32311	Printing	2	44	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	18	10	1 392	42 831	926	2 000	22 774	132 353	116 853	247 362	7 952
3256	Soap, cleaning compound, & toilet preparation mfg	—	8	3	f	D	D	D	D	D	D	D	2 963
32562	Toilet preparation mfg	—	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
325620	Toilet preparation mfg	—	5	3	902	19 201	667	1 453	11 675	47 354	25 012	70 557	D
326	Plastics & rubber products mfg	—	17	11	1 496	39 646	1 188	2 233	28 287	108 188	107 678	213 818	6 767
3261	Plastics product mfg	—	15	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	9	6	1 053	27 386	866	1 589	20 838	68 329	75 624	142 209	D
326192	Resilient floor covering mfg	—	3	2	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	6	4	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	19	9	391	12 540	299	651	8 732	31 494	25 485	57 110	3 550
331	Primary metal mfg	—	5	3	394	16 422	247	530	9 381	31 977	153 630	183 829	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	49	11	1 077	44 002	837	1 787	32 736	105 090	232 355	341 164	10 232
3324	Boiler, tank, & shipping container mfg	—	4	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	2	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	10	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	19	7	1 121	34 794	910	1 883	24 198	76 031	115 721	190 208	6 585
3351	Electric lighting equipment mfg	—	9	3	483	16 053	386	758	9 707	33 498	31 266	64 479	D
33512	Lighting fixture mfg	—	9	3	483	16 053	386	758	9 707	33 498	31 266	64 479	D
3359	Other electrical equipment & component mfg	3	6	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	5	3	3	363	9 606	305	629	7 350	27 461	46 356	72 796	4 145
335929	Other communication & energy wire mfg	5	3	3	363	9 606	305	629	7 350	27 461	46 356	72 796	4 145
337	Furniture & related product mfg	4	19	5	e	D	D	D	D	D	D	D	543
3372	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	294
33721	Office furniture (including fixtures) mfg	3	7	3	e	D	D	D	D	D	D	D	294

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con. Newburgh, NY—PA PMSA—Con. Manufacturing—Con.												
339	Miscellaneous mfg.....	4	33	9	1 082	26 635	813	1 592	16 062	58 011	36 767	94 625	3 636
3399	Other miscellaneous mfg ..	4	20	7	968	22 999	738	1 457	14 389	49 383	32 449	81 634	3 156
33999	All other miscellaneous mfg ..	4	11	6	914	22 040	697	1 393	13 837	46 474	29 551	75 876	2 908
339999	All other miscellaneous mfg ..	5	7	4	748	18 576	576	1 120	11 752	39 498	26 813	65 992	2 753
31-33	PHILADELPHIA—WILMINGTON—ATLANTIC CITY, PA—NJ—DE—MD CMSA Manufacturing	1	7 571	2 521	296 009	11 144 543	198 342	402 245	6 246 279	36 032 591	42 854 609	78 627 684	3 154 094
	Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA (DE Part)	—	458	152	22 610	1 000 141	15 063	32 184	586 957	3 047 597	5 748 447	8 734 968	411 143
	Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA (MD Part)	—	55	22	2 766	100 911	1 618	3 211	48 378	385 245	295 709	678 271	52 939
	Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA (NJ Part)	1	1 931	643	73 747	2 654 647	51 459	101 322	1 560 504	8 161 513	9 971 460	18 209 340	508 565
	Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD CMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg.....	1	658	204	26 743	799 864	18 468	36 623	476 156	2 875 491	4 075 170	6 931 087	163 018
312	Beverage & tobacco product mfg.....	1	41	15	h	D	D	D	D	D	D	D	D
313	Textile mills.....	2	111	51	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	150	30	h	D	D	D	D	D	D	D	D
315	Apparel mfg.....	3	300	109	j	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	—	25	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	151	35	2 393	61 337	1 849	3 513	38 878	144 044	231 714	372 912	D
322	Paper mfg.....	1	167	111	j	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	1 071	237	25 080	873 504	17 864	34 229	537 117	1 962 280	1 237 277	3 197 812	134 832
324	Petroleum & coal products mfg.....	—	69	33	i	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	371	205	k	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	350	178	16 562	555 452	12 154	24 588	328 294	1 685 983	1 375 225	3 062 168	151 712
327	Nonmetallic mineral product mfg.....	1	300	114	12 188	429 542	9 612	20 003	308 463	1 106 394	734 488	1 834 034	D
331	Primary metal mfg.....	—	91	52	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	1 270	376	31 121	1 131 270	22 772	45 939	690 784	2 548 013	1 825 591	4 351 565	D
333	Machinery mfg.....	1	579	200	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	480	205	29 370	1 229 659	15 453	30 789	532 374	3 098 273	1 937 075	5 006 993	D
335	Electrical equipment, appliance, & component mfg.....	1	165	66	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	176	72	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	2	356	70	8 035	246 015	6 057	12 131	155 199	632 178	506 362	1 136 678	D
339	Miscellaneous mfg.....	2	690	154	j	D	D	D	D	D	D	D	D

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA												
31-33	Manufacturing	1	6 606	2 206	251 908	9 482 996	167 118	338 336	5 228 189	31 229 385	35 557 980	66 607 657	2 582 420
	Philadelphia, PA–NJ PMSA (NJ Part)	–	1 479	502	55 022	2 094 152	36 916	72 808	1 177 749	6 791 149	8 718 987	15 602 552	400 973
	Philadelphia, PA–NJ PMSA (PA Part)	1	5 127	1 704	196 886	7 388 844	130 202	265 528	4 050 440	24 438 236	26 838 993	51 005 105	2 181 447
311	Food mfg	1	543	169	23 115	703 712	15 744	31 442	415 160	2 575 262	3 626 338	6 186 218	145 214
3111	Animal food mfg	–	7	3	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	–	7	3	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	–	2	2	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	3	44	14	1 575	42 691	1 216	2 473	26 267	123 552	129 711	254 002	7 878
31133	Confectionery mfg from purchased chocolate	2	21	9	1 073	28 697	835	1 739	16 865	89 201	74 413	164 014	5 376
311330	Confectionery mfg from purchased chocolate	2	21	9	1 073	28 697	835	1 739	16 865	89 201	74 413	164 014	5 376
31134	Nonchocolate confectionery mfg	1	15	2	317	7 139	246	447	4 922	19 052	13 801	33 339	972
311340	Nonchocolate confectionery mfg	1	15	2	317	7 139	246	447	4 922	19 052	13 801	33 339	972
3114	Fruit & vegetable preserving & specialty food mfg	–	25	16	1 479	42 428	1 153	2 127	29 144	280 939	223 566	504 508	12 267
31141	Frozen food mfg	–	11	8	889	26 242	780	1 411	20 651	167 369	132 582	299 928	D
311412	Frozen specialty food mfg	–	10	7	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	–	14	8	590	16 186	373	716	8 493	113 570	90 984	204 580	D
311421	Fruit & vegetable canning	–	13	8	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	43	13	1 499	50 305	789	1 618	24 021	155 662	375 626	527 335	16 921
31151	Dairy product (except frozen) mfg	2	22	12	1 390	48 046	711	1 504	22 666	149 391	366 390	511 840	16 431
311511	Fluid milk mfg	2	13	9	1 243	43 761	602	1 302	20 338	128 931	309 403	435 101	15 463
3116	Meat product mfg	–	60	43	7 660	227 962	5 732	12 065	138 323	569 835	2 065 790	2 634 155	43 748
31161	Animal slaughtering & processing	–	60	43	7 660	227 962	5 732	12 065	138 323	569 835	2 065 790	2 634 155	43 748
311611	Animal (except poultry) slaughtering	–	15	10	3 359	108 674	2 278	4 812	63 513	217 666	1 115 055	1 334 175	22 830
311612	Meat processed from carcasses	1	30	22	2 710	81 273	2 095	4 229	51 898	214 879	646 996	861 733	13 901
311615	Poultry processing	–	12	9	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	308	63	9 137	275 399	5 705	10 787	161 771	1 150 076	560 258	1 699 435	49 018
31181	Bread & bakery product mfg	2	276	50	7 219	214 441	4 366	7 957	121 551	825 861	354 081	1 178 644	31 811
311811	Retail bakeries	4	198	19	1 620	22 062	913	1 292	11 561	47 326	26 891	74 390	2 702
311812	Commercial bakeries	2	68	24	4 173	142 769	2 269	4 247	71 240	541 761	191 257	730 868	21 229
311813	Frozen cakes, pies, & other pastries mfg	–	10	7	1 426	49 610	1 184	2 418	38 750	236 774	135 933	373 386	7 880
31182	Cookie, cracker, & pasta mfg	–	31	13	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	–	15	7	g	D	D	D	D	D	D	D	13 848
311822	Flour mixes & dough mfg from purchased flour	2	6	4	346	9 211	205	413	4 995	30 890	35 472	67 700	D
3119	Other food mfg	2	51	16	1 385	51 345	880	1 797	28 072	232 262	202 153	435 142	D
31191	Snack food mfg	–	11	2	327	8 366	205	456	5 400	98 664	96 539	196 495	2 045
311919	Other snack food mfg	–	8	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	4	13	5	450	20 781	245	544	10 199	52 079	34 402	86 964	D
311942	Spice & extract mfg	4	7	4	353	17 363	186	441	8 032	40 571	22 462	63 519	3 707
31199	All other food mfg	3	21	7	542	19 914	395	726	11 494	74 284	63 148	136 602	D
311999	All other miscellaneous food mfg	3	16	6	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	31	12	2 314	87 151	1 127	2 285	36 664	424 039	485 708	915 078	26 004
3121	Beverage mfg	1	30	11	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	1	19	7	1 785	70 552	715	1 480	24 359	309 228	438 886	753 024	19 594
312111	Soft drink mfg	1	9	6	1 721	68 712	686	1 420	23 719	305 860	436 486	747 212	19 029
3122	Tobacco mfg	–	1	1	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	–	1	1	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	–	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	2	96	44	3 218	87 010	2 528	5 220	58 333	181 138	220 207	404 570	13 111
3131	Fiber, yarn, & thread mills .	2	12	8	416	8 036	367	687	6 174	17 305	26 650	43 763	1 481
31311	Fiber, yarn, & thread mills	2	12	8	416	8 036	367	687	6 174	17 305	26 650	43 763	1 481
3132	Fabric mills	2	48	24	2 006	53 955	1 593	3 298	35 775	105 333	82 940	189 869	8 475
31321	Broadwoven fabric mills .	6	14	7	502	13 520	417	863	10 074	28 900	27 980	56 414	3 325
313210	Broadwoven fabric mills	6	14	7	502	13 520	417	863	10 074	28 900	27 980	56 414	3 325
31322	Narrow fabric mills & schiffli machine embroidery	—	17	8	1 101	28 787	858	1 763	17 671	54 552	26 719	81 228	3 543
313221	Narrow fabric mills	1	13	7	f	D	D	D	D	D	D	D	D
313222	Schiffli machine embroidery	—	4	1	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	1	10	7	310	8 381	237	472	5 393	18 183	23 262	43 575	D
313230	Nonwoven fabric mills .	1	10	7	310	8 381	237	472	5 393	18 183	23 262	43 575	D
3133	Textile & fabric finishing & fabric coating mills	3	36	12	796	25 019	568	1 235	16 384	58 500	110 617	170 938	3 155
31331	Textile & fabric finishing mills	3	29	10	613	18 516	443	970	11 812	45 388	96 195	143 708	2 493
313311	Broadwoven fabric finishing mills	4	18	5	378	10 592	237	528	6 851	29 460	88 821	120 457	1 137
314	Textile product mills	1	122	26	2 030	47 467	1 567	2 969	28 729	93 408	87 153	179 560	D
3141	Textile furnishings mills	1	53	7	610	13 625	512	947	9 083	30 846	27 458	57 977	D
31412	Curtain & linen mills	1	49	6	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	15	4	315	8 001	264	501	5 531	20 255	19 907	39 770	D
3149	Other textile product mills ...	1	69	19	1 420	33 842	1 055	2 022	19 646	62 562	59 695	121 583	D
31491	Textile bag & canvas mills	1	27	7	540	12 451	432	780	7 667	22 939	23 182	45 107	D
314912	Canvas & related product mills	1	22	5	342	9 705	253	465	5 459	18 566	19 143	36 821	D
31499	All other textile product mills	2	42	12	880	21 391	623	1 242	11 979	39 623	36 513	76 476	D
314999	All other miscellaneous textile product mills ..	1	34	8	673	16 097	525	1 034	9 716	28 024	21 946	50 846	D
315	Apparel mfg	3	277	99	11 080	253 592	8 429	15 374	152 162	710 833	748 705	1 389 216	D
3151	Apparel knitting mills	3	19	6	466	9 833	425	798	6 189	20 486	19 091	38 828	D
31519	Other apparel knitting mills	3	11	4	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	205	79	9 592	225 098	7 241	13 342	135 273	660 195	686 261	1 277 195	11 271
31521	Cut & sew apparel contractors	3	102	37	2 054	31 498	1 925	3 359	25 724	62 532	9 296	71 541	1 481
315211	Men's & boys' cut & sew apparel contractors	2	15	8	407	7 543	369	644	5 584	22 119	3 543	25 429	444
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	87	29	1 647	23 955	1 556	2 715	20 140	40 413	5 753	46 112	1 037
31522	Men's & boys' cut & sew apparel mfg	6	35	17	3 020	75 308	2 426	4 890	48 961	245 267	239 980	475 159	5 238
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	9	8	g	D	D	D	D	D	D	D	1 971
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	9	6	2	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	7	6	3	548	12 176	497	1 027	10 096	31 084	22 175	52 883	D
31523	Women's & girls' cut & sew apparel mfg	1	50	20	4 155	111 144	2 707	4 756	57 588	331 400	418 345	691 598	4 243
315232	Women's & girls' cut & sew blouse & shirt mfg	4	12	5	1 002	18 544	852	1 616	14 018	66 398	49 477	114 374	634
315233	Women's & girls' cut & sew dress mfg	—	11	5	919	11 621	745	1 540	9 874	23 782	51 767	75 409	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	12	5	1 916	73 928	844	1 161	28 433	225 245	302 017	469 784	D
315239	Women's & girls' cut & sew other outerwear mfg	5	13	5	e	D	D	D	D	D	D	D	385
31529	Other cut & sew apparel mfg	2	18	5	363	7 148	183	337	3 000	20 996	18 640	38 897	309
315299	All other cut & sew apparel mfg	2	13	4	317	6 597	158	296	2 655	20 053	17 920	37 202	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	1	53	14	1 022	18 661	763	1 234	10 700	30 152	43 353	73 193	1 627
31599	Apparel accessories & other apparel mfg	1	53	14	1 022	18 661	763	1 234	10 700	30 152	43 353	73 193	1 627
315999	Other apparel accessories & other apparel mfg	1	41	11	810	15 992	608	1 009	8 949	24 284	39 526	63 526	D
316	Leather & allied product mfg	2	23	3	269	5 328	194	363	3 613	16 009	16 012	33 946	292
321	Wood product mfg	2	125	33	2 080	53 993	1 596	3 045	33 892	123 908	208 532	328 825	D
3212	Veneer, plywood, & engineered wood product mfg	1	11	6	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	1	11	6	e	D	D	D	D	D	D	D	D
321214	Truss mfg	1	6	5	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	106	26	1 547	35 874	1 221	2 276	25 206	71 711	99 465	171 840	D
32191	Millwork	6	40	6	441	10 609	323	593	7 544	18 664	20 575	39 675	D
321911	Wood window & door mfg	8	17	5	307	6 766	219	396	4 694	11 909	14 332	26 695	D
32192	Wood container & pallet mfg	3	36	12	614	13 516	496	903	9 362	23 396	37 389	60 878	D
321920	Wood container & pallet mfg	3	36	12	614	13 516	496	903	9 362	23 396	37 389	60 878	D
32199	All other wood product mfg	1	30	8	492	11 749	402	780	8 300	29 651	41 501	71 287	D
321999	All other miscellaneous wood product mfg	1	22	5	341	7 722	274	538	5 171	19 125	27 290	46 473	D
322	Paper mfg	1	150	99	11 236	449 189	8 241	17 384	277 145	1 450 721	1 414 585	2 845 499	138 630
3221	Pulp, paper, & paperboard mills	—	10	10	1 889	92 955	1 619	3 472	74 417	524 105	256 454	757 977	51 413
32212	Paper mills	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	8	8	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	140	89	9 347	356 234	6 622	13 912	202 728	926 616	1 158 131	2 087 522	87 217
32221	Paperboard container mfg	1	65	46	4 185	152 353	3 115	6 819	90 923	370 650	490 254	861 500	31 020
322211	Corrugated & solid fiber box mfg	1	30	21	2 160	84 261	1 548	3 205	47 103	198 213	292 509	491 909	18 558
322212	Folding paperboard box mfg	1	22	15	g	D	D	D	D	D	D	D	8 763
322213	Setup paperboard box mfg	3	7	5	253	7 002	199	393	4 565	12 528	9 852	22 135	23
322215	Nonfolding sanitary food container mfg	—	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	1	33	18	2 395	99 724	1 646	3 573	57 980	326 947	334 878	659 370	19 934
322222	Coated & laminated paper mfg	1	23	11	1 294	57 420	834	1 831	31 707	227 422	187 938	414 056	12 677
322223	Plastics, foil, & coated paper bag mfg	—	3	3	f	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	22	11	895	30 392	557	1 152	15 627	51 391	71 059	124 796	2 120
322232	Envelope mfg	—	4	4	578	21 283	337	725	10 379	34 432	57 907	94 456	1 304
32229	Other converted paper product mfg	2	20	14	1 872	73 765	1 304	2 368	38 198	177 628	261 940	441 856	34 143
322291	Sanitary paper product mfg	—	5	4	926	42 456	658	1 402	26 839	103 227	129 023	228 166	D
322299	All other converted paper product mfg	3	15	10	946	31 309	646	966	11 359	74 401	132 917	213 690	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	945	221	23 739	833 074	16 899	32 463	511 473	1 886 194	1 195 681	3 079 569	129 173
3231	Printing & related support activities.....	2	945	221	23 739	833 074	16 899	32 463	511 473	1 886 194	1 195 681	3 079 569	129 173
32311	Printing.....	2	819	186	20 063	693 165	14 063	26 693	420 723	1 619 610	1 124 726	2 741 694	114 464
323110	Commercial lithographic printing ..	2	406	110	12 503	443 183	8 947	16 756	275 076	963 451	614 448	1 574 946	72 161
323111	Commercial gravure printing.....	5	7	5	476	20 739	357	836	13 941	48 521	49 316	96 748	7 284
323112	Commercial flexographic printing ..	2	19	7	613	24 850	439	928	15 433	64 029	46 496	110 730	2 332
323113	Commercial screen printing.....	3	65	13	881	21 441	637	1 111	12 473	42 475	23 181	65 723	3 058
323114	Quick printing.....	2	166	7	856	22 094	559	970	13 373	51 750	27 554	79 094	2 826
323116	Manifold business form printing.....	3	38	21	2 355	75 787	1 427	2 984	41 681	257 500	239 406	498 508	12 416
323117	Book printing.....	—	8	2	514	19 132	392	679	9 781	36 796	27 860	64 238	D
323119	Other commercial printing.....	5	87	13	1 419	53 990	1 014	1 902	32 607	128 446	82 323	210 720	8 961
32312	Support activities for printing.....	1	126	35	3 676	139 909	2 836	5 770	90 750	266 584	70 955	337 875	14 709
323121	Tradebinding & related work.....	—	40	15	983	32 293	802	1 811	22 253	60 899	18 180	80 555	3 416
323122	Prepress services.....	1	86	20	2 693	107 616	2 034	3 959	68 497	205 685	52 775	257 320	11 293
324	Petroleum & coal products mfg.....	—	55	28	4 707	267 418	3 050	7 145	166 823	1 786 726	9 093 063	10 971 541	576 185
3241	Petroleum & coal products mfg.....	—	55	28	4 707	267 418	3 050	7 145	166 823	1 786 726	9 093 063	10 971 541	576 185
32411	Petroleum refineries.....	—	8	8	3 354	211 053	2 213	5 353	138 290	1 549 304	8 363 886	10 005 177	563 565
324110	Petroleum refineries ..	—	8	8	3 354	211 053	2 213	5 353	138 290	1 549 304	8 363 886	10 005 177	563 565
32412	Asphalt paving, roofing, & saturated materials mfg.....	3	28	6	e	D	D	D	D	D	D	D	6 679
324122	Asphalt shingle & coating materials mfg.....	4	5	4	e	D	D	D	D	D	D	D	2 427
32419	Other petroleum & coal products mfg.....	—	19	14	f	D	D	D	D	D	D	D	5 941
324191	Petroleum lubricating oil & grease mfg.....	—	17	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	314	172	21 387	1 142 420	11 766	24 504	523 796	8 690 369	6 898 935	15 672 003	700 990
3251	Basic chemical mfg.....	—	52	27	4 265	239 488	2 102	4 055	108 187	1 389 936	1 581 863	2 981 008	104 063
32511	Petrochemical mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg.....	—	11	3	2 210	126 680	962	1 762	56 118	242 094	181 328	440 709	25 915
325120	Industrial gas mfg.....	—	11	3	2 210	126 680	962	1 762	56 118	242 094	181 328	440 709	25 915
32513	Dye & pigment mfg.....	2	10	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg.....	2	10	2	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg.....	—	13	9	549	28 623	356	760	14 920	359 559	500 191	857 022	11 536
325188	All other basic inorganic chemical mfg.....	—	13	9	549	28 623	356	760	14 920	359 559	500 191	857 022	11 536
32519	Other basic organic chemical mfg.....	—	16	11	781	47 976	405	840	19 208	560 919	566 921	1 134 902	28 818
325199	All other basic organic chemical mfg.....	1	15	10	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	25	21	3 183	183 897	1 781	3 973	89 671	623 667	1 116 311	1 733 703	D
32521	Resin & synthetic rubber mfg.....	—	24	21	h	D	D	D	D	D	D	D	96 379
325211	Plastics material & resin mfg.....	—	21	19	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	54	38	8 961	527 975	5 037	10 695	237 322	5 919 099	3 352 981	9 362 871	451 833
32541	Pharmaceutical & medicine mfg.....	—	54	38	8 961	527 975	5 037	10 695	237 322	5 919 099	3 352 981	9 362 871	451 833
325411	Medicinal & botanical mfg.....	3	6	4	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	—	29	20	7 553	455 767	4 239	9 133	209 497	5 761 192	3 193 900	9 046 541	417 828
325413	In-vitro diagnostic substance mfg.....	1	8	7	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg.....	7	11	7	592	36 597	350	763	13 267	84 391	107 193	190 976	6 255

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg.....	3	58	27	1 841	68 708	976	1 920	29 179	295 904	309 608	612 821	15 675
32551	Paint & coating mfg.....	2	36	18	1 269	45 539	684	1 291	19 820	205 992	207 495	418 742	8 406
325510	Paint & coating mfg....	2	36	18	1 269	45 539	684	1 291	19 820	205 992	207 495	418 742	8 406
32552	Adhesive mfg.....	3	22	9	572	23 169	292	629	9 359	89 912	102 113	194 079	7 269
325520	Adhesive mfg.....	3	22	9	572	23 169	292	629	9 359	89 912	102 113	194 079	7 269
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	56	22	1 173	44 569	707	1 394	21 131	128 088	176 189	304 514	14 632
32561	Soap & cleaning compound mfg.....	4	49	22	1 117	43 063	668	1 326	20 263	122 094	171 887	294 200	14 241
325611	Soap & other detergent mfg.....	2	21	9	478	16 930	287	561	8 396	34 673	56 985	91 914	2 437
325612	Polish & other sanitation good mfg...	5	19	7	396	13 384	248	433	4 929	28 757	31 932	60 913	1 312
3259	Other chemical product mfg.....	3	62	35	1 806	71 349	1 089	2 306	36 338	320 065	346 622	649 154	D
32591	Printing ink mfg.....	3	16	11	474	21 291	253	584	9 424	81 163	45 244	122 598	D
325910	Printing ink mfg.....	3	16	11	474	21 291	253	584	9 424	81 163	45 244	122 598	D
32599	All other chemical product & preparation mfg.....	3	46	24	1 332	50 058	836	1 722	26 914	238 902	301 378	526 556	14 971
325991	Custom compounding of purchased resin...	1	15	7	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	5	28	15	779	29 354	438	888	14 699	146 156	141 951	280 013	10 083
326	Plastics & rubber products mfg.....	2	277	137	11 455	386 427	8 435	17 147	231 743	1 098 954	888 212	1 978 298	89 583
3261	Plastics product mfg.....	2	233	117	10 393	352 113	7 653	15 572	211 213	1 028 921	832 750	1 853 129	85 499
32611	Unsupported plastics film, sheet, & bag mfg..	4	30	15	1 210	39 529	891	1 711	24 390	96 082	116 016	212 532	14 971
326111	Unsupported plastics bag mfg.....	3	11	6	420	13 612	319	703	8 588	35 169	39 698	74 877	3 402
326112	Unsupported plastics packaging film & sheet mfg.....	—	5	3	382	11 499	304	479	7 614	20 943	26 515	47 402	2 318
326113	Unsupported plastics film & sheet (except packaging) mfg.....	7	14	6	408	14 418	268	529	8 188	39 970	49 803	90 253	9 251
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg.....	4	19	11	911	32 535	681	1 534	20 593	87 346	70 476	157 664	7 182
326121	Unsupported plastics profile shape mfg....	4	17	10	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg.....	5	13	9	694	21 272	525	1 004	11 474	63 936	74 601	138 390	4 331
326150	Urethane & other foam product (except polystyrene) mfg....	5	13	9	694	21 272	525	1 004	11 474	63 936	74 601	138 390	4 331
32616	Plastics bottle mfg.....	—	6	5	324	10 299	277	533	8 060	45 009	37 914	80 537	1 339
326160	Plastics bottle mfg....	—	6	5	324	10 299	277	533	8 060	45 009	37 914	80 537	1 339
32619	Other plastics product mfg.....	1	151	72	6 920	236 654	5 027	10 177	138 383	700 297	491 972	1 186 069	55 121
326192	Resilient floor covering mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	1	146	68	5 584	177 060	4 224	8 410	104 173	371 959	337 830	706 427	D
3262	Rubber product mfg.....	2	44	20	1 062	34 314	782	1 575	20 530	70 033	55 462	125 169	4 084
32629	Other rubber product mfg.....	2	35	16	877	29 320	663	1 343	17 667	60 344	42 598	102 837	3 498
326291	Rubber product mfg for mechanical use.....	4	13	5	255	8 268	192	377	4 874	14 606	8 563	23 146	989
326299	All other rubber product mfg.....	1	22	11	622	21 052	471	966	12 793	45 738	34 035	79 691	2 509

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	209	68	4 955	183 217	3 734	7 912	121 667	535 467	406 537	940 719	D
3271	Clay product & refractory mfg	3	22	6	418	11 550	354	634	8 523	32 290	14 865	47 872	531
32711	Pottery, ceramics, & plumbing fixture mfg . . .	—	13	4	e	D	D	D	D	D	D	D	289
327112	Vitreous china, fine earthenware, & other pottery product mfg . .	—	12	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	38	13	1 267	49 859	967	2 059	33 733	132 498	98 140	227 544	D
32721	Glass & glass product mfg	—	38	13	1 267	49 859	967	2 059	33 733	132 498	98 140	227 544	D
327213	Glass container mfg . . .	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	29	11	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	102	36	2 123	79 184	1 555	3 381	49 453	203 698	187 574	391 063	D
32732	Ready-mix concrete mfg	1	49	17	888	36 688	653	1 423	23 916	99 399	91 908	191 779	8 190
327320	Ready-mix concrete mfg	1	49	17	888	36 688	653	1 423	23 916	99 399	91 908	191 779	8 190
32733	Concrete pipe, brick, & block mfg	—	18	6	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	33	13	863	27 320	630	1 288	16 590	65 945	56 072	121 675	D
327390	Other concrete product mfg	1	33	13	863	27 320	630	1 288	16 590	65 945	56 072	121 675	D
3274	Lime & gypsum product mfg	—	7	3	255	10 873	207	497	8 203	54 440	46 836	101 400	D
3279	Other nonmetallic mineral product mfg	—	40	10	892	31 751	651	1 341	21 755	112 541	59 122	172 840	D
32799	All other nonmetallic mineral product mfg . . .	—	32	6	708	25 230	524	1 081	18 225	94 348	48 140	143 664	D
327993	Mineral wool mfg	—	7	2	306	12 129	252	517	9 879	45 584	25 554	72 060	D
331	Primary metal mfg	—	86	48	9 586	414 030	7 156	14 709	280 222	895 417	1 619 209	2 530 925	92 877
3311	Iron & steel mills & ferroalloy mfg	—	10	9	3 815	198 541	2 713	5 869	139 778	363 962	965 863	1 335 325	31 595
33111	Iron & steel mills & ferroalloy mfg	—	10	9	3 815	198 541	2 713	5 869	139 778	363 962	965 863	1 335 325	31 595
331111	Iron & steel mills	—	9	8	h	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	11	11	1 287	42 768	1 016	2 103	30 479	105 105	152 757	262 406	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	744	25 583	591	1 206	17 829	49 307	64 146	116 806	7 246
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	4	744	25 583	591	1 206	17 829	49 307	64 146	116 806	7 246
33122	Rolling & drawing of purchased steel	—	7	7	543	17 185	425	897	12 650	55 798	88 611	145 600	D
331221	Cold-rolled steel shape mfg	—	3	3	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	5	4	1 296	41 997	1 148	1 834	27 261	98 555	189 605	284 253	9 641
33131	Alumina & aluminum production & processing	—	5	4	1 296	41 997	1 148	1 834	27 261	98 555	189 605	284 253	9 641
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	21	12	1 271	62 351	786	1 784	33 758	157 096	186 872	357 301	29 313
33141	Nonferrous metal (except aluminum) smelting & refining	—	5	2	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	5	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	1	4	4	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA—WILMINGTON—ATLANTIC CITY, PA—NJ—DE—MD CMSA—Con.												
	Philadelphia, PA—NJ PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing—Con.												
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	12	6	491	22 774	258	622	9 993	54 244	77 480	132 014	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	2	9	5	e	D	D	D	D	D	D	D	5 034
3315	Foundries	—	39	12	1 917	68 373	1 493	3 119	48 946	170 699	124 112	291 640	D
33151	Ferrous metal foundries	—	16	7	898	31 924	709	1 483	22 119	104 251	72 634	173 931	D
331511	Iron foundries	—	10	4	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	23	5	1 019	36 449	784	1 636	26 827	66 448	51 478	117 709	6 811
331521	Aluminum die-casting foundries	1	3	3	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	5	1	e	D	D	D	D	D	D	D	505
332	Fabricated metal product mfg	1	1 154	346	28 785	1 049 019	21 056	42 235	639 919	2 378 504	1 705 280	4 060 987	150 287
3321	Forging & stamping	1	55	31	1 721	60 943	1 232	2 581	34 410	121 410	123 288	245 236	6 625
33211	Forging & stamping	1	55	31	1 721	60 943	1 232	2 581	34 410	121 410	123 288	245 236	6 625
332111	Iron & steel forging ...	—	8	6	297	10 757	217	488	6 647	21 030	19 299	40 511	1 103
332114	Custom roll forming	—	12	5	315	12 949	197	434	5 480	29 357	30 257	59 384	1 028
332116	Metal stamping	2	30	18	969	34 057	712	1 492	19 826	62 808	70 012	133 094	4 027
3322	Cutlery & handtool mfg. ...	3	39	10	839	27 846	581	1 114	15 065	70 535	49 971	118 868	3 042
33221	Cutlery & handtool mfg. ...	3	39	10	839	27 846	581	1 114	15 065	70 535	49 971	118 868	3 042
332212	Hand & edge tool mfg. ...	2	28	5	455	15 845	314	614	8 463	32 134	19 606	51 256	1 252
3323	Architectural & structural metals mfg	1	240	84	6 048	212 746	4 403	9 166	118 941	474 880	400 902	863 464	19 926
33231	Plate work & fabricated structural product mfg. ...	1	57	22	1 349	54 717	948	2 063	30 567	138 593	111 276	245 484	4 847
332312	Fabricated structural metal mfg	1	31	12	688	28 851	481	1 111	17 405	69 654	74 910	145 245	2 893
332313	Plate work mfg	1	22	9	573	22 783	409	827	11 680	61 350	29 445	85 484	D
33232	Ornamental & architectural metal products mfg.	1	183	62	4 699	158 029	3 455	7 103	88 374	336 287	289 626	617 980	15 079
332321	Metal window & door mfg	1	29	12	719	20 204	512	958	11 831	42 038	68 530	110 583	1 180
332322	Sheet metal work mfg. ...	1	110	41	3 167	105 558	2 424	5 019	61 325	232 465	172 570	396 286	12 220
332323	Ornamental & architectural metal work mfg	—	44	9	813	32 267	519	1 126	15 218	61 784	48 526	111 111	1 679
3324	Boiler, tank, & shipping container mfg.	1	35	20	1 393	47 713	953	1 892	27 284	133 255	200 082	333 601	5 139
33241	Power boiler & heat exchanger mfg.	2	10	7	e	D	D	D	D	D	D	D	2 102
332410	Power boiler & heat exchanger mfg.	2	10	7	e	D	D	D	D	D	D	D	2 102
33243	Metal can, box, & other metal container (light gauge) mfg	—	18	9	792	25 416	641	1 285	18 616	86 121	150 139	236 889	2 463
332431	Metal can mfg.	—	5	2	291	10 925	237	515	8 761	38 611	91 284	130 101	D
332439	Other metal container mfg	1	13	7	501	14 491	404	770	9 855	47 510	58 855	106 788	D
3325	Hardware mfg.	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
33251	Hardware mfg.	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
332510	Hardware mfg.	—	9	4	340	8 566	216	413	5 228	24 890	20 194	45 280	638
3326	Spring & wire product mfg. ...	1	36	13	1 016	35 200	703	1 365	18 354	87 989	61 829	151 358	3 928
33261	Spring & wire product mfg	1	36	13	1 016	35 200	703	1 365	18 354	87 989	61 829	151 358	3 928
332612	Spring (light gauge) mfg	—	6	4	391	14 624	238	446	7 207	45 191	24 440	70 979	2 145
332618	Other fabricated wire product mfg	2	26	7	e	D	D	D	D	D	D	D	1 352
3327	Machine shops, turned product, & screw, nut, & bolt mfg.	1	498	96	9 365	373 826	7 226	14 894	256 662	776 251	322 735	1 105 251	69 904
33271	Machine shops	2	428	68	5 405	206 394	4 152	8 086	134 737	395 841	172 612	575 351	30 626
332710	Machine shops	2	428	68	5 405	206 394	4 152	8 086	134 737	395 841	172 612	575 351	30 626
33272	Turned product & screw, nut, & bolt mfg.	—	70	28	3 960	167 432	3 074	6 808	121 925	380 410	150 123	529 900	39 278
332721	Precision turned product mfg	—	45	17	1 370	46 453	1 146	2 506	34 555	111 457	52 186	162 952	13 753
332722	Bolt, nut, screw, rivet, & washer mfg	—	25	11	2 590	120 979	1 928	4 302	87 370	268 953	97 937	366 948	25 525

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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.	2	121	30	1 810	62 134	1 380	2 801	39 379	130 998	56 083	184 627	9 112
33281	Coating, engraving, heat treating, & allied activities.....	2	121	30	1 810	62 134	1 380	2 801	39 379	130 998	56 083	184 627	9 112
332811	Metal heat treating....	—	17	6	340	12 204	245	485	6 867	32 229	9 512	40 661	2 582
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	2	47	14	736	24 980	581	1 246	17 487	54 184	32 331	84 995	4 044
332813	Electroplating, plating, polishing, anodizing, & coloring.....	3	57	10	734	24 950	554	1 070	15 025	44 585	14 240	58 971	2 486
3329	Other fabricated metal product mfg.....	—	121	58	6 253	220 045	4 362	8 009	124 596	558 296	470 196	1 013 302	31 973
33291	Metal valve mfg.....	—	31	19	2 314	89 898	1 458	2 883	44 390	231 556	209 012	429 487	15 613
332911	Industrial valve mfg...	1	17	10	937	43 656	522	1 080	19 942	111 043	61 347	167 207	D
332913	Plumbing fixture fitting & trim mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	90	39	3 939	130 147	2 904	5 126	80 206	326 740	261 184	583 815	16 360
332991	Ball & roller bearing mfg.....	—	4	4	503	19 834	346	686	12 053	59 606	23 360	80 959	D
332996	Fabricated pipe & pipe fitting mfg.....	—	17	8	736	24 617	546	871	14 882	54 798	20 970	74 391	2 698
332998	Enameled iron & metal sanitary ware mfg...	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	—	49	23	1 800	63 895	1 293	2 525	37 978	159 783	186 183	347 582	6 582
333	Machinery mfg.....	1	524	186	18 207	706 910	10 125	21 066	337 222	1 508 844	1 523 451	3 032 378	89 140
3332	Industrial machinery mfg ..	—	99	33	5 531	199 288	2 530	5 272	80 552	500 590	537 638	1 023 200	23 855
33322	Plastics & rubber industry machinery mfg.....	—	11	4	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	11	4	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	—	87	29	5 262	178 320	2 382	4 950	70 254	473 834	483 709	948 077	D
333291	Paper industry machinery mfg.....	—	12	6	796	41 388	481	1 114	24 408	74 112	81 898	154 611	3 809
333295	Semiconductor machinery mfg.....	—	6	3	h	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	2	45	11	1 321	55 427	641	1 324	20 008	118 376	110 364	228 665	6 865
3333	Commercial & service industry machinery mfg ..	1	53	21	1 855	65 567	929	1 794	25 310	109 823	108 749	218 970	6 276
33331	Commercial & service industry machinery mfg.....	1	53	21	1 855	65 567	929	1 794	25 310	109 823	108 749	218 970	6 276
333313	Office machinery mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg.....	7	12	5	337	9 319	232	377	5 028	19 114	13 248	33 374	1 816
333319	Other commercial & service industry machinery mfg.....	—	24	8	513	19 123	275	579	8 368	43 908	40 885	84 652	1 150
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	37	20	1 490	48 199	1 013	2 016	24 901	124 494	114 060	236 285	5 646
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	1	37	20	1 490	48 199	1 013	2 016	24 901	124 494	114 060	236 285	5 646
333414	Heating equipment (except warm air furnaces) mfg.....	2	10	4	295	10 705	148	329	4 108	36 931	19 833	56 552	621
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	15	10	858	26 121	658	1 325	15 871	53 840	63 881	116 111	1 828
3335	Metalworking machinery mfg.....	3	145	25	1 834	71 638	1 367	2 725	47 925	131 225	53 890	183 140	8 600
33351	Metalworking machinery mfg.....	3	145	25	1 834	71 638	1 367	2 725	47 925	131 225	53 890	183 140	8 600
333511	Industrial mold mfg...	2	28	4	269	12 444	225	484	9 484	22 007	8 989	30 467	1 361
333514	Special die & tool, die set, jig, & fixture mfg ..	3	74	15	1 056	40 786	819	1 612	28 475	72 065	23 379	94 593	3 535
333515	Cutting tool & machine tool accessory mfg ..	4	28	1	270	9 918	169	336	5 217	21 680	6 866	27 887	1 338

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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	1	20	9	1 108	54 441	710	1 704	29 731	107 120	70 058	179 493	9 993
33361	Engine, turbine, & power transmission equipment mfg	1	20	9	1 108	54 441	710	1 704	29 731	107 120	70 058	179 493	9 993
333612	Speed changer, industrial high-speed drive, & gear mfg	—	8	4	658	35 676	419	1 103	18 949	70 713	51 689	124 912	8 676
333613	Mechanical power transmission equipment mfg	—	5	2	e	D	D	D	D	D	D	D	505
3339	Other general-purpose machinery mfg	1	162	75	6 161	259 187	3 411	7 233	123 434	520 814	614 601	1 153 246	33 688
33391	Pump & compressor mfg	1	25	15	1 655	72 305	951	2 155	37 945	151 310	126 690	281 595	11 167
333911	Pump & pumping equipment mfg	3	16	8	f	D	D	D	D	D	D	D	3 498
333912	Air & gas compressor mfg	—	8	6	536	22 907	307	745	11 391	55 220	37 597	92 263	D
333913	Measuring & dispensing pump mfg	—	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	31	20	1 405	47 480	848	1 630	24 711	76 782	103 146	181 381	5 991
333922	Conveyor & conveying equipment mfg	—	13	9	f	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	8	6	525	18 316	364	731	10 610	28 953	36 325	67 106	3 497
33399	All other general-purpose machinery mfg	2	106	40	3 101	139 402	1 612	3 448	60 778	292 722	384 765	690 270	16 530
333993	Packaging machinery mfg	—	26	14	667	30 107	399	806	15 276	65 463	46 439	111 622	1 985
333994	Industrial process furnace & oven mfg ..	4	18	7	755	35 268	315	753	13 611	101 880	128 520	223 114	4 777
333999	All other miscellaneous general-purpose machinery mfg	—	44	15	1 357	61 764	700	1 478	25 174	99 337	179 387	298 349	8 840
334	Computer & electronic product mfg	2	448	191	27 385	1 146 916	14 501	28 882	500 775	2 832 446	1 747 715	4 552 369	146 204
3341	Computer & peripheral equipment mfg	1	49	24	3 330	132 188	1 299	2 753	42 661	326 597	313 962	635 540	14 604
33411	Computer & peripheral equipment mfg	1	49	24	3 330	132 188	1 299	2 753	42 661	326 597	313 962	635 540	14 604
334111	Electronic computer mfg	2	9	3	426	18 476	157	325	6 388	57 577	48 319	102 525	D
334119	Other computer peripheral equipment mfg	1	33	17	2 693	104 729	1 070	2 239	30 737	249 793	246 877	494 719	D
3342	Communications equipment mfg	3	66	35	7 177	343 680	3 031	5 490	108 338	850 716	538 619	1 369 581	43 170
33421	Telephone apparatus mfg	—	13	7	798	36 219	404	708	11 877	162 743	134 702	303 787	10 131
334210	Telephone apparatus mfg	—	13	7	798	36 219	404	708	11 877	162 743	134 702	303 787	10 131
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	41	25	6 210	301 893	2 546	4 627	94 744	672 430	397 111	1 043 394	32 423
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	41	25	6 210	301 893	2 546	4 627	94 744	672 430	397 111	1 043 394	32 423
3344	Semiconductor & other electronic component mfg	2	139	60	5 087	158 834	3 384	6 621	74 956	324 928	191 527	510 774	35 976
33441	Semiconductor & other electronic component mfg	2	139	60	5 087	158 834	3 384	6 621	74 956	324 928	191 527	510 774	35 976
334412	Bare printed circuit board mfg	4	32	6	448	12 896	323	610	7 308	25 557	16 052	41 379	2 603
334413	Semiconductor & related device mfg ...	1	27	12	1 176	44 393	764	1 497	21 025	83 090	45 559	127 581	23 724
334416	Electronic coil, transformer, & other inductor mfg	2	9	4	500	16 527	349	785	9 553	33 735	15 858	49 175	1 300
334417	Electronic connector mfg	2	15	10	705	20 462	430	832	7 633	37 797	32 545	70 643	2 123

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg—Con.												
334418	Printed circuit assembly (electronic assembly) mfg	3	17	11	763	23 697	421	806	9 126	47 496	19 896	64 102	2 428
334419	Other electronic component mfg	1	35	14	1 076	30 125	787	1 518	15 570	75 102	44 416	118 233	2 759
3345	Navigational, measuring, medical, & control instruments mfg	1	159	63	10 449	462 395	5 860	12 151	240 073	1 226 532	637 134	1 866 121	37 359
33451	Navigational, measuring, medical, & control instruments mfg	1	159	63	10 449	462 395	5 860	12 151	240 073	1 226 532	637 134	1 866 121	37 359
334510	Electromedical & electrotherapeutic apparatus mfg	2	12	7	753	30 460	276	506	8 326	55 664	54 569	116 243	3 961
334511	Search, detection, navigation, & guidance instrument mfg	—	18	8	h	D	D	D	D	D	D	D	14 152
334513	Industrial process control instrument mfg	3	36	15	3 312	139 537	1 376	2 883	48 554	360 524	187 147	547 331	11 776
334515	Electricity measuring & testing instrument mfg	1	21	10	645	24 517	364	706	9 729	58 939	37 976	98 132	2 293
334516	Analytical laboratory instrument mfg	3	22	5	439	16 039	244	542	7 787	40 588	19 514	59 364	804
334519	Other measuring & controlling device mfg	1	27	10	1 215	48 107	727	1 512	22 401	46 365	43 155	90 161	3 256
3346	Mfg & reproducing magnetic & optical media	3	28	9	1 303	48 931	899	1 811	34 249	102 050	63 273	165 502	14 990
33461	Mfg & reproducing magnetic & optical media	3	28	9	1 303	48 931	899	1 811	34 249	102 050	63 273	165 502	14 990
334612	Prerecorded CD (except software), tape, & record reproducing	2	16	5	1 090	42 736	734	1 486	30 335	84 691	53 439	138 133	11 874
335	Electrical equipment, appliance, & component mfg	1	155	61	7 227	234 995	5 041	10 102	136 084	740 950	674 536	1 424 082	28 298
3351	Electric lighting equipment mfg	—	40	20	2 570	61 409	1 982	3 626	38 529	185 482	276 297	464 969	7 728
33512	Lighting fixture mfg	—	40	20	2 570	61 409	1 982	3 626	38 529	185 482	276 297	464 969	7 728
335121	Residential electric lighting fixture mfg	—	21	8	1 306	25 861	1 063	1 751	16 835	79 575	120 515	204 725	2 828
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	13	7	976	26 737	753	1 554	17 488	80 424	131 800	210 610	3 884
335129	Other lighting equipment mfg	—	6	5	288	8 811	166	321	4 206	25 483	23 982	49 634	1 016
3352	Household appliance mfg	—	5	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	1	54	12	1 747	77 882	1 011	2 185	41 961	179 390	101 105	286 785	D
33531	Electrical equipment mfg	1	54	12	1 747	77 882	1 011	2 185	41 961	179 390	101 105	286 785	D
335312	Motor & generator mfg	3	12	3	549	20 148	376	844	11 395	52 603	26 553	78 638	1 799
335313	Switchgear & switchboard apparatus mfg	—	13	6	895	45 612	449	970	24 816	89 253	52 775	148 136	D
3359	Other electrical equipment & component mfg	1	56	26	h	D	D	D	D	D	D	D	13 194
33592	Communication & energy wire & cable mfg	—	4	4	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	3	3	e	D	D	D	D	D	D	D	2 401
33593	Wiring device mfg	1	25	9	1 268	42 238	1 005	2 123	29 750	143 864	153 810	298 065	5 871
335931	Current-carrying wiring device mfg	1	19	6	674	20 379	564	1 213	15 377	67 529	39 108	105 804	2 614
335932	Noncurrent-carrying wiring device mfg	1	6	3	594	21 859	441	910	14 373	76 335	114 702	192 261	3 257

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
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	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33599	All other electrical equipment & component mfg	1	25	12	900	30 071	550	1 112	12 782	95 802	88 827	182 661	4 322
335999	All other miscellaneous electrical equipment & component mfg	2	24	11	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	146	57	18 157	789 903	11 575	26 087	425 749	1 694 228	1 786 397	3 280 544	D
3362	Motor vehicle body & trailer mfg	2	20	5	401	10 775	283	535	6 097	22 047	38 682	60 999	D
33621	Motor vehicle body & trailer mfg	2	20	5	401	10 775	283	535	6 097	22 047	38 682	60 999	D
3363	Motor vehicle parts mfg . . .	—	83	39	10 455	383 622	7 486	17 479	251 535	1 172 913	1 095 528	2 290 724	107 314
33631	Motor vehicle gasoline engine & engine parts mfg	2	13	5	625	18 719	494	811	11 629	44 828	100 199	159 210	D
336312	Gasoline engine & engine parts mfg	2	9	4	587	17 681	464	762	10 930	42 821	98 895	155 910	D
33632	Motor vehicle electrical & electronic equipment mfg	—	29	13	2 469	97 991	1 921	3 943	68 542	376 964	384 281	776 400	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	28	13	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg . . .	—	3	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	3	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	8	6	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	8	6	h	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	4	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	4	3	g	D	D	D	D	D	D	D	2 528
336370	Motor vehicle metal stamping	—	4	3	g	D	D	D	D	D	D	D	2 528
33639	Other motor vehicle parts mfg	1	19	8	1 081	37 649	833	1 474	18 353	111 253	194 398	304 604	6 415
336399	All other motor vehicle parts mfg	1	19	8	1 081	37 649	833	1 474	18 353	111 253	194 398	304 604	6 415
3364	Aerospace product & parts mfg	—	17	7	6 167	364 687	2 872	6 144	144 060	454 077	577 423	808 990	17 956
33641	Aerospace product & parts mfg	—	17	7	6 167	364 687	2 872	6 144	144 060	454 077	577 423	808 990	17 956
336411	Aircraft mfg	—	5	2	i	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	12	5	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	14	2	821	22 097	741	1 654	19 039	22 946	38 934	61 883	D
33661	Ship & boat building	—	14	2	821	22 097	741	1 654	19 039	22 946	38 934	61 883	D
336611	Ship building & repairing	—	9	2	f	D	D	D	D	D	D	D	D

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	PHILADELPHIA–WILMINGTON–ATLANTIC CITY, PA–NJ–DE–MD CMSA—Con.												
	Philadelphia, PA–NJ PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	311	65	7 671	236 560	5 753	11 543	148 065	610 543	489 189	1 097 904	31 634
3371	Household & institutional furniture & kitchen cabinet mfg	3	193	19	2 920	74 710	2 403	4 638	51 551	149 534	166 223	316 142	8 018
33711	Wood kitchen cabinet & counter top mfg	2	93	7	721	19 458	579	1 200	14 042	39 584	28 041	67 634	1 133
337110	Wood kitchen cabinet & counter top mfg ...	2	93	7	721	19 458	579	1 200	14 042	39 584	28 041	67 634	1 133
33712	Household & institutional furniture mfg	3	100	12	2 199	55 252	1 824	3 438	37 509	109 950	138 182	248 508	6 885
337122	Nonupholstered wood household furniture mfg	3	45	2	252	5 607	218	444	4 529	11 329	10 601	21 257	374
337124	Metal household furniture mfg	5	9	6	1 430	33 209	1 254	2 294	24 516	72 867	67 255	140 673	5 438
337127	Institutional furniture mfg	—	15	2	312	11 606	175	338	4 755	16 759	52 885	70 134	813
3372	Office furniture (including fixtures) mfg	1	99	42	4 529	156 627	3 196	6 605	93 693	437 379	308 818	743 899	23 354
33721	Office furniture (including fixtures) mfg	1	99	42	4 529	156 627	3 196	6 605	93 693	437 379	308 818	743 899	23 354
337211	Wood office furniture mfg	7	10	4	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	29	12	773	28 588	525	1 074	15 941	60 543	40 731	101 617	2 337
337214	Office furniture (except wood) mfg	—	6	3	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	54	23	1 821	58 050	1 329	2 657	34 704	108 676	104 289	211 642	4 390
339	Miscellaneous mfg	2	615	141	13 305	404 665	8 601	16 459	198 953	995 425	722 535	1 703 426	45 476
3391	Medical equipment & supplies mfg	2	288	69	6 097	184 071	3 852	7 066	85 313	473 422	205 511	668 636	23 560
33911	Medical equipment & supplies mfg	2	288	69	6 097	184 071	3 852	7 066	85 313	473 422	205 511	668 636	23 560
339111	Laboratory apparatus & furniture mfg	—	20	10	680	20 940	466	819	9 739	45 422	24 995	69 558	1 681
339112	Surgical & medical instrument mfg	1	59	20	2 258	77 004	1 231	2 317	31 783	262 319	93 387	345 752	11 110
339113	Surgical appliance & supplies mfg	1	35	17	933	25 237	530	851	10 003	47 998	25 875	73 329	3 593
339114	Dental equipment & supplies mfg	2	28	11	873	29 680	615	1 192	14 613	53 867	29 152	82 747	1 910
339115	Ophthalmic goods mfg	8	15	6	607	11 905	432	851	7 126	27 370	16 385	43 826	3 990
339116	Dental laboratories ...	6	131	5	746	19 305	578	1 036	12 049	36 446	15 717	53 424	1 276
3399	Other miscellaneous mfg ..	2	327	72	7 208	220 594	4 749	9 393	113 640	522 003	517 024	1 034 790	21 916
33991	Jewelry & silverware mfg	2	59	7	848	21 013	470	863	9 740	48 678	83 423	133 276	1 090
339911	Jewelry (except costume) mfg	2	40	5	694	17 804	385	726	8 225	42 552	77 032	120 926	961
33992	Sporting & athletic goods mfg	1	20	7	828	26 034	659	1 469	17 568	55 086	76 982	136 293	4 439
339920	Sporting & athletic goods mfg	1	20	7	828	26 034	659	1 469	17 568	55 086	76 982	136 293	4 439
33993	Doll, toy, & game mfg ...	3	21	6	280	8 000	202	334	4 160	26 449	20 483	45 176	745
33994	Office supplies (except paper) mfg	—	23	5	669	18 829	374	780	10 765	46 308	37 334	82 269	1 745
339944	Carbon paper & inked ribbon mfg	—	6	2	354	10 552	148	337	5 715	24 335	24 733	47 905	1 093
33995	Sign mfg	2	114	21	1 707	61 480	1 128	2 227	29 913	129 571	85 540	213 049	3 786
339950	Sign mfg	2	114	21	1 707	61 480	1 128	2 227	29 913	129 571	85 540	213 049	3 786
33999	All other miscellaneous mfg	3	90	26	2 876	85 238	1 916	3 720	41 494	215 911	213 262	424 727	10 111
339991	Gasket, packing, & sealing device mfg ...	6	21	8	1 012	34 784	626	1 272	15 280	74 494	48 371	122 624	4 765
339994	Broom, brush, & mop mfg	2	6	3	267	7 850	209	418	5 269	24 533	36 148	59 198	1 546
339999	All other miscellaneous mfg	1	47	10	1 318	34 214	903	1 666	16 789	95 570	110 735	202 888	2 845

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	PITTSBURGH, PA MSA												
31-33	Manufacturing	-	3 000	993	120 793	4 355 351	83 107	164 500	2 587 725	11 120 557	13 216 507	24 173 274	901 367
311	Food mfg	2	224	54	5 121	131 272	3 264	6 164	82 301	531 780	465 813	997 413	29 850
3113	Sugar & confectionery product mfg	3	39	7	780	11 642	488	640	6 541	24 549	23 171	49 930	1 748
31133	Confectionery mfg from purchased chocolate	2	23	6	721	10 627	442	578	5 835	21 513	19 426	42 936	1 535
311330	Confectionery mfg from purchased chocolate	2	23	6	721	10 627	442	578	5 835	21 513	19 426	42 936	1 535
3114	Fruit & vegetable preserving & specialty food mfg	-	6	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	2	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	3	13	9	814	28 302	319	630	11 017	68 811	149 813	218 924	7 731
31151	Dairy product (except frozen) mfg	3	10	8	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	3	7	7	710	25 135	254	533	9 478	62 546	133 803	196 485	7 221
3116	Meat product mfg	4	21	5	485	12 097	339	607	8 448	35 677	72 200	108 207	1 358
31161	Animal slaughtering & processing	4	21	5	485	12 097	339	607	8 448	35 677	72 200	108 207	1 358
311612	Meat processed from carcasses	3	12	4	396	10 314	267	473	7 149	30 871	55 874	87 066	1 073
3118	Bakeries & tortilla mfg	2	118	25	1 897	41 275	1 160	2 012	25 571	91 803	57 304	147 789	4 465
31181	Bread & bakery product mfg	4	108	21	1 415	20 810	771	1 110	10 295	41 621	24 261	65 968	D
311811	Retail bakeries	4	81	8	f	D	D	D	D	D	D	D	744
311812	Commercial bakeries	4	26	12	642	12 218	331	587	5 809	24 524	13 870	38 401	1 059
31182	Cookie, cracker, & pasta mfg	-	10	4	482	20 465	389	902	15 276	50 182	33 043	81 821	D
311821	Cookie & cracker mfg	-	4	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	5	22	6	1 288	39 971	936	1 774	26 491	146 487	135 611	281 021	9 931
3121	Beverage mfg	5	22	6	1 288	39 971	936	1 774	26 491	146 487	135 611	281 021	9 931
31211	Soft drink & ice mfg	-	13	2	621	16 365	438	821	8 664	59 818	63 590	121 991	2 178
312111	Soft drink mfg	-	6	2	576	15 679	410	767	8 249	58 242	62 706	119 529	2 018
31212	Breweries	9	6	4	647	23 380	490	946	17 726	85 691	71 082	157 193	7 694
312120	Breweries	9	6	4	647	23 380	490	946	17 726	85 691	71 082	157 193	7 694
313	Textile mills	2	16	5	389	8 915	310	497	5 995	20 837	34 849	54 528	1 740
314	Textile product mills	7	43	6	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	5	27	5	365	7 659	271	457	4 335	12 343	10 722	23 047	D
315	Apparel mfg	1	49	15	1 121	17 829	951	1 507	13 291	46 168	28 207	77 303	D
3152	Cut & sew apparel mfg	1	32	12	824	11 979	680	1 047	8 618	33 662	15 968	49 439	319
31523	Women's & girls' cut & sew apparel mfg	-	9	5	404	5 410	323	481	4 028	22 468	10 541	32 876	77
321	Wood product mfg	3	115	21	1 760	37 210	1 489	2 685	28 189	88 247	158 013	245 877	8 501
3211	Sawmills & wood preservation	1	35	8	505	9 162	454	764	7 525	27 866	64 492	91 469	3 391
32111	Sawmills & wood preservation	1	35	8	505	9 162	454	764	7 525	27 866	64 492	91 469	3 391
321113	Sawmills	1	31	7	461	8 214	415	693	6 773	21 379	27 321	49 204	2 309
3212	Veneer, plywood, & engineered wood product mfg	7	5	3	373	8 659	316	661	6 568	16 926	26 160	43 859	D
32121	Veneer, plywood, & engineered wood product mfg	7	5	3	373	8 659	316	661	6 568	16 926	26 160	43 859	D
321211	Hardwood veneer & plywood mfg	9	2	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	4	75	10	882	19 389	719	1 260	14 096	43 455	67 361	110 549	D
32191	Millwork	6	37	4	467	11 126	376	684	8 187	24 956	41 564	66 211	2 605
322	Paper mfg	-	32	22	2 825	79 596	1 955	4 209	52 072	250 760	315 408	562 633	29 286
3222	Converted paper product mfg	-	32	22	2 825	79 596	1 955	4 209	52 072	250 760	315 408	562 633	29 286
32221	Paperboard container mfg	-	21	17	1 379	45 890	1 021	2 272	30 608	120 319	161 752	283 449	14 153
322211	Corrugated & solid fiber box mfg	-	14	11	998	34 388	721	1 606	22 679	94 480	135 378	230 765	11 482
32223	Stationery product mfg	-	4	2	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	1	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	5	1	e	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PITTSBURGH, PA MSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	357	64	5 838	157 423	4 276	7 671	101 482	357 434	218 499	574 887	25 272
3231	Printing & related support activities.....	2	357	64	5 838	157 423	4 276	7 671	101 482	357 434	218 499	574 887	25 272
32311	Printing	2	317	57	5 259	142 339	3 771	6 669	89 556	320 771	210 240	530 043	23 798
323110	Commercial lithographic printing ..	1	161	33	2 603	78 464	1 855	3 199	48 071	147 022	109 945	256 221	16 440
323113	Commercial screen printing.....	1	28	7	648	12 251	495	922	7 938	24 139	16 757	41 048	1 449
323114	Quick printing	3	71	2	341	7 403	221	333	4 613	19 924	8 644	28 507	1 333
323116	Manifold business form printing.....	3	15	8	1 052	27 922	771	1 433	18 189	93 027	55 850	148 705	3 522
32312	Support activities for printing.....	1	40	7	579	15 084	505	1 002	11 926	36 663	8 259	44 844	1 474
323122	Prepress services	1	27	3	390	11 110	338	603	8 826	29 442	7 183	36 505	D
324	Petroleum & coal products mfg	—	29	10	1 791	82 809	1 436	3 373	62 324	269 173	520 198	789 101	18 872
3241	Petroleum & coal products mfg	—	29	10	1 791	82 809	1 436	3 373	62 324	269 173	520 198	789 101	18 872
32411	Petroleum refineries	—	4	4	f	D	D	D	D	D	D	D	11 466
324110	Petroleum refineries ..	—	4	4	f	D	D	D	D	D	D	D	11 466
32419	Other petroleum & coal products mfg	—	11	6	g	D	D	D	D	D	D	D	D
324199	All other petroleum & coal products mfg ...	—	3	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	121	55	5 488	227 584	3 282	6 663	116 700	949 176	1 165 036	2 102 490	80 033
3251	Basic chemical mfg	—	30	12	1 535	69 113	913	1 865	37 268	300 435	334 537	622 646	24 174
32513	Dye & pigment mfg	—	5	3	e	D	D	D	D	D	D	D	7 057
325131	Inorganic dye & pigment mfg	—	3	2	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	8	5	297	11 784	193	424	7 131	80 402	108 906	187 259	2 823
325188	All other basic inorganic chemical mfg	—	8	5	297	11 784	193	424	7 131	80 402	108 906	187 259	2 823
32519	Other basic organic chemical mfg	—	7	4	755	34 638	460	870	20 227	142 048	185 976	318 916	13 223
325192	Cyclic crude & intermediate mfg	—	2	2	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	5	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	8	7	1 048	49 167	613	1 259	26 697	176 414	210 595	387 450	22 708
32521	Resin & synthetic rubber mfg	—	8	7	1 048	49 167	613	1 259	26 697	176 414	210 595	387 450	22 708
325211	Plastics material & resin mfg	—	6	6	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	23	8	999	49 004	468	994	19 027	176 372	203 711	379 964	10 365
32551	Paint & coating mfg	—	18	8	981	48 651	456	980	18 836	175 097	201 715	376 675	10 244
325510	Paint & coating mfg ...	—	18	8	981	48 651	456	980	18 836	175 097	201 715	376 675	10 244
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	17	6	500	14 847	336	605	6 734	41 873	45 992	88 188	1 458
32561	Soap & cleaning compound mfg	1	16	5	e	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg..	1	10	4	363	8 781	273	484	5 446	21 475	33 350	55 251	1 026
3259	Other chemical product mfg	—	35	17	1 182	39 456	805	1 688	23 105	223 969	344 339	568 409	17 844
32599	All other chemical product & preparation mfg	—	34	17	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ...	—	9	6	e	D	D	D	D	D	D	D	9 273
325998	All other miscellaneous chemical product & preparation mfg	—	18	8	621	22 313	420	928	13 005	165 354	213 155	378 344	D
326	Plastics & rubber products mfg	1	127	71	6 609	209 235	4 802	9 795	123 154	554 065	567 574	1 119 696	81 942
3261	Plastics product mfg	—	107	66	6 236	198 844	4 519	9 223	116 575	524 708	530 465	1 054 755	80 284
32611	Unsupported plastics film, sheet, & bag mfg ..	—	5	3	e	D	D	D	D	D	D	D	1 934
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	2	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	6	3	469	14 052	347	744	8 672	37 471	34 582	73 183	D
326121	Unsupported plastics profile shape mfg	1	5	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PITTSBURGH, PA MSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32614	Polystyrene foam product mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg.....	-	7	7	403	10 228	309	554	7 614	27 223	33 386	61 120	2 655
326160	Plastics bottle mfg.....	-	7	7	403	10 228	309	554	7 614	27 223	33 386	61 120	2 655
32619	Other plastics product mfg.....	1	82	49	4 439	129 822	3 287	6 579	75 818	328 010	267 161	589 543	56 063
326199	All other plastics product mfg.....	1	76	48	4 388	128 586	3 249	6 504	75 144	325 187	264 750	584 419	56 013
3262	Rubber product mfg.....	4	20	5	373	10 391	283	572	6 579	29 357	37 109	64 941	1 658
32629	Other rubber product mfg.....	4	9	5	319	9 197	235	490	5 686	23 282	26 944	50 066	1 478
326299	All other rubber product mfg.....	5	7	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	202	74	8 067	275 189	6 191	12 879	192 057	776 617	499 192	1 286 512	73 692
3271	Clay product & refractory mfg.....	1	40	23	1 746	55 197	1 220	2 573	33 289	126 620	99 209	228 844	10 046
32711	Pottery, ceramics, & plumbing fixture mfg...	3	16	8	785	20 830	583	1 170	13 372	43 534	13 606	57 144	3 597
327112	Vitreous china, fine earthenware, & other pottery product mfg...	5	10	3	254	4 027	219	410	3 104	7 832	2 942	10 818	84
327113	Porcelain electrical supply mfg.....	2	6	5	531	16 803	364	760	10 268	35 702	10 664	46 326	3 513
32712	Clay building material & refractories mfg.....	-	24	15	961	34 367	637	1 403	19 917	83 086	85 603	171 700	6 449
327124	Clay refractory mfg...	-	13	8	430	16 029	301	639	8 864	35 828	42 740	80 133	2 910
327125	Nonclay refractory mfg.....	-	6	4	299	11 024	208	463	6 587	33 661	32 362	67 312	D
3272	Glass & glass product mfg.	1	33	18	3 901	133 868	3 201	6 596	102 224	375 204	184 805	568 114	37 648
32721	Glass & glass product mfg.....	1	33	18	3 901	133 868	3 201	6 596	102 224	375 204	184 805	568 114	37 648
327212	Other pressed & blown glass & glassware mfg.....	-	11	8	2 181	72 995	1 786	3 666	54 781	202 909	62 572	266 455	23 004
327213	Glass container mfg...	-	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	7	18	6	687	21 836	545	1 163	15 554	65 342	57 136	123 562	7 814
3273	Cement & concrete product mfg.....	1	87	20	g	D	D	D	D	D	D	D	D
32731	Cement mfg.....	-	8	5	428	17 302	301	670	11 469	70 955	40 281	111 026	6 787
327310	Cement mfg.....	-	8	5	428	17 302	301	670	11 469	70 955	40 281	111 026	6 787
32732	Ready-mix concrete mfg.	1	38	9	459	14 641	381	735	11 325	48 446	56 570	104 733	2 952
327320	Ready-mix concrete mfg.....	1	38	9	459	14 641	381	735	11 325	48 446	56 570	104 733	2 952
3279	Other nonmetallic mineral product mfg.....	1	39	12	1 053	41 113	759	1 652	25 097	123 216	85 924	209 507	12 619
32791	Abrasive product mfg...	-	9	4	321	12 841	246	507	8 370	35 834	31 954	67 901	4 319
327910	Abrasive product mfg...	-	9	4	321	12 841	246	507	8 370	35 834	31 954	67 901	4 319
32799	All other nonmetallic mineral product mfg...	2	30	8	732	28 272	513	1 145	16 727	87 382	53 970	141 606	8 300
327992	Ground or treated mineral & earth mfg...	4	12	4	351	10 169	257	564	6 207	29 941	26 818	56 267	D
331	Primary metal mfg.....	-	115	79	22 166	977 617	17 326	35 218	730 354	2 464 131	4 696 981	7 101 634	209 603
3311	Iron & steel mills & ferroalloy mfg.....	-	21	20	14 880	707 595	12 066	23 899	544 458	1 776 694	3 473 608	5 199 438	142 036
33111	Iron & steel mills & ferroalloy mfg.....	-	21	20	14 880	707 595	12 066	23 899	544 458	1 776 694	3 473 608	5 199 438	142 036
331111	Iron & steel mills.....	-	18	18	j	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel.....	-	20	18	2 566	98 570	1 875	3 784	73 459	213 296	597 276	811 904	15 781
33121	Iron & steel pipes & tubes mfg from purchased steel.....	-	3	3	338	14 577	284	614	11 141	35 305	38 844	72 506	D
331210	Iron & steel pipes & tubes mfg from purchased steel.....	-	3	3	338	14 577	284	614	11 141	35 305	38 844	72 506	D
33122	Rolling & drawing of purchased steel.....	-	17	15	2 228	83 993	1 591	3 170	62 318	177 991	558 432	739 398	D
331221	Cold-rolled steel shape mfg.....	-	11	10	1 992	76 028	1 405	2 779	57 499	153 674	517 166	673 907	13 517

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PITTSBURGH, PA MSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3314	Nonferrous metal (except aluminum) production & processing.....	1	24	16	2 583	101 628	1 776	4 237	64 537	300 051	462 451	754 499	42 792
33141	Nonferrous metal (except aluminum) smelting & refining.....	—	4	3	988	38 472	746	1 942	26 254	167 285	166 035	325 315	D
331419	Other nonferrous metal primary smelting & refining.....	—	4	3	988	38 472	746	1 942	26 254	167 285	166 035	325 315	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	2	18	11	g	D	D	D	D	D	D	D	24 457
331491	Other nonferrous metal rolling, drawing, & extruding	3	11	7	924	35 143	531	1 218	21 031	86 308	129 614	210 178	20 104
3315	Foundries	—	46	23	2 031	65 952	1 531	3 128	45 409	156 868	111 806	266 291	7 962
33151	Ferrous metal foundries .	1	23	15	998	28 994	820	1 596	20 715	88 449	62 203	149 049	3 767
331511	Iron foundries	1	13	8	485	13 783	388	736	9 718	31 810	32 039	63 460	2 149
331513	Steel foundries (except investment)	1	9	6	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	23	8	1 033	36 958	711	1 532	24 694	68 419	49 603	117 242	4 195
331522	Nonferrous (except aluminum) die-casting foundries	—	2	1	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	6	3	270	8 017	222	449	6 546	10 561	12 862	23 632	1 031
332	Fabricated metal product mfg	—	657	229	18 251	587 295	13 870	27 731	376 207	1 430 565	1 455 852	2 884 314	109 976
3321	Forging & stamping	1	34	24	3 001	108 040	2 397	5 091	72 851	268 980	200 903	472 262	28 862
33211	Forging & stamping	1	34	24	3 001	108 040	2 397	5 091	72 851	268 980	200 903	472 262	28 862
332111	Iron & steel forging ...	6	7	4	491	14 970	422	927	11 139	43 023	39 980	85 187	3 782
332115	Crown & closure mfg..	—	2	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	15	11	1 541	52 970	1 222	2 539	34 099	117 395	72 717	189 683	14 408
332117	Powder metallurgy part mfg	—	6	5	461	19 124	301	622	11 489	38 254	25 688	63 812	D
3322	Cutlery & handtool mfg	—	16	9	891	26 614	705	1 496	15 985	107 992	33 404	138 677	4 757
33221	Cutlery & handtool mfg ...	—	16	9	891	26 614	705	1 496	15 985	107 992	33 404	138 677	4 757
332212	Hand & edge tool mfg .	—	11	5	511	16 572	424	907	9 561	52 573	21 597	72 530	1 443
3323	Architectural & structural metals mfg	—	145	58	4 816	155 532	3 554	7 135	94 995	352 781	396 957	746 985	14 458
33231	Plate work & fabricated structural product mfg ..	—	72	30	1 812	59 392	1 365	2 783	37 420	139 764	163 659	301 000	4 573
332312	Fabricated structural metal mfg	—	44	18	1 142	38 892	853	1 756	24 575	91 516	130 798	221 875	2 760
332313	Plate work mfg	1	24	10	f	D	D	D	D	D	D	D	1 457
33232	Ornamental & architectural metal products mfg	—	73	28	3 004	96 140	2 189	4 352	57 575	213 017	233 298	445 985	9 885
332321	Metal window & door mfg	—	18	9	1 407	42 292	961	1 942	21 694	109 639	134 273	243 817	4 769
332322	Sheet metal work mfg .	—	32	13	1 231	42 666	949	1 798	28 368	76 967	75 946	153 339	3 930
332323	Ornamental & architectural metal work mfg	—	23	6	366	11 182	279	612	7 513	26 411	23 079	48 829	1 186
3324	Boiler, tank, & shipping container mfg	2	19	15	798	29 267	548	1 092	16 901	60 359	66 506	126 895	3 850
33242	Metal tank (heavy gauge) mfg	—	10	10	534	19 844	360	687	10 963	39 994	37 458	77 143	2 709
332420	Metal tank (heavy gauge) mfg	—	10	10	534	19 844	360	687	10 963	39 994	37 458	77 143	2 709
3326	Spring & wire product mfg .	—	21	8	632	18 248	439	912	11 699	37 661	67 531	106 524	6 544
33261	Spring & wire product mfg	—	21	8	632	18 248	439	912	11 699	37 661	67 531	106 524	6 544
332618	Other fabricated wire product mfg	—	13	3	347	10 278	220	492	5 994	20 848	54 360	76 839	2 433
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	299	71	4 882	140 286	3 859	7 313	99 113	284 157	127 546	408 414	21 675
33271	Machine shops	1	269	54	4 059	117 202	3 187	5 934	82 598	224 830	87 662	310 061	14 056
332710	Machine shops	1	269	54	4 059	117 202	3 187	5 934	82 598	224 830	87 662	310 061	14 056
33272	Turned product & screw, nut, & bolt mfg	1	30	17	823	23 084	672	1 379	16 515	59 327	39 884	98 353	7 619
332721	Precision turned product mfg	1	21	12	602	17 738	491	944	12 688	39 150	29 148	67 910	5 147

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PITTSBURGH, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	—	48	16	1 151	39 847	873	1 773	25 765	150 834	424 557	577 805	17 033
33281	Coating, engraving, heat treating, & allied activities	—	48	16	1 151	39 847	873	1 773	25 765	150 834	424 557	577 805	17 033
332811	Metal heat treating	—	11	5	277	9 441	218	417	6 145	26 643	7 094	33 636	8 597
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	21	8	672	24 114	498	1 021	15 788	112 689	414 758	529 964	7 299
3329	Other fabricated metal product mfg	1	69	27	2 020	67 610	1 448	2 838	37 866	163 879	135 045	299 466	12 679
33291	Metal valve mfg	2	19	13	874	32 099	580	1 195	17 098	82 797	66 655	150 427	6 663
332911	Industrial valve mfg	1	14	10	720	27 279	473	989	14 097	72 448	57 120	130 503	5 988
33299	All other fabricated metal product mfg	—	50	14	1 146	35 511	868	1 643	20 768	81 082	68 390	149 039	6 016
332996	Fabricated pipe & pipe fitting mfg	—	10	5	396	14 082	290	566	8 740	33 944	22 797	56 868	1 699
332999	All other miscellaneous fabricated metal product mfg	—	34	8	699	20 126	540	1 013	11 038	44 511	44 938	88 896	4 275
333	Machinery mfg	1	261	111	11 946	482 348	7 291	14 343	247 817	1 030 269	822 585	1 872 402	60 327
3331	Agriculture, construction, & mining machinery mfg	—	13	4	512	18 024	277	544	6 412	29 260	112 555	145 933	142
33313	Mining & oil & gas field machinery mfg	—	9	4	487	16 807	260	516	6 055	26 311	104 796	135 315	59
333131	Mining machinery & equipment mfg	—	7	4	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	26	11	694	24 901	390	788	10 951	64 430	52 793	113 869	4 691
33329	Other industrial machinery mfg	—	24	9	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	17	6	374	12 567	248	521	7 143	25 195	16 577	41 194	4 101
3333	Commercial & service industry machinery mfg	2	25	14	1 169	46 062	759	1 447	22 965	122 113	63 783	180 414	5 454
33331	Commercial & service industry machinery mfg	2	25	14	1 169	46 062	759	1 447	22 965	122 113	63 783	180 414	5 454
333314	Optical instrument & lens mfg	—	7	3	420	18 852	274	568	10 409	59 768	19 055	74 295	D
333319	Other commercial & service industry machinery mfg	3	12	9	652	24 544	418	769	11 217	53 540	40 914	93 440	1 404
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	561	22 870	295	630	10 539	45 184	29 833	75 219	1 496
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	561	22 870	295	630	10 539	45 184	29 833	75 219	1 496
3335	Metalworking machinery mfg	—	109	41	4 360	170 352	3 033	6 540	108 904	361 045	233 295	608 912	20 027
33351	Metalworking machinery mfg	—	109	41	4 360	170 352	3 033	6 540	108 904	361 045	233 295	608 912	20 027
333511	Industrial mold mfg	1	11	6	804	35 470	667	1 582	27 506	72 369	36 788	113 451	7 226
333514	Special die & tool, die set, jig, & fixture mfg	1	56	20	1 573	55 819	1 301	2 783	43 732	106 699	36 500	145 453	7 124
333515	Cutting tool & machine tool accessory mfg	—	25	6	751	27 033	495	1 000	15 970	51 567	37 912	89 043	2 897
333516	Rolling mill machinery & equipment mfg	1	9	5	632	26 360	274	572	9 930	84 598	73 475	164 093	1 410
333518	Other metalworking machinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	70	32	4 517	195 285	2 453	4 209	85 159	397 509	324 094	730 538	27 829
33391	Pump & compressor mfg	1	7	4	1 988	98 628	1 031	1 298	41 959	201 508	123 997	322 786	17 522
333911	Pump & pumping equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	3	2	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	18	5	294	11 217	165	347	5 191	22 354	35 753	57 132	1 295
33399	All other general-purpose machinery mfg	1	45	23	2 235	85 440	1 257	2 564	38 009	173 647	164 344	350 620	9 012
333993	Packaging machinery mfg	—	3	3	299	11 399	166	316	5 207	8 256	18 660	38 039	D
333999	All other miscellaneous general-purpose machinery mfg	1	23	13	1 401	56 165	724	1 563	24 198	127 293	99 016	225 903	6 388

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PITTSBURGH, PA MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	155	68	12 968	525 178	6 463	12 126	174 119	983 969	1 120 599	2 141 911	97 324
3341	Computer & peripheral equipment mfg.....	8	17	5	e	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	8	17	5	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg.....	9	12	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	11	6		2 431	143 496	727	1 451	22 523	136 112	175 513	343 604
33421	Telephone apparatus mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	2	44	19		2 056	51 480	1 438	2 495	26 820	61 047	157 797	219 293
33441	Semiconductor & other electronic component mfg.....	2	44	19		2 056	51 480	1 438	2 495	26 820	61 047	157 797	219 293
334412	Bare printed circuit board mfg.....	3	7	4		376	9 849	245	410	4 425	16 273	9 612	24 549
334413	Semiconductor & related device mfg...	—	7	3		639	18 836	454	848	9 666	S	S	108 607
334418	Printed circuit assembly (electronic assembly) mfg.....	1	7	4		307	5 654	270	374	3 131	11 115	11 044	21 987
334419	Other electronic component mfg.....	8	15	4		548	13 354	343	689	7 498	31 937	15 312	50 346
3345	Navigational, measuring, medical, & control instruments mfg.....	1	72	35		5 728	241 051	2 523	4 883	72 985	584 579	346 426	935 738
33451	Navigational, measuring, medical, & control instruments mfg.....	1	72	35		5 728	241 051	2 523	4 883	72 985	584 579	346 426	935 738
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	6	4	f	D	D	D	D	D	D	D	8 563
334511	Search, detection, navigation, & guidance instrument mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	—	20	7		1 381	72 060	392	765	15 276	203 330	97 305	301 100
334514	Totalizing fluid meter & counting device mfg..	—	2	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	1	14	7		1 313	47 416	579	1 139	16 394	107 631	75 547	185 001
334519	Other measuring & controlling device mfg.....	3	11	7		518	17 771	252	486	5 300	42 507	33 412	74 973
3346	Mfg & reproducing magnetic & optical media..	7	10	2	f	D	D	D	D	D	D	D	6 468
33461	Mfg & reproducing magnetic & optical media.....	7	10	2	f	D	D	D	D	D	D	D	6 468
334612	Prerecorded CD (except software), tape, & record reproducing.....	6	5	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PITTSBURGH, PA MSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	80	40	4 788	162 119	2 885	5 758	77 591	381 423	378 806	766 378	18 025
3351	Electric lighting equipment mfg	1	16	7	439	8 807	312	618	5 735	13 356	15 630	29 524	314
33512	Lighting fixture mfg	1	15	7	e	D	D	D	D	D	D	D	314
335121	Residential electric lighting fixture mfg ...	1	8	5	319	6 826	223	453	4 393	9 591	12 540	22 656	249
3353	Electrical equipment mfg ..	—	42	21	2 947	105 659	1 838	3 677	51 495	273 521	271 130	552 294	8 402
33531	Electrical equipment mfg	—	42	21	2 947	105 659	1 838	3 677	51 495	273 521	271 130	552 294	8 402
335312	Motor & generator mfg	—	11	6	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	6	4	967	30 565	672	1 246	17 696	127 870	110 992	241 895	3 051
335314	Relay & industrial control mfg	—	23	10	1 059	43 500	393	798	9 921	81 918	119 259	206 054	2 778
3359	Other electrical equipment & component mfg	5	22	12	1 402	47 653	735	1 463	20 361	94 546	92 046	184 560	9 309
33592	Communication & energy wire & cable mfg	8	3	3	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	8	3	3	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	6	4	434	11 721	284	498	7 518	30 952	20 944	51 722	D
335931	Current-carrying wiring device mfg	—	5	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	49	17	3 705	165 147	2 055	4 174	80 629	411 434	303 275	557 801	23 662
3363	Motor vehicle parts mfg ...	—	17	7	1 298	67 658	1 092	2 389	55 302	78 790	84 136	146 470	14 524
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	6	5	2 024	87 561	659	1 232	18 603	313 951	196 796	369 921	8 225
33651	Railroad rolling stock mfg	—	6	5	2 024	87 561	659	1 232	18 603	313 951	196 796	369 921	8 225
336510	Railroad rolling stock mfg	—	6	5	2 024	87 561	659	1 232	18 603	313 951	196 796	369 921	8 225
337	Furniture & related product mfg	2	143	16	1 691	39 547	1 286	2 260	25 665	68 018	69 964	136 826	3 435
3371	Household & institutional furniture & kitchen cabinet mfg	4	111	8	734	15 122	571	1 002	10 637	25 302	23 856	49 160	1 447
33711	Wood kitchen cabinet & counter top mfg	4	69	7	541	11 381	421	759	8 090	18 680	18 380	37 067	807
337110	Wood kitchen cabinet & counter top mfg ...	4	69	7	541	11 381	421	759	8 090	18 680	18 380	37 067	807
3372	Office furniture (including fixtures) mfg	—	21	5	727	19 992	540	994	12 309	25 960	34 557	59 988	1 809
33721	Office furniture (including fixtures) mfg	—	21	5	727	19 992	540	994	12 309	25 960	34 557	59 988	1 809
337214	Office furniture (except wood) mfg	1	4	2	409	11 615	301	554	7 020	11 837	24 079	35 470	D
339	Miscellaneous mfg	1	201	30	4 399	136 777	2 587	4 831	63 746	335 829	234 542	570 887	17 699
3391	Medical equipment & supplies mfg	1	84	13	1 986	66 113	1 078	2 019	25 276	171 212	102 654	273 404	10 486
33911	Medical equipment & supplies mfg	1	84	13	1 986	66 113	1 078	2 019	25 276	171 212	102 654	273 404	10 486
339112	Surgical & medical instrument mfg	1	12	4	363	8 876	277	486	5 361	20 253	6 448	26 978	941
339113	Surgical appliance & supplies mfg	—	17	6	1 313	50 879	588	1 242	16 407	135 589	89 389	224 116	8 742
3399	Other miscellaneous mfg ...	1	117	17	2 413	70 664	1 509	2 812	38 470	164 617	131 888	297 483	7 213
33994	Office supplies (except paper) mfg	1	16	3	378	11 087	206	470	6 666	45 632	30 701	77 558	1 660
33995	Sign mfg	1	46	9	1 344	42 745	925	1 712	22 772	84 628	65 455	150 181	3 292
339950	Sign mfg	1	46	9	1 344	42 745	925	1 712	22 772	84 628	65 455	150 181	3 292
33999	All other miscellaneous mfg	1	25	4	480	12 540	231	408	6 644	24 475	22 749	47 239	1 612
339999	All other miscellaneous mfg	—	15	2	365	9 139	165	283	5 189	19 125	16 434	35 545	1 278

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
READING, PA MSA													
31-33	Manufacturing	—	587	241	41 614	1 510 673	30 925	62 366	954 026	3 865 145	3 894 176	7 729 356	344 741
311	Food mfg	2	55	22	4 153	115 342	3 122	6 510	73 611	441 029	461 233	894 573	26 280
3113	Sugar & confectionery product mfg	3	10	5	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	3	8	5	1 751	42 779	1 545	3 560	30 910	222 116	149 270	364 196	13 971
311330	Confectionery mfg from purchased chocolate	3	8	5	1 751	42 779	1 545	3 560	30 910	222 116	149 270	364 196	13 971
3114	Fruit & vegetable preserving & specialty food mfg	—	6	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	5	2	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	—	5	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	3	6	3	350	11 756	197	382	6 067	25 185	112 663	137 899	2 541
31151	Dairy product (except frozen) mfg	3	3	3	335	11 454	185	366	5 840	23 939	110 730	134 720	2 430
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	3	250	10 234	185	387	6 856	33 188	45 955	78 081	D
31161	Animal slaughtering & processing	—	3	3	250	10 234	185	387	6 856	33 188	45 955	78 081	D
3118	Bakeries & tortilla mfg	—	20	5	999	24 122	601	1 031	13 246	83 836	48 648	132 272	2 783
31181	Bread & bakery product mfg	—	18	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	7	3	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg	—	1	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	7	4	e	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	5	4	319	9 211	219	412	5 760	35 036	16 660	51 836	652
311919	Other snack food mfg	—	5	4	319	9 211	219	412	5 760	35 036	16 660	51 836	652
312	Beverage & tobacco product mfg	—	7	4	662	21 541	350	763	10 315	106 927	200 207	306 025	6 583
3121	Beverage mfg	—	7	4	662	21 541	350	763	10 315	106 927	200 207	306 025	6 583
31211	Soft drink & ice mfg	—	5	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	f	D	D	D	D	D	D	D	D
313	Textile mills	2	11	7	938	24 540	731	1 501	16 508	45 548	29 923	75 255	1 559
3132	Fabric mills	1	6	4	732	20 626	582	1 197	14 277	38 124	26 037	63 942	1 321
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	14	3	478	8 726	378	649	5 418	26 206	16 636	36 740	1 118
3149	Other textile product mills	1	7	3	448	8 075	350	609	4 945	24 608	14 862	33 375	D
31499	All other textile product mills	1	4	3	438	7 881	340	593	4 804	24 281	14 536	32 734	1 032
314999	All other miscellaneous textile product mills	1	4	3	438	7 881	340	593	4 804	24 281	14 536	32 734	1 032
315	Apparel mfg	3	37	25	2 376	41 746	2 039	3 763	34 489	146 525	86 451	231 398	4 996
3151	Apparel knitting mills	1	9	4	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	3	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	2	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	25	20	1 614	25 948	1 349	2 552	20 870	72 374	53 117	123 910	2 466
31521	Cut & sew apparel contractors	2	8	6	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	5	8	7	728	11 398	637	1 221	9 202	32 742	28 162	62 148	422
315221	Men's & boys' cut & sew underwear & nightwear mfg	8	3	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	8	6	354	6 318	273	553	5 425	21 774	19 493	39 189	D
316	Leather & allied product mfg	—	4	3	f	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	2	2	f	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	2	2	f	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	2	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	2	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	2	1	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	13	10	709	25 916	512	1 077	16 171	74 871	86 269	160 980	7 972
3222	Converted paper product mfg	—	9	6	549	19 284	403	809	11 808	53 483	62 217	115 492	5 950
32221	Paperboard container mfg	—	5	4	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	3	355	13 040	242	526	7 352	30 163	29 001	59 022	5 001

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	READING, PA MSA— Con.												
31-33	Manufacturing— Con.												
323	Printing & related support activities.....	-	53	12	1 418	44 720	980	1 977	25 697	98 134	79 192	177 850	9 665
3231	Printing & related support activities.....	-	53	12	1 418	44 720	980	1 977	25 697	98 134	79 192	177 850	9 665
32311	Printing	-	49	12	1 400	44 294	968	1 959	25 394	97 376	79 031	176 931	9 623
323110	Commercial lithographic printing ..	-	30	11	1 147	36 729	775	1 460	20 297	72 231	42 450	114 543	7 392
325	Chemical mfg	-	29	11	1 443	59 691	764	1 439	25 308	219 048	230 163	446 843	14 222
3251	Basic chemical mfg	-	5	2	348	14 949	176	344	5 936	43 647	29 982	74 041	6 828
32513	Dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	4	3	600	26 412	342	585	11 644	105 597	107 587	211 495	4 677
32551	Paint & coating mfg	-	3	2	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	3	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	28	12	1 715	57 789	1 206	2 553	30 306	107 604	102 922	210 432	19 932
3261	Plastics product mfg	-	25	12	1 710	57 672	1 202	2 545	30 219	107 354	102 697	209 956	19 912
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	5	2	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	4	2	e	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	-	1	1	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	2	1	e	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	2	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	17	8	727	19 986	513	1 033	10 981	38 662	39 790	77 970	3 370
326199	All other plastics product mfg	-	16	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	25	11	1 076	39 963	791	1 760	27 583	107 958	94 664	201 062	18 564
3271	Clay product & refractory mfg	-	4	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	3	2	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	16	6	586	21 751	408	997	13 730	68 490	62 842	127 945	14 861
32739	Other concrete product mfg	1	6	4	293	9 679	237	584	6 818	30 344	18 407	45 362	7 878
327390	Other concrete product mfg	1	6	4	293	9 679	237	584	6 818	30 344	18 407	45 362	7 878
331	Primary metal mfg	-	33	27	6 238	303 284	4 700	10 088	198 951	588 011	1 196 551	1 787 563	89 358
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	12	11	1 239	46 941	915	2 122	32 734	186 744	556 776	744 621	12 069
33142	Copper rolling, drawing, extruding, & alloying ...	-	7	7	879	32 777	631	1 462	23 797	114 241	471 009	588 491	5 171
331421	Copper rolling, drawing, & extruding .	-	6	6	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	5	4	360	14 164	284	660	8 937	72 503	85 767	156 130	6 898
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	READING, PA MSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	—	19	14	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	10	9	1 478	39 369	1 266	2 444	28 726	75 922	43 421	118 743	D
331511	Iron foundries	—	3	3	e	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	3	3	464	13 496	395	780	9 151	27 317	8 728	35 914	D
331513	Steel foundries (except investment)	—	4	3	f	D	D	D	D	D	D	D	1 581
33152	Nonferrous metal foundries	—	9	5	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	109	36	3 705	113 045	2 899	5 428	73 076	280 990	256 414	529 463	20 205
3323	Architectural & structural metals mfg	—	22	13	824	27 788	666	1 205	17 864	56 890	75 428	132 882	2 378
33231	Plate work & fabricated structural product mfg ..	—	11	9	413	14 584	334	607	8 966	32 559	57 362	89 769	1 742
33232	Ornamental & architectural metal products mfg	—	11	4	411	13 204	332	598	8 898	24 331	18 066	43 113	636
332322	Sheet metal work mfg ..	—	7	4	399	12 847	323	580	8 685	23 585	17 184	41 481	600
3325	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	37	10	1 043	28 826	804	1 242	18 496	68 898	50 553	115 190	4 682
33271	Machine shops	1	33	8	f	D	D	D	D	D	D	D	D
332710	Machine shops	1	33	8	f	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	—	4	2	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	2	2	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.	—	10	4	342	9 118	274	548	5 840	18 964	11 503	29 167	3 075
33281	Coating, engraving, heat treating, & allied activities	—	10	4	342	9 118	274	548	5 840	18 964	11 503	29 167	3 075
3329	Other fabricated metal product mfg	—	20	4	256	7 433	206	315	5 321	13 488	8 835	21 989	734
33299	All other fabricated metal product mfg	—	20	4	256	7 433	206	315	5 321	13 488	8 835	21 989	734
333	Machinery mfg	1	40	18	1 384	48 167	899	1 730	26 135	135 215	119 927	257 729	3 548
3332	Industrial machinery mfg ..	—	13	7	597	23 579	395	818	12 957	84 578	81 582	169 200	1 270
33329	Other industrial machinery mfg	—	13	7	597	23 579	395	818	12 957	84 578	81 582	169 200	1 270
333293	Printing machinery & equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	8	5	4	315	8 664	210	361	4 341	21 611	19 326	41 424	896
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	8	5	4	315	8 664	210	361	4 341	21 611	19 326	41 424	896
333414	Heating equipment (except warm air furnaces) mfg	9	3	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	17	7	2 882	128 226	2 036	4 086	55 720	491 288	121 664	614 744	D
3342	Communications equipment mfg	1	4	3	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	9	3	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	9	3	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	1	1	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	READING, PA MSA— Con.												
	Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg	—	12	7	4 039	133 144	2 922	5 878	88 012	332 075	211 610	530 344	29 471
3351	Electric lighting equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	5	4	h	D	D	D	D	D	D	D	D
33591	Battery mfg	—	3	2	h	D	D	D	D	D	D	D	D
335911	Storage battery mfg	—	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	13	5	4 436	210 408	3 708	7 301	164 539	388 676	280 401	680 949	18 591
3362	Motor vehicle body & trailer mfg	—	5	3	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	5	3	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	—	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	3	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	1	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	29	9	536	15 890	409	874	10 165	32 123	22 867	54 602	1 044
3371	Household & institutional furniture & kitchen cabinet mfg	—	18	3	251	6 491	211	410	4 976	12 270	7 285	19 465	368
339	Miscellaneous mfg	1	38	10	2 259	84 745	1 501	3 064	47 650	165 099	78 887	239 463	11 632
3391	Medical equipment & supplies mfg	1	20	7	1 943	76 059	1 328	2 711	43 692	143 169	67 065	206 435	10 664
33911	Medical equipment & supplies mfg	1	20	7	1 943	76 059	1 328	2 711	43 692	143 169	67 065	206 435	10 664
339112	Surgical & medical instrument mfg	1	6	6	1 598	65 044	1 093	2 297	38 339	117 673	37 061	150 468	8 760
339113	Surgical appliance & supplies mfg	—	3	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	18	3	316	8 686	173	353	3 958	21 930	11 822	33 028	968
	SCRANTON-WILKES-BARRE-HAZLETON, PA MSA												
31-33	Manufacturing	1	849	355	51 202	1 421 112	40 207	83 017	984 390	5 183 371	4 768 204	9 882 498	532 442
311	Food mfg	—	92	36	5 264	127 097	3 832	7 757	89 458	535 507	580 353	1 111 245	33 626
3111	Animal food mfg	—	6	1	f	D	D	D	D	D	D	D	D
31111	Animal food mfg	—	6	1	f	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	—	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	10	5	973	22 328	805	1 715	18 274	196 686	127 229	321 096	D
31133	Confectionery mfg from purchased chocolate	—	9	4	f	D	D	D	D	D	D	D	3 358
311330	Confectionery mfg from purchased chocolate	—	9	4	f	D	D	D	D	D	D	D	3 358
3114	Fruit & vegetable preserving & specialty food mfg	1	5	3	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	1	4	3	392	8 701	342	525	5 665	18 181	24 051	42 312	D
311412	Frozen specialty food mfg	1	4	3	392	8 701	342	525	5 665	18 181	24 051	42 312	D
3116	Meat product mfg	3	19	11	887	20 779	744	1 281	14 925	42 614	108 649	151 482	2 330
31161	Animal slaughtering & processing	3	19	11	887	20 779	744	1 281	14 925	42 614	108 649	151 482	2 330
311612	Meat processed from carcasses	2	12	8	745	17 929	622	1 058	12 667	37 796	79 556	117 253	2 000
3118	Bakeries & tortilla mfg	—	40	12	1 096	22 935	684	1 166	15 581	152 777	62 450	214 181	3 920
31181	Bread & bakery product mfg	—	38	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	13	9	790	16 907	464	762	11 154	108 464	40 090	148 548	1 929
3119	Other food mfg	—	7	2	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	8	10	5	661	20 869	442	878	13 583	289 707	259 333	545 606	8 116
3121	Beverage mfg	8	9	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	7	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	8	6	3	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SCRANTON-WILKES-BARRE-HAZLETON, PA MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	2	27	18	2 840	66 178	2 322	4 918	46 827	156 499	128 015	281 101	13 600
3132	Fabric mills	1	11	7	1 934	45 556	1 555	3 293	31 648	113 012	97 026	206 467	9 878
31321	Broadwoven fabric mills	3	8	4	789	18 274	614	1 436	12 634	46 921	51 525	96 536	D
313210	Broadwoven fabric mills	3	8	4	789	18 274	614	1 436	12 634	46 921	51 525	96 536	D
31323	Nonwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	6	10	8	659	15 927	557	1 175	11 943	36 635	20 708	57 536	D
31331	Textile & fabric finishing mills	6	8	6	f	D	D	D	D	D	D	D	2 349
313311	Broadwoven fabric finishing mills	7	6	5	e	D	D	D	D	D	D	D	D
314	Textile product mills	—	24	8	1 558	40 159	1 282	2 696	27 254	86 929	95 833	182 862	D
3141	Textile furnishings mills	—	13	4	1 159	32 311	973	2 227	22 619	70 965	83 771	154 468	D
31411	Carpet & rug mills	—	3	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	3	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	10	2	e	D	D	D	D	D	D	D	D
3149	Other textile product mills	3	11	4	399	7 848	309	469	4 635	15 964	12 062	28 394	456
315	Apparel mfg	2	56	34	4 292	86 946	3 882	6 779	71 274	209 381	191 214	398 941	6 666
3151	Apparel knitting mills	—	3	3	626	11 339	589	1 114	9 989	27 694	20 222	46 203	D
31519	Other apparel knitting mills	—	3	3	626	11 339	589	1 114	9 989	27 694	20 222	46 203	D
315191	Outerwear knitting mills	—	2	2	e	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	48	28	3 449	68 419	3 133	5 341	58 307	166 288	156 771	322 394	6 350
31521	Cut & sew apparel contractors	7	35	21	2 705	53 698	2 520	4 359	47 183	84 266	16 901	102 385	6 029
315211	Men's & boys' cut & sew apparel contractors	5	14	13	1 079	17 811	994	1 733	14 570	36 277	5 446	41 786	D
315212	Women's, girls', & infants' cut & sew apparel contractors	9	21	8	1 626	35 887	1 526	2 626	32 613	47 989	11 455	60 599	D
31522	Men's & boys' cut & sew apparel mfg	1	6	3	e	D	D	D	D	D	D	D	118
31523	Women's & girls' cut & sew apparel mfg	—	7	4	e	D	D	D	D	D	D	D	203
321	Wood product mfg	1	42	13	1 328	32 001	1 069	2 039	22 348	61 494	73 443	134 018	D
3219	Other wood product mfg	1	28	10	1 130	27 511	904	1 683	18 955	48 771	55 661	103 577	D
32191	Millwork	2	10	3	294	7 367	268	518	6 272	12 703	15 343	27 946	D
32199	All other wood product mfg	—	10	5	700	17 851	537	926	10 956	32 150	35 916	67 284	1 408
321992	Prefabricated wood building mfg	—	6	5	662	17 152	507	871	10 452	30 290	35 042	64 554	1 360
322	Paper mfg	—	26	16	4 122	83 212	3 690	7 324	64 351	1 269 832	794 540	2 024 144	D
3221	Pulp, paper, & paperboard mills	—	2	2	h	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	h	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	h	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	24	14	g	D	D	D	D	D	D	D	4 908
32221	Paperboard container mfg	—	11	6	f	D	D	D	D	D	D	D	1 686
322211	Corrugated & solid fiber box mfg	—	5	3	270	9 106	203	420	6 145	14 111	39 574	53 930	1 363
32222	Paper bag & coated & treated paper mfg	—	4	3	e	D	D	D	D	D	D	D	2 112
322222	Coated & laminated paper mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	90	28	3 409	101 507	2 643	5 243	67 669	229 459	126 641	355 828	50 692
3231	Printing & related support activities	—	90	28	3 409	101 507	2 643	5 243	67 669	229 459	126 641	355 828	50 692
32311	Printing	—	85	28	3 381	100 706	2 625	5 205	67 130	227 962	126 448	354 139	50 648
323110	Commercial lithographic printing	—	48	15	1 659	49 525	1 252	2 498	32 855	105 808	80 920	186 556	22 386
323117	Book printing	—	3	3	1 002	34 657	796	1 604	23 408	74 071	22 783	96 739	D
325	Chemical mfg	1	26	9	595	17 625	432	799	10 753	80 367	119 757	199 774	7 068

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SCRANTON-WILKES-BARRE-HAZLETON, PA MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	42	33	3 905	105 930	3 164	6 654	75 431	416 947	518 973	931 626	27 495
3261	Plastics product mfg	-	40	32	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	11	10	1 816	55 441	1 446	3 128	39 924	204 495	289 537	494 996	11 717
326111	Unsupported plastics bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	9	8	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	5	5	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	5	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	17	12	1 191	27 971	1 013	2 058	20 460	116 764	88 373	201 348	9 426
326199	All other plastics product mfg	-	17	12	1 191	27 971	1 013	2 058	20 460	116 764	88 373	201 348	9 426
327	Nonmetallic mineral product mfg	-	49	13	3 206	125 374	2 637	5 907	97 168	343 232	318 323	648 613	122 523
3272	Glass & glass product mfg	-	7	4	2 261	90 998	1 903	4 298	71 887	272 735	241 379	499 995	D
32721	Glass & glass product mfg	-	7	4	2 261	90 998	1 903	4 298	71 887	272 735	241 379	499 995	D
327212	Other pressed & blown glass & glassware mfg	-	2	2	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	32	4	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	8	4	514	21 665	416	928	16 644	43 692	49 929	94 534	D
32799	All other nonmetallic mineral product mfg	-	6	2	e	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	13	10	1 467	46 718	1 148	2 490	32 720	135 646	202 852	341 494	14 368
3312	Steel product mfg from purchased steel	-	4	4	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	6	4	602	16 729	539	1 099	12 998	32 170	22 727	54 412	D
33151	Ferrous metal foundries	-	2	2	e	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	4	2	e	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	140	54	5 892	169 652	4 330	8 680	103 616	392 353	402 756	799 239	24 018
3321	Forging & stamping	-	8	7	793	26 959	643	1 361	17 087	72 470	81 724	155 261	6 531
33211	Forging & stamping	-	8	7	793	26 959	643	1 361	17 087	72 470	81 724	155 261	6 531
332116	Metal stamping	-	7	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	30	10	1 223	39 462	842	1 942	22 841	75 923	83 132	160 728	3 054
33232	Ornamental & architectural metal products mfg	-	20	6	1 016	34 082	691	1 625	19 877	61 383	62 671	125 456	2 690
332321	Metal window & door mfg	-	7	2	620	23 113	389	960	13 278	40 766	53 132	95 820	1 673
332323	Ornamental & architectural metal work mfg	-	5	2	254	6 877	194	402	3 966	12 558	5 772	18 037	D
3325	Hardware mfg	-	3	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	2	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	-	13	9	1 646	37 452	1 219	2 394	24 462	110 199	97 495	207 794	3 661
33261	Spring & wire product mfg	-	13	9	1 646	37 452	1 219	2 394	24 462	110 199	97 495	207 794	3 661
332618	Other fabricated wire product mfg	-	11	7	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	56	13	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	55	13	834	24 224	643	1 128	15 252	41 933	25 092	67 474	3 859
332710	Machine shops	2	55	13	834	24 224	643	1 128	15 252	41 933	25 092	67 474	3 859

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SCRANTON-WILKES-BARRE-HAZLETON, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	18	7	714	21 605	440	837	10 996	59 406	23 681	84 591	4 560
33299	All other fabricated metal product mfg.....	-	16	6	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	51	23	2 323	71 832	1 604	3 153	43 027	173 832	159 138	329 798	11 127
3332	Industrial machinery mfg ..	1	15	4	438	13 949	289	482	8 325	25 360	20 802	47 062	1 874
33329	Other industrial machinery mfg.....	1	14	3	e	D	D	D	D	D	D	D	1 874
333298	All other industrial machinery mfg.....	-	8	2	304	10 498	203	327	6 541	18 147	15 537	34 729	1 744
3333	Commercial & service industry machinery mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	7	3	347	8 000	296	596	5 287	11 656	13 299	24 902	407
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	7	3	347	8 000	296	596	5 287	11 656	13 299	24 902	407
333414	Heating equipment (except warm air furnaces) mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	14	9	719	23 693	464	1 013	13 801	51 440	61 055	104 451	3 167
33399	All other general-purpose machinery mfg.....	2	9	5	266	7 328	199	386	4 755	19 228	9 018	24 918	927
334	Computer & electronic product mfg.....	1	22	10	4 673	176 724	3 636	9 111	126 748	433 786	412 522	847 071	66 513
3344	Semiconductor & other electronic component mfg.....	1	5	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	1	5	3	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg....	-	1	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	9	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	6	2	483	18 872	304	557	7 339	17 387	27 006	44 012	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	6	2	483	18 872	304	557	7 339	17 387	27 006	44 012	D
334519	Other measuring & controlling device mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	-	3	2	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	-	3	2	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	17	7	1 038	29 454	849	1 878	21 001	65 753	75 277	141 574	2 813
3359	Other electrical equipment & component mfg.....	-	8	5	907	25 378	772	1 726	18 396	56 014	65 549	121 848	2 280
33591	Battery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg....	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg....	-	1	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg....	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SCRANTON-WILKES-BARRE-HAZLETON, PA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	16	10	993	32 595	731	1 506	20 436	102 252	109 638	208 870	4 557
3364	Aerospace product & parts mfg	-	7	5	536	17 697	403	856	9 666	69 218	57 055	122 421	D
33641	Aerospace product & parts mfg	-	7	5	536	17 697	403	856	9 666	69 218	57 055	122 421	D
336412	Aircraft engine & engine parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	6	35	6	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	26	2	281	6 665	226	405	4 794	12 445	8 391	20 853	D
3372	Office furniture (including fixtures) mfg	9	6	2	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	9	6	2	e	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	9	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	63	20	2 636	62 548	1 734	3 612	32 598	133 364	144 983	278 876	9 557
3391	Medical equipment & supplies mfg	2	25	8	1 366	34 537	808	1 861	15 817	69 849	99 015	167 372	7 227
33911	Medical equipment & supplies mfg	2	25	8	1 366	34 537	808	1 861	15 817	69 849	99 015	167 372	7 227
339113	Surgical appliance & supplies mfg	-	9	6	1 092	27 468	603	1 364	10 948	51 280	92 739	143 018	5 037
3399	Other miscellaneous mfg ..	1	38	12	1 270	28 011	926	1 751	16 781	63 515	45 968	111 504	2 330
33992	Sporting & athletic goods mfg	1	5	3	394	8 271	300	500	5 266	21 549	18 245	42 184	D
339920	Sporting & athletic goods mfg	1	5	3	394	8 271	300	500	5 266	21 549	18 245	42 184	D
33999	All other miscellaneous mfg	1	16	5	472	10 414	386	778	7 410	21 593	14 956	36 834	456
339995	Burial casket mfg	-	4	2	338	7 332	267	534	5 387	15 715	12 770	28 711	344
	SHARON, PA MSA												
31-33	Manufacturing	1	198	77	10 457	326 802	7 788	15 622	220 942	990 406	1 474 465	2 440 846	75 673
311	Food mfg	7	19	8	833	20 216	553	848	9 679	63 700	148 452	212 156	5 435
3118	Bakeries & tortilla mfg	1	9	4	412	7 935	319	402	4 338	20 688	9 009	29 769	1 912
31182	Cookie, cracker, & pasta mfg	-	2	2	e	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	7	531	11 728	414	781	7 893	29 936	29 826	59 393	3 075
3261	Plastics product mfg	-	12	7	531	11 728	414	781	7 893	29 936	29 826	59 393	3 075
32619	Other plastics product mfg	-	10	6	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	10	6	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	12	10	2 428	95 253	1 980	4 154	70 569	430 968	610 543	1 018 474	13 978
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	7	6	g	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	6	6	1 693	67 373	1 421	3 029	52 610	332 138	469 153	784 336	6 368
331210	Iron & steel pipes & tubes mfg from purchased steel	-	6	6	1 693	67 373	1 421	3 029	52 610	332 138	469 153	784 336	6 368
3315	Foundries	-	2	2	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	e	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SHARON, PA MSA— Con. Manufacturing— Con.												
332	Fabricated metal product mfg	—	45	21	2 675	72 661	1 841	3 801	53 787	174 224	267 511	440 546	31 297
3321	Forging & stamping	—	5	4	355	11 575	260	546	8 063	34 767	49 936	86 600	2 383
33211	Forging & stamping	—	5	4	355	11 575	260	546	8 063	34 767	49 936	86 600	2 383
3323	Architectural & structural metals mfg	—	9	4	260	7 083	171	334	3 685	19 930	30 216	49 704	1 738
3324	Boiler, tank, & shipping container mfg	—	5	4	373	14 576	320	667	11 466	37 206	38 491	73 634	2 101
3329	Other fabricated metal product mfg	—	7	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	7	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	3	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	12	4	1 051	36 822	832	1 680	26 466	121 676	79 215	203 579	4 641
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	1	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	1	e	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	4	3	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	—	1	1	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	11	6	528	17 718	299	593	6 934	35 413	31 121	65 511	5 661
3344	Semiconductor & other electronic component mfg	6	7	4	336	9 852	233	449	4 960	25 625	18 025	42 968	D
33441	Semiconductor & other electronic component mfg	6	7	4	336	9 852	233	449	4 960	25 625	18 025	42 968	D
336	Transportation equipment mfg	—	11	7	1 247	42 909	1 104	2 363	29 713	72 751	234 656	305 362	6 998
3365	Railroad rolling stock mfg	—	2	2	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	2	2	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	2	2	f	D	D	D	D	D	D	D	D
31-33	STATE COLLEGE, PA MSA Manufacturing	—	159	58	8 546	255 406	5 941	11 755	148 714	790 071	625 316	1 409 254	127 102
315	Apparel mfg	9	5	4	425	5 987	380	628	5 043	15 464	7 195	22 998	687
3152	Cut & sew apparel mfg	9	5	4	425	5 987	380	628	5 043	15 464	7 195	22 998	687
31522	Men's & boys' cut & sew apparel mfg	9	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
3231	Printing & related support activities	—	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
32311	Printing	—	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
323117	Book printing	—	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	4	3	426	9 949	381	791	7 852	33 178	34 259	68 237	2 138
3261	Plastics product mfg	—	3	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	14	8	1 655	58 693	1 287	2 805	38 510	270 975	128 810	398 440	D
3272	Glass & glass product mfg	—	2	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	g	D	D	D	D	D	D	D	D
3274	Lime & gypsum product mfg	—	5	4	337	12 353	255	607	9 213	33 309	34 186	69 194	D
32741	Lime mfg	—	4	3	e	D	D	D	D	D	D	D	D
327410	Lime mfg	—	4	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	STATE COLLEGE, PA MSA—Con.													
	Manufacturing—Con.													
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D	
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D	
331421	Copper rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	21	2		8 187	209	365	4 679	24 640	3 574	28 254	782	
333	Machinery mfg	-	8	4		472	15 279	266	553	8 793	37 273	31 794	69 244	2 602
334	Computer & electronic product mfg	-	31	18		2 965	90 228	1 716	3 413	40 537	233 900	203 229	432 601	17 872
3342	Communications equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	8		1 587	44 330	1 046	2 150	24 487	138 343	137 524	271 467	13 588
33441	Semiconductor & other electronic component mfg	-	12	8		1 587	44 330	1 046	2 150	24 487	138 343	137 524	271 467	13 588
334414	Electronic capacitor mfg	-	2	1	g	D	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	12	7		674	24 072	343	707	9 595	59 513	38 476	96 840	3 148
33451	Navigational, measuring, medical, & control instruments mfg	-	12	7		674	24 072	343	707	9 595	59 513	38 476	96 840	3 148
334516	Analytical laboratory instrument mfg	-	7	5		520	19 699	251	537	7 073	46 594	29 989	75 689	2 748
339	Miscellaneous mfg	1	14	4		277	7 411	216	407	5 048	11 043	14 326	25 317	348
3391	Medical equipment & supplies mfg	1	10	4		271	7 279	210	398	4 964	10 755	14 127	24 823	337
33911	Medical equipment & supplies mfg	1	10	4		271	7 279	210	398	4 964	10 755	14 127	24 823	337
31-33	WILLIAMSPORT, PA MSA													
	Manufacturing	-	208	95		12 982	370 226	9 691	18 771	229 917	1 189 394	1 262 012	2 460 365	60 042
311	Food mfg	-	12	8		1 021	34 711	834	1 825	24 417	243 643	186 243	462 982	6 683
3118	Bakeries & tortilla mfg	-	5	2	e	D	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	e	D	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	1	1	e	D	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	-	1	1	e	D	D	D	D	D	D	D	D	D
315	Apparel mfg	-	11	6		1 069	16 731	979	1 904	12 946	41 665	83 474	125 408	624
3152	Cut & sew apparel mfg	-	10	6	g	D	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D	212
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	10		1 019	24 856	827	1 473	17 037	58 383	75 751	133 714	2 813
3219	Other wood product mfg	-	11	4		583	13 455	461	765	8 950	30 095	37 714	67 539	738
32199	All other wood product mfg	-	5	1	e	D	D	D	D	D	D	D	D	410
321992	Prefabricated wood building mfg	-	2	1	e	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WILLIAMSPORT, PA MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	8	7	367	9 731	272	501	6 477	26 637	38 737	65 726	1 986
3222	Converted paper product mfg	-	8	7	367	9 731	272	501	6 477	26 637	38 737	65 726	1 986
32221	Paperboard container mfg	-	7	6	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	17	6	457	12 990	318	570	7 508	25 957	22 108	47 996	1 297
3231	Printing & related support activities.....	2	17	6	457	12 990	318	570	7 508	25 957	22 108	47 996	1 297
32311	Printing	2	16	6	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	17	11	1 024	25 347	755	1 487	15 709	127 333	100 835	225 760	11 356
3261	Plastics product mfg	-	13	9	845	21 155	606	1 184	12 666	100 480	93 916	192 712	D
32619	Other plastics product mfg	-	8	5	653	16 835	453	882	9 698	64 308	41 178	105 703	5 872
326199	All other plastics product mfg	-	8	5	653	16 835	453	882	9 698	64 308	41 178	105 703	5 872
331	Primary metal mfg	-	4	4	768	27 495	584	1 305	19 310	79 438	201 535	286 090	3 842
3312	Steel product mfg from purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	e	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	38	14	1 320	46 349	849	1 393	20 865	78 250	76 535	150 925	4 067
3323	Architectural & structural metals mfg	-	9	5	311	9 739	260	439	5 868	22 932	16 059	34 456	1 042
3324	Boiler, tank, & shipping container mfg	-	3	2	e	D	D	D	D	D	D	D	176
33241	Power boiler & heat exchanger mfg	-	1	1	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	3	777	28 286	311	631	8 839	66 500	44 671	99 225	4 521
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	4	861	25 918	646	1 227	18 640	66 253	59 314	124 457	2 356
3344	Semiconductor & other electronic component mfg	-	2	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	e	D	D	D	D	D	D	D	474
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	e	D	D	D	D	D	D	D	474
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WILLIAMSPORT, PA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	5	3	698	33 778	516	1 002	21 659	55 073	126 196	175 764	3 699
3362	Motor vehicle body & trailer mfg	-	4	2	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	4	2	e	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	2	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	14	7	1 487	33 371	1 141	2 227	24 620	105 766	82 654	185 672	4 192
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	4	561	11 703	387	586	5 055	22 160	29 215	52 094	D
33712	Household & institutional furniture mfg	-	7	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	2	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	2	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	2	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	2	1	f	D	D	D	D	D	D	D	D
	YORK, PA MSA												
31-33	Manufacturing	-	661	314	45 754	1 557 477	33 469	66 061	975 549	4 627 847	3 542 690	8 156 938	300 081
311	Food mfg	-	45	21	4 384	129 266	2 763	6 062	61 923	439 678	359 278	780 693	21 534
3113	Sugar & confectionery product mfg	-	9	3	255	5 366	156	260	2 707	11 051	11 450	22 910	639
3118	Bakeries & tortilla mfg	2	12	4	1 213	29 230	984	2 191	19 006	70 807	78 519	147 260	D
31181	Bread & bakery product mfg	4	10	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	3	2	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	14	12	h	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	12	11	2 542	83 745	1 357	2 969	32 929	302 773	164 190	466 892	12 499
311919	Other snack food mfg ..	-	12	11	2 542	83 745	1 357	2 969	32 929	302 773	164 190	466 892	12 499
313	Textile mills	3	8	4	420	10 655	332	666	6 972	23 763	30 750	53 616	1 894
3132	Fabric mills	5	5	3	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	5	3	2	e	D	D	D	D	D	D	D	1 724
313210	Broadwoven fabric mills	5	3	2	e	D	D	D	D	D	D	D	1 724
314	Textile product mills	-	9	2	e	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	3	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	3	1	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	22	13	1 740	31 464	1 224	2 482	20 196	65 154	50 097	116 641	686
3152	Cut & sew apparel mfg	-	19	12	1 699	30 848	1 199	2 424	19 722	64 381	49 468	115 190	652
31521	Cut & sew apparel contractors	1	11	7	365	5 729	296	600	3 902	6 168	9 691	16 018	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	1	11	7	365	5 729	296	600	3 902	6 168	9 691	16 018	D
31523	Women's & girls' cut & sew apparel mfg	-	6	4	g	D	D	D	D	D	D	D	342
315239	Women's & girls' cut & sew other outerwear mfg	-	6	4	g	D	D	D	D	D	D	D	342
321	Wood product mfg	2	28	7	567	12 685	481	958	9 734	19 835	27 345	47 502	2 125
3219	Other wood product mfg ...	2	19	5	330	6 243	275	514	4 490	11 743	14 642	26 411	683

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31-33	YORK, PA MSA—Con. Manufacturing— Con.												
322	Paper mfg	-	30	20	3 343	136 662	2 341	5 027	81 661	388 488	292 287	679 174	56 652
3221	Pulp, paper, & paperboard mills	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	27	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	21	13	g	D	D	D	D	D	D	D	12 784
322211	Corrugated & solid fiber box mfg	-	12	8	864	28 070	661	1 415	16 566	68 817	80 451	148 487	8 275
32222	Paper bag & coated & treated paper mfg	-	5	4	861	34 398	506	957	16 471	107 361	61 745	170 379	D
322222	Coated & laminated paper mfg	-	5	4	861	34 398	506	957	16 471	107 361	61 745	170 379	D
323	Printing & related support activities	1	58	26	4 018	123 101	2 975	6 068	78 039	260 116	164 065	419 900	17 953
3231	Printing & related support activities	1	58	26	4 018	123 101	2 975	6 068	78 039	260 116	164 065	419 900	17 953
32311	Printing	1	42	19	2 676	84 069	1 976	4 013	53 368	199 407	142 316	337 972	15 394
323110	Commercial lithographic printing ..	-	19	9	858	27 983	698	1 508	20 150	62 132	51 856	114 206	4 042
323112	Commercial flexographic printing ..	5	2	2	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	4	3	520	19 088	372	711	11 795	65 296	32 647	96 807	3 778
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	-	16	7	1 342	39 032	999	2 055	24 671	60 709	21 749	81 928	2 559
323121	Tradebinding & related work	-	2	2	f	D	D	D	D	D	D	D	D
323122	Prepress services	-	14	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	5	17	7	340	11 522	168	333	3 968	34 174	58 219	92 484	4 597
326	Plastics & rubber products mfg	-	28	18	2 168	69 403	1 781	3 378	52 361	176 522	147 265	325 492	18 520
3261	Plastics product mfg	-	26	17	g	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	3	3	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	-	3	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	20	13	1 447	46 057	1 164	2 302	34 339	103 413	64 386	169 842	7 827
326199	All other plastics product mfg	-	19	12	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	30	12	1 866	54 139	1 530	2 940	41 681	152 302	110 787	265 239	17 796
3271	Clay product & refractory mfg	-	6	5	1 312	37 525	1 099	2 013	30 454	111 622	69 287	183 796	13 054
32711	Pottery, ceramics, & plumbing fixture mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	3	3	f	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	2	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	16	7	497	15 212	394	856	10 380	36 916	38 694	74 840	4 367
32733	Concrete pipe, brick, & block mfg	-	6	3	275	7 999	226	529	5 705	17 743	20 509	37 142	D
327331	Concrete block & brick mfg	-	6	3	275	7 999	226	529	5 705	17 743	20 509	37 142	D
331	Primary metal mfg	-	14	12	2 539	76 410	1 989	4 268	54 436	198 541	153 627	349 564	15 360
3312	Steel product mfg from purchased steel	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
33122	Rolling & drawing of purchased steel	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
331222	Steel wire drawing	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
3313	Alumina & aluminum production & processing ..	-	3	3	e	D	D	D	D	D	D	D	4 912
33131	Alumina & aluminum production & processing	-	3	3	e	D	D	D	D	D	D	D	4 912
331319	Other aluminum rolling & drawing	-	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	-	8	6	g	D	D	D	D	D	D	D	5 933
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	6	4	338	8 864	280	572	6 512	14 732	11 270	25 548	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YORK, PA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	133	55	5 217	168 969	4 026	7 665	110 937	428 995	360 690	787 794	18 466
3321	Forging & stamping	-	8	6	602	20 257	462	997	12 173	46 957	43 185	89 340	3 506
33211	Forging & stamping	-	8	6	602	20 257	462	997	12 173	46 957	43 185	89 340	3 506
332116	Metal stamping	-	5	5	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	9	5	405	12 030	322	738	7 986	19 607	11 475	30 961	469
33221	Cutlery & handtool mfg	-	9	5	405	12 030	322	738	7 986	19 607	11 475	30 961	469
332212	Hand & edge tool mfg	-	7	4	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	21	13	1 614	54 047	1 227	2 090	34 084	121 036	105 885	225 283	4 162
33231	Plate work & fabricated structural product mfg	-	9	5	817	29 218	586	840	18 158	63 461	65 933	131 036	2 790
332312	Fabricated structural metal mfg	-	5	3	e	D	D	D	D	D	D	D	D
332313	Plate work mfg	-	3	2	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	12	8	797	24 829	641	1 250	15 926	57 575	39 952	94 247	1 372
332321	Metal window & door mfg	-	2	2	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	8	6	f	D	D	D	D	D	D	D	497
3324	Boiler, tank, & shipping container mfg	-	7	3	323	10 385	221	459	6 699	26 403	75 629	101 815	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	60	14	847	25 399	670	1 178	17 780	56 462	21 497	78 071	4 303
33271	Machine shops	-	53	11	743	22 585	585	1 006	15 835	49 315	19 753	69 236	2 669
332710	Machine shops	-	53	11	743	22 585	585	1 006	15 835	49 315	19 753	69 236	2 669
3328	Coating, engraving, heat treating, & allied activities	1	11	8	e	D	D	D	D	D	D	D	388
33281	Coating, engraving, heat treating, & allied activities	1	11	8	e	D	D	D	D	D	D	D	388
3329	Other fabricated metal product mfg	-	16	5	985	35 686	783	1 566	25 266	133 698	89 402	223 859	4 728
33299	All other fabricated metal product mfg	-	15	5	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	e	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	83	42	6 121	274 681	4 151	8 742	147 538	1 009 435	598 326	1 610 848	51 941
3331	Agriculture, construction, & mining machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	-	13	9	771	31 315	473	826	14 073	65 232	69 544	136 106	D
33322	Plastics & rubber industry machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	11	7	e	D	D	D	D	D	D	D	975
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	10	7	g	D	D	D	D	D	D	D	15 935
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	10	7	g	D	D	D	D	D	D	D	15 935
333415	AC & warm air heating & commercial industrial refig equip mfg	-	8	7	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	32	10	575	20 608	391	794	11 915	35 543	18 092	54 032	2 450
33351	Metalworking machinery mfg	2	32	10	575	20 608	391	794	11 915	35 543	18 092	54 032	2 450
3336	Engine, turbine, & power transmission equipment mfg	-	4	4	f	D	D	D	D	D	D	D	5 598
33361	Engine, turbine, & power transmission equipment mfg	-	4	4	f	D	D	D	D	D	D	D	5 598
333611	Turbine & turbine generator set unit mfg	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YORK, PA MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	19	10	1 098	42 288	716	1 565	26 959	77 360	120 984	201 950	D
33392	Material handling equipment mfg	2	9	4	346	12 348	241	616	8 535	29 397	25 520	56 696	D
333923	Overhead traveling crane, hoist, & monorail system mfg.	3	3	3	279	10 103	190	517	7 407	24 761	21 370	47 926	407
33399	All other general-purpose machinery mfg	-	10	6	752	29 940	475	949	18 424	47 963	95 464	145 254	2 940
333992	Welding & soldering equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	27	17	2 303	76 049	1 899	3 485	56 243	342 797	203 989	541 547	17 052
3344	Semiconductor & other electronic component mfg	-	17	11	1 839	60 826	1 631	2 988	49 945	307 832	178 885	481 107	16 098
33441	Semiconductor & other electronic component mfg	-	17	11	1 839	60 826	1 631	2 988	49 945	307 832	178 885	481 107	16 098
334417	Electronic connector mfg	-	9	8	1 646	56 975	1 476	2 782	47 787	298 269	170 843	463 449	15 653
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	287	10 092	171	310	4 239	24 871	16 243	41 138	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	287	10 092	171	310	4 239	24 871	16 243	41 138	D
335	Electrical equipment, appliance, & component mfg	-	21	16	1 691	59 555	1 133	2 367	35 525	218 975	220 750	436 113	11 352
3351	Electric lighting equipment mfg	-	3	2	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	12	10	771	24 249	479	906	11 714	74 012	72 150	147 748	D
33531	Electrical equipment mfg	-	12	10	771	24 249	479	906	11 714	74 012	72 150	147 748	D
335314	Relay & industrial control mfg	-	8	7	647	20 813	395	753	10 011	61 744	64 891	127 495	901
3359	Other electrical equipment & component mfg	-	6	4	e	D	D	D	D	D	D	D	7 199
33593	Wiring device mfg	-	4	2	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	4	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	19	12	5 254	216 800	3 806	5 814	146 481	584 677	518 994	1 123 489	29 863
3363	Motor vehicle parts mfg ...	1	11	7	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	6	3	292	9 509	173	350	3 823	24 963	33 705	59 253	625
3369	Other transportation equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	42	16	1 414	36 202	1 151	2 184	24 198	81 910	72 170	153 475	2 924
3371	Household & institutional furniture & kitchen cabinet mfg	2	31	13	1 107	26 814	920	1 732	19 216	57 212	49 970	106 670	1 734
33711	Wood kitchen cabinet & counter top mfg	1	14	5	437	11 058	370	709	8 358	23 842	14 385	38 233	534
337110	Wood kitchen cabinet & counter top mfg ...	1	14	5	437	11 058	370	709	8 358	23 842	14 385	38 233	534
33712	Household & institutional furniture mfg	3	17	8	670	15 756	550	1 023	10 858	33 370	35 585	68 437	1 200
337122	Nonupholstered wood household furniture mfg	3	11	5	318	7 120	267	471	4 560	15 422	12 252	26 814	557

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31-33	YORK, PA MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	-	11	3	307	9 388	231	452	4 982	24 698	22 200	46 805	1 190
33721	Office furniture (including fixtures) mfg	-	11	3	307	9 388	231	452	4 982	24 698	22 200	46 805	1 190
339	Miscellaneous mfg	-	34	12	1 768	56 691	1 205	2 637	32 778	162 812	82 169	241 225	8 452
3391	Medical equipment & supplies mfg	-	20	7	1 047	34 009	667	1 435	16 256	115 417	45 725	157 683	4 705
33911	Medical equipment & supplies mfg	-	20	7	1 047	34 009	667	1 435	16 256	115 417	45 725	157 683	4 705
339114	Dental equipment & supplies mfg	-	4	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	2	14	5	721	22 682	538	1 202	16 522	47 395	36 444	83 542	3 747
33999	All other miscellaneous mfg	-	6	1	e	D	D	D	D	D	D	D	D
339995	Burial casket mfg	-	1	1	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ADAMS COUNTY, PA												
31-33	Manufacturing	-	127	55	8 209	214 065	6 599	13 329	152 197	727 746	678 250	1 401 302	37 127
311	Food mfg	-	17	12	2 398	61 756	1 895	4 000	40 467	270 316	367 157	638 342	9 395
3114	Fruit & vegetable preserving & specialty food mfg	-	7	6	1 693	46 477	1 332	2 748	30 324	237 413	244 461	481 836	8 413
31142	Fruit & vegetable canning, pickling, & drying	-	7	6	1 693	46 477	1 332	2 748	30 324	237 413	244 461	481 836	8 413
311421	Fruit & vegetable canning	-	6	5	g	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	6	783	21 912	593	1 097	14 999	58 642	96 114	153 690	3 419
3222	Converted paper product mfg	-	8	6	783	21 912	593	1 097	14 999	58 642	96 114	153 690	3 419
32221	Paperboard container mfg	-	5	4	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	4	3	577	16 071	434	764	10 876	37 168	78 572	114 818	D
323	Printing & related support activities	-	7	4	1 047	29 618	825	1 652	21 417	61 075	30 833	92 028	D
3231	Printing & related support activities	-	7	4	1 047	29 618	825	1 652	21 417	61 075	30 833	92 028	D
32311	Printing	-	7	4	1 047	29 618	825	1 652	21 417	61 075	30 833	92 028	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	9	6	715	14 770	648	1 409	13 121	59 166	14 191	71 969	1 735
3271	Clay product & refractory mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	13	3	640	15 067	582	1 181	12 863	52 373	29 088	81 963	1 014

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALLEGHENY COUNTY, PA												
31-33	Manufacturing	1	1 500	457	55 620	2 130 833	36 517	72 417	1 178 618	5 105 820	5 595 869	10 576 128	355 489
311	Food mfg	1	127	29	3 231	92 276	2 170	4 420	60 961	413 435	285 772	697 969	22 152
3114	Fruit & vegetable preserving & specialty food mfg	—	3	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	2	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	69	17	1 332	32 722	809	1 474	20 986	57 730	42 558	100 105	3 763
31181	Bread & bakery product mfg	4	62	14	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	11	4	895	25 650	628	1 209	15 302	82 519	71 184	151 982	D
3121	Beverage mfg	3	11	4	895	25 650	628	1 209	15 302	82 519	71 184	151 982	D
31211	Soft drink & ice mfg	—	7	2	f	D	D	D	D	D	D	D	1 945
312111	Soft drink mfg	—	4	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	7	33	5	510	10 802	394	744	6 649	21 569	22 663	44 209	D
322	Paper mfg	—	16	8	f	D	D	D	D	D	D	D	2 739
3222	Converted paper product mfg	—	16	8	f	D	D	D	D	D	D	D	2 739
323	Printing & related support activities	1	241	46	4 047	115 432	2 951	5 266	73 878	268 557	137 820	405 658	20 247
3231	Printing & related support activities	1	241	46	4 047	115 432	2 951	5 266	73 878	268 557	137 820	405 658	20 247
32311	Printing	1	204	39	3 481	100 697	2 459	4 289	62 298	232 485	129 671	361 516	D
323110	Commercial lithographic printing	1	94	24	1 713	55 240	1 201	2 036	32 969	101 854	69 046	170 397	14 291
323116	Manifold business form printing	2	9	4	772	20 193	567	977	12 962	71 102	31 997	103 007	2 441
32312	Support activities for printing	1	37	7	566	14 735	492	977	11 580	36 072	8 149	44 142	D
324	Petroleum & coal products mfg	—	9	6	989	49 073	825	1 917	39 008	99 736	257 047	355 721	2 129
3241	Petroleum & coal products mfg	—	9	6	989	49 073	825	1 917	39 008	99 736	257 047	355 721	2 129
32419	Other petroleum & coal products mfg	—	5	5	f	D	D	D	D	D	D	D	D
324199	All other petroleum & coal products mfg	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	62	28	2 906	123 374	1 658	3 315	57 854	388 530	575 133	962 873	30 535
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	5	5	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	5	5	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	5	5	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	15	6	f	D	D	D	D	D	D	D	8 934
32551	Paint & coating mfg	—	12	6	790	39 834	342	722	14 193	129 554	143 979	273 892	D
325510	Paint & coating mfg	—	12	6	790	39 834	342	722	14 193	129 554	143 979	273 892	D
326	Plastics & rubber products mfg	1	52	25	2 194	67 294	1 503	2 945	36 749	159 943	145 011	303 650	16 955
3261	Plastics product mfg	1	45	24	2 129	65 585	1 463	2 873	36 060	157 535	139 587	295 845	16 758
32619	Other plastics product mfg	1	35	18	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	32	17	1 475	45 967	980	1 861	23 378	104 529	86 912	189 583	12 181
327	Nonmetallic mineral product mfg	2	82	29	2 856	102 750	2 177	4 626	71 569	316 585	250 660	570 452	28 996
3272	Glass & glass product mfg	3	15	7	1 517	56 456	1 267	2 690	44 134	183 326	115 737	300 757	15 260
32721	Glass & glass product mfg	3	15	7	1 517	56 456	1 267	2 690	44 134	183 326	115 737	300 757	15 260
327213	Glass container mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	8	10	3	531	18 045	431	924	13 087	58 084	53 736	112 909	7 552
331	Primary metal mfg	—	33	19	8 788	420 564	6 925	14 725	315 498	943 908	1 606 948	2 524 318	95 968
3311	Iron & steel mills & ferroalloy mfg	—	7	6	7 082	357 794	5 706	12 127	276 678	814 679	1 398 709	2 184 058	88 408
33111	Iron & steel mills & ferroalloy mfg	—	7	6	7 082	357 794	5 706	12 127	276 678	814 679	1 398 709	2 184 058	88 408
331111	Iron & steel mills	—	6	6	i	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	10	5	616	23 717	431	990	13 961	39 982	130 116	175 148	D
3315	Foundries	1	12	6	843	28 186	577	1 164	16 948	66 669	44 149	108 534	3 291

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALLEGHENY COUNTY, PA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	292	103	7 571	249 829	5 614	11 198	156 514	642 747	876 542	1 518 816	42 232
3321	Forging & stamping	3	14	10	910	31 671	639	1 378	19 122	81 344	69 992	153 997	4 810
33211	Forging & stamping	3	14	10	910	31 671	639	1 378	19 122	81 344	69 992	153 997	4 810
3322	Cutlery & handtool mfg	—	9	6	634	20 805	497	1 094	11 864	78 144	28 064	104 493	2 450
33221	Cutlery & handtool mfg ..	—	9	6	634	20 805	497	1 094	11 864	78 144	28 064	104 493	2 450
3323	Architectural & structural metals mfg	—	78	25	1 998	67 641	1 491	2 929	43 141	138 437	159 522	296 935	6 559
33231	Plate work & fabricated structural product mfg ..	1	33	13	699	22 124	517	1 044	13 122	53 925	37 865	91 902	1 645
33232	Ornamental & architectural metal products mfg	—	45	12	1 299	45 517	974	1 885	30 019	84 512	121 657	205 033	4 914
332322	Sheet metal work mfg ..	—	18	6	707	27 251	568	1 048	20 011	38 643	41 468	79 901	2 116
3324	Boiler, tank, & shipping container mfg	2	12	10	605	23 301	409	787	13 627	50 613	56 757	107 804	3 327
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	102	25	1 736	48 615	1 359	2 570	33 210	102 104	55 865	155 210	8 617
33271	Machine shops	2	89	15	1 309	37 180	1 003	1 784	24 936	67 443	30 769	96 017	4 232
332710	Machine shops	2	89	15	1 309	37 180	1 003	1 784	24 936	67 443	30 769	96 017	4 232
3328	Coating, engraving, heat treating, & allied activities ..	—	23	7	537	20 941	380	823	13 518	97 487	412 274	512 097	7 657
33281	Coating, engraving, heat treating, & allied activities	—	23	7	537	20 941	380	823	13 518	97 487	412 274	512 097	7 657
3329	Other fabricated metal product mfg	1	36	12	712	24 311	512	989	13 857	61 086	50 916	112 288	3 628
333	Machinery mfg	1	108	49	4 052	165 855	2 251	4 098	71 359	332 927	279 354	632 012	14 479
3333	Commercial & service industry machinery mfg ..	2	11	8	544	20 658	365	659	10 265	51 884	31 740	82 405	1 422
33331	Commercial & service industry machinery mfg	2	11	8	544	20 658	365	659	10 265	51 884	31 740	82 405	1 422
3335	Metalworking machinery mfg	1	43	15	1 287	49 944	744	1 458	25 200	132 826	91 355	230 975	4 709
33351	Metalworking machinery mfg	1	43	15	1 287	49 944	744	1 458	25 200	132 826	91 355	230 975	4 709
333516	Rolling mill machinery & equipment mfg	1	8	4	f	D	D	D	D	D	D	D	1 410
3339	Other general-purpose machinery mfg	1	29	15	1 626	72 598	837	1 359	26 951	104 020	122 583	240 807	5 487
33391	Pump & compressor mfg	—	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	20	11	912	35 094	457	880	12 673	66 190	82 304	161 221	D
334	Computer & electronic product mfg	1	96	34	7 011	334 411	2 797	5 145	79 645	608 252	414 783	1 057 228	34 183
3342	Communications equipment mfg	—	7	4	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	3	3	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	3	3	g	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	22	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	22	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	46	19	3 374	159 485	1 140	2 278	36 925	403 856	200 969	607 044	20 238
33451	Navigational, measuring, medical, & control instruments mfg	1	46	19	3 374	159 485	1 140	2 278	36 925	403 856	200 969	607 044	20 238
334510	Electromedical & electrotherapeutic apparatus mfg	—	6	4	f	D	D	D	D	D	D	D	8 563
334513	Industrial process control instrument mfg	—	14	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	3	9	3	557	19 517	194	374	5 436	36 538	21 584	58 316	2 068

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	ALLEGHENY COUNTY, PA—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3346	Mfg & reproducing magnetic & optical media .	7	8	2	f	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	7	8	2	f	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	45	21		2 313	83 635	1 449	3 039	40 836	164 022	175 168	344 754	5 723
3353	Electrical equipment mfg ..	—	29	16		1 920	73 163	1 124	2 369	33 031	142 302	157 447	304 677	D
33531	Electrical equipment mfg	—	29	16		1 920	73 163	1 124	2 369	33 031	142 302	157 447	304 677	D
335312	Motor & generator mfg	—	8	6	f	D	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	20	9	g	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	23	10		3 113	148 767	1 578	3 268	69 986	379 923	249 902	473 944	21 522
3363	Motor vehicle parts mfg ...	—	9	4		1 099	61 615	942	2 095	51 498	65 528	67 478	116 804	D
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	3	3	g	D	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	90	9		1 186	28 965	893	1 587	18 593	51 943	53 306	104 108	2 280
3372	Office furniture (including fixtures) mfg	—	16	4		624	17 491	452	853	10 641	23 033	32 183	54 556	D
33721	Office furniture (including fixtures) mfg	—	16	4		624	17 491	452	853	10 641	23 033	32 183	54 556	D
339	Miscellaneous mfg	2	121	23		2 600	76 646	1 683	3 016	41 359	151 724	109 438	261 224	6 697
3391	Medical equipment & supplies mfg	2	47	9		650	17 068	469	782	9 781	35 702	14 727	50 812	1 507
33911	Medical equipment & supplies mfg	2	47	9		650	17 068	469	782	9 781	35 702	14 727	50 812	1 507
3399	Other miscellaneous mfg ...	2	74	14		1 950	59 578	1 214	2 234	31 578	116 022	94 711	210 412	5 190
33995	Sign mfg	1	31	8	g	D	D	D	D	D	D	D	D	3 100
339950	Sign mfg	1	31	8	g	D	D	D	D	D	D	D	D	3 100
	ARMSTRONG COUNTY, PA													
31-33	Manufacturing	1	92	38		3 617	94 883	2 855	5 471	65 225	228 069	179 294	409 188	15 836
327	Nonmetallic mineral product mfg	—	12	7		677	20 111	563	1 139	16 229	50 654	28 797	79 984	955
3271	Clay product & refractory mfg	—	4	3	f	D	D	D	D	D	D	D	D	354
331	Primary metal mfg	—	3	2		517	16 128	405	765	11 085	31 397	36 433	68 211	D
3315	Foundries	—	2	2	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	1	17	7		600	17 800	450	961	11 697	51 175	26 322	76 698	2 099
3335	Metalworking machinery mfg	1	12	6		549	16 422	423	907	11 152	48 206	23 804	71 405	1 981
33351	Metalworking machinery mfg	1	12	6		549	16 422	423	907	11 152	48 206	23 804	71 405	1 981
	BEAVER COUNTY, PA													
31-33	Manufacturing	—	221	81		10 311	383 075	7 825	16 770	260 073	1 413 580	1 747 434	3 161 919	118 487
326	Plastics & rubber products mfg	—	9	6		897	43 372	561	1 389	22 023	132 716	190 467	326 945	D
3261	Plastics product mfg	—	9	6		897	43 372	561	1 389	22 023	132 716	190 467	326 945	D
327	Nonmetallic mineral product mfg	—	23	11		1 603	56 841	1 250	2 674	40 088	170 361	63 368	233 911	15 245
3272	Glass & glass product mfg .	—	2	1	f	D	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	2	1	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BEAVER COUNTY, PA —Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	25	19	3 655	157 267	2 821	6 600	113 729	595 744	993 148	1 582 165	29 595
3311	Iron & steel mills & ferroalloy mfg	—	3	3	1 776	88 086	1 389	3 222	66 058	344 879	708 292	1 052 958	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	1 776	88 086	1 389	3 222	66 058	344 879	708 292	1 052 958	D
331111	Iron & steel mills	—	3	3	1 776	88 086	1 389	3 222	66 058	344 879	708 292	1 052 958	D
3312	Steel product mfg from purchased steel	—	8	8	631	23 718	478	1 065	16 845	50 608	112 483	163 653	D
33122	Rolling & drawing of purchased steel	—	7	7	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	—	7	7	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	6	3	975	37 187	724	1 825	24 562	160 995	147 873	301 660	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	2	2	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	55	17	1 193	43 755	949	1 937	30 772	112 830	110 256	223 327	6 921
335	Electrical equipment, appliance, & component mfg	—	7	3	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	5	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
BEDFORD COUNTY, PA													
31-33	Manufacturing	—	61	14	3 231	76 640	2 639	4 730	54 359	203 459	280 484	472 756	10 354
316	Leather & allied product mfg	—	1	1	g	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	—	1	1	g	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	—	1	1	g	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	2	1	f	D	D	D	D	D	D	D	D
BERKS COUNTY, PA													
31-33	Manufacturing	—	587	241	41 614	1 510 673	30 925	62 366	954 026	3 865 145	3 894 176	7 729 356	344 741
311	Food mfg	2	55	22	4 153	115 342	3 122	6 510	73 611	441 029	461 233	894 573	26 280
3113	Sugar & confectionery product mfg	3	10	5	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	3	8	5	1 751	42 779	1 545	3 560	30 910	222 116	149 270	364 196	13 971
311330	Confectionery mfg from purchased chocolate	3	8	5	1 751	42 779	1 545	3 560	30 910	222 116	149 270	364 196	13 971
3118	Bakeries & tortilla mfg	—	20	5	999	24 122	601	1 031	13 246	83 836	48 648	132 272	2 783
31181	Bread & bakery product mfg	—	18	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	7	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	7	4	662	21 541	350	763	10 315	106 927	200 207	306 025	6 583
3121	Beverage mfg	—	7	4	662	21 541	350	763	10 315	106 927	200 207	306 025	6 583
31211	Soft drink & ice mfg	—	5	4	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	4	3	f	D	D	D	D	D	D	D	D
313	Textile mills	2	11	7	938	24 540	731	1 501	16 508	45 548	29 923	75 255	1 559
3132	Fabric mills	1	6	4	732	20 626	582	1 197	14 277	38 124	26 037	63 942	1 321
31322	Narrow fabric mills & schiffli machine embroidery	—	2	2	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	37	25	2 376	41 746	2 039	3 763	34 489	146 525	86 451	231 398	4 996
3151	Apparel knitting mills	1	9	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	3	25	20	1 614	25 948	1 349	2 552	20 870	72 374	53 117	123 910	2 466
31522	Men's & boys' cut & sew apparel mfg	5	8	7	728	11 398	637	1 221	9 202	32 742	28 162	62 148	422

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	BERKS COUNTY, PA—Con.													
	Manufacturing—Con.													
316	Leather & allied product mfg .	-	4	3	f	D	D	D	D	D	D	D	D	
3161	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D	
31611	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D	
316110	Leather & hide tanning & finishing	-	2	2	f	D	D	D	D	D	D	D	D	
322	Paper mfg	-	13	10		709	25 916	512	1 077	16 171	74 871	86 269	160 980	7 972
3222	Converted paper product mfg	-	9	6		549	19 284	403	809	11 808	53 483	62 217	115 492	5 950
323	Printing & related support activities	-	53	12	1 418	44 720	980	1 977	25 697	98 134	79 192	177 850	9 665	
3231	Printing & related support activities	-	53	12	1 418	44 720	980	1 977	25 697	98 134	79 192	177 850	9 665	
32311	Printing	-	49	12	1 400	44 294	968	1 959	25 394	97 376	79 031	176 931	9 623	
323110	Commercial lithographic printing	-	30	11	1 147	36 729	775	1 460	20 297	72 231	42 450	114 543	7 392	
325	Chemical mfg	-	29	11	1 443	59 691	764	1 439	25 308	219 048	230 163	446 843	14 222	
3255	Paint, coating, & adhesive mfg	-	4	3	600	26 412	342	585	11 644	105 597	107 587	211 495	4 677	
32551	Paint & coating mfg	-	3	2	f	D	D	D	D	D	D	D	D	
325510	Paint & coating mfg	-	3	2	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	28	12	1 715	57 789	1 206	2 553	30 306	107 604	102 922	210 432	19 932	
3261	Plastics product mfg	-	25	12	1 710	57 672	1 202	2 545	30 219	107 354	102 697	209 956	19 912	
32619	Other plastics product mfg	-	17	8	727	19 986	513	1 033	10 981	38 662	39 790	77 970	3 370	
326199	All other plastics product mfg	-	16	8	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	25	11	1 076	39 963	791	1 760	27 583	107 958	94 664	201 062	18 564	
3273	Cement & concrete product mfg	-	16	6	586	21 751	408	997	13 730	68 490	62 842	127 945	14 861	
331	Primary metal mfg	-	33	27	6 238	303 284	4 700	10 088	198 951	588 011	1 196 551	1 787 563	89 358	
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D	
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D	
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D	
3314	Nonferrous metal (except aluminum) production & processing	-	12	11	1 239	46 941	915	2 122	32 734	186 744	556 776	744 621	12 069	
33142	Copper rolling, drawing, extruding, & alloying	-	7	7	879	32 777	631	1 462	23 797	114 241	471 009	588 491	5 171	
331421	Copper rolling, drawing, & extruding	-	6	6	f	D	D	D	D	D	D	D	D	
3315	Foundries	-	19	14	g	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries	-	10	9	1 478	39 369	1 266	2 444	28 726	75 922	43 421	118 743	D	
331513	Steel foundries (except investment)	-	4	3	f	D	D	D	D	D	D	D	1 581	
332	Fabricated metal product mfg	-	109	36	3 705	113 045	2 899	5 428	73 076	280 990	256 414	529 463	20 205	
3323	Architectural & structural metals mfg	-	22	13	824	27 788	666	1 205	17 864	56 890	75 428	132 882	2 378	
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D	
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D	
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	37	10	1 043	28 826	804	1 242	18 496	68 898	50 553	115 190	4 682	
33271	Machine shops	1	33	8	f	D	D	D	D	D	D	D	D	
332710	Machine shops	1	33	8	f	D	D	D	D	D	D	D	D	
33272	Turned product & screw, nut, & bolt mfg	-	4	2	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	1	40	18	1 384	48 167	899	1 730	26 135	135 215	119 927	257 729	3 548	
3332	Industrial machinery mfg	-	13	7	597	23 579	395	818	12 957	84 578	81 582	169 200	1 270	
33329	Other industrial machinery mfg	-	13	7	597	23 579	395	818	12 957	84 578	81 582	169 200	1 270	
334	Computer & electronic product mfg	-	17	7	2 882	128 226	2 036	4 086	55 720	491 288	121 664	614 744	D	
3344	Semiconductor & other electronic component mfg	-	9	3	h	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	-	9	3	h	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg	-	1	1	g	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERKS COUNTY, PA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	12	7	4 039	133 144	2 922	5 878	88 012	332 075	211 610	530 344	29 471
3359	Other electrical equipment & component mfg	-	5	4	h	D	D	D	D	D	D	D	D
33591	Battery mfg	-	3	2	h	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	5	4 436	210 408	3 708	7 301	164 539	388 676	280 401	680 949	18 591
3362	Motor vehicle body & trailer mfg	-	5	3	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	5	3	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	1	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	29	9	536	15 890	409	874	10 165	32 123	22 867	54 602	1 044
339	Miscellaneous mfg	1	38	10	2 259	84 745	1 501	3 064	47 650	165 099	78 887	239 463	11 632
3391	Medical equipment & supplies mfg	1	20	7	1 943	76 059	1 328	2 711	43 692	143 169	67 065	206 435	10 664
33911	Medical equipment & supplies mfg	1	20	7	1 943	76 059	1 328	2 711	43 692	143 169	67 065	206 435	10 664
339112	Surgical & medical instrument mfg	1	6	6	1 598	65 044	1 093	2 297	38 339	117 673	37 061	150 468	8 760
BLAIR COUNTY, PA													
31-33	Manufacturing	-	157	61	8 966	251 710	6 960	13 419	165 544	865 111	722 732	1 592 437	59 065
311	Food mfg	3	25	11	1 001	20 483	729	1 183	11 017	56 458	79 426	136 446	5 837
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	5	1 444	52 580	1 155	2 417	38 867	199 478	158 739	361 329	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	2	508	14 959	326	623	7 958	67 738	52 155	120 829	D
327	Nonmetallic mineral product mfg	-	12	5	642	21 470	490	978	15 116	65 821	52 962	120 122	1 815
331	Primary metal mfg	-	3	3	536	19 766	367	889	12 982	44 031	84 073	127 221	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	3	3	536	19 766	367	889	12 982	44 031	84 073	127 221	D
332	Fabricated metal product mfg	-	14	4	778	23 965	651	1 225	16 827	84 449	47 710	133 355	4 520
333	Machinery mfg	-	7	3	663	25 791	452	877	14 996	57 957	26 759	84 485	1 558
334	Computer & electronic product mfg	-	6	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRADFORD COUNTY, PA													
31-33	Manufacturing	-	73	25	6 405	191 515	5 278	10 000	143 077	629 500	642 724	1 273 722	46 328
311	Food mfg	-	12	3	1 387	33 577	1 155	2 101	23 002	48 746	271 314	322 167	D
3116	Meat product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	6	915	26 649	796	1 551	22 052	99 877	50 026	150 152	7 596
3212	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	g	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	649	23 733	399	881	13 432	96 965	50 686	147 968	D
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
BUCKS COUNTY, PA													
31-33	Manufacturing	1	1 236	428	41 592	1 518 872	26 985	55 389	816 850	3 414 798	4 201 017	7 592 956	420 133
311	Food mfg	2	70	17	1 498	35 568	1 091	2 339	22 444	124 311	155 075	278 100	D
315	Apparel mfg	-	28	10	2 271	81 708	1 079	1 504	31 260	250 157	327 343	520 734	D
3152	Cut & sew apparel mfg	-	20	9	2 002	76 104	928	1 235	29 172	243 107	307 528	494 226	D
31523	Women's & girls' cut & sew apparel mfg	-	7	4	g	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	28	18	1 965	74 314	1 418	3 070	42 622	271 760	271 329	540 692	16 695
3222	Converted paper product mfg	1	28	18	1 965	74 314	1 418	3 070	42 622	271 760	271 329	540 692	16 695
32222	Paper bag & coated & treated paper mfg	-	11	7	1 158	46 597	809	1 774	26 446	198 597	175 298	371 057	10 702
322222	Coated & laminated paper mfg	-	9	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	132	34	3 468	122 667	2 274	4 664	71 296	317 443	234 252	549 838	24 617
3231	Printing & related support activities	1	132	34	3 468	122 667	2 274	4 664	71 296	317 443	234 252	549 838	24 617
32311	Printing	1	115	30	3 198	113 708	2 069	4 212	64 604	301 743	230 271	528 943	21 784
323110	Commercial lithographic printing	-	58	19	2 137	75 117	1 299	2 671	41 858	190 855	94 119	284 377	14 471
325	Chemical mfg	1	61	32	3 454	160 722	1 860	4 016	78 848	265 436	743 780	1 020 589	195 595
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	3	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	10	6	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	10	6	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	7	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BUCKS COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	5	18	12	f	D	D	D	D	D	D	D	7 720
32599	All other chemical product & preparation mfg	6	15	10	540	21 176	309	655	10 569	81 674	88 712	169 346	D
326	Plastics & rubber products mfg	2	75	42	3 336	110 315	2 459	5 000	64 799	250 447	219 066	468 769	30 604
3261	Plastics product mfg	2	65	35	3 055	101 943	2 261	4 625	59 841	236 866	206 750	443 084	29 504
32619	Other plastics product mfg	1	42	21	1 836	63 802	1 359	2 768	36 122	129 768	81 989	211 074	15 537
326199	All other plastics product mfg	1	42	21	1 836	63 802	1 359	2 768	36 122	129 768	81 989	211 074	15 537
327	Nonmetallic mineral product mfg	—	42	15	1 262	43 513	897	1 872	26 437	121 583	95 576	218 083	D
3273	Cement & concrete product mfg	1	20	7	524	18 183	376	853	11 258	58 896	49 479	108 052	D
331	Primary metal mfg	—	11	6	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	254	80	6 286	232 347	4 662	9 768	142 877	572 343	366 974	937 460	51 102
3323	Architectural & structural metals mfg	1	46	21	1 308	46 982	948	2 025	27 056	107 478	124 172	232 214	5 816
33232	Ornamental & architectural metal products mfg	1	39	17	1 100	37 976	801	1 652	21 400	89 381	105 992	195 017	5 074
332322	Sheet metal work mfg	1	27	11	722	25 763	514	1 114	13 490	61 762	56 127	117 073	4 266
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	131	28	2 981	112 363	2 303	4 839	73 627	287 897	91 893	379 813	35 526
33271	Machine shops	1	113	20	1 639	60 573	1 239	2 240	36 848	126 500	48 140	174 624	10 433
332710	Machine shops	1	113	20	1 639	60 573	1 239	2 240	36 848	126 500	48 140	174 624	10 433
33272	Turned product & screw, nut, & bolt mfg	—	18	8	1 342	51 790	1 064	2 599	36 779	161 397	43 753	205 189	25 093
332722	Bolt, nut, screw, rivet, & washer mfg	—	4	3	872	31 196	671	1 612	22 351	124 984	19 333	143 842	D
3328	Coating, engraving, heat treating, & allied activities	2	29	8	516	20 537	385	866	13 249	47 716	28 029	75 209	3 728
33281	Coating, engraving, heat treating, & allied activities	2	29	8	516	20 537	385	866	13 249	47 716	28 029	75 209	3 728
3329	Other fabricated metal product mfg	—	19	8	567	21 413	374	695	10 322	46 696	29 790	75 817	2 904
333	Machinery mfg	1	136	46	3 728	153 727	2 195	4 629	74 819	288 709	330 655	639 195	18 655
3333	Commercial & service industry machinery mfg	—	18	7	567	18 941	384	788	10 592	46 993	36 535	84 268	2 079
33331	Commercial & service industry machinery mfg	—	18	7	567	18 941	384	788	10 592	46 993	36 535	84 268	2 079
3335	Metalworking machinery mfg	2	45	9	643	28 655	485	1 034	19 259	50 175	16 747	66 398	2 444
33351	Metalworking machinery mfg	2	45	9	643	28 655	485	1 034	19 259	50 175	16 747	66 398	2 444
333514	Special die & tool, die set, jig, & fixture mfg	1	27	9	502	22 225	376	803	14 851	39 251	12 026	50 899	1 290
3339	Other general-purpose machinery mfg	1	45	21	1 919	83 702	906	1 924	32 996	139 191	227 109	387 589	9 223
33391	Pump & compressor mfg	4	9	8	614	24 246	353	815	13 093	54 876	33 448	89 086	D
33399	All other general-purpose machinery mfg	—	30	9	1 047	51 109	422	877	16 839	73 018	167 452	260 767	5 975
333999	All other miscellaneous general-purpose machinery mfg	—	14	4	715	38 385	260	537	11 901	46 268	142 115	208 144	4 813

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BUCKS COUNTY, PA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	2	109	47	5 678	218 443	2 787	5 613	81 612	374 478	376 734	756 864	21 422
3341	Computer & peripheral equipment mfg	1	15	8	1 322	55 780	431	978	16 289	130 416	148 272	275 422	5 186
33411	Computer & peripheral equipment mfg	1	15	8	1 322	55 780	431	978	16 289	130 416	148 272	275 422	5 186
334119	Other computer peripheral equipment mfg	—	9	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	8	4	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	6	4	800	31 842	406	891	11 652	62 432	28 929	95 825	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	6	4	800	31 842	406	891	11 652	62 432	28 929	95 825	D
3344	Semiconductor & other electronic component mfg	3	41	18	1 336	34 119	936	1 727	17 858	73 910	37 945	110 938	6 966
33441	Semiconductor & other electronic component mfg	3	41	18	1 336	34 119	936	1 727	17 858	73 910	37 945	110 938	6 966
3345	Navigational, measuring, medical, & control instruments mfg	4	42	17	2 183	95 924	988	1 974	35 381	105 968	159 011	270 325	6 534
33451	Navigational, measuring, medical, & control instruments mfg	4	42	17	2 183	95 924	988	1 974	35 381	105 968	159 011	270 325	6 534
334513	Industrial process control instrument mfg	7	11	5	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	8	3	603	28 945	345	718	14 403	11 900	22 323	34 847	D
335	Electrical equipment, appliance, & component mfg	1	26	9	1 200	34 718	927	1 980	23 326	91 132	110 418	201 171	4 614
3351	Electric lighting equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	6	2	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	26	8	600	16 067	476	934	9 805	29 761	36 502	66 929	D
337	Furniture & related product mfg	3	57	12	1 156	37 044	821	1 709	21 897	65 871	54 505	121 409	3 249
3372	Office furniture (including fixtures) mfg	4	23	8	835	28 470	575	1 245	16 717	48 284	41 536	90 799	2 571
33721	Office furniture (including fixtures) mfg	4	23	8	835	28 470	575	1 245	16 717	48 284	41 536	90 799	2 571
339	Miscellaneous mfg	1	102	27	2 892	89 250	1 846	3 531	41 127	222 743	175 258	398 494	8 888
3391	Medical equipment & supplies mfg	1	47	12	1 471	52 687	840	1 707	21 695	139 659	61 272	200 499	5 343
33911	Medical equipment & supplies mfg	1	47	12	1 471	52 687	840	1 707	21 695	139 659	61 272	200 499	5 343
339112	Surgical & medical instrument mfg	—	11	5	794	31 167	411	831	11 951	95 004	36 460	130 856	3 493
3399	Other miscellaneous mfg ..	1	55	15	1 421	36 563	1 006	1 824	19 432	83 084	113 986	197 995	3 545
33999	All other miscellaneous mfg	—	16	8	913	23 282	640	1 208	12 022	56 552	89 894	146 541	1 907
339999	All other miscellaneous mfg	—	10	5	723	17 088	523	956	8 673	40 754	78 541	118 703	1 134
	BUTLER COUNTY, PA												
31-33	Manufacturing	—	276	106	14 891	532 963	10 912	20 763	340 438	1 358 068	1 654 295	2 989 977	104 096
324	Petroleum & coal products mfg	—	8	3	524	24 785	379	879	16 852	132 337	203 438	336 621	11 356
3241	Petroleum & coal products mfg	—	8	3	524	24 785	379	879	16 852	132 337	203 438	336 621	11 356
32411	Petroleum refineries	—	3	3	500	23 815	359	837	16 237	129 493	196 134	326 458	D
324110	Petroleum refineries ..	—	3	3	500	23 815	359	837	16 237	129 493	196 134	326 458	D
325	Chemical mfg	—	9	4	706	31 693	431	859	18 844	124 160	108 094	225 453	10 642
3251	Basic chemical mfg	—	5	2	f	D	D	D	D	D	D	D	9 337
32519	Other basic organic chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BUTLER COUNTY, PA —Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	—	10	7	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	7	6	631	17 161	482	873	9 605	47 338	43 873	87 936	D
32619	Other plastics product mfg	—	7	6	631	17 161	482	873	9 605	47 338	43 873	87 936	D
326199	All other plastics product mfg	—	7	6	631	17 161	482	873	9 605	47 338	43 873	87 936	D
327	Nonmetallic mineral product mfg	1	32	15	1 136	38 443	814	1 713	25 203	98 220	86 865	185 772	11 558
3271	Clay product & refractory mfg	1	9	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	11	7	3 997	160 283	3 293	5 274	122 381	286 095	674 681	946 617	D
3311	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	66	27	2 889	90 101	2 184	4 427	52 371	202 907	147 216	350 651	17 201
3321	Forging & stamping	—	4	3	557	19 015	485	914	11 195	39 993	17 757	57 315	D
33211	Forging & stamping	—	4	3	557	19 015	485	914	11 195	39 993	17 757	57 315	D
332116	Metal stamping	—	3	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	17	10	1 273	36 672	914	1 880	20 002	95 101	77 300	172 903	2 210
33232	Ornamental & architectural metal products mfg	—	8	5	1 053	30 492	747	1 537	16 040	82 286	60 749	143 186	1 759
332321	Metal window & door mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	36	16	1 946	82 717	1 244	2 735	46 568	213 271	124 762	333 839	10 416
3335	Metalworking machinery mfg	—	11	5	777	34 390	553	1 252	21 498	68 198	48 010	118 552	D
33351	Metalworking machinery mfg	—	11	5	777	34 390	553	1 252	21 498	68 198	48 010	118 552	D
334	Computer & electronic product mfg	2	13	8	1 428	46 792	808	1 624	19 417	111 187	76 685	191 846	D
3344	Semiconductor & other electronic component mfg	9	7	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	7	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	5	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	5	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	2	2	f	D	D	D	D	D	D	D	D
CAMBRIA COUNTY, PA													
31-33	Manufacturing	2	153	56	7 403	186 304	4 970	8 768	113 423	515 020	819 546	1 349 484	29 062
311	Food mfg	—	11	3	500	15 327	233	393	4 731	36 379	95 093	131 848	D
315	Apparel mfg	—	10	5	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	8	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	2	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	4	27	10	709	20 460	546	990	12 611	34 113	41 817	80 647	2 802
336	Transportation equipment mfg	1	10	8	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333
33651	Railroad rolling stock mfg	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333
336510	Railroad rolling stock mfg	—	4	4	939	32 985	775	1 505	23 975	67 850	203 232	269 011	2 333

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMERON COUNTY, PA													
31-33	Manufacturing	1	20	9	1 259	34 622	999	2 037	22 900	87 851	62 452	151 428	16 803
332	Fabricated metal product mfg	-	12	6	g	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
CARBON COUNTY, PA													
31-33	Manufacturing	4	63	32	3 646	76 220	3 036	5 941	58 408	177 532	134 415	311 894	12 167
315	Apparel mfg	3	16	12	1 399	22 520	1 301	2 654	20 214	33 293	5 876	37 036	408
3152	Cut & sew apparel mfg	3	15	12	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	3	10	8	1 017	17 859	935	2 068	16 097	29 611	1 936	29 419	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	10	8	1 017	17 859	935	2 068	16 097	29 611	1 936	29 419	D
331	Primary metal mfg	-	5	5	608	14 411	451	842	11 272	55 544	47 796	103 840	6 540
336	Transportation equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	9	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	9	1	1	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	9	1	1	f	D	D	D	D	D	D	D	D
CENTRE COUNTY, PA													
31-33	Manufacturing	-	159	58	8 546	255 406	5 941	11 755	148 714	790 071	625 316	1 409 254	127 102
323	Printing & related support activities	-	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
3231	Printing & related support activities	-	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
32311	Printing	-	15	4	565	14 509	470	853	11 117	43 600	11 846	55 312	1 703
327	Nonmetallic mineral product mfg	-	14	8	1 655	58 693	1 287	2 805	38 510	270 975	128 810	398 440	D
3272	Glass & glass product mfg .	-	2	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	31	18	2 965	90 228	1 716	3 413	40 537	233 900	203 229	432 601	17 872
3342	Communications equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	8	1 587	44 330	1 046	2 150	24 487	138 343	137 524	271 467	13 588
33441	Semiconductor & other electronic component mfg	-	12	8	1 587	44 330	1 046	2 150	24 487	138 343	137 524	271 467	13 588
334414	Electronic capacitor mfg	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	12	7	674	24 072	343	707	9 595	59 513	38 476	96 840	3 148
33451	Navigational, measuring, medical, & control instruments mfg	-	12	7	674	24 072	343	707	9 595	59 513	38 476	96 840	3 148
334516	Analytical laboratory instrument mfg	-	7	5	520	19 699	251	537	7 073	46 594	29 989	75 689	2 748

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESTER COUNTY, PA													
31-33	Manufacturing	1	629	208	20 791	771 110	13 708	28 271	425 597	2 343 558	1 997 255	4 332 219	130 598
311	Food mfg	-	32	11	1 373	43 140	1 069	2 036	30 191	278 193	212 859	488 984	19 609
31181	Bakeries & tortilla mfg	-	16	3	f	D	D	D	D	D	D	D	D
	Bread & bakery product mfg	-	14	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	22	15	1 754	68 765	1 218	2 776	43 315	153 223	211 197	366 265	D
3222	Converted paper product mfg	-	18	11	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	10	4	558	21 353	459	1 128	15 689	54 881	69 396	124 149	D
323	Printing & related support activities	1	82	16	1 493	55 108	977	1 776	28 685	121 974	66 086	187 947	D
3231	Printing & related support activities	1	82	16	1 493	55 108	977	1 776	28 685	121 974	66 086	187 947	D
32311	Printing	1	76	14	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	28	8	821	31 988	510	959	16 194	69 129	44 536	113 670	9 723
325	Chemical mfg	2	43	24	2 005	98 897	1 314	2 678	49 853	320 232	350 476	666 604	17 892
3254	Pharmaceutical & medicine mfg	4	12	10	1 175	63 647	809	1 614	33 025	131 076	148 715	281 150	D
32541	Pharmaceutical & medicine mfg	4	12	10	1 175	63 647	809	1 614	33 025	131 076	148 715	281 150	D
325412	Pharmaceutical preparation mfg	-	5	4	634	29 325	502	941	22 065	50 175	44 677	96 622	D
326	Plastics & rubber products mfg	-	26	12	781	26 260	543	1 031	14 259	60 303	59 367	121 223	3 995
3261	Plastics product mfg	-	23	11	738	24 431	519	986	13 065	56 364	55 551	113 430	D
331	Primary metal mfg	-	13	9	h	D	D	D	D	D	D	D	12 902
3311	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	88	29	2 050	76 790	1 503	3 082	47 509	158 241	140 546	300 417	10 347
3323	Architectural & structural metals mfg	1	19	6	504	19 401	336	780	11 131	35 512	23 945	59 622	853
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	41	6	f	D	D	D	D	D	D	D	4 119
333	Machinery mfg	1	66	24	1 896	74 858	993	2 038	34 329	190 722	141 977	328 174	10 724
3332	Industrial machinery mfg ..	-	15	5	689	27 524	268	544	10 001	90 417	49 598	135 078	6 431
33329	Other industrial machinery mfg	-	13	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	2	29	13	705	29 606	418	919	15 131	60 261	48 443	108 893	1 754
33399	All other general-purpose machinery mfg	1	21	10	578	24 824	347	788	13 034	51 347	36 525	86 806	1 416
334	Computer & electronic product mfg	1	52	19	2 005	71 191	930	1 920	21 312	205 802	160 087	357 057	9 210
3341	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	21	7	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	21	7	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	18	7	762	22 899	431	954	10 191	160 923	78 728	239 824	3 271
337	Furniture & related product mfg	6	41	8	1 132	29 146	979	2 218	21 685	66 668	60 322	126 633	4 533
3371	Household & institutional furniture & kitchen cabinet mfg	7	35	5	953	23 398	868	1 969	18 898	55 058	51 636	106 056	3 968
33712	Household & institutional furniture mfg	8	20	4	803	19 167	744	1 671	15 659	40 854	42 171	82 373	D
337124	Metal household furniture mfg	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	54	9	902	27 140	534	991	13 532	107 822	52 502	162 580	D
3391	Medical equipment & supplies mfg	1	26	6	547	15 186	350	628	8 552	79 038	25 472	107 426	D
33911	Medical equipment & supplies mfg	1	26	6	547	15 186	350	628	8 552	79 038	25 472	107 426	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARION COUNTY, PA													
31-33	Manufacturing	-	49	24	2 711	76 356	2 281	4 294	58 891	217 123	222 329	441 721	8 901
321	Wood product mfg	-	19	10	1 239	34 067	1 004	1 886	24 733	86 036	124 844	211 532	3 979
3219	Other wood product mfg . . .	-	11	8	1 031	27 509	823	1 480	19 495	65 941	99 674	165 710	1 945
32199	All other wood product mfg	-	7	7	966	26 556	760	1 354	18 599	63 506	96 609	160 202	1 733
321991	Manufactured home (mobile home) mfg . .	-	5	5	f	D	D	D	D	D	D	D	1 733
CLEARFIELD COUNTY, PA													
31-33	Manufacturing	1	107	46	4 864	120 240	3 789	7 747	84 148	302 692	490 856	790 976	25 400
315	Apparel mfg	-	8	7	f	D	D	D	D	D	D	D	446
3152	Cut & sew apparel mfg	-	8	7	f	D	D	D	D	D	D	D	446
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	15	9	539	14 066	340	682	8 812	36 415	37 059	73 825	2 820
332	Fabricated metal product mfg	-	17	5	524	17 186	379	734	11 421	28 296	35 305	62 449	2 191
333	Machinery mfg	2	9	6	504	13 161	380	713	9 081	29 766	26 709	55 089	1 880
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON COUNTY, PA													
31-33	Manufacturing	-	54	20	3 212	89 163	2 659	5 113	64 902	330 543	353 078	677 112	28 882
322	Paper mfg	1	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	500	8 060	435	728	6 580	80 688	21 047	100 255	D
3363	Motor vehicle parts mfg . . .	-	4	3	500	8 060	435	728	6 580	80 688	21 047	100 255	D
COLUMBIA COUNTY, PA													
31-33	Manufacturing	-	100	43	i	D	D	D	D	D	D	D	D
311	Food mfg	-	12	6	g	D	D	D	D	D	D	D	D
3111	Animal food mfg	-	3	1	f	D	D	D	D	D	D	D	D
31111	Animal food mfg	-	3	1	f	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	8	5	1 414	32 201	1 157	2 336	22 806	83 763	63 220	145 715	D
3132	Fabric mills	-	4	3	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	4	3	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	4	3	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	7	1 036	36 118	757	1 740	23 195	28 337	144 538	174 884	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRAWFORD COUNTY, PA													
31-33	Manufacturing	-	301	104	8 714	289 381	6 350	12 400	178 861	760 286	502 270	1 263 394	65 600
321	Wood product mfg	1	29	9	558	12 076	474	867	9 600	33 845	51 556	83 470	5 140
326	Plastics & rubber products mfg	-	15	9	1 030	29 677	793	1 593	19 358	76 825	59 907	136 814	4 124
3261	Plastics product mfg	-	12	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	8	4	528	13 887	401	846	8 863	30 134	19 070	49 005	2 227
326199	All other plastics product mfg	-	8	4	528	13 887	401	846	8 863	30 134	19 070	49 005	2 227
327	Nonmetallic mineral product mfg	-	10	3	f	D	D	D	D	D	D	D	1 706
331	Primary metal mfg	-	6	5	545	16 864	450	868	12 099	43 141	20 906	63 667	1 828
332	Fabricated metal product mfg	-	71	20	2 150	70 132	1 618	3 254	43 410	172 675	99 937	272 545	13 258
3322	Cutlery & handtool mfg	-	4	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	4	2	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	3	1	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	42	9	f	D	D	D	D	D	D	D	7 921
33271	Machine shops	1	39	7	500	18 656	405	819	13 606	33 799	10 214	44 118	D
332710	Machine shops	1	39	7	500	18 656	405	819	13 606	33 799	10 214	44 118	D
333	Machinery mfg	1	123	46	2 627	103 300	1 899	3 819	66 058	183 106	97 330	282 463	17 393
3335	Metalworking machinery mfg	1	112	42	2 298	92 716	1 730	3 548	62 122	158 963	77 333	238 364	16 825
33351	Metalworking machinery mfg	1	112	42	2 298	92 716	1 730	3 548	62 122	158 963	77 333	238 364	16 825
333511	Industrial mold mfg	-	28	10	510	20 114	406	822	14 775	35 565	12 868	48 213	3 128
333514	Special die & tool, die set, jig, & fixture mfg	1	68	26	1 153	47 640	897	1 924	33 666	77 571	22 299	99 745	7 005
CUMBERLAND COUNTY, PA													
31-33	Manufacturing	-	221	83	13 804	444 765	9 986	21 387	288 043	1 573 991	1 757 616	3 307 332	120 369
311	Food mfg	-	21	10	g	D	D	D	D	D	D	D	20 457
314	Textile product mills	-	8	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	4	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	6	5	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	44	7	1 825	57 809	1 072	3 007	39 443	104 754	88 972	195 964	24 356
3231	Printing & related support activities	-	44	7	1 825	57 809	1 072	3 007	39 443	104 754	88 972	195 964	24 356
32311	Printing	-	40	7	1 804	57 328	1 056	2 980	39 081	103 962	88 847	195 047	24 305
323110	Commercial lithographic printing	-	19	4	1 596	51 663	901	2 690	35 537	92 168	81 519	175 909	D
326	Plastics & rubber products mfg	-	12	6	g	D	D	D	D	D	D	D	10 943
3262	Rubber product mfg	-	4	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	6	4	686	25 355	537	1 254	17 984	119 664	70 019	189 936	D
332	Fabricated metal product mfg	-	27	11	896	26 949	708	1 458	18 027	66 581	88 982	156 404	5 555
333	Machinery mfg	-	12	8	956	33 082	579	1 134	19 290	98 768	159 754	259 493	6 084
3331	Agriculture, construction, & mining machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CUMBERLAND COUNTY, PA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	2	22	13	1 937	55 954	1 439	2 931	35 922	161 346	86 827	246 151	D
3344	Semiconductor & other electronic component mfg.....	2	17	11	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	2	17	11	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	3	12	8	g	D	D	D	D	D	D	D	D
	DAUPHIN COUNTY, PA												
31-33	Manufacturing....	—	222	84	14 871	522 448	11 743	22 816	378 072	1 670 858	1 979 965	3 590 903	71 171
311	Food mfg.....	—	23	10	i	D	D	D	D	D	D	D	23 475
3113	Sugar & confectionery product mfg.....	—	5	3	i	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans.....	—	1	1	h	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans....	—	1	1	h	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	—	2	2	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	—	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	7	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	41	13	745	17 856	532	926	11 624	41 567	21 532	63 250	3 435
3231	Printing & related support activities.....	1	41	13	745	17 856	532	926	11 624	41 567	21 532	63 250	3 435
32311	Printing.....	2	38	12	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	9	6	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	—	8	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	5	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	28	10	716	22 987	581	1 291	17 561	77 471	74 702	149 123	4 860
333	Machinery mfg.....	—	21	13	1 777	53 780	1 333	2 579	36 985	157 971	100 332	238 399	9 288
3335	Metalworking machinery mfg.....	—	13	6	1 129	31 215	852	1 651	21 686	75 089	27 714	96 316	2 695
33351	Metalworking machinery mfg.....	—	13	6	1 129	31 215	852	1 651	21 686	75 089	27 714	96 316	2 695
333515	Cutting tool & machine tool accessory mfg ..	—	6	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	8	2	f	D	D	D	D	D	D	D	D
	DELAWARE COUNTY, PA												
31-33	Manufacturing....	—	522	136	19 341	866 981	12 311	24 949	447 356	3 117 810	4 505 790	7 315 196	596 770
311	Food mfg.....	3	41	10	1 151	32 395	816	1 516	19 836	98 653	261 888	361 989	D
322	Paper mfg.....	—	9	7	1 549	73 151	1 279	2 614	57 138	453 797	203 477	636 465	D
3221	Pulp, paper, & paperboard mills.....	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	—	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	—	8	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DELAWARE COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	2	84	14	898	26 515	698	1 195	17 351	114 271	56 967	171 347	D
3231	Printing & related support activities.....	2	84	14	898	26 515	698	1 195	17 351	114 271	56 967	171 347	D
32311	Printing.....	2	76	13	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	42	8	538	17 321	428	728	11 878	92 662	44 478	137 166	1 548
324	Petroleum & coal products mfg	—	9	5	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	9	5	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	3	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	3	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	26	14	707	32 426	401	742	14 035	186 635	273 968	450 912	29 015
326	Plastics & rubber products mfg	2	20	7	1 027	38 606	679	1 519	24 524	272 745	114 364	386 183	16 656
3261	Plastics product mfg	2	17	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	10	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	96	26	2 714	88 491	2 093	3 727	53 125	196 858	109 781	305 421	11 745
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	43	10	f	D	D	D	D	D	D	D	6 779
33271	Machine shops	3	39	8	573	23 625	459	855	15 526	39 727	19 021	59 245	D
332710	Machine shops	3	39	8	573	23 625	459	855	15 526	39 727	19 021	59 245	D
3329	Other fabricated metal product mfg	1	8	3	985	26 423	796	1 261	16 852	52 407	35 376	85 302	D
33299	All other fabricated metal product mfg	1	7	3	f	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	35	8	568	26 987	333	682	12 406	57 134	46 574	96 546	D
334	Computer & electronic product mfg	6	31	13	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	8	6 327	365 371	3 051	6 612	138 831	491 203	712 783	979 062	19 757
3364	Aerospace product & parts mfg	—	4	4	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	4	4	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	2	2	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	61	7	735	22 788	497	851	10 907	63 206	33 134	96 284	D
	ELK COUNTY, PA												
31-33	Manufacturing	—	130	56	8 338	288 024	6 616	14 204	208 788	668 377	713 134	1 393 273	78 444
322	Paper mfg	—	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	58	23	3 422	98 386	2 866	5 937	73 977	194 437	122 544	319 196	15 519
3321	Forging & stamping	—	16	12	1 895	52 668	1 609	3 564	40 838	109 226	81 612	191 213	8 644
33211	Forging & stamping	—	16	12	1 895	52 668	1 609	3 564	40 838	109 226	81 612	191 213	8 644
332117	Powder metallurgy part mfg	—	13	11	1 843	51 341	1 573	3 505	39 939	107 646	78 630	186 628	8 059
3326	Spring & wire product mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	—	4	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	22	6	525	16 240	418	805	12 517	40 217	20 613	61 973	3 724

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31-33	ELK COUNTY, PA— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg	—	8	7	1 986	87 292	1 564	3 736	64 218	258 242	248 336	511 208	D
3351	Electric lighting equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	7	6	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	6	5	g	D	D	D	D	D	D	D	40 686
335991	Carbon & graphite product mfg	—	6	5	g	D	D	D	D	D	D	D	40 686
	ERIE COUNTY, PA												
31-33	Manufacturing	—	570	253	32 813	1 142 349	24 172	53 363	739 324	3 128 326	2 621 289	5 779 337	202 249
311	Food mfg	3	26	10	1 400	31 715	910	1 951	20 913	93 678	127 145	220 813	14 022
322	Paper mfg	—	5	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	64	47	5 734	162 213	4 607	9 036	106 115	415 630	348 918	762 787	42 821
3261	Plastics product mfg	1	58	41	5 061	136 961	4 162	8 093	91 728	343 145	317 060	658 936	39 082
32619	Other plastics product mfg	—	48	34	4 528	117 829	3 756	7 372	82 444	291 023	243 999	533 546	33 888
326199	All other plastics product mfg	—	48	34	4 528	117 829	3 756	7 372	82 444	291 023	243 999	533 546	33 888
3262	Rubber product mfg	—	6	6	673	25 252	445	943	14 387	72 485	31 858	103 851	3 739
32629	Other rubber product mfg	—	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	19	13	1 942	67 085	1 438	3 116	46 379	150 753	109 175	257 148	11 997
3315	Foundries	—	15	9	1 148	40 189	950	1 994	30 609	98 158	67 539	165 425	8 070
33151	Ferrous metal foundries	—	7	4	504	18 874	380	867	13 262	50 929	31 475	82 370	6 818
33152	Nonferrous metal foundries	—	8	5	644	21 315	570	1 127	17 347	47 229	36 064	83 055	1 252
332	Fabricated metal product mfg	—	169	69	6 416	205 713	4 766	9 636	131 171	454 640	358 453	825 669	25 883
3321	Forging & stamping	—	15	10	1 215	42 518	873	1 938	29 951	80 033	105 192	194 175	2 642
33211	Forging & stamping	—	15	10	1 215	42 518	873	1 938	29 951	80 033	105 192	194 175	2 642
3323	Architectural & structural metals mfg	1	24	11	928	27 651	711	1 372	17 139	71 695	38 562	109 539	2 180
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	65	19	1 880	53 418	1 538	3 185	38 754	105 715	59 791	165 779	8 581
33271	Machine shops	—	53	12	1 449	42 477	1 202	2 434	30 024	80 790	47 518	128 548	6 083
332710	Machine shops	—	53	12	1 449	42 477	1 202	2 434	30 024	80 790	47 518	128 548	6 083
3329	Other fabricated metal product mfg	—	21	12	1 033	36 271	622	1 285	17 735	109 556	69 480	178 241	3 775
33291	Metal valve mfg	—	12	10	927	33 172	542	1 132	15 576	102 504	66 681	168 289	3 479
332911	Industrial valve mfg	—	9	7	544	18 598	324	646	8 195	39 839	27 578	67 207	2 415
333	Machinery mfg	1	102	43	3 358	137 491	2 256	4 983	83 931	278 638	200 940	477 931	16 867
3335	Metalworking machinery mfg	1	64	27	1 693	80 503	1 303	2 975	54 921	144 737	101 855	246 437	8 965
33351	Metalworking machinery mfg	1	64	27	1 693	80 503	1 303	2 975	54 921	144 737	101 855	246 437	8 965
333511	Industrial mold mfg	—	37	20	1 125	57 425	930	2 250	41 948	100 322	49 629	149 323	7 059
3339	Other general-purpose machinery mfg	—	18	9	1 104	37 036	604	1 323	18 504	89 882	66 022	153 889	4 572
33399	All other general-purpose machinery mfg	—	10	6	840	29 291	457	984	14 748	72 469	54 828	125 131	3 736
333999	All other miscellaneous general-purpose machinery mfg	—	5	4	633	25 441	324	732	12 870	64 338	50 682	112 819	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ERIE COUNTY, PA— Con. Manufacturing— Con.												
334	Computer & electronic product mfg	1	16	11	1 578	48 567	1 049	1 908	23 447	105 730	72 244	180 936	5 472
3344	Semiconductor & other electronic component mfg	3	13	8	1 016	22 975	731	1 210	11 397	52 061	40 168	94 641	D
33441	Semiconductor & other electronic component mfg	3	13	8	1 016	22 975	731	1 210	11 397	52 061	40 168	94 641	D
3345	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	2	2	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	17	9	554	14 926	418	709	9 335	31 311	23 346	54 344	641
336	Transportation equipment mfg	—	11	5	i	D	D	D	D	D	D	D	50 944
3365	Railroad rolling stock mfg ..	—	1	1	i	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	i	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	15	8	695	16 552	567	1 114	10 851	26 245	24 813	51 249	743
339	Miscellaneous mfg	—	31	13	1 650	54 472	965	1 971	25 979	101 584	51 809	165 482	5 156
3391	Medical equipment & supplies mfg	—	15	3	1 008	40 609	469	975	17 545	72 310	30 573	114 932	D
33911	Medical equipment & supplies mfg	—	15	3	1 008	40 609	469	975	17 545	72 310	30 573	114 932	D
339111	Laboratory apparatus & furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	16	10	642	13 863	496	996	8 434	29 274	21 236	50 550	D
31-33	FAYETTE COUNTY, PA Manufacturing	1	128	40	3 842	105 968	2 987	5 366	69 715	318 876	331 681	656 684	23 877
332	Fabricated metal product mfg	—	18	7	754	22 657	680	1 301	17 652	78 715	56 906	135 613	3 879
334	Computer & electronic product mfg	—	6	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	3	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	—	2	1	f	D	D	D	D	D	D	D	D
31-33	FRANKLIN COUNTY, PA Manufacturing	—	191	74	12 763	379 541	9 223	17 558	226 909	975 283	1 250 801	2 212 044	74 195
311	Food mfg	3	12	4	809	18 207	574	1 079	10 552	56 967	71 770	128 609	2 570
315	Apparel mfg	9	7	5	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	6	5	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	9	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	34	6	567	12 169	435	789	8 334	25 560	31 709	57 542	1 407
323	Printing & related support activities	3	12	5	737	15 699	481	1 009	10 660	32 205	45 457	75 097	1 571
3231	Printing & related support activities	3	12	5	737	15 699	481	1 009	10 660	32 205	45 457	75 097	1 571
32311	Printing	3	9	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	7	6	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	11	5	f	D	D	D	D	D	D	D	2 985

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRANKLIN COUNTY, PA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	39	19	1 586	41 001	1 236	2 340	27 736	121 547	153 634	280 377	8 010
3323	Architectural & structural metals mfg	-	11	4	657	15 920	505	886	11 259	45 828	43 009	83 267	807
333	Machinery mfg	-	16	13	5 184	198 183	3 471	6 467	108 421	407 026	536 401	932 547	36 901
3331	Agriculture, construction, & mining machinery mfg	-	3	2	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	7	6	1 024	44 596	654	1 320	22 215	72 559	88 655	157 925	2 567
33351	Metalworking machinery mfg	-	7	6	1 024	44 596	654	1 320	22 215	72 559	88 655	157 925	2 567
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
FULTON COUNTY, PA													
31-33	Manufacturing	-	22	6	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg .	-	1	1	h	D	D	D	D	D	D	D	D
GREENE COUNTY, PA													
31-33	Manufacturing	3	27	7	630	15 076	521	1 044	10 649	39 949	41 367	81 470	2 490
HUNTINGDON COUNTY, PA													
31-33	Manufacturing	-	44	17	2 300	59 511	1 932	3 560	45 236	308 393	182 498	492 998	9 058
327	Nonmetallic mineral product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
INDIANA COUNTY, PA													
31-33	Manufacturing	1	88	27	3 175	98 851	2 158	4 140	61 864	152 861	160 776	344 098	9 951
326	Plastics & rubber products mfg	-	6	4	666	16 322	518	946	13 041	43 913	35 696	81 628	744
333	Machinery mfg	1	13	4	592	21 667	357	830	14 494	21 812	29 086	78 821	1 858

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JEFFERSON COUNTY, PA													
31-33	Manufacturing	-	88	42	4 634	131 955	3 774	7 333	94 529	368 553	314 516	680 889	25 391
321	Wood product mfg	-	18	6	556	10 568	467	816	6 650	44 834	50 349	92 247	2 150
327	Nonmetallic mineral product mfg	-	8	6	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	11	1 068	35 914	769	1 638	21 343	65 013	71 857	136 417	7 459
333	Machinery mfg	-	9	4	589	17 359	525	1 023	13 748	42 201	39 319	82 628	5 858
JUNIATA COUNTY, PA													
31-33	Manufacturing	-	57	18	2 443	61 149	2 150	4 700	44 633	204 999	84 983	290 572	7 695
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	4	510	14 967	387	923	10 228	54 780	41 274	95 966	2 572
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	4	510	14 967	387	923	10 228	54 780	41 274	95 966	2 572
LACKAWANNA COUNTY, PA													
31-33	Manufacturing	-	306	129	16 052	463 001	12 611	26 744	318 665	1 266 314	1 297 523	2 562 696	87 477
311	Food mfg	2	36	16	g	D	D	D	D	D	D	D	8 284
3113	Sugar & confectionery product mfg	-	4	3	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	3	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	3	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	10	7	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	5	10	7	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	4	7	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	24	17	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	4	21	14	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	18	13	g	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	5	12	12	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	16	7	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	2	10	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	31	10	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	31	10	g	D	D	D	D	D	D	D	D
32311	Printing	-	30	10	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	14	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	21	16	1 335	35 235	1 074	2 097	23 151	148 949	137 438	280 955	D
3261	Plastics product mfg	-	19	15	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	6	6	587	17 881	449	867	11 090	73 946	103 357	172 232	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	5	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	9	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	7	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	41	15	g	D	D	D	D	D	D	D	D

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	LACKAWANNA COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	8	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg....	-	1	1	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media..	-	2	1	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	-	2	1	g	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	10	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	28	9	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	3	12	4	853	21 421	541	1 332	11 291	44 772	37 716	81 828	D
33911	Medical equipment & supplies mfg.....	3	12	4	853	21 421	541	1 332	11 291	44 772	37 716	81 828	D
339113	Surgical appliance & supplies mfg.....	1	4	3	f	D	D	D	D	D	D	D	D
	LANCASTER COUNTY, PA												
31-33	Manufacturing	-	918	370	52 908	1 752 047	40 403	79 651	1 178 496	5 658 468	5 052 520	10 585 384	443 196
311	Food mfg.....	1	110	53	9 007	281 870	6 462	13 467	190 112	1 249 595	1 399 364	2 616 818	73 957
3111	Animal food mfg.....	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
31111	Animal food mfg.....	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
311119	Other animal food mfg.....	4	17	6	618	21 444	172	329	4 499	46 285	211 277	255 038	3 087
3112	Grain & oilseed milling....	-	5	1	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	-	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	10	5	g	D	D	D	D	D	D	D	18 217
31132	Chocolate & confectionery mfg from cacao beans.....	-	2	2	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans...	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	-	5	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	9	5	1 294	39 017	784	1 652	23 311	152 402	234 185	381 643	15 362
31152	Ice cream & frozen dessert mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	11	7	1 546	36 623	1 183	2 643	26 375	60 214	157 223	216 946	4 044
31161	Animal slaughtering & processing.....	-	11	7	1 546	36 623	1 183	2 643	26 375	60 214	157 223	216 946	4 044
311615	Poultry processing.....	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	29	8	1 317	43 497	981	1 861	34 352	174 749	75 958	253 674	7 021
31182	Cookie, cracker, & pasta mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg..	-	3	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg.....	1	25	18	1 509	33 190	1 069	1 715	19 451	116 188	217 012	333 382	8 522
31191	Snack food mfg.....	-	15	11	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg..	-	15	11	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	8	6	599	13 676	438	720	7 698	48 608	164 707	213 301	D
313	Textile mills.....	3	8	6	718	19 184	597	1 160	13 604	46 730	30 901	77 512	D
3132	Fabric mills.....	1	6	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LANCASTER COUNTY, PA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	-	39	20	2 897	60 262	2 396	4 710	42 372	119 492	141 244	253 635	2 582
3151	Apparel knitting mills	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	32	15	1 476	25 662	1 301	2 553	20 681	51 890	47 162	98 790	742
31521	Cut & sew apparel contractors	6	17	6	598	11 315	524	1 160	9 307	16 688	1 723	18 371	229
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	15	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	8	5	607	10 212	540	951	8 166	28 329	42 129	69 945	207
3159	Apparel accessories & other apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	63	17	2 491	64 298	1 963	3 396	43 345	135 771	171 329	307 009	6 044
3219	Other wood product mfg ...	-	51	14	2 360	61 251	1 865	3 195	41 301	129 868	150 033	279 893	5 302
32191	Millwork	-	12	5	1 130	29 094	857	1 329	19 657	49 669	41 400	90 561	3 431
321911	Wood window & door mfg	-	5	3	965	25 993	760	1 163	17 715	46 135	34 383	80 003	D
32199	All other wood product mfg	-	32	6	1 100	29 239	893	1 660	19 429	73 457	100 478	174 448	1 376
321991	Manufactured home (mobile home) mfg ..	-	5	5	906	24 913	731	1 357	16 219	63 293	85 604	149 233	871
322	Paper mfg	-	13	11	885	30 643	629	1 337	16 174	79 577	104 577	184 988	4 720
3222	Converted paper product mfg	-	13	11	885	30 643	629	1 337	16 174	79 577	104 577	184 988	4 720
32221	Paperboard container mfg	-	7	6	516	19 786	347	693	9 081	49 853	71 277	121 555	D
323	Printing & related support activities.....	-	95	42	6 833	247 405	5 491	10 873	179 908	652 431	448 137	1 098 060	61 469
3231	Printing & related support activities.....	-	95	42	6 833	247 405	5 491	10 873	179 908	652 431	448 137	1 098 060	61 469
32311	Printing	-	79	34	6 392	234 341	5 177	10 312	172 100	629 688	443 909	1 071 110	59 568
323110	Commercial lithographic printing ..	-	41	19	4 784	181 673	3 931	7 703	133 660	504 358	336 343	837 012	50 500
323117	Book printing.....	1	5	4	596	19 881	497	1 100	15 830	42 490	16 448	58 914	2 594
325	Chemical mfg	-	29	12	2 255	96 353	1 625	2 793	61 757	1 025 984	199 891	1 187 310	63 379
3254	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	4	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	31	23	4 281	169 493	3 702	7 665	134 104	473 231	406 031	861 881	82 105
3261	Plastics product mfg	-	23	18	3 878	153 046	3 398	6 950	123 803	429 359	378 010	790 021	78 746
32614	Polystyrene foam product mfg	-	1	1	g	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	14	9	2 438	114 505	2 060	4 215	90 380	377 192	211 474	571 583	D
326192	Resilient floor covering mfg	-	1	1	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	12	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	26	10	1 329	47 340	1 124	2 113	37 908	97 024	95 193	189 753	19 052
3273	Cement & concrete product mfg	-	15	8	655	21 112	545	1 055	15 994	33 474	55 620	86 435	D
3279	Other nonmetallic mineral product mfg	-	6	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	6	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	26	18	2 921	105 858	2 316	4 931	75 504	251 979	534 418	766 803	47 575
3313	Alumina & aluminum production & processing ..	-	3	3	1 090	51 286	828	1 700	36 291	118 033	404 599	502 862	D
33131	Alumina & aluminum production & processing,	-	3	3	1 090	51 286	828	1 700	36 291	118 033	404 599	502 862	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	19	11	1 416	38 175	1 210	2 619	28 923	78 666	34 914	113 611	3 043
33151	Ferrous metal foundries ..	-	7	5	922	24 465	787	1 764	19 372	47 797	19 331	67 131	858
331511	Iron foundries	-	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LANCASTER COUNTY, PA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	154	60	7 280	235 346	5 656	11 102	147 387	540 152	411 737	938 876	33 081
3323	Architectural & structural metals mfg	—	34	18	2 075	68 258	1 632	3 033	43 495	148 655	142 978	284 008	6 938
33231	Plate work & fabricated structural product mfg . .	—	17	10	1 286	41 994	1 045	1 714	26 289	93 065	80 186	165 854	3 623
332312	Fabricated structural metal mfg	—	13	8	1 142	37 181	931	1 507	23 035	81 902	72 495	147 169	3 430
33232	Ornamental & architectural metal products mfg	—	17	8	789	26 264	587	1 319	17 206	55 590	62 792	118 154	3 315
332322	Sheet metal work mfg	—	10	5	645	22 231	477	1 063	14 511	44 680	52 831	97 291	2 557
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	68	19	1 363	42 379	1 083	2 123	27 509	72 554	40 066	112 415	7 159
33271	Machine shops	1	51	9	593	18 046	440	783	11 630	30 210	14 076	44 600	1 965
332710	Machine shops	1	51	9	593	18 046	440	783	11 630	30 210	14 076	44 600	1 965
33272	Turned product & screw, nut, & bolt mfg	—	17	10	770	24 333	643	1 340	15 879	42 344	25 990	67 815	5 194
332721	Precision turned product mfg	—	14	8	692	21 604	587	1 215	14 144	39 039	21 454	60 175	D
3329	Other fabricated metal product mfg	—	15	8	2 535	87 145	1 958	3 936	52 733	235 745	153 651	385 481	14 209
33291	Metal valve mfg	—	2	2	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	13	6	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	77	29	3 125	122 120	2 252	4 100	80 523	268 509	250 855	515 601	13 394
3331	Agriculture, construction, & mining machinery mfg	—	23	6	1 185	49 074	989	1 674	40 898	75 759	90 897	162 174	3 836
33311	Agricultural implement mfg	—	20	3	1 090	45 986	934	1 550	39 209	69 150	84 906	149 631	2 947
333111	Farm machinery & equipment mfg	—	18	3	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	7	6	569	21 454	300	639	7 855	80 397	83 799	160 928	2 947
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . .	—	7	6	569	21 454	300	639	7 855	80 397	83 799	160 928	2 947
3339	Other general-purpose machinery mfg	1	16	8	617	21 106	458	845	14 397	57 001	38 128	97 276	2 331
334	Computer & electronic product mfg	—	23	13	2 253	86 083	1 427	2 764	39 565	289 543	179 697	476 711	11 275
3342	Communications equipment mfg	—	3	3	f	D	D	D	D	D	D	D	4 564
3344	Semiconductor & other electronic component mfg	1	11	8	1 199	48 794	952	1 911	28 254	135 606	65 359	205 376	4 845
33441	Semiconductor & other electronic component mfg	1	11	8	1 199	48 794	952	1 911	28 254	135 606	65 359	205 376	4 845
334417	Electronic connector mfg	—	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	16	8	1 866	52 761	1 234	2 602	34 493	136 543	256 834	393 448	9 503
3359	Other electrical equipment & component mfg	—	7	5	1 371	41 179	874	1 932	29 077	124 064	220 762	345 840	8 036
33592	Communication & energy wire & cable mfg	—	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	28	10	1 390	41 663	1 008	1 906	25 017	98 244	260 032	359 349	3 265
3362	Motor vehicle body & trailer mfg	—	12	6	775	22 772	590	1 044	14 227	41 052	60 117	103 500	475
33621	Motor vehicle body & trailer mfg	—	12	6	775	22 772	590	1 044	14 227	41 052	60 117	103 500	475

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LANCASTER COUNTY, PA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	2	86	17	1 982	55 967	1 537	2 920	36 961	106 948	87 129	194 533	3 218
3371	Household & institutional furniture & kitchen cabinet mfg	3	79	13	1 672	46 118	1 288	2 455	31 716	84 993	65 259	150 737	2 402
33711	Wood kitchen cabinet & counter top mfg	2	43	9	1 009	30 451	749	1 563	20 673	51 420	29 695	81 240	1 222
337110	Wood kitchen cabinet & counter top mfg ...	2	43	9	1 009	30 451	749	1 563	20 673	51 420	29 695	81 240	1 222
33712	Household & institutional furniture mfg	4	36	4	663	15 667	539	892	11 043	33 573	35 564	69 497	1 180
339	Miscellaneous mfg	2	59	11	792	22 581	581	1 183	12 350	49 763	28 223	79 264	2 573
	LAWRENCE COUNTY, PA												
31-33	Manufacturing	1	169	59	5 092	156 359	3 740	7 473	96 429	455 482	624 844	1 076 616	51 157
326	Plastics & rubber products mfg	1	9	5	616	13 941	485	976	9 483	28 136	30 356	58 210	2 480
3261	Plastics product mfg	1	8	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	643	29 330	431	914	17 115	107 550	175 320	279 382	D
332	Fabricated metal product mfg	1	51	18	1 348	45 779	975	1 928	28 182	118 244	109 592	226 898	14 940
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
	LEBANON COUNTY, PA												
31-33	Manufacturing	1	199	90	9 376	254 281	7 154	14 487	173 251	681 290	1 023 351	1 710 286	45 546
311	Food mfg	4	20	10	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	9	7	1 550	31 799	1 336	2 714	25 216	107 875	275 811	385 700	D
31161	Animal slaughtering & processing	5	9	7	1 550	31 799	1 336	2 714	25 216	107 875	275 811	385 700	D
311615	Poultry processing	-	3	3	g	D	D	D	D	D	D	D	2 770
315	Apparel mfg	6	15	9	f	D	D	D	D	D	D	D	395
3152	Cut & sew apparel mfg	6	11	7	f	D	D	D	D	D	D	D	331
321	Wood product mfg	-	9	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	7	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	4	1	f	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing....	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	18	6	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	18	6	f	D	D	D	D	D	D	D	D
32311	Printing	1	16	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	10	8	972	32 456	776	1 603	23 284	101 884	168 255	271 256	D
3315	Foundries	-	8	6	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	39	17	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	20	9	656	22 319	369	747	10 445	62 741	54 820	117 341	4 277
337	Furniture & related product mfg	1	14	7	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	14	7	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	2	9	6	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	2	9	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
LEHIGH COUNTY, PA														
31-33	Manufacturing	-	504	185	23 277	877 178	15 685	30 070	485 245	5 212 219	2 471 222	7 690 056	308 485	
311	Food mfg	-	31	12	g	D	D	D	D	D	D	D	D	
3115	Dairy product mfg	-	4	3	g	D	D	D	D	D	D	D	D	
31151	Dairy product (except frozen) mfg	-	4	3	g	D	D	D	D	D	D	D	D	
311513	Cheese mfg	-	2	2	f	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg	-	6	4	f	D	D	D	D	D	D	D	D	
3121	Beverage mfg	-	6	4	f	D	D	D	D	D	D	D	D	
313	Textile mills	5	19	12		787	20 382	671	1 367	14 141	46 601	41 407	87 728	2 718
314	Textile product mills	4	15	3	f		D	D	D	D	D	D	D	
315	Apparel mfg	2	86	28	1 742	23 067	1 531	2 564	18 330	61 519	33 622	95 330	1 741	
3152	Cut & sew apparel mfg	2	77	23	g	D	D	D	D	D	D	D	D	
31521	Cut & sew apparel contractors	5	61	18	915	9 160	856	1 230	8 136	17 716	3 296	20 959	D	
315212	Women's, girls' & infants' cut & sew apparel contractors ..	5	59	17	f	D	D	D	D	D	D	D	D	
322	Paper mfg	-	8	6	f	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	8	6	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	2	57	11	f	D	D	D	D	D	D	D	D	
3231	Printing & related support activities	2	57	11	f	D	D	D	D	D	D	D	D	
32311	Printing	2	54	10	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	1	28	14	1 393	47 814	1 120	2 241	30 625	116 316	124 665	235 832	D	
3261	Plastics product mfg	1	26	14	g	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	1	15	8	1 008	37 395	811	1 650	23 794	91 414	97 927	184 722	D	
326199	All other plastics product mfg	3	13	6	f	D	D	D	D	D	D	D	4 599	
331	Primary metal mfg	3	9	6	802	25 211	652	1 385	17 963	80 673	74 790	152 727	3 986	
3315	Foundries	-	5	4	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	67	28	2 218	80 821	1 434	2 881	42 828	200 073	136 932	330 819	10 777	
3329	Other fabricated metal product mfg	1	10	8	753	30 168	401	795	12 905	75 463	33 361	105 948	4 080	
33291	Metal valve mfg	1	6	6	627	26 727	315	617	10 829	70 257	28 376	95 524	D	
332919	Other metal valve & pipe fitting mfg	1	3	3	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	-	31	20	2 190	91 004	1 305	2 364	43 070	342 629	235 176	585 116	D	
3332	Industrial machinery mfg ..	1	11	8	765	31 492	431	882	14 386	58 790	112 039	178 408	D	
33329	Other industrial machinery mfg	1	10	8	f	D	D	D	D	D	D	D	D	
3339	Other general-purpose machinery mfg	-	9	6	795	34 199	458	686	14 217	165 256	101 992	268 206	4 694	
33399	All other general-purpose machinery mfg	-	7	5	f	D	D	D	D	D	D	D	D	
333996	Fluid power pump & motor mfg	-	1	1	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	-	20	9	h	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	-	7	4	g	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	-	7	4	g	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg ...	-	4	4	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	11	3	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	-	3	1	f	D	D	D	D	D	D	D	D	
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D	
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	12	5	g	D	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D	
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D	
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D	

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	LEHIGH COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	18	5	757	29 572	496	1 062	14 164	79 743	41 730	122 248	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	13	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	10	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	37	6	2 407	75 858	1 465	2 559	33 285	194 073	76 906	264 960	10 925
3391	Medical equipment & supplies mfg	—	17	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	17	2	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	3	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	2	20	4	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	5	4	f	D	D	D	D	D	D	D	D
	LUZERNE COUNTY, PA												
31-33	Manufacturing	1	408	171	24 362	700 787	18 860	38 096	487 232	2 350 176	2 177 379	4 501 055	272 208
311	Food mfg	—	40	14	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	21	7	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	20	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	7	6	f	D	D	D	D	D	D	D	D
313	Textile mills	5	13	10	1 150	27 948	927	2 086	19 583	63 155	50 358	111 188	D
3132	Fabric mills	4	6	4	601	14 930	468	1 078	9 758	32 561	35 543	65 810	D
315	Apparel mfg	2	28	14	2 192	47 539	2 067	3 557	43 027	127 301	140 606	265 228	D
3152	Cut & sew apparel mfg	2	25	13	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	16	8	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	9	14	7	g	D	D	D	D	D	D	D	D
322	Paper mfg	1	18	10	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	1	18	10	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	9	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	46	14	1 836	55 126	1 431	2 905	38 945	135 355	66 713	202 362	15 635
3231	Printing & related support activities	—	46	14	1 836	55 126	1 431	2 905	38 945	135 355	66 713	202 362	15 635
32311	Printing	—	44	14	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	—	28	8	f	D	D	D	D	D	D	D	D
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	16	12	2 282	63 858	1 855	4 077	47 243	249 711	345 366	596 236	15 618
3261	Plastics product mfg	—	16	12	2 282	63 858	1 855	4 077	47 243	249 711	345 366	596 236	15 618
32611	Unsupported plastics film, sheet, & bag mfg	—	5	4	1 229	37 560	997	2 261	28 834	130 549	186 180	322 764	D
326111	Unsupported plastics bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	8	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	8	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	23	5	h	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	4	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	4	3	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	2	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	4	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LUZERNE COUNTY, PA													
—Con.													
31-33	Manufacturing—												
	Con.												
332	Fabricated metal product mfg	-	74	30	3 198	85 638	2 331	4 620	52 723	256 942	196 943	455 353	14 453
3321	Forging & stamping	-	4	4	528	19 329	420	926	11 829	54 422	60 846	116 606	D
33211	Forging & stamping	-	4	4	528	19 329	420	926	11 829	54 422	60 846	116 606	D
3326	Spring & wire product mfg	-	6	6	1 421	31 519	1 042	2 095	20 803	95 725	79 769	174 631	D
33261	Spring & wire product mfg	-	6	6	1 421	31 519	1 042	2 095	20 803	95 725	79 769	174 631	D
332618	Other fabricated wire product mfg	-	6	6	1 421	31 519	1 042	2 095	20 803	95 725	79 769	174 631	D
333	Machinery mfg	-	29	17	g	D	D	D	D	D	D	D	10 226
3333	Commercial & service industry machinery mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	11	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	7	12	6	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	9	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	9	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	11	6	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	6	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	6	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	7	15	4	601	15 921	475	956	12 369	40 880	21 301	63 158	D
339	Miscellaneous mfg	1	30	8	1 212	28 416	740	1 377	12 827	63 279	88 867	153 096	D
3391	Medical equipment & supplies mfg	-	13	4	513	13 116	267	529	4 526	25 077	61 299	85 544	D
33911	Medical equipment & supplies mfg	-	13	4	513	13 116	267	529	4 526	25 077	61 299	85 544	D
3399	Other miscellaneous mfg ..	1	17	4	699	15 300	473	848	8 301	38 202	27 568	67 552	D
LYCOMING COUNTY, PA													
31-33	Manufacturing	-	208	95	12 982	370 226	9 691	18 771	229 917	1 189 394	1 262 012	2 460 365	60 042
311	Food mfg	-	12	8	1 021	34 711	834	1 825	24 417	243 643	186 243	462 982	6 683
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	11	6	1 069	16 731	979	1 904	12 946	41 665	83 474	125 408	624
3152	Cut & sew apparel mfg	-	10	6	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	212
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	10	1 019	24 856	827	1 473	17 037	58 383	75 751	133 714	2 813
3219	Other wood product mfg ...	-	11	4	583	13 455	461	765	8 950	30 095	37 714	67 539	738
326	Plastics & rubber products mfg	-	17	11	1 024	25 347	755	1 487	15 709	127 333	100 835	225 760	11 356
3261	Plastics product mfg	-	13	9	845	21 155	606	1 184	12 666	100 480	93 916	192 712	D
32619	Other plastics product mfg	-	8	5	653	16 835	453	882	9 698	64 308	41 178	105 703	5 872
326199	All other plastics product mfg	-	8	5	653	16 835	453	882	9 698	64 308	41 178	105 703	5 872
331	Primary metal mfg	-	4	4	768	27 495	584	1 305	19 310	79 438	201 535	286 090	3 842
332	Fabricated metal product mfg	-	38	14	1 320	46 349	849	1 393	20 865	78 250	76 535	150 925	4 067

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LYCOMING COUNTY, PA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	13	3	777	28 286	311	631	8 839	66 500	44 671	99 225	4 521
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	4	861	25 918	646	1 227	18 640	66 253	59 314	124 457	2 356
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg . .	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	698	33 778	516	1 002	21 659	55 073	126 196	175 764	3 699
337	Furniture & related product mfg	-	14	7	1 487	33 371	1 141	2 227	24 620	105 766	82 654	185 672	4 192
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	4	561	11 703	387	586	5 055	22 160	29 215	52 094	D
33712	Household & institutional furniture mfg	-	7	4	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	2	1	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	2	1	f	D	D	D	D	D	D	D	D
	MC KEAN COUNTY, PA												
31-33	Manufacturing	-	67	31	5 346	158 723	4 266	8 397	116 906	455 920	421 532	875 676	40 608
321	Wood product mfg	-	14	5	783	21 245	666	1 234	14 796	60 911	96 464	154 754	D
327	Nonmetallic mineral product mfg	-	7	3	1 061	38 284	950	1 735	33 426	112 827	61 646	176 794	12 875
3272	Glass & glass product mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	6	780	24 652	521	1 128	15 816	57 202	37 856	95 119	D
339	Miscellaneous mfg	-	9	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	9	4	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	4	1	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
	MERCER COUNTY, PA												
31-33	Manufacturing	1	198	77	10 457	326 802	7 788	15 622	220 942	990 406	1 474 465	2 440 846	75 673
311	Food mfg	7	19	8	833	20 216	553	848	9 679	63 700	148 452	212 156	5 435
326	Plastics & rubber products mfg	-	12	7	531	11 728	414	781	7 893	29 936	29 826	59 393	3 075
3261	Plastics product mfg	-	12	7	531	11 728	414	781	7 893	29 936	29 826	59 393	3 075
331	Primary metal mfg	-	12	10	2 428	95 253	1 980	4 154	70 569	430 968	610 543	1 018 474	13 978
3312	Steel product mfg from purchased steel	-	7	6	g	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	6	6	1 693	67 373	1 421	3 029	52 610	332 138	469 153	784 336	6 368
331210	Iron & steel pipes & tubes mfg from purchased steel	-	6	6	1 693	67 373	1 421	3 029	52 610	332 138	469 153	784 336	6 368
332	Fabricated metal product mfg	-	45	21	2 675	72 661	1 841	3 801	53 787	174 224	267 511	440 546	31 297
3329	Other fabricated metal product mfg	-	7	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	7	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MERCER COUNTY, PA													
—Con.													
31-33	Manufacturing—												
	Con.												
333	Machinery mfg	—	12	4	1 051	36 822	832	1 680	26 466	121 676	79 215	203 579	4 641
3339	Other general-purpose machinery mfg	—	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	11	6	528	17 718	299	593	6 934	35 413	31 121	65 511	5 661
336	Transportation equipment mfg	—	11	7	1 247	42 909	1 104	2 363	29 713	72 751	234 656	305 362	6 998
3365	Railroad rolling stock mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	2	2	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	2	2	f	D	D	D	D	D	D	D	D
MIFFLIN COUNTY, PA													
31-33	Manufacturing	—	72	25	5 373	163 121	4 406	9 031	124 256	490 985	432 265	922 664	41 915
326	Plastics & rubber products mfg	7	8	4	503	11 330	434	936	9 644	37 672	37 864	75 440	3 939
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	9	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
MONROE COUNTY, PA													
31-33	Manufacturing	1	113	32	4 744	171 123	2 994	5 774	74 074	547 882	292 728	812 899	39 320
323	Printing & related support activities	2	20	4	509	13 662	421	767	10 491	24 620	10 658	35 692	1 992
3231	Printing & related support activities	2	20	4	509	13 662	421	767	10 491	24 620	10 658	35 692	1 992
32311	Printing	1	19	4	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	7	5	1 448	70 736	511	845	12 294	330 763	139 272	441 512	21 210
3254	Pharmaceutical & medicine mfg	—	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	5	26	6	818	26 270	592	1 241	14 563	45 292	21 669	67 708	6 499
339	Miscellaneous mfg	—	7	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MONTGOMERY COUNTY, PA												
31-33	Manufacturing	1	1 398	502	67 234	2 649 478	43 314	88 786	1 434 625	11 564 582	9 044 803	20 666 642	716 622
311	Food mfg.....	-	91	38	7 250	227 710	4 914	10 406	133 407	758 023	1 791 975	2 550 349	44 975
3115	Dairy product mfg.....	-	11	5	f	D	D	D	D	D	D	D	2 762
31151	Dairy product (except frozen) mfg.....	-	6	4	f	D	D	D	D	D	D	D	2 671
311511	Fluid milk mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	12	11	3 891	122 955	2 804	6 111	71 248	297 210	1 408 637	1 705 142	25 921
31161	Animal slaughtering & processing.....	-	12	11	3 891	122 955	2 804	6 111	71 248	297 210	1 408 637	1 705 142	25 921
311611	Animal (except poultry) slaughtering.....	-	7	6	3 059	99 852	2 051	4 254	57 740	193 021	1 048 979	1 243 812	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	3	46	14	1 983	61 413	1 276	2 694	36 968	302 066	150 003	453 202	D
31181	Bread & bakery product mfg.....	3	38	10	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	8	8	4	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
313	Textile mills.....	3	18	9	775	19 083	574	1 182	13 184	40 003	106 041	148 150	3 039
314	Textile product mills.....	1	20	8	607	16 445	421	909	9 450	31 432	32 108	62 823	D
315	Apparel mfg.....	3	46	12	1 565	29 054	1 285	2 723	21 589	69 589	87 960	157 812	D
3152	Cut & sew apparel mfg....	3	27	8	1 326	23 929	1 080	2 304	18 202	58 157	72 726	131 521	2 169
31523	Women's & girls' cut & sew apparel mfg.....	4	8	3	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg.....	-	3	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	24	17	1 640	71 506	1 164	2 499	42 481	170 974	205 789	371 944	37 745
3222	Converted paper product mfg.....	-	24	17	1 640	71 506	1 164	2 499	42 481	170 974	205 789	371 944	37 745
32221	Paperboard container mfg.....	-	13	10	611	24 871	443	957	13 768	62 940	70 430	132 732	D
32229	Other converted paper product mfg.....	-	6	4	950	43 781	677	1 470	27 449	102 422	129 668	227 898	D
322291	Sanitary paper product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	196	44	7 058	238 690	5 394	10 485	161 419	562 695	318 604	878 965	36 560
3231	Printing & related support activities.....	3	196	44	7 058	238 690	5 394	10 485	161 419	562 695	318 604	878 965	36 560
32311	Printing.....	3	176	36	5 276	174 484	3 950	7 761	118 453	435 182	282 557	715 346	30 118
323110	Commercial lithographic printing...	3	79	16	3 057	98 807	2 527	4 838	74 494	192 883	145 127	335 613	17 439
323116	Manifold business form printing.....	1	11	8	858	25 182	495	1 085	13 931	107 355	57 104	164 836	D
32312	Support activities for printing.....	-	20	8	1 782	64 206	1 444	2 724	42 966	127 513	36 047	163 619	6 442
323122	Prepress services.....	-	17	6	g	D	D	D	D	D	D	D	6 254
325	Chemical mfg.....	-	56	26	6 724	426 710	3 428	7 378	180 826	5 833 442	3 079 537	8 992 883	282 423
3254	Pharmaceutical & medicine mfg.....	-	10	7	i	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	10	7	i	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	3	14	7	681	20 485	321	599	8 278	104 460	96 046	201 831	6 327
326	Plastics & rubber products mfg.....	2	45	24	2 064	63 352	1 644	3 297	42 538	159 141	156 785	314 730	11 343
3261	Plastics product mfg.....	2	36	18	1 723	52 034	1 385	2 772	36 010	139 174	140 368	278 469	10 614
32619	Other plastics product mfg.....	-	23	11	1 139	33 236	912	1 843	22 341	91 747	88 218	178 656	5 926
326199	All other plastics product mfg.....	-	23	11	1 139	33 236	912	1 843	22 341	91 747	88 218	178 656	5 926
327	Nonmetallic mineral product mfg.....	2	48	16	845	29 962	615	1 296	18 336	65 409	65 893	131 708	D
3273	Cement & concrete product mfg.....	1	24	9	523	20 231	380	879	13 236	45 229	50 349	95 900	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTGOMERY COUNTY, PA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	-	25	15	2 679	118 066	1 942	4 232	76 448	285 125	343 065	640 925	41 827
3311	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	3	3	644	20 632	490	964	13 088	43 290	24 599	68 544	7 027
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	6	5	f	D	D	D	D	D	D	D	D
3315	Foundries	1	12	3	f	D	D	D	D	D	D	D	6 008
33152	Nonferrous metal foundries	1	8	2	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	1	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	277	88	8 760	349 498	6 255	12 704	217 993	763 656	586 613	1 344 341	45 461
3323	Architectural & structural metals mfg	1	49	17	1 132	40 680	849	1 792	23 635	99 105	95 126	190 573	4 180
33232	Ornamental & architectural metal products mfg	1	34	10	687	23 176	530	1 098	13 405	54 725	53 745	104 587	2 464
332322	Sheet metal work mfg	1	22	9	572	19 774	451	934	11 411	49 185	47 975	93 385	2 262
3326	Spring & wire product mfg	-	11	6	619	23 534	393	807	11 382	60 939	41 532	104 072	2 866
33261	Spring & wire product mfg	-	11	6	619	23 534	393	807	11 382	60 939	41 532	104 072	2 866
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	122	26	3 140	146 291	2 338	5 002	104 152	243 114	125 536	376 246	D
33271	Machine shops	1	104	19	1 421	57 333	1 083	2 306	39 021	101 920	53 641	162 197	8 422
332710	Machine shops	1	104	19	1 421	57 333	1 083	2 306	39 021	101 920	53 641	162 197	8 422
33272	Turned product & screw, nut, & bolt mfg	-	18	7	1 719	88 958	1 255	2 696	65 131	141 194	71 895	214 049	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	11	4	1 556	84 390	1 138	2 452	61 836	130 517	65 030	196 351	D
3329	Other fabricated metal product mfg	-	42	20	2 736	99 684	1 865	3 459	54 297	273 949	231 023	493 966	16 012
33291	Metal valve mfg	-	15	8	g	D	D	D	D	D	D	D	11 881
332911	Industrial valve mfg	2	9	4	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	27	12	g	D	D	D	D	D	D	D	4 131
332996	Fabricated pipe & pipe fitting mfg	-	8	5	620	21 403	462	702	13 128	48 790	14 785	62 061	D
333	Machinery mfg	-	117	51	6 338	230 473	3 243	6 948	102 904	546 854	573 278	1 121 439	33 431
3332	Industrial machinery mfg	-	26	11	3 158	92 760	1 282	2 599	29 567	262 128	335 388	594 130	9 734
33329	Other industrial machinery mfg	-	23	9	h	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	2	15	5	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	41	20	1 712	70 578	1 052	2 215	37 529	142 060	154 494	300 220	12 590
33391	Pump & compressor mfg	-	7	4	679	31 477	412	920	17 220	52 596	66 907	122 006	6 766
33392	Material handling equipment mfg	1	11	7	539	18 092	345	708	10 248	29 377	33 942	63 765	1 778
334	Computer & electronic product mfg	4	133	59	9 072	382 144	4 331	8 192	143 791	845 677	523 007	1 339 315	52 877
3341	Computer & peripheral equipment mfg	5	16	8	618	20 672	302	607	9 755	36 498	36 068	75 936	2 646
33411	Computer & peripheral equipment mfg	5	16	8	618	20 672	302	607	9 755	36 498	36 068	75 936	2 646
3342	Communications equipment mfg	7	21	10	3 393	167 848	1 342	2 245	58 768	335 131	260 343	568 837	17 699
33422	Radio & TV broadcasting & wireless communications equipment mfg	7	16	8	3 342	165 976	1 330	2 224	58 411	332 042	257 275	562 397	17 384
334220	Radio & TV broadcasting & wireless communications equipment mfg	7	16	8	3 342	165 976	1 330	2 224	58 411	332 042	257 275	562 397	17 384

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MONTGOMERY COUNTY, PA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	39	20	1 978	69 996	1 301	2 605	32 662	137 234	76 363	208 997	22 400
33441	Semiconductor & other electronic component mfg	1	39	20	1 978	69 996	1 301	2 605	32 662	137 234	76 363	208 997	22 400
334413	Semiconductor & related device mfg ...	—	10	6	821	30 899	581	1 218	17 132	59 975	32 845	92 358	19 265
3345	Navigational, measuring, medical, & control instruments mfg	2	48	20	3 017	121 684	1 350	2 660	41 701	331 028	146 479	475 968	9 661
33451	Navigational, measuring, medical, & control instruments mfg	2	48	20	3 017	121 684	1 350	2 660	41 701	331 028	146 479	475 968	9 661
334513	Industrial process control instrument mfg	2	15	8	1 973	83 067	735	1 456	24 676	247 979	97 946	344 223	6 216
335	Electrical equipment, appliance, & component mfg	—	39	18	1 812	64 041	1 239	2 588	34 995	170 060	122 456	290 588	9 424
3353	Electrical equipment mfg ..	—	14	6	640	26 039	420	906	13 742	72 456	39 904	112 206	D
33531	Electrical equipment mfg	—	14	6	640	26 039	420	906	13 742	72 456	39 904	112 206	D
3359	Other electrical equipment & component mfg	—	15	9	982	31 700	697	1 430	18 590	77 004	65 154	141 255	6 227
336	Transportation equipment mfg	—	27	14	3 487	161 868	2 609	5 317	115 595	589 974	514 471	1 119 862	75 263
3363	Motor vehicle parts mfg ...	—	14	10	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	4	4	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	4	4	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	66	11	2 374	84 796	1 625	3 358	51 622	307 577	235 799	541 224	17 175
3372	Office furniture (including fixtures) mfg	—	22	8	1 903	70 795	1 302	2 714	44 246	278 817	178 589	455 272	16 253
33721	Office furniture (including fixtures) mfg	—	22	8	1 903	70 795	1 302	2 714	44 246	278 817	178 589	455 272	16 253
337214	Office furniture (except wood) mfg	—	1	1	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	1	13	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	129	41	3 300	108 435	1 912	3 814	46 915	219 330	175 237	385 076	8 780
3391	Medical equipment & supplies mfg	3	66	21	1 425	49 243	813	1 589	19 007	98 265	46 357	134 340	3 226
33911	Medical equipment & supplies mfg	3	66	21	1 425	49 243	813	1 589	19 007	98 265	46 357	134 340	3 226
339112	Surgical & medical instrument mfg	2	19	7	650	23 599	270	566	6 806	60 010	23 555	72 957	D
3399	Other miscellaneous mfg ..	4	63	20	1 875	59 192	1 099	2 225	27 908	121 065	128 880	250 736	5 554
33999	All other miscellaneous mfg	6	18	5	813	26 911	482	908	10 739	52 835	37 475	89 832	3 706
339991	Gasket, packing, & sealing device mfg ...	7	6	3	675	23 004	383	731	8 591	45 923	29 872	75 327	D
	MONTOUR COUNTY, PA												
31-33	Manufacturing	—	22	8	1 530	65 751	1 168	2 529	42 211	517 753	296 475	820 351	D
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NORTHAMPTON COUNTY, PA												
31-33	Manufacturing	1	353	153	18 244	546 136	13 613	28 034	355 393	1 496 658	1 151 597	2 638 374	121 583
311	Food mfg.....	-	29	9	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	12	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	12	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	5	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	1	40	26	3 225	59 853	2 765	5 477	44 889	117 125	86 496	204 904	2 958
3152	Cut & sew apparel mfg....	1	36	23	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	24	15	1 497	24 351	1 375	2 709	19 786	51 983	10 810	62 797	922
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	23	14	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	9	7	810	14 804	687	1 105	9 425	38 372	30 980	68 820	D
315239	Women's & girls' cut & sew other outerwear mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	28	7	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	28	7	g	D	D	D	D	D	D	D	D
32311	Printing	-	24	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	11	5	f	D	D	D	D	D	D	D	D
323118	Blankbook, looseleaf binder, & device mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	21	10	660	28 405	402	892	15 291	78 935	61 993	142 821	D
326	Plastics & rubber products mfg.....	1	18	15	2 015	51 856	1 600	3 424	36 302	159 416	136 433	288 917	30 853
3261	Plastics product mfg.....	1	17	14	g	D	D	D	D	D	D	D	30 853
32619	Other plastics product mfg.....	1	12	9	1 698	41 689	1 355	2 867	29 844	133 549	104 493	231 993	D
326199	All other plastics product mfg.....	1	12	9	1 698	41 689	1 355	2 867	29 844	133 549	104 493	231 993	D
327	Nonmetallic mineral product mfg.....	-	32	14	1 218	43 595	927	1 861	29 779	188 306	88 472	279 143	D
3273	Cement & concrete product mfg.....	-	16	7	746	29 444	555	1 085	20 053	154 777	70 895	227 802	D
32731	Cement mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
327310	Cement mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	9	8	1 365	61 131	975	2 278	43 625	79 371	144 449	240 848	9 652
3315	Foundries	-	3	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	3	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	63	17	1 514	49 306	1 109	2 263	33 116	97 049	60 645	156 916	5 485
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	30	7	f	D	D	D	D	D	D	D	D
33271	Machine shops.....	1	25	7	722	22 590	524	1 062	17 142	38 942	11 702	50 318	3 172
332710	Machine shops.....	1	25	7	722	22 590	524	1 062	17 142	38 942	11 702	50 318	3 172
333	Machinery mfg.....	-	21	12	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	22	8	1 891	50 916	1 649	3 204	37 672	256 243	103 790	336 971	D
3399	Other miscellaneous mfg ..	-	15	6	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	g	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	-	8	4	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTHUMBERLAND COUNTY, PA													
31-33	Manufacturing	4	115	62	7 812	217 304	5 854	11 651	154 952	826 854	687 201	1 526 724	35 370
311	Food mfg	8	16	9	2 819	81 962	1 774	3 373	55 282	452 985	225 166	686 681	18 452
3114	Fruit & vegetable preserving & specialty food mfg	9	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	9	2	2	g	D	D	D	D	D	D	D	D
311422	Specialty canning	9	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	5	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	2	1	f	D	D	D	D	D	D	D	D
313	Textile mills	4	7	6	590	15 209	497	983	10 642	44 717	41 560	86 190	2 415
321	Wood product mfg	—	9	5	812	20 966	679	1 287	16 132	60 737	74 234	134 848	2 264
3219	Other wood product mfg	—	8	4	f	D	D	D	D	D	D	D	D
32191	Millwork	—	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	4	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	3	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	f	D	D	D	D	D	D	D	D
PERRY COUNTY, PA													
31-33	Manufacturing	2	32	8	845	19 063	689	1 288	12 420	39 915	43 710	82 728	2 656
PHILADELPHIA COUNTY, PA													
31-33	Manufacturing	1	1 342	430	47 928	1 582 403	33 884	68 133	926 012	3 997 488	7 090 128	11 098 092	317 324
311	Food mfg	1	191	49	7 524	251 354	4 999	9 436	145 432	857 770	708 346	1 552 278	47 890
3116	Meat product mfg	2	24	14	1 906	57 826	1 437	2 816	35 910	137 674	303 227	440 146	D
31161	Animal slaughtering & processing	2	24	14	1 906	57 826	1 437	2 816	35 910	137 674	303 227	440 146	D
311612	Meat processed from carcasses	2	15	10	g	D	D	D	D	D	D	D	8 100
3118	Bakeries & tortilla mfg	—	119	20	h	D	D	D	D	D	D	D	29 542
31181	Bread & bakery product mfg	—	108	17	h	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	76	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	31	12	h	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	11	3	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	6	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	5	24	8	577	23 136	376	746	12 318	50 990	51 828	102 645	4 878
312	Beverage & tobacco product mfg	2	9	4	1 110	40 836	272	595	8 773	136 481	167 807	304 076	D
3121	Beverage mfg	2	9	4	1 110	40 836	272	595	8 773	136 481	167 807	304 076	D
31211	Soft drink & ice mfg	—	6	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	2	41	20	g	D	D	D	D	D	D	D	D
3132	Fabric mills	3	19	10	f	D	D	D	D	D	D	D	D
314	Textile product mills	2	41	8	662	13 772	537	922	8 413	33 123	29 943	62 857	D
315	Apparel mfg	4	138	54	5 269	105 481	4 483	8 302	75 327	229 600	238 267	456 836	D
3152	Cut & sew apparel mfg	5	113	46	4 737	96 454	4 041	7 564	68 847	215 009	224 317	428 227	D
31521	Cut & sew apparel contractors	3	62	26	1 143	16 077	1 089	1 938	13 405	30 681	6 979	37 402	D
315212	Women's, girls', & infants' cut & sew apparel contractors	5	56	24	1 051	13 783	1 005	1 760	11 920	20 896	4 480	25 348	D
31522	Men's & boys' cut & sew apparel mfg	5	19	10	2 356	59 994	1 872	3 650	37 921	128 586	176 549	296 011	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	7	7	1 883	49 418	1 450	2 814	29 410	104 925	154 519	250 452	D
31523	Women's & girls' cut & sew apparel mfg	6	25	9	g	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	9	7	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA COUNTY, PA—Con.												
	Manufacturing—Con.												
322	Paper mfg	2	48	31	2 926	106 649	2 197	4 359	64 196	269 662	375 100	649 825	18 897
3222	Converted paper product mfg	2	45	28	2 454	85 443	1 794	3 429	48 171	211 525	314 313	531 153	D
32221	Paperboard container mfg	—	22	17	1 329	42 807	1 023	1 990	26 609	94 211	147 259	240 903	7 560
322211	Corrugated & solid fiber box mfg	—	7	6	688	23 514	500	903	13 273	51 967	87 383	139 375	D
32222	Paper bag & coated & treated paper mfg	3	11	5	f	D	D	D	D	D	D	D	5 971
323	Printing & related support activities	3	185	44	4 420	170 826	3 125	5 959	96 736	334 864	198 692	533 425	23 158
3231	Printing & related support activities	3	185	44	4 420	170 826	3 125	5 959	96 736	334 864	198 692	533 425	23 158
32311	Printing	3	152	39	3 932	151 367	2 776	5 197	84 280	298 284	189 640	488 050	D
323110	Commercial lithographic printing ..	3	84	23	2 362	98 235	1 678	3 046	54 822	189 005	112 193	302 220	12 612
324	Petroleum & coal products mfg	—	10	7	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	10	7	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	52	29	2 432	105 531	1 419	3 078	49 354	500 370	703 594	1 186 622	58 234
3251	Basic chemical mfg	1	7	3	522	27 372	294	616	14 589	204 445	337 307	531 320	D
3254	Pharmaceutical & medicine mfg	5	8	6	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	5	8	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	44	18	1 135	36 763	834	1 702	19 673	60 766	74 609	135 125	4 786
3261	Plastics product mfg	2	33	14	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	22	9	698	23 578	493	996	11 521	34 305	47 086	80 862	3 126
326199	All other plastics product mfg	1	22	9	698	23 578	493	996	11 521	34 305	47 086	80 862	3 126
331	Primary metal mfg	2	14	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	174	42	3 495	112 896	2 584	5 121	64 512	269 367	232 340	491 764	10 275
3323	Architectural & structural metals mfg	1	55	13	1 425	41 653	1 119	2 287	23 324	98 096	78 349	169 139	3 394
33232	Ornamental & architectural metal products mfg	1	46	10	1 166	29 679	938	1 908	17 301	66 907	57 028	122 129	2 101
332322	Sheet metal work mfg ..	1	17	3	702	16 971	605	1 279	10 775	40 125	32 633	71 056	1 571
3329	Other fabricated metal product mfg	1	18	11	677	23 603	421	794	12 384	67 882	64 247	130 825	2 760
33299	All other fabricated metal product mfg	1	17	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	62	23	2 080	73 900	1 365	2 680	42 048	136 176	102 996	240 628	D
3339	Other general-purpose machinery mfg	—	12	6	602	24 350	356	760	13 298	50 898	35 379	86 719	3 708
334	Computer & electronic product mfg	2	33	10	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	11	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	11	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	26	14	2 231	81 242	1 509	3 088	48 402	223 284	246 864	482 289	6 954
3351	Electric lighting equipment mfg	1	17	9	1 047	23 367	818	1 608	14 683	69 532	103 053	177 501	2 573
33512	Lighting fixture mfg	1	17	9	1 047	23 367	818	1 608	14 683	69 532	103 053	177 501	2 573
335121	Residential electric lighting fixture mfg ...	—	11	6	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	6	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	6	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA COUNTY, PA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	1	31	17	6 145	205 133	4 237	11 018	133 874	509 087	365 171	868 722	26 998
3363	Motor vehicle parts mfg . . .	—	25	16	i	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	4	4	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	4	4	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	6	3	535	15 291	469	772	11 231	34 505	32 685	67 291	D
336399	All other motor vehicle parts mfg	4	6	3	535	15 291	469	772	11 231	34 505	32 685	67 291	D
337	Furniture & related product mfg	1	71	20	1 730	43 497	1 382	2 319	27 293	91 238	77 691	169 309	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	37	5	881	19 886	742	1 125	14 386	40 052	35 634	76 538	D
33712	Household & institutional furniture mfg	1	26	4	788	16 948	670	965	12 467	35 448	31 721	67 966	1 802
337124	Metal household furniture mfg	—	5	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	23	12	683	19 723	523	977	10 847	37 642	30 990	68 075	D
33721	Office furniture (including fixtures) mfg	2	23	12	683	19 723	523	977	10 847	37 642	30 990	68 075	D
339	Miscellaneous mfg	3	137	29	2 288	64 957	1 719	3 008	36 910	165 679	140 599	302 142	8 628
3391	Medical equipment & supplies mfg	2	56	15	887	23 560	665	997	13 013	48 111	25 027	72 174	D
33911	Medical equipment & supplies mfg	2	56	15	887	23 560	665	997	13 013	48 111	25 027	72 174	D
3399	Other miscellaneous mfg . .	3	81	14	1 401	41 397	1 054	2 011	23 897	117 568	115 572	229 968	D
	POTTER COUNTY, PA												
31-33	Manufacturing	1	29	15	1 166	28 774	982	1 878	21 110	62 320	55 515	117 617	5 709
	SCHUYLKILL COUNTY, PA												
31-33	Manufacturing	1	226	114	14 370	393 667	11 600	22 953	272 786	1 341 302	1 279 110	2 625 116	86 861
311	Food mfg	1	18	3	527	18 771	379	726	10 504	51 288	73 906	125 588	1 343
313	Textile mills	6	8	7	1 225	32 422	1 038	2 260	25 221	155 681	119 798	273 578	10 619
3132	Fabric mills	5	4	4	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	6	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	33	26	3 193	53 587	2 727	4 969	40 475	158 943	83 238	248 055	D
3151	Apparel knitting mills	—	11	9	1 619	32 719	1 331	2 618	22 904	109 079	41 862	154 039	D
31519	Other apparel knitting mills	—	11	9	1 619	32 719	1 331	2 618	22 904	109 079	41 862	154 039	D
315192	Underwear & nightwear knitting mills	—	4	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	5	19	16	g	D	D	D	D	D	D	D	1 048
31522	Men's & boys' cut & sew apparel mfg	—	5	5	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	4	4	758	10 667	673	1 114	9 225	15 440	22 582	40 024	527
321	Wood product mfg	1	19	7	827	18 767	706	1 271	13 488	56 899	85 690	142 928	2 957
3219	Other wood product mfg . . .	—	16	6	f	D	D	D	D	D	D	D	2 730
325	Chemical mfg	1	12	7	823	30 583	519	1 043	17 738	89 178	68 330	163 136	24 313
326	Plastics & rubber products mfg	—	13	9	1 310	45 614	1 011	2 139	31 920	190 163	116 044	302 300	8 965
3261	Plastics product mfg	—	12	9	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg . .	—	7	5	f	D	D	D	D	D	D	D	4 949
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SCHUYLKILL COUNTY, PA—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	6	6	1 288	43 262	1 155	2 428	33 070	158 966	257 394	413 304	D
3313	Alumina & aluminum production & processing ..	—	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	—	1	1	g	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg ..	1	38	14	1 090	32 143	857	1 690	22 161	77 284	54 657	130 214	8 667
333	Machinery mfg ..	1	18	7	961	28 513	692	1 389	16 809	57 336	52 027	107 143	6 574
335	Electrical equipment, appliance, & component mfg ..	—	3	3	668	19 680	556	1 005	15 759	84 002	73 237	158 158	2 237
SNYDER COUNTY, PA													
31-33	Manufacturing	—	65	34	4 413	111 257	3 575	6 754	79 486	181 619	234 136	414 250	12 377
321	Wood product mfg ..	—	13	7	620	14 452	535	997	10 208	26 612	41 115	67 713	833
3219	Other wood product mfg ...	—	11	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg ..	—	10	5	1 758	46 233	1 366	2 621	33 937	66 466	44 748	111 124	D
3371	Household & institutional furniture & kitchen cabinet mfg ..	—	8	4	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg ..	—	3	2	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	—	3	2	g	D	D	D	D	D	D	D	D
SOMERSET COUNTY, PA													
31-33	Manufacturing	2	118	45	4 828	117 116	3 764	7 257	79 377	301 608	338 522	644 063	18 929
332	Fabricated metal product mfg ..	—	11	5	646	16 809	428	962	10 401	38 912	34 000	72 811	1 785
333	Machinery mfg ..	3	13	3	830	23 819	600	1 301	15 173	50 892	54 011	111 684	D
3331	Agriculture, construction, & mining machinery mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg ..	2	10	9	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg ..	2	9	9	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg ..	2	9	9	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg ..	7	8	8	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
SUSQUEHANNA COUNTY, PA													
31-33	Manufacturing	2	51	13	1 160	22 105	939	1 867	14 362	54 236	77 214	132 628	3 629
TIOGA COUNTY, PA													
31-33	Manufacturing	1	46	18	2 930	69 415	2 501	4 952	56 019	216 281	205 461	415 895	20 901
332	Fabricated metal product mfg ..	—	6	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg ..	—	2	2	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg ..	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNION COUNTY, PA													
31-33	Manufacturing	1	36	16	3 394	86 017	2 673	5 459	60 643	228 427	206 482	434 525	14 777
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	2	f	D	D	D	D	D	D	D	951
3371	Household & institutional furniture & kitchen cabinet mfg	-	3	2	f	D	D	D	D	D	D	D	951
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
VENANGO COUNTY, PA													
31-33	Manufacturing	3	89	33	3 950	137 833	2 767	5 763	83 351	383 684	711 377	1 084 640	39 030
331	Primary metal mfg	-	7	6	589	17 673	470	892	12 923	59 040	73 588	126 449	D
333	Machinery mfg	9	10	3	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	9	3	1	g	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	9	1	1	g	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
WARREN COUNTY, PA													
31-33	Manufacturing	-	81	34	4 670	147 764	3 256	6 455	88 757	395 666	734 760	1 116 315	28 310
324	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
32619	Other plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
326199	All other plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
332	Fabricated metal product mfg	-	18	7	1 220	43 723	892	1 723	28 599	116 720	51 642	169 307	5 830
3321	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	1	f	D	D	D	D	D	D	D	D
332111	Iron & steel forging	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, PA													
31-33	Manufacturing	1	278	108	11 725	402 311	7 983	16 377	245 375	1 137 620	1 664 611	2 788 409	105 455
311	Food mfg	3	20	6	511	8 432	266	396	4 085	14 280	26 121	41 415	1 898
322	Paper mfg	-	6	6	500	16 284	373	848	12 141	50 198	75 570	126 521	7 237
3222	Converted paper product mfg	-	6	6	500	16 284	373	848	12 141	50 198	75 570	126 521	7 237
32221	Paperboard container mfg	-	6	6	500	16 284	373	848	12 141	50 198	75 570	126 521	7 237
322211	Corrugated & solid fiber box mfg	-	6	6	500	16 284	373	848	12 141	50 198	75 570	126 521	7 237
325	Chemical mfg	-	23	13	1 065	40 899	653	1 399	20 984	195 505	263 103	455 764	18 997
3251	Basic chemical mfg	-	10	5	595	25 435	337	723	11 640	127 838	127 196	251 830	8 399
326	Plastics & rubber products mfg	2	11	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	2	8	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WASHINGTON COUNTY, PA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	17	7	876	26 774	686	1 441	18 573	76 517	33 379	112 297	D
3272	Glass & glass product mfg	—	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	2	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	15	13	2 147	97 425	1 576	3 175	74 067	339 429	796 709	1 120 042	36 119
3311	Iron & steel mills & ferroalloy mfg	—	4	4	1 294	62 915	1 112	2 200	55 179	265 346	619 867	881 029	15 210
33111	Iron & steel mills & ferroalloy mfg	—	4	4	1 294	62 915	1 112	2 200	55 179	265 346	619 867	881 029	15 210
331111	Iron & steel mills	—	4	4	1 294	62 915	1 112	2 200	55 179	265 346	619 867	881 029	15 210
3314	Nonferrous metal (except aluminum) production & processing	4	5	5	f	D	D	D	D	D	D	D	20 351
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	4	5	5	f	D	D	D	D	D	D	D	20 351
332	Fabricated metal product mfg	—	61	22	1 882	56 196	1 415	2 875	34 810	143 277	104 530	248 153	14 554
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	32	8	533	15 249	420	808	10 443	31 181	11 447	43 121	1 766
333	Machinery mfg	1	28	13	1 818	76 365	1 145	2 607	41 984	147 018	205 184	354 784	7 911
3335	Metalworking machinery mfg	1	8	4	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	1	8	4	f	D	D	D	D	D	D	D	D
333511	Industrial mold mfg	1	4	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	11	4	570	24 576	306	636	11 626	38 242	39 226	76 962	1 949
33399	All other general-purpose machinery mfg	—	7	3	513	22 791	277	575	10 939	34 536	34 065	68 396	D
335	Electrical equipment, appliance, & component mfg	6	6	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	6	4	4	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	8	3	3	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	8	3	3	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, PA													
31-33	Manufacturing	1	68	11	1 039	24 460	821	1 529	16 852	70 990	111 333	182 347	3 609
WESTMORELAND COUNTY, PA													
31-33	Manufacturing	1	597	201	24 404	800 201	16 883	32 807	493 506	1 786 593	2 222 617	4 000 157	193 963
311	Food mfg	3	40	8	655	14 004	438	754	9 483	57 657	62 538	119 707	D
322	Paper mfg	1	4	4	1 330	33 112	816	1 765	18 516	81 461	100 044	176 311	8 640
3222	Converted paper product mfg	1	4	4	1 330	33 112	816	1 765	18 516	81 461	100 044	176 311	8 640
32223	Stationery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	42	26	2 195	63 832	1 665	3 316	42 271	172 565	153 995	325 516	15 933
3261	Plastics product mfg	—	35	24	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	28	18	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	27	18	1 397	39 035	1 046	2 061	23 961	105 717	70 183	175 888	D
327	Nonmetallic mineral product mfg	—	36	10	1 183	35 473	910	1 802	23 763	80 300	45 869	125 141	8 124
3272	Glass & glass product mfg	—	8	6	792	23 334	626	1 235	16 199	50 258	22 485	71 622	4 963
32721	Glass & glass product mfg	—	8	6	792	23 334	626	1 235	16 199	50 258	22 485	71 622	4 963
327212	Other pressed & blown glass & glassware mfg	—	4	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WESTMORELAND COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	-	26	17	3 401	136 154	2 566	5 129	101 142	278 888	591 080	874 473	29 146
3311	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	5	4	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	4	3	g	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg	-	2	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	16	8	634	20 189	486	985	15 482	37 103	41 355	78 036	3 622
332	Fabricated metal product mfg	1	165	53	3 962	124 757	3 028	5 993	84 088	250 089	160 402	407 754	25 189
3321	Forging & stamping	-	10	7	913	33 560	732	1 567	24 642	74 889	54 256	127 948	11 585
33211	Forging & stamping	-	10	7	913	33 560	732	1 567	24 642	74 889	54 256	127 948	11 585
332116	Metal stamping	-	4	2	548	19 027	466	1 009	15 254	43 751	37 129	80 229	D
3323	Architectural & structural metals mfg	1	22	10	642	20 371	454	921	12 560	36 227	29 411	64 108	2 701
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	103	26	1 730	48 572	1 355	2 514	35 089	89 233	38 748	128 201	D
33271	Machine shops	1	95	23	1 587	44 032	1 239	2 343	31 939	81 971	33 080	115 306	5 438
332710	Machine shops	1	95	23	1 587	44 032	1 239	2 343	31 939	81 971	33 080	115 306	5 438
333	Machinery mfg	1	70	27	3 695	144 379	2 332	4 286	80 276	307 685	186 978	494 789	26 047
3335	Metalworking machinery mfg	-	43	16	1 599	55 379	1 163	2 409	38 925	90 399	57 754	152 436	7 391
33351	Metalworking machinery mfg	-	43	16	1 599	55 379	1 163	2 409	38 925	90 399	57 754	152 436	7 391
333514	Special die & tool, die set, jig, & fixture mfg ..	1	24	10	f	D	D	D	D	D	D	D	3 327
333515	Cutting tool & machine tool accessory mfg ..	-	15	4	628	22 669	426	866	13 799	36 813	31 075	67 445	D
3339	Other general-purpose machinery mfg	1	13	7	1 832	80 638	1 007	1 610	37 939	204 577	117 002	316 998	18 001
33391	Pump & compressor mfg	1	4	3	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	3	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	27	16	3 380	106 562	2 235	4 176	59 307	161 513	555 202	714 519	52 431
3343	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	10	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	10	6	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	12	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	12	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	14	9	721	23 345	348	698	10 876	50 891	84 324	135 071	1 724
339	Miscellaneous mfg	-	36	5	1 403	52 931	628	1 389	18 477	167 051	114 003	281 328	10 068
3391	Medical equipment & supplies mfg	-	16	3	1 137	45 134	477	1 016	13 603	125 336	82 687	207 045	8 470
33911	Medical equipment & supplies mfg	-	16	3	1 137	45 134	477	1 016	13 603	125 336	82 687	207 045	8 470
339113	Surgical appliance & supplies mfg	-	4	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WYOMING COUNTY, PA													
31-33	Manufacturing	—	35	12	h	D	D	D	D	D	D	D	D
322	Paper mfg	—	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
YORK COUNTY, PA													
31-33	Manufacturing	—	661	314	45 754	1 557 477	33 469	66 061	975 549	4 627 847	3 542 690	8 156 938	300 081
311	Food mfg	—	45	21	4 384	129 266	2 763	6 062	61 923	439 678	359 278	780 693	21 534
3118	Bakeries & tortilla mfg	2	12	4	1 213	29 230	984	2 191	19 006	70 807	78 519	147 260	D
31181	Bread & bakery product mfg	4	10	3	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	2	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	—	14	12	h	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	12	11	2 542	83 745	1 357	2 969	32 929	302 773	164 190	466 892	12 499
311919	Other snack food mfg	—	12	11	2 542	83 745	1 357	2 969	32 929	302 773	164 190	466 892	12 499
315	Apparel mfg	—	22	13	1 740	31 464	1 224	2 482	20 196	65 154	50 097	116 641	686
3152	Cut & sew apparel mfg	—	19	12	1 699	30 848	1 199	2 424	19 722	64 381	49 468	115 190	652
31523	Women's & girls' cut & sew apparel mfg	—	6	4	g	D	D	D	D	D	D	D	342
315239	Women's & girls' cut & sew other outerwear mfg	—	6	4	g	D	D	D	D	D	D	D	342
321	Wood product mfg	2	28	7	567	12 685	481	958	9 734	19 835	27 345	47 502	2 125
322	Paper mfg	—	30	20	3 343	136 662	2 341	5 027	81 661	388 488	292 287	679 174	56 652
3221	Pulp, paper, & paperboard mills	—	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	27	17	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	21	13	g	D	D	D	D	D	D	D	12 784
322211	Corrugated & solid fiber box mfg	—	12	8	864	28 070	661	1 415	16 566	68 817	80 451	148 487	8 275
32222	Paper bag & coated & treated paper mfg	—	5	4	861	34 398	506	957	16 471	107 361	61 745	170 379	D
322222	Coated & laminated paper mfg	—	5	4	861	34 398	506	957	16 471	107 361	61 745	170 379	D
323	Printing & related support activities	1	58	26	4 018	123 101	2 975	6 068	78 039	260 116	164 065	419 900	17 953
3231	Printing & related support activities	1	58	26	4 018	123 101	2 975	6 068	78 039	260 116	164 065	419 900	17 953
32311	Printing	1	42	19	2 676	84 069	1 976	4 013	53 368	199 407	142 316	337 972	15 394
323110	Commercial lithographic printing	—	19	9	858	27 983	698	1 508	20 150	62 132	51 856	114 206	4 042
323112	Commercial flexographic printing	5	2	2	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	—	4	3	520	19 088	372	711	11 795	65 296	32 647	96 807	3 778
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	—	16	7	1 342	39 032	999	2 055	24 671	60 709	21 749	81 928	2 559
323121	Tradebinding & related work	—	2	2	f	D	D	D	D	D	D	D	D
323122	Prepress services	—	14	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	28	18	2 168	69 403	1 781	3 378	52 361	176 522	147 265	325 492	18 520
3261	Plastics product mfg	—	26	17	g	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	3	3	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	—	3	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	20	13	1 447	46 057	1 164	2 302	34 339	103 413	64 386	169 842	7 827
326199	All other plastics product mfg	—	19	12	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	YORK COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	30	12	1 866	54 139	1 530	2 940	41 681	152 302	110 787	265 239	17 796
3271	Clay product & refractory mfg	-	6	5	1 312	37 525	1 099	2 013	30 454	111 622	69 287	183 796	13 054
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	3	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	14	12	2 539	76 410	1 989	4 268	54 436	198 541	153 627	349 564	15 360
3312	Steel product mfg from purchased steel	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
33122	Rolling & drawing of purchased steel	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
331222	Steel wire drawing	-	3	3	984	29 291	764	1 627	21 738	78 523	61 612	139 879	4 515
3315	Foundries	-	8	6	g	D	D	D	D	D	D	D	5 933
33151	Ferrous metal foundries .	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	133	55	5 217	168 969	4 026	7 665	110 937	428 995	360 690	787 794	18 466
3321	Forging & stamping	-	8	6	602	20 257	462	997	12 173	46 957	43 185	89 340	3 506
33211	Forging & stamping	-	8	6	602	20 257	462	997	12 173	46 957	43 185	89 340	3 506
332116	Metal stamping	-	5	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	21	13	1 614	54 047	1 227	2 090	34 084	121 036	105 885	225 283	4 162
33231	Plate work & fabricated structural product mfg ..	-	9	5	817	29 218	586	840	18 158	63 461	65 933	131 036	2 790
33232	Ornamental & architectural metal products mfg	-	12	8	797	24 829	641	1 250	15 926	57 575	39 952	94 247	1 372
332322	Sheet metal work mfg .	-	8	6	f	D	D	D	D	D	D	D	497
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	60	14	847	25 399	670	1 178	17 780	56 462	21 497	78 071	4 303
33271	Machine shops	-	53	11	743	22 585	585	1 006	15 835	49 315	19 753	69 236	2 669
332710	Machine shops	-	53	11	743	22 585	585	1 006	15 835	49 315	19 753	69 236	2 669
3329	Other fabricated metal product mfg	-	16	5	985	35 686	783	1 566	25 266	133 698	89 402	223 859	4 728
33299	All other fabricated metal product mfg	-	15	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	83	42	6 121	274 681	4 151	8 742	147 538	1 009 435	598 326	1 610 848	51 941
3331	Agriculture, construction, & mining machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	13	9	771	31 315	473	826	14 073	65 232	69 544	136 106	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	10	7	g	D	D	D	D	D	D	D	15 935
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	10	7	g	D	D	D	D	D	D	D	15 935
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	8	7	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	32	10	575	20 608	391	794	11 915	35 543	18 092	54 032	2 450
33351	Metalworking machinery mfg	2	32	10	575	20 608	391	794	11 915	35 543	18 092	54 032	2 450
3336	Engine, turbine, & power transmission equipment mfg	-	4	4	f	D	D	D	D	D	D	D	5 598
33361	Engine, turbine, & power transmission equipment mfg	-	4	4	f	D	D	D	D	D	D	D	5 598
333611	Turbine & turbine generator set unit mfg	-	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	19	10	1 098	42 288	716	1 565	26 959	77 360	120 984	201 950	D
33399	All other general-purpose machinery mfg	-	10	6	752	29 940	475	949	18 424	47 963	95 464	145 254	2 940

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	YORK COUNTY, PA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	—	27	17	2 303	76 049	1 899	3 485	56 243	342 797	203 989	541 547	17 052
3344	Semiconductor & other electronic component mfg	—	17	11	1 839	60 826	1 631	2 988	49 945	307 832	178 885	481 107	16 098
33441	Semiconductor & other electronic component mfg	—	17	11	1 839	60 826	1 631	2 988	49 945	307 832	178 885	481 107	16 098
334417	Electronic connector mfg	—	9	8	1 646	56 975	1 476	2 782	47 787	298 269	170 843	463 449	15 653
335	Electrical equipment, appliance, & component mfg	—	21	16	1 691	59 555	1 133	2 367	35 525	218 975	220 750	436 113	11 352
3353	Electrical equipment mfg	—	12	10	771	24 249	479	906	11 714	74 012	72 150	147 748	D
33531	Electrical equipment mfg	—	12	10	771	24 249	479	906	11 714	74 012	72 150	147 748	D
335314	Relay & industrial control mfg	—	8	7	647	20 813	395	753	10 011	61 744	64 891	127 495	901
336	Transportation equipment mfg	—	19	12	5 254	216 800	3 806	5 814	146 481	584 677	518 994	1 123 489	29 863
3363	Motor vehicle parts mfg	1	11	7	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	2	2	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	2	2	h	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	—	1	1	h	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	42	16	1 414	36 202	1 151	2 184	24 198	81 910	72 170	153 475	2 924
3371	Household & institutional furniture & kitchen cabinet mfg	2	31	13	1 107	26 814	920	1 732	19 216	57 212	49 970	106 670	1 734
33712	Household & institutional furniture mfg	3	17	8	670	15 756	550	1 023	10 858	33 370	35 585	68 437	1 200
339	Miscellaneous mfg	—	34	12	1 768	56 691	1 205	2 637	32 778	162 812	82 169	241 225	8 452
3391	Medical equipment & supplies mfg	—	20	7	1 047	34 009	667	1 435	16 256	115 417	45 725	157 683	4 705
33911	Medical equipment & supplies mfg	—	20	7	1 047	34 009	667	1 435	16 256	115 417	45 725	157 683	4 705
339114	Dental equipment & supplies mfg	—	4	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	2	14	5	721	22 682	538	1 202	16 522	47 395	36 444	83 542	3 747

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALIQUIPPA, PA												
	Manufacturing	-	9	4	f	D	D	D	D	D	D	D	6 008
	ALLENTOWN, PA												
31-33	Manufacturing	-	238	76	8 310	324 998	6 059	10 997	184 116	3 362 309	688 735	4 059 957	92 909
312	Beverage & tobacco product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	2	f	D	D	D	D	D	D	D	D
313	Textile mills	5	15	10	550	15 092	477	991	10 581	35 291	29 847	64 706	2 032
315	Apparel mfg	1	70	22	1 417	19 150	1 252	2 089	15 089	54 674	32 170	86 930	1 374
3152	Cut & sew apparel mfg	2	65	19	1 073	12 552	980	1 475	10 189	42 300	17 013	59 447	D
31521	Cut & sew apparel contractors	4	50	14	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	49	14	f	D	D	D	D	D	D	D	330
332	Fabricated metal product mfg	1	24	10	869	34 402	489	962	15 350	87 555	53 749	139 003	5 981
3329	Other fabricated metal product mfg	1	3	3	532	22 914	255	507	8 883	59 192	24 664	81 739	D
33291	Metal valve mfg	1	3	3	532	22 914	255	507	8 883	59 192	24 664	81 739	D
333	Machinery mfg	-	15	8	538	19 524	325	627	10 075	51 804	64 683	119 899	1 244
334	Computer & electronic product mfg	-	6	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	3	f	D	D	D	D	D	D	D	857
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	3	f	D	D	D	D	D	D	D	857
33712	Household & institutional furniture mfg	-	7	3	f	D	D	D	D	D	D	D	857
	ALTOONA, PA												
31-33	Manufacturing	1	68	23	2 622	62 684	2 041	3 804	41 054	253 069	171 641	424 747	11 725
311	Food mfg	6	8	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	3	f	D	D	D	D	D	D	D	D
	AMBRIDGE, PA												
31-33	Manufacturing	2	23	9	500	14 814	326	670	9 189	42 662	39 124	81 935	4 867
	ANTRIM TOWNSHIP, PA												
31-33	Manufacturing	-	12	2	h	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
	ARCHBALD, PA												
31-33	Manufacturing	-	9	5	f	D	D	D	D	D	D	D	2 107
	ASTON TOWNSHIP, PA												
31-33	Manufacturing	1	39	14	1 148	44 774	758	1 548	23 421	110 532	132 427	231 945	4 903
	BANGOR, PA												
31-33	Manufacturing	5	15	4	642	11 106	551	1 162	8 898	22 443	12 107	34 446	531
315	Apparel mfg	7	6	3	546	8 148	484	1 030	6 998	16 161	7 383	23 434	347
3152	Cut & sew apparel mfg	7	6	3	546	8 148	484	1 030	6 998	16 161	7 383	23 434	347

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BEAVER, PA													
31-33	Manufacturing	-	8	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
BEAVER FALLS, PA													
31-33	Manufacturing	-	27	8	996	33 337	764	1 574	23 989	81 707	83 229	165 524	5 968
BELLEFONTE, PA													
31-33	Manufacturing	-	12	8	1 206	39 519	903	1 865	27 043	84 596	180 103	264 500	8 448
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	1	1	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding .	-	1	1	f	D	D	D	D	D	D	D	D
BENSALEM TOWNSHIP, PA													
31-33	Manufacturing	2	143	53	4 291	133 611	2 920	5 986	73 855	292 518	340 283	630 525	18 836
332	Fabricated metal product mfg	2	33	12	737	25 372	543	1 136	14 257	49 358	43 594	92 432	2 711
BERWICK, PA													
31-33	Manufacturing	-	33	19	3 445	86 804	2 490	5 133	57 051	195 343	178 974	372 650	12 849
311	Food mfg	-	4	3	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	3	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
BETHEL PARK, PA													
31-33	Manufacturing	2	49	9	527	15 738	334	610	7 880	28 725	41 220	71 334	1 931
BETHLEHEM, PA *													
31-33	Manufacturing	1	109	53	6 650	237 305	4 279	8 738	126 962	527 214	527 423	1 063 087	46 015
311	Food mfg	2	10	4	574	20 087	380	795	10 499	69 236	46 352	113 802	D
331	Primary metal mfg	1	7	7	1 220	54 692	828	1 915	36 914	68 717	169 047	254 862	7 677
332	Fabricated metal product mfg	-	19	8	631	22 020	447	920	13 387	49 881	56 097	102 483	2 398
339	Miscellaneous mfg	-	12	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	7	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	7	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	4	1	g	D	D	D	D	D	D	D	D
BLAIRSVILLE, PA													
31-33	Manufacturing	-	16	7	801	27 247	563	1 073	15 821	38 057	28 646	67 089	2 225

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BLOOMSBURG, PA													
31-33	Manufacturing	-	29	12	2 483	71 226	1 946	4 324	46 394	128 049	189 528	319 716	14 962
314	Textile product mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	2	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	3	550	21 422	349	955	12 313	7 803	53 400	63 245	D
BOYERTOWN, PA													
31-33	Manufacturing	2	22	12	1 216	33 337	983	1 840	23 286	81 344	63 112	145 225	2 756
BRACKENRIDGE, PA													
31-33	Manufacturing	-	6	2	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
BRADDOCK, PA													
31-33	Manufacturing	-	7	4	785	26 034	670	1 436	21 099	57 360	41 605	99 172	2 587
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRADFORD, PA													
31-33	Manufacturing	-	25	14	2 675	75 708	2 086	4 064	53 429	240 008	176 597	413 811	D
332	Fabricated metal product mfg	-	5	3	528	17 707	372	786	12 430	42 991	19 283	61 679	D
339	Miscellaneous mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	3	1	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	g	D	D	D	D	D	D	D	D
BRIDGEPORT, PA													
31-33	Manufacturing	4	31	13	603	17 499	449	909	10 815	45 580	39 453	83 730	2 198
BRIDGEVILLE, PA													
31-33	Manufacturing	1	15	7	844	28 063	627	1 232	19 200	99 643	97 405	198 728	7 616
BRISTOL, PA													
31-33	Manufacturing	-	23	8	1 216	37 984	939	1 987	25 315	181 281	157 092	338 442	6 236

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRISTOL TOWNSHIP, PA													
31-33	Manufacturing	-	130	50	5 943	241 045	3 463	6 672	114 273	478 417	779 894	1 210 036	35 748
315	Apparel mfg	-	7	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	6	4	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	14	5	1 201	70 322	606	1 533	32 323	27 855	307 559	347 034	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	7	809	29 995	712	1 617	21 939	57 402	44 598	102 537	8 386
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	12	4	540	21 440	484	1 133	16 050	36 696	27 135	64 057	6 311
334	Computer & electronic product mfg	-	14	9	711	23 775	354	615	6 539	61 402	59 186	116 838	1 625
BROOKVILLE, PA													
31-33	Manufacturing	-	18	9	1 190	29 985	1 022	2 018	22 141	112 010	113 718	222 523	6 866
BUTLER, PA													
31-33	Manufacturing	4	40	16	1 420	35 591	1 000	2 033	22 564	76 227	90 823	171 790	5 881
BUTLER TOWNSHIP, PA													
31-33	Manufacturing	-	15	4	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
CALN TOWNSHIP, PA													
31-33	Manufacturing	-	13	10	2 154	102 693	1 402	3 046	62 801	267 475	221 706	497 194	9 587
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	g	D	D	D	D	D	D	D	D
CAMP HILL, PA													
31-33	Manufacturing	-	17	7	g	D	D	D	D	D	D	D	9 720
311	Food mfg	-	5	4	f	D	D	D	D	D	D	D	4 285
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
CANONSBURG, PA													
31-33	Manufacturing	1	24	9	1 120	31 398	653	1 249	16 609	65 941	54 515	119 669	4 602
CARBONDALE, PA													
31-33	Manufacturing	1	13	6	586	16 825	460	1 117	11 256	62 340	80 295	141 828	4 237

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARLISLE, PA													
31-33	Manufacturing	-	48	25	5 025	175 387	3 767	7 858	113 519	569 478	489 379	1 049 538	42 552
314	Textile product mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	6	5	945	31 638	729	1 542	22 691	100 195	45 282	142 310	2 884
3344	Semiconductor & other electronic component mfg	-	6	5	945	31 638	729	1 542	22 691	100 195	45 282	142 310	2 884
33441	Semiconductor & other electronic component mfg	-	6	5	945	31 638	729	1 542	22 691	100 195	45 282	142 310	2 884
CARNEGIE, PA													
31-33	Manufacturing	1	25	11	530	19 007	373	707	9 507	37 921	35 443	73 308	1 899
CECIL TOWNSHIP, PA													
31-33	Manufacturing	-	21	13	1 033	36 923	518	1 115	14 026	62 915	96 728	153 542	9 259
CENTER TOWNSHIP, PA													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
CHAMBERSBURG, PA													
31-33	Manufacturing	1	44	17	3 276	81 647	2 677	5 168	57 101	196 945	187 734	373 821	21 537
315	Apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	2	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	9	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHARLEROI, PA													
31-33	Manufacturing	-	13	6	797	24 059	675	1 368	18 033	84 346	40 818	127 597	4 944
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHELTENHAM TOWNSHIP, PA													
31-33	Manufacturing	-	45	6	1 843	84 598	1 271	2 578	61 679	136 174	75 144	211 107	6 249
332	Fabricated metal product mfg	-	6	1	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	3	1	g	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	-	3	1	g	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	-	2	1	g	D	D	D	D	D	D	D	D
CHESTER, PA													
31-33	Manufacturing	-	34	20	2 372	101 335	1 831	3 774	72 368	534 383	264 123	782 617	49 837
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
CLARION, PA													
31-33	Manufacturing	-	7	4	850	28 407	732	1 286	23 388	100 731	75 273	176 949	D
CLEARFIELD, PA													
31-33	Manufacturing	-	15	6	1 258	32 264	1 085	2 607	25 891	92 597	115 959	209 105	10 259
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D
COLLEGEVILLE, PA													
31-33	Manufacturing	-	8	3	658	21 368	512	1 045	13 928	33 120	17 149	51 531	D
COLUMBIA, PA													
31-33	Manufacturing	-	17	9	2 008	58 008	1 650	3 414	42 838	186 345	197 438	380 280	11 109
332	Fabricated metal product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	1	1	g	D	D	D	D	D	D	D	D
CONSHOHOCKEN, PA													
31-33	Manufacturing	1	35	21	2 711	101 169	2 055	3 918	70 777	222 163	345 702	565 034	15 413
323	Printing & related support activities	6	4	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	6	4	2	f	D	D	D	D	D	D	D	D
32311	Printing	6	4	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	6	4	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CORRY, PA													
31-33	Manufacturing	2	24	11	1 738	58 509	1 274	2 381	35 395	145 010	112 138	257 573	14 469
326	Plastics & rubber products mfg	4	6	5	744	21 871	589	918	12 434	72 219	70 115	142 071	10 424
3261	Plastics product mfg	4	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	4	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	12	5	f	D	D	D	D	D	D	D	D
CRAFTON, PA													
31-33	Manufacturing	5	7	4	546	15 274	379	644	9 433	35 079	15 474	51 366	D
CRANBERRY TOWNSHIP, PA													
31-33	Manufacturing	—	32	12	1 861	60 977	1 250	2 532	31 778	177 812	124 980	297 548	9 802
332	Fabricated metal product mfg	—	9	6	1 215	35 880	878	1 840	20 050	92 968	59 274	151 849	3 893
3323	Architectural & structural metals mfg	—	4	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	3	3	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	1	1	f	D	D	D	D	D	D	D	D
CURWENSVILLE, PA													
31-33	Manufacturing	—	5	4	689	13 901	575	1 105	10 139	43 896	75 481	118 049	D
DALLAS, PA													
31-33	Manufacturing	—	6	4	986	29 802	780	1 569	22 037	69 857	24 327	93 949	D
323	Printing & related support activities	—	2	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	2	2	f	D	D	D	D	D	D	D	D
32311	Printing	—	2	2	f	D	D	D	D	D	D	D	D
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D
DANVILLE, PA													
31-33	Manufacturing	—	11	5	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
DENVER, PA													
31-33	Manufacturing	—	20	15	2 654	80 529	2 024	3 817	62 569	247 697	198 862	446 184	14 295
311	Food mfg	—	6	3	1 023	36 662	880	1 655	31 905	160 862	70 347	234 180	3 887
3118	Bakeries & tortilla mfg	—	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DERRY TOWNSHIP, PA (DAUPHIN COUNTY)													
31-33	Manufacturing	-	16	7	i	D	D	D	D	D	D	D	D
311	Food mfg	-	4	4	i	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	3	3	i	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	1	1	h	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	1	1	h	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	-	2	2	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	2	2	g	D	D	D	D	D	D	D	D
DERRY TOWNSHIP, PA (WESTMORELAND COUNTY)													
31-33	Manufacturing	-	26	7	f	D	D	D	D	D	D	D	5 676
DONORA, PA													
31-33	Manufacturing	1	17	6	530	16 961	354	699	9 693	56 759	49 143	104 776	10 753
DOWNTOWN, PA													
31-33	Manufacturing	-	36	16	1 483	54 358	1 202	2 500	39 923	193 401	152 182	344 776	8 370
322	Paper mfg	-	5	5	594	23 985	500	1 271	18 887	72 072	84 871	156 264	5 512
DUBOIS, PA													
31-33	Manufacturing	1	27	12	1 253	35 756	801	1 544	19 675	92 425	195 580	287 847	7 628
DUNMORE, PA													
31-33	Manufacturing	-	16	9	1 897	67 374	1 518	3 408	48 494	224 801	298 643	521 990	8 485
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D
DURYEA, PA													
31-33	Manufacturing	-	12	6	770	25 353	501	1 028	14 445	71 662	59 378	129 178	D
EAST GREENVILLE, PA													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	1	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EAST HEMPFIELD TOWNSHIP, PA													
31-33	Manufacturing	-	68	38	4 977	176 727	3 530	7 415	105 677	709 329	655 102	1 326 391	43 764
311	Food mfg	1	10	7	2 005	74 173	1 557	3 659	54 789	457 167	323 105	744 384	28 912
3112	Grain & oilseed milling	-	1	1	f	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg	-	1	1	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	2	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	9	1 116	39 933	750	1 503	18 964	89 050	66 203	154 425	4 494
3329	Other fabricated metal product mfg	-	5	5	667	25 875	403	817	9 762	59 222	37 051	95 419	3 194
EAST LAMPETER TOWNSHIP, PA													
31-33	Manufacturing	1	55	25	2 365	70 722	1 826	3 483	41 627	155 351	125 375	272 960	6 719
332	Fabricated metal product mfg	-	9	6	952	29 836	830	1 405	18 133	60 292	41 317	93 502	722
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
EASTON, PA													
31-33	Manufacturing	-	53	23	3 748	112 430	3 028	6 215	81 873	430 301	231 754	639 521	34 287
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	g	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	-	1	1	g	D	D	D	D	D	D	D	D
EAST STROUDSBURG, PA													
31-33	Manufacturing	1	28	11	1 292	44 078	980	2 021	28 738	154 240	80 847	237 104	6 419
ELIZABETHTOWN, PA													
31-33	Manufacturing	-	18	8	983	39 639	699	1 294	23 069	269 018	158 680	427 445	3 329
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
ELLWOOD CITY, PA *													
31-33	Manufacturing	-	26	12	1 308	42 638	983	1 845	26 094	221 566	189 666	407 947	13 972
332	Fabricated metal product mfg	1	12	4	506	21 495	352	716	12 379	50 154	59 481	108 517	4 502
EPHRATA, PA													
31-33	Manufacturing	1	34	14	1 230	39 479	1 032	2 219	29 633	83 898	70 995	155 028	4 043

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ERIE, PA													
31-33	Manufacturing	-	203	92	10 286	357 249	7 180	15 181	225 748	937 786	823 182	1 788 955	74 349
311	Food mfg	1	11	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	16	9	1 327	45 038	947	2 042	28 526	113 730	87 084	199 269	D
3261	Plastics product mfg	2	15	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	13	7	f	D	D	D	D	D	D	D	8 845
326199	All other plastics product mfg	2	13	7	f	D	D	D	D	D	D	D	8 845
331	Primary metal mfg	-	11	8	f	D	D	D	D	D	D	D	D
3315	Foundries	-	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	68	28	2 713	93 641	2 049	4 188	59 479	213 418	186 386	414 037	9 357
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	23	5	984	30 096	822	1 754	22 547	56 702	34 731	91 655	4 404
33271	Machine shops	-	19	3	846	26 284	715	1 542	19 655	48 262	30 300	78 794	3 155
332710	Machine shops	-	19	3	846	26 284	715	1 542	19 655	48 262	30 300	78 794	3 155
333	Machinery mfg	-	27	17	1 425	55 959	885	1 935	30 783	117 742	100 341	216 389	D
3339	Other general-purpose machinery mfg	1	5	5	631	22 694	326	750	11 214	51 589	31 940	81 919	2 420
334	Computer & electronic product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
FALLS TOWNSHIP, PA													
31-33	Manufacturing	-	54	27	2 705	119 957	2 037	4 605	86 443	187 571	730 882	917 724	32 286
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
FERGUSON TOWNSHIP, PA													
31-33	Manufacturing	-	10	3	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	1	1	g	D	D	D	D	D	D	D	D
FLEETWOOD, PA													
31-33	Manufacturing	-	16	5	914	24 882	783	1 453	20 987	48 089	166 544	215 521	3 919
FOLCROFT, PA													
31-33	Manufacturing	1	21	11	874	29 396	679	1 226	16 501	98 074	189 383	289 486	2 069
FORD CITY, PA													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	470
FRACKVILLE, PA													
31-33	Manufacturing	-	8	5	620	11 353	506	1 001	9 046	35 993	59 531	97 277	1 128

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRANKLIN, PA													
31-33	Manufacturing	7	24	12	2 134	78 027	1 437	3 094	45 155	195 969	335 549	527 601	11 626
333	Machinery mfg	9	3	2	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	9	1	1	g	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg.	9	1	1	g	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg.	9	1	1	g	D	D	D	D	D	D	D	D
GETTYSBURG, PA													
31-33	Manufacturing	-	10	3	539	10 101	503	1 081	9 378	46 129	8 785	53 659	1 342
GIRARD, PA													
31-33	Manufacturing	1	22	13	686	16 215	544	974	10 494	43 800	41 716	84 521	D
GREENCASTLE, PA													
31-33	Manufacturing	-	22	13	1 956	52 862	1 373	2 735	31 927	259 515	371 827	621 923	7 779
332	Fabricated metal product mfg.	-	9	5	511	13 829	400	814	10 475	50 974	44 328	90 669	1 276
GREENSBURG, PA													
31-33	Manufacturing	1	67	19	1 386	39 149	954	1 781	24 846	73 940	55 609	131 522	4 875
332	Fabricated metal product mfg.	1	19	8	515	16 706	355	688	10 316	30 642	18 867	50 418	2 759
GREENVILLE, PA													
31-33	Manufacturing	-	13	6	1 035	35 224	889	1 871	23 524	50 142	202 691	250 126	D
336	Transportation equipment mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg. ..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg.	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg.	-	1	1	f	D	D	D	D	D	D	D	D
GROVE CITY, PA													
31-33	Manufacturing	-	13	6	1 023	36 832	669	1 318	20 981	87 155	84 078	173 930	4 206
HAMBURG, PA													
31-33	Manufacturing	-	21	10	1 038	27 528	815	1 611	18 470	54 783	93 128	145 217	4 387
HAMPDEN TOWNSHIP, PA													
31-33	Manufacturing	-	24	4	735	22 742	534	1 133	13 768	60 672	88 110	149 269	4 477
HANOVER, PA													
31-33	Manufacturing	-	69	38	6 214	202 124	4 382	8 513	120 914	588 939	589 880	1 176 918	31 699
311	Food mfg.	-	8	7	g	D	D	D	D	D	D	D	D
3119	Other food mfg.	-	7	7	1 989	67 791	1 040	2 216	26 578	211 790	109 036	321 016	10 992
31191	Snack food mfg.	-	7	7	1 989	67 791	1 040	2 216	26 578	211 790	109 036	321 016	10 992
311919	Other snack food mfg. .	-	7	7	1 989	67 791	1 040	2 216	26 578	211 790	109 036	321 016	10 992
331	Primary metal mfg.	-	4	4	658	16 471	517	1 021	11 180	37 843	46 586	83 423	2 973
332	Fabricated metal product mfg.	-	12	5	612	22 380	519	1 103	17 619	94 786	110 911	206 872	3 240
333	Machinery mfg.	-	5	3	f	D	D	D	D	D	D	D	3 421
336	Transportation equipment mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg. ...	-	1	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg.	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg.	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARRISBURG, PA													
31-33	Manufacturing	2	58	24	2 299	69 906	1 731	3 663	48 684	223 366	263 690	478 916	12 870
HATBORO, PA													
31-33	Manufacturing	3	41	6	546	18 561	339	711	9 162	36 287	29 988	66 095	2 082
HATFIELD, PA													
31-33	Manufacturing	-	9	7	722	24 344	427	794	10 493	62 296	24 437	87 320	1 735
HATFIELD TOWNSHIP, PA													
31-33	Manufacturing	-	73	36	4 640	153 771	2 900	5 739	79 650	366 118	507 719	876 857	28 262
311	Food mfg.....	-	7	4	1 723	59 385	959	1 913	28 180	108 289	302 259	413 095	16 105
3116	Meat product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	6	5	765	17 931	631	1 261	13 598	50 938	47 172	98 553	D
3261	Plastics product mfg.....	1	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	3	3	705	16 479	581	1 175	12 529	46 701	45 471	92 606	2 753
326199	All other plastics product mfg.....	1	3	3	705	16 479	581	1 175	12 529	46 701	45 471	92 606	2 753
332	Fabricated metal product mfg.....	-	14	9	733	28 142	459	939	15 862	74 964	62 604	139 653	3 518
HAZLETON, PA													
31-33	Manufacturing	-	70	39	5 575	158 610	4 374	9 053	114 574	625 358	586 956	1 214 453	34 815
311	Food mfg.....	-	11	7	1 081	30 623	815	1 506	23 424	262 249	145 187	405 784	5 833
3118	Bakeries & tortilla mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	-	6	3	f	D	D	D	D	D	D	D	1 609
311812	Commercial bakeries ..	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	9	7	1 490	43 930	1 229	2 689	33 968	145 682	216 678	363 201	D
3261	Plastics product mfg.....	-	9	7	1 490	43 930	1 229	2 689	33 968	145 682	216 678	363 201	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	7	3	508	17 718	285	562	9 553	42 413	38 582	85 725	3 572
HEMPFIELD TOWNSHIP, PA													
31-33	Manufacturing	2	28	11	1 225	37 000	952	1 831	26 934	45 275	53 865	101 645	3 202
HERMITAGE, PA													
31-33	Manufacturing	1	21	6	766	22 180	628	1 130	15 147	67 573	70 745	135 716	5 051
HILLTOWN TOWNSHIP, PA													
31-33	Manufacturing	-	24	11	781	27 581	547	1 100	15 326	64 813	53 399	120 388	2 920

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HORSHAM TOWNSHIP, PA													
31-33	Manufacturing	2	74	33	4 312	144 869	3 039	6 213	85 713	326 984	277 122	601 302	18 961
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	20	5	1 429	54 203	1 172	2 186	38 326	118 271	44 563	163 063	5 117
3231	Printing & related support activities.....	3	20	5	1 429	54 203	1 172	2 186	38 326	118 271	44 563	163 063	5 117
32312	Support activities for printing.....	-	5	3	g	D	D	D	D	D	D	D	D
323122	Prepress services	-	4	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	2	16	9	944	34 783	487	1 007	13 440	72 776	48 290	121 525	3 337
3345	Navigational, measuring, medical, & control instruments mfg	3	8	5	556	20 002	263	566	7 218	49 284	25 612	73 823	1 739
33451	Navigational, measuring, medical, & control instruments mfg	3	8	5	556	20 002	263	566	7 218	49 284	25 612	73 823	1 739
HUNTINGDON, PA													
31-33	Manufacturing	-	8	5	703	20 472	569	1 098	14 532	95 850	34 778	133 129	D
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
INDIANA, PA													
31-33	Manufacturing	-	25	8	954	25 227	767	1 412	20 130	34 285	59 098	124 108	3 703
JEANNETTE, PA													
31-33	Manufacturing	-	21	9	1 924	78 567	1 146	1 715	39 402	185 475	96 228	275 986	20 112
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	g	D	D	D	D	D	D	D	D
JERSEY SHORE, PA													
31-33	Manufacturing	1	15	7	598	12 543	544	1 064	10 442	39 059	31 214	70 233	3 106
JOHNSONBURG, PA													
31-33	Manufacturing	-	6	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JOHNSTOWN, PA													
31-33	Manufacturing	1	49	20	4 264	112 401	2 659	4 817	71 606	348 876	626 556	989 371	15 224
315	Apparel mfg	-	2	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	2	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	2	f	D	D	D	D	D	D	D	D
KANE, PA													
31-33	Manufacturing	1	13	5	646	18 105	581	956	15 627	49 243	58 337	106 693	2 448
KITTANNING, PA													
31-33	Manufacturing	1	20	7	602	12 429	496	830	8 353	39 529	33 179	72 916	3 486
KUTZTOWN, PA													
31-33	Manufacturing	2	19	6	674	15 891	552	1 087	11 592	33 549	35 420	68 782	1 540
LAKE CITY, PA													
31-33	Manufacturing	-	18	9	991	28 579	740	1 502	17 234	62 203	56 161	118 217	2 760
LANCASTER, PA													
31-33	Manufacturing	-	108	44	9 758	382 177	7 699	15 461	266 842	1 148 243	911 702	2 038 475	78 984
311	Food mfg	-	10	4	969	30 254	650	1 488	17 704	60 961	141 434	199 817	4 640
323	Printing & related support activities	-	24	7	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	24	7	h	D	D	D	D	D	D	D	D
32311	Printing	-	18	6	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	11	5	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	5	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	g	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	7	981	33 427	708	1 357	17 994	70 534	80 130	150 699	4 313
334	Computer & electronic product mfg	-	6	5	f	D	D	D	D	D	D	D	D
LANSDALE, PA													
31-33	Manufacturing	-	62	23	3 370	117 435	2 164	4 453	62 251	305 402	263 071	570 957	18 232
323	Printing & related support activities	-	9	3	654	18 147	334	728	9 152	86 138	36 180	122 187	D
3231	Printing & related support activities	-	9	3	654	18 147	334	728	9 152	86 138	36 180	122 187	D
32311	Printing	-	7	3	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	7	1 388	49 490	938	1 835	25 944	117 835	141 164	258 982	6 510
3329	Other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	5	608	22 188	419	908	13 912	49 001	43 250	95 934	D
3339	Other general-purpose machinery mfg	-	4	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LATROBE, PA													
31-33	Manufacturing	2	74	24	3 031	117 065	2 329	4 608	77 304	272 124	272 823	540 319	31 898
331	Primary metal mfg	-	7	4	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	8	610	21 748	479	1 014	15 782	42 564	23 970	65 628	7 321
LEBANON, PA													
31-33	Manufacturing	3	77	33	3 327	91 915	2 581	5 142	63 701	307 861	480 495	793 693	17 396
311	Food mfg	7	8	3	531	12 958	454	857	10 341	86 237	174 711	262 933	2 916
321	Wood product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	2	1	f	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, & planing	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
LEHIGHTON, PA													
31-33	Manufacturing	2	26	12	1 125	20 512	1 021	1 929	16 168	42 381	20 886	63 134	1 700
315	Apparel mfg	-	7	6	687	9 103	660	1 236	8 038	16 595	1 169	17 759	91
3152	Cut & sew apparel mfg	-	7	6	687	9 103	660	1 236	8 038	16 595	1 169	17 759	91
31521	Cut & sew apparel contractors	-	3	3	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	3	3	f	D	D	D	D	D	D	D	D
LEWISBURG, PA													
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	6 328
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
LEWISTOWN, PA													
31-33	Manufacturing	1	28	14	2 398	62 451	1 941	4 072	47 099	165 264	243 668	407 888	11 544
332	Fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
LIMERICK TOWNSHIP, PA													
31-33	Manufacturing	-	11	8	507	20 162	389	846	12 110	76 422	37 286	113 522	2 814
LITITZ, PA													
31-33	Manufacturing	-	23	14	1 880	59 832	1 415	2 724	39 087	141 996	321 528	471 425	13 700
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	4	4	f	D	D	D	D	D	D	D	D
LITTLESTOWN, PA													
31-33	Manufacturing	-	12	7	1 080	26 931	920	1 902	21 021	94 822	49 638	145 152	2 008
337	Furniture & related product mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LOGAN TOWNSHIP, PA													
31-33	Manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
LOWER GWYNEDD TOWNSHIP, PA													
31-33	Manufacturing	1	9	2	g	D	D	D	D	D	D	D	3 012
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
LOWER MERION TOWNSHIP, PA													
31-33	Manufacturing	2	53	10	831	22 029	576	1 044	13 424	48 584	96 243	147 778	5 325
LOWER MORELAND TOWNSHIP, PA													
31-33	Manufacturing	1	53	17	1 221	47 323	773	1 665	25 619	141 714	100 746	240 077	6 841
LOWER PROVIDENCE TOWNSHIP, PA													
31-33	Manufacturing	-	25	8	1 100	43 322	725	1 503	21 668	81 911	42 213	124 132	7 050
LOWER SALFORD TOWNSHIP, PA													
31-33	Manufacturing	-	17	9	579	20 317	384	877	9 950	51 325	44 446	95 119	2 482
LOWER SOUTHAMPTON TOWNSHIP, PA													
31-33	Manufacturing	2	85	22	1 572	56 641	1 070	2 178	31 870	137 826	117 155	255 846	7 046
MCKEESPORT, PA													
31-33	Manufacturing	1	24	9	827	30 700	602	1 135	20 636	67 127	44 080	110 955	6 036
MCKEES ROCKS, PA													
31-33	Manufacturing	-	30	13	953	28 556	590	1 182	16 706	87 657	87 991	176 423	4 026
MACUNGIE, PA													
31-33	Manufacturing	-	8	5	2 095	94 280	1 169	2 779	68 735	339 675	407 388	742 180	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D
MALVERN, PA													
31-33	Manufacturing	1	32	17	1 884	71 966	1 201	2 781	39 160	197 319	203 457	400 087	11 666

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MANCHESTER TOWNSHIP, PA													
31-33	Manufacturing	-	66	41	4 894	167 105	3 417	7 311	100 685	343 303	404 200	743 630	27 784
323	Printing & related support activities.....	-	6	4	789	24 650	522	1 086	13 279	41 812	26 066	67 217	2 841
3231	Printing & related support activities.....	-	6	4	789	24 650	522	1 086	13 279	41 812	26 066	67 217	2 841
32312	Support activities for printing.....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	9	1 543	56 559	944	2 036	28 986	91 725	142 450	235 355	8 229
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	6	4	613	20 513	464	1 045	15 119	43 461	27 661	70 502	D
3399	Other miscellaneous mfg ..	2	4	3	f	D	D	D	D	D	D	D	D
MANHEIM, PA													
31-33	Manufacturing	2	22	8	914	31 084	632	1 157	17 850	71 224	51 991	125 547	5 736
MANHEIM TOWNSHIP, PA													
31-33	Manufacturing	-	50	24	3 055	116 251	2 054	4 103	71 318	265 430	457 113	705 399	39 663
323	Printing & related support activities.....	-	9	5	562	19 512	369	785	11 491	58 355	11 152	69 474	2 936
3231	Printing & related support activities.....	-	9	5	562	19 512	369	785	11 491	58 355	11 152	69 474	2 936
32311	Printing	-	8	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
MARCUS HOOK, PA													
31-33	Manufacturing	-	7	4	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries ...	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
MARIETTA, PA													
31-33	Manufacturing	-	5	5	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MEADVILLE, PA													
31-33	Manufacturing	-	103	42	3 770	130 930	2 767	5 263	80 253	345 762	159 098	502 873	25 315
332	Fabricated metal product mfg	-	24	5	809	24 884	647	1 290	16 095	61 900	19 010	80 607	3 205
3322	Cutlery & handtool mfg.	-	2	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg. .	-	2	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg. .	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	52	26	1 353	53 407	1 000	2 015	34 512	96 088	41 418	135 007	7 215
3335	Metalworking machinery mfg	-	46	23	1 079	44 690	861	1 810	31 361	75 251	23 972	96 699	D
33351	Metalworking machinery mfg	-	46	23	1 079	44 690	861	1 810	31 361	75 251	23 972	96 699	D
333514	Special die & tool, die set, jig, & fixture mfg .	-	29	15	668	28 670	531	1 160	20 074	46 428	13 839	60 159	4 424
MECHANICSBURG, PA													
31-33	Manufacturing	-	24	10	1 861	59 097	1 104	3 161	40 791	116 324	110 274	229 344	D
323	Printing & related support activities.....	-	7	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	7	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	7	4	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	3	1	g	D	D	D	D	D	D	D	D
MIDDLETOWN TOWNSHIP, PA (BUCKS COUNTY)													
31-33	Manufacturing	2	29	14	948	36 685	527	1 069	15 949	119 874	141 648	258 517	5 213
MIDDLETOWN TOWNSHIP, PA (DELAWARE COUNTY)													
31-33	Manufacturing	7	13	4	560	21 868	389	888	13 091	82 097	108 990	191 180	4 639
MIDLAND, PA													
31-33	Manufacturing	-	9	4	f	D	D	D	D	D	D	D	1 070
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
MIFFLINBURG, PA													
31-33	Manufacturing	4	11	4	892	20 711	756	1 557	15 621	50 840	44 393	95 100	D
MILLCREEK TOWNSHIP, PA													
31-33	Manufacturing	1	128	58	6 082	204 933	4 434	9 039	125 410	413 260	291 859	720 082	27 234
326	Plastics & rubber products mfg	-	14	11	1 695	47 845	1 510	3 039	35 217	109 446	103 910	214 499	6 377
3261	Plastics product mfg	-	14	11	1 695	47 845	1 510	3 039	35 217	109 446	103 910	214 499	6 377
32619	Other plastics product mfg	-	9	7	1 438	38 990	1 325	2 656	29 612	91 440	88 560	180 959	5 063
326199	All other plastics product mfg	-	9	7	1 438	38 990	1 325	2 656	29 612	91 440	88 560	180 959	5 063
332	Fabricated metal product mfg	1	32	18	1 268	34 625	938	1 894	21 499	79 283	47 929	126 870	6 465
333	Machinery mfg	1	34	15	g	D	D	D	D	D	D	D	7 059
3335	Metalworking machinery mfg	2	26	13	862	44 112	683	1 616	31 277	77 906	45 088	122 408	4 330
33351	Metalworking machinery mfg	2	26	13	862	44 112	683	1 616	31 277	77 906	45 088	122 408	4 330
333511	Industrial mold mfg ...	-	18	10	624	34 275	518	1 279	25 587	59 065	32 381	90 869	3 190
339	Miscellaneous mfg	-	8	4	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	6	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	2	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MILLERSBURG, PA													
31-33	Manufacturing	-	11	6	1 039	22 067	885	1 487	17 409	53 204	36 994	86 614	2 074
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
MILTON, PA													
31-33	Manufacturing	7	16	11	2 963	93 279	2 300	4 366	76 908	487 539	280 462	769 220	20 231
311	Food mfg	9	1	1	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	9	1	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	9	1	1	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	9	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONACA, PA													
31-33	Manufacturing	-	16	9	1 510	66 567	998	2 171	38 635	234 929	279 814	518 697	37 914
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONTGOMERY TOWNSHIP, PA													
31-33	Manufacturing	3	56	31	2 662	96 356	1 817	3 181	54 630	191 592	189 559	381 394	12 066
334	Computer & electronic product mfg	1	6	4	896	31 186	581	624	18 276	35 910	53 346	88 327	4 793
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
MONTOURSVILLE, PA													
31-33	Manufacturing	-	27	11	1 034	23 755	875	1 538	15 441	43 454	66 678	112 016	4 415
MOOSIC, PA													
31-33	Manufacturing	-	13	4	610	17 307	468	912	11 744	60 792	105 900	162 763	D
MOUNT JOY, PA													
31-33	Manufacturing	1	16	10	1 209	40 472	1 033	1 913	27 608	104 707	96 356	206 254	8 869
MOUNT PLEASANT TOWNSHIP, PA													
31-33	Manufacturing	-	20	10	2 486	79 928	1 744	3 426	48 279	182 868	437 328	618 404	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MOUNT UNION, PA													
31-33	Manufacturing	-	4	4	859	19 101	745	1 296	15 360	142 264	68 840	216 098	D
MUHLENBERG TOWNSHIP, PA													
31-33	Manufacturing	1	36	13	2 024	76 256	1 244	2 642	39 694	175 188	234 769	408 000	18 363
326	Plastics & rubber products mfg	-	4	2	508	16 406	402	893	11 390	31 495	32 454	63 998	D
3261	Plastics product mfg	-	4	2	508	16 406	402	893	11 390	31 495	32 454	63 998	D
339	Miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
MUNCY, PA													
31-33	Manufacturing	-	8	6	g	D	D	D	D	D	D	D	9 053
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
MUNICIPALITY OF MONROEVILLE, PA													
31-33	Manufacturing	3	26	8	687	19 624	422	784	9 547	42 987	40 344	82 202	2 371
MUNICIPALITY OF MURRYSVILLE, PA													
31-33	Manufacturing	-	20	9	1 931	68 705	1 168	2 495	32 463	210 100	136 061	344 376	14 533
339	Miscellaneous mfg	-	5	3	1 080	43 907	450	1 027	13 149	122 332	86 950	208 375	D
3391	Medical equipment & supplies mfg	-	2	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	2	2	g	D	D	D	D	D	D	D	D
MYERSTOWN, PA													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
NAZARETH, PA													
31-33	Manufacturing	-	22	10	1 429	42 556	1 132	2 228	28 545	193 411	89 374	283 969	8 320
NESQUEHONING, PA													
31-33	Manufacturing	9	8	5	1 197	27 241	931	1 867	19 658	53 918	54 925	108 801	3 662
336	Transportation equipment mfg	9	2	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	9	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	9	1	1	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	9	1	1	f	D	D	D	D	D	D	D	D
NEW BRITAIN TOWNSHIP, PA													
31-33	Manufacturing	-	15	6	938	37 907	638	1 435	23 534	122 738	52 464	175 220	7 556
323	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW CASTLE, PA													
31-33	Manufacturing	1	89	35	2 483	76 032	1 860	3 726	47 992	201 272	238 888	436 878	23 418
326	Plastics & rubber products mfg	1	5	4	569	12 780	451	912	8 701	26 406	27 800	54 053	2 089
3261	Plastics product mfg	1	5	4	569	12 780	451	912	8 701	26 406	27 800	54 053	2 089
332	Fabricated metal product mfg	1	24	9	588	16 259	438	856	10 772	41 377	34 814	76 438	D
NEW FREEDOM, PA													
31-33	Manufacturing	-	13	6	570	17 058	409	861	11 456	25 267	20 352	45 756	6 577
NEW HOLLAND, PA													
31-33	Manufacturing	-	15	11	3 331	103 910	2 604	5 169	78 955	191 005	331 518	509 405	12 956
311	Food mfg	-	3	3	1 340	30 441	1 053	2 230	25 370	62 600	164 326	226 099	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
NEW KENSINGTON, PA													
31-33	Manufacturing	1	36	11	805	22 683	543	1 010	11 567	41 339	30 822	71 716	2 297
NEWTOWN, PA													
31-33	Manufacturing	-	7	3	523	22 483	250	557	7 585	41 629	19 147	60 348	1 493
NEWTOWN TOWNSHIP, PA (BUCKS COUNTY)													
31-33	Manufacturing	3	22	13	1 080	45 161	633	1 419	20 518	87 285	78 057	166 793	14 286
NORRISTOWN, PA													
31-33	Manufacturing	3	63	25	1 517	48 808	998	1 940	25 742	113 434	82 765	196 618	6 066
NORTHAMPTON, PA													
31-33	Manufacturing	-	9	7	575	13 227	489	937	9 283	36 497	12 320	48 076	6 597
NORTHAMPTON TOWNSHIP, PA													
31-33	Manufacturing	2	79	27	1 985	67 587	1 156	2 225	31 575	133 943	115 489	256 041	7 784
334	Computer & electronic product mfg	-	11	5	508	22 136	179	356	5 329	29 517	49 214	84 087	D
NORTH EAST, PA													
31-33	Manufacturing	1	15	10	1 786	56 031	1 303	2 864	37 883	190 497	191 645	380 441	D
NORTH HUNTINGDON TOWNSHIP, PA													
31-33	Manufacturing	-	35	10	897	24 227	608	1 116	14 723	51 315	35 069	86 472	3 814
OAKMONT, PA													
31-33	Manufacturing	-	14	10	1 218	39 833	761	1 479	19 641	89 718	77 828	167 737	11 877
326	Plastics & rubber products mfg	-	3	3	764	27 459	446	855	12 073	68 438	59 661	128 204	10 459
3261	Plastics product mfg	-	3	3	764	27 459	446	855	12 073	68 438	59 661	128 204	10 459
OLD FORGE, PA													
31-33	Manufacturing	-	16	10	942	24 552	741	1 488	16 540	49 097	38 162	86 989	1 634

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORWIGSBURG, PA													
31-33	Manufacturing	4	25	17	872	19 750	725	1 422	14 188	51 324	44 750	95 564	1 746
PALMER TOWNSHIP, PA													
31-33	Manufacturing	3	23	14	1 332	34 790	1 028	1 993	21 108	66 357	76 874	141 565	10 555
326	Plastics & rubber products mfg	3	5	5	813	20 294	669	1 238	13 725	42 271	58 287	99 978	8 888
3261	Plastics product mfg	3	5	5	813	20 294	669	1 238	13 725	42 271	58 287	99 978	8 888
32619	Other plastics product mfg	3	5	5	813	20 294	669	1 238	13 725	42 271	58 287	99 978	8 888
326199	All other plastics product mfg	3	5	5	813	20 294	669	1 238	13 725	42 271	58 287	99 978	8 888
PALMERTON, PA													
31-33	Manufacturing	—	9	7	835	15 135	708	1 297	13 305	48 025	40 435	88 836	D
PEN ARGYL, PA													
31-33	Manufacturing	—	12	8	943	18 640	783	1 339	12 380	44 445	36 276	80 274	855
315	Apparel mfg	—	6	5	f	D	D	D	D	D	D	D	322
3152	Cut & sew apparel mfg	—	6	5	f	D	D	D	D	D	D	D	322
31523	Women's & girls' cut & sew apparel mfg	—	4	3	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	2	2	f	D	D	D	D	D	D	D	D
PENN HILLS TOWNSHIP, PA													
31-33	Manufacturing	5	39	9	507	16 263	310	593	7 990	40 186	54 926	94 715	2 289
PERKASIE, PA													
31-33	Manufacturing	1	24	5	522	14 929	354	634	7 892	33 587	28 769	63 034	1 505
PHILADELPHIA, PA													
31-33	Manufacturing	1	1 342	430	47 928	1 582 403	33 884	68 133	926 012	3 997 488	7 090 128	11 098 092	317 324
311	Food mfg	1	191	49	7 524	251 354	4 999	9 436	145 432	857 770	708 346	1 552 278	47 890
3116	Meat product mfg	2	24	14	1 906	57 826	1 437	2 816	35 910	137 674	303 227	440 146	D
31161	Animal slaughtering & processing	2	24	14	1 906	57 826	1 437	2 816	35 910	137 674	303 227	440 146	D
311612	Meat processed from carcasses	2	15	10	g	D	D	D	D	D	D	D	8 100
3118	Bakeries & tortilla mfg	—	119	20	h	D	D	D	D	D	D	D	29 542
31181	Bread & bakery product mfg	—	108	17	h	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	76	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	31	12	h	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	11	3	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	—	6	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	5	24	8	577	23 136	376	746	12 318	50 990	51 828	102 645	4 878
312	Beverage & tobacco product mfg	2	9	4	1 110	40 836	272	595	8 773	136 481	167 807	304 076	D
3121	Beverage mfg	2	9	4	1 110	40 836	272	595	8 773	136 481	167 807	304 076	D
31211	Soft drink & ice mfg	—	6	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	2	41	20	g	D	D	D	D	D	D	D	D
3132	Fabric mills	3	19	10	f	D	D	D	D	D	D	D	D
314	Textile product mills	2	41	8	662	13 772	537	922	8 413	33 123	29 943	62 857	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PHILADELPHIA, PA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	4	138	54	5 269	105 481	4 483	8 302	75 327	229 600	238 267	456 836	D
3152	Cut & sew apparel mfg	5	113	46	4 737	96 454	4 041	7 564	68 847	215 009	224 317	428 227	D
31521	Cut & sew apparel contractors	3	62	26	1 143	16 077	1 089	1 938	13 405	30 681	6 979	37 402	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	56	24	1 051	13 783	1 005	1 760	11 920	20 896	4 480	25 348	D
31522	Men's & boys' cut & sew apparel mfg	5	19	10	2 356	59 994	1 872	3 650	37 921	128 586	176 549	296 011	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	4	7	7	1 883	49 418	1 450	2 814	29 410	104 925	154 519	250 452	D
31523	Women's & girls' cut & sew apparel mfg	6	25	9	g	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	9	7	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	48	31	2 926	106 649	2 197	4 359	64 196	269 662	375 100	649 825	18 897
3222	Converted paper product mfg	2	45	28	2 454	85 443	1 794	3 429	48 171	211 525	314 313	531 153	D
32221	Paperboard container mfg	—	22	17	1 329	42 807	1 023	1 990	26 609	94 211	147 259	240 903	7 560
322211	Corrugated & solid fiber box mfg	—	7	6	688	23 514	500	903	13 273	51 967	87 383	139 375	D
32222	Paper bag & coated & treated paper mfg	3	11	5	f	D	D	D	D	D	D	D	5 971
323	Printing & related support activities	3	185	44	4 420	170 826	3 125	5 959	96 736	334 864	198 692	533 425	23 158
3231	Printing & related support activities	3	185	44	4 420	170 826	3 125	5 959	96 736	334 864	198 692	533 425	23 158
32311	Printing	3	152	39	3 932	151 367	2 776	5 197	84 280	298 284	189 640	488 050	D
323110	Commercial lithographic printing ..	3	84	23	2 362	98 235	1 678	3 046	54 822	189 005	112 193	302 220	12 612
324	Petroleum & coal products mfg	—	10	7	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	10	7	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	52	29	2 432	105 531	1 419	3 078	49 354	500 370	703 594	1 186 622	58 234
3251	Basic chemical mfg	1	7	3	522	27 372	294	616	14 589	204 445	337 307	531 320	D
3254	Pharmaceutical & medicine mfg	5	8	6	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	5	8	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	44	18	1 135	36 763	834	1 702	19 673	60 766	74 609	135 125	4 786
3261	Plastics product mfg	2	33	14	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	22	9	698	23 578	493	996	11 521	34 305	47 086	80 862	3 126
326199	All other plastics product mfg	1	22	9	698	23 578	493	996	11 521	34 305	47 086	80 862	3 126
331	Primary metal mfg	2	14	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	174	42	3 495	112 896	2 584	5 121	64 512	269 367	232 340	491 764	10 275
3323	Architectural & structural metals mfg	1	55	13	1 425	41 653	1 119	2 287	23 324	98 096	78 349	169 139	3 394
33232	Ornamental & architectural metal products mfg	1	46	10	1 166	29 679	938	1 908	17 301	66 907	57 028	122 129	2 101
332322	Sheet metal work mfg ..	1	17	3	702	16 971	605	1 279	10 775	40 125	32 633	71 056	1 571
3329	Other fabricated metal product mfg	1	18	11	677	23 603	421	794	12 384	67 882	64 247	130 825	2 760
33299	All other fabricated metal product mfg	1	17	10	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	62	23	2 080	73 900	1 365	2 680	42 048	136 176	102 996	240 628	D
3339	Other general-purpose machinery mfg	—	12	6	602	24 350	356	760	13 298	50 898	35 379	86 719	3 708
334	Computer & electronic product mfg	2	33	10	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	11	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	11	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PHILADELPHIA, PA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	26	14	2 231	81 242	1 509	3 088	48 402	223 284	246 864	482 289	6 954
3351	Electric lighting equipment mfg	1	17	9	1 047	23 367	818	1 608	14 683	69 532	103 053	177 501	2 573
33512	Lighting fixture mfg	1	17	9	1 047	23 367	818	1 608	14 683	69 532	103 053	177 501	2 573
335121	Residential electric lighting fixture mfg ...	-	11	6	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	6	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	6	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	31	17	6 145	205 133	4 237	11 018	133 874	509 087	365 171	868 722	26 998
3363	Motor vehicle parts mfg ...	-	25	16	i	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	4	4	h	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	4	4	h	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	2	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	4	6	3	535	15 291	469	772	11 231	34 505	32 685	67 291	D
336399	All other motor vehicle parts mfg	4	6	3	535	15 291	469	772	11 231	34 505	32 685	67 291	D
337	Furniture & related product mfg	1	71	20	1 730	43 497	1 382	2 319	27 293	91 238	77 691	169 309	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	37	5	881	19 886	742	1 125	14 386	40 052	35 634	76 538	D
33712	Household & institutional furniture mfg	1	26	4	788	16 948	670	965	12 467	35 448	31 721	67 966	1 802
337124	Metal household furniture mfg	-	5	4	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	23	12	683	19 723	523	977	10 847	37 642	30 990	68 075	D
33721	Office furniture (including fixtures) mfg	2	23	12	683	19 723	523	977	10 847	37 642	30 990	68 075	D
339	Miscellaneous mfg	3	137	29	2 288	64 957	1 719	3 008	36 910	165 679	140 599	302 142	8 628
3391	Medical equipment & supplies mfg	2	56	15	887	23 560	665	997	13 013	48 111	25 027	72 174	D
33911	Medical equipment & supplies mfg	2	56	15	887	23 560	665	997	13 013	48 111	25 027	72 174	D
3399	Other miscellaneous mfg ..	3	81	14	1 401	41 397	1 054	2 011	23 897	117 568	115 572	229 968	D
	PHILIPSBURG, PA												
31-33	Manufacturing	4	18	7	722	14 522	585	1 009	9 746	40 955	17 795	59 467	1 424
	PHOENIXVILLE, PA												
31-33	Manufacturing	1	25	6	558	19 668	402	797	11 896	45 222	47 313	92 671	4 244

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PITTSBURGH, PA													
31-33	Manufacturing	1	479	137	13 924	471 562	9 652	19 107	289 183	1 183 746	1 211 502	2 395 020	69 833
311	Food mfg	-	43	12	1 891	62 918	1 435	3 234	46 642	341 167	179 705	519 526	18 847
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	22	6	707	23 641	469	993	16 129	37 502	31 263	68 548	2 906
323	Printing & related support activities	1	106	31	2 054	66 975	1 565	2 821	43 976	136 630	69 155	205 207	14 000
3231	Printing & related support activities	1	106	31	2 054	66 975	1 565	2 821	43 976	136 630	69 155	205 207	14 000
32311	Printing	1	81	25	1 579	54 224	1 156	1 997	34 033	105 980	62 556	168 030	12 752
323110	Commercial lithographic printing ..	1	37	16	1 054	37 081	782	1 251	22 577	68 830	45 908	114 320	11 268
324	Petroleum & coal products mfg	-	4	2	f	D	D	D	D	D	D	D	1 429
3241	Petroleum & coal products mfg	-	4	2	f	D	D	D	D	D	D	D	1 429
32419	Other petroleum & coal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
324199	All other petroleum & coal products mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	4	733	24 387	478	977	13 883	58 234	40 856	96 818	2 453
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	65	22	1 864	62 987	1 325	2 689	39 936	168 793	398 950	570 996	9 284
3323	Architectural & structural metals mfg	1	20	6	690	23 699	525	1 084	17 193	32 021	30 870	62 603	931
33232	Ornamental & architectural metal products mfg	1	13	3	505	17 320	381	792	13 107	18 620	20 071	38 650	314
333	Machinery mfg	1	34	10	866	31 198	531	1 026	16 058	69 774	62 882	131 108	2 621
334	Computer & electronic product mfg	4	31	7	1 387	49 654	689	1 272	18 907	70 289	52 275	123 771	7 135
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	45	10	1 179	37 173	718	1 178	21 177	75 767	50 140	125 341	2 184
3399	Other miscellaneous mfg ..	-	30	5	939	29 569	563	928	17 110	61 828	42 933	104 102	1 818
33995	Sign mfg	-	12	3	591	20 470	422	685	12 005	42 761	24 851	67 363	660
339950	Sign mfg	-	12	3	591	20 470	422	685	12 005	42 761	24 851	67 363	660
PITTSTON, PA													
31-33	Manufacturing	-	19	6	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	g	D	D	D	D	D	D	D	D
PLUM, PA													
31-33	Manufacturing	-	36	11	1 523	48 055	929	1 740	20 883	104 443	89 577	194 206	4 709
PLYMOUTH TOWNSHIP, PA													
31-33	Manufacturing	1	23	6	526	21 164	294	578	7 015	41 577	40 061	82 630	2 968

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POTTSTOWN, PA													
31-33	Manufacturing	-	57	26	3 543	134 271	2 661	5 409	91 174	476 162	352 364	821 236	35 413
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	2	f	D	D	D	D	D	D	D	D
311813	Frozen cakes, pies, & other pastries mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
POTTSVILLE, PA													
31-33	Manufacturing	-	18	9	1 236	37 003	953	1 753	24 693	123 763	78 994	200 363	7 269
PUNXSUTAWNEY, PA													
31-33	Manufacturing	1	20	8	644	18 679	443	845	10 250	40 038	30 224	69 190	4 122
QUAKERTOWN, PA													
31-33	Manufacturing	2	30	15	1 475	42 263	1 102	2 256	27 049	130 518	130 920	259 043	8 611
RADNOR TOWNSHIP, PA													
31-33	Manufacturing	1	31	11	895	33 464	604	1 223	13 943	144 564	182 716	325 763	5 367
READING, PA													
31-33	Manufacturing	-	160	70	16 969	737 374	12 458	25 028	463 220	1 893 280	1 762 812	3 654 193	193 104
311	Food mfg	2	19	8	2 156	63 319	1 599	2 802	40 720	297 561	187 070	477 740	16 244
3113	Sugar & confectionery product mfg	5	5	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	5	4	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	5	4	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	9	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	8	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	7	12	9	959	15 449	805	1 446	12 004	39 993	26 808	65 961	2 561
3152	Cut & sew apparel mfg	6	9	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	12	5	1 001	42 700	556	985	18 279	153 012	140 336	292 086	11 339
3255	Paint, coating, & adhesive mfg	-	3	3	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	-	2	2	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	4	616	22 969	386	870	9 509	33 306	41 137	74 630	5 940
3261	Plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	8	7	3 342	210 472	2 283	5 151	131 426	316 077	861 371	1 179 785	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	27	8	1 297	39 181	964	2 055	24 802	107 168	53 000	157 927	5 606
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
READING, PA—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	—	1	1	h	D	D	D	D	D	D	D		
3363	Motor vehicle parts mfg ...	—	1	1	h	D	D	D	D	D	D	D		
33639	Other motor vehicle parts mfg	—	1	1	h	D	D	D	D	D	D	D		
336399	All other motor vehicle parts mfg	—	1	1	h	D	D	D	D	D	D	D		
339	Miscellaneous mfg	—	15	2		545	17 105	323	615	7 992	41 458	37 098	78 781	2 095
RED LION, PA														
31-33	Manufacturing	—	30	16		2 049	55 633	1 686	3 149	37 550	142 610	145 118	288 464	6 564
332	Fabricated metal product mfg	—	8	5		889	28 854	701	1 214	19 246	84 200	85 598	171 077	3 618
337	Furniture & related product mfg	2	8	6		682	16 332	588	1 090	11 659	36 051	30 152	65 469	1 387
3371	Household & institutional furniture & kitchen cabinet mfg	3	5	5	f		D	D	D	D	D	D	D	D
RICHLAND TOWNSHIP, PA														
31-33	Manufacturing	4	8	6		727	23 148	418	696	9 433	52 844	76 942	128 943	6 021
RIDGWAY, PA														
31-33	Manufacturing	1	26	15		1 686	54 395	1 394	2 830	38 212	114 362	94 103	212 055	7 957
332	Fabricated metal product mfg	—	14	7		694	20 219	601	1 196	13 448	43 420	31 974	75 741	D
3321	Forging & stamping	—	8	5	f		D	D	D	D	D	D	D	D
33211	Forging & stamping	—	8	5	f		D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	—	7	5	f		D	D	D	D	D	D	D	D
RIDLEY PARK, PA														
31-33	Manufacturing	—	2	2	i		D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	i		D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	i		D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	i		D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	i		D	D	D	D	D	D	D	D
ROARING SPRING, PA														
31-33	Manufacturing	—	9	5		1 065	38 830	788	1 692	26 299	141 793	119 227	263 694	D
322	Paper mfg	—	3	2	f		D	D	D	D	D	D	D	D
ROCHESTER, PA														
31-33	Manufacturing	—	9	4		524	13 251	407	807	9 118	26 331	21 835	48 185	2 747

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ST. MARYS, PA													
31-33	Manufacturing	-	67	31	5 439	187 948	4 267	9 362	136 488	453 697	370 616	830 942	62 319
332	Fabricated metal product mfg	-	28	11	2 437	70 604	2 034	4 339	55 110	134 817	85 265	222 001	10 550
3321	Forging & stamping	-	5	5	1 162	31 274	988	2 338	26 548	61 481	48 182	109 846	D
33211	Forging & stamping	-	5	5	1 162	31 274	988	2 338	26 548	61 481	48 182	109 846	D
332117	Powder metallurgy part mfg	-	5	5	1 162	31 274	988	2 338	26 548	61 481	48 182	109 846	D
3326	Spring & wire product mfg .	-	4	2	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	7	1 986	87 292	1 564	3 736	64 218	258 242	248 336	511 208	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	7	6	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	6	5	g	D	D	D	D	D	D	D	40 686
335991	Carbon & graphite product mfg	-	6	5	g	D	D	D	D	D	D	D	40 686
SALISBURY TOWNSHIP, PA													
31-33	Manufacturing	-	18	11	691	26 483	457	873	12 217	51 437	37 071	89 020	3 885
SAYRE, PA													
31-33	Manufacturing	6	15	6	834	12 335	613	767	6 842	21 322	27 059	49 021	1 526
SCHUYLKILL HAVEN, PA													
31-33	Manufacturing	1	30	16	1 484	44 836	1 158	2 435	28 129	87 360	138 612	223 843	5 814
SCRANTON, PA													
31-33	Manufacturing	1	124	51	4 567	114 099	3 516	6 585	70 197	340 419	250 631	591 181	13 269
311	Food mfg	1	19	8	578	11 213	432	673	6 503	76 264	72 172	148 527	1 200
315	Apparel mfg	4	12	9	856	17 796	743	1 370	12 015	38 553	14 593	53 960	D
3152	Cut & sew apparel mfg	6	9	6	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	6	8	6	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	6	6	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	6	685	19 054	528	1 016	11 613	77 291	56 167	131 284	D
3261	Plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	18	7	995	27 073	739	1 291	14 946	61 252	24 818	87 407	D
SELINGSGROVE, PA													
31-33	Manufacturing	-	21	11	1 381	34 254	1 149	2 128	24 244	55 831	88 638	143 320	2 801
SELLERSVILLE, PA													
31-33	Manufacturing	-	16	9	1 605	58 911	1 073	1 964	38 255	52 255	254 381	311 606	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHALER TOWNSHIP, PA													
31-33	Manufacturing	-	27	8	895	32 862	637	1 317	20 268	69 616	59 846	129 748	3 519
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
SHARON, PA													
31-33	Manufacturing	-	24	9	1 324	46 981	1 081	2 355	36 644	132 316	262 657	388 521	24 747
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	f	D	D	D	D	D	D	D	D
SHARPSVILLE, PA													
31-33	Manufacturing	8	10	6	586	15 760	351	635	8 768	46 961	122 042	169 567	3 712
SHILLINGTON, PA													
31-33	Manufacturing	1	10	7	919	27 783	637	1 120	14 926	69 024	31 618	97 834	6 118
SHIPPENSBURG, PA *													
31-33	Manufacturing	-	21	10	1 791	49 184	1 320	2 776	34 854	145 164	218 317	361 588	8 822
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
SHREWSBURY, PA													
31-33	Manufacturing	-	5	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
SOMERSET, PA													
31-33	Manufacturing	-	24	9	1 054	29 058	864	1 931	21 476	78 890	61 600	141 876	4 876
333	Machinery mfg	-	5	1	f	D	D	D	D	D	D	D	D
SOMERSET TOWNSHIP, PA													
31-33	Manufacturing	1	22	11	1 432	33 805	1 143	2 010	22 954	78 026	101 015	177 201	3 064
336	Transportation equipment mfg	2	5	4	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	4	4	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	2	4	4	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	1	1	f	D	D	D	D	D	D	D	D
SOUTH WHITEHALL TOWNSHIP, PA													
31-33	Manufacturing	-	22	7	822	27 361	671	1 288	17 276	109 849	119 784	228 908	11 419
SOUTH WILLIAMSPORT, PA													
31-33	Manufacturing	-	14	6	639	17 511	489	1 062	12 510	34 795	32 817	72 485	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPRING TOWNSHIP, PA												
	Manufacturing	-	12	6	591	22 856	429	773	12 277	34 446	64 371	98 376	D
	SPRING CITY, PA												
31-33	Manufacturing	7	14	8	681	20 740	531	1 161	12 110	115 466	54 180	167 543	3 597
	SPRINGDALE, PA												
31-33	Manufacturing	-	7	4	557	23 679	366	764	13 000	105 292	120 989	226 107	D
	SPRINGETTSBURY TOWNSHIP, PA												
31-33	Manufacturing	-	48	28	5 581	224 036	4 323	8 117	160 538	643 047	588 025	1 235 564	38 721
323	Printing & related support activities	-	8	3	526	16 550	415	795	12 120	55 196	21 634	75 454	2 420
3231	Printing & related support activities	-	8	3	526	16 550	415	795	12 120	55 196	21 634	75 454	2 420
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
	SPRING GARDEN TOWNSHIP, PA												
31-33	Manufacturing	-	29	15	1 642	50 823	1 262	2 476	33 444	148 136	122 670	269 581	12 743
333	Machinery mfg	-	6	3	526	19 744	364	766	11 917	46 381	49 032	94 582	1 102
	STATE COLLEGE, PA												
31-33	Manufacturing	-	38	19	2 140	65 962	1 371	2 566	34 441	172 952	77 874	251 773	D
334	Computer & electronic product mfg	1	11	7	933	28 994	521	912	11 122	50 157	36 213	87 022	1 836
3342	Communications equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
	STEELTON, PA												
31-33	Manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
	SUNBURY, PA												
31-33	Manufacturing	-	20	10	1 614	47 407	932	1 806	24 605	125 470	103 088	230 551	4 717
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	2	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	2	1	f	D	D	D	D	D	D	D	D
	SWATARA TOWNSHIP, PA												
31-33	Manufacturing	6	25	5	517	15 817	396	717	9 847	84 204	36 769	121 046	2 244

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TAMAQUA, PA													
31-33	Manufacturing	-	14	8	1 715	51 307	1 212	2 588	31 553	167 160	90 854	267 149	27 729
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
TAYLOR, PA													
31-33	Manufacturing	-	4	4	526	15 737	416	859	10 134	30 714	22 503	53 357	D
TELFORD, PA *													
31-33	Manufacturing	-	43	14	1 946	71 935	1 157	2 416	33 299	148 986	173 967	319 217	7 238
334	Computer & electronic product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
THROOP, PA													
31-33	Manufacturing	-	7	3	f	D	D	D	D	D	D	D	1 653
TITUSVILLE, PA													
31-33	Manufacturing	1	31	12	736	19 059	604	1 295	14 225	50 508	50 377	99 527	5 659
TOWAMENCIN TOWNSHIP, PA													
31-33	Manufacturing	6	21	11	1 287	43 524	868	1 832	23 246	101 876	80 161	181 336	6 679
339	Miscellaneous mfg.....	7	5	4	895	28 447	592	1 223	14 148	55 088	36 986	92 813	D
3399	Other miscellaneous mfg ..	8	3	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	7	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg....	7	2	2	f	D	D	D	D	D	D	D	D
TOWANDA, PA													
31-33	Manufacturing	-	6	4	2 474	91 258	2 155	4 452	76 193	265 584	164 458	426 320	D
321	Wood product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	1	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying...	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
TYRONE, PA													
31-33	Manufacturing	-	14	6	852	26 843	652	1 366	17 693	98 925	90 027	191 404	9 842
UNION CITY, PA													
31-33	Manufacturing	-	9	7	1 020	23 342	841	1 608	16 751	40 754	36 434	76 040	1 808

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNIONTOWN, PA													
31-33	Manufacturing	1	30	12	1 404	42 466	912	1 555	21 043	125 513	125 366	251 200	7 956
334	Computer & electronic product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	-	1	1	f	D	D	D	D	D	D	D	D
UPPER DUBLIN TOWNSHIP, PA													
31-33	Manufacturing	1	26	12	1 255	49 562	649	1 266	23 143	205 042	87 418	282 622	5 013
UPPER GWYNEDD TOWNSHIP, PA													
31-33	Manufacturing	-	23	10	h	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	h	D	D	D	D	D	D	D	D
UPPER MACUNGIE TOWNSHIP, PA													
31-33	Manufacturing	-	34	17	2 025	68 067	1 600	2 951	45 384	270 209	341 312	611 761	26 963
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	5	5	589	19 606	502	986	13 130	24 941	35 332	54 167	3 761
3261	Plastics product mfg	3	5	5	589	19 606	502	986	13 130	24 941	35 332	54 167	3 761
UPPER MERION TOWNSHIP, PA													
31-33	Manufacturing	3	67	26	5 704	276 902	3 159	6 868	134 796	743 921	629 150	1 362 676	77 774
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	9	11	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	2	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	g	D	D	D	D	D	D	D	D
UPPER MORELAND TOWNSHIP, PA													
31-33	Manufacturing	-	75	23	4 129	123 404	2 114	4 301	50 885	332 660	381 179	709 986	27 247
333	Machinery mfg	-	10	4	h	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	h	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
UPPER PROVIDENCE TOWNSHIP, PA													
31-33	Manufacturing	1	20	6	611	22 291	409	834	13 574	44 143	31 862	77 088	3 032

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UPPER SAUCON TOWNSHIP, PA													
31-33	Manufacturing	-	14	5	1 304	62 332	478	989	12 992	127 070	127 339	254 465	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
UPPER SOUTHAMPTON TOWNSHIP, PA													
31-33	Manufacturing	2	46	17	1 446	47 051	1 032	2 119	26 846	111 263	105 226	215 115	5 824
UWCHLAN TOWNSHIP, PA													
31-33	Manufacturing	2	17	7	815	32 431	482	1 117	15 536	98 783	71 533	170 214	5 342
VERONA, PA													
31-33	Manufacturing	-	12	5	577	14 978	452	838	8 309	51 296	41 365	91 062	2 405
WARMINSTER TOWNSHIP, PA													
31-33	Manufacturing	2	78	35	3 467	143 893	1 944	3 969	64 764	281 222	402 494	707 971	19 938
333	Machinery mfg	-	13	5	736	38 755	281	623	12 430	46 846	145 664	213 416	5 092
3339	Other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	4 228
33399	All other general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	4 228
333999	All other miscellaneous general-purpose machinery mfg	-	4	2	f	D	D	D	D	D	D	D	4 228
334	Computer & electronic product mfg	7	7	4	807	35 283	342	754	14 096	48 286	73 439	125 539	D
3345	Navigational, measuring, medical, & control instruments mfg	9	4	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	9	4	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	9	2	2	f	D	D	D	D	D	D	D	D
WARREN, PA													
31-33	Manufacturing	-	41	21	3 073	99 138	2 012	4 028	55 327	267 826	644 123	900 541	21 846
324	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
32619	Other plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
326199	All other plastics product mfg	-	4	4	758	27 148	498	867	15 113	58 653	43 479	101 653	5 428
WARRINGTON TOWNSHIP, PA													
31-33	Manufacturing	1	37	13	1 329	45 836	831	1 481	22 075	84 285	44 320	130 624	7 561
WARWICK TOWNSHIP, PA													
31-33	Manufacturing	-	27	5	g	D	D	D	D	D	D	D	21 669
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WASHINGTON, PA													
31-33	Manufacturing	-	52	17	2 716	112 678	1 999	4 280	79 520	384 068	564 942	943 014	20 459
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	3	523	15 752	374	776	9 570	32 984	26 741	60 385	3 373
WAYNESBORO, PA													
31-33	Manufacturing	1	23	13	2 479	90 420	1 532	3 272	46 562	130 961	228 797	356 659	11 023
323	Printing & related support activities	9	4	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	4	1	f	D	D	D	D	D	D	D	D
32311	Printing	9	4	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	5	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	4	4	f	D	D	D	D	D	D	D	2 107
33351	Metalworking machinery mfg	-	4	4	f	D	D	D	D	D	D	D	2 107
WELLSBORO, PA													
31-33	Manufacturing	-	12	5	793	18 907	694	1 356	14 623	85 114	46 005	129 917	D
WEST CHESTER, PA													
31-33	Manufacturing	3	46	13	1 796	77 450	1 241	2 543	42 058	221 308	176 753	402 028	13 366
325	Chemical mfg	4	5	4	812	45 699	566	1 214	22 355	110 047	84 377	194 564	8 139
3254	Pharmaceutical & medicine mfg	5	4	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	5	4	4	f	D	D	D	D	D	D	D	D
WEST GOSHEN TOWNSHIP, PA													
31-33	Manufacturing	-	49	18	2 440	86 826	1 312	2 448	36 130	400 643	275 449	665 998	30 723
333	Machinery mfg	2	9	4	668	23 471	303	580	9 563	82 019	53 086	130 287	6 760
334	Computer & electronic product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
WEST HAZLETON, PA													
31-33	Manufacturing	3	13	10	1 294	33 214	1 025	2 269	22 848	107 741	99 252	205 424	8 192
313	Textile mills	9	4	4	557	13 127	451	1 152	9 710	38 886	23 973	60 814	D
WEST HEMPFIELD TOWNSHIP, PA													
31-33	Manufacturing	-	13	4	658	20 469	545	1 064	15 601	56 889	52 970	110 664	2 075

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST MANCHESTER TOWNSHIP, PA													
31-33	Manufacturing	-	34	13	3 125	114 191	1 966	3 607	61 086	369 434	269 041	638 760	12 335
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	1	1	g	D	D	D	D	D	D	D	D
WEST MIFFLIN, PA													
31-33	Manufacturing	-	21	7	2 375	120 912	1 170	2 554	59 090	327 381	203 254	374 047	20 021
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	g	D	D	D	D	D	D	D	D
WEST PITTSSTON, PA													
31-33	Manufacturing	-	12	3	539	13 154	310	605	4 995	22 243	58 163	79 469	3 208
WEST READING, PA													
31-33	Manufacturing	-	7	2	699	16 046	560	1 089	10 380	35 994	29 060	64 485	2 361
WEST WHITELAND TOWNSHIP, PA													
31-33	Manufacturing	2	64	23	1 996	77 189	1 159	2 348	35 957	175 746	141 811	316 478	13 906
WEST YORK, PA													
31-33	Manufacturing	1	14	7	555	14 916	456	896	9 962	37 929	35 197	72 992	2 216
WHITEHALL TOWNSHIP, PA													
31-33	Manufacturing	-	20	10	931	34 069	708	1 423	23 782	153 567	185 094	341 448	11 568
WHITEMARSH TOWNSHIP, PA													
31-33	Manufacturing	-	30	11	2 056	131 533	740	1 640	28 301	520 619	139 282	672 252	40 113
325	Chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
WHITPAIN TOWNSHIP, PA													
31-33	Manufacturing	-	23	9	969	41 494	586	1 144	20 913	91 655	77 704	168 738	8 213
WILKES-BARRE, PA													
31-33	Manufacturing	-	69	29	3 390	81 284	2 479	4 799	52 280	241 438	178 741	422 363	15 368
332	Fabricated metal product mfg	-	8	3	1 200	24 577	843	1 650	15 199	79 936	43 457	123 553	2 514
3326	Spring & wire product mfg .	-	2	2	g	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	2	2	g	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	2	2	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILLIAMSPORT, PA													
31-33	Manufacturing	-	72	37	6 023	182 695	4 605	8 748	110 613	587 735	708 917	1 284 279	23 541
315	Apparel mfg	-	7	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	7	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	212
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	823	32 428	436	625	11 193	51 205	53 300	100 279	857
334	Computer & electronic product mfg	-	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
WILSON, PA													
31-33	Manufacturing	-	7	3	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	f	D	D	D	D	D	D	D	D
WOMELSDORF, PA													
31-33	Manufacturing	-	6	4	1 018	29 498	815	1 534	18 827	76 580	60 989	129 711	4 118
WYOMISSING, PA													
31-33	Manufacturing	-	11	5	1 748	49 881	1 277	3 036	30 962	206 410	217 814	419 024	12 430
YORK, PA													
31-33	Manufacturing	-	123	62	9 253	332 266	6 618	14 204	191 842	1 257 244	670 805	1 923 960	78 292
311	Food mfg	-	7	4	883	20 735	692	1 737	14 638	46 273	68 854	115 407	5 858
3118	Bakeries & tortilla mfg	-	2	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	10	5	g	D	D	D	D	D	D	D	321
3152	Cut & sew apparel mfg	-	9	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	18	10	1 416	43 604	1 116	2 440	31 674	89 869	63 913	153 720	7 432
3231	Printing & related support activities	-	18	10	1 416	43 604	1 116	2 440	31 674	89 869	63 913	153 720	7 432
32311	Printing	-	14	9	1 317	40 352	1 033	2 277	29 033	84 704	63 525	148 166	D
323110	Commercial lithographic printing ..	-	9	7	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	11	1 023	35 074	747	1 311	22 035	56 200	41 800	97 614	2 563
3323	Architectural & structural metals mfg	-	4	3	526	21 830	340	509	12 484	25 598	22 269	47 796	904

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
YORK, PA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	—	14	11	2 385	133 836	1 766	3 815	69 430	747 365	267 508	1 015 582	35 789
3331	Agriculture, construction, & mining machinery mfg. . . .	—	2	2	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	4	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.	—	8	4	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	6	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	6	3	f	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg	—	2	2	f	D	D	D	D	D	D	D	D
YORK TOWNSHIP, PA													
31-33	Manufacturing	2	25	12	1 260	37 585	917	1 607	22 173	100 064	118 262	218 034	5 780
YOUNGWOOD, PA													
31-33	Manufacturing	—	10	4	547	18 489	382	717	11 628	S	S	98 644	3 384
ZELIENOPLE, PA													
31-33	Manufacturing	1	19	8	686	24 152	449	882	13 519	61 665	43 364	104 789	5 689

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
PENNSYLVANIA		PENNSYLVANIA—Con.	
Companies ¹	number.. 15 750	Quantity of electricity purchased for heat and power	1,000 kWh.. 34 325 064
All establishments	number.. 17 128	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 3 121 852
Establishments with 1 to 19 employees	number.. 10 771	Total value of shipments	\$1,000.. 172 193 216
Establishments with 20 to 99 employees	number.. 4 495	Value of resales	\$1,000.. 7 813 952
Establishments with 100 employees or more	number.. 1 862	Value added	\$1,000.. 86 212 087
All employees	number.. 826 521	Total inventories, beginning of year	\$1,000.. 20 324 457
Total compensation ²	\$1,000.. 34 924 520	Finished goods inventories, beginning of year	\$1,000.. 7 603 681
Annual payroll	\$1,000.. 27 641 293	Work-in-process inventories, beginning of year	\$1,000.. 6 198 723
Total fringe benefits	\$1,000.. 7 283 227	Materials and supplies inventories, beginning of year	\$1,000.. 6 522 053
Production workers, average for year	number.. 597 544	Total inventories, end of year	\$1,000.. 21 297 226
Production workers on March 12	number.. 593 614	Finished goods inventories, end of year	\$1,000.. 7 946 460
Production workers on May 12	number.. 596 466	Work-in-process inventories, end of year	\$1,000.. 6 622 062
Production workers on August 12	number.. 601 015	Materials and supplies inventories, end of year	\$1,000.. 6 728 704
Production workers on November 12	number.. 599 081	Gross book value of total assets at beginning of year	\$1,000.. 63 970 684
Production-worker hours	1,000.. 1 198 200	Total capital expenditures (new and used)	\$1,000.. 6 902 381
Production-worker wages	\$1,000.. 17 045 095	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 1 080 348
Total cost of materials	\$1,000.. 86 722 271	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 5 822 033
Cost of materials, parts, containers, etc., consumed	\$1,000.. 75 432 815	Total retirements ²	\$1,000.. 1 847 943
Cost of resales	\$1,000.. 5 686 053	Gross book value of total assets at end of year	\$1,000.. 69 039 635
Cost of fuels	\$1,000.. 1 341 579	Total depreciation during year ²	\$1,000.. 4 459 630
Cost of purchased electricity	\$1,000.. 1 915 732	Total rental payments ²	\$1,000.. 1 185 897
Cost of contract work	\$1,000.. 2 346 092	Buildings and other structures rental payments ²	\$1,000.. 554 232
		Machinery and equipment rental payments ²	\$1,000.. 631 512

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

PENNSYLVANIA

Ashland is in Columbia and Schuylkill Counties; it was erroneously reported as never being in Columbia County for the 1992 Economic Census.

Bethlehem is in Lehigh and Northampton Counties.

Ellwood City is in Beaver and Lawrence Counties.

Shippensburg is in Cumberland and Franklin Counties.

Telford is in Bucks and Montgomery Counties.

Trafford is in Allegheny and Westmoreland Counties.

Appendix E. Metropolitan Areas

PENNSYLVANIA

Allentown—Bethlehem—Easton, PA MSA

Carbon County, PA
Lehigh County, PA
Northampton County, PA

Altoona, PA MSA

Blair County, PA

Erie, PA MSA

Erie County, PA

Harrisburg—Lebanon—Carlisle, PA MSA

Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Lancaster, PA MSA

Lancaster County, PA

New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA

Bergen—Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport, CT PMSA
Fairfield County, CT (Part)
Bridgeport city, CT
Fairfield town, CT
Monroe town, CT
Shelton city, CT
Stratford town, CT
Trumbull town, CT

New York—Northern New Jersey—Long Island, NY—NJ—CT—PA CMSA—Con.

Bridgeport, CT PMSA—Con.
New Haven County, CT (Part)
Ansonia city, CT
Derby city, CT
Milford city, CT
Seymour town, CT
Danbury, CT PMSA
Fairfield County, CT (Part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown town, CT
Ridgefield town, CT
Litchfield County, CT (Part)
New Milford town, CT
Dutchess County, NY PMSA
Dutchess County, NY
Jersey City, NJ PMSA
Hudson County, NJ
Middlesex—Somerset—Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth—Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau—Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

New Haven—Meriden, CT PMSA

Middlesex County, CT (Part)

Clinton town, CT

New Haven County, CT (Part)

Branford town, CT

Cheshire town, CT

East Haven town, CT

Guilford town, CT

Hamden town, CT

Madison town, CT

Meriden city, CT

New Haven city, CT

North Branford town, CT

North Haven town, CT

Orange town, CT

Wallingford town, CT

West Haven city, CT

New York, NY PMSA

Bronx County, NY

Kings County, NY

New York County, NY

Putnam County, NY

Queens County, NY

Richmond County, NY

Rockland County, NY

Westchester County, NY

Newark, NJ PMSA

Essex County, NJ

Morris County, NJ

Sussex County, NJ

Union County, NJ

Warren County, NJ

Newburgh, NY—PA PMSA

Orange County, NY

Pike County, PA

**New York—Northern New Jersey—Long Island,
NY—NJ—CT—PA CMSA—Con.**

Stamford—Norwalk, CT PMSA

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

Stamford city, CT

Westport town, CT

Wilton town, CT

Trenton, NJ PMSA

Mercer County, NJ

Waterbury, CT PMSA

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

Newburgh, NY—PA PMSA

Orange County, NY

Pike County, PA

Philadelphia, PA—NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Salem County, NJ

Bucks County, PA

Chester County, PA

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

**Philadelphia—Wilmington—Atlantic City,
PA—NJ—DE—MD CMSA**

Atlantic—Cape May, NJ PMSA

Atlantic County, NJ

Cape May County, NJ

**Philadelphia—Wilmington—Atlantic City,
PA—NJ—DE—MD CMSA—Con.**

Philadelphia, PA—NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Salem County, NJ

Bucks County, PA

Chester County, PA

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

Vineland—Millville—Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington—Newark, DE—MD PMSA

New Castle County, DE

Cecil County, MD

Pittsburgh, PA MSA

Allegheny County, PA

Beaver County, PA

Pittsburgh, PA MSA—Con.

Butler County, PA

Fayette County, PA

Washington County, PA

Westmoreland County, PA

Reading, PA MSA

Berks County, PA

Scranton—Wilkes-Barre—Hazleton, PA MSA

Columbia County, PA

Lackawanna County, PA

Luzerne County, PA

Wyoming County, PA

Sharon, PA MSA

Mercer County, PA

State College, PA MSA

Centre County, PA

Williamsport, PA MSA

Lycoming County, PA

York, PA MSA

York County, PA

Rhode Island

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND													
31-33	Manufacturing	1	2 535	704	75 599	2 288 614	52 889	105 399	1 279 835	5 484 173	4 944 031	10 482 011	398 380
311	Food mfg	2	142	32	2 440	59 194	1 585	3 678	32 900	185 823	204 716	392 463	15 378
3112	Grain & oilseed milling	-	2	1	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	1	1	c	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	1	1	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	5	2	e	D	D	D	D	D	D	D	1 462
31134	Nonchocolate confectionery mfg	-	2	1	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	2	1	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	9	5	2	100	1 788	86	121	1 332	6 201	7 549	13 821	D
3115	Dairy product mfg	4	8	2	c	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	9	2	167	5 178	140	300	3 306	16 296	23 518	41 543	826
31161	Animal slaughtering & processing	1	9	2	167	5 178	140	300	3 306	16 296	23 518	41 543	826
311612	Meat processed from carcasses	1	9	2	167	5 178	140	300	3 306	16 296	23 518	41 543	826
3117	Seafood product preparation & packaging ..	3	9	3	160	5 018	115	222	2 696	13 792	20 295	34 047	3 013
31171	Seafood product preparation & packaging ..	3	9	3	160	5 018	115	222	2 696	13 792	20 295	34 047	3 013
311712	Fresh & frozen seafood processing ..	2	7	3	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	3	93	16	1 201	23 097	790	1 289	13 160	63 916	41 881	105 849	2 335
31181	Bread & bakery product mfg	3	86	16	1 184	22 728	777	1 270	12 895	61 872	40 124	102 047	2 239
311811	Retail bakeries	4	59	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	25	11	737	17 514	465	901	9 843	48 584	31 089	79 816	1 427
3119	Other food mfg	4	11	4	255	5 937	143	220	2 517	20 782	28 992	49 432	1 406
31192	Coffee & tea mfg	-	2	1	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	1	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	13	4	378	14 130	215	443	6 022	34 942	86 211	120 505	10 022
3121	Beverage mfg	1	13	4	378	14 130	215	443	6 022	34 942	86 211	120 505	10 022
31211	Soft drink & ice mfg	1	10	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	5	3	325	12 637	179	382	5 186	29 903	81 630	111 140	D
313	Textile mills	-	93	53	6 038	168 905	4 677	9 747	108 192	360 580	464 324	831 910	24 413
3131	Fiber, yarn, & thread mills .	2	13	7	537	13 473	445	984	8 526	26 135	38 747	64 115	2 770
31311	Fiber, yarn, & thread mills	2	13	7	537	13 473	445	984	8 526	26 135	38 747	64 115	2 770
313111	Yarn spinning mills ...	4	7	4	179	5 157	149	342	3 973	15 278	16 127	31 655	1 374
313112	Yarn texturing, throwing, & twisting mills	-	3	2	232	6 345	190	413	3 164	7 871	15 810	23 554	D
313113	Thread mills	3	3	1	126	1 971	106	229	1 389	2 986	6 810	8 906	D
3132	Fabric mills	-	46	28	3 605	96 080	2 894	5 904	62 905	172 962	278 833	455 950	13 204
31321	Broadwoven fabric mills .	-	11	6	1 009	28 390	842	1 818	19 283	44 961	74 229	123 205	1 887
313210	Broadwoven fabric mills	-	11	6	1 009	28 390	842	1 818	19 283	44 961	74 229	123 205	1 887
31322	Narrow fabric mills & schiffli machine embroidery	-	19	12	1 397	31 051	1 185	2 365	21 728	52 926	52 653	105 740	2 142
313221	Narrow fabric mills	-	17	12	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	4	3	414	13 435	215	433	4 729	18 437	72 023	89 846	4 805
313230	Nonwoven fabric mills .	-	4	3	414	13 435	215	433	4 729	18 437	72 023	89 846	4 805
31324	Knit fabric mills	-	12	7	785	23 204	652	1 288	17 165	56 638	79 928	137 159	4 370
313249	Other knit fabric & lace mills	-	12	7	785	23 204	652	1 288	17 165	56 638	79 928	137 159	4 370
3133	Textile & fabric finishing & fabric coating mills	1	34	18	1 896	59 352	1 338	2 859	36 761	161 483	146 744	311 845	8 439
31331	Textile & fabric finishing mills	1	29	15	1 732	54 401	1 219	2 655	33 917	150 662	131 565	285 859	7 598
313311	Broadwoven fabric finishing mills	2	21	10	1 411	44 693	1 004	2 226	28 314	84 655	58 650	146 922	4 778
313312	Textile & fabric finishing mills	-	8	5	321	9 708	215	429	5 603	66 007	72 915	138 937	2 820
31332	Fabric coating mills	-	5	3	164	4 951	119	204	2 844	10 821	15 179	25 986	841
313320	Fabric coating mills ...	-	5	3	164	4 951	119	204	2 844	10 821	15 179	25 986	841

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	2	54	12	1 331	27 271	1 120	2 043	18 068	59 171	48 539	107 264	3 420
3141	Textile furnishings mills	2	19	5	582	10 205	531	928	7 899	19 043	25 932	45 692	928
31411	Carpet & rug mills	2	7	4	436	7 535	399	701	5 825	12 618	19 614	32 961	752
314110	Carpet & rug mills	2	7	4	436	7 535	399	701	5 825	12 618	19 614	32 961	752
31412	Curtain & linen mills	1	12	1	146	2 670	132	227	2 074	6 425	6 318	12 731	176
314121	Curtain & drapery mills	—	9	1	103	1 517	95	152	1 240	4 433	4 076	8 467	26
3149	Other textile product mills	1	35	7	749	17 066	589	1 115	10 169	40 128	22 607	61 572	2 492
31491	Textile bag & canvas mills	5	16	2	107	2 156	83	124	1 318	3 431	3 056	6 465	262
31499	All other textile product mills	1	19	5	642	14 910	506	991	8 851	36 697	19 551	55 107	2 230
314991	Rope, cordage, & twine mills	1	5	2	122	3 260	87	167	1 800	6 659	3 154	9 732	339
314999	All other miscellaneous textile product mills	1	14	3	520	11 650	419	824	7 051	30 038	16 397	45 375	1 891
315	Apparel mfg	—	23	7	468	10 515	323	557	4 906	24 999	18 700	43 042	D
3152	Cut & sew apparel mfg	—	13	4	273	6 461	201	341	3 078	15 049	11 064	26 059	D
31522	Men's & boys' cut & sew apparel mfg	—	3	2	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	9	3	c	D	D	D	D	D	D	D	257
31599	Apparel accessories & other apparel mfg	1	9	3	c	D	D	D	D	D	D	D	257
315999	Other apparel accessories & other apparel mfg	1	8	3	c	D	D	D	D	D	D	D	257
316	Leather & allied product mfg	1	14	5	343	6 854	219	408	4 134	21 306	11 340	32 775	D
3169	Other leather & allied product mfg	1	14	5	343	6 854	219	408	4 134	21 306	11 340	32 775	D
31699	Other leather & allied product mfg	1	14	5	343	6 854	219	408	4 134	21 306	11 340	32 775	D
316993	Personal leather good (except women's handbag & purse) mfg	—	7	3	225	4 399	134	260	2 824	15 777	7 611	23 519	D
321	Wood product mfg	1	47	8	526	13 398	434	852	9 770	28 558	72 553	101 319	1 736
3219	Other wood product mfg	1	36	6	402	9 873	338	656	7 637	18 443	18 226	36 711	1 253
32191	Millwork	2	15	1	112	3 102	92	198	2 333	5 106	6 232	11 320	344
32192	Wood container & pallet mfg	—	9	4	170	4 080	149	275	3 295	6 825	5 650	12 504	536
321920	Wood container & pallet mfg	—	9	4	170	4 080	149	275	3 295	6 825	5 650	12 504	536
32199	All other wood product mfg	2	12	1	120	2 691	97	183	2 009	6 512	6 344	12 887	373
322	Paper mfg	2	42	28	1 955	63 417	1 448	2 893	39 359	156 638	144 683	302 847	9 003
3222	Converted paper product mfg	2	42	28	1 955	63 417	1 448	2 893	39 359	156 638	144 683	302 847	9 003
32221	Paperboard container mfg	3	26	17	1 245	38 197	944	1 874	24 633	81 523	77 874	158 146	5 858
322211	Corrugated & solid fiber box mfg	1	8	5	291	9 972	191	392	5 021	20 911	29 471	50 360	1 870
322212	Folding paperboard box mfg	2	7	6	538	19 533	412	870	13 564	38 774	28 379	66 340	2 114
322213	Setup paperboard box mfg	8	8	5	302	6 154	246	420	4 132	14 905	9 647	24 180	1 466
322214	Fiber can, tube, drum, & similar products mfg	9	3	1	114	2 538	95	192	1 916	6 933	10 377	17 266	408
32222	Paper bag & coated & treated paper mfg	—	11	7	584	22 566	413	874	13 192	67 991	63 221	133 757	2 568
322222	Coated & laminated paper mfg	—	10	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	225	41	3 300	103 248	2 274	4 239	62 104	225 635	151 817	378 421	19 978
3231	Printing & related support activities	4	225	41	3 300	103 248	2 274	4 239	62 104	225 635	151 817	378 421	19 978
32311	Printing	4	204	37	3 118	97 688	2 145	3 994	57 941	214 871	148 482	364 512	19 467
323110	Commercial lithographic printing	5	88	20	1 496	49 507	1 035	1 917	28 813	102 781	69 514	173 201	9 912
323111	Commercial gravure printing	3	5	2	198	6 284	148	367	5 044	20 785	3 778	24 546	D
323112	Commercial flexographic printing	—	8	2	198	5 592	115	214	3 000	10 993	6 508	17 551	978
323113	Commercial screen printing	1	24	6	423	12 191	282	552	6 528	29 054	33 481	62 452	1 205
323114	Quick printing	4	49	—	215	4 823	156	213	3 071	9 147	5 551	14 678	618
323117	Book printing	1	4	2	c	D	D	D	D	D	D	D	D
323119	Other commercial printing	8	20	4	264	8 523	165	296	3 824	19 808	10 250	30 242	794
32312	Support activities for printing	2	21	4	182	5 560	129	245	4 163	10 764	3 335	13 909	511
323122	Prepress services	1	12	3	126	4 440	93	175	3 142	8 896	2 796	11 555	458

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	1	68	20	2 700	124 564	1 601	3 478	54 276	299 858	310 533	641 965	21 454
3251	Basic chemical mfg	—	10	5	599	33 697	295	852	14 542	89 065	112 372	224 334	8 001
32513	Dye & pigment mfg	—	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	2	2	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	2	1	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	1	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	5	3	215	9 596	155	300	6 697	35 542	13 253	51 385	2 251
32541	Pharmaceutical & medicine mfg	1	5	3	215	9 596	155	300	6 697	35 542	13 253	51 385	2 251
325414	Biological product (except diagnostic) mfg	—	1	1	c	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	11	2	c	D	D	D	D	D	D	D	901
32551	Paint & coating mfg	1	8	1	125	8 120	35	68	937	12 984	13 263	26 367	862
325510	Paint & coating mfg ...	1	8	1	125	8 120	35	68	937	12 984	13 263	26 367	862
3256	Soap, cleaning compound, & toilet preparation mfg ..	9	10	1	e	D	D	D	D	D	D	D	3 938
32561	Soap & cleaning compound mfg	9	9	1	435	14 072	311	728	8 390	28 788	20 021	49 450	D
325611	Soap & other detergent mfg	9	3	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	24	7	1 176	53 766	714	1 375	21 766	116 695	130 644	252 518	5 471
32599	All other chemical product & preparation mfg	—	23	7	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ...	—	10	4	746	34 826	390	842	12 005	59 072	64 550	127 988	2 819
325992	Photographic film, paper, plate, & chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	—	11	2	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	110	54	5 458	166 164	3 998	7 886	103 697	441 858	338 525	776 849	76 681
3261	Plastics product mfg	1	99	52	5 178	158 791	3 775	7 521	98 096	425 684	327 082	748 679	76 200
32611	Unsupported plastics film, sheet, & bag mfg ..	—	13	6	1 092	41 423	796	1 613	26 918	171 803	150 595	318 924	D
326112	Unsupported plastics packaging film & sheet mfg	—	1	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	9	4	f	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	—	5	4	160	5 306	102	198	2 719	11 058	6 284	17 241	231
326140	Polystyrene foam product mfg	—	5	4	160	5 306	102	198	2 719	11 058	6 284	17 241	231
32619	Other plastics product mfg	1	69	40	3 823	109 000	2 808	5 567	66 834	237 104	164 818	401 980	D
326199	All other plastics product mfg	1	69	40	3 823	109 000	2 808	5 567	66 834	237 104	164 818	401 980	D
3262	Rubber product mfg	1	11	2	280	7 373	223	365	5 601	16 174	11 443	28 170	481
32629	Other rubber product mfg	1	10	2	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	1	8	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	51	8	1 122	37 545	880	1 810	27 838	103 657	59 546	162 365	7 109
3272	Glass & glass product mfg ..	1	16	4	722	24 378	611	1 229	19 218	70 169	23 698	93 351	4 701
32721	Glass & glass product mfg	1	16	4	722	24 378	611	1 229	19 218	70 169	23 698	93 351	4 701
327212	Other pressed & blown glass & glassware mfg	—	4	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	7	12	3	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	18	2	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	1	9	1	129	4 755	101	219	3 608	10 716	16 024	26 762	1 052
327320	Ready-mix concrete mfg	1	9	1	129	4 755	101	219	3 608	10 716	16 024	26 762	1 052
3279	Other nonmetallic mineral product mfg	1	9	2	169	4 804	98	226	2 930	14 333	14 178	28 352	580

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	87	26	3 207	97 367	2 763	6 123	78 339	170 746	366 134	543 315	16 591
3312	Steel product mfg from purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	3	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	1	28	13	1 118	36 519	825	1 700	24 529	54 390	218 922	280 257	8 061
33142	Copper rolling, drawing, extruding, & alloying	—	6	4	272	10 591	193	390	6 101	28 239	39 672	67 027	1 482
331421	Copper rolling, drawing, & extruding	—	4	2	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	1	17	8	804	24 542	602	1 250	17 618	20 305	168 888	197 044	6 006
331491	Other nonferrous metal rolling, drawing, & extruding	1	11	6	722	20 833	566	1 176	15 804	13 350	145 327	168 166	5 875
3315	Foundries	2	54	10	627	17 599	514	1 019	12 211	33 655	22 938	56 365	D
33151	Ferrous metal foundries	1	8	3	110	3 751	89	201	2 685	6 659	2 286	8 888	D
33152	Nonferrous metal foundries	2	46	7	517	13 848	425	818	9 526	26 996	20 652	47 477	1 135
331522	Nonferrous (except aluminum) die-casting foundries	1	11	2	193	5 730	157	318	3 628	11 934	10 562	22 102	359
331525	Copper foundries (except die-casting)	—	7	1	106	2 535	87	185	1 837	5 156	1 249	6 303	D
331528	Other nonferrous foundries (except die-casting)	3	20	4	161	4 305	132	238	3 042	6 875	6 682	13 888	209
332	Fabricated metal product mfg	1	440	114	10 600	315 898	7 618	14 544	196 531	560 088	483 849	1 035 317	41 869
3321	Forging & stamping	—	45	17	1 029	35 311	767	1 625	22 091	82 701	68 776	151 643	7 176
33211	Forging & stamping	—	45	17	1 029	35 311	767	1 625	22 091	82 701	68 776	151 643	7 176
332116	Metal stamping	—	39	16	912	31 605	688	1 471	19 489	75 740	62 233	138 055	6 595
3322	Cutlery & handtool mfg	1	17	7	818	29 635	425	1 068	16 418	53 746	24 507	78 297	4 202
33221	Cutlery & handtool mfg	1	17	7	818	29 635	425	1 068	16 418	53 746	24 507	78 297	4 202
332212	Hand & edge tool mfg	—	11	4	682	25 494	322	892	13 718	45 128	20 025	65 244	2 962
3323	Architectural & structural metals mfg	—	35	9	1 756	62 099	1 249	2 643	39 908	78 290	149 581	223 314	4 767
33231	Plate work & fabricated structural product mfg	1	15	6	1 268	46 015	927	1 991	31 094	46 490	106 761	150 962	3 635
332312	Fabricated structural metal mfg	1	14	5	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	20	3	488	16 084	322	652	8 814	31 800	42 820	72 352	1 132
332321	Metal window & door mfg	1	7	2	c	D	D	D	D	D	D	D	583
332322	Sheet metal work mfg	—	11	1	303	11 266	197	403	6 018	23 816	26 904	49 645	D
3324	Boiler, tank, & shipping container mfg	—	10	4	593	22 200	422	485	12 633	33 057	42 394	72 393	2 238
33242	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	1	10	2	226	7 134	183	368	5 410	17 317	8 214	25 296	196
33251	Hardware mfg	1	10	2	226	7 134	183	368	5 410	17 317	8 214	25 296	196
332510	Hardware mfg	1	10	2	226	7 134	183	368	5 410	17 317	8 214	25 296	196
3326	Spring & wire product mfg	2	16	5	222	6 368	134	254	3 066	12 893	15 728	29 057	665
33261	Spring & wire product mfg	2	16	5	222	6 368	134	254	3 066	12 893	15 728	29 057	665
332618	Other fabricated wire product mfg	2	15	5	c	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	139	23	1 680	51 338	1 297	2 265	34 143	95 206	49 373	143 910	10 453
33271	Machine shops	2	95	10	904	28 245	690	1 160	18 589	52 062	23 522	74 501	5 928
332710	Machine shops	2	95	10	904	28 245	690	1 160	18 589	52 062	23 522	74 501	5 928
33272	Turned product & screw, nut, & bolt mfg	4	44	13	776	23 093	607	1 105	15 554	43 144	25 851	69 409	4 525
332721	Precision turned product mfg	2	27	4	295	8 027	244	419	5 825	16 575	6 656	23 172	1 277
332722	Bolt, nut, screw, rivet, & washer mfg	5	17	9	481	15 066	363	686	9 729	26 569	19 195	46 237	3 248

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities .	3	125	30	2 431	58 490	1 955	3 646	37 578	102 791	51 304	154 472	6 647
33281	Coating, engraving, heat treating, & allied activities	3	125	30	2 431	58 490	1 955	3 646	37 578	102 791	51 304	154 472	6 647
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	28	9	772	17 412	618	1 118	10 984	31 773	14 014	45 833	3 475
332813	Electroplating, plating, polishing, anodizing, & coloring	3	91	21	1 619	39 809	1 308	2 472	25 757	68 499	36 595	105 425	3 012
3329	Other fabricated metal product mfg	1	43	17	1 845	43 323	1 186	2 190	25 284	84 087	73 972	156 935	5 525
33291	Metal valve mfg	—	6	4	124	4 446	83	148	2 519	14 684	8 316	22 878	412
33299	All other fabricated metal product mfg	1	37	13	1 721	38 877	1 103	2 042	22 765	69 403	65 656	134 057	5 113
332999	All other miscellaneous fabricated metal product mfg	1	23	11	1 582	34 402	1 026	1 883	20 613	62 654	60 412	122 663	4 661
333	Machinery mfg	1	176	38	3 241	119 900	2 095	4 024	63 159	259 169	162 785	417 042	10 618
3332	Industrial machinery mfg . .	1	35	10	594	23 422	334	706	11 633	44 162	42 419	86 324	2 186
33322	Plastics & rubber industry machinery mfg	—	3	1	c	D	D	D	D	D	D	D	160
333220	Plastics & rubber industry machinery mfg	—	3	1	c	D	D	D	D	D	D	D	160
33329	Other industrial machinery mfg	1	32	9	e	D	D	D	D	D	D	D	2 026
333292	Textile machinery mfg .	2	10	2	115	3 956	78	134	1 932	6 760	4 214	10 780	659
333298	All other industrial machinery mfg	2	16	4	204	7 272	92	160	2 859	11 769	14 199	25 647	795
3333	Commercial & service industry machinery mfg . .	—	7	3	c	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	7	3	c	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	5	2	102	3 124	52	103	1 259	4 479	8 478	13 004	245
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	8	1	126	3 508	82	160	1 935	12 986	6 714	20 336	734
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	2	8	1	126	3 508	82	160	1 935	12 986	6 714	20 336	734
333414	Heating equipment (except warm air furnaces) mfg	2	4	1	113	3 178	75	148	1 811	12 387	6 199	19 215	721
3335	Metalworking machinery mfg	2	97	15	1 292	44 231	985	1 815	29 613	85 511	37 661	122 605	4 440
33351	Metalworking machinery mfg	2	97	15	1 292	44 231	985	1 815	29 613	85 511	37 661	122 605	4 440
333511	Industrial mold mfg . . .	1	16	3	188	6 661	146	261	4 694	12 149	4 405	16 535	1 201
333512	Machine tool (metal cutting types) mfg . . .	4	5	2	c	D	D	D	D	D	D	D	318
333514	Special die & tool, die set, jig, & fixture mfg .	2	47	3	435	13 427	341	586	9 785	25 840	7 951	33 388	1 533
333515	Cutting tool & machine tool accessory mfg . .	1	23	5	331	11 532	262	521	7 110	19 944	6 592	26 303	1 019
333518	Other metalworking machinery mfg	1	5	2	213	7 513	156	276	5 263	18 099	10 497	29 175	369
3339	Other general-purpose machinery mfg	—	27	7	1 013	40 789	566	1 101	16 869	102 206	61 632	159 536	2 646
33391	Pump & compressor mfg	—	2	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	2	5	1	c	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	2	1	c	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	20	5	484	21 866	243	422	6 728	58 181	16 221	73 972	D
333994	Industrial process furnace & oven mfg . .	—	4	2	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	15	3	312	15 918	171	276	4 242	47 847	9 420	56 588	821

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	78	39	7 359	262 364	3 791	7 198	88 967	646 995	494 322	1 153 957	45 172
3341	Computer & peripheral equipment mfg	1	6	4	914	32 507	441	889	11 165	148 692	154 344	305 311	15 554
33411	Computer & peripheral equipment mfg	1	6	4	914	32 507	441	889	11 165	148 692	154 344	305 311	15 554
334111	Electronic computer mfg	9	1	1	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	6	2	1 430	43 744	953	1 918	20 826	83 165	71 275	159 223	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	26	14	2 054	60 800	1 304	2 116	23 277	149 116	71 507	220 931	15 154
33441	Semiconductor & other electronic component mfg	-	26	14	2 054	60 800	1 304	2 116	23 277	149 116	71 507	220 931	15 154
334413	Semiconductor & related device mfg ...	-	3	3	1 111	33 579	645	902	10 193	85 839	41 448	127 631	D
334415	Electronic resistor mfg	-	3	3	281	8 952	177	351	4 218	20 128	5 667	25 853	1 438
334417	Electronic connector mfg	4	7	3	c	D	D	D	D	D	D	D	624
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	c	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	4	9	4	260	6 710	181	310	3 152	14 136	8 503	22 580	997
3345	Navigational, measuring, medical, & control instruments mfg	-	40	19	2 961	125 313	1 093	2 275	33 699	266 022	197 196	468 492	D
33451	Navigational, measuring, medical, & control instruments mfg	-	40	19	2 961	125 313	1 093	2 275	33 699	266 022	197 196	468 492	D
334511	Search, detection, navigation, & guidance instrument mfg	-	4	3	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	4	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	7	7	4	146	5 635	66	118	1 821	11 419	6 979	18 658	314
334515	Electricity measuring & testing instrument mfg	-	6	6	330	11 018	171	362	4 185	22 579	14 655	37 364	928
334519	Other measuring & controlling device mfg	-	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	34	17	4 591	150 442	3 297	7 133	81 427	586 052	503 913	1 099 054	32 405
3351	Electric lighting equipment mfg	1	11	5	430	12 782	322	746	8 344	34 586	24 908	59 711	1 395
33512	Lighting fixture mfg	1	10	4	e	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	-	4	1	c	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	3	6	3	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	10	4	379	9 368	267	413	3 539	38 149	18 969	58 252	2 112
33531	Electrical equipment mfg	-	10	4	379	9 368	267	413	3 539	38 149	18 969	58 252	2 112
335314	Relay & industrial control mfg	-	10	4	379	9 368	267	413	3 539	38 149	18 969	58 252	2 112
3359	Other electrical equipment & component mfg	2	13	8	3 782	128 292	2 708	5 974	69 544	513 317	460 036	981 091	28 898
33592	Communication & energy wire & cable mfg	-	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
335929	Other communication & energy wire mfg ...	-	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
33593	Wiring device mfg	-	5	3	g	D	D	D	D	D	D	D	9 489
335931	Current-carrying wiring device mfg	-	5	3	g	D	D	D	D	D	D	D	9 489

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	RHODE ISLAND—Con.													
31-33	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg—Con.													
3359	Other electrical equipment & component mfg—Con.													
33599	All other electrical equipment & component mfg	9	5	2	g	D	D	D	D	D	D	D	D	
335991	Carbon & graphite product mfg	—	1	1	c	D	D	D	D	D	D	D	D	
335999	All other miscellaneous electrical equipment & component mfg	9	4	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	1	56	17		1 143	32 990	808	1 594	21 955	61 578	79 603	138 331	5 255
3363	Motor vehicle parts mfg	4	12	1	c		D	D	D	D	D	D	D	D
3366	Ship & boat building	1	33	14		918	27 024	660	1 335	18 811	46 089	43 735	89 059	4 172
33661	Ship & boat building	1	33	14		918	27 024	660	1 335	18 811	46 089	43 735	89 059	4 172
336611	Ship building & repairing	2	6	2		135	4 068	110	222	3 279	5 194	2 836	8 030	32
336612	Boat building	1	27	12		783	22 956	550	1 113	15 532	40 895	40 899	81 029	4 140
337	Furniture & related product mfg	4	68	21		1 915	49 634	1 407	2 807	29 049	104 328	95 814	201 889	8 510
3371	Household & institutional furniture & kitchen cabinet mfg	3	37	5	e		D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	3	22	4		269	6 140	219	450	4 169	11 596	7 228	18 818	D
337122	Nonupholstered wood household furniture mfg	2	11	2		127	2 642	107	229	1 809	4 406	3 107	7 518	242
3372	Office furniture (including fixtures) mfg	1	29	15		1 139	30 352	813	1 588	17 474	66 420	45 581	111 837	5 727
33721	Office furniture (including fixtures) mfg	1	29	15		1 139	30 352	813	1 588	17 474	66 420	45 581	111 837	5 727
337212	Custom architectural woodwork & millwork mfg	—	8	4	e		D	D	D	D	D	D	D	2 911
337215	Showcase, partition, shelving, & locker mfg	3	20	11		628	16 232	481	917	9 337	31 184	24 786	55 683	D
3379	Other furniture related product mfg	9	2	1	e		D	D	D	D	D	D	D	D
33792	Blind & shade mfg	9	2	1	e		D	D	D	D	D	D	D	D
337920	Blind & shade mfg	9	2	1	e		D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	711	160		17 476	464 517	12 330	23 933	248 948	1 150 368	842 601	1 996 033	47 391
3391	Medical equipment & supplies mfg	—	54	6		1 243	47 187	798	1 544	19 110	141 159	61 930	206 462	9 447
33911	Medical equipment & supplies mfg	—	54	6		1 243	47 187	798	1 544	19 110	141 159	61 930	206 462	9 447
339113	Surgical appliance & supplies mfg	—	9	3		747	32 310	438	913	11 274	65 008	38 838	109 938	D
339115	Ophthalmic goods mfg	—	4	1	e		D	D	D	D	D	D	D	D
339116	Dental laboratories	7	36	1	c		D	D	D	D	D	D	D	252
3399	Other miscellaneous mfg	2	657	154		16 233	417 330	11 532	22 389	229 838	1 009 209	780 671	1 789 571	37 944
33991	Jewelry & silverware mfg	2	536	122		12 464	304 494	8 871	17 326	167 392	741 305	630 608	1 373 232	22 329
339911	Jewelry (except costume) mfg	2	144	35		3 372	83 666	2 455	4 943	45 385	220 283	216 476	438 025	5 505
339912	Silverware & plated ware mfg	—	6	6		512	14 574	425	1 008	8 626	27 361	23 642	53 746	1 206
339913	Jewelers' material & lapidary work mfg	1	104	21		2 142	47 228	1 416	2 731	27 635	106 720	135 049	240 001	3 411
339914	Costume jewelry & novelty mfg	3	282	60		6 438	159 026	4 575	8 644	85 746	386 941	255 441	641 460	12 207
33993	Doll, toy, & game mfg	—	6	2		316	8 840	201	434	4 692	30 574	15 978	45 309	1 070
339932	Game, toy, & children's vehicle mfg	—	6	2		316	8 840	201	434	4 692	30 574	15 978	45 309	1 070
33994	Office supplies (except paper) mfg	—	9	5		1 152	39 585	880	1 653	23 887	103 560	45 023	148 224	7 723
339941	Pen & mechanical pencil mfg	—	5	5		1 128	39 020	866	1 619	23 452	102 152	44 167	145 933	7 682
33995	Sign mfg	4	32	10		809	19 048	553	958	9 862	47 343	31 126	78 086	1 985
339950	Sign mfg	4	32	10		809	19 048	553	958	9 862	47 343	31 126	78 086	1 985

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RHODE ISLAND—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	2	61	15	1 438	44 125	982	1 944	23 145	82 545	54 108	137 117	4 661
339991	Gasket, packing, & sealing device mfg...	—	4	3	e	D	D	D	D	D	D	D	D
339992	Musical instrument mfg	—	5	1	c	D	D	D	D	D	D	D	D
339993	Fastener, button, needle, & pin mfg.	1	14	4	241	6 314	181	390	3 675	15 398	15 807	30 914	521
339999	All other miscellaneous mfg	6	33	7	588	12 939	434	716	7 347	27 776	18 397	45 969	1 254

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW LONDON–NORWICH, CT–RI MSA												
	Manufacturing	—	336	95	24 297	1 175 932	10 906	22 911	343 471	2 225 497	1 421 230	3 666 659	239 832
	New London–Norwich, CT–RI MSA (CT Part)	1	290	80	22 772	1 127 397	9 749	20 541	310 382	2 108 059	1 314 210	3 438 210	233 138
	New London–Norwich, CT–RI MSA (RI Part)	—	46	15	1 525	48 535	1 157	2 370	33 089	117 438	107 020	228 449	6 694
311	Food mfg	6	25	2	372	9 810	221	441	5 212	20 861	76 167	96 469	D
313	Textile mills	—	14	10	1 118	34 612	873	1 832	24 665	114 165	110 915	228 273	6 810
3132	Fabric mills	—	9	5	578	19 676	465	996	15 349	46 913	67 945	117 760	D
31324	Knit fabric mills	—	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
313249	Other knit fabric & lace mills	—	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
3133	Textile & fabric finishing & fabric coating mills	—	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
31331	Textile & fabric finishing mills	—	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
313311	Broadwoven fabric finishing mills	—	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
322	Paper mfg	2	10	7	952	37 867	725	1 590	25 143	129 144	148 216	278 708	9 646
3221	Pulp, paper, & paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
32213	Paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
322130	Paperboard mills	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
3222	Converted paper product mfg	—	7	4	525	19 387	401	818	12 061	38 321	38 348	79 314	D
32222	Paper bag & coated & treated paper mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
3231	Printing & related support activities	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
32311	Printing	1	33	6	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	17	3	835	29 910	670	1 248	22 047	65 095	59 063	123 078	3 669
325	Chemical mfg	—	10	5	4 321	388 168	604	1 515	35 072	267 936	260 280	549 515	D
3254	Pharmaceutical & medicine mfg	—	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	—	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW LONDON—NORWICH, CT—RI MSA—Con. Manufacturing—Con.												
326	Plastics & rubber products mfg	-	17	9	638	21 605	469	1 060	13 186	59 975	50 324	110 243	4 079
3261	Plastics product mfg	1	12	6	348	11 464	264	630	7 541	30 143	24 006	53 754	1 795
3262	Rubber product mfg	-	5	3	290	10 141	205	430	5 645	29 832	26 318	56 489	2 284
32629	Other rubber product mfg	-	4	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	7	3	991	29 892	798	1 555	21 684	80 743	49 421	129 196	6 994
3314	Nonferrous metal (except aluminum) production & processing	-	2	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	-	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	-	4	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	2	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	47	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	8	3	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	5	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	28	11	1 202	57 207	569	1 286	23 242	150 750	93 128	238 379	3 438
3332	Industrial machinery mfg ..	1	7	4	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	6	5	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	12	3	506	13 718	377	625	7 577	54 002	52 285	105 317	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	2	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	14	10	1 322	40 425	965	1 939	18 475	117 374	79 004	196 114	4 407
3359	Other electrical equipment & component mfg	-	5	4	933	27 718	682	1 420	11 686	49 660	40 659	90 584	3 565
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	4	i	D	D	D	D	D	D	D	11 704
3364	Aerospace product & parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	3	2	i	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	2	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	3	2	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	35	9	710	19 497	531	1 072	11 560	49 573	21 138	69 340	D
3399	Other miscellaneous mfg ..	3	24	5	479	13 196	376	779	8 701	33 987	16 956	49 797	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA												
	Manufacturing	1	2 920	867	97 789	2 926 041	69 941	140 374	1 662 594	6 817 057	6 785 104	13 692 000	521 650
	Providence—Fall River—Warwick, RI—MA MSA (MA Part)	—	506	192	25 911	783 265	19 116	39 006	439 941	1 618 779	2 061 586	3 722 249	137 433
	Providence—Fall River—Warwick, RI—MA MSA (RI Part)	1	2 414	675	71 878	2 142 776	50 825	101 368	1 222 653	5 198 278	4 723 518	9 969 751	384 217
311	Food mfg	2	167	34	2 929	70 436	1 947	4 328	40 225	215 059	234 720	451 474	17 604
3118	Bakeries & tortilla mfg	2	111	17	1 566	32 435	1 036	1 740	18 442	89 566	63 543	153 164	4 055
31181	Bread & bakery product mfg	2	104	17	g	D	D	D	D	D	D	D	D
311811	Retail bakeries	4	73	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	1	29	12	g	D	D	D	D	D	D	D	D
3119	Other food mfg	4	13	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	14	4	364	13 782	202	420	5 727	34 362	86 417	120 175	D
3121	Beverage mfg	1	14	4	364	13 782	202	420	5 727	34 362	86 417	120 175	D
31211	Soft drink & ice mfg	1	11	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	7	3	e	D	D	D	D	D	D	D	D
313	Textile mills	—	106	60	9 124	276 653	7 182	16 507	179 785	544 322	601 944	1 149 644	50 759
3131	Fiber, yarn, & thread mills	3	14	7	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	3	14	7	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	49	29	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	12	8	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	12	8	h	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	—	23	13	g	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	—	21	13	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	3	2	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	3	2	e	D	D	D	D	D	D	D	D
31324	Knit fabric mills	1	11	6	e	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	1	11	6	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	43	24	3 124	104 890	2 235	5 155	65 446	251 582	191 207	443 943	D
31331	Textile & fabric finishing mills	—	38	21	2 960	99 939	2 116	4 951	62 602	240 761	176 028	417 957	D
313311	Broadwoven fabric finishing mills	1	27	14	h	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	11	7	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	65	23	h	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	6	25	12	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	2	5	4	e	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	2	5	4	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	7	20	8	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	8	16	6	863	14 740	714	1 372	11 227	37 997	37 098	73 614	D
3149	Other textile product mills	1	40	11	g	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	26	9	958	22 753	776	1 380	12 143	57 318	31 651	88 445	D
314999	All other miscellaneous textile product mills	1	20	7	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	64	38	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	49	32	3 235	61 404	2 901	5 274	47 640	100 289	90 517	187 444	D
31521	Cut & sew apparel contractors	2	27	16	1 148	17 546	1 060	1 658	14 571	25 377	3 291	28 659	572
315212	Women's, girls', & infants' cut & sew apparel contractors	2	25	15	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	9	8	1 448	31 026	1 285	2 560	23 349	53 075	70 358	120 221	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	3	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	3	4	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	5	8	5	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	8	3	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	1	13	5	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	1	13	5	e	D	D	D	D	D	D	D	D

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31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
316	Leather & allied product mfg .	2	17	10	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	2	17	10	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	2	17	10	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	9	5	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	50	9	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	1	38	7	e	D	D	D	D	D	D	D	D
322	Paper mfg	2	49	33	2 167	68 641	1 601	3 125	41 057	159 425	164 325	322 106	D
3222	Converted paper product mfg	2	49	33	2 167	68 641	1 601	3 125	41 057	159 425	164 325	322 106	D
32221	Paperboard container mfg	3	29	19	1 444	43 177	1 093	2 141	27 219	87 831	84 974	171 714	D
322211	Corrugated & solid fiber box mfg	1	9	5	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	2	7	6	538	19 533	412	870	13 564	38 774	28 379	66 340	2 114
322213	Setup paperboard box mfg	6	9	6	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	12	8	544	21 248	376	795	11 718	60 957	74 228	134 380	D
322222	Coated & laminated paper mfg	—	11	7	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	248	44	3 543	108 977	2 432	4 501	65 324	240 950	157 197	399 273	22 305
3231	Printing & related support activities	4	248	44	3 543	108 977	2 432	4 501	65 324	240 950	157 197	399 273	22 305
32311	Printing	4	225	40	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	5	100	22	1 671	54 860	1 150	2 125	31 718	112 258	76 661	189 714	D
323113	Commercial screen printing	1	26	5	355	9 129	258	480	5 490	28 070	27 302	55 412	D
323119	Other commercial printing	7	27	5	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	77	26	3 661	159 677	2 312	5 021	76 009	348 437	418 793	799 255	D
3251	Basic chemical mfg	1	13	7	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	3	3	382	25 623	158	532	11 254	896	58 992	92 104	D
325132	Synthetic organic dye & pigment mfg	—	3	3	382	25 623	158	532	11 254	896	58 992	92 104	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	3	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	1	1	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	1	13	3	253	12 441	117	208	2 931	25 041	29 473	55 858	D
3256	Soap, cleaning compound, & toilet preparation mfg	8	11	2	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	9	10	1	e	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	9	4	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	25	8	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	24	8	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	—	11	5	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	125	59	6 006	179 253	4 390	8 656	113 251	468 149	373 168	838 274	78 013
3261	Plastics product mfg	1	107	53	5 438	163 041	3 940	7 835	101 324	433 839	337 040	766 947	76 615
32611	Unsupported plastics film, sheet, & bag mfg	—	15	6	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	10	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	75	42	4 086	113 441	2 971	5 906	70 191	244 296	173 946	418 445	D
326199	All other plastics product mfg	1	75	42	4 086	113 441	2 971	5 906	70 191	244 296	173 946	418 445	D

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31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	2	18	6	568	16 212	450	821	11 927	34 310	36 128	71 327	1 398
32629	Other rubber product mfg	2	17	6	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	2	12	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	60	11	1 381	47 076	1 089	2 254	34 684	125 406	71 295	196 019	8 869
3272	Glass & glass product mfg	1	17	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	1	17	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	5	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	23	4	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	11	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	99	34	4 103	129 491	3 424	7 588	98 667	218 673	1 064 714	1 321 377	D
3312	Steel product mfg from purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	3	2	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	3	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	35	20	1 945	66 470	1 441	3 082	43 698	97 284	916 324	1 052 092	D
33142	Copper rolling, drawing, extruding, & alloying	—	6	4	272	10 591	193	390	6 101	28 239	39 672	67 027	1 482
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	24	15	1 631	54 493	1 218	2 632	36 787	63 199	866 290	968 879	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	14	9	g	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying	—	10	6	e	D	D	D	D	D	D	D	D
3315	Foundries	2	59	11	696	19 772	559	1 102	13 370	38 688	24 116	62 592	D
33152	Nonferrous metal foundries	2	49	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	513	140	12 452	373 047	9 011	17 463	234 499	676 840	557 146	1 224 555	52 699
3321	Forging & stamping	—	57	22	1 326	45 660	963	2 007	27 645	98 043	81 960	180 203	8 195
33211	Forging & stamping	—	57	22	1 326	45 660	963	2 007	27 645	98 043	81 960	180 203	8 195
332116	Metal stamping	—	51	21	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	1	25	9	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	1	25	9	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	17	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	45	12	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	1	17	6	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	1	16	5	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	28	6	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	—	15	3	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	9	4	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	3	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	10	3	e	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	21	5	e	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	1	21	5	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	1	20	5	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	161	28	g	D	D	D	D	D	D	D	12 490
33271	Machine shops	1	114	13	1 127	35 222	864	1 513	23 179	64 062	29 040	92 237	7 080
332710	Machine shops	1	114	13	1 127	35 222	864	1 513	23 179	64 062	29 040	92 237	7 080
33272	Turned product & screw, nut, & bolt mfg	3	47	15	f	D	D	D	D	D	D	D	5 410
332721	Precision turned product mfg	2	26	4	e	D	D	D	D	D	D	D	1 277
332722	Bolt, nut, screw, rivet, & washer mfg	3	21	11	f	D	D	D	D	D	D	D	4 133
3328	Coating, engraving, heat treating, & allied activities .	2	139	37	2 943	72 551	2 335	4 549	48 195	136 412	69 381	205 806	10 125
33281	Coating, engraving, heat treating, & allied activities	2	139	37	2 943	72 551	2 335	4 549	48 195	136 412	69 381	205 806	10 125
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	30	10	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	2	101	27	2 072	52 146	1 647	3 300	35 440	98 320	54 195	152 480	6 275
3329	Other fabricated metal product mfg	1	46	20	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	6	5	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	40	15	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	2	25	13	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	207	45	3 965	142 198	2 556	4 819	75 599	305 527	208 598	508 078	14 668
3332	Industrial machinery mfg ..	1	38	10	707	26 245	378	740	12 757	44 319	53 629	98 475	D
33322	Plastics & rubber industry machinery mfg	—	4	2	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	—	4	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	2	34	8	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	12	6	461	14 975	280	521	7 261	35 675	34 407	68 417	1 135
33331	Commercial & service industry machinery mfg	—	12	6	461	14 975	280	521	7 261	35 675	34 407	68 417	1 135
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	2	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	115	17	g	D	D	D	D	D	D	D	5 934
33351	Metalworking machinery mfg	2	115	17	g	D	D	D	D	D	D	D	5 934
333514	Special die & tool, die set, jig, & fixture mfg .	2	56	3	499	14 984	394	666	10 940	28 484	8 778	36 843	D
333515	Cutting tool & machine tool accessory mfg ..	2	28	6	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	28	7	1 042	41 795	587	1 140	17 765	103 631	62 151	161 487	2 740
33391	Pump & compressor mfg	—	2	1	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	21	5	513	22 872	264	461	7 624	59 606	16 740	75 923	D
333999	All other miscellaneous general-purpose machinery mfg	1	15	3	e	D	D	D	D	D	D	D	868

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE-FALL RIVER-WARWICK, RI-MA MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	1	90	42	6 732	208 830	4 085	7 881	90 730	549 412	448 069	1 009 027	44 685
3341	Computer & peripheral equipment mfg	1	7	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	1	7	4	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	5	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	37	20	2 762	78 928	1 916	3 369	35 405	174 806	104 012	280 289	D
33441	Semiconductor & other electronic component mfg	-	37	20	2 762	78 928	1 916	3 369	35 405	174 806	104 012	280 289	D
334413	Semiconductor & related device mfg ...	-	5	4	g	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	5	5	468	13 313	342	779	7 230	27 842	8 680	36 530	1 955
334418	Printed circuit assembly (electronic assembly) mfg	-	4	3	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	3	12	5	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	40	17	1 772	59 986	885	1 991	26 899	156 266	130 785	290 621	D
33451	Navigational, measuring, medical, & control instruments mfg	1	40	17	1 772	59 986	885	1 991	26 899	156 266	130 785	290 621	D
334512	Automatic environmental control mfg	-	4	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	7	6	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	6	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	45	24	5 589	181 544	4 024	8 643	101 460	694 693	598 451	1 299 082	36 045
3351	Electric lighting equipment mfg	-	16	8	1 141	32 817	840	1 745	21 671	121 224	88 157	206 309	D
33512	Lighting fixture mfg	-	14	7	g	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	8	5	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	13	6	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	13	6	e	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	11	5	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	16	10	h	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
335929	Other communication & energy wire mfg ...	-	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
33593	Wiring device mfg	-	8	5	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	8	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	9	5	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	9	4	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE—FALL RIVER—WARWICK, RI—MA MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	—	50	14	4 950	195 702	2 776	5 101	62 392	394 176	341 211	739 071	D
3363	Motor vehicle parts mfg ...	—	16	3	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	4	2	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	4	2	h	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	23	9	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	23	9	f	D	D	D	D	D	D	D	D
336612	Boat building	2	18	6	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	74	22	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	3	39	5	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	3	26	4	275	6 292	226	463	4 282	11 955	7 405	19 347	1 337
3372	Office furniture (including fixtures) mfg	1	32	16	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	32	16	g	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	9	5	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	22	11	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	9	3	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	9	2	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	9	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	796	194	21 452	569 890	15 208	29 733	309 013	1 426 466	1 066 941	2 510 766	D
3391	Medical equipment & supplies mfg	—	65	10	1 800	62 177	1 130	2 217	25 680	190 190	89 796	284 514	D
33911	Medical equipment & supplies mfg	—	65	10	1 800	62 177	1 130	2 217	25 680	190 190	89 796	284 514	D
339112	Surgical & medical instrument mfg	—	6	2	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	12	5	f	D	D	D	D	D	D	D	6 740
339115	Ophthalmic goods mfg	—	8	2	344	9 949	250	449	5 204	64 795	18 137	80 461	D
3399	Other miscellaneous mfg ..	2	731	184	19 652	507 713	14 078	27 516	283 333	1 236 276	977 145	2 226 252	46 901
33991	Jewelry & silverware mfg	2	594	148	15 568	385 126	11 211	22 148	216 222	941 660	813 674	1 768 692	D
339911	Jewelry (except costume) mfg	2	170	49	4 541	116 235	3 374	6 719	64 985	333 167	299 108	633 654	7 796
339912	Silverware & plated ware mfg	—	10	8	f	D	D	D	D	D	D	D	D
339913	Jewelers' material & lapidary work mfg ...	1	113	25	2 959	72 765	1 920	3 867	39 842	149 195	211 359	358 292	D
339914	Costume jewelry & novelty mfg	2	301	66	i	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	—	7	2	257	6 113	167	335	3 212	35 779	20 133	55 125	749
339932	Game, toy, & children's vehicle mfg	—	7	2	257	6 113	167	335	3 212	35 779	20 133	55 125	749
33994	Office supplies (except paper) mfg	1	10	6	g	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	—	6	6	g	D	D	D	D	D	D	D	D
33995	Sign mfg	4	40	12	f	D	D	D	D	D	D	D	D
339950	Sign mfg	4	40	12	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	2	65	16	1 610	50 808	1 073	2 089	25 649	91 690	56 222	149 101	5 103
339991	Gasket, packing, & sealing device mfg ...	—	5	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	36	9	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees; k–2,500 to 4,999 employees; m–5,000 to 9,999 employees; o–10,000 to 24,999 employees; q–25,000 to 49,999 employees; s–50,000 to 99,999 employees; u–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRISTOL COUNTY, RI													
31-33	Manufacturing	2	100	34	2 634	73 047	1 966	3 753	47 173	156 978	111 018	267 042	8 131
336	Transportation equipment mfg	1	11	7	531	14 780	385	755	11 300	25 969	26 419	51 991	D
3366	Ship & boat building	1	11	7	531	14 780	385	755	11 300	25 969	26 419	51 991	D
33661	Ship & boat building	1	11	7	531	14 780	385	755	11 300	25 969	26 419	51 991	D
339	Miscellaneous mfg	5	12	8	603	15 144	444	841	8 415	35 615	19 688	54 761	D
3399	Other miscellaneous mfg	6	10	7	f	D	D	D	D	D	D	D	D
KENT COUNTY, RI													
31-33	Manufacturing	1	411	106	12 933	417 125	8 912	17 679	227 974	1 060 949	1 021 178	2 115 312	76 752
313	Textile mills	2	17	9	587	14 787	482	968	9 120	21 114	28 411	49 491	D
325	Chemical mfg	2	12	6	1 021	54 561	577	1 482	25 608	61 054	110 242	207 894	D
331	Primary metal mfg	-	12	6	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	2	8	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	66	14	1 525	53 103	1 043	1 718	30 257	95 683	100 004	190 373	5 287
3324	Boiler, tank, & shipping container mfg	-	3	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	30	15	2 433	80 889	1 288	2 195	26 008	266 870	209 711	479 142	26 412
3341	Computer & peripheral equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	1	4	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	10	5	1 349	41 865	822	1 305	14 436	100 414	48 294	149 160	11 380
33441	Semiconductor & other electronic component mfg	-	10	5	1 349	41 865	822	1 305	14 436	100 414	48 294	149 160	11 380
334413	Semiconductor & related device mfg	-	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	8	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	3	2	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	3	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	9	12	3	547	14 325	391	792	8 176	27 973	44 973	74 845	D
339	Miscellaneous mfg	1	101	18	1 772	50 062	1 225	2 394	25 706	117 291	126 600	243 685	5 248
3399	Other miscellaneous mfg	1	93	18	1 732	48 763	1 198	2 359	25 088	114 085	125 001	238 837	D
33991	Jewelry & silverware mfg	2	73	14	1 291	32 267	946	1 845	17 343	80 917	105 586	185 553	3 608
339913	Jewelers' material & lapidary work mfg	-	11	4	f	D	D	D	D	D	D	D	D
NEWPORT COUNTY, RI													
31-33	Manufacturing	1	98	15	2 304	100 001	988	1 795	25 728	174 894	119 540	296 074	7 954
334	Computer & electronic product mfg	-	9	6	1 441	75 944	382	685	12 389	133 252	82 868	218 467	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PROVIDENCE COUNTY, RI												
31-33	Manufacturing	1	1 774	506	49 910	1 440 880	35 529	70 998	831 835	3 413 759	3 007 318	6 434 991	212 788
311	Food mfg	1	91	19	1 688	43 624	1 061	2 869	24 082	144 424	148 818	294 962	10 947
3118	Bakeries & tortilla mfg	3	64	13	931	20 064	615	1 052	11 225	55 370	35 595	91 114	1 943
31181	Bread & bakery product mfg	3	59	13	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	2	21	10	662	16 873	426	840	9 324	47 349	30 199	77 691	1 361
313	Textile mills	—	59	35	4 191	117 968	3 221	6 742	72 951	257 784	337 070	601 842	14 818
3132	Fabric mills	—	26	20	2 792	72 073	2 227	4 620	45 295	114 837	197 121	315 728	8 238
31321	Broadwoven fabric mills	—	6	6	992	28 004	827	1 790	18 971	44 168	73 205	121 383	D
313210	Broadwoven fabric mills	—	6	6	992	28 004	827	1 790	18 971	44 168	73 205	121 383	D
31322	Narrow fabric mills & schiffli machine embroidery	—	14	10	1 303	29 217	1 103	2 229	20 395	49 440	50 143	99 595	D
313221	Narrow fabric mills	—	13	10	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	24	11	1 195	40 195	822	1 719	23 254	126 688	121 107	250 763	D
31331	Textile & fabric finishing mills	—	21	9	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	—	16	6	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	30	9	896	18 484	739	1 340	11 830	42 452	32 745	74 110	2 595
3149	Other textile product mills	1	17	6	581	13 216	458	885	7 783	32 405	18 819	50 150	D
31499	All other textile product mills	1	14	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	12	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	2	33	22	1 449	44 316	1 089	2 117	26 688	112 143	112 407	223 589	6 317
3222	Converted paper product mfg	2	33	22	1 449	44 316	1 089	2 117	26 688	112 143	112 407	223 589	6 317
32221	Paperboard container mfg	4	21	14	963	27 992	750	1 467	17 679	62 445	64 484	126 472	D
323	Printing & related support activities	4	148	31	2 532	81 166	1 716	3 263	49 381	185 269	116 817	302 915	17 367
3231	Printing & related support activities	4	148	31	2 532	81 166	1 716	3 263	49 381	185 269	116 817	302 915	17 367
32311	Printing	4	131	27	2 361	75 831	1 596	3 029	45 374	174 944	113 589	289 551	16 881
323110	Commercial lithographic printing	6	63	14	1 131	37 676	754	1 370	21 579	82 573	52 032	135 131	8 452
325	Chemical mfg	1	48	12	1 595	67 295	967	1 897	27 344	231 249	191 770	418 055	12 616
3259	Other chemical product mfg	—	18	5	1 074	49 431	662	1 263	20 151	109 359	105 716	219 812	D
32599	All other chemical product & preparation mfg	—	17	5	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	—	7	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	84	41	4 017	111 364	2 940	5 758	69 744	239 698	186 412	427 293	12 888
3261	Plastics product mfg	1	76	40	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	53	31	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	53	31	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	32	6	926	32 333	726	1 532	24 079	89 931	49 606	138 583	6 340
3272	Glass & glass product mfg	—	13	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	13	2	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	3	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	72	20	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	19	8	f	D	D	D	D	D	D	D	D
3315	Foundries	2	49	10	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	2	43	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVIDENCE COUNTY, RI—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	2	324	94	7 499	207 036	5 446	10 481	130 451	402 216	269 494	670 787	31 587
3321	Forging & stamping	—	37	16	f	D	D	D	D	D	D	D	6 857
33211	Forging & stamping	—	37	16	f	D	D	D	D	D	D	D	6 857
332116	Metal stamping	—	34	15	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	1	13	6	745	27 107	379	983	15 382	49 964	22 650	72 627	4 000
33221	Cutlery & handtool mfg	1	13	6	745	27 107	379	983	15 382	49 964	22 650	72 627	4 000
332212	Hand & edge tool mfg	—	7	3	609	22 966	276	807	12 682	41 346	18 168	59 574	2 760
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	86	18	1 227	36 889	939	1 639	24 402	67 346	34 534	100 997	8 570
33271	Machine shops	2	52	7	589	17 726	445	719	11 579	31 958	12 919	44 093	4 819
332710	Machine shops	2	52	7	589	17 726	445	719	11 579	31 958	12 919	44 093	4 819
33272	Turned product & screw, nut, & bolt mfg	4	34	11	638	19 163	494	920	12 823	35 388	21 615	56 904	3 751
3328	Coating, engraving, heat treating, & allied activities	3	115	29	2 360	56 693	1 897	3 547	36 464	99 432	49 757	149 539	6 343
33281	Coating, engraving, heat treating, & allied activities	3	115	29	2 360	56 693	1 897	3 547	36 464	99 432	49 757	149 539	6 343
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	2	25	9	752	16 780	599	1 088	10 578	30 783	13 678	44 500	D
332813	Electroplating, plating, polishing, anodizing, & coloring	3	84	20	1 568	38 644	1 269	2 403	25 049	66 130	35 384	101 825	D
3329	Other fabricated metal product mfg	1	33	13	1 583	34 504	1 045	1 889	21 573	67 949	60 286	127 789	D
33299	All other fabricated metal product mfg	1	29	10	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	20	10	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	113	23	2 235	84 682	1 443	2 753	43 027	179 196	119 161	292 822	7 045
3335	Metalworking machinery mfg	1	66	9	817	27 684	621	1 154	18 395	53 432	23 813	76 891	2 904
33351	Metalworking machinery mfg	1	66	9	817	27 684	621	1 154	18 395	53 432	23 813	76 891	2 904
3339	Other general-purpose machinery mfg	—	21	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	28	14	1 557	45 191	967	2 099	25 682	100 599	45 175	146 531	6 190
3344	Semiconductor & other electronic component mfg	1	14	8	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	14	8	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	12	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	12	6	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	21	10	2 199	79 404	1 606	3 494	44 729	222 626	307 722	537 880	18 066
3359	Other electrical equipment & component mfg	—	7	4	g	D	D	D	D	D	D	D	14 783
33592	Communication & energy wire & cable mfg	—	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
335929	Other communication & energy wire mfg	—	3	3	1 377	56 177	986	2 254	31 543	157 576	264 432	427 536	D
337	Furniture & related product mfg	1	39	17	1 263	32 796	928	1 842	19 141	72 287	47 614	119 908	D
3372	Office furniture (including fixtures) mfg	1	21	12	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	21	12	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	18	10	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PROVIDENCE COUNTY, RI—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	2	575	132	14 809	391 390	10 423	20 204	209 080	976 261	685 134	1 666 211	39 896
3391	Medical equipment & supplies mfg	—	34	5	1 130	42 958	724	1 426	17 188	130 853	57 139	191 652	9 098
33911	Medical equipment & supplies mfg	—	34	5	1 130	42 958	724	1 426	17 188	130 853	57 139	191 652	9 098
339113	Surgical appliance & supplies mfg	—	7	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	2	541	127	13 679	348 432	9 699	18 778	191 892	845 408	627 995	1 474 559	30 798
33991	Jewelry & silverware mfg	2	456	106	11 093	270 789	7 875	15 389	149 347	655 617	522 097	1 179 945	18 670
339911	Jewelry (except costume) mfg	2	120	29	3 045	75 306	2 207	4 516	41 208	200 027	194 148	395 548	3 961
339913	Jewelers' material & lapidary work mfg	2	92	17	g	D	D	D	D	D	D	D	D
339914	Costume jewelry & novelty mfg	2	239	55	6 025	147 990	4 265	7 989	79 992	359 871	235 504	594 911	11 318
33994	Office supplies (except paper) mfg	—	6	3	g	D	D	D	D	D	D	D	7 552
339941	Pen & mechanical pencil mfg	—	3	3	g	D	D	D	D	D	D	D	D
33995	Sign mfg	4	21	8	614	14 518	409	711	7 392	36 623	24 486	60 808	1 663
339950	Sign mfg	4	21	8	614	14 518	409	711	7 392	36 623	24 486	60 808	1 663
33999	All other miscellaneous mfg	2	45	9	695	20 391	447	865	9 655	35 277	26 708	62 033	D
	WASHINGTON COUNTY, RI												
31-33	Manufacturing	2	152	43	7 818	257 561	5 494	11 174	147 125	677 593	684 977	1 368 592	92 755
313	Textile mills	1	9	8	1 123	33 711	859	1 801	24 381	77 739	92 138	170 795	7 181
3132	Fabric mills	—	4	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	4	5	5	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	4	4	4	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	4	4	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	7	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	7	4	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	—	4	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	25	5	1 369	49 196	983	2 072	31 589	48 312	105 848	151 725	D
3323	Architectural & structural metals mfg	—	6	1	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	—	4	1	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	4	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	7	3	1 885	59 076	1 123	2 157	24 125	143 564	153 673	304 182	D
3342	Communications equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON COUNTY, RI—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	9	4	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	9	3	2	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	9	3	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	9	2	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BRISTOL TOWN, RI												
	Manufacturing	1	56	20	1 356	39 213	1 040	1 986	25 410	89 721	61 238	150 010	2 981
	CENTRAL FALLS, RI												
31-33	Manufacturing	1	37	19	2 163	63 568	1 702	3 285	43 862	174 867	99 157	273 589	7 521
313	Textile mills	—	3	3	529	14 991	438	927	10 219	28 712	34 543	63 016	D
3132	Fabric mills	—	3	3	529	14 991	438	927	10 219	28 712	34 543	63 016	D
31322	Narrow fabric mills & schiffli machine embroidery	—	3	3	529	14 991	438	927	10 219	28 712	34 543	63 016	D
313221	Narrow fabric mills	—	3	3	529	14 991	438	927	10 219	28 712	34 543	63 016	D
327	Nonmetallic mineral product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	f	D	D	D	D	D	D	D	D
	COVENTRY TOWN, RI												
31-33	Manufacturing	1	52	11	g	D	D	D	D	D	D	D	3 917

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CRANSTON, RI													
31-33	Manufacturing	1	252	79	7 160	213 311	4 980	9 311	111 328	523 274	429 311	949 037	41 232
326	Plastics & rubber products mfg	-	12	6	656	16 672	514	932	12 335	40 162	23 399	63 200	1 708
332	Fabricated metal product mfg	1	38	11	777	18 566	577	1 064	11 108	37 759	23 328	60 731	2 214
333	Machinery mfg	-	23	7	816	29 453	492	1 036	16 038	59 834	53 928	109 681	2 811
3339	Other general-purpose machinery mfg	-	9	3	554	20 837	297	635	10 426	46 896	43 344	86 687	1 730
339	Miscellaneous mfg	1	90	22	2 657	80 554	1 807	3 387	37 042	162 572	101 766	271 856	10 946
3391	Medical equipment & supplies mfg	-	7	2	596	26 440	314	658	7 926	49 270	30 085	83 793	D
33911	Medical equipment & supplies mfg	-	7	2	596	26 440	314	658	7 926	49 270	30 085	83 793	D
339113	Surgical appliance & supplies mfg	-	3	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	83	20	2 061	54 114	1 493	2 729	29 116	113 302	71 681	188 063	D
33991	Jewelry & silverware mfg	1	67	15	1 471	36 356	1 109	2 000	20 853	81 555	51 669	136 023	2 033
339914	Costume jewelry & novelty mfg	1	39	11	1 179	30 462	885	1 637	17 255	67 361	38 606	108 449	1 758
CUMBERLAND TOWN, RI													
31-33	Manufacturing	2	42	18	1 332	36 943	1 003	2 000	23 974	92 384	77 434	171 660	7 670
EAST GREENWICH TOWN, RI													
31-33	Manufacturing	-	30	7	2 869	93 969	2 155	4 172	57 087	182 907	191 408	371 171	18 777
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	1	1	g	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	-	1	1	g	D	D	D	D	D	D	D	D
331222	Steel wire drawing	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
EAST PROVIDENCE, RI													
31-33	Manufacturing	3	133	48	4 397	129 240	3 016	5 848	69 480	328 540	228 356	555 457	22 383
326	Plastics & rubber products mfg	1	9	6	611	18 593	417	660	10 466	50 015	39 083	89 638	4 242
3261	Plastics product mfg	1	9	6	611	18 593	417	660	10 466	50 015	39 083	89 638	4 242
32619	Other plastics product mfg	1	8	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	8	6	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	31	12	1 658	39 320	1 219	2 503	24 369	97 997	78 371	174 903	6 357
3399	Other miscellaneous mfg ..	5	28	12	1 632	38 467	1 200	2 467	23 907	96 009	76 423	170 949	D
33991	Jewelry & silverware mfg	5	25	12	g	D	D	D	D	D	D	D	6 225
339914	Costume jewelry & novelty mfg	7	13	7	956	24 064	737	1 492	14 594	59 559	42 229	100 794	D
JOHNSTON TOWN, RI													
31-33	Manufacturing	2	157	22	2 185	52 294	1 668	3 076	32 303	112 825	93 906	206 332	4 336
339	Miscellaneous mfg	4	81	7	660	12 439	502	789	7 125	27 251	28 457	55 928	409
3399	Other miscellaneous mfg ..	4	78	7	655	12 393	498	785	7 102	27 132	28 397	55 749	403
33991	Jewelry & silverware mfg	4	72	7	628	11 974	478	762	6 854	26 360	27 715	54 294	371

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINCOLN TOWN, RI													
31-33	Manufacturing	-	66	30	3 109	98 917	2 277	4 594	61 451	216 050	281 408	505 210	21 094
332	Fabricated metal product mfg	-	18	10	887	29 147	690	1 439	19 791	62 783	56 780	118 553	8 240
339	Miscellaneous mfg	1	8	3	1 009	36 426	776	1 504	21 623	101 403	51 154	152 615	D
3399	Other miscellaneous mfg ..	1	8	3	1 009	36 426	776	1 504	21 623	101 403	51 154	152 615	D
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D
NORTH KINGSTOWN TOWN, RI													
31-33	Manufacturing	-	42	14	2 759	101 748	1 834	3 717	58 510	273 799	360 018	628 767	67 055
326	Plastics & rubber products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	11	4	1 289	46 951	931	1 978	30 378	44 137	103 050	144 713	D
3323	Architectural & structural metals mfg	-	3	1	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	3	1	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	3	1	g	D	D	D	D	D	D	D	D
NORTH PROVIDENCE TOWN, RI													
31-33	Manufacturing	2	78	12	1 494	36 330	1 116	2 142	22 543	62 544	51 738	113 847	2 465
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	42	8	509	10 433	309	553	5 526	21 385	15 960	36 949	509
NORTH SMITHFIELD TOWN, RI													
31-33	Manufacturing	4	29	8	763	22 530	583	1 176	14 736	62 195	33 319	96 352	4 607
PAWTUCKET, RI													
31-33	Manufacturing	-	205	83	9 766	294 277	6 755	15 001	165 463	682 512	842 547	1 535 204	47 829
313	Textile mills	-	17	12	1 568	43 413	1 099	2 365	23 377	116 479	183 553	301 220	9 364
3132	Fabric mills	-	13	10	g	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	-	6	5	561	10 190	490	1 013	7 696	13 777	10 725	24 619	D
313221	Narrow fabric mills	-	6	5	561	10 190	490	1 013	7 696	13 777	10 725	24 619	D
325	Chemical mfg	-	6	2	f	D	D	D	D	D	D	D	2 594
3259	Other chemical product mfg	-	4	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	4	1	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin ..	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	38	10	1 594	35 588	1 141	2 022	22 723	63 902	56 517	120 476	3 747
3328	Coating, engraving, heat treating, & allied activities ..	1	13	4	549	11 102	446	777	6 901	16 059	8 154	24 251	654
33281	Coating, engraving, heat treating, & allied activities	1	13	4	549	11 102	446	777	6 901	16 059	8 154	24 251	654
3329	Other fabricated metal product mfg	-	4	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	4	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PAWTUCKET, RI—Con. Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	6	3	732	22 118	458	1 265	16 266	46 195	16 112	62 733	2 337
3345	Navigational, measuring, medical, & control instruments mfg.....	1	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	1	3	2	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	4	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg...	—	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	5	44	15	1 068	23 242	811	1 589	14 464	49 964	46 875	96 369	1 268
3399	Other miscellaneous mfg... Jewelry & silverware mfg.....	5	42	15	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg.....	4	38	11	918	19 798	707	1 406	12 747	41 310	40 337	81 342	D
	PORTSMOUTH TOWN, RI												
31-33	Manufacturing	—	23	9	1 572	78 781	533	1 044	15 866	125 302	91 392	218 523	5 663
334	Computer & electronic product mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
	PROVIDENCE, RI												
31-33	Manufacturing	2	570	132	12 465	337 140	8 814	17 188	196 965	739 896	553 609	1 294 059	37 153
323	Printing & related support activities.....	5	56	11	1 283	45 155	886	1 765	28 124	105 677	54 316	160 916	9 750
3231	Printing & related support activities.....	5	56	11	1 283	45 155	886	1 765	28 124	105 677	54 316	160 916	9 750
32311	Printing.....	5	47	8	1 178	42 091	818	1 623	25 822	100 088	52 670	153 736	9 426
323110	Commercial lithographic printing..	7	24	5	620	23 084	415	793	13 070	53 912	34 146	88 619	3 698
326	Plastics & rubber products mfg.....	1	21	11	652	15 147	468	880	9 131	32 532	31 707	63 895	1 667
3261	Plastics product mfg.....	—	18	11	639	14 840	457	864	8 923	31 602	30 873	62 121	1 614
332	Fabricated metal product mfg.....	2	105	29	2 300	70 744	1 599	3 295	43 158	132 946	71 376	204 974	9 413
3322	Cutlery & handtool mfg....	1	4	3	584	22 123	263	763	12 453	39 638	15 849	55 463	D
33221	Cutlery & handtool mfg..	1	4	3	584	22 123	263	763	12 453	39 638	15 849	55 463	D
3328	Coating, engraving, heat treating, & allied activities..	6	55	11	873	21 239	691	1 276	13 319	39 580	16 351	56 151	2 409
33281	Coating, engraving, heat treating, & allied activities.....	6	55	11	873	21 239	691	1 276	13 319	39 580	16 351	56 151	2 409
332813	Electroplating, plating, polishing, anodizing, & coloring.....	6	42	10	774	18 463	626	1 150	11 868	35 629	13 910	49 778	1 904
335	Electrical equipment, appliance, & component mfg.....	—	6	3	505	13 820	400	731	8 345	41 902	22 610	65 128	D
339	Miscellaneous mfg.....	1	227	52	5 592	137 910	3 936	7 880	76 197	316 993	275 765	592 025	8 295
3399	Other miscellaneous mfg... Jewelry & silverware mfg.....	1	222	52	5 571	137 422	3 922	7 862	75 969	315 778	275 164	590 193	D
33991	Jewelry (except costume) mfg.....	1	192	45	5 037	123 755	3 584	7 224	69 095	285 080	250 443	535 666	6 758
339913	Jewelers' material & lapidary work mfg....	1	52	17	2 119	55 008	1 509	3 370	29 644	145 439	137 900	284 048	3 041
339914	Costume jewelry & novelty mfg.....	2	41	8	f	D	D	D	D	D	D	D	D
		1	97	18	2 181	50 733	1 556	2 858	29 020	99 172	78 622	177 075	2 670

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SMITHFIELD TOWN, RI													
31-33	Manufacturing	-	75	18	1 741	56 695	1 080	2 068	25 409	209 997	116 365	326 861	5 778
339	Miscellaneous mfg.....	-	23	6	1 122	39 006	691	1 389	16 217	166 177	70 442	236 759	3 971
3399	Other miscellaneous mfg ..	-	20	4	f	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	13	3	600	22 584	275	594	6 560	85 452	45 053	131 692	D
SOUTH KINGSTOWN TOWN, RI													
31-33	Manufacturing	5	30	7	2 631	80 112	1 818	3 586	37 358	224 186	162 499	393 622	12 345
334	Computer & electronic product mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	9	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	9	1	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	9	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	9	1	1	f	D	D	D	D	D	D	D	D
WARREN TOWN, RI													
31-33	Manufacturing	2	37	13	1 227	32 841	898	1 719	21 178	65 396	48 861	114 253	5 020
339	Miscellaneous mfg.....	6	8	5	500	11 750	378	711	6 900	26 281	15 532	41 582	D
WARWICK, RI													
31-33	Manufacturing	2	260	67	6 751	206 035	4 674	9 226	112 551	611 016	544 909	1 154 754	31 908
332	Fabricated metal product mfg	-	41	7	707	22 368	480	934	12 659	46 856	49 766	94 500	1 751
334	Computer & electronic product mfg.....	5	22	10	694	24 306	395	707	9 043	61 510	45 746	108 350	3 953
335	Electrical equipment, appliance, & component mfg	-	5	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	2	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	9	7	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	78	16	1 583	44 585	1 089	2 138	23 120	104 852	119 007	224 084	5 082
3399	Other miscellaneous mfg ..	1	72	16	g	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	1	59	14	1 223	30 851	889	1 740	16 500	77 779	103 598	180 436	3 570
339913	Jewelers' material & lapidary work mfg ...	-	7	4	579	13 572	408	801	7 711	36 672	64 530	100 900	D
WESTERLY TOWN, RI													
31-33	Manufacturing	-	29	8	934	30 200	722	1 456	21 132	71 213	74 723	147 650	D
313	Textile mills	-	4	4	f	D	D	D	D	D	D	D	D
WEST WARWICK TOWN, RI													
31-33	Manufacturing	4	58	16	1 739	55 255	1 089	2 235	25 929	95 186	80 485	177 928	9 834
325	Chemical mfg	5	6	3	538	22 466	317	747	8 778	37 337	28 861	66 948	4 112

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	WOONSOCKET, RI												
31-33	Manufacturing	1	84	28	2 700	80 497	2 043	4 407	52 890	169 199	151 397	317 307	9 037
313	Textile mills	1	14	7	821	28 840	604	1 280	18 713	61 038	42 917	104 211	3 031
3133	Textile & fabric finishing & fabric coating mills	—	9	4	646	24 099	460	956	15 147	46 698	28 771	75 475	1 966
31331	Textile & fabric finishing mills	—	9	4	646	24 099	460	956	15 147	46 698	28 771	75 475	1 966

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
RHODE ISLAND		RHODE ISLAND—Con.	
Companies ¹	number.. 2 477	Quantity of electricity purchased for heat and power	1,000 kWh.. 1 359 538
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 5 907
All establishments	number.. 2 535	Total value of shipments	\$1,000.. 10 482 011
Establishments with 1 to 19 employees	number.. 1 831	Value of resales	\$1,000.. 503 090
Establishments with 20 to 99 employees	number.. 552	Value added	\$1,000.. 5 484 173
Establishments with 100 employees or more	number.. 152	Total inventories, beginning of year	\$1,000.. 1 513 065
All employees	number.. 75 599	Finished goods inventories, beginning of year	\$1,000.. 603 417
Total compensation ²	\$1,000.. 2 804 962	Work-in-process inventories, beginning of year	\$1,000.. 378 369
Annual payroll	\$1,000.. 2 288 614	Materials and supplies inventories, beginning of year	\$1,000.. 531 279
Total fringe benefits	\$1,000.. 516 348	Total inventories, end of year	\$1,000.. 1 503 686
Production workers, average for year	number.. 52 889	Finished goods inventories, end of year	\$1,000.. 576 974
Production workers on March 12	number.. 52 466	Work-in-process inventories, end of year	\$1,000.. 350 826
Production workers on May 12	number.. 53 012	Materials and supplies inventories, end of year	\$1,000.. 575 886
Production workers on August 12	number.. 52 749	Gross book value of total assets at beginning of year	\$1,000.. 4 143 632
Production workers on November 12	number.. 53 329	Total capital expenditures (new and used)	\$1,000.. 398 380
Production-worker hours	1,000.. 105 399	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 73 685
Production-worker wages	\$1,000.. 1 279 835	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 324 695
Total cost of materials	\$1,000.. 4 944 031	Total retirements ²	\$1,000.. 98 440
Cost of materials, parts, containers, etc., consumed	\$1,000.. 4 198 075	Gross book value of total assets at end of year	\$1,000.. 4 443 572
Cost of resales	\$1,000.. 331 921	Total depreciation during year ²	\$1,000.. 296 904
Cost of fuels	\$1,000.. 56 824	Total rental payments ²	\$1,000.. 120 134
Cost of purchased electricity	\$1,000.. 116 275	Buildings and other structures rental payments ²	\$1,000.. 66 331
Cost of contract work	\$1,000.. 240 936	Machinery and equipment rental payments ²	\$1,000.. 53 803

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

RHODE ISLAND

There are no geographic notes for the state of Rhode Island.

Appendix E. Metropolitan Areas

RHODE ISLAND

New London—Norwich, CT—RI MSA

Middlesex County, CT (Part)
New London County, CT (Part)
 East Lyme town, CT
 Groton city, CT
 Groton town balance, CT
 Jewett City, CT
 Ledyard town, CT
 Montville town, CT
 New London city, CT
 Norwich city, CT
 Stonington town, CT
 Waterford town, CT
Windham County, CT (Part)
 Plainfield town, CT
Washington County, RI (Part)
 Westerly town, RI

Providence—Fall River—Warwick, RI—MA MSA

Bristol County, MA (Part)
 Attleboro city, MA
 Fall River city, MA
 North Attleborough town, MA
 Seekonk town, MA
 Somerset town, MA
 Swansea town, MA
 Westport town, MA

Providence—Fall River—Warwick, RI—MA MSA—Con.

Bristol County, RI (Part)
 Barrington town, RI
 Bristol town, RI
 Warren town, RI
Kent County, RI (Part)
 Coventry town, RI
 East Greenwich town, RI
 Warwick city, RI
 West Warwick town, RI
Newport County, RI (Part)
 Tiverton town, RI
Providence County, RI (Part)
 Burrillville town, RI
 Central Falls city, RI
 Cranston city, RI
 Cumberland town, RI
 East Providence city, RI
 Johnston town, RI
 Lincoln town, RI
 North Providence town, RI
 North Smithfield town, RI
 Pawtucket city, RI
 Providence city, RI
 Scituate town, RI
 Smithfield town, RI
 Woonsocket city, RI
Washington County, RI (Part)
 Narragansett town, RI
 North Kingstown town, RI
 South Kingstown town, RI

South Carolina

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH CAROLINA													
31-33	Manufacturing	-	4 450	1 873	346 142	10 369 419	267 548	786 083	6 856 005	33 657 787	37 229 455	70 797 020	3 414 769
311	Food mfg.....	1	195	70	16 257	348 318	13 469	25 278	256 423	1 412 359	1 732 500	3 141 095	50 109
3111	Animal food mfg.....	-	14	4	210	4 587	163	297	3 216	27 756	132 930	160 336	677
31111	Animal food mfg.....	-	14	4	210	4 587	163	297	3 216	27 756	132 930	160 336	677
311119	Other animal food mfg.....	-	13	3	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	1	9	3	153	4 812	115	269	3 336	25 060	141 185	163 764	3 426
31122	Starch & vegetable fats & oils mfg.....	1	7	2	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	16	3	f	D	D	D	D	D	D	D	191
31133	Confectionery mfg from purchased chocolate...	-	9	2	f	D	D	D	D	D	D	D	144
311330	Confectionery mfg from purchased chocolate.....	-	9	2	f	D	D	D	D	D	D	D	144
3114	Fruit & vegetable preserving & specialty food mfg.....	-	11	6	1 516	46 439	1 338	2 946	38 205	399 787	219 609	619 485	6 833
31141	Frozen food mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	3	7	3	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	9	4	1	c	D	D	D	D	D	D	D	D
311422	Specialty canning.....	-	3	2	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	10	6	791	21 454	401	884	9 351	93 491	185 936	280 169	5 570
31151	Dairy product (except frozen) mfg.....	-	6	6	777	21 229	389	869	9 156	92 804	184 903	278 449	5 513
311511	Fluid milk mfg.....	-	5	5	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	44	20	8 973	162 730	8 211	14 689	133 223	451 657	700 134	1 153 404	21 919
31161	Animal slaughtering & processing.....	1	44	20	8 973	162 730	8 211	14 689	133 223	451 657	700 134	1 153 404	21 919
311611	Animal (except poultry) slaughtering.....	1	24	7	1 904	32 657	1 713	3 070	23 230	61 133	146 450	208 992	3 510
311612	Meat processed from carcasses.....	8	10	4	e	D	D	D	D	D	D	D	D
311615	Poultry processing.....	1	9	8	6 526	113 996	6 146	10 894	100 275	387 567	491 622	879 355	15 171
3118	Bakeries & tortilla mfg.....	-	65	19	2 775	68 224	1 730	3 209	38 973	226 371	157 619	382 250	7 688
31181	Bread & bakery product mfg.....	-	59	16	2 466	61 566	1 501	2 731	33 958	204 893	120 781	323 748	6 357
311811	Retail bakeries.....	5	43	6	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	-	15	9	2 023	54 668	1 176	2 160	29 309	175 495	112 815	288 555	5 334
31182	Cookie, cracker, & pasta mfg.....	4	6	3	309	6 658	229	478	5 015	21 478	36 838	58 502	1 331
311822	Flour mixes & dough mfg from purchased flour.....	4	3	3	293	6 355	216	461	4 787	20 058	35 782	56 020	1 238
3119	Other food mfg.....	2	19	8	933	24 287	774	1 546	17 991	127 776	162 919	289 889	3 717
31191	Snack food mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
311919	Other snack food mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	8	5	2	107	3 203	84	160	2 203	17 286	35 518	52 577	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	8	5	2	107	3 203	84	160	2 203	17 286	35 518	52 577	D
31199	All other food mfg.....	7	9	4	e	D	D	D	D	D	D	D	1 434
311999	All other miscellaneous food mfg.....	7	8	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	17	6	838	25 378	291	682	7 469	93 750	254 364	348 999	5 250
3121	Beverage mfg.....	-	17	6	838	25 378	291	682	7 469	93 750	254 364	348 999	5 250
31211	Soft drink & ice mfg.....	-	14	6	819	24 900	279	661	7 231	91 528	252 292	344 845	5 110
312111	Soft drink mfg.....	-	5	4	734	22 759	239	593	6 590	87 684	249 986	338 624	4 419
313	Textile mills.....	-	342	265	65 568	1 637 976	56 768	362 446	1 279 313	3 873 735	6 094 866	10 028 745	422 587
3131	Fiber, yarn, & thread mills .	-	55	48	10 407	246 965	9 356	266 004	203 193	554 913	1 113 754	1 670 608	66 018
31311	Fiber, yarn, & thread mills.....	-	55	48	10 407	246 965	9 356	266 004	203 193	554 913	1 113 754	1 670 608	66 018
313111	Yarn spinning mills....	1	46	40	8 086	191 646	7 266	261 642	159 880	444 710	673 241	1 117 648	50 317
313112	Yarn texturing, throwing, & twisting mills.....	-	9	8	2 321	55 319	2 090	4 362	43 313	110 203	440 513	552 960	15 701

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills—Con.												
3132	Fabric mills	—	189	159	41 282	1 028 408	36 024	72 554	810 198	2 379 852	3 230 190	5 652 277	283 140
31321	Broadwoven fabric mills .	—	123	104	32 014	814 797	28 665	57 687	665 849	1 853 243	2 497 398	4 389 452	238 187
313210	Broadwoven fabric mills	—	123	104	32 014	814 797	28 665	57 687	665 849	1 853 243	2 497 398	4 389 452	238 187
31322	Narrow fabric mills & schiffli machine embroidery	3	20	16	2 546	47 510	2 217	4 625	35 653	101 936	99 459	201 929	5 786
313221	Narrow fabric mills	2	17	13	1 805	35 742	1 556	3 312	27 300	76 992	85 937	163 192	D
313222	Schiffli machine embroidery	6	3	3	741	11 768	661	1 313	8 353	24 944	13 522	38 737	D
31323	Nonwoven fabric mills ...	—	22	20	2 946	91 066	2 183	4 345	56 945	231 046	335 231	563 396	17 482
313230	Nonwoven fabric mills .	—	22	20	2 946	91 066	2 183	4 345	56 945	231 046	335 231	563 396	17 482
31324	Knit fabric mills	—	24	19	3 776	75 035	2 959	5 897	51 751	193 627	298 102	497 500	21 685
313241	Weft knit fabric mills ..	—	16	13	g	D	D	D	D	D	D	D	6 657
313249	Other knit fabric & lace mills	—	8	6	g	D	D	D	D	D	D	D	15 028
3133	Textile & fabric finishing & fabric coating mills	—	98	58	13 879	362 603	11 388	23 888	265 922	938 970	1 750 922	2 705 860	73 429
31331	Textile & fabric finishing mills	—	92	55	13 258	345 806	10 993	23 034	256 697	905 434	1 720 207	2 641 282	72 414
313311	Broadwoven fabric finishing mills	—	75	43	12 342	321 719	10 204	21 448	239 372	858 050	1 670 382	2 544 230	68 748
313312	Textile & fabric finishing mills	—	17	12	916	24 087	789	1 586	17 325	47 384	49 825	97 052	3 666
31332	Fabric coating mills	—	6	3	621	16 797	395	854	9 225	33 536	30 715	64 578	1 015
313320	Fabric coating mills	—	6	3	621	16 797	395	854	9 225	33 536	30 715	64 578	1 015
314	Textile product mills	—	168	76	14 835	321 679	12 683	25 152	243 804	829 207	1 588 057	2 349 149	57 357
3141	Textile furnishings mills	—	72	36	9 660	204 485	8 646	17 072	166 733	626 708	1 106 075	1 660 105	33 396
31411	Carpet & rug mills	1	16	10	2 392	50 356	2 147	4 196	39 768	124 321	162 264	287 538	11 646
314110	Carpet & rug mills	1	16	10	2 392	50 356	2 147	4 196	39 768	124 321	162 264	287 538	11 646
31412	Curtain & linen mills	—	56	26	7 268	154 129	6 499	12 876	126 965	502 387	943 811	1 372 567	21 750
314121	Curtain & drapery mills	1	29	5	868	14 798	714	1 212	10 671	29 294	32 316	59 675	1 083
314129	Other household textile product mills	—	27	21	6 400	139 331	5 785	11 664	116 294	473 093	911 495	1 312 892	20 667
3149	Other textile product mills ..	—	96	40	5 175	117 194	4 037	8 080	77 071	202 499	481 982	689 044	23 961
31491	Textile bag & canvas mills	1	26	8	369	7 893	281	486	4 624	13 265	12 781	26 072	376
314912	Canvas & related product mills	—	22	7	312	7 089	231	415	4 033	11 853	10 957	22 836	293
31499	All other textile product mills	—	70	32	4 806	109 301	3 756	7 594	72 447	189 234	469 201	662 972	23 585
314991	Rope, cordage, & twine mills	1	8	3	c	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	—	2	1	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	—	60	28	4 342	97 380	3 350	6 826	63 699	168 292	391 760	564 574	20 531
315	Apparel mfg	1	220	154	17 848	283 192	15 010	27 712	210 522	736 446	703 064	1 425 134	20 726
3151	Apparel knitting mills	—	24	19	3 622	73 340	3 352	6 570	63 681	199 238	277 255	478 552	10 436
31511	Hosiery & sock mills	—	12	9	2 349	49 381	2 200	4 464	43 758	171 150	207 234	379 894	9 342
315111	Sheer hosiery mills	—	7	5	g	D	D	D	D	D	D	D	3 738
315119	Other hosiery & sock mills	—	5	4	g	D	D	D	D	D	D	D	5 604
31519	Other apparel knitting mills	2	12	10	1 273	23 959	1 152	2 106	19 923	28 088	70 021	98 658	1 094
315191	Outerwear knitting mills	2	10	8	g	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	3	2	2	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	173	128	13 820	202 643	11 322	20 678	142 123	521 054	413 627	918 411	9 911
31521	Cut & sew apparel contractors	4	103	75	6 517	85 480	5 541	9 699	63 183	124 616	19 404	142 854	3 831
315211	Men's & boys' cut & sew apparel contractors	4	33	25	2 357	30 074	2 038	3 476	22 747	45 400	6 078	51 320	1 110
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	70	50	4 160	55 406	3 503	6 223	40 436	79 216	13 326	91 534	2 721

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31522	Men's & boys' cut & sew apparel mfg.....	1	29	23	3 648	56 433	2 745	5 029	34 801	221 234	167 735	388 005	1 935
315221	Men's & boys' cut & sew underwear & nightwear mfg.....	9	3	3	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	—	1	1	c	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	—	14	12	2 208	37 953	1 509	2 861	21 413	179 909	115 415	294 954	1 108
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	—	4	3	138	2 656	106	173	1 034	7 689	9 789	16 690	D
315225	Men's & boys' cut & sew work clothing mfg.....	—	1	1	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg.....	8	6	3	458	5 281	374	598	3 717	6 155	18 631	24 944	226
31523	Women's & girls' cut & sew apparel mfg.....	—	28	19	2 523	42 285	2 049	4 261	30 353	140 670	173 222	301 025	3 473
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	—	6	6	511	9 493	390	918	6 114	9 908	18 539	28 112	797
315232	Women's & girls' cut & sew blouse & shirt mfg.....	1	8	5	750	12 329	648	1 376	9 545	50 813	60 020	97 107	D
315239	Women's & girls' cut & sew other outerwear mfg.....	—	11	8	1 254	20 325	1 004	1 958	14 620	79 642	94 190	175 021	D
31529	Other cut & sew apparel mfg.....	1	13	11	1 132	18 445	987	1 689	13 786	34 534	53 266	86 527	672
315299	All other cut & sew apparel mfg.....	1	11	9	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	2	23	7	406	7 209	336	464	4 718	16 154	12 182	28 171	379
31599	Apparel accessories & other apparel mfg.....	2	23	7	406	7 209	336	464	4 718	16 154	12 182	28 171	379
315999	Other apparel accessories & other apparel mfg.....	2	21	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	—	297	123	11 191	282 067	9 365	19 145	203 327	746 286	1 279 088	2 019 531	58 440
3211	Sawmills & wood preservation.....	—	86	46	4 069	114 926	3 422	7 511	82 368	369 183	776 236	1 141 937	37 594
32111	Sawmills & wood preservation.....	—	86	46	4 069	114 926	3 422	7 511	82 368	369 183	776 236	1 141 937	37 594
321113	Sawmills.....	—	71	40	3 268	94 105	2 784	6 135	68 982	310 404	568 635	880 558	31 278
321114	Wood preservation....	—	15	6	801	20 821	638	1 376	13 386	58 779	207 601	261 379	6 316
3212	Veneer, plywood, & engineered wood product mfg.....	—	48	31	3 527	91 278	3 001	6 170	67 262	230 194	308 337	536 821	8 570
32121	Veneer, plywood, & engineered wood product mfg.....	—	48	31	3 527	91 278	3 001	6 170	67 262	230 194	308 337	536 821	8 570
321211	Hardwood veneer & plywood mfg.....	1	17	12	1 057	18 548	940	1 780	13 686	44 895	53 969	98 114	2 538
321212	Softwood veneer & plywood mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
321214	Truss mfg.....	—	20	9	f	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	—	8	7	948	28 427	746	1 632	20 749	91 853	102 801	194 915	3 526
3219	Other wood product mfg....	1	163	46	3 595	75 863	2 942	5 464	53 697	146 909	194 515	340 773	12 276
32191	Millwork.....	1	66	21	1 896	39 508	1 608	3 037	29 856	77 368	116 475	192 794	8 305
321911	Wood window & door mfg.....	—	21	8	958	22 084	843	1 605	16 880	45 737	78 077	123 808	6 286
321912	Cut stock, resawing lumber, & planing....	1	20	8	617	11 389	508	960	8 777	21 622	27 261	48 257	1 051
321918	Other millwork (including flooring)...	3	25	5	321	6 035	257	472	4 199	10 009	11 137	20 729	968
32192	Wood container & pallet mfg.....	2	51	14	763	12 658	636	1 132	9 750	23 270	27 455	50 662	1 236
321920	Wood container & pallet mfg.....	2	51	14	763	12 658	636	1 132	9 750	23 270	27 455	50 662	1 236
32199	All other wood product mfg.....	1	46	11	936	23 697	698	1 295	14 091	46 271	50 585	97 317	2 735
321991	Manufactured home (mobile home) mfg....	—	3	2	e	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg....	2	35	8	483	10 752	334	646	6 641	21 939	16 332	38 701	1 451

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH CAROLINA—Con.													
31-33 Manufacturing—Con.													
322	Paper mfg	—	102	73	14 738	586 227	11 410	24 564	411 794	2 625 831	2 270 076	4 903 653	411 605
3221	Pulp, paper, & paperboard mills	—	10	10	6 673	343 952	5 037	11 309	246 124	1 779 503	1 302 956	3 089 811	341 329
32212	Paper mills	—	5	5	4 324	228 841	3 312	7 710	167 267	1 298 104	896 805	2 201 912	258 789
322121	Paper (except newsprint) mills	—	5	5	4 324	228 841	3 312	7 710	167 267	1 298 104	896 805	2 201 912	258 789
32213	Paperboard mills	—	5	5	2 349	115 111	1 725	3 599	78 857	481 399	406 151	887 899	82 540
322130	Paperboard mills	—	5	5	2 349	115 111	1 725	3 599	78 857	481 399	406 151	887 899	82 540
3222	Converted paper product mfg	—	92	63	8 065	242 275	6 373	13 255	165 670	846 328	967 120	1 813 842	70 276
32221	Paperboard container mfg	—	53	41	4 426	130 074	3 570	7 303	88 410	351 983	473 871	826 212	36 509
322211	Corrugated & solid fiber box mfg.	—	30	27	2 596	80 086	2 028	4 229	49 337	189 150	300 360	488 146	24 337
322212	Folding paperboard box mfg	—	6	4	252	6 500	200	347	4 352	15 921	14 914	31 202	D
322214	Fiber can, tube, drum, & similar products mfg	—	13	6	862	25 267	715	1 387	19 726	55 340	83 593	139 360	7 307
322215	Nonfolding sanitary food container mfg	—	3	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	15	11	2 339	79 927	1 845	4 032	54 495	383 933	235 824	617 222	17 706
322222	Coated & laminated paper mfg	—	8	6	1 627	59 249	1 230	2 681	38 031	325 359	165 465	490 019	13 932
322224	Uncoated paper & multiwall bag mfg	—	2	2	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	8	4	370	9 303	287	567	6 761	62 635	153 584	219 579	2 488
322231	Die-cut paper & paperboard office supplies mfg	—	3	1	c	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg	—	3	2	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	2	16	7	930	22 971	671	1 353	16 004	47 777	103 841	150 829	13 573
322291	Sanitary paper product mfg	1	4	3	626	14 764	406	849	9 764	30 350	74 162	103 008	11 956
322299	All other converted paper product mfg	4	12	4	304	8 207	265	504	6 240	17 427	29 679	47 821	1 617
323	Printing & related support activities	2	455	73	7 205	195 030	5 248	9 658	122 957	439 824	388 999	823 365	33 030
3231	Printing & related support activities	2	455	73	7 205	195 030	5 248	9 658	122 957	439 824	388 999	823 365	33 030
32311	Printing	2	433	69	6 856	185 219	4 981	9 152	116 544	420 316	381 914	796 732	30 680
323110	Commercial lithographic printing	3	198	37	2 919	79 996	2 054	3 700	48 478	161 450	97 693	255 598	11 953
323111	Commercial gravure printing	—	5	3	g	D	D	D	D	D	D	D	9 411
323112	Commercial flexographic printing	1	8	1	103	2 285	82	121	1 459	5 091	3 269	8 604	D
323113	Commercial screen printing	2	66	14	1 170	24 388	892	1 574	14 386	49 752	38 639	89 164	3 467
323114	Quick printing	3	105	2	573	11 457	385	551	6 934	24 037	13 194	37 211	2 606
323116	Manifold business form printing	2	11	8	565	18 000	379	842	11 087	53 704	86 148	139 157	1 541
323117	Book printing	7	7	2	182	4 501	148	241	3 053	9 310	5 880	15 182	753
323119	Other commercial printing	9	28	2	167	4 047	115	206	2 357	8 355	5 593	13 955	607
32312	Support activities for printing	1	22	4	349	9 811	267	506	6 413	19 508	7 085	26 633	2 350
323122	Prepress services	—	15	4	306	8 815	230	445	5 628	17 594	6 791	24 422	2 108
324	Petroleum & coal products mfg	—	21	5	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	21	5	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	1	18	3	c	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	2	3	2	c	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	—	3	2	c	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	—	3	2	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH CAROLINA— Con. Manufacturing— Con.												
325	Chemical mfg	-	254	135	38 471	1 691 822	21 799	43 169	827 604	7 690 737	5 656 792	13 252 603	943 643
3251	Basic chemical mfg	-	59	36	15 551	806 860	5 082	7 044	274 988	3 222 901	1 107 398	4 324 249	474 708
32512	Industrial gas mfg	1	12	4	c	D	D	D	D	D	D	D	33 728
325120	Industrial gas mfg	1	12	4	c	D	D	D	D	D	D	D	33 728
32513	Dye & pigment mfg	-	8	4	430	18 308	222	479	8 556	76 892	101 959	178 911	6 069
325132	Synthetic organic dye & pigment mfg	-	7	4	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	14	7	j	D	D	D	D	D	D	D	18 511
325188	All other basic inorganic chemical mfg	-	14	7	j	D	D	D	D	D	D	D	18 511
32519	Other basic organic chemical mfg	-	25	21	2 568	109 875	1 410	2 751	49 989	886 027	801 964	1 684 893	416 400
325191	Gum & wood chemical mfg	-	2	2	c	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	3	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	20	16	1 863	80 286	1 024	1 881	36 637	344 798	416 877	761 499	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	39	31	14 879	583 008	11 525	24 661	395 561	2 809 688	2 960 021	5 703 789	354 880
32521	Resin & synthetic rubber mfg	-	15	9	1 784	79 680	1 130	2 406	45 543	379 413	650 556	996 448	58 389
325211	Plastics material & resin mfg	-	12	9	1 755	78 788	1 112	2 374	44 964	377 553	647 724	991 786	57 829
32522	Artificial & synthetic fibers & filaments mfg	-	24	22	13 095	503 328	10 395	22 255	350 018	2 430 275	2 309 465	4 707 341	296 491
325221	Cellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	23	21	j	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	22	6	610	20 531	382	853	10 172	109 783	106 521	206 304	13 309
32531	Fertilizer mfg	1	19	5	e	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	2	16	4	c	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	3	1	e	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	3	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	15	12	2 792	98 110	1 895	4 113	54 847	734 288	461 915	1 178 287	42 922
32541	Pharmaceutical & medicine mfg	-	15	12	2 792	98 110	1 895	4 113	54 847	734 288	461 915	1 178 287	42 922
325411	Medicinal & botanical mfg	-	2	1	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	11	9	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	24	9	431	17 194	252	514	7 049	58 420	65 270	122 525	4 305
32551	Paint & coating mfg	4	14	5	179	7 003	96	186	2 518	18 398	25 674	42 739	2 450
325510	Paint & coating mfg	4	14	5	179	7 003	96	186	2 518	18 398	25 674	42 739	2 450
32552	Adhesive mfg	1	10	4	252	10 191	156	328	4 531	40 022	39 596	79 786	1 855
325520	Adhesive mfg	1	10	4	252	10 191	156	328	4 531	40 022	39 596	79 786	1 855
3256	Soap, cleaning compound, & toilet preparation mfg	-	45	20	1 274	51 050	777	1 600	22 895	169 762	332 156	512 493	26 595
32561	Soap & cleaning compound mfg	-	43	20	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	2	14	3	186	5 304	130	243	2 954	16 223	38 033	54 214	1 126
325612	Polish & other sanitation good mfg	9	7	2	c	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	22	15	960	42 288	562	1 203	18 080	141 879	283 488	435 728	25 048
3259	Other chemical product mfg	1	50	21	2 934	115 069	1 886	4 384	62 092	585 895	623 511	1 204 956	26 924
32591	Printing ink mfg	4	13	7	406	12 822	213	408	5 627	54 564	74 431	126 918	2 714
325910	Printing ink mfg	4	13	7	406	12 822	213	408	5 627	54 564	74 431	126 918	2 714
32599	All other chemical product & preparation mfg	-	37	14	2 528	102 247	1 673	3 976	56 465	531 331	549 080	1 078 038	24 210
325991	Custom compounding of purchased resin ...	5	13	3	255	7 037	191	324	4 079	19 077	35 605	54 869	D
325992	Photographic film, paper, plate, & chemical mfg	-	6	4	1 310	53 104	846	2 075	28 879	325 684	340 216	667 088	D
325998	All other miscellaneous chemical product & preparation mfg	-	18	7	963	42 106	636	1 577	23 507	186 570	173 259	356 081	13 509

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH CAROLINA— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	-	248	134	23 541	762 582	19 187	39 186	557 901	2 236 710	2 424 263	4 718 769	234 181
3261	Plastics product mfg	-	187	106	15 244	480 173	12 190	25 653	323 578	1 283 532	1 276 890	2 611 792	171 412
32611	Unsupported plastics film, sheet, & bag mfg ..	-	21	14	3 874	158 856	2 918	6 164	99 204	446 718	419 180	872 772	43 697
326111	Unsupported plastics bag mfg	2	7	4	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	2	2	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	12	8	1 882	81 227	1 319	2 967	44 161	204 652	255 931	464 522	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	21	13	1 225	40 334	1 069	2 431	28 883	104 035	144 044	246 342	8 754
326121	Unsupported plastics profile shape mfg	-	17	9	915	32 026	815	1 941	22 590	67 247	73 243	139 841	6 057
326122	Plastics pipe & pipe fitting mfg	-	4	4	310	8 308	254	490	6 293	36 788	70 801	106 501	2 697
32613	Laminated plastics plate, sheet, & shape mfg	-	7	5	1 242	46 646	1 005	2 421	35 525	96 162	122 197	219 246	16 493
326130	Laminated plastics plate, sheet, & shape mfg	-	7	5	1 242	46 646	1 005	2 421	35 525	96 162	122 197	219 246	16 493
32614	Polystyrene foam product mfg	-	5	1	240	7 016	198	318	4 367	28 366	14 699	42 113	D
326140	Polystyrene foam product mfg	-	5	1	240	7 016	198	318	4 367	28 366	14 699	42 113	D
32615	Urethane & other foam product (except polystyrene) mfg	-	6	3	353	10 003	233	510	5 057	26 407	35 119	61 694	D
326150	Urethane & other foam product (except polystyrene) mfg	-	6	3	353	10 003	233	510	5 057	26 407	35 119	61 694	D
32616	Plastics bottle mfg	2	10	9	509	14 951	448	1 046	12 072	51 682	63 811	116 248	9 033
326160	Plastics bottle mfg	2	10	9	509	14 951	448	1 046	12 072	51 682	63 811	116 248	9 033
32619	Other plastics product mfg	1	117	61	7 801	202 367	6 319	12 763	138 470	530 162	477 840	1 053 377	76 850
326191	Plastics plumbing fixture mfg	1	15	5	276	5 665	189	356	3 751	11 396	8 264	19 639	247
326199	All other plastics product mfg	1	102	56	7 525	196 702	6 130	12 407	134 719	518 766	469 576	1 033 738	76 603
3262	Rubber product mfg	-	61	28	8 297	282 409	6 997	13 533	234 323	953 178	1 147 373	2 106 977	62 769
32621	Tire mfg	-	22	7	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	6	4	h	D	D	D	D	D	D	D	D
326212	Tire retreading	4	16	3	147	3 149	123	250	2 219	4 550	9 584	14 163	246
32622	Rubber & plastics hoses & belting mfg	-	11	5	g	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	11	5	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	28	16	2 791	90 007	2 195	4 223	67 170	309 156	480 063	796 303	23 274
326291	Rubber product mfg for mechanical use	-	11	5	278	7 325	199	367	4 459	13 208	16 316	29 190	822
326299	All other rubber product mfg	1	17	11	2 513	82 682	1 996	3 856	62 711	295 948	463 747	767 113	22 452
327	Nonmetallic mineral product mfg	2	210	83	9 795	320 124	7 714	16 858	229 212	1 138 009	728 853	1 863 827	118 312
3271	Clay product & refractory mfg	-	21	14	2 324	72 758	1 856	4 055	53 836	166 280	64 367	231 382	6 885
32711	Pottery, ceramics, & plumbing fixture mfg	1	9	4	1 341	44 707	1 127	2 447	35 369	99 574	34 883	136 119	2 031
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	4	3	3	f	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	12	10	983	28 051	729	1 608	18 467	66 706	29 484	95 263	4 854
327121	Brick & structural clay tile mfg	-	8	8	899	26 413	662	1 521	17 413	62 654	27 693	89 469	4 611
3272	Glass & glass product mfg	3	24	11	3 519	121 357	2 977	6 810	94 218	550 774	337 305	885 103	46 523
32721	Glass & glass product mfg	3	24	11	3 519	121 357	2 977	6 810	94 218	550 774	337 305	885 103	46 523
327211	Flat glass mfg	-	1	1	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	5	7	4	g	D	D	D	D	D	D	D	29 495
327215	Glass product mfg made of purchased glass	-	16	6	1 131	37 508	926	2 326	26 866	172 766	118 202	288 775	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	129	46	3 384	108 758	2 435	5 068	69 740	365 699	276 520	641 615	60 132
32731	Cement mfg	—	5	3	543	25 487	391	805	17 259	159 370	67 221	226 549	D
327310	Cement mfg	—	5	3	543	25 487	391	805	17 259	159 370	67 221	226 549	D
32732	Ready-mix concrete mfg.	4	74	22	1 113	31 505	896	1 744	23 344	86 122	112 117	198 746	8 953
327320	Ready-mix concrete mfg	4	74	22	1 113	31 505	896	1 744	23 344	86 122	112 117	198 746	8 953
32733	Concrete pipe, brick, & block mfg	2	19	12	727	23 690	456	1 067	13 244	60 977	54 294	113 975	5 833
327331	Concrete block & brick mfg	3	15	10	e	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	—	4	2	c	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	31	9	1 001	28 076	692	1 452	15 893	59 230	42 888	102 345	D
327390	Other concrete product mfg	1	31	9	1 001	28 076	692	1 452	15 893	59 230	42 888	102 345	D
3279	Other nonmetallic mineral product mfg	1	34	12	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	1	33	11	f	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg ..	2	6	4	146	4 573	117	252	2 960	16 127	10 067	26 068	1 020
327999	All other miscellaneous nonmetallic mineral product mfg	—	11	6	266	9 184	208	450	6 102	32 735	34 548	67 189	2 927
331	Primary metal mfg	—	66	34	6 988	258 276	5 676	11 670	188 279	819 458	1 421 860	2 302 360	88 822
3311	Iron & steel mills & ferroalloy mfg	—	11	10	2 612	108 665	2 174	4 530	82 785	446 147	823 407	1 251 747	30 221
33111	Iron & steel mills & ferroalloy mfg	—	11	10	2 612	108 665	2 174	4 530	82 785	446 147	823 407	1 251 747	30 221
331111	Iron & steel mills	—	10	9	g	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	1	16	5	658	20 803	537	1 116	15 078	44 882	92 954	137 550	D
33122	Rolling & drawing of purchased steel	1	15	5	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	11	5	634	20 086	518	1 089	14 565	42 812	88 557	131 037	D
3313	Alumina & aluminum production & processing ..	—	6	5	1 325	57 402	937	1 900	36 583	151 510	373 468	614 876	D
33131	Alumina & aluminum production & processing	—	6	5	1 325	57 402	937	1 900	36 583	151 510	373 468	614 876	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	2	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	9	4	796	24 423	652	1 325	18 283	76 107	62 053	130 725	11 058
33142	Copper rolling, drawing, extruding, & alloying ...	—	1	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing ..	—	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	8	3	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	c	D	D	D	D	D	D	D	D
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	1	7	2	c	D	D	D	D	D	D	D	D
3315	Foundries	—	24	10	1 597	46 983	1 376	2 799	35 550	100 812	69 978	167 462	11 085
33151	Ferrous metal foundries ..	—	10	4	613	18 237	502	873	12 698	39 592	27 477	66 662	2 069
331511	Iron foundries	—	7	3	514	15 867	442	774	11 316	35 081	23 015	57 808	1 600
33152	Nonferrous metal foundries	—	14	6	984	28 746	874	1 926	22 852	61 220	42 501	100 800	9 016
331521	Aluminum die-casting foundries	—	4	2	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	2	1	c	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting) ..	—	3	2	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	722	231	29 808	861 563	23 510	47 370	599 063	2 398 553	1 958 068	4 340 636	155 174
3321	Forging & stamping	—	22	12	812	27 848	565	1 318	17 718	70 969	94 188	165 029	3 482
33211	Forging & stamping	—	22	12	812	27 848	565	1 318	17 718	70 969	94 188	165 029	3 482
332111	Iron & steel forging	—	3	2	c	D	D	D	D	D	D	D	D
332112	Nonferrous forging	—	3	2	e	D	D	D	D	D	D	D	1 419
332116	Metal stamping	2	13	6	345	9 389	222	462	6 093	17 529	13 609	31 017	1 025
3322	Cutlery & handtool mfg	—	20	10	2 447	69 711	2 073	4 041	52 958	222 691	128 203	355 969	9 181
33221	Cutlery & handtool mfg	—	20	10	2 447	69 711	2 073	4 041	52 958	222 691	128 203	355 969	9 181
332212	Hand & edge tool mfg	—	14	6	1 729	49 525	1 527	3 224	39 724	145 836	88 378	238 396	4 580
332213	Saw blade & handsaw mfg	—	4	4	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	146	54	5 076	142 573	3 702	7 600	88 375	340 065	529 378	866 280	16 313
33231	Plate work & fabricated structural product mfg	—	68	28	3 312	99 342	2 335	4 846	60 003	232 394	433 660	662 662	12 786
332311	Prefabricated metal building & component mfg	2	8	2	140	2 795	83	86	1 551	4 985	4 319	9 222	50
332312	Fabricated structural metal mfg	—	47	20	2 671	84 584	1 861	4 006	50 021	198 334	409 970	605 661	12 065
332313	Plate work mfg	1	13	6	501	11 963	391	754	8 431	29 075	19 371	47 779	671
33232	Ornamental & architectural metal products mfg	1	78	26	1 764	43 231	1 367	2 754	28 372	107 671	95 718	203 618	3 527
332321	Metal window & door mfg	1	11	5	441	10 107	348	680	7 121	25 009	33 558	58 787	400
332322	Sheet metal work mfg	1	42	17	1 063	26 755	858	1 744	17 691	58 093	48 594	106 430	2 406
332323	Ornamental & architectural metal work mfg	1	25	4	260	6 369	161	330	3 560	24 569	13 566	38 401	721
3324	Boiler, tank, & shipping container mfg	—	20	15	1 214	44 049	953	1 927	31 636	131 426	206 857	337 549	7 755
33241	Power boiler & heat exchanger mfg	—	6	5	469	15 429	352	782	9 435	45 515	23 017	69 398	738
332410	Power boiler & heat exchanger mfg	—	6	5	469	15 429	352	782	9 435	45 515	23 017	69 398	738
33242	Metal tank (heavy gauge) mfg	—	6	5	249	8 447	188	351	5 713	13 816	12 532	25 850	2 373
332420	Metal tank (heavy gauge) mfg	—	6	5	249	8 447	188	351	5 713	13 816	12 532	25 850	2 373
33243	Metal can, box, & other metal container (light gauge) mfg	—	8	5	496	20 173	413	794	16 488	72 095	171 308	242 301	4 644
332431	Metal can mfg	—	4	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	9	7	950	22 940	732	1 361	12 723	68 538	62 266	131 216	2 505
33251	Hardware mfg	—	9	7	950	22 940	732	1 361	12 723	68 538	62 266	131 216	2 505
332510	Hardware mfg	—	9	7	950	22 940	732	1 361	12 723	68 538	62 266	131 216	2 505
3326	Spring & wire product mfg	1	22	9	835	20 253	641	1 318	12 758	60 822	49 358	107 177	8 037
33261	Spring & wire product mfg	1	22	9	835	20 253	641	1 318	12 758	60 822	49 358	107 177	8 037
332618	Other fabricated wire product mfg	1	18	8	742	17 406	562	1 164	10 408	53 579	43 372	93 977	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	347	64	4 521	131 439	3 472	6 195	84 372	257 425	116 547	370 240	19 095
33271	Machine shops	2	318	48	3 737	107 912	2 853	5 018	68 616	201 305	82 822	283 841	13 401
332710	Machine shops	2	318	48	3 737	107 912	2 853	5 018	68 616	201 305	82 822	283 841	13 401
33272	Turned product & screw, nut, & bolt mfg	2	29	16	784	23 527	619	1 177	15 756	56 120	33 725	86 399	5 694
332721	Precision turned product mfg	2	17	11	462	12 132	380	698	8 821	28 356	13 278	39 678	1 768
332722	Bolt, nut, screw, rivet, & washer mfg	1	12	5	322	11 395	239	479	6 935	27 764	20 447	46 721	3 926
3328	Coating, engraving, heat treating, & allied activities	—	48	14	1 447	36 267	1 129	2 218	23 153	72 597	29 323	102 290	2 885
33281	Coating, engraving, heat treating, & allied activities	—	48	14	1 447	36 267	1 129	2 218	23 153	72 597	29 323	102 290	2 885
332811	Metal heat treating	1	5	1	132	2 964	123	172	2 467	11 619	4 039	15 657	704
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	16	4	338	8 821	267	568	5 993	26 012	13 305	39 537	894
332813	Electroplating, plating, polishing, anodizing, & coloring	—	27	9	977	24 482	739	1 478	14 693	34 966	11 979	47 096	1 287

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	—	88	46	12 506	366 483	10 243	21 392	275 370	1 174 020	741 948	1 904 886	85 921
33291	Metal valve mfg.....	—	20	15	3 220	90 718	2 536	5 039	63 116	339 209	176 544	519 507	19 548
332911	Industrial valve mfg...	—	9	9	1 953	54 163	1 600	3 218	40 493	246 276	86 458	337 123	12 416
332912	Fluid power valve & hose fitting mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	2	5	2	136	3 230	112	218	2 482	8 156	11 802	19 563	290
33299	All other fabricated metal product mfg.....	—	68	31	9 286	275 765	7 707	16 353	212 254	834 811	565 404	1 385 379	66 373
332991	Ball & roller bearing mfg.....	—	14	13	6 433	197 600	5 417	11 610	154 628	642 495	400 790	1 036 063	53 892
332994	Small arms mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	—	11	3	f	D	D	D	D	D	D	D	2 735
332999	All other miscellaneous fabricated metal product mfg.....	—	38	14	1 961	47 347	1 616	3 362	35 063	123 808	94 368	209 608	9 404
333	Machinery mfg.....	—	360	147	24 872	783 501	17 558	36 797	472 869	2 541 724	2 946 596	5 517 080	219 626
3331	Agriculture, construction, & mining machinery mfg....	—	16	9	3 835	68 994	2 912	5 909	46 231	195 525	543 935	727 399	28 243
33311	Agricultural implement mfg.....	—	7	3	h	D	D	D	D	D	D	D	25 295
333111	Farm machinery & equipment mfg.....	9	4	1	179	4 137	130	245	3 351	7 641	10 107	17 985	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	—	3	2	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	1	7	4	542	15 571	299	581	7 279	43 174	66 578	97 915	D
333120	Construction machinery mfg.....	1	7	4	542	15 571	299	581	7 279	43 174	66 578	97 915	D
33313	Mining & oil & gas field machinery mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	94	34	3 932	129 230	2 521	5 043	69 216	277 803	222 842	503 545	20 518
33322	Plastics & rubber industry machinery mfg.....	—	4	1	c	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	4	1	c	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	1	89	33	3 818	125 269	2 445	4 933	66 759	271 735	209 290	484 736	19 530
333292	Textile machinery mfg.	—	59	27	3 272	104 756	2 191	4 434	58 897	222 976	166 356	394 498	16 376
333298	All other industrial machinery mfg.....	6	16	4	396	15 648	140	283	4 632	38 155	36 441	72 798	2 747
3333	Commercial & service industry machinery mfg ..	—	21	7	1 430	39 070	1 107	2 523	23 380	117 560	154 018	277 149	5 780
33331	Commercial & service industry machinery mfg.....	—	21	7	1 430	39 070	1 107	2 523	23 380	117 560	154 018	277 149	5 780
333311	Automatic vending machine mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.....	2	15	5	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	—	21	8	1 897	51 197	1 531	3 088	34 069	241 775	154 711	399 882	8 818
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	21	8	1 897	51 197	1 531	3 088	34 069	241 775	154 711	399 882	8 818
333411	Air purification equipment mfg.....	3	8	2	107	1 996	83	97	1 172	5 394	5 327	10 633	674
333414	Heating equipment (except warm air furnaces) mfg.....	—	6	2	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg.....	—	6	3	1 164	30 929	1 017	2 083	24 412	182 062	120 258	303 265	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	-	103	38	4 069	133 801	2 917	6 288	86 365	296 495	205 448	496 301	32 336
33351	Metalworking machinery mfg	-	103	38	4 069	133 801	2 917	6 288	86 365	296 495	205 448	496 301	32 336
333512	Industrial mold mfg ...	-	13	4	593	25 597	415	1 090	16 239	37 806	22 948	61 074	9 215
333514	Machine tool (metal cutting types) mfg ...	-	3	2	c	D	D	D	D	D	D	D	D
333515	Special die & tool, die set, jig, & fixture mfg .	-	43	9	573	16 966	434	806	12 121	30 553	10 801	40 952	2 297
3336	Engine, turbine, & power transmission equipment mfg	-	19	16	3 727	146 451	2 628	5 631	95 457	884 977	1 057 159	1 977 918	90 197
33361	Engine, turbine, & power transmission equipment mfg	-	19	16	3 727	146 451	2 628	5 631	95 457	884 977	1 057 159	1 977 918	90 197
333611	Turbine & turbine generator set unit mfg	-	2	2	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	2	2	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	3	3	c	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	12	9	1 007	30 933	669	1 414	18 774	87 973	212 724	304 856	D
3339	Other general-purpose machinery mfg	-	86	35	5 982	214 758	3 942	8 315	118 151	527 589	608 483	1 134 886	33 734
33391	Pump & compressor mfg	-	2	2	c	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	c	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	23	7	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	3	8	3	311	10 733	175	329	4 414	23 717	26 358	51 004	763
333923	Overhead traveling crane, hoist, & monorail system mfg .	-	7	2	c	D	D	D	D	D	D	D	199
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	7	2	264	11 095	157	367	5 544	29 493	65 538	94 361	D
33399	All other general-purpose machinery mfg	-	61	26	4 998	180 460	3 332	7 043	101 206	464 115	478 945	939 996	30 710
333991	Power-driven handtool mfg	-	3	3	1 752	59 593	1 329	3 310	39 987	179 891	228 652	398 221	10 898
333992	Welding & soldering equipment mfg	-	5	2	g	D	D	D	D	D	D	D	2 642
333993	Packaging machinery mfg	-	9	7	924	40 332	571	1 078	21 630	94 297	80 361	178 027	7 112
333994	Industrial process furnace & oven mfg .	4	8	3	159	5 770	121	283	3 142	15 075	8 561	23 280	D
333995	Fluid power cylinder & actuator mfg	-	3	2	c	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	5	3	276	10 228	171	420	4 888	26 173	44 835	72 501	3 382
333997	Scale & balance (except laboratory) mfg	-	2	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	26	5	322	10 557	216	425	6 060	18 649	13 984	33 389	1 280
334	Computer & electronic product mfg	-	83	36	14 795	504 263	9 760	19 216	248 786	1 107 727	1 199 286	2 273 671	122 250
3341	Computer & peripheral equipment mfg	-	10	4	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	10	4	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	4	2	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	12	2	495	15 844	318	637	7 010	45 208	28 447	69 963	D
33429	Other communications equipment mfg	-	3	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	3	1	e	D	D	D	D	D	D	D	D

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31-33	SOUTH CAROLINA— Con. Manufacturing— Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	-	33	18	10 301	321 436	7 066	13 857	170 621	669 972	745 825	1 402 451	97 216
33441	Semiconductor & other electronic component mfg	-	33	18	10 301	321 436	7 066	13 857	170 621	669 972	745 825	1 402 451	97 216
334411	Electron tube mfg	-	2	1	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	6	4	660	20 419	483	965	11 548	21 461	48 388	70 111	D
334413	Semiconductor & related device mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	8	5	6 326	193 042	3 996	7 679	87 782	445 424	310 190	748 449	D
334417	Electronic connector mfg	-	3	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	10	4	661	15 125	533	1 034	9 887	29 298	36 580	65 877	1 255
3345	Navigational, measuring, medical, & control instruments mfg	-	21	8	1 581	53 434	1 119	2 110	28 856	126 206	155 454	271 420	8 470
33451	Navigational, measuring, medical, & control instruments mfg	-	21	8	1 581	53 434	1 119	2 110	28 856	126 206	155 454	271 420	8 470
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	2	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	-	3	3	298	11 670	178	338	5 610	22 485	19 666	42 335	1 058
334515	Electricity measuring & testing instrument mfg	-	4	1	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	1	6	3	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	6	3	g	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg .	-	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	91	57	14 995	455 221	11 100	22 942	281 984	1 424 713	1 755 608	3 162 759	124 482
3351	Electric lighting equipment mfg	-	11	6	1 851	50 400	1 251	2 518	28 910	150 466	159 625	309 322	6 346
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	10	5	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	-	5	2	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/ institutional electric lighting fixture mfg ...	1	2	1	c	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	6	4	2 906	84 556	2 552	5 659	65 261	255 230	373 418	629 259	16 215
33522	Major appliance mfg ...	-	6	4	2 906	84 556	2 552	5 659	65 261	255 230	373 418	629 259	16 215
335221	Household cooking appliance mfg	-	4	2	f	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	42	22	4 182	128 148	2 696	5 847	70 186	327 957	364 877	691 713	16 598
33531	Electrical equipment mfg	-	42	22	4 182	128 148	2 696	5 847	70 186	327 957	364 877	691 713	16 598
335312	Motor & generator mfg	1	16	8	e	D	D	D	D	D	D	D	1 937
335313	Switchgear & switchboard apparatus mfg	-	13	6	1 783	57 968	1 147	3 020	32 641	177 887	210 220	386 059	D
335314	Relay & industrial control mfg	-	11	7	1 840	52 508	1 169	2 062	27 745	118 894	125 709	245 037	5 520
3359	Other electrical equipment & component mfg	-	32	25	6 056	192 117	4 601	8 918	117 627	691 060	857 688	1 532 465	85 323
33591	Battery mfg	-	2	2	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	8	8	1 863	62 690	1 335	2 828	35 935	245 512	458 312	699 816	22 458
335921	Fiber optic cable mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	6	6	g	D	D	D	D	D	D	D	D

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	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33593	Wiring device mfg	-	11	8	g	D	D	D	D	D	D	D	16 218
335931	Current-carrying wiring device mfg	-	6	4	511	14 714	438	907	10 383	69 151	49 201	115 637	D
335932	Noncurrent-carrying wiring device mfg	-	5	4	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	11	7	1 357	51 142	906	1 828	28 870	233 022	144 976	367 798	D
335991	Carbon & graphite product mfg	-	4	4	1 018	40 869	676	1 323	23 016	196 261	114 981	300 042	8 139
335999	All other miscellaneous electrical equipment & component mfg	-	7	3	339	10 273	230	505	5 854	36 761	29 995	67 756	D
336	Transportation equipment mfg	-	157	93	22 646	776 170	17 456	36 277	526 347	2 744 270	4 120 129	6 816 951	311 834
3361	Motor vehicle mfg	-	10	5	3 203	154 041	2 407	4 990	105 290	656 246	1 723 519	2 376 082	122 390
33611	Automobile & light duty motor vehicle mfg	-	9	4	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	7	2	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	2	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	23	11	492	12 224	327	597	6 334	38 918	55 922	97 017	1 956
33621	Motor vehicle body & trailer mfg	2	23	11	492	12 224	327	597	6 334	38 918	55 922	97 017	1 956
336211	Motor vehicle body mfg	-	4	4	207	4 891	111	188	1 918	24 238	28 701	54 900	673
336212	Truck trailer mfg	3	5	5	156	4 440	133	264	2 935	8 359	15 632	24 017	927
336214	Travel trailer & camper mfg	6	14	2	129	2 893	83	145	1 481	6 321	11 589	18 100	356
3363	Motor vehicle parts mfg	-	76	54	13 858	439 538	10 997	23 656	303 927	1 587 145	1 992 352	3 556 676	167 505
33631	Motor vehicle gasoline engine & engine parts mfg	-	9	8	2 638	88 181	1 932	4 344	56 291	396 945	410 102	798 625	51 883
336311	Carburetor, piston, piston ring, & valve mfg	9	2	2	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	7	6	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	12	10	1 929	49 395	1 565	3 118	31 861	162 861	195 805	360 593	12 532
336321	Vehicular lighting equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	11	9	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	6	5	1 682	55 573	1 348	3 045	40 003	208 996	230 416	441 126	23 821
336340	Motor vehicle brake system mfg	-	6	5	1 682	55 573	1 348	3 045	40 003	208 996	230 416	441 126	23 821
33635	Motor vehicle transmission & power train parts mfg	-	10	9	3 621	129 455	2 881	6 229	96 299	526 266	745 949	1 258 968	43 676
336350	Motor vehicle transmission & power train parts mfg	-	10	9	3 621	129 455	2 881	6 229	96 299	526 266	745 949	1 258 968	43 676
33636	Motor vehicle seating & interior trim mfg	-	3	1	c	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	3	1	c	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	11	7	1 568	50 793	1 308	2 934	36 806	135 373	154 640	289 416	11 037
336370	Motor vehicle metal stamping	-	11	7	1 568	50 793	1 308	2 934	36 806	135 373	154 640	289 416	11 037
33639	Other motor vehicle parts mfg	1	23	13	2 244	61 447	1 820	3 694	39 677	138 247	201 068	335 980	23 755
336391	Motor vehicle air-conditioning mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	1	22	12	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH CAROLINA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	-	7	5	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	7	5	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	4	3	e	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	8	6	1 228	43 767	783	1 480	22 984	98 523	108 559	200 915	7 132
33651	Railroad rolling stock mfg	-	8	6	1 228	43 767	783	1 480	22 984	98 523	108 559	200 915	7 132
336510	Railroad rolling stock mfg	-	8	6	1 228	43 767	783	1 480	22 984	98 523	108 559	200 915	7 132
3366	Ship & boat building	1	28	11	1 928	51 767	1 399	2 773	30 843	120 284	140 677	262 280	4 491
33661	Ship & boat building	1	28	11	1 928	51 767	1 399	2 773	30 843	120 284	140 677	262 280	4 491
336611	Ship building & repairing	4	6	4	899	25 613	633	1 392	16 102	58 469	36 911	95 380	2 679
336612	Boat building	-	22	7	1 029	26 154	766	1 381	14 741	61 815	103 766	166 900	1 812
3369	Other transportation equipment mfg	2	5	1	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	2	5	1	e	D	D	D	D	D	D	D	D
336992	Military armored vehicle, tank, & tank component mfg	-	1	1	c	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	194	38	5 450	119 591	4 499	8 342	84 731	282 447	283 064	569 616	11 607
3371	Household & institutional furniture & kitchen cabinet mfg	-	158	22	3 895	77 696	3 347	6 113	61 025	181 417	193 962	379 302	6 089
33711	Wood kitchen cabinet & counter top mfg	3	97	6	615	12 956	518	869	9 498	25 192	18 393	43 380	1 193
337110	Wood kitchen cabinet & counter top mfg ...	3	97	6	615	12 956	518	869	9 498	25 192	18 393	43 380	1 193
33712	Household & institutional furniture mfg	-	61	16	3 280	64 740	2 829	5 244	51 527	156 225	175 569	335 922	4 896
337121	Upholstered household furniture mfg	-	7	1	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	35	8	2 049	35 514	1 898	3 216	30 280	82 626	81 680	167 075	3 199
337124	Metal household furniture mfg	1	5	1	c	D	D	D	D	D	D	D	504
337125	Household furniture (except wood & metal) mfg	8	2	2	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	12	4	497	12 434	288	548	7 112	30 952	60 811	93 219	929
3372	Office furniture (including fixtures) mfg	1	29	13	1 316	36 711	973	1 846	20 288	88 933	77 944	165 841	3 484
33721	Office furniture (including fixtures) mfg	1	29	13	1 316	36 711	973	1 846	20 288	88 933	77 944	165 841	3 484
337212	Custom architectural woodwork & millwork mfg	-	12	4	378	10 573	260	386	4 414	24 498	11 337	36 029	D
337214	Office furniture (except wood) mfg	-	4	2	c	D	D	D	D	D	D	D	1 005
337215	Showcase, partition, shelving, & locker mfg	-	11	6	703	19 275	531	1 057	11 316	39 463	41 539	80 176	1 182
3379	Other furniture related product mfg	2	7	3	239	5 184	179	383	3 418	12 097	11 158	24 473	2 034
33791	Mattress mfg	-	4	2	c	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	4	2	c	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	244	40	5 934	143 950	4 748	8 961	93 388	444 218	275 275	714 072	21 072
3391	Medical equipment & supplies mfg	3	89	11	1 951	49 758	1 501	2 778	30 651	106 209	68 653	174 708	7 875
33911	Medical equipment & supplies mfg	3	89	11	1 951	49 758	1 501	2 778	30 651	106 209	68 653	174 708	7 875
339112	Surgical & medical instrument mfg	3	8	5	733	18 592	543	1 015	10 903	35 347	23 085	58 413	3 568
339113	Surgical appliance & supplies mfg	1	8	5	880	22 398	693	1 334	14 883	51 655	38 256	89 564	3 624
339116	Dental laboratories ...	7	65	1	318	8 315	251	406	4 597	17 320	6 381	23 899	619

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH CAROLINA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . .	—	155	29	3 983	94 192	3 247	6 183	62 737	338 009	206 622	539 364	13 197
33992	Sporting & athletic goods mfg	—	25	4	1 046	26 127	860	1 687	17 920	115 473	83 879	192 881	4 306
339920	Sporting & athletic goods mfg	—	25	4	1 046	26 127	860	1 687	17 920	115 473	83 879	192 881	4 306
33994	Office supplies (except paper) mfg	—	7	4	457	12 867	397	861	9 742	71 430	34 924	107 676	2 039
339941	Pen & mechanical pencil mfg	—	2	2	c	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	—	1	1	c	D	D	D	D	D	D	D	D
33995	Sign mfg	2	69	10	786	18 619	560	905	10 438	40 242	22 650	62 568	1 920
339950	Sign mfg	2	69	10	786	18 619	560	905	10 438	40 242	22 650	62 568	1 920
33999	All other miscellaneous mfg	1	41	10	1 623	35 127	1 380	2 638	23 841	107 176	62 064	169 471	4 779
339991	Gasket, packing, & sealing device mfg	1	10	3	875	21 708	742	1 526	15 117	67 334	33 565	101 446	2 078
339993	Fastener, button, needle, & pin mfg	—	1	1	c	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	5	3	209	3 826	180	356	2 218	8 641	13 920	22 656	D
339999	All other miscellaneous mfg	1	19	3	e	D	D	D	D	D	D	D	600

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUGUSTA-AIKEN, GA-SC MSA												
	Manufacturing	—	364	149	41 124	1 560 574	25 542	47 026	817 378	6 561 832	3 797 324	10 336 193	463 785
	Augusta-Aiken, GA-SC MSA (GA Part)	—	237	98	19 084	619 348	13 651	26 518	375 719	3 033 447	2 709 616	5 746 519	161 885
	Augusta-Aiken, GA-SC MSA (SC Part)	—	127	51	22 040	941 226	11 891	20 508	441 659	3 528 385	1 087 708	4 589 674	301 900
311	Food mfg	—	17	8	1 666	51 295	1 377	2 862	30 733	186 058	275 429	462 723	5 375
3116	Meat product mfg	—	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	2	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	3	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	6	3	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	8	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	8	2	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	8	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUGUSTA-AIKEN, GA-SC MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	-	20	18	5 232	125 075	4 777	7 885	108 452	231 029	556 256	801 161	9 543
3131	Fiber, yarn, & thread mills .	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	1	11	10	3 311	74 246	3 009	4 951	63 533	160 786	343 469	502 580	D
31321	Broadwoven fabric mills .	1	8	7	2 917	66 193	2 735	4 466	59 407	139 888	294 153	432 959	3 035
313210	Broadwoven fabric mills	1	8	7	2 917	66 193	2 735	4 466	59 407	139 888	294 153	432 959	3 035
31323	Nonwoven fabric mills . . .	-	3	3	394	8 053	274	485	4 126	20 898	49 316	69 621	D
313230	Nonwoven fabric mills .	-	3	3	394	8 053	274	485	4 126	20 898	49 316	69 621	D
3133	Textile & fabric finishing & fabric coating mills	-	7	6	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	7	6	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	3	2	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	4	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	14	4	1 145	17 907	851	1 460	10 309	42 735	42 336	86 062	D
3141	Textile furnishings mills	-	9	3	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	9	3	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	7	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	8	6	1 339	18 462	1 143	2 016	13 413	40 139	27 106	63 757	D
3152	Cut & sew apparel mfg	3	7	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	3	3	3	g	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	20	7	766	21 986	590	1 257	15 096	49 267	78 203	124 951	8 182
3211	Sawmills & wood preservation	-	7	4	388	12 977	313	746	8 693	24 322	54 333	76 441	4 842
32111	Sawmills & wood preservation	-	7	4	388	12 977	313	746	8 693	24 322	54 333	76 441	4 842
321113	Sawmills	-	5	3	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	1	11	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	9	3 016	159 310	2 418	5 994	122 785	1 100 419	551 800	1 643 833	234 363
3221	Pulp, paper, & paperboard mills	-	5	5	2 619	146 335	2 104	5 313	113 832	1 070 240	502 565	1 565 058	D
32212	Paper mills	-	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	397	12 975	314	681	8 953	30 179	49 235	78 775	D
32221	Paperboard container mfg	-	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
3231	Printing & related support activities	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
32311	Printing	-	46	7	1 045	27 896	861	1 651	21 453	68 454	50 481	119 533	9 783
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	41	26	14 137	751 382	4 845	7 011	279 843	3 419 466	958 402	4 369 849	85 098
3251	Basic chemical mfg	-	22	16	12 276	677 795	3 359	3 785	226 972	2 504 495	413 281	2 931 976	39 315
32518	Other basic inorganic chemical mfg	-	10	6	11 217	624 966	2 694	2 415	195 353	2 170 028	120 738	2 289 523	11 897
325188	All other basic inorganic chemical mfg	-	9	5	j	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	6	6	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	5	5	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	AUGUSTA-AIKEN, GA-SC MSA—Con.													
	Manufacturing—Con.													
325	Chemical mfg—Con.													
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	7	6	g	D	D	D	D	D	D	D	D	
32521	Resin & synthetic rubber mfg	—	3	3	e	D	D	D	D	D	D	D	7 077	
325211	Plastics material & resin mfg	—	3	3	e	D	D	D	D	D	D	D	7 077	
32522	Artificial & synthetic fibers & filaments mfg . .	—	4	3	f	D	D	D	D	D	D	D	D	
325222	Noncellulosic organic fiber mfg	—	4	3	f	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	—	5	2	e	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	—	5	2	e	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	—	2	2	e	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	—	16	8		1 003	27 204	833	1 470	19 497	89 523	52 844	139 621	D
3261	Plastics product mfg	—	11	7	f		D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg	—	2	2	e		D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	—	2	2	e		D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	7	4		293	6 041	250	378	4 088	11 993	10 128	20 720	D
326199	All other plastics product mfg	1	7	4		293	6 041	250	378	4 088	11 993	10 128	20 720	D
327	Nonmetallic mineral product mfg	6	30	7		2 743	90 744	2 056	4 337	62 548	310 131	165 561	475 616	30 725
3271	Clay product & refractory mfg	—	3	2	g		D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	3	2	g		D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	2	1	e		D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	—	1	1	f		D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	9	5	1	g		D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	9	5	1	g		D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	9	3	1	g		D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	20	4	e		D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	50	18		1 822	44 408	1 480	3 095	30 505	133 463	92 170	220 215	9 723
3323	Architectural & structural metals mfg	3	12	6		277	7 944	201	422	4 806	15 126	18 123	33 431	763
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	22	5	e		D	D	D	D	D	D	D	D
33271	Machine shops	4	19	5		258	7 213	194	322	4 755	14 746	5 671	20 392	794
332710	Machine shops	4	19	5		258	7 213	194	322	4 755	14 746	5 671	20 392	794
3329	Other fabricated metal product mfg	—	9	5		1 021	21 343	875	1 926	15 532	78 937	53 133	126 596	6 700
33291	Metal valve mfg	—	4	2	e		D	D	D	D	D	D	D	D
332911	Industrial valve mfg . . .	—	1	1	e		D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	5	3	f		D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	4	3	f		D	D	D	D	D	D	D	D
333	Machinery mfg	—	13	7		1 215	46 733	799	1 711	22 411	348 923	305 941	643 825	13 398
3335	Metalworking machinery mfg	—	5	1	f		D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	—	5	1	f		D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg . .	—	2	1	f		D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	4	3		404	13 848	289	575	7 626	48 089	22 962	70 258	D
33391	Pump & compressor mfg	—	1	1	e		D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	1	1	e		D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUGUSTA-AIKEN, GA-SC MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	5	2	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	18	8	h	D	D	D	D	D	D	D	12 423
3363	Motor vehicle parts mfg ...	-	5	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	5	3	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	5	3	h	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	-	4	2	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	19	6	302	6 676	251	473	4 143	35 601	16 213	51 725	1 496
339	Miscellaneous mfg.....	-	27	3	906	26 744	765	1 452	20 151	42 562	110 028	152 772	D
3391	Medical equipment & supplies mfg	-	13	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	13	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D
	CHARLESTON-NORTH CHARLESTON, SC MSA												
31-33	Manufacturing	-	415	133	20 595	687 536	14 909	31 000	436 492	3 086 856	3 461 367	6 588 871	656 856
311	Food mfg.....	1	29	5	625	14 753	332	576	5 619	45 461	71 761	116 811	2 039
3115	Dairy product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	e	D	D	D	D	D	D	D	D
313	Textile mills	-	7	4	1 146	35 026	903	1 903	23 612	90 026	100 308	185 500	10 967
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	2	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	1	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	1	1	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	5	16	4	707	12 782	665	1 150	10 748	31 753	22 119	52 498	1 687
3141	Textile furnishings mills....	5	7	3	648	11 580	620	1 086	10 203	29 614	19 061	47 240	D
31411	Carpet & rug mills	6	2	2	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	6	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	30	16	1 538	41 460	1 244	2 493	29 413	110 768	145 714	255 905	5 009
3211	Sawmills & wood preservation	-	7	6	326	8 973	279	574	6 765	33 927	58 402	92 025	2 267
32111	Sawmills & wood preservation	-	7	6	326	8 973	279	574	6 765	33 927	58 402	92 025	2 267
321113	Sawmills	-	7	6	326	8 973	279	574	6 765	33 927	58 402	92 025	2 267
3212	Veneer, plywood, & engineered wood product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	4	f	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	-	1	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	1	18	6	f	D	D	D	D	D	D	D	D
32191	Millwork	-	8	2	270	5 829	234	459	4 580	9 513	8 144	17 703	449
322	Paper mfg	-	5	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLESTON-NORTH CHARLESTON, SC MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	4	59	7	544	10 275	392	675	6 241	18 322	22 901	42 471	1 515
3231	Printing & related support activities.....	4	59	7	544	10 275	392	675	6 241	18 322	22 901	42 471	1 515
32311	Printing	4	59	7	544	10 275	392	675	6 241	18 322	22 901	42 471	1 515
323113	Commercial screen printing.....	7	13	3	251	4 192	185	373	2 419	5 806	15 546	22 558	824
325	Chemical mfg	—	30	14	2 860	128 468	1 822	4 337	69 591	1 127 311	1 024 872	2 130 806	447 606
3251	Basic chemical mfg	—	9	6	948	51 691	467	1 047	21 330	680 373	517 945	1 187 116	D
32519	Other basic organic chemical mfg	—	5	5	897	49 520	430	964	20 194	661 085	511 969	1 167 312	D
325192	Cyclic crude & intermediate mfg	—	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	3	3	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	7	4	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	3	3	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	3	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	7	1	g	D	D	D	D	D	D	D	714
32599	All other chemical product & preparation mfg	—	7	1	g	D	D	D	D	D	D	D	714
325992	Photographic film, paper, plate, & chemical mfg	—	3	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	25	12	1 236	26 941	887	1 665	19 198	124 061	64 687	189 205	10 020
3261	Plastics product mfg	—	11	8	444	11 005	357	736	7 720	27 381	31 521	58 623	8 729
3262	Rubber product mfg	—	14	4	792	15 936	530	929	11 478	96 680	33 166	130 582	1 291
32622	Rubber & plastics hoses & belting mfg	—	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	27	11	790	29 300	557	1 137	18 945	114 937	61 756	176 078	46 260
3273	Cement & concrete product mfg	1	20	9	711	27 330	502	1 041	17 772	108 537	58 264	167 259	D
32731	Cement mfg	—	3	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	3	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	13	7	1 776	71 055	1 265	2 791	46 159	259 429	572 753	911 792	D
3311	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	4	4	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	4	4	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	55	15	1 239	33 526	934	1 739	21 717	87 667	91 844	180 873	5 109
3322	Cutlery & handtool mfg	—	5	2	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	5	2	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg ..	—	4	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	17	4	359	7 785	256	531	5 431	20 059	17 257	37 213	631
33231	Plate work & fabricated structural product mfg ..	1	8	3	308	6 781	230	484	4 803	18 440	15 451	33 806	226
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	24	6	e	D	D	D	D	D	D	D	D
33271	Machine shops.....	—	23	5	321	9 721	245	427	6 288	18 809	6 512	25 192	2 084
332710	Machine shops.....	—	23	5	321	9 721	245	427	6 288	18 809	6 512	25 192	2 084

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLESTON-NORTH CHARLESTON, SC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	20	9	710	24 197	374	775	11 386	65 057	129 872	196 003	2 219
3336	Engine, turbine, & power transmission equipment mfg	-	6	6	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	6	6	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	4	4	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	10	2	262	9 100	117	227	2 708	20 065	59 407	81 391	1 014
335	Electrical equipment, appliance, & component mfg	-	6	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	e	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	26	12	3 855	134 580	2 961	6 688	97 980	582 723	703 749	1 270 918	27 704
3363	Motor vehicle parts mfg	-	8	4	2 716	103 600	2 122	4 929	78 250	510 694	653 580	1 148 825	24 602
33635	Motor vehicle transmission & power train parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	3	14	6	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	3	14	6	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	4	5	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	19	1	380	9 963	291	555	5 331	16 741	12 290	28 664	950
3372	Office furniture (including fixtures) mfg	-	3	1	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	32	5	813	20 379	602	1 096	11 969	37 258	23 302	60 936	4 191
3391	Medical equipment & supplies mfg	4	17	3	660	16 554	488	889	9 693	30 897	20 054	51 431	3 891
33911	Medical equipment & supplies mfg	4	17	3	660	16 554	488	889	9 693	30 897	20 054	51 431	3 891
339112	Surgical & medical instrument mfg	4	2	2	f	D	D	D	D	D	D	D	D
31-33	CHARLOTTE-GASTONIA-ROCK HILL, NC-SC MSA												
	Manufacturing	-	2 422	926	133 983	4 061 600	100 901	208 784	2 620 572	17 634 645	14 545 193	32 133 936	1 076 320
	Charlotte-Gastonia-Rock Hill, NC-SC MSA (NC Part)	-	2 200	836	122 252	3 669 824	92 213	190 962	2 370 223	16 471 675	13 385 512	29 808 220	998 712
	Charlotte-Gastonia-Rock Hill, NC-SC MSA (SC Part)	-	222	90	11 731	391 776	8 688	17 822	250 349	1 162 970	1 159 681	2 325 716	77 608
311	Food mfg	-	84	36	j	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	14	5	2 174	44 114	2 029	4 204	33 539	227 211	207 696	439 052	3 627
31161	Animal slaughtering & processing	-	14	5	2 174	44 114	2 029	4 204	33 539	227 211	207 696	439 052	3 627
311615	Poultry processing	-	5	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	38	11	i	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	33	7	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	18	7	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	5	4	h	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	2	2	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	16	10	1 602	58 216	1 006	2 024	24 236	326 699	166 792	492 651	22 831
31191	Snack food mfg	—	4	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	4	3	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	2	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	2	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg	5	7	5	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	5	6	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	12	8	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	11	7	f	D	D	D	D	D	D	D	15 242
31211	Soft drink & ice mfg	—	10	7	722	19 833	326	769	8 862	257 094	236 634	493 747	D
312111	Soft drink mfg	—	7	6	674	18 995	307	739	8 585	255 456	235 500	490 971	14 885
3122	Tobacco mfg	—	1	1	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	1	1	g	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	—	198	140	26 518	617 760	23 285	51 675	490 448	1 506 300	2 378 962	3 886 695	172 112
3131	Fiber, yarn, & thread mills	—	70	58	10 741	221 619	9 697	21 286	186 917	519 487	910 470	1 433 327	100 526
31311	Fiber, yarn, & thread mills	—	70	58	10 741	221 619	9 697	21 286	186 917	519 487	910 470	1 433 327	100 526
313111	Yarn spinning mills	—	61	53	10 352	213 043	9 347	20 544	180 233	510 382	890 770	1 404 456	D
313112	Yarn texturing, throwing, & twisting mills	1	8	4	e	D	D	D	D	D	D	D	D
3132	Fabric mills	1	69	48	11 210	284 321	9 749	22 097	226 693	590 859	823 482	1 419 291	51 393
31321	Broadwoven fabric mills	1	22	16	6 887	181 653	6 284	14 701	156 372	399 186	572 109	981 520	33 209
313210	Broadwoven fabric mills	1	22	16	6 887	181 653	6 284	14 701	156 372	399 186	572 109	981 520	33 209
31324	Knit fabric mills	2	35	27	3 926	93 366	3 126	6 668	63 784	169 020	226 298	390 124	16 589
313241	Weft knit fabric mills	5	26	19	2 222	51 276	1 726	3 589	34 022	81 205	93 547	171 888	7 381
313249	Other knit fabric & lace mills	—	9	8	1 704	42 090	1 400	3 079	29 762	87 815	132 751	218 236	9 208
3133	Textile & fabric finishing & fabric coating mills	—	59	34	4 567	111 820	3 839	8 292	76 838	395 954	645 010	1 034 077	20 193
31331	Textile & fabric finishing mills	—	55	31	h	D	D	D	D	D	D	D	19 168
313311	Broadwoven fabric finishing mills	—	25	7	g	D	D	D	D	D	D	D	4 330
313312	Textile & fabric finishing mills	—	30	24	3 049	76 668	2 677	5 842	53 321	293 044	374 702	661 573	14 838
31332	Fabric coating mills	—	4	3	e	D	D	D	D	D	D	D	1 025
313320	Fabric coating mills	—	4	3	e	D	D	D	D	D	D	D	1 025
314	Textile product mills	1	53	24	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	2	28	11	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	2	28	11	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	—	21	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	2	7	7	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	1	25	13	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	1	23	12	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	22	11	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	87	49	5 190	88 205	4 536	8 312	66 179	216 093	241 875	459 963	D
3151	Apparel knitting mills	2	33	17	2 544	42 579	2 287	4 301	34 321	122 030	118 023	240 128	D
31511	Hosiery & sock mills	3	23	11	1 880	31 415	1 678	3 263	24 674	77 588	80 219	157 512	D
315111	Sheer hosiery mills	3	18	8	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	3	5	3	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	2	10	6	664	11 164	609	1 038	9 647	44 442	37 804	82 616	D
315191	Outerwear knitting mills	1	9	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	4	43	27	2 085	35 556	1 732	3 015	24 724	74 115	100 988	178 204	D
31522	Men's & boys' cut & sew apparel mfg	3	14	11	965	18 837	741	1 304	12 208	45 786	69 236	117 862	1 225
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	2	9	8	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	3	9	7	352	5 645	304	535	3 981	9 712	10 372	19 990	461
315239	Women's & girls' cut & sew other outerwear mfg	5	4	4	260	4 057	237	466	3 317	6 662	2 689	9 268	D
31529	Other cut & sew apparel mfg	9	7	5	519	7 913	462	817	5 904	12 556	19 919	32 826	1 034
315291	Infants' cut & sew apparel mfg	9	2	2	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	11	5	561	10 070	517	996	7 134	19 948	22 864	41 631	D
31599	Apparel accessories & other apparel mfg	2	11	5	561	10 070	517	996	7 134	19 948	22 864	41 631	D
315999	Other apparel accessories & other apparel mfg	2	9	5	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	84	29	h	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	5	4	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	5	4	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	63	22	2 212	55 044	1 889	3 657	39 946	121 497	172 803	293 723	D
32191	Millwork	2	28	9	761	17 200	631	1 258	11 974	46 708	55 133	101 761	D
321911	Wood window & door mfg	1	10	6	586	12 616	495	994	9 250	32 014	34 075	66 781	1 404
32192	Wood container & pallet mfg	1	18	5	258	5 231	207	400	3 188	10 082	8 138	18 246	577
321920	Wood container & pallet mfg	1	18	5	258	5 231	207	400	3 188	10 082	8 138	18 246	577
32199	All other wood product mfg	1	17	8	1 193	32 613	1 051	1 999	24 784	64 707	109 532	173 716	D
321991	Manufactured home (mobile home) mfg	1	6	6	1 061	30 596	941	1 862	23 313	61 060	102 493	162 972	1 750
322	Paper mfg	—	51	38	4 682	180 356	3 482	7 333	120 623	581 036	505 164	1 094 578	D
3221	Pulp, paper, & paperboard mills	—	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	49	36	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	37	29	2 873	91 074	2 137	4 480	59 491	211 028	271 519	482 654	21 413
322211	Corrugated & solid fiber box mfg	—	20	17	1 504	48 792	1 094	2 341	29 210	104 740	170 856	275 321	11 673
322212	Folding paperboard box mfg	—	6	6	804	26 244	587	1 124	17 763	66 087	49 380	115 609	6 326
322214	Fiber can, tube, drum, & similar products mfg	—	9	6	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg	—	4	3	308	10 091	255	563	6 459	27 264	25 263	51 858	D
323	Printing & related support activities	1	307	58	5 460	180 809	3 902	7 679	112 849	380 785	334 451	716 506	49 001
3231	Printing & related support activities	1	307	58	5 460	180 809	3 902	7 679	112 849	380 785	334 451	716 506	49 001
32311	Printing	1	268	47	4 791	156 908	3 417	6 671	96 858	331 774	322 604	655 595	45 528
323110	Commercial lithographic printing	1	100	24	2 078	70 509	1 504	2 927	45 793	147 526	134 061	279 750	28 055
323112	Commercial flexographic printing	1	12	3	391	12 517	275	666	7 754	30 707	35 363	64 650	3 235
323113	Commercial screen printing	1	43	6	569	11 632	438	735	7 085	26 392	22 497	51 801	1 458
323114	Quick printing	2	60	—	346	9 105	242	426	5 622	17 348	10 971	28 289	2 654
323116	Manifold business form printing	1	13	8	637	19 935	368	734	11 379	70 091	92 488	161 359	3 955
323117	Book printing	1	6	2	322	19 831	281	601	12 037	13 934	6 421	23 175	4 573
32312	Support activities for printing	1	39	11	669	23 901	485	1 008	15 991	49 011	11 847	60 911	3 473
323122	Prepress services	1	28	9	548	20 689	391	811	13 922	42 342	10 085	52 465	2 919

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con. Manufacturing—Con.												
324	Petroleum & coal products mfg	1	6	2	e	D	D	D	D	D	D	D	1 014
3241	Petroleum & coal products mfg	1	6	2	e	D	D	D	D	D	D	D	1 014
325	Chemical mfg	1	148	67	9 276	352 854	5 964	13 099	189 284	1 302 201	1 363 690	2 657 258	116 737
3251	Basic chemical mfg	2	23	12	1 286	51 954	587	1 181	21 333	184 827	187 605	372 335	27 743
32513	Dye & pigment mfg	—	10	5	f	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	8	5	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	6	8	5	e	D	D	D	D	D	D	D	9 841
325199	All other basic organic chemical mfg	6	7	4	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	15	11	4 126	148 670	3 227	7 629	101 755	497 041	537 283	1 035 217	47 724
32521	Resin & synthetic rubber mfg	1	9	6	f	D	D	D	D	D	D	D	22 255
325211	Plastics material & resin mfg	1	7	5	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	6	5	h	D	D	D	D	D	D	D	25 469
325221	Cellulosic organic fiber mfg	—	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	1	5	4	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	7	8	4	452	14 948	236	381	4 637	37 159	29 462	70 458	4 079
32541	Pharmaceutical & medicine mfg	7	8	4	452	14 948	236	381	4 637	37 159	29 462	70 458	4 079
325412	Pharmaceutical preparation mfg	6	3	3	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	24	8	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	31	12	991	41 259	520	996	16 023	149 110	195 067	340 701	9 600
32561	Soap & cleaning compound mfg	2	29	10	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	1	11	4	e	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	3	15	6	609	26 803	276	544	9 149	104 586	136 206	238 517	D
3259	Other chemical product mfg	2	45	19	1 881	74 244	1 062	2 220	35 054	260 399	236 578	487 929	23 643
32591	Printing ink mfg	4	18	11	782	28 444	435	880	13 595	96 760	119 419	212 509	D
325910	Printing ink mfg	4	18	11	782	28 444	435	880	13 595	96 760	119 419	212 509	D
32599	All other chemical product & preparation mfg	1	26	8	g	D	D	D	D	D	D	D	20 742
325991	Custom compounding of purchased resin ...	—	9	5	e	D	D	D	D	D	D	D	2 174
325998	All other miscellaneous chemical product & preparation mfg	1	16	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	116	60	8 631	263 617	6 613	12 726	172 374	781 263	749 720	1 513 005	77 610
3261	Plastics product mfg	2	81	46	5 566	159 143	4 243	8 233	100 970	426 261	497 102	915 892	57 108
32611	Unsupported plastics film, sheet, & bag mfg ..	2	13	9	905	30 219	688	1 391	19 698	104 487	127 322	233 150	5 893
326113	Unsupported plastics film & sheet (except packaging) mfg	1	6	4	593	19 873	461	956	13 229	79 965	97 957	179 669	3 266
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	6	3	775	23 928	668	1 316	18 799	73 418	141 280	200 255	D
326122	Plastics pipe & pipe fitting mfg	—	2	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	7	3	2	269	8 179	212	331	3 807	19 976	37 348	57 404	2 009
326150	Urethane & other foam product (except polystyrene) mfg	7	3	2	269	8 179	212	331	3 807	19 976	37 348	57 404	2 009
32619	Other plastics product mfg	3	51	25	3 071	80 515	2 257	4 341	47 840	178 745	143 542	327 036	19 912
326199	All other plastics product mfg	3	43	22	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	—	35	14	3 065	104 474	2 370	4 493	71 404	355 002	252 618	597 113	20 502
32621	Tire mfg	—	10	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	2	1	g	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	—	10	6	802	26 531	515	1 028	13 895	64 960	58 017	122 907	D
326220	Rubber & plastics hoses & belting mfg	—	10	6	802	26 531	515	1 028	13 895	64 960	58 017	122 907	D
32629	Other rubber product mfg	—	15	7	f	D	D	D	D	D	D	D	1 394
326299	All other rubber product mfg	—	6	4	312	9 888	227	477	5 218	22 058	22 702	45 555	549
327	Nonmetallic mineral product mfg	2	87	35	3 712	97 392	3 064	6 197	71 286	305 117	243 954	553 537	42 513
3271	Clay product & refractory mfg	—	15	7	843	22 598	705	1 389	16 217	87 110	35 187	122 368	9 239
32711	Pottery, ceramics, & plumbing fixture mfg	1	8	2	e	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	1	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	—	7	5	f	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg	—	6	4	513	12 711	426	842	8 645	42 795	14 816	57 997	D
3272	Glass & glass product mfg	—	11	5	1 293	29 013	1 116	2 223	22 083	74 003	67 707	146 045	21 682
32721	Glass & glass product mfg	—	11	5	1 293	29 013	1 116	2 223	22 083	74 003	67 707	146 045	21 682
327215	Glass product mfg made of purchased glass	—	9	4	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	40	16	1 104	33 987	858	1 898	24 246	100 348	100 191	200 241	D
32732	Ready-mix concrete mfg	5	23	8	689	22 894	539	1 228	16 381	60 869	78 568	139 339	6 553
327320	Ready-mix concrete mfg	5	23	8	689	22 894	539	1 228	16 381	60 869	78 568	139 339	6 553
32739	Other concrete product mfg	1	10	4	270	6 526	214	430	4 980	28 079	8 089	36 223	1 443
327390	Other concrete product mfg	1	10	4	270	6 526	214	430	4 980	28 079	8 089	36 223	1 443
3279	Other nonmetallic mineral product mfg	1	18	6	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	14	4	303	8 104	265	469	6 282	22 781	22 418	45 220	2 135
331	Primary metal mfg	—	17	10	2 741	113 971	2 063	4 594	78 821	410 127	501 521	882 152	27 281
3311	Iron & steel mills & ferroalloy mfg	—	3	3	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	3	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	2	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	2	1	g	D	D	D	D	D	D	D	D
3315	Foundries	—	9	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	6	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE-GASTONIA-ROCK HILL, NC-SC MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg.....	—	471	117	11 441	356 698	8 728	17 426	236 245	780 322	829 310	1 605 481	61 313
3321	Forging & stamping.....	1	25	11	1 070	34 390	862	1 727	24 133	60 228	41 924	102 058	3 971
33211	Forging & stamping.....	1	25	11	1 070	34 390	862	1 727	24 133	60 228	41 924	102 058	3 971
332111	Iron & steel forging ...	1	4	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping.....	2	13	5	459	13 931	377	799	9 625	29 112	18 400	47 169	2 050
3322	Cutlery & handtool mfg....	—	7	4	f	D	D	D	D	D	D	D	3 146
33221	Cutlery & handtool mfg... .	—	7	4	f	D	D	D	D	D	D	D	3 146
332212	Hand & edge tool mfg....	—	7	4	f	D	D	D	D	D	D	D	3 146
3323	Architectural & structural metals mfg.....	—	83	26	1 857	60 424	1 264	2 497	33 042	98 984	212 353	309 419	7 302
33231	Plate work & fabricated structural product mfg... .	—	31	9	868	32 669	523	1 021	15 649	40 789	148 551	188 123	4 553
332312	Fabricated structural metal mfg.....	—	25	7	780	30 567	477	948	14 441	37 147	145 785	181 707	4 467
33232	Ornamental & architectural metal products mfg.....	—	52	17	989	27 755	741	1 476	17 393	58 195	63 802	121 296	2 749
332322	Sheet metal work mfg....	1	29	10	602	17 251	462	934	10 857	32 578	34 152	66 365	1 790
3324	Boiler, tank, & shipping container mfg.....	—	11	8	e	D	D	D	D	D	D	D	1 692
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	5	4	303	11 097	251	524	7 277	21 083	68 449	85 606	1 328
3325	Hardware mfg.....	—	7	4	931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
33251	Hardware mfg.....	—	7	4	931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
332510	Hardware mfg.....	—	7	4	931	27 083	815	1 747	20 873	101 607	65 938	166 973	6 587
3326	Spring & wire product mfg... .	—	10	7	777	20 850	653	1 199	14 093	70 201	41 291	112 386	5 153
33261	Spring & wire product mfg.....	—	10	7	777	20 850	653	1 199	14 093	70 201	41 291	112 386	5 153
332612	Spring (light gauge) mfg.....	—	4	3	505	13 630	426	724	9 255	56 949	26 765	84 372	3 727
332618	Other fabricated wire product mfg.....	—	6	4	272	7 220	227	475	4 838	13 252	14 526	28 014	1 426
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	237	25	2 167	64 087	1 685	3 085	42 728	113 578	59 296	174 492	10 794
33271	Machine shops.....	2	219	19	1 812	52 872	1 407	2 531	34 844	92 300	45 702	139 791	6 528
332710	Machine shops.....	2	219	19	1 812	52 872	1 407	2 531	34 844	92 300	45 702	139 791	6 528
33272	Turned product & screw, nut, & bolt mfg.....	2	18	6	355	11 215	278	554	7 884	21 278	13 594	34 701	4 266
332721	Precision turned product mfg.....	—	13	5	280	9 013	219	450	6 344	17 386	10 488	27 870	D
3328	Coating, engraving, heat treating, & allied activities..	2	47	12	917	26 810	663	1 365	18 102	58 758	34 126	93 233	7 113
33281	Coating, engraving, heat treating, & allied activities.....	2	47	12	917	26 810	663	1 365	18 102	58 758	34 126	93 233	7 113
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services.....	2	12	5	336	10 241	262	537	7 611	21 058	19 904	41 187	5 265
332813	Electroplating, plating, polishing, anodizing, & coloring.....	2	28	5	447	13 091	290	597	7 873	27 512	10 837	38 473	1 114
3329	Other fabricated metal product mfg.....	—	44	20	2 670	85 430	1 912	3 958	56 615	176 376	183 722	359 936	15 555
33291	Metal valve mfg.....	—	7	5	733	16 662	482	929	10 544	26 808	45 161	74 872	2 198
332919	Other metal valve & pipe fitting mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	37	15	1 937	68 768	1 430	3 029	46 071	149 568	138 561	285 064	13 357
332991	Ball & roller bearing mfg.....	—	3	3	f	D	D	D	D	D	D	D	6 325
332996	Fabricated pipe & pipe fitting mfg.....	—	5	3	261	9 813	179	374	5 643	19 497	20 935	40 811	D
332999	All other miscellaneous fabricated metal product mfg.....	—	24	9	794	23 052	503	935	11 659	47 678	25 933	72 939	6 337
333	Machinery mfg.....	—	245	107	11 178	392 650	6 638	12 796	193 610	1 078 052	1 000 681	2 067 545	57 164

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3331	Agriculture, construction, & mining machinery mfg....	-	11	8	1 502	39 885	915	1 512	17 826	229 556	153 658	370 361	9 069
33311	Agricultural implement mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	1	3	2	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	1	5	4	252	7 427	168	302	3 790	20 761	29 174	51 773	1 088
333120	Construction machinery mfg.....	1	5	4	252	7 427	168	302	3 790	20 761	29 174	51 773	1 088
3332	Industrial machinery mfg..	-	110	45	4 120	135 511	2 356	4 584	63 286	331 753	432 867	746 953	28 862
33321	Sawmill & woodworking machinery mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	-	102	40	3 588	119 694	1 963	3 819	53 073	291 996	399 974	676 418	25 448
333291	Paper industry machinery mfg.....	-	6	2	e	D	D	D	D	D	D	D	D
333292	Textile machinery mfg.	-	76	26	2 528	81 242	1 477	2 971	38 698	193 985	152 941	340 148	20 265
333298	All other industrial machinery mfg.....	2	16	10	495	15 647	240	390	5 506	42 979	33 591	73 433	1 705
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	17	9	834	24 576	580	1 010	14 037	38 944	47 241	87 369	1 805
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	1	17	9	834	24 576	580	1 010	14 037	38 944	47 241	87 369	1 805
333415	AC & warm air heating & commercial industrial refrig equip mfg.....	1	5	3	610	18 713	436	773	11 109	23 468	31 423	56 708	1 226
3335	Metalworking machinery mfg.....	4	35	9	778	32 325	509	1 088	19 243	72 852	39 498	110 837	3 369
33351	Metalworking machinery mfg.....	4	35	9	778	32 325	509	1 088	19 243	72 852	39 498	110 837	3 369
3336	Engine, turbine, & power transmission equipment mfg.....	-	15	9	1 216	52 967	772	1 503	27 943	144 299	51 330	214 743	2 246
33361	Engine, turbine, & power transmission equipment mfg.....	-	15	9	1 216	52 967	772	1 503	27 943	144 299	51 330	214 743	2 246
333611	Turbine & turbine generator set unit mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg.....	-	7	5	461	15 010	318	629	7 811	38 560	38 063	77 350	1 686
3339	Other general-purpose machinery mfg.....	-	44	25	2 563	101 114	1 420	2 973	49 473	248 362	264 273	513 094	11 524
33391	Pump & compressor mfg.....	-	5	4	661	27 428	311	598	10 181	73 844	122 711	196 501	D
333911	Pump & pumping equipment mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	14	7	433	15 169	271	582	7 883	28 852	23 220	53 441	D
333922	Conveyor & conveying equipment mfg.....	-	8	6	355	12 757	212	469	6 448	24 195	18 522	44 177	D
33399	All other general-purpose machinery mfg.....	1	25	14	1 469	58 517	838	1 793	31 409	145 666	118 342	263 152	8 843
333991	Power-driven handtool mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg.....	2	17	9	676	21 310	411	899	10 485	56 656	30 096	86 010	3 238

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31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	-	60	24	5 398	201 535	3 588	8 044	109 703	1 105 144	970 379	2 082 825	20 940
3344	Semiconductor & other electronic component mfg	-	22	9	4 208	162 170	3 019	6 928	96 090	1 012 258	888 110	1 908 174	13 953
33441	Semiconductor & other electronic component mfg	-	22	9	4 208	162 170	3 019	6 928	96 090	1 012 258	888 110	1 908 174	13 953
334417	Electronic connector mfg	-	3	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	h	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	6	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	18	8	712	24 647	334	595	8 359	56 501	45 026	101 247	2 862
33451	Navigational, measuring, medical, & control instruments mfg	-	18	8	712	24 647	334	595	8 359	56 501	45 026	101 247	2 862
335	Electrical equipment, appliance, & component mfg	-	49	21	2 258	72 017	1 707	3 292	41 787	163 341	230 199	392 740	19 391
3353	Electrical equipment mfg ..	-	29	11	1 126	40 055	770	1 428	23 586	64 419	135 906	200 023	12 794
33531	Electrical equipment mfg	-	29	11	1 126	40 055	770	1 428	23 586	64 419	135 906	200 023	12 794
335311	Power, distribution, & specialty transformer mfg	-	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	1	9	5	358	12 769	241	489	7 712	20 754	20 608	42 324	1 471
3359	Other electrical equipment & component mfg	1	13	8	913	24 856	792	1 607	15 817	79 809	74 916	155 000	D
33593	Wiring device mfg	-	6	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	81	35	10 675	362 735	8 971	17 658	293 427	1 361 116	2 130 267	3 491 768	56 686
3361	Motor vehicle mfg	-	8	2	h	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	14	4	407	13 491	261	566	8 016	26 079	40 902	66 774	D
33621	Motor vehicle body & trailer mfg	-	14	4	407	13 491	261	566	8 016	26 079	40 902	66 774	D
336211	Motor vehicle body mfg	-	9	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	51	28	i	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	8	5	g	D	D	D	D	D	D	D	10 367
336340	Motor vehicle brake system mfg	-	8	5	g	D	D	D	D	D	D	D	10 367
33635	Motor vehicle transmission & power train parts mfg	-	8	6	f	D	D	D	D	D	D	D	2 875
336350	Motor vehicle transmission & power train parts mfg	-	8	6	f	D	D	D	D	D	D	D	2 875
33636	Motor vehicle seating & interior trim mfg	2	4	3	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	2	4	3	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	17	11	3 931	126 719	3 166	6 519	99 566	372 718	281 455	653 171	17 173
336399	All other motor vehicle parts mfg	-	16	10	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	112	29	3 877	94 492	3 217	6 542	69 015	252 351	208 912	462 297	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	76	18	2 932	70 049	2 425	4 950	52 612	148 642	144 705	293 899	6 102
33711	Wood kitchen cabinet & counter top mfg	1	41	5	652	15 217	551	1 017	10 219	34 352	22 750	57 114	3 203
337110	Wood kitchen cabinet & counter top mfg ...	1	41	5	652	15 217	551	1 017	10 219	34 352	22 750	57 114	3 203
33712	Household & institutional furniture mfg	1	35	13	2 280	54 832	1 874	3 933	42 393	114 290	121 955	236 785	2 899
337121	Upholstered household furniture mfg	-	11	7	1 445	35 378	1 273	2 780	30 051	76 942	80 621	157 730	854
337122	Nonupholstered wood household furniture mfg	1	13	3	431	8 795	356	698	6 280	22 661	19 634	42 436	700

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLOTTE—GASTONIA—ROCK HILL, NC—SC MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	—	32	10	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	32	10	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	—	2	2	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	18	6	378	10 260	310	577	6 406	20 831	16 972	38 101	131
339	Miscellaneous mfg	1	150	36	3 798	111 300	2 605	5 139	59 206	268 704	249 468	511 405	18 493
3391	Medical equipment & supplies mfg	1	56	11	1 478	50 062	977	1 892	24 541	137 884	112 980	244 357	D
33911	Medical equipment & supplies mfg	1	56	11	1 478	50 062	977	1 892	24 541	137 884	112 980	244 357	D
339113	Surgical appliance & supplies mfg	—	14	6	777	24 323	496	948	11 714	94 283	67 450	161 199	2 832
339114	Dental equipment & supplies mfg	—	4	1	e	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	4	32	2	321	10 045	256	486	6 364	18 298	4 852	23 759	D
3399	Other miscellaneous mfg ..	1	94	25	2 320	61 238	1 628	3 247	34 665	130 820	136 488	267 048	D
33995	Sign mfg	2	29	5	336	10 185	209	468	4 920	18 156	11 133	28 819	433
339950	Sign mfg	2	29	5	336	10 185	209	468	4 920	18 156	11 133	28 819	433
33999	All other miscellaneous mfg	1	37	15	1 601	42 247	1 211	2 437	26 065	92 123	109 649	202 079	11 924
339991	Gasket, packing, & sealing device mfg ...	—	5	3	493	13 470	389	848	9 155	25 246	17 229	44 155	1 716
339993	Fastener, button, needle, & pin mfg	3	3	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	17	6	409	10 172	283	535	6 091	28 373	52 678	80 615	6 584
	COLUMBIA, SC MSA												
31-33	Manufacturing	—	460	162	23 522	785 021	16 649	33 134	462 493	2 499 443	2 809 007	5 301 456	184 105
311	Food mfg	1	15	12	995	22 434	804	1 593	16 607	209 002	221 663	429 269	3 155
3116	Meat product mfg	2	4	3	e	D	D	D	D	D	D	D	1 443
31161	Animal slaughtering & processing	2	4	3	e	D	D	D	D	D	D	D	1 443
311615	Poultry processing	2	2	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	2	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	3	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	2	10	5	761	14 933	682	1 385	12 671	34 865	52 578	87 457	2 069
3132	Fabric mills	2	5	4	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	2	3	3	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	2	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	8	14	10	795	9 549	671	1 119	7 141	15 779	25 510	41 544	383
3152	Cut & sew apparel mfg	8	10	8	717	8 763	614	1 056	6 648	14 611	24 100	38 932	302
31522	Men's & boys' cut & sew apparel mfg	9	2	2	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	9	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	23	9	472	10 901	387	756	6 917	24 820	55 984	79 891	2 474
3219	Other wood product mfg ...	—	16	5	268	6 068	228	405	4 124	13 708	19 449	33 322	1 253
322	Paper mfg	—	12	8	2 192	86 815	1 697	3 603	58 718	300 843	321 482	630 777	19 491
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	11	7	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	6	5	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	3	3	379	11 883	308	729	8 525	25 473	52 478	77 934	D
32222	Paper bag & coated & treated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLUMBIA, SC MSA—Con.												
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	3	87	18	1 535	44 548	1 156	2 206	26 589	86 940	48 790	135 292	7 573
3231	Printing & related support activities.....	3	87	18	1 535	44 548	1 156	2 206	26 589	86 940	48 790	135 292	7 573
32311	Printing.....	3	82	17	1 471	42 914	1 104	2 113	25 506	84 163	48 337	132 082	7 274
323110	Commercial lithographic printing ..	5	35	9	862	26 843	616	1 217	15 243	48 490	30 159	78 179	5 672
323113	Commercial screen printing.....	—	13	4	358	10 052	283	526	5 974	22 553	10 777	33 073	918
325	Chemical mfg.....	—	21	11	3 529	153 161	2 431	4 875	93 849	615 019	598 493	1 198 335	53 228
3251	Basic chemical mfg.....	—	6	2	974	43 100	516	948	19 757	136 882	112 582	256 379	5 561
32518	Other basic inorganic chemical mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg.....	—	3	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	—	5	5	2 336	103 010	1 801	3 721	71 315	450 784	454 214	882 249	45 735
32521	Resin & synthetic rubber mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	4	4	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	—	4	4	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	23	10	2 066	76 686	1 827	3 593	65 839	281 291	225 762	503 769	18 374
3261	Plastics product mfg.....	3	17	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	6	12	4	263	6 028	209	410	4 247	12 065	11 553	23 652	310
3262	Rubber product mfg.....	—	6	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	—	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	32	13	956	28 783	681	1 530	18 079	66 177	47 789	113 992	6 519
3271	Clay product & refractory mfg.....	—	5	3	439	13 578	319	715	8 438	29 507	11 636	40 891	1 433
32712	Clay building material & refractories mfg.....	—	4	3	e	D	D	D	D	D	D	D	D
327121	Brick & structural clay tile mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	3	18	9	442	13 252	317	727	8 717	31 430	31 805	63 427	4 911
331	Primary metal mfg.....	—	7	3	525	18 391	377	762	12 129	47 017	97 067	142 706	D
3311	Iron & steel mills & ferroalloy mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	—	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	78	28	3 256	90 722	2 241	4 385	52 343	220 088	328 081	544 750	14 284
3322	Cutlery & handtool mfg....	—	3	2	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	—	3	2	e	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	—	31	14	1 786	48 623	1 196	2 441	25 857	107 123	255 507	359 206	8 589
33231	Plate work & fabricated structural product mfg..	—	17	10	1 491	41 635	972	1 974	21 142	93 061	239 046	328 286	7 899
332312	Fabricated structural metal mfg.....	—	14	8	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	3	14	4	295	6 988	224	467	4 715	14 062	16 461	30 920	690
3329	Other fabricated metal product mfg.....	—	13	4	486	15 358	363	717	9 991	39 796	28 451	68 051	917
33299	All other fabricated metal product mfg.....	—	10	2	401	12 681	303	609	8 244	31 602	23 112	54 476	716
332994	Small arms mfg.....	—	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	COLUMBIA, SC MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	37	10	1 367	44 756	966	2 035	27 215	97 326	89 096	186 781	7 857
3335	Metalworking machinery mfg	-	7	3	256	8 055	177	345	4 635	28 735	14 868	42 448	2 006
33351	Metalworking machinery mfg	-	7	3	256	8 055	177	345	4 635	28 735	14 868	42 448	2 006
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	3	444	15 532	353	785	10 984	47 940	22 070	64 993	2 737
33399	All other general-purpose machinery mfg	-	5	3	e	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	13	5	g	D	D	D	D	D	D	D	15 340
3341	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	1	e	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	7	3	f	D	D	D	D	D	D	D	7 542
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	15	7	1 184	34 480	779	1 390	18 741	67 372	104 126	168 845	11 132
3363	Motor vehicle parts mfg ...	-	7	3	336	8 856	261	428	5 463	28 972	37 034	65 923	D
3365	Railroad rolling stock mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	19	4	426	10 206	257	459	6 757	19 342	45 520	66 091	981
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	2	329	7 502	183	321	5 089	13 119	40 467	54 753	704
33712	Household & institutional furniture mfg	-	9	2	307	7 088	163	289	4 747	12 142	39 645	52 953	673
337127	Institutional furniture mfg	-	4	1	e	D	D	D	D	D	D	D	559
339	Miscellaneous mfg	2	34	4	384	9 277	283	515	5 799	19 559	12 186	31 793	D
3399	Other miscellaneous mfg ..	1	23	2	272	6 503	194	333	3 989	13 267	8 503	21 657	445

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLORENCE, SC MSA													
31-33	Manufacturing	-	139	62	11 011	328 248	7 889	15 857	200 288	972 990	1 145 538	2 114 244	129 903
311	Food mfg	1	7	4	744	18 224	363	568	7 148	59 725	48 893	108 823	1 908
3118	Bakeries & tortilla mfg	-	1	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	-	4	4	600	12 100	506	995	9 666	15 035	32 261	52 100	D
3131	Fiber, yarn, & thread mills	2	3	3	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	2	3	3	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	2	3	3	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	6	5	1 013	21 597	787	1 571	13 005	36 196	96 608	133 632	4 741
3141	Textile furnishings mills	-	2	2	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	2	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	2	e	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	16	13	925	10 501	786	1 344	8 358	14 464	6 433	20 501	210
3152	Cut & sew apparel mfg	-	15	12	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	11	9	660	7 153	554	974	5 730	9 899	1 180	10 985	158
315212	Women's, girls', & infants' cut & sew apparel contractors	-	8	6	491	5 496	415	750	4 572	8 040	1 003	8 973	D
321	Wood product mfg	-	15	5	480	9 829	390	750	7 324	18 342	49 270	67 596	3 818
322	Paper mfg	-	4	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	1	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	e	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	28	10	1 555	51 878	1 231	2 471	38 466	126 938	147 240	276 896	2 927
3322	Cutlery & handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	-	1	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	8	4	632	25 413	462	1 066	17 736	64 604	106 750	172 632	627
33231	Plate work & fabricated structural product mfg	-	6	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	4	3	591	24 425	431	1 007	17 125	63 038	105 924	170 233	D
333	Machinery	-	6	2	g	D	D	D	D	D	D	D	2 631
3339	Other general-purpose machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
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FLORENCE, SC MSA—Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	3	1	e	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	
3352	Household appliance mfg..	-	1	1	e	D	D	D	D	D	D	D	D	
33522	Major appliance mfg....	-	1	1	e	D	D	D	D	D	D	D	D	
335221	Household cooking appliance mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
337121	Upholstered household furniture mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg.....	-	10	1		255	5 107	207	491	3 473	19 974	8 515	28 510	
GREENVILLE-SPARTANBURG-ANDERSON, SC MSA														
31-33	Manufacturing	-	1 603	688		121 048	3 689 043	95 274	439 475	2 496 059	11 035 019	13 927 172	24 905 610	1 089 264
311	Food mfg.....	1	48	21		3 467	95 289	2 820	5 947	72 703	532 950	524 995	1 058 404	14 647
3114	Fruit & vegetable preserving & specialty food mfg.....	-	6	3	g	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	5	6	4		530	12 314	455	936	9 265	31 161	93 905	125 260	1 518
31161	Animal slaughtering & processing.....	5	6	4		530	12 314	455	936	9 265	31 161	93 905	125 260	1 518
311611	Animal (except poultry) slaughtering.....	-	4	2	e	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	20	9		1 103	25 074	814	1 584	17 162	63 492	77 153	140 888	3 998
31181	Bread & bakery product mfg.....	-	17	6		810	18 719	598	1 123	12 375	43 434	41 371	84 868	2 760
311812	Commercial bakeries .	-	6	4		650	16 620	499	999	11 337	41 982	40 513	82 516	2 475
31182	Cookie, cracker, & pasta mfg.....	4	3	3		293	6 355	216	461	4 787	20 058	35 782	56 020	1 238
311822	Flour mixes & dough mfg from purchased flour.....	4	3	3		293	6 355	216	461	4 787	20 058	35 782	56 020	1 238
3119	Other food mfg.....	5	3	2	e	D	D	D	D	D	D	D	D	D
313	Textile mills.....	-	164	124		29 112	739 950	24 906	297 562	556 472	1 789 959	2 409 164	4 215 407	182 426
3131	Fiber, yarn, & thread mills .	-	21	18		2 968	77 305	2 548	251 504	58 370	211 234	355 130	570 981	10 170
31311	Fiber, yarn, & thread mills.....	-	21	18		2 968	77 305	2 548	251 504	58 370	211 234	355 130	570 981	10 170
313111	Yarn spinning mills ...	-	18	15	g	D	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills.....	-	3	3	f	D	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	103	86		21 922	549 106	18 941	38 844	418 883	1 277 243	1 578 450	2 862 586	156 909
31321	Broadwoven fabric mills .	-	66	56		16 999	430 022	14 929	30 492	341 091	962 368	1 197 648	2 168 059	130 037
313210	Broadwoven fabric mills.....	-	66	56		16 999	430 022	14 929	30 492	341 091	962 368	1 197 648	2 168 059	130 037
31322	Narrow fabric mills & schiffli machine embroidery.....	4	14	11		1 796	32 857	1 544	3 284	23 348	67 631	53 059	121 641	4 367
313221	Narrow fabric mills....	2	11	8		1 055	21 089	883	1 971	14 995	42 687	39 537	82 904	D
313222	Schiffli machine embroidery.....	6	3	3		741	11 768	661	1 313	8 353	24 944	13 522	38 737	D
31323	Nonwoven fabric mills...	-	14	12		1 682	55 900	1 240	2 478	33 355	138 386	179 688	314 645	9 616
313230	Nonwoven fabric mills...	-	14	12		1 682	55 900	1 240	2 478	33 355	138 386	179 688	314 645	9 616
31324	Knit fabric mills.....	-	9	7		1 445	30 327	1 228	2 590	21 089	108 858	148 055	258 241	12 889
313241	Weft knit fabric mills ..	-	6	4	f	D	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills.....	-	3	3	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.												
	Manufacturing—Con.												
313	Textile mills—Con.												
3133	Textile & fabric finishing & fabric coating mills	—	40	20	4 222	113 539	3 417	7 214	79 219	301 482	475 584	781 840	15 347
31331	Textile & fabric finishing mills	—	38	19	h	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	—	31	14	3 388	91 051	2 757	5 848	64 746	258 878	430 517	693 653	12 456
313312	Textile & fabric finishing mills	—	7	5	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	67	32	6 505	150 864	5 611	11 607	117 073	320 090	895 707	1 162 640	26 403
3141	Textile furnishings mills	—	32	15	4 412	99 500	3 940	8 158	82 389	241 957	652 588	843 423	14 037
31411	Carpet & rug mills	—	12	6	1 207	27 203	1 043	2 110	21 003	70 046	109 386	180 111	D
314110	Carpet & rug mills	—	12	6	1 207	27 203	1 043	2 110	21 003	70 046	109 386	180 111	D
31412	Curtain & linen mills	—	20	9	3 205	72 297	2 897	6 048	61 386	171 911	543 202	663 312	D
314129	Other household textile product mills	—	14	8	3 033	69 663	2 766	5 815	59 879	167 304	538 361	653 888	4 772
3149	Other textile product mills	—	35	17	2 093	51 364	1 671	3 449	34 684	78 133	243 119	319 217	12 366
31491	Textile bag & canvas mills	—	11	6	256	6 006	189	331	3 367	9 758	9 406	19 173	250
314912	Canvas & related product mills	—	10	6	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	24	11	1 837	45 358	1 482	3 118	31 317	68 375	233 713	300 044	12 116
314999	All other miscellaneous textile product mills ..	—	21	10	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	54	36	2 594	43 193	2 155	4 061	32 362	66 749	59 256	129 347	2 695
3152	Cut & sew apparel mfg	1	44	31	2 256	34 593	1 874	3 427	25 765	51 526	46 237	100 982	1 758
31521	Cut & sew apparel contractors	3	27	15	743	10 617	659	1 191	8 557	19 786	4 529	24 396	453
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	21	12	603	7 956	541	976	6 463	15 038	2 800	17 895	D
31522	Men's & boys' cut & sew apparel mfg	—	3	3	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	8	7	705	13 692	536	1 284	9 409	15 427	23 171	38 162	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	5	5	e	D	D	D	D	D	D	D	797
31529	Other cut & sew apparel mfg	1	6	6	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	4	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	70	16	1 206	32 215	908	1 738	19 127	57 664	169 054	226 205	4 232
3211	Sawmills & wood preservation	—	20	5	346	10 611	224	411	5 490	17 674	119 622	136 411	2 020
32111	Sawmills & wood preservation	—	20	5	346	10 611	224	411	5 490	17 674	119 622	136 411	2 020
321113	Sawmills	—	20	5	346	10 611	224	411	5 490	17 674	119 622	136 411	2 020
3219	Other wood product mfg	1	42	8	689	17 264	544	1 052	10 915	28 893	37 203	66 737	1 007
32199	All other wood product mfg	—	13	2	351	10 309	284	552	6 207	16 301	21 209	38 079	301
321991	Manufactured home (mobile home) mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	45	31	3 449	113 996	2 540	5 270	73 709	462 797	345 968	806 030	33 100
3222	Converted paper product mfg	—	43	29	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	24	18	1 415	43 512	1 061	2 172	26 043	104 902	146 212	250 409	D
322211	Corrugated & solid fiber box mfg	—	16	13	1 092	34 717	820	1 694	20 119	84 372	125 657	209 386	9 375
32222	Paper bag & coated & treated paper mfg	—	9	7	1 355	48 056	1 047	2 221	32 502	311 973	139 866	450 202	11 858
322222	Coated & laminated paper mfg	—	5	4	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	5	8	4	463	12 734	281	527	8 687	14 216	30 633	44 907	D
323	Printing & related support activities	1	142	23	2 747	79 622	1 961	3 558	52 976	182 834	129 858	308 822	14 574
3231	Printing & related support activities	1	142	23	2 747	79 622	1 961	3 558	52 976	182 834	129 858	308 822	14 574
32311	Printing	1	134	22	2 668	77 029	1 906	3 463	51 634	177 511	127 677	301 342	D
323110	Commercial lithographic printing ..	2	62	11	1 108	31 288	737	1 327	19 418	72 192	41 890	111 018	4 083
323111	Commercial gravure printing	—	2	2	f	D	D	D	D	D	D	D	D

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31-33	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con. Manufacturing—Con.												
325	Chemical mfg	-	100	54	8 421	324 615	5 834	11 774	183 255	1 549 145	1 806 774	3 353 440	167 218
3251	Basic chemical mfg	1	16	8	843	29 904	511	881	14 357	115 029	186 872	302 013	10 324
32519	Other basic organic chemical mfg	1	8	6	640	22 384	399	647	10 741	93 277	149 303	241 977	7 076
325199	All other basic organic chemical mfg	1	8	6	640	22 384	399	647	10 741	93 277	149 303	241 977	7 076
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	11	9	3 692	157 827	2 624	5 251	94 442	556 125	810 618	1 362 282	91 452
32521	Resin & synthetic rubber mfg	-	5	4	496	15 678	359	806	10 498	147 710	156 333	311 393	D
325211	Plastics material & resin mfg	-	5	4	496	15 678	359	806	10 498	147 710	156 333	311 393	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	6	5	3 196	142 149	2 265	4 445	83 944	408 415	654 285	1 050 889	D
325222	Noncellulosic organic fiber mfg	-	6	5	3 196	142 149	2 265	4 445	83 944	408 415	654 285	1 050 889	D
3254	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	21 850
32541	Pharmaceutical & medicine mfg	-	6	5	g	D	D	D	D	D	D	D	21 850
325412	Pharmaceutical preparation mfg	-	6	5	g	D	D	D	D	D	D	D	21 850
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	33	17	1 095	45 063	685	1 430	20 704	144 463	301 766	456 287	24 894
32561	Soap & cleaning compound mfg	-	32	17	g	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	20	14	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	21	9	718	26 693	465	888	12 687	190 749	114 174	302 135	15 822
32599	All other chemical product & preparation mfg	1	15	8	f	D	D	D	D	D	D	D	14 505
326	Plastics & rubber products mfg	-	106	59	12 192	416 114	9 965	19 898	309 234	1 195 776	1 559 213	2 772 008	119 958
3261	Plastics product mfg	-	86	47	7 493	245 374	5 904	11 973	165 392	674 254	706 836	1 386 142	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	12	7	2 767	111 753	2 084	4 322	73 071	336 720	271 562	613 483	D
326112	Unsupported plastics packaging film & sheet mfg	-	1	1	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	6	4	g	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	4	3	f	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	4	3	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	5	3	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	5	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	51	27	3 483	93 140	2 836	5 668	63 160	237 066	254 140	492 253	31 118
326199	All other plastics product mfg	1	48	26	3 413	91 678	2 780	5 572	62 121	235 331	252 662	489 033	D
3262	Rubber product mfg	-	20	12	4 699	170 740	4 061	7 925	143 842	521 522	852 377	1 385 866	D
32621	Tire mfg	-	6	4	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	3	3	h	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	10	7	g	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	1	7	5	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	50	24	3 290	108 785	2 569	5 462	76 713	308 971	239 735	554 583	9 658
3271	Clay product & refractory mfg	1	5	5	1 206	39 841	1 022	2 217	32 201	94 832	32 597	129 528	1 698
32711	Pottery, ceramics, & plumbing fixture mfg	1	3	3	g	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	f	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	8	2	2	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	6	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	6	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	30	11	1 176	38 502	787	1 683	22 707	95 143	84 726	179 150	3 966
32733	Concrete pipe, brick, & block mfg	—	5	3	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	10	3	631	20 455	401	877	10 871	43 374	29 864	73 321	1 151
327390	Other concrete product mfg	—	10	3	631	20 455	401	877	10 871	43 374	29 864	73 321	1 151
331	Primary metal mfg	—	17	7	1 550	45 289	1 336	2 814	36 219	124 195	126 989	246 571	18 107
3314	Nonferrous metal (except aluminum) production & processing	—	5	1	534	16 369	455	902	12 858	46 304	37 594	81 824	9 043
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	6	4	694	19 767	630	1 446	16 746	47 196	30 835	75 102	7 162
33152	Nonferrous metal foundries	—	5	3	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	269	83	8 052	250 150	6 276	12 376	169 996	601 076	459 202	1 052 372	44 332
3321	Forging & stamping	—	11	5	370	13 829	258	613	8 334	29 970	26 667	56 786	1 891
33211	Forging & stamping	—	11	5	370	13 829	258	613	8 334	29 970	26 667	56 786	1 891
3323	Architectural & structural metals mfg	2	45	18	1 113	32 255	833	1 665	20 176	84 107	79 718	163 059	3 187
33231	Plate work & fabricated structural product mfg	2	20	8	571	17 311	417	838	10 455	37 680	53 198	90 276	1 406
332312	Fabricated structural metal mfg	2	12	5	383	12 081	257	532	6 696	26 533	46 357	72 778	1 025
33232	Ornamental & architectural metal products mfg	2	25	10	542	14 944	416	827	9 721	46 427	26 520	72 783	1 781
332322	Sheet metal work mfg	2	17	8	432	12 318	363	733	8 738	28 297	19 009	46 972	1 545
3324	Boiler, tank, & shipping container mfg	—	5	5	277	9 447	216	324	6 413	15 205	35 910	49 881	D
3325	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	146	28	1 747	53 034	1 360	2 459	35 380	106 699	58 743	164 015	8 782
33271	Machine shops	2	133	20	1 442	43 583	1 115	1 938	29 104	79 098	41 352	120 585	6 146
332710	Machine shops	2	133	20	1 442	43 583	1 115	1 938	29 104	79 098	41 352	120 585	6 146
33272	Turned product & screw, nut, & bolt mfg	1	13	8	305	9 451	245	521	6 276	27 601	17 391	43 430	2 636
3328	Coating, engraving, heat treating, & allied activities	—	26	9	1 036	25 201	816	1 614	16 203	47 207	18 743	65 981	1 887
33281	Coating, engraving, heat treating, & allied activities	—	26	9	1 036	25 201	816	1 614	16 203	47 207	18 743	65 981	1 887
332813	Electroplating, plating, polishing, anodizing, & coloring	—	14	6	741	17 274	572	1 172	10 964	18 745	5 181	23 994	553

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31-33	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	20	11	2 672	93 492	2 161	4 406	71 107	262 897	206 850	465 105	20 466
33291	Metal valve mfg.....	-	7	6	1 250	35 158	990	1 861	24 247	126 119	80 440	210 074	8 610
332911	Industrial valve mfg...	-	2	2	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	13	5	1 422	58 334	1 171	2 545	46 860	136 778	126 410	255 031	11 856
332991	Ball & roller bearing mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	180	79	13 325	467 514	9 576	20 623	288 740	1 643 264	1 730 522	3 404 630	150 530
3331	Agriculture, construction, & mining machinery mfg....	1	6	4	586	18 736	454	846	12 996	35 710	44 119	78 737	8 059
33311	Agricultural implement mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	58	26	3 054	100 524	2 017	4 115	55 618	207 762	156 863	367 053	13 726
33329	Other industrial machinery mfg.....	1	57	25	h	D	D	D	D	D	D	D	D
333292	Textile machinery mfg.	-	46	22	2 729	86 978	1 832	3 765	49 268	175 532	116 197	296 575	11 369
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	8	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	53	19	2 486	88 882	1 831	4 174	56 875	163 378	146 717	306 531	19 112
33351	Metalworking machinery mfg.....	-	53	19	2 486	88 882	1 831	4 174	56 875	163 378	146 717	306 531	19 112
333511	Industrial mold mfg ...	-	10	4	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	21	10	1 648	55 359	1 226	2 723	35 211	110 039	118 329	224 954	8 771
3336	Engine, turbine, & power transmission equipment mfg.....	-	8	6	h	D	D	D	D	D	D	D	85 323
33361	Engine, turbine, & power transmission equipment mfg.....	-	8	6	h	D	D	D	D	D	D	D	85 323
333611	Turbine & turbine generator set unit mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg....	-	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	40	17	3 199	109 157	2 216	5 014	59 871	258 144	350 914	609 441	20 107
33392	Material handling equipment mfg.....	-	15	3	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	23	12	2 547	88 363	1 791	4 180	49 266	232 615	295 523	526 754	D
333991	Power-driven handtool mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	-	5	5	727	33 832	443	816	17 343	81 544	60 290	142 867	5 856
333997	Scale & balance (except laboratory) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	31	16	6 949	221 095	4 870	9 258	120 591	333 748	574 129	898 486	62 087
3344	Semiconductor & other electronic component mfg.....	-	14	9	6 655	212 821	4 707	8 977	116 556	315 546	553 543	858 938	60 817

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg	-	14	9	6 655	212 821	4 707	8 977	116 556	315 546	553 543	858 938	60 817
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	1	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	1	1	f	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	3	2	h	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	3	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	34	19	4 376	138 216	3 280	6 859	85 818	456 122	534 843	972 430	19 720
3351	Electric lighting equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	2	2	f	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	2	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg..	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	20	10	901	27 934	619	1 354	14 894	82 406	91 284	172 418	D
33531	Electrical equipment mfg	-	20	10	901	27 934	619	1 354	14 894	82 406	91 284	172 418	D
335313	Switchgear & switchboard apparatus mfg	-	7	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	10	6	1 737	61 211	1 148	2 256	31 807	202 997	196 867	382 921	11 417
33592	Communication & energy wire & cable mfg	1	2	2	f	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	-	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	9	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	5	3	f	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	58	35	10 731	386 775	8 225	16 250	254 055	1 171 918	2 190 187	3 341 444	209 574
3361	Motor vehicle mfg	-	6	3	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	6	3	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	5	2	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	36	24	6 056	191 888	4 772	9 980	124 309	594 176	864 923	1 453 917	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	4	4	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	4	4	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	8	7	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	8	7	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	4	4	f	D	D	D	D	D	D	D	13 659
336350	Motor vehicle transmission & power train parts mfg	-	4	4	f	D	D	D	D	D	D	D	13 659
33637	Motor vehicle metal stamping	-	6	3	1 218	41 190	1 042	2 278	30 115	100 147	121 671	222 519	D
336370	Motor vehicle metal stamping	-	6	3	1 218	41 190	1 042	2 278	30 115	100 147	121 671	222 519	D
33639	Other motor vehicle parts mfg	1	9	4	568	16 534	449	959	10 297	26 882	88 551	115 772	D
336399	All other motor vehicle parts mfg	1	9	4	568	16 534	449	959	10 297	26 882	88 551	115 772	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GREENVILLE-SPARTANBURG-ANDERSON, SC MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	1	3	2	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	5	3	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	5	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	69	12	g	D	D	D	D	D	D	D	3 948
3371	Household & institutional furniture & kitchen cabinet mfg	2	58	6	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	16	4	321	6 635	265	525	4 368	22 449	19 741	42 098	845
3372	Office furniture (including fixtures) mfg	1	10	5	443	11 481	290	385	4 448	29 008	17 931	45 902	801
33721	Office furniture (including fixtures) mfg	1	10	5	443	11 481	290	385	4 448	29 008	17 931	45 902	801
337212	Custom architectural woodwork & millwork mfg	-	4	2	250	7 179	163	214	2 321	17 356	5 597	23 074	D
339	Miscellaneous mfg	1	86	16	1 822	44 374	1 496	2 767	29 801	160 541	106 510	261 611	5 274
3399	Other miscellaneous mfg ..	-	55	14	1 638	40 110	1 363	2 541	27 246	145 633	101 033	241 133	4 700
33992	Sporting & athletic goods mfg	-	7	3	696	15 526	611	1 121	11 160	45 302	53 204	91 774	D
339920	Sporting & athletic goods mfg	-	7	3	696	15 526	611	1 121	11 160	45 302	53 204	91 774	D
33994	Office supplies (except paper) mfg	-	4	3	e	D	D	D	D	D	D	D	D
33995	Sign mfg	2	22	3	e	D	D	D	D	D	D	D	784
339950	Sign mfg	2	22	3	e	D	D	D	D	D	D	D	784
33999	All other miscellaneous mfg	3	16	4	384	10 312	301	583	6 248	24 433	15 677	40 133	1 072
339991	Gasket, packing, & sealing device mfg ...	4	5	2	e	D	D	D	D	D	D	D	885
	MYRTLE BEACH, SC MSA												
31-33	Manufacturing	-	160	31	6 687	173 408	4 559	9 377	98 927	565 171	388 326	927 797	46 983
313	Textile mills	9	4	2	e	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	9	1	1	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	9	1	1	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	9	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	9	1	e	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	5	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	5	1	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	3	419	11 932	384	806	10 148	58 026	63 591	120 065	2 367
3211	Sawmills & wood preservation	-	4	1	e	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	4	1	e	D	D	D	D	D	D	D	D
321113	Sawmills	-	3	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	18	5	1 037	28 294	731	1 461	19 279	109 999	39 587	143 798	6 970
3329	Other fabricated metal product mfg	-	4	3	926	25 928	656	1 355	17 707	105 008	36 686	136 302	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	3	571	14 532	315	499	6 587	43 148	58 101	89 542	3 727
3331	Agriculture, construction, & mining machinery mfg....	-	3	1	e	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D

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31-33	MYRTLE BEACH, SC MSA—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg.....	-	4	2	g	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D	
334414	Electronic capacitor mfg.....	-	1	1	g	D	D	D	D	D	D	D	D	
334419	Other electronic component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	
	SUMTER, SC MSA													
31-33	Manufacturing....	-	84	50		12 655	303 045	10 941	21 438	227 700	976 820	1 073 585	2 050 389	62 670
311	Food mfg.....	-	4	3	h	D	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	h	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	h	D	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	h	D	D	D	D	D	D	D	D	D
313	Textile mills.....	-	5	4	g	D	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	-	4	4	g	D	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills.....	-	4	4	g	D	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills.....	-	2	2	g	D	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	4	3		514	7 252	469	820	5 812	14 398	13 628	28 259	D
3141	Textile furnishings mills....	-	3	3	f	D	D	D	D	D	D	D	D	D
31411	Carpet & rug mills.....	-	1	1	e	D	D	D	D	D	D	D	D	D
314110	Carpet & rug mills.....	-	1	1	e	D	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	4	2		308	3 935	241	423	2 643	7 655	759	8 345	D
3152	Cut & sew apparel mfg....	-	4	2		308	3 935	241	423	2 643	7 655	759	8 345	D
31521	Cut & sew apparel contractors.....	-	3	2	e	D	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	4	4		593	17 762	474	983	11 461	35 885	112 138	142 385	9 785
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg..	-	1	1	e	D	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.	-	1	1	f	D	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	1	1	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	19	9		1 666	44 351	1 502	3 277	35 006	147 040	68 947	220 933	4 854
3322	Cutlery & handtool mfg....	-	1	1	f	D	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	-	1	1	f	D	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg..	-	1	1	f	D	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	3	e	D	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	2	2	e	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	3	g	D	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	2	2	f	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
33591	Battery mfg.....	-	1	1	e	D	D	D	D	D	D	D	D	D
335911	Storage battery mfg....	-	1	1	e	D	D	D	D	D	D	D	D	D

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31-33	SUMTER, SC MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	5	4	1 166	37 764	1 006	2 405	30 030	173 404	187 347	360 282	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	7	1 691	36 042	1 534	3 036	29 579	78 113	68 793	151 347	3 179
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	4	g	D	D	D	D	D	D	D	2 553
33712	Household & institutional furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
337122	Nonupholstered wood household furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ABBEVILLE COUNTY, SC												
	Manufacturing	-	36	26	3 978	101 350	3 437	7 234	77 996	237 310	370 700	607 468	37 002
313	Textile mills	-	6	6	1 909	49 434	1 693	3 524	40 052	89 449	168 064	255 463	30 607
3132	Fabric mills	-	5	5	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	4	4	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	4	4	g	D	D	D	D	D	D	D	D
315	Apparel mfg	4	6	6	631	10 323	553	1 037	8 062	16 674	3 979	20 230	D
3152	Cut & sew apparel mfg	7	5	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31-33	AIKEN COUNTY, SC												
	Manufacturing	-	99	40	19 999	896 656	10 215	17 232	409 652	3 405 358	875 298	4 256 326	294 821
313	Textile mills	-	9	8	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	6	5	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	6	5	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AIKEN COUNTY, SC—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	-	9	6	j	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	4	3	j	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	2	1	j	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	1	j	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	9	11	2	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	9	5	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	9	5	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	9	3	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	8	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	5	f	D	D	D	D	D	D	D	D
ALLENDALE COUNTY, SC													
31-33	Manufacturing	-	14	9	1 440	33 642	1 199	2 385	24 137	135 064	174 996	310 346	8 477
ANDERSON COUNTY, SC													
31-33	Manufacturing	-	240	103	20 589	611 442	16 627	33 958	431 682	1 739 478	2 429 619	4 180 093	192 145
313	Textile mills	-	27	23	6 847	179 656	5 637	11 967	128 267	412 068	577 491	997 872	40 150
3131	Fiber, yarn, & thread mills	-	4	4	g	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	g	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	18	17	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	15	14	4 977	135 797	4 014	8 580	95 066	292 547	373 383	671 611	33 890
313210	Broadwoven fabric mills	-	15	14	4 977	135 797	4 014	8 580	95 066	292 547	373 383	671 611	33 890
314	Textile product mills	-	12	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	5	g	D	D	D	D	D	D	D	28 331
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	25	13	3 431	107 575	2 820	5 326	82 765	339 719	550 596	898 480	41 969
3261	Plastics product mfg	-	19	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	14	7	1 189	31 099	980	1 851	21 468	79 657	71 373	150 474	D
326199	All other plastics product mfg	-	14	7	1 189	31 099	980	1 851	21 468	79 657	71 373	150 474	D
3262	Rubber product mfg	1	6	4	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	1	3	3	g	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	1	3	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ANDERSON COUNTY, SC—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	55	17		1 120	33 733	809	1 556	20 528	81 926	49 855	131 962
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	30	7		543	17 045	410	729	10 848	36 226	15 085	52 092
335	Electrical equipment, appliance, & component mfg	-	7	5	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	5	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	BAMBERG COUNTY, SC												
31-33	Manufacturing	-	24	11		1 175	28 497	879	1 679	16 617	100 416	79 009	180 356
	BARNWELL COUNTY, SC												
31-33	Manufacturing	-	22	14		3 376	75 895	2 858	5 896	51 033	203 716	249 823	450 313
315	Apparel mfg	-	5	4	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	1	1	g	D	D	D	D	D	D	D	D
	BEAUFORT COUNTY, SC												
31-33	Manufacturing	3	94	13		1 087	28 716	781	1 429	16 456	75 820	66 249	137 548

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERKELEY COUNTY, SC													
31-33	Manufacturing	-	75	33	6 396	210 630	4 561	9 808	132 622	1 232 618	1 503 178	2 811 193	D
321	Wood product mfg	-	6	5	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	4	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	3	654	11 859	449	827	9 453	85 179	30 748	116 680	D
3262	Rubber product mfg	-	4	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	9	2	508	11 466	408	779	8 013	20 657	8 937	29 708	D
CALHOUN COUNTY, SC													
31-33	Manufacturing	4	18	6	809	22 921	637	1 463	15 439	20 522	78 916	97 576	D
CHARLESTON COUNTY, SC													
31-33	Manufacturing	-	261	67	10 530	366 332	7 467	15 412	230 743	1 466 054	1 603 227	3 039 363	D
311	Food mfg.....	1	23	4	571	13 901	281	497	5 114	44 068	69 580	113 182	1 986
314	Textile product mills.....	8	12	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	9	4	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	19	8	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	5	4	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	3	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	20	8	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	5	3	g	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	4	12	4	940	26 541	666	1 450	16 748	60 219	38 982	99 227	D
33661	Ship & boat building	4	12	4	940	26 541	666	1 450	16 748	60 219	38 982	99 227	D
336611	Ship building & repairing	4	5	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHEROKEE COUNTY, SC													
31-33	Manufacturing	-	76	51	8 195	231 435	6 800	259 717	174 928	911 390	859 601	1 767 117	53 767
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	19	18	3 414	86 504	2 913	252 027	65 264	254 718	207 210	462 756	D
3131	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	4	4	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	4	4	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	8	8	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	6	6	1 052	31 278	924	1 959	24 119	66 513	87 458	154 873	D
313210	Broadwoven fabric mills	-	6	6	1 052	31 278	924	1 959	24 119	66 513	87 458	154 873	D
3133	Textile & fabric finishing & fabric coating mills	-	7	6	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	7	6	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	5	4	1 092	30 150	868	1 696	21 135	77 009	55 196	130 646	D
332	Fabricated metal product mfg	-	9	6	1 087	41 909	949	1 867	34 959	90 655	101 896	191 751	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHESTER COUNTY, SC													
31-33	Manufacturing	-	54	30	5 260	145 769	4 503	9 056	111 454	441 185	519 603	964 140	30 721
313	Textile mills	-	7	6	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	7	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	6	5	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	6	5	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	2	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	2	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	4	f	D	D	D	D	D	D	D	8 506
3272	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	3	f	D	D	D	D	D	D	D	D
CHESTERFIELD COUNTY, SC													
31-33	Manufacturing	-	58	36	7 450	196 374	5 702	12 058	134 756	614 115	790 324	1 408 203	43 164
313	Textile mills	1	11	11	1 909	48 166	1 580	3 438	35 431	128 782	195 214	327 145	16 733
3132	Fabric mills	1	7	7	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	2	4	4	f	D	D	D	D	D	D	D	7 188
313210	Broadwoven fabric mills	2	4	4	f	D	D	D	D	D	D	D	7 188
315	Apparel mfg	-	12	8	1 044	20 155	609	1 202	8 939	40 665	67 691	107 215	795
3152	Cut & sew apparel mfg	-	9	6	935	19 184	503	1 053	8 065	37 679	64 505	101 431	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	8	2 586	73 023	1 992	4 183	51 809	283 435	197 760	480 644	15 045
3322	Cutlery & handtool mfg	-	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	2	2	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	2	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	4	3	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	CHESTERFIELD COUNTY, SC—Con.													
	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3352	Household appliance mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D	
33522	Major appliance mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D	
335228	Other major household appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	CLARENDON COUNTY, SC													
31-33	Manufacturing	2	24	14		1 396	26 108	1 245	2 367	20 273	74 500	49 080	122 355	5 603
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg . .	-	2	1	f	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D	
339991	Gasket, packing, & sealing device mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D	
	COLLETON COUNTY, SC													
31-33	Manufacturing	1	26	15		1 779	46 920	1 470	3 226	33 518	86 900	103 191	196 019	9 356
	DARLINGTON COUNTY, SC													
31-33	Manufacturing	-	63	34		6 002	185 942	5 088	10 440	146 352	749 176	1 308 983	2 054 592	88 614
313	Textile mills	-	2	2	g	D	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills	-	1	1	g	D	D	D	D	D	D	D	D	
31331	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D	
313311	Broadwoven fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D	
315	Apparel mfg	-	6	6	f	D	D	D	D	D	D	D	968	
322	Paper mfg	-	6	6	g	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	5	5	1 137	32 663	1 031	2 073	27 477	127 973	121 825	250 663	D	
32221	Paperboard container mfg	-	3	3	g	D	D	D	D	D	D	D	D	
322214	Fiber can, tube, drum, & similar products mfg	-	2	2	f	D	D	D	D	D	D	D	D	
322215	Nonfolding sanitary food container mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	-	6	2	f	D	D	D	D	D	D	D	D	
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D	
32522	Artificial & synthetic fibers & filaments mfg . .	-	1	1	f	D	D	D	D	D	D	D	D	
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	DILLON COUNTY, SC													
31-33	Manufacturing	-	25	16		3 613	62 893	3 308	5 800	49 863	155 425	239 568	394 302	23 837
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D	
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D	
313	Textile mills	-	6	5	876	19 811	830	1 724	16 235	56 242	144 249	199 678	14 548	
3131	Fiber, yarn, & thread mills .	-	4	3	f	D	D	D	D	D	D	D	D	
31311	Fiber, yarn, & thread mills	-	4	3	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	2	f	D	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D	
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DORCHESTER COUNTY, SC													
31-33	Manufacturing	-	79	33	3 669	110 574	2 881	5 780	73 127	388 184	354 962	738 315	D
321	Wood product mfg	-	10	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
EDGEFIELD COUNTY, SC													
31-33	Manufacturing	-	28	11	2 041	44 570	1 676	3 276	32 007	123 027	212 410	333 348	7 079
313	Textile mills	-	5	4	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	4	3	f	D	D	D	D	D	D	D	D
FAIRFIELD COUNTY, SC													
31-33	Manufacturing	-	20	11	2 239	79 833	1 966	4 263	63 046	453 292	550 039	1 001 911	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	f	D	D	D	D	D	D	D	D
FLORENCE COUNTY, SC													
31-33	Manufacturing	-	139	62	11 011	328 248	7 889	15 857	200 288	972 990	1 145 538	2 114 244	129 903
311	Food mfg	1	7	4	744	18 224	363	568	7 148	59 725	48 893	108 823	1 908
313	Textile mills	-	4	4	600	12 100	506	995	9 666	15 035	32 261	52 100	D
314	Textile product mills	-	6	5	1 013	21 597	787	1 571	13 005	36 196	96 608	133 632	4 741
3149	Other textile product mills..	-	4	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	4	3	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	4	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	16	13	925	10 501	786	1 344	8 358	14 464	6 433	20 501	210
3152	Cut & sew apparel mfg	-	15	12	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	11	9	660	7 153	554	974	5 730	9 899	1 180	10 985	158
322	Paper mfg	-	4	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	28	10	1 555	51 878	1 231	2 471	38 466	126 938	147 240	276 896	2 927
3323	Architectural & structural metals mfg	-	8	4	632	25 413	462	1 066	17 736	64 604	106 750	172 632	627
33231	Plate work & fabricated structural product mfg ..	-	6	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	4	3	591	24 425	431	1 007	17 125	63 038	105 924	170 233	D
333	Machinery mfg	-	6	2	g	D	D	D	D	D	D	D	2 631
3339	Other general-purpose machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	1	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGETOWN COUNTY, SC													
31-33	Manufacturing	-	78	31	4 974	141 636	4 094	7 529	106 608	431 713	634 295	1 057 601	45 147
313	Textile mills	-	6	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	6	13	10	764	9 210	676	1 088	7 915	14 732	11 158	25 884	D
3152	Cut & sew apparel mfg	5	10	8	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
GREENVILLE COUNTY, SC													
31-33	Manufacturing	-	672	272	45 372	1 431 844	34 483	70 399	916 539	4 595 172	4 923 408	9 507 470	417 041
311	Food mfg	7	24	11	1 054	22 362	776	1 497	15 521	76 881	138 783	215 889	D
3118	Bakeries & tortilla mfg	5	10	5	526	10 329	357	684	6 511	20 092	22 869	43 167	D
313	Textile mills	-	46	33	6 980	173 448	6 039	12 474	127 866	476 586	532 499	997 068	62 464
3132	Fabric mills	-	30	24	5 718	140 859	4 994	10 322	105 250	402 487	448 805	838 899	58 547
31321	Broadwoven fabric mills	-	14	11	3 270	76 038	2 998	6 116	63 764	241 092	227 074	457 234	44 779
313210	Broadwoven fabric mills	-	14	11	3 270	76 038	2 998	6 116	63 764	241 092	227 074	457 234	44 779
31322	Narrow fabric mills & schiffli machine embroidery	3	5	4	g	D	D	D	D	D	D	D	D
313222	Schiffli machine embroidery	7	2	2	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	-	8	7	744	26 128	591	1 203	16 080	68 874	105 293	171 236	D
313230	Nonwoven fabric mills	-	8	7	744	26 128	591	1 203	16 080	68 874	105 293	171 236	D
31324	Knit fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	2	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	13	8	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	13	8	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	9	5	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	28	10	2 097	47 748	1 716	3 817	34 444	76 996	208 104	283 798	D
3141	Textile furnishings mills	-	15	6	1 153	27 011	926	2 175	19 610	53 113	88 936	141 594	D
31412	Curtain & linen mills	1	11	4	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	6	3	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	13	4	944	20 737	790	1 642	14 834	23 883	119 168	142 204	D
31499	All other textile product mills	-	8	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	8	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	20	12	985	17 410	793	1 489	12 145	29 573	33 945	62 909	1 201
3152	Cut & sew apparel mfg	1	16	9	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	17	11	1 406	50 842	1 049	2 185	33 666	314 364	141 605	455 361	13 889
3222	Converted paper product mfg	-	16	10	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	70	12	1 085	29 860	743	1 337	17 833	72 003	43 140	111 651	D
3231	Printing & related support activities	3	70	12	1 085	29 860	743	1 337	17 833	72 003	43 140	111 651	D
32311	Printing	3	68	12	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENVILLE COUNTY, SC—Con.												
	Manufacturing—Con.												
325	Chemical mfg	-	55	30	3 609	128 133	2 483	5 280	69 960	795 521	733 817	1 536 871	52 336
3254	Pharmaceutical & medicine mfg	-	5	5	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	5	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	5	5	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	21	11	737	33 043	428	902	13 518	80 176	174 765	265 489	D
32561	Soap & cleaning compound mfg	-	20	11	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	13	9	604	29 002	341	745	11 343	73 289	145 047	228 834	D
326	Plastics & rubber products mfg	-	41	23	5 336	199 691	4 298	9 021	143 045	611 532	619 728	1 239 887	52 649
3261	Plastics product mfg	-	35	19	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	8	5	2 677	109 337	2 016	4 223	71 505	330 550	262 314	597 791	D
326112	Unsupported plastics packaging film & sheet mfg	-	1	1	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	16	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	13	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	6	4	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	9	659	21 753	466	1 083	13 734	57 228	61 628	118 331	D
3273	Cement & concrete product mfg	1	17	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	101	32	2 923	82 306	2 259	4 527	50 527	181 849	128 026	307 229	10 500
3323	Architectural & structural metals mfg	2	19	8	559	16 699	424	881	10 315	38 698	43 008	81 171	1 988
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	47	9	545	17 311	422	791	11 695	32 302	17 804	48 379	2 256
3328	Coating, engraving, heat treating, & allied activities ..	-	13	7	874	20 744	694	1 369	13 350	36 729	15 664	52 424	1 629
33281	Coating, engraving, heat treating, & allied activities	-	13	7	874	20 744	694	1 369	13 350	36 729	15 664	52 424	1 629
332813	Electroplating, plating, polishing, anodizing, & coloring	-	7	4	638	14 767	492	1 019	9 296	14 336	3 967	18 373	D
333	Machinery mfg	-	86	41	7 281	274 474	5 076	10 814	171 581	1 130 406	1 228 429	2 389 732	116 335
3332	Industrial machinery mfg ..	1	33	17	2 336	78 703	1 531	3 096	43 697	165 926	124 866	290 501	11 557
33329	Other industrial machinery mfg	2	32	16	g	D	D	D	D	D	D	D	D
333292	Textile machinery mfg ..	-	27	14	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	18	5	755	30 425	517	1 317	18 468	49 856	30 622	80 355	D
33351	Metalworking machinery mfg	-	18	5	755	30 425	517	1 317	18 468	49 856	30 622	80 355	D
3336	Engine, turbine, & power transmission equipment mfg	-	5	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	5	4	h	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	2	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	16	7	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	9	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GREENVILLE COUNTY, SC—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	16	7	i	D	D	D	D	D	D	D	44 400
3344	Semiconductor & other electronic component mfg.....	-	7	4	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	7	4	i	D	D	D	D	D	D	D	D
334411	Electron tube mfg....	-	1	1	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	13	7	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg.....	1	6	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	19	11	2 888	109 491	2 384	4 797	80 166	310 979	255 056	554 501	28 749
3363	Motor vehicle parts mfg...	-	13	6	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	37	11	g	D	D	D	D	D	D	D	3 658
339	Miscellaneous mfg.....	1	43	5	882	20 078	743	1 335	13 590	48 676	60 138	102 191	D
3399	Other miscellaneous mfg..	1	27	5	837	19 125	711	1 286	13 093	45 860	59 072	98 261	1 672
33992	Sporting & athletic goods mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
31-33	GREENWOOD COUNTY, SC												
	Manufacturing....	-	93	41	11 612	339 599	9 767	20 355	250 422	944 939	960 701	1 875 085	62 524
311	Food mfg.....	-	7	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	2	12	9	h	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills..	9	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	9	2	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills....	9	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	7	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	7	6	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	7	6	g	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	6	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	11	3	f	D	D	D	D	D	D	D	1 130

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
GREENWOOD COUNTY, SC—Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg	—	4	3	g	D	D	D	D	D	D	D	D	
3346	Mfg & reproducing magnetic & optical media	—	1	1	g	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	—	1	1	g	D	D	D	D	D	D	D	D	
334613	Magnetic & optical recording media mfg	—	1	1	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	
335313	Switchgear & switchboard apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D	
HAMPTON COUNTY, SC														
31-33	Manufacturing	—	20	8		1 307	44 156	1 055	2 833	30 408	97 507	98 916	196 652	15 376
326	Plastics & rubber products mfg	—	5	4		842	29 910	662	1 822	21 055	60 168	48 527	109 895	D
3261	Plastics product mfg	—	5	4		842	29 910	662	1 822	21 055	60 168	48 527	109 895	D
32613	Laminated plastics plate, sheet, & shape mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
HORRY COUNTY, SC														
31-33	Manufacturing	—	160	31		6 687	173 408	4 559	9 377	98 927	565 171	388 326	927 797	46 983
332	Fabricated metal product mfg	—	18	5		1 037	28 294	731	1 461	19 279	109 999	39 587	143 798	6 970
3329	Other fabricated metal product mfg	—	4	3		926	25 928	656	1 355	17 707	105 008	36 686	136 302	D
33291	Metal valve mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	—	7	3		571	14 532	315	499	6 587	43 148	58 101	89 542	3 727
334	Computer & electronic product mfg	—	4	2	g	D	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
KERSHAW COUNTY, SC														
31-33	Manufacturing	—	62	29		4 916	151 847	3 894	7 726	112 960	979 902	661 536	1 637 889	57 541
313	Textile mills	—	5	4		813	25 189	683	1 413	19 395	62 143	84 179	145 706	13 579
3132	Fabric mills	—	4	4	f	D	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	3	3	f	D	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	3	3	f	D	D	D	D	D	D	D	D	D
314	Textile product mills	8	9	6		550	8 339	384	751	5 291	13 057	12 606	25 708	1 581
3149	Other textile product mills	8	9	6		550	8 339	384	751	5 291	13 057	12 606	25 708	1 581
325	Chemical mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	1	1	g	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LANCASTER COUNTY, SC													
31-33	Manufacturing	-	54	26	5 341	145 496	4 627	9 037	112 770	510 375	1 063 902	1 561 649	68 284
313	Textile mills	-	2	2	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	-	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	g	D	D	D	D	D	D	D	D
LAURENS COUNTY, SC													
31-33	Manufacturing	-	72	29	6 447	171 741	5 483	10 944	127 957	405 335	432 167	834 106	32 778
313	Textile mills	-	10	6	1 858	48 708	1 676	3 507	40 596	97 724	144 519	244 650	7 737
3132	Fabric mills	-	4	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	24	7	2 042	58 523	1 753	3 569	46 812	155 656	87 860	245 774	12 652
3329	Other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
LEE COUNTY, SC													
31-33	Manufacturing	-	9	7	641	18 258	503	1 047	15 181	60 521	110 938	172 411	D
LEXINGTON COUNTY, SC													
31-33	Manufacturing	-	225	68	9 964	324 221	7 032	13 893	186 745	1 035 380	1 046 554	2 080 733	65 706
311	Food mfg	2	9	7	f	D	D	D	D	D	D	D	D
313	Textile mills	2	4	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	2	3	3	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	2	3	3	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	2	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	36	7	f	D	D	D	D	D	D	D	1 476
3231	Printing & related support activities	3	36	7	f	D	D	D	D	D	D	D	1 476
32311	Printing	3	36	7	f	D	D	D	D	D	D	D	1 476
326	Plastics & rubber products mfg	-	14	5	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	11	4	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	14	1 378	34 216	958	1 930	22 237	77 449	79 225	155 961	2 892
3323	Architectural & structural metals mfg	-	19	9	984	24 000	700	1 456	16 062	56 259	65 012	120 699	1 953
33231	Plate work & fabricated structural product mfg	-	11	6	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	9	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	18	3	505	16 619	391	816	12 396	46 771	21 794	65 271	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEXINGTON COUNTY, SC—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	8	4	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	8	3	633	19 657	374	602	9 857	31 665	32 642	60 693	D
3365	Railroad rolling stock mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
MARION COUNTY, SC													
31-33	Manufacturing	-	32	19	5 007	112 496	4 046	8 487	83 068	389 018	336 771	727 005	16 866
311	Food mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	5	5	1 571	29 578	1 240	2 606	20 089	153 671	94 334	249 403	D
3152	Cut & sew apparel mfg....	-	4	4	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
MARLBORO COUNTY, SC													
31-33	Manufacturing	-	22	14	2 935	82 107	2 362	5 264	58 867	318 867	433 610	755 182	10 311
313	Textile mills.....	-	3	3	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills..	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	-	1	1	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	-	2	2	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills.....	-	2	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills.....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWBERRY COUNTY, SC													
31-33	Manufacturing	-	49	29	5 553	130 517	4 983	10 665	106 505	304 004	433 335	735 403	19 784
311	Food mfg	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	2	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	12	7	643	17 408	583	1 238	14 951	57 945	84 533	142 631	2 837
OCONEE COUNTY, SC													
31-33	Manufacturing	-	80	37	7 487	202 797	5 877	11 834	137 670	637 471	499 256	1 135 988	66 978
313	Textile mills	3	5	4	1 331	34 698	1 215	2 131	28 367	87 783	96 374	204 673	20 219
3132	Fabric mills	4	4	3	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	5	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	5	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	6	619	14 925	549	938	11 596	60 766	23 893	85 250	4 570
333	Machinery mfg	-	14	7	f	D	D	D	D	D	D	D	6 095
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
ORANGEBURG COUNTY, SC													
31-33	Manufacturing	-	90	44	9 370	222 899	7 235	14 595	141 614	644 170	1 063 937	1 700 258	75 615
311	Food mfg	-	7	3	611	15 253	273	558	6 499	58 132	59 984	117 758	995
315	Apparel mfg	9	5	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	9	5	3	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	3	2	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	9	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	19	12	1 042	24 516	848	1 668	16 735	61 114	129 341	188 020	4 242
325	Chemical mfg	-	6	3	615	28 597	376	903	13 204	100 905	160 397	255 553	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORANGEBURG COUNTY, SC—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg.....	-	9	4	1 128	36 677	840	1 827	20 537	78 031	81 934	160 307	D
3329	Other fabricated metal product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
PICKENS COUNTY, SC													
31-33	Manufacturing	-	134	55	11 790	305 732	9 973	20 184	226 893	616 801	1 299 803	1 916 285	76 288
313	Textile mills.....	-	20	15	4 084	96 495	3 740	7 326	83 017	114 433	485 731	609 205	39 058
3132	Fabric mills.....	-	15	13	h	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	11	10	3 264	75 517	3 021	5 774	66 781	147 705	200 175	353 762	31 659
313210	Broadwoven fabric mills.....	-	11	10	3 264	75 517	3 021	5 774	66 781	147 705	200 175	353 762	31 659
314	Textile product mills.....	-	2	2	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	2	2	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	2	2	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	30	10	1 136	33 401	907	1 694	22 338	76 832	67 375	143 813	7 037
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	23	9	h	D	D	D	D	D	D	D	14 145
3335	Metalworking machinery mfg.....	-	10	5	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg.....	-	10	5	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	6	3	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
RICHLAND COUNTY, SC													
31-33	Manufacturing	-	235	94	13 558	460 800	9 617	19 241	275 748	1 464 063	1 762 453	3 220 723	118 399
322	Paper mfg.....	-	9	7	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	8	6	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	51	11	f	D	D	D	D	D	D	D	6 097
3231	Printing & related support activities.....	4	51	11	f	D	D	D	D	D	D	D	6 097
32311	Printing.....	4	46	10	f	D	D	D	D	D	D	D	5 798
323110	Commercial lithographic printing..	4	19	7	f	D	D	D	D	D	D	D	4 541

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RICHLAND COUNTY, SC—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	-	15	9	3 382	149 137	2 336	4 699	91 630	598 247	584 234	1 166 904	D
3251	Basic chemical mfg	-	4	2	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5	2 336	103 010	1 801	3 721	71 315	450 784	454 214	882 249	45 735
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	4	4	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	4	4	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	15	7	f	D	D	D	D	D	D	D	4 864
332	Fabricated metal product mfg	-	33	14	1 878	56 506	1 283	2 455	30 106	142 639	248 856	388 789	11 392
3323	Architectural & structural metals mfg	-	12	5	802	24 623	496	985	9 795	50 864	190 495	238 507	6 636
33231	Plate work & fabricated structural product mfg ..	-	6	4	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	5	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	19	7	862	28 137	575	1 219	14 819	50 555	67 302	121 510	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	4	551	14 823	405	788	8 884	35 707	71 484	108 152	D
SALUDA COUNTY, SC													
31-33	Manufacturing	-	14	10	2 565	46 933	2 287	4 381	35 738	144 766	221 193	375 154	10 611
311	Food mfg	-	3	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	2	2	f	D	D	D	D	D	D	D	D
SPARTANBURG COUNTY, SC													
31-33	Manufacturing	-	481	207	35 102	1 108 590	27 391	55 217	746 017	3 172 178	4 414 741	7 534 645	350 023
311	Food mfg	-	14	5	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPARTANBURG COUNTY, SC—Con.												
	Manufacturing—Con.												
313	Textile mills	-	52	35	7 787	203 847	6 577	13 768	152 058	532 154	606 233	1 148 506	D
3131	Fiber, yarn, & thread mills .	-	9	8	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	9	8	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	7	6	f	D	D	D	D	D	D	D	D
3132	Fabric mills	1	32	24	5 916	150 215	5 087	10 407	115 296	304 019	395 664	706 089	D
31321	Broadwoven fabric mills .	1	20	15	4 436	111 392	3 972	8 063	91 361	214 511	309 558	530 579	D
313210	Broadwoven fabric mills	1	20	15	4 436	111 392	3 972	8 063	91 361	214 511	309 558	530 579	D
31322	Narrow fabric mills & schiffli machine embroidery	5	5	4	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills . . .	-	4	3	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills . . .	-	4	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	11	3	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	10	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	10	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	19	10	2 184	58 255	1 925	3 828	45 826	141 650	295 569	393 954	9 496
3141	Textile furnishings mills . . .	-	6	2	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	3	1	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	3	1	g	D	D	D	D	D	D	D	D
3149	Other textile product mills .	-	13	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	8	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills . .	-	7	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	3	17	13	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	16	14	1 479	46 738	1 167	2 459	30 939	124 414	174 017	296 732	11 470
3222	Converted paper product mfg	-	15	13	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	10	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	7	7	658	21 625	505	1 000	12 619	51 463	87 152	138 158	D
32222	Paper bag & coated & treated paper mfg	-	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	39	7	1 266	39 488	929	1 758	29 024	92 600	75 509	167 749	7 690
3231	Printing & related support activities	-	39	7	1 266	39 488	929	1 758	29 024	92 600	75 509	167 749	7 690
32311	Printing	-	35	6	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	32	15	h	D	D	D	D	D	D	D	82 877
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg . .	-	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	35	20	2 919	94 528	2 410	4 567	73 202	224 215	354 516	578 256	23 828
3261	Plastics product mfg	2	28	17	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	18	11	1 031	26 696	819	1 576	19 058	88 917	81 658	171 653	D
326199	All other plastics product mfg	2	18	11	1 031	26 696	819	1 576	19 058	88 917	81 658	171 653	D
3262	Rubber product mfg	-	7	3	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	17	10	1 812	59 409	1 406	2 913	42 299	143 059	71 145	215 210	D
3271	Clay product & refractory mfg	1	4	4	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	1	3	3	g	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	8	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	SPARTANBURG COUNTY, SC—Con.													
31-33	Manufacturing—Con.													
331	Primary metal mfg	—	9	3	f	D	D	D	D	D	D	D	D	
3314	Nonferrous metal (except aluminum) production & processing	—	5	1		534	16 369	455	902	12 858	46 304	37 594	81 824	9 043
332	Fabricated metal product mfg	—	74	18		1 786	58 801	1 352	2 732	41 644	169 814	112 050	277 617	11 977
3329	Other fabricated metal product mfg	—	4	4		701	24 413	535	1 233	19 063	102 867	45 107	145 666	D
333	Machinery mfg	—	49	21		2 688	88 623	1 994	4 016	52 179	296 037	195 612	496 547	13 718
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	1	f	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	1	f	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	14	6		500	13 892	368	785	8 589	29 674	15 091	43 691	2 416
33351	Metalworking machinery mfg	—	14	6		500	13 892	368	785	8 589	29 674	15 091	43 691	2 416
3339	Other general-purpose machinery mfg	—	12	5	f	D	D	D	D	D	D	D	D	6 501
33399	All other general-purpose machinery mfg	—	8	5	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	6	6	g	D	D	D	D	D	D	D	D	16 786
3344	Semiconductor & other electronic component mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	3	g	D	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	14	7		1 602	52 945	1 089	2 319	27 599	204 113	247 505	444 850	D
3351	Electric lighting equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	7	4	f	D	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	7	4	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	24	14		4 170	156 541	3 159	6 181	100 602	353 334	1 192 517	1 546 006	117 809
3361	Motor vehicle mfg	—	3	1	g	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	3	1	g	D	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	3	1	g	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	15	12	g	D	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	5	4	f	D	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	2	5	4	f	D	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	2	f	D	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	2	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	26	5	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUMTER COUNTY, SC													
31-33	Manufacturing	-	84	50	12 655	303 045	10 941	21 438	227 700	976 820	1 073 585	2 050 389	62 670
311	Food mfg	-	4	3	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	h	D	D	D	D	D	D	D	D
313	Textile mills	-	5	4	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	4	4	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	4	4	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	4	3	514	7 252	469	820	5 812	14 398	13 628	28 259	D
3141	Textile furnishings mills	-	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	4	4	593	17 762	474	983	11 461	35 885	112 138	142 385	9 785
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	9	1 666	44 351	1 502	3 277	35 006	147 040	68 947	220 933	4 854
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	1 166	37 764	1 006	2 405	30 030	173 404	187 347	360 282	D
3363	Motor vehicle parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	10	7	1 691	36 042	1 534	3 036	29 579	78 113	68 793	151 347	3 179
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	4	g	D	D	D	D	D	D	D	2 553
33712	Household & institutional furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
337122	Nonupholstered wood household furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
UNION COUNTY, SC													
31-33	Manufacturing	-	43	26	5 355	129 204	4 341	8 643	91 332	341 642	338 317	679 568	34 695
313	Textile mills	-	15	11	3 751	85 003	2 997	6 066	60 668	205 606	241 861	446 123	23 755
3131	Fiber, yarn, & thread mills	2	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	2	2	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills	2	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	6	5	1 690	33 683	1 307	2 435	23 266	116 957	138 371	254 401	D
31321	Broadwoven fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	1	g	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	7	4	g	D	D	D	D	D	D	D	12 712
31331	Textile & fabric finishing mills	-	7	4	g	D	D	D	D	D	D	D	12 712
313311	Broadwoven fabric finishing mills	-	4	3	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNION COUNTY, SC—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	8	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
WILLIAMSBURG COUNTY, SC													
31-33	Manufacturing	-	34	19	3 392	86 777	2 828	6 239	63 214	246 560	243 567	533 447	27 178
325	Chemical mfg	-	3	2	1 046	33 403	816	2 241	22 066	82 568	104 553	186 565	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	1 090	31 990	924	2 006	25 394	117 831	67 205	225 966	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
YORK COUNTY, SC													
31-33	Manufacturing	-	222	90	11 731	391 776	8 688	17 822	250 349	1 162 970	1 159 681	2 325 716	77 608
313	Textile mills	-	19	16	2 137	45 209	1 880	3 892	36 088	102 136	174 360	277 097	6 302
3131	Fiber, yarn, & thread mills .	-	5	4	866	17 341	828	1 751	15 941	33 843	55 802	90 842	D
31311	Fiber, yarn, & thread mills	-	5	4	866	17 341	828	1 751	15 941	33 843	55 802	90 842	D
313111	Yarn spinning mills ...	-	5	4	866	17 341	828	1 751	15 941	33 843	55 802	90 842	D
3133	Textile & fabric finishing & fabric coating mills	-	5	5	815	17 297	656	1 330	11 734	41 527	91 219	132 607	D
31331	Textile & fabric finishing mills	-	4	4	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	4	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	9	5	1 524	78 616	1 098	2 316	54 329	330 141	224 883	564 120	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	22	13	2 206	84 248	1 584	3 403	50 476	278 931	264 170	538 697	14 155
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	45	12	1 205	32 884	916	1 863	21 416	93 228	79 308	171 012	6 012
333	Machinery mfg	-	23	10	868	39 163	449	828	19 812	100 714	84 090	183 909	5 079
335	Electrical equipment, appliance, & component mfg	-	9	7	664	21 202	480	1 020	11 316	47 838	52 168	99 888	3 094
336	Transportation equipment mfg	-	7	4	1 027	31 285	783	1 537	20 605	54 255	59 383	116 221	7 932
3363	Motor vehicle parts mfg ...	-	4	4	g	D	D	D	D	D	D	D	7 864
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees, h–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABBEVILLE, SC													
31-33	Manufacturing	-	17	11	1 890	44 690	1 618	3 321	33 119	96 267	162 719	255 547	17 037
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	3	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	5	4	4	f	D	D	D	D	D	D	D	D
AIKEN, SC													
31-33	Manufacturing	3	38	18	4 692	139 587	3 891	8 141	102 363	652 632	368 634	1 009 177	D
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	9	4	1	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	9	1	1	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	9	1	1	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	9	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	6	1 042	22 561	870	1 911	15 836	81 144	54 320	130 241	7 046
3329	Other fabricated metal product mfg	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
ALLENDALE, SC													
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
ANDERSON, SC													
31-33	Manufacturing	-	73	32	9 005	285 627	7 057	15 341	196 531	962 649	1 170 997	2 141 443	111 669
313	Textile mills	1	6	4	g	D	D	D	D	D	D	D	15 838
3132	Fabric mills	-	3	3	1 567	47 342	1 255	2 921	31 579	101 098	96 552	205 236	D
31321	Broadwoven fabric mills	-	3	3	1 567	47 342	1 255	2 921	31 579	101 098	96 552	205 236	D
313210	Broadwoven fabric mills	-	3	3	1 567	47 342	1 255	2 921	31 579	101 098	96 552	205 236	D
314	Textile product mills	-	5	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	6	10	4	855	22 221	575	1 130	12 576	91 874	88 629	179 850	4 178
3261	Plastics product mfg	-	7	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	6	597	17 879	417	835	10 699	50 708	27 814	80 144	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANDERSON, SC—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
ANDREWS, SC *													
31-33	Manufacturing	1	21	14	1 402	27 529	1 099	1 909	21 289	40 248	107 067	144 895	D
315	Apparel mfg	6	7	7	f	D	D	D	D	D	D	D	D
BARNWELL, SC													
31-33	Manufacturing	-	9	4	f	D	D	D	D	D	D	D	16 124
315	Apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	f	D	D	D	D	D	D	D	D
BATESBURG-LEESVILLE, SC *													
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
BELTON, SC													
31-33	Manufacturing	-	8	6	928	22 502	788	1 460	16 115	58 566	102 385	160 747	2 002
313	Textile mills	-	3	3	554	13 352	478	892	9 465	31 878	51 725	83 876	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
BENNETTSVILLE, SC													
31-33	Manufacturing	-	11	6	1 494	37 163	1 230	2 632	26 531	112 136	168 289	284 149	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	2	2	f	D	D	D	D	D	D	D	D
BLACKVILLE, SC													
31-33	Manufacturing	1	3	3	f	D	D	D	D	D	D	D	D
CAMDEN, SC													
31-33	Manufacturing	-	16	6	691	19 240	572	968	15 480	38 197	63 022	101 224	D
CAYCE, SC													
31-33	Manufacturing	-	26	11	1 312	35 860	902	2 015	23 688	98 116	126 942	221 447	12 914
332	Fabricated metal product mfg	-	7	4	f	D	D	D	D	D	D	D	1 322

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHARLESTON, SC *													
31-33	Manufacturing	-	84	13	1 985	65 676	1 435	2 979	43 138	362 268	254 146	602 932	D
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	4	2	612	17 716	390	927	10 463	44 620	29 863	74 487	D
3366	Ship & boat building	3	4	2	612	17 716	390	927	10 463	44 620	29 863	74 487	D
33661	Ship & boat building	3	4	2	612	17 716	390	927	10 463	44 620	29 863	74 487	D
336611	Ship building & repairing	3	3	2	f	D	D	D	D	D	D	D	D
CHERAW, SC													
31-33	Manufacturing	-	21	13	3 107	88 968	2 442	5 370	64 521	314 204	409 149	722 518	23 118
313	Textile mills	1	4	4	f	D	D	D	D	D	D	D	12 477
332	Fabricated metal product mfg	-	7	5	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	2	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	2	2	g	D	D	D	D	D	D	D	D
CHESTER, SC													
31-33	Manufacturing	-	22	11	1 259	39 673	968	2 185	27 010	112 594	149 199	262 194	D
CLEMSON, SC *													
31-33	Manufacturing	-	9	4	g	D	D	D	D	D	D	D	22 198
313	Textile mills	-	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	1	1	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	1	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON, SC													
31-33	Manufacturing	-	10	4	2 496	69 345	2 259	4 649	57 922	171 208	106 893	281 547	D
313	Textile mills	-	3	2	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	g	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	g	D	D	D	D	D	D	D	D
CLOVER, SC													
31-33	Manufacturing	1	18	8	689	15 635	491	960	8 742	37 279	18 944	56 820	1 812

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLUMBIA, SC *													
31-33	Manufacturing	-	105	33	7 137	253 435	5 185	10 510	156 619	763 766	895 855	1 648 289	63 153
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	6	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	3	826	25 772	590	1 199	15 076	42 834	95 634	137 030	3 173
CONWAY, SC													
31-33	Manufacturing	-	26	9	1 666	42 996	1 217	2 436	29 828	187 914	140 601	309 804	11 272
332	Fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
DARLINGTON, SC													
31-33	Manufacturing	-	10	6	1 614	46 758	1 248	2 436	31 974	255 326	513 334	770 081	28 859
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	1	1	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
DILLON, SC													
31-33	Manufacturing	-	11	8	2 461	41 275	2 319	4 274	34 364	96 939	154 171	249 347	17 032
311	Food mfg	-	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EASLEY, SC													
31-33	Manufacturing	1	41	20	3 075	76 496	2 492	4 448	50 680	169 708	152 002	330 441	15 522
313	Textile mills	-	3	3	560	12 610	502	1 028	10 609	29 953	28 306	58 839	D
3132	Fabric mills	-	3	3	560	12 610	502	1 028	10 609	29 953	28 306	58 839	D
31321	Broadwoven fabric mills .	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	4	729	20 980	570	971	13 379	47 480	44 365	91 869	5 607
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	570	18 302	405	753	10 501	24 379	24 820	51 756	D
FLORENCE, SC													
31-33	Manufacturing	-	52	21	4 653	148 582	3 107	5 970	76 199	343 276	354 230	701 179	19 747
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
FORT MILL, SC													
31-33	Manufacturing	4	26	10	968	29 016	612	1 167	16 771	94 108	100 901	193 919	5 130
FOUNTAIN INN, SC *													
31-33	Manufacturing	-	30	17	3 252	86 048	2 700	4 502	58 712	207 433	276 571	484 584	39 484
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	1	1	f	D	D	D	D	D	D	D	D
GAFFNEY, SC													
31-33	Manufacturing	-	39	27	5 638	175 267	4 616	9 229	133 959	727 739	707 793	1 430 777	D
311	Food mfg	-	2	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
313	Textile mills	-	12	11	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	5	5	952	29 803	830	1 745	23 486	61 889	85 167	147 750	D
31321	Broadwoven fabric mills .	-	4	4	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	4	4	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	5	4	593	15 562	470	820	10 860	25 047	20 916	44 427	1 875
31331	Textile & fabric finishing mills	-	5	4	593	15 562	470	820	10 860	25 047	20 916	44 427	1 875
332	Fabricated metal product mfg	-	5	4	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GEORGETOWN, SC													
31-33	Manufacturing	-	23	6	1 474	46 042	1 316	2 178	33 714	110 332	222 393	328 082	14 478
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
GOOSE CREEK, SC *													
31-33	Manufacturing	-	12	8	2 621	107 223	1 717	3 938	60 147	388 649	721 568	1 205 186	33 882
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
GREENVILLE, SC													
31-33	Manufacturing	-	159	64	14 641	504 173	11 402	23 225	350 300	1 955 952	2 060 529	4 021 744	141 736
313	Textile mills	-	11	9	2 647	65 242	2 336	4 811	52 063	172 855	129 025	300 856	29 339
3132	Fabric mills	-	7	6	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	4	3	1 473	37 339	1 341	2 739	32 165	116 863	50 331	165 434	D
313210	Broadwoven fabric mills	-	4	3	1 473	37 339	1 341	2 739	32 165	116 863	50 331	165 434	D
322	Paper mfg	-	5	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	9	5	564	19 497	367	736	9 950	27 651	143 466	178 306	7 472
326	Plastics & rubber products mfg	-	8	5	1 585	59 727	1 481	3 089	53 575	208 097	240 489	451 007	D
3262	Rubber product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	9	3 587	141 795	2 468	5 241	90 094	834 851	843 295	1 709 905	50 497
3332	Industrial machinery mfg ..	-	7	5	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	7	5	g	D	D	D	D	D	D	D	D
333292	Textile machinery mfg	-	6	5	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	g	D	D	D	D	D	D	D	D
334411	Electron tube mfg	-	1	1	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	GREENVILLE, SC— Con.													
	Manufacturing— Con.													
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D	
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D	
	GREENWOOD, SC													
31-33	Manufacturing	-	51	25		7 027	212 111	5 842	12 415	156 626	581 116	567 579	1 131 653	24 513
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D	
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D	
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D	
313	Textile mills	3	5	4	g	D	D	D	D	D	D	D	D	
3131	Fiber, yarn, & thread mills ..	9	2	2	f	D	D	D	D	D	D	D	D	
31311	Fiber, yarn, & thread mills	9	2	2	f	D	D	D	D	D	D	D	D	
313111	Yarn spinning mills	9	2	2	f	D	D	D	D	D	D	D	D	
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D	
31321	Broadwoven fabric mills ..	-	2	2	f	D	D	D	D	D	D	D	D	
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D	
3259	Other chemical product mfg	-	3	2	f	D	D	D	D	D	D	D	D	
32599	All other chemical product & preparation mfg	-	3	2	f	D	D	D	D	D	D	D	D	
325998	All other miscellaneous chemical product & preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	-	3	2	g	D	D	D	D	D	D	D	D	
3346	Mfg & reproducing magnetic & optical media ..	-	1	1	g	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	-	1	1	g	D	D	D	D	D	D	D	D	
334613	Magnetic & optical recording media mfg ..	-	1	1	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	GREER, SC *													
31-33	Manufacturing	2	42	21		1 857	58 560	1 283	2 512	34 221	122 246	171 280	292 074	18 042
333	Machinery mfg	4	6	5		781	27 441	551	1 140	17 964	42 124	63 786	104 036	9 656
	HAMPTON, SC													
31-33	Manufacturing	-	3	2	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
	HARTSVILLE, SC													
31-33	Manufacturing	-	15	9		1 389	48 523	1 218	2 359	40 078	147 943	199 952	345 135	D
322	Paper mfg	-	3	3	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HONEA PATH, SC *													
31-33	Manufacturing	-	10	7	1 693	40 024	1 481	2 877	31 827	48 931	89 405	140 545	5 000
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
JOHNSTON, SC													
31-33	Manufacturing	1	4	3	898	17 643	766	1 428	13 152	52 869	99 494	153 252	D
LAKE CITY, SC													
31-33	Manufacturing	-	12	9	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	f	D	D	D	D	D	D	D	D
LANCASTER, SC													
31-33	Manufacturing	-	15	9	3 739	105 796	3 285	6 574	83 371	412 470	840 033	1 240 908	49 034
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	1	1	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills....	-	1	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	1	1	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	g	D	D	D	D	D	D	D	D
335912	Primary battery mfg....	-	1	1	g	D	D	D	D	D	D	D	D
LAURENS, SC													
31-33	Manufacturing	-	15	4	989	24 586	830	1 711	19 832	59 191	96 080	152 833	1 221
LEXINGTON, SC													
31-33	Manufacturing	-	30	8	740	20 629	617	1 241	14 902	46 666	73 400	121 714	4 188
LIBERTY, SC													
31-33	Manufacturing	-	8	2	761	22 571	598	1 229	15 426	53 290	51 873	105 184	2 249

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARION, SC													
31-33	Manufacturing	-	14	8	2 578	60 442	2 137	4 611	45 880	169 036	164 727	333 445	8 790
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
MAULDIN, SC													
31-33	Manufacturing	2	29	12	1 355	36 656	1 000	1 995	20 054	97 074	122 175	219 098	4 623
MONCKS CORNER, SC													
31-33	Manufacturing	-	8	3	843	16 109	565	1 046	11 862	98 506	37 497	136 681	D
326	Plastics & rubber products mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	D
MULLINS, SC													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	1 219
315	Apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
MYRTLE BEACH, SC													
31-33	Manufacturing	-	46	6	h	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
NEWBERRY, SC													
31-33	Manufacturing	-	15	8	2 655	59 214	2 502	5 660	52 325	84 680	220 593	302 777	7 385
311	Food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	2	2	g	D	D	D	D	D	D	D	D
313	Textile mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NORTH CHARLESTON, SC *													
31-33	Manufacturing	-	108	40	5 292	188 572	3 667	7 399	109 644	573 669	665 094	1 237 010	89 754
314	Textile product mills	8	4	2	f	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	9	2	1	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	9	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
ORANGEBURG, SC													
31-33	Manufacturing	-	34	15	4 636	97 082	3 510	7 268	59 646	293 434	633 233	925 494	35 870
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	h	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
PAGELAND, SC													
31-33	Manufacturing	1	9	8	1 576	38 053	1 336	2 620	27 514	112 089	97 878	213 331	6 158
313	Textile mills	5	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
PENDLETON, SC													
31-33	Manufacturing	-	11	4	f	D	D	D	D	D	D	D	D
PICKENS, SC													
31-33	Manufacturing	7	11	4	582	10 021	496	854	8 436	15 341	18 013	35 659	2 446
ROCK HILL, SC													
31-33	Manufacturing	-	75	36	4 658	151 944	3 380	6 973	90 282	420 258	485 801	901 096	24 689
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	3	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	9	7	1 784	69 759	1 353	2 956	44 042	222 834	195 151	414 296	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
SALUDA, SC													
31-33	Manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SENECA, SC													
31-33	Manufacturing	-	23	9	2 774	76 106	2 208	4 514	53 986	190 098	217 446	393 287	24 133
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
SIMPSONVILLE, SC													
31-33	Manufacturing	-	23	9	2 416	91 390	1 982	4 204	64 795	262 930	214 308	478 350	D
326	Plastics & rubber products mfg	-	4	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	g	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	1	1	g	D	D	D	D	D	D	D	D
SPARTANBURG, SC													
31-33	Manufacturing	-	93	40	8 867	311 422	7 080	13 940	223 053	754 617	1 579 578	2 339 512	134 553
313	Textile mills	-	14	10	1 255	34 251	1 034	2 282	25 496	121 063	103 661	225 016	D
3132	Fabric mills	-	7	5	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	5	4	555	14 987	473	1 027	10 988	56 288	38 557	95 975	D
313210	Broadwoven fabric mills	-	5	4	555	14 987	473	1 027	10 988	56 288	38 557	95 975	D
323	Printing & related support activities	-	14	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	14	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	14	3	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	4	3	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	1	3	3	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	1	2	2	g	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	7	3	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUMMERVILLE, SC *													
31-33	Manufacturing	-	40	15	1 654	45 244	1 267	2 645	29 588	114 427	171 587	284 134	10 203
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
SUMTER, SC													
31-33	Manufacturing	-	59	34	10 009	234 437	8 857	16 934	180 898	810 636	706 834	1 522 276	51 037
311	Food mfg	-	2	1	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	7	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	1 166	37 764	1 006	2 405	30 030	173 404	187 347	360 282	D
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	6	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
33712	Household & institutional furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
337122	Nonupholstered wood household furniture mfg	-	4	3	1 352	27 779	1 256	2 457	23 210	58 812	45 025	106 468	2 553
TRAVELERS REST, SC													
31-33	Manufacturing	2	14	10	1 529	31 111	1 267	2 508	20 297	82 687	62 394	145 194	2 826
313	Textile mills	7	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	7	2	2	f	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	7	2	2	f	D	D	D	D	D	D	D	D
313222	Schiffli machine embroidery	7	2	2	f	D	D	D	D	D	D	D	D
UNION, SC													
31-33	Manufacturing	1	12	7	1 878	50 519	1 596	3 381	38 417	139 593	157 211	298 522	14 015
313	Textile mills	1	7	5	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	2	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	2	2	2	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	2	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
WALHALLA, SC													
31-33	Manufacturing	-	6	4	1 157	25 383	920	1 732	16 540	73 631	40 466	114 043	4 632

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WALTERBORO, SC													
31-33	Manufacturing	-	14	8	951	28 384	755	1 659	20 590	63 454	62 525	130 858	6 547
WELLFORD, SC													
31-33	Manufacturing	-	7	4	662	23 206	522	1 055	14 661	47 979	128 992	173 156	10 033
WEST COLUMBIA, SC													
31-33	Manufacturing	1	53	18	2 652	101 087	1 448	2 796	30 175	278 158	319 195	615 063	16 789
334	Computer & electronic product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
WESTMINSTER, SC													
31-33	Manufacturing	2	13	9	1 199	34 348	1 016	1 966	26 117	156 405	74 413	249 725	9 610
WILLIAMSTON, SC													
31-33	Manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	1	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	f	D	D	D	D	D	D	D	D
313112	Yarn texturing, throwing, & twisting mills	-	1	1	f	D	D	D	D	D	D	D	D
WILLISTON, SC													
31-33	Manufacturing	-	7	6	1 731	41 517	1 433	3 190	27 766	114 356	168 064	285 705	D
333	Machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	1	1	g	D	D	D	D	D	D	D	D
WINNSBORO, SC													
31-33	Manufacturing	-	7	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	f	D	D	D	D	D	D	D	D
YORK, SC													
31-33	Manufacturing	-	22	10	1 492	40 629	1 241	2 323	28 961	85 756	123 995	211 338	8 263
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
SOUTH CAROLINA		SOUTH CAROLINA—Con.	
Companies ¹ number..	3 945	Quantity of electricity purchased for heat and power 1,000 kWh..	29 131 524
		Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	2 925 400
All establishments number..	4 450	Total value of shipments \$1,000..	70 797 020
Establishments with 1 to 19 employees number..	2 577	Value of resales \$1,000..	2 412 013
Establishments with 20 to 99 employees number..	1 072	Value added \$1,000..	33 657 787
Establishments with 100 employees or more number..	801	Total inventories, beginning of year \$1,000..	7 655 130
All employees number..	346 142	Finished goods inventories, beginning of year \$1,000..	2 854 721
Total compensation ² \$1,000..	12 928 802	Work-in-process inventories, beginning of year \$1,000..	2 006 276
Annual payroll \$1,000..	10 369 419	Materials and supplies inventories, beginning of year \$1,000..	2 794 133
Total fringe benefits \$1,000..	2 559 383	Total inventories, end of year \$1,000..	7 913 837
Production workers, average for year number..	267 548	Finished goods inventories, end of year \$1,000..	3 005 938
Production workers on March 12 number..	267 067	Work-in-process inventories, end of year \$1,000..	1 947 227
Production workers on May 12 number..	267 740	Materials and supplies inventories, end of year \$1,000..	2 960 672
Production workers on August 12 number..	267 564	Gross book value of total assets at beginning of year \$1,000..	36 603 295
Production workers on November 12 number..	267 821	Total capital expenditures (new and used) \$1,000..	3 414 769
Production-worker hours 1,000..	786 083	Capital expenditures for buildings and other structures (new and used) \$1,000..	379 208
Production-worker wages \$1,000..	6 856 005	Capital expenditures for machinery and equipment (new and used) \$1,000..	3 035 561
Total cost of materials \$1,000..	37 229 455	Total retirements ² \$1,000..	990 398
Cost of materials, parts, containers, etc., consumed \$1,000..	33 041 124	Gross book value of total assets at end of year \$1,000..	39 027 666
Cost of resales \$1,000..	1 907 726	Total depreciation during year ² \$1,000..	2 467 113
Cost of fuels \$1,000..	534 013	Total rental payments ² \$1,000..	357 615
Cost of purchased electricity \$1,000..	1 138 759	Buildings and other structures rental payments ² \$1,000..	136 581
Cost of contract work \$1,000..	607 833	Machinery and equipment rental payments ² \$1,000..	221 034

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

SOUTH CAROLINA

Andrews is in Georgetown and Williamsburg Counties.

Batesburg-Leesville is in Lexington and Saluda Counties; resulted from the merger of Batesburg (reported in the 1992 Economic Census) and Leesville (not populous enough for separate tabulation in the 1992 Economic Census) in January 1993.

Charleston is in Berkeley and Charleston Counties.

Clemson is in Anderson and Pickens Counties.

Columbia is in Lexington and Richland Counties.

Fountain Inn is in Greenville and Laurens Counties.

Goose Creek is in Berkeley and Charleston Counties.

Greer is in Greenville and Spartanburg Counties.

Honea Path is in Abbeville and Anderson Counties.

Irmo is in Lexington and Richland Counties.

North Augusta is in Aiken and Edgefield Counties.

North Charleston is in Berkeley, Charleston, and Dorchester Counties.

Summerville is in Berkeley, Charleston, and Dorchester Counties.

Appendix E. Metropolitan Areas

SOUTH CAROLINA

Augusta—Aiken, GA—SC MSA

Columbia County, GA
McDuffie County, GA
Richmond County, GA
Aiken County, SC
Edgefield County, SC

Charleston—North Charleston, SC MSA

Berkeley County, SC
Charleston County, SC
Dorchester County, SC

Charlotte—Gastonia—Rock Hill, NC—SC MSA

Cabarrus County, NC
Gaston County, NC
Lincoln County, NC
Mecklenburg County, NC
Rowan County, NC

Charlotte—Gastonia—Rock Hill, NC—SC MSA—Con.

Union County, NC
York County, SC

Columbia, SC MSA

Lexington County, SC
Richland County, SC

Florence, SC MSA

Florence County, SC

Greenville—Spartanburg—Anderson, SC MSA

Anderson County, SC
Cherokee County, SC
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

Myrtle Beach, SC MSA

Horry County, SC

Sumter, SC MSA

Sumter County, SC

South Dakota

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH DAKOTA													
31-33	Manufacturing	-	888	292	46 539	1 162 575	33 230	65 210	707 448	3 880 867	8 420 878	12 305 468	264 205
311	Food mfg.....	1	91	34	7 811	179 274	6 451	13 236	133 262	18 313	2 401 307	2 409 494	33 207
3111	Animal food mfg.....	3	18	7	456	12 798	307	627	6 755	79 750	99 372	180 651	2 505
31111	Animal food mfg.....	3	18	7	456	12 798	307	627	6 755	79 750	99 372	180 651	2 505
311111	Dog & cat food mfg...	-	4	1	c	D	D	D	D	D	D	D	D
311119	Other animal food mfg.....	5	14	6	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	2	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	1	18	10	1 022	26 029	738	1 564	16 427	85 506	360 815	441 888	6 622
31151	Dairy product (except frozen) mfg.....	1	17	10	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	2	5	3	e	D	D	D	D	D	D	D	D
311513	Cheese mfg.....	-	9	5	610	13 424	507	983	9 938	52 082	253 969	301 122	4 483
3116	Meat product mfg.....	2	18	9	4 769	107 896	4 210	8 845	85 444	S	S	1 396 799	11 166
31161	Animal slaughtering & processing.....	2	18	9	4 769	107 896	4 210	8 845	85 444	S	S	1 396 799	11 166
311611	Animal (except poultry) slaughtering.....	2	13	6	4 168	94 290	3 691	7 830	75 178	S	S	1 294 260	D
311612	Meat processed from carcasses.....	-	4	2	e	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	20	2	g	D	D	D	D	D	D	D	2 014
31181	Bread & bakery product mfg.....	-	18	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	2	1	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg..	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	2	6	3	109	1 260	91	107	913	2 933	7 192	10 125	D
31199	All other food mfg.....	2	4	3	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	9	3	213	6 065	62	119	1 191	27 015	23 244	50 267	D
3121	Beverage mfg.....	-	9	3	213	6 065	62	119	1 191	27 015	23 244	50 267	D
31211	Soft drink & ice mfg.....	-	8	3	c	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	4	3	191	5 591	49	93	895	25 935	22 538	48 474	D
313	Textile mills.....	-	4	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	1	29	8	857	13 695	589	1 099	7 761	25 171	27 397	50 376	971
3141	Textile furnishings mills....	-	13	6	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	13	6	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	-	7	6	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	2	16	2	e	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	1	11	2	235	4 657	166	323	2 774	14 483	11 106	24 514	718
314912	Canvas & related product mills.....	-	8	1	c	D	D	D	D	D	D	D	684
315	Apparel mfg.....	-	18	9	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	14	8	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors.....	-	11	6	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors.....	-	6	6	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	2	c	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	46	19	1 443	35 467	1 231	2 418	27 432	78 479	123 248	204 199	5 185
3211	Sawmills & wood preservation.....	2	13	4	459	12 254	397	780	9 936	28 821	56 886	88 446	2 828
32111	Sawmills & wood preservation.....	2	13	4	459	12 254	397	780	9 936	28 821	56 886	88 446	2 828
321113	Sawmills.....	2	10	3	406	10 758	357	692	8 991	26 415	42 267	69 813	2 336
3212	Veneer, plywood, & engineered wood product mfg.....	-	8	5	525	14 805	431	910	11 154	32 836	44 764	77 604	1 834
32121	Veneer, plywood, & engineered wood product mfg.....	-	8	5	525	14 805	431	910	11 154	32 836	44 764	77 604	1 834
321214	Truss mfg.....	-	6	4	c	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH DAKOTA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg . . .	2	25	10	459	8 408	403	728	6 342	16 822	21 598	38 149	523
32191	Millwork	4	12	6	223	3 572	207	389	3 113	5 664	9 129	14 696	378
321912	Cut stock, resawing lumber, & planing	5	8	5	c	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	7	4	225	4 701	185	325	3 122	10 848	12 123	22 798	126
321992	Prefabricated wood building mfg	1	6	3	c	D	D	D	D	D	D	D	D
322	Paper mfg	—	9	9	695	20 027	563	1 154	13 074	65 418	87 446	151 151	4 311
3222	Converted paper product mfg	—	9	9	695	20 027	563	1 154	13 074	65 418	87 446	151 151	4 311
32221	Paperboard container mfg	—	7	7	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	4	4	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	3	3	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	2	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	95	17	1 384	29 744	1 073	1 859	19 950	76 171	46 756	122 684	4 946
3231	Printing & related support activities	1	95	17	1 384	29 744	1 073	1 859	19 950	76 171	46 756	122 684	4 946
32311	Printing	1	94	17	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	44	9	618	13 057	461	737	8 128	26 274	17 124	43 564	1 535
323112	Commercial flexographic printing	—	3	2	e	D	D	D	D	D	D	D	D
323113	Commercial screen printing	3	11	3	141	2 523	121	190	1 521	6 191	3 314	9 305	129
325	Chemical mfg	3	24	8	706	19 924	388	667	7 723	78 369	66 958	146 008	7 462
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	2	1	c	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	2	1	c	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	1	1	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	8	4	2	233	5 710	110	213	1 907	12 153	9 276	22 157	1 585
32541	Pharmaceutical & medicine mfg	8	4	2	233	5 710	110	213	1 907	12 153	9 276	22 157	1 585
325414	Biological product (except diagnostic) mfg	9	1	1	c	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	8	3	260	9 062	136	264	3 111	53 436	28 711	82 234	2 201
32599	All other chemical product & preparation mfg	—	7	2	c	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	1	1	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	37	14	1 470	32 215	1 234	2 119	22 336	112 285	90 326	203 761	6 899
3261	Plastics product mfg	—	30	12	1 024	22 515	853	1 362	14 644	73 970	75 101	150 096	6 619
32611	Unsupported plastics film, sheet, & bag mfg	—	5	4	390	9 243	350	720	7 752	47 426	54 346	103 010	4 918
326111	Unsupported plastics bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	4	3	c	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	19	6	527	9 674	430	503	5 379	20 193	14 241	34 226	936
326199	All other plastics product mfg	2	17	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	7	2	446	9 700	381	757	7 692	38 315	15 225	53 665	280
32629	Other rubber product mfg	—	3	1	e	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	1	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH DAKOTA—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	68	12	1 172	36 342	889	1 825	21 811	85 472	68 951	153 759	9 619
3272	Glass & glass product mfg	—	2	1	c	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	49	9	695	21 966	557	1 215	15 282	56 548	49 275	105 306	4 218
32732	Ready-mix concrete mfg	1	31	4	353	11 562	292	660	9 015	30 200	34 998	65 408	3 056
327320	Ready-mix concrete mfg	1	31	4	353	11 562	292	660	9 015	30 200	34 998	65 408	3 056
32739	Other concrete product mfg	1	9	3	235	7 276	180	389	3 991	10 681	8 266	18 351	340
327390	Other concrete product mfg	1	9	3	235	7 276	180	389	3 991	10 681	8 266	18 351	340
3274	Lime & gypsum product mfg	—	2	1	c	D	D	D	D	D	D	D	D
32741	Lime mfg	—	1	1	c	D	D	D	D	D	D	D	D
327410	Lime mfg	—	1	1	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	10	1	155	5 034	125	244	2 311	14 528	7 840	22 519	D
32799	All other nonmetallic mineral product mfg	1	10	1	155	5 034	125	244	2 311	14 528	7 840	22 519	D
327991	Cut stone & stone product mfg	—	4	1	c	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	6	3	f	D	D	D	D	D	D	D	1 070
3313	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	115	37	3 401	85 350	2 609	5 478	59 141	167 602	218 063	389 489	14 174
3323	Architectural & structural metals mfg	1	27	15	1 646	44 867	1 192	2 829	29 833	85 192	134 846	223 882	7 604
33231	Plate work & fabricated structural product mfg	—	10	7	433	13 573	311	656	7 833	32 626	35 855	69 516	1 400
332311	Prefabricated metal building & component mfg	—	3	3	c	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	5	3	227	7 434	153	333	4 169	14 406	24 030	39 595	499
33232	Ornamental & architectural metal products mfg	1	17	8	1 213	31 294	881	2 173	22 000	52 566	98 991	154 366	6 204
332321	Metal window & door mfg	—	5	4	898	22 888	660	1 672	15 974	33 777	71 497	107 876	D
332323	Ornamental & architectural metal work mfg	7	8	2	251	6 485	186	427	5 080	14 618	16 710	31 664	2 746
3325	Hardware mfg	—	4	3	383	8 614	330	688	6 648	20 282	21 825	41 735	733
33251	Hardware mfg	—	4	3	383	8 614	330	688	6 648	20 282	21 825	41 735	733
332510	Hardware mfg	—	4	3	383	8 614	330	688	6 648	20 282	21 825	41 735	733
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	52	8	649	16 042	540	988	11 839	32 502	20 779	53 408	3 206
33271	Machine shops	2	45	5	526	13 012	438	824	9 801	25 185	15 700	41 130	1 805
332710	Machine shops	2	45	5	526	13 012	438	824	9 801	25 185	15 700	41 130	1 805
33272	Turned product & screw, nut, & bolt mfg	1	7	3	123	3 030	102	164	2 038	7 317	5 079	12 278	1 401
3329	Other fabricated metal product mfg	1	16	8	551	12 416	414	766	8 474	22 434	35 340	58 105	1 777
33291	Metal valve mfg	—	2	2	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	2	14	6	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	3	2	c	D	D	D	D	D	D	D	205

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH DAKOTA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	93	39	5 180	142 734	3 776	7 859	92 330	389 935	387 406	775 698	24 817
3331	Agriculture, construction, & mining machinery mfg.	-	37	15	1 898	48 888	1 401	2 813	32 210	160 435	177 429	335 500	12 729
33311	Agricultural implement mfg	2	24	6	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	2	21	6	597	14 022	447	914	10 232	32 268	44 864	78 146	D
33312	Construction machinery mfg	-	11	9	1 276	34 291	931	1 858	21 589	126 796	131 409	254 755	9 539
333120	Construction machinery mfg	-	11	9	1 276	34 291	931	1 858	21 589	126 796	131 409	254 755	9 539
3332	Industrial machinery mfg	1	9	2	188	5 792	127	240	3 127	7 328	10 953	18 265	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	8	4	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	8	4	f	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	-	4	3	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	2	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	11	6	385	11 741	233	471	6 279	29 076	24 551	52 908	1 779
33351	Metalworking machinery mfg	-	11	6	385	11 741	233	471	6 279	29 076	24 551	52 908	1 779
333513	Machine tool (metal forming types) mfg	-	2	2	c	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	1	e	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	19	11	1 335	38 790	959	2 158	24 659	82 028	99 208	180 725	5 894
33392	Material handling equipment mfg	-	5	3	782	23 195	593	1 471	15 881	41 428	58 767	100 610	3 820
333922	Conveyor & conveying equipment mfg	-	3	2	c	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg	-	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	11	7	522	14 828	347	663	8 409	38 515	38 659	76 158	D
333992	Welding & soldering equipment mfg	-	2	2	c	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	2	2	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	6	3	175	5 105	111	195	2 642	10 151	17 964	27 669	850
334	Computer & electronic product mfg	-	35	19	12 395	313 110	6 802	12 123	128 844	1 801 967	4 124 870	5 941 741	87 858
3341	Computer & peripheral equipment mfg	-	5	4	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	4	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	3	3	i	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	22	14	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	22	14	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	4	3	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	-	8	6	1 555	33 739	1 176	2 403	19 986	71 869	37 012	113 536	3 735
334418	Printed circuit assembly (electronic assembly) mfg	-	4	3	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SOUTH DAKOTA—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	5	1	c	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	1	c	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	1	1	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	11	4	454	11 100	376	733	7 984	57 809	36 350	92 783	D
3353	Electrical equipment mfg ..	—	8	3	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	8	3	e	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	—	2	1	c	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	3	2	c	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	36	19	2 154	56 065	1 730	3 397	37 397	194 470	186 808	381 077	18 136
3361	Motor vehicle mfg	—	1	1	c	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	c	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	c	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	—	15	7	913	23 502	748	1 592	17 045	88 749	73 659	163 376	2 132
33621	Motor vehicle body & trailer mfg	—	15	7	913	23 502	748	1 592	17 045	88 749	73 659	163 376	2 132
336212	Truck trailer mfg	—	7	5	817	21 563	665	1 443	15 555	85 104	66 643	152 672	1 495
3363	Motor vehicle parts mfg ...	—	13	9	960	25 377	761	1 404	15 532	90 742	88 298	179 569	14 725
33631	Motor vehicle gasoline engine & engine parts mfg	—	3	1	c	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	3	1	c	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	9	1	1	c	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	9	1	1	c	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	c	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	2	1	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	5	4	392	10 038	289	589	5 753	27 998	29 416	58 961	D
336399	All other motor vehicle parts mfg	—	5	4	392	10 038	289	589	5 753	27 998	29 416	58 961	D
337	Furniture & related product mfg	1	54	12	1 479	34 247	1 181	2 181	23 766	83 120	57 215	140 495	4 733
3371	Household & institutional furniture & kitchen cabinet mfg	1	46	9	1 145	26 720	914	1 738	18 973	68 720	43 435	112 033	2 730
33711	Wood kitchen cabinet & counter top mfg	—	34	7	896	20 193	715	1 371	14 201	57 378	32 612	89 824	2 093
337110	Wood kitchen cabinet & counter top mfg ...	—	34	7	896	20 193	715	1 371	14 201	57 378	32 612	89 824	2 093
33712	Household & institutional furniture mfg	5	12	2	249	6 527	199	367	4 772	11 342	10 823	22 209	637
337122	Nonupholstered wood household furniture mfg	7	5	1	c	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	3	1	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	7	3	e	D	D	D	D	D	D	D	2 003
33721	Office furniture (including fixtures) mfg	1	7	3	e	D	D	D	D	D	D	D	2 003
337212	Custom architectural woodwork & millwork mfg	—	2	2	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	2	5	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SOUTH DAKOTA—Con. Manufacturing—Con.												
339	Miscellaneous mfg.....	-	103	23	3 913	100 773	2 721	5 801	68 153	495 768	242 369	738 163	23 418
3391	Medical equipment & supplies mfg.....	-	36	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	36	3	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	1	67	20	h	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg.....	2	16	8	1 000	21 821	703	1 342	13 505	55 889	37 263	94 607	D
339911	Jewelry (except costume) mfg.....	2	14	7	f	D	D	D	D	D	D	D	1 983
33992	Sporting & athletic goods mfg.....	1	10	3	c	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg.....	1	10	3	c	D	D	D	D	D	D	D	D
33995	Sign mfg.....	1	20	7	1 448	32 425	857	2 047	24 688	40 220	64 545	104 485	4 864
339950	Sign mfg.....	1	20	7	1 448	32 425	857	2 047	24 688	40 220	64 545	104 485	4 864
33999	All other miscellaneous mfg.....	-	17	2	e	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg....	-	1	1	c	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees; h–2,500 to 4,999 employees; j–5,000 to 9,999 employees; k–10,000 to 24,999 employees; l–25,000 to 49,999 employees; m–50,000 to 99,999 employees; n–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RAPID CITY, SD MSA Manufacturing	2	134	38	4 263	100 840	3 214	6 051	62 420	318 502	606 685	867 319	25 372
311	Food mfg.....	7	11	3	500	11 533	384	900	7 881	30 408	140 458	170 928	1 866
3116	Meat product mfg.....	9	2	2	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	9	2	2	e	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	9	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	6	5	473	13 843	412	870	11 205	31 416	43 531	74 848	1 946
3212	Veneer, plywood, & engineered wood product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	14	7	322	7 610	235	456	5 076	17 777	20 850	39 209	666
334	Computer & electronic product mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	RAPID CITY, SD MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	4	36	10	1 076	23 316	734	1 339	14 083	63 241	40 353	105 314	2 403
3399	Other miscellaneous mfg ..	3	21	10	f	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	2	12	7	f	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	2	11	6	f	D	D	D	D	D	D	D	D
	SIOUX FALLS, SD MSA												
31-33	Manufacturing	—	198	66	12 978	340 266	9 592	19 336	217 688	670 878	2 620 331	3 203 075	79 407
311	Food mfg.....	—	18	9	4 010	92 394	3 261	6 678	67 124	S	S	1 129 451	7 340
3116	Meat product mfg.....	—	5	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	5	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	4	1	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	4	4	342	10 829	254	489	6 412	26 426	41 488	68 222	1 457
3222	Converted paper product mfg.....	—	4	4	342	10 829	254	489	6 412	26 426	41 488	68 222	1 457
32221	Paperboard container mfg.....	—	4	4	342	10 829	254	489	6 412	26 426	41 488	68 222	1 457
323	Printing & related support activities.....	—	31	4	692	17 721	536	1 024	12 116	47 426	27 405	74 544	3 013
3231	Printing & related support activities.....	—	31	4	692	17 721	536	1 024	12 116	47 426	27 405	74 544	3 013
32311	Printing	—	31	4	692	17 721	536	1 024	12 116	47 426	27 405	74 544	3 013
323112	Commercial flexographic printing ..	—	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	9	5	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	—	6	4	e	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	—	11	4	e	D	D	D	D	D	D	D	2 024
3273	Cement & concrete product mfg.....	—	7	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	23	10	1 015	27 564	778	1 640	18 487	59 978	73 141	133 959	4 366
3323	Architectural & structural metals mfg	2	8	6	530	16 162	373	848	10 350	36 172	41 182	78 671	D
33231	Plate work & fabricated structural product mfg ..	—	7	5	e	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	20	8	823	24 266	625	1 258	15 145	66 195	71 005	137 472	3 926
3331	Agriculture, construction, & mining machinery mfg.....	—	8	4	e	D	D	D	D	D	D	D	890
33311	Agricultural implement mfg	—	5	3	292	7 405	238	491	5 239	20 186	27 822	48 160	D
333111	Farm machinery & equipment mfg.....	—	4	3	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	1	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SIoux FALLS, SD MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	9	5	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	3	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	2	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	1 506
33441	Semiconductor & other electronic component mfg	—	3	2	f	D	D	D	D	D	D	D	1 506
334418	Printed circuit assembly (electronic assembly) mfg	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	5	417	10 977	323	622	6 956	19 983	23 136	41 982	1 378
337	Furniture & related product mfg	—	16	5	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	13	4	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	—	12	4	f	D	D	D	D	D	D	D	1 660
337110	Wood kitchen cabinet & counter top mfg	—	12	4	f	D	D	D	D	D	D	D	1 660

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BEADLE COUNTY, SD												
31-33	Manufacturing	7	21	7	1 134	25 672	921	2 055	19 592	66 310	196 471	263 508	3 196
311	Food mfg	9	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROOKINGS COUNTY, SD													
31-33	Manufacturing	-	31	15	3 449	92 390	2 459	5 516	64 211	469 682	431 602	901 967	31 580
332	Fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	6	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
339950	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
BROWN COUNTY, SD													
31-33	Manufacturing	-	38	15	2 492	61 039	1 905	3 794	42 759	230 593	166 504	397 502	23 231
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	9	5	f	D	D	D	D	D	D	D	1 382
334	Computer & electronic product mfg	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723
3344	Semiconductor & other electronic component mfg	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723
33441	Semiconductor & other electronic component mfg	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723
CODINGTON COUNTY, SD													
31-33	Manufacturing	-	63	27	4 115	102 567	3 138	6 456	66 422	201 150	195 753	395 849	18 198
332	Fabricated metal product mfg	1	14	7	553	13 822	458	924	10 255	27 527	19 940	47 154	D
333	Machinery mfg	-	8	5	1 155	34 473	837	2 100	22 265	68 335	71 093	139 348	D
3339	Other general-purpose machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	-	1	1	f	D	D	D	D	D	D	D	D
DAVISON COUNTY, SD													
31-33	Manufacturing	-	36	13	1 719	47 249	1 329	2 713	31 067	196 173	169 262	365 931	D
336	Transportation equipment mfg	-	4	3	692	19 450	557	1 216	13 643	80 438	57 051	137 075	D
3362	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
GRANT COUNTY, SD													
31-33	Manufacturing	-	6	4	f	D	D	D	D	D	D	D	4 756

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAKE COUNTY, SD													
31-33	Manufacturing	-	23	12	950	19 722	767	1 148	12 932	74 412	95 414	167 171	6 420
LAWRENCE COUNTY, SD													
31-33	Manufacturing	1	30	5	502	13 104	424	787	10 135	31 871	53 445	88 199	2 719
LINCOLN COUNTY, SD													
31-33	Manufacturing	1	30	8	f	D	D	D	D	D	D	D	4 047
MINNEHAHA COUNTY, SD													
31-33	Manufacturing	-	168	58	j	D	D	D	D	D	D	D	75 360
311	Food mfg	-	16	9	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	1	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	28	4	684	17 590	530	1 018	12 033	47 158	27 229	74 101	D
3231	Printing & related support activities	-	28	4	684	17 590	530	1 018	12 033	47 158	27 229	74 101	D
32311	Printing	-	28	4	684	17 590	530	1 018	12 033	47 158	27 229	74 101	D
332	Fabricated metal product mfg	1	19	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	5	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	2	f	D	D	D	D	D	D	D	1 506
33441	Semiconductor & other electronic component mfg	-	3	2	f	D	D	D	D	D	D	D	1 506
334418	Printed circuit assembly (electronic assembly) mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	5	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	4	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	10	4	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	10	4	f	D	D	D	D	D	D	D	D
PENNINGTON COUNTY, SD													
31-33	Manufacturing	2	134	38	4 263	100 840	3 214	6 051	62 420	318 502	606 685	867 319	25 372
311	Food mfg	7	11	3	500	11 533	384	900	7 881	30 408	140 458	170 928	1 866
334	Computer & electronic product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	36	10	1 076	23 316	734	1 339	14 083	63 241	40 353	105 314	2 403
3399	Other miscellaneous mfg ..	3	21	10	f	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	2	12	7	f	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	2	11	6	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UNION COUNTY, SD													
31-33	Manufacturing	-	26	15	i	D	D	D	D	D	D	D	24 092
311	Food mfg.....	-	4	3	767	18 128	711	1 387	15 014	106 705	69 114	178 425	D
3118	Bakeries & tortilla mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	3	3	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	2	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	2	2	i	D	D	D	D	D	D	D	D
YANKTON COUNTY, SD													
31-33	Manufacturing	-	30	14	2 517	62 282	1 961	4 105	42 941	166 940	284 489	452 162	13 867
331	Primary metal mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	4	f	D	D	D	D	D	D	D	3 940
3331	Agriculture, construction, & mining machinery mfg....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D
33312	Construction machinery mfg.....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D
333120	Construction machinery mfg.....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D
334	Computer & electronic product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; g-500 to 999 employees; h-1,000 to 2,499 employees; i-2,500 to 4,999 employees; j-5,000 to 9,999 employees; k-10,000 to 24,999 employees; l-25,000 to 49,999 employees; m-50,000 to 99,999 employees; n-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABERDEEN, SD													
31-33	Manufacturing	-	29	11	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723
3344	Semiconductor & other electronic component mfg.....	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723
33441	Semiconductor & other electronic component mfg.....	-	3	2	524	8 272	432	847	6 953	43 585	9 839	53 236	1 723

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROOKINGS, SD													
31-33	Manufacturing	-	24	12	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	6	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33995	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
339950	Sign mfg	-	1	1	f	D	D	D	D	D	D	D	D
HURON, SD													
31-33	Manufacturing	7	16	7	g	D	D	D	D	D	D	D	D
311	Food mfg	9	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	1	1	f	D	D	D	D	D	D	D	D
MADISON, SD													
31-33	Manufacturing	-	22	12	f	D	D	D	D	D	D	D	D
MITCHELL, SD													
31-33	Manufacturing	-	29	11	1 633	45 489	1 264	2 598	29 900	192 540	165 562	358 510	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
RAPID CITY, SD													
31-33	Manufacturing	2	109	30	3 513	77 309	2 621	4 810	46 557	268 013	546 210	756 169	D
334	Computer & electronic product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	31	9	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	4	18	9	f	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	3	10	6	f	D	D	D	D	D	D	D	1 710
339911	Jewelry (except costume) mfg	3	9	5	694	15 991	484	905	9 704	41 946	29 566	72 898	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SIoux FALLS, SD *													
31-33	Manufacturing	-	133	52	11 605	301 908	8 550	17 361	193 928	579 979	2 502 315	2 995 248	72 877
311	Food mfg.....	-	13	8	3 933	90 501	3 211	6 627	66 528	S	S	1 107 404	D
3116	Meat product mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	3	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	2	1	h	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	24	4	644	16 695	504	973	11 462	45 525	26 280	71 516	D
3231	Printing & related support activities.....	-	24	4	644	16 695	504	973	11 462	45 525	26 280	71 516	D
32311	Printing.....	-	24	4	644	16 695	504	973	11 462	45 525	26 280	71 516	D
332	Fabricated metal product mfg.....	2	16	7	858	22 963	665	1 420	15 516	47 074	57 986	105 961	D
334	Computer & electronic product mfg.....	-	8	5	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	1 506
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	1 506
334418	Printed circuit assembly (electronic assembly) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	10	5	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg....	-	7	4	f	D	D	D	D	D	D	D	D
WATERTOWN, SD													
31-33	Manufacturing	-	59	27	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	12	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	8	5	1 155	34 473	837	2 100	22 265	68 335	71 093	139 348	D
3339	Other general-purpose machinery mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg.	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
YANKTON, SD													
31-33	Manufacturing	-	23	10	1 579	37 417	1 214	2 544	25 656	116 134	154 171	271 355	D
333	Machinery mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D
33312	Construction machinery mfg.....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D
333120	Construction machinery mfg.....	-	3	3	564	15 089	395	834	9 604	56 859	58 436	112 862	D

Table 4. Industry Statistics for Places: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
SOUTH DAKOTA		SOUTH DAKOTA—Con.	
Companies ¹	825	Quantity of electricity purchased for heat and power	1,000 kWh.. 1 212 581
All establishments	888	Quantity of electricity generated less sold for heat and power	1,000 kWh.. —
Establishments with 1 to 19 employees	596	Total value of shipments	\$1,000.. 12 305 468
Establishments with 20 to 99 employees	197	Value of resales	\$1,000.. 231 963
Establishments with 100 employees or more	95	Value added	\$1,000.. 3 880 867
All employees	46 539	Total inventories, beginning of year	\$1,000.. 937 496
Total compensation ²	1 449 567	Finished goods inventories, beginning of year	\$1,000.. 315 196
Annual payroll	1 162 575	Work-in-process inventories, beginning of year	\$1,000.. 318 210
Total fringe benefits	286 992	Materials and supplies inventories, beginning of year	\$1,000.. 304 090
Production workers, average for year	33 230	Total inventories, end of year	\$1,000.. 1 005 004
Production workers on March 12	32 462	Finished goods inventories, end of year	\$1,000.. 360 469
Production workers on May 12	33 106	Work-in-process inventories, end of year	\$1,000.. 271 355
Production workers on August 12	33 679	Materials and supplies inventories, end of year	\$1,000.. 373 180
Production workers on November 12	33 673	Gross book value of total assets at beginning of year	\$1,000.. 1 959 103
Production-worker hours	65 210	Total capital expenditures (new and used)	\$1,000.. 264 205
Production-worker wages	707 448	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 54 953
Total cost of materials	\$1,000.. 8 420 878	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 209 252
Cost of materials, parts, containers, etc., consumed	\$1,000.. 8 047 395	Total retirements ²	\$1,000.. 35 664
Cost of resales	\$1,000.. 223 182	Gross book value of total assets at end of year	\$1,000.. 2 187 644
Cost of fuels	\$1,000.. 31 730	Total depreciation during year ²	\$1,000.. 143 257
Cost of purchased electricity	\$1,000.. 54 728	Total rental payments ²	\$1,000.. 47 249
Cost of contract work	\$1,000.. 63 843	Buildings and other structures rental payments ²	\$1,000.. 22 674
		Machinery and equipment rental payments ²	\$1,000.. 24 575

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

SOUTH DAKOTA

Sioux Falls is in Lincoln and Minnehaha Counties.

Appendix E. Metropolitan Areas

SOUTH DAKOTA

Rapid City, SD MSA

Pennington County, SD

Sioux Falls, SD MSA

Lincoln County, SD

Minnehaha County, SD

Tennessee

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE													
31-33	Manufacturing	-	7 407	2 906	483 823	14 351 915	375 121	743 819	9 468 824	44 355 170	54 211 506	98 503 080	3 871 129
311	Food mfg	1	338	150	35 817	1 004 842	25 291	50 020	600 675	4 218 796	5 355 469	9 503 309	344 146
3111	Animal food mfg	4	23	14	949	25 316	621	1 009	14 676	101 775	334 587	435 638	5 985
31111	Animal food mfg	4	23	14	949	25 316	621	1 009	14 676	101 775	334 587	435 638	5 985
311111	Dog & cat food mfg	-	4	3	212	6 568	148	326	3 929	32 170	54 760	86 422	1 137
311119	Other animal food mfg	5	19	11	737	18 748	473	683	10 747	69 605	279 827	349 216	4 848
3112	Grain & oilseed milling	-	19	13	2 285	99 895	1 630	3 700	72 066	546 217	1 202 926	1 757 127	53 275
31121	Flour milling & malt mfg	-	8	4	e	D	D	D	D	D	D	D	D
311211	Flour milling	-	8	4	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	9	7	1 364	57 494	912	2 197	40 289	305 917	918 206	1 230 363	39 838
311221	Wet corn milling	-	3	2	f	D	D	D	D	D	D	D	D
311222	Soybean processing	-	1	1	e	D	D	D	D	D	D	D	D
311223	Other oilseed processing	-	1	1	c	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	-	4	3	424	17 078	263	596	10 074	69 285	387 041	460 673	D
31123	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	31	9	3 694	115 553	2 898	5 603	67 679	690 250	403 703	1 082 682	26 403
31133	Confectionery mfg from purchased chocolate	-	21	5	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	21	5	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	10	4	g	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	10	4	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	22	9	2 030	58 446	1 667	3 415	40 173	286 545	278 878	565 476	17 359
31141	Frozen food mfg	-	8	5	1 413	43 144	1 291	2 652	29 919	190 936	181 607	372 545	14 430
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	7	4	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	2	14	4	617	15 302	376	763	10 254	95 609	97 271	192 931	2 929
311421	Fruit & vegetable canning	7	10	3	e	D	D	D	D	D	D	D	D
311422	Specialty canning	-	3	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	4	24	14	2 771	84 747	1 291	2 951	33 333	273 269	527 549	799 894	14 001
31151	Dairy product (except frozen) mfg	4	21	12	h	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	5	11	8	2 408	73 921	1 028	2 412	27 128	239 602	422 547	661 529	12 271
311513	Cheese mfg	-	5	2	c	D	D	D	D	D	D	D	499
31152	Ice cream & frozen dessert mfg	-	3	2	c	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	3	2	c	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	68	32	7 828	151 868	6 654	12 520	114 674	459 101	1 008 413	1 449 006	25 810
31161	Animal slaughtering & processing	1	68	32	7 828	151 868	6 654	12 520	114 674	459 101	1 008 413	1 449 006	25 810
311611	Animal (except poultry) slaughtering	2	25	6	1 340	26 951	1 014	1 717	15 848	145 837	237 044	380 914	5 228
311612	Meat processed from carcasses	1	23	11	1 046	22 341	750	1 458	14 211	76 152	174 081	250 938	3 257
311613	Rendering & meat byproduct processing	2	6	3	179	5 408	109	238	2 605	23 736	22 758	46 068	2 090
311615	Poultry processing	1	14	12	5 263	97 168	4 781	9 107	82 010	213 376	574 530	771 086	15 235
3118	Bakeries & tortilla mfg	-	106	38	12 844	366 427	7 803	15 354	188 703	1 336 174	1 031 434	2 358 367	107 528
31181	Bread & bakery product mfg	-	94	29	10 426	286 276	5 660	10 697	126 293	741 100	602 301	1 343 592	74 093
311811	Retail bakeries	1	53	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	39	26	10 052	280 217	5 410	10 341	122 726	725 082	591 368	1 316 582	73 409
31182	Cookie, cracker, & pasta mfg	-	12	9	2 418	80 151	2 143	4 657	62 410	595 074	429 133	1 014 775	33 435
311821	Cookie & cracker mfg	-	5	5	894	27 853	785	1 604	18 776	143 927	65 830	209 179	9 174
311822	Flour mixes & dough mfg from purchased flour	-	7	4	1 524	52 298	1 358	3 053	43 634	451 147	363 303	805 596	24 261

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	41	21	3 407	102 493	2 720	5 460	69 304	525 200	567 368	1 054 245	93 764
31191	Snack food mfg	—	9	5	2 123	70 446	1 757	3 670	49 958	359 165	394 000	714 882	D
311919	Other snack food mfg	—	9	5	2 123	70 446	1 757	3 670	49 958	359 165	394 000	714 882	D
31192	Coffee & tea mfg	2	4	2	c	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	2	4	2	c	D	D	D	D	D	D	D	D
31193	Flavoring syrup & concentrate mfg	—	3	2	c	D	D	D	D	D	D	D	D
311930	Flavoring syrup & concentrate mfg	—	3	2	c	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	7	9	4	443	11 041	353	709	7 606	48 066	55 794	103 984	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	8	6	3	e	D	D	D	D	D	D	D	2 082
31199	All other food mfg	1	16	8	563	14 502	405	758	7 774	80 016	70 652	150 488	D
311991	Perishable prepared food mfg	—	5	3	254	6 220	163	285	2 286	15 248	12 527	27 585	D
311999	All other miscellaneous food mfg	1	11	5	309	8 282	242	473	5 488	64 768	58 125	122 903	D
312	Beverage & tobacco product mfg	—	57	25	3 792	133 749	2 267	4 804	72 808	1 714 020	981 875	2 686 104	51 125
3121	Beverage mfg	1	49	19	3 104	105 273	1 710	3 695	55 864	906 266	807 945	1 714 138	D
31211	Soft drink & ice mfg	2	36	14	g	D	D	D	D	D	D	D	26 592
312111	Soft drink mfg	2	16	12	2 001	61 689	959	2 156	25 764	264 414	495 653	759 062	25 602
31212	Breweries	—	3	2	f	D	D	D	D	D	D	D	D
312120	Breweries	—	3	2	f	D	D	D	D	D	D	D	D
31214	Distilleries	—	3	3	e	D	D	D	D	D	D	D	D
312140	Distilleries	—	3	3	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	8	6	688	28 476	557	1 109	16 944	807 754	173 930	971 966	D
31221	Tobacco stemming & redrying	—	2	1	c	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	2	1	c	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	6	5	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	6	5	f	D	D	D	D	D	D	D	D
313	Textile mills	—	105	63	12 181	333 417	10 247	20 672	241 463	773 273	985 173	1 757 474	75 318
3131	Fiber, yarn, & thread mills	—	17	14	2 876	73 053	2 706	5 761	65 115	153 193	281 813	434 922	11 598
31311	Fiber, yarn, & thread mills	—	17	14	2 876	73 053	2 706	5 761	65 115	153 193	281 813	434 922	11 598
313111	Yarn spinning mills	—	11	9	2 094	56 174	1 978	4 223	50 294	124 705	223 164	347 807	10 292
313112	Yarn texturing, throwing, & twisting mills	—	4	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	—	45	29	6 748	205 579	5 380	10 802	136 024	494 211	569 166	1 057 823	52 857
31321	Broadwoven fabric mills	—	15	8	2 282	58 835	2 028	4 116	47 907	130 827	127 200	251 489	9 974
313210	Broadwoven fabric mills	—	15	8	2 282	58 835	2 028	4 116	47 907	130 827	127 200	251 489	9 974
31322	Narrow fabric mills & schiffli machine embroidery	—	8	4	434	9 567	369	712	6 694	27 677	11 406	39 127	D
313221	Narrow fabric mills	—	8	4	434	9 567	369	712	6 694	27 677	11 406	39 127	D
31323	Nonwoven fabric mills	—	7	6	1 441	68 203	972	2 015	40 766	190 600	289 470	479 118	D
313230	Nonwoven fabric mills	—	7	6	1 441	68 203	972	2 015	40 766	190 600	289 470	479 118	D
31324	Knit fabric mills	—	15	11	2 591	68 974	2 011	3 959	40 657	145 107	141 090	288 089	14 874
313241	Weft knit fabric mills	—	12	10	g	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	—	3	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	4	43	20	2 557	54 785	2 161	4 109	40 324	125 869	134 194	264 729	10 863
31331	Textile & fabric finishing mills	3	34	16	1 972	36 728	1 704	3 275	27 553	89 670	75 177	165 698	7 415
313311	Broadwoven fabric finishing mills	8	24	6	609	9 064	509	884	6 828	17 991	10 885	28 561	D
313312	Textile & fabric finishing mills	2	10	10	1 363	27 664	1 195	2 391	20 725	71 679	64 292	137 137	D
31332	Fabric coating mills	5	9	4	585	18 057	457	834	12 771	36 199	59 017	99 031	3 448
313320	Fabric coating mills	5	9	4	585	18 057	457	834	12 771	36 199	59 017	99 031	3 448

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills.....	-	166	58	6 268	135 059	5 183	9 734	92 122	403 396	422 455	825 212	38 958
3141	Textile furnishings mills....	-	69	12	1 916	37 666	1 709	3 651	30 858	145 352	191 079	336 017	3 724
31411	Carpet & rug mills	-	11	4	786	16 489	707	1 701	14 102	65 189	132 207	197 461	1 342
314110	Carpet & rug mills	-	11	4	786	16 489	707	1 701	14 102	65 189	132 207	197 461	1 342
31412	Curtain & linen mills.....	-	58	8	1 130	21 177	1 002	1 950	16 756	80 163	58 872	138 556	2 382
314121	Curtain & drapery mills	1	48	3	333	5 453	295	556	4 139	8 866	10 675	20 271	188
314129	Other household textile product mills	-	10	5	797	15 724	707	1 394	12 617	71 297	48 197	118 285	2 194
3149	Other textile product mills..	-	97	46	4 352	97 393	3 474	6 083	61 264	258 044	231 376	489 195	35 234
31491	Textile bag & canvas mills	-	40	18	1 168	22 480	915	1 612	12 247	50 904	37 727	87 454	1 795
314911	Textile bag mills	-	13	8	633	10 007	516	904	6 211	21 495	16 118	36 396	672
314912	Canvas & related product mills	1	27	10	535	12 473	399	708	6 036	29 409	21 609	51 058	1 123
31499	All other textile product mills	-	57	28	3 184	74 913	2 559	4 471	49 017	207 140	193 649	401 741	33 439
314991	Rope, cordage, & twine mills	4	10	3	c	D	D	D	D	D	D	D	D
314992	Tire cord & tire fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	45	23	2 518	54 621	2 057	3 558	36 567	128 552	141 154	271 041	D
315	Apparel mfg	1	354	229	36 613	615 786	31 375	57 561	445 829	1 560 033	1 590 315	3 143 871	42 919
3151	Apparel knitting mills	1	35	22	4 338	78 189	3 826	7 842	59 815	173 682	142 302	321 255	8 799
31511	Hosiery & sock mills	-	20	14	3 327	60 931	2 873	5 941	45 566	153 220	118 761	276 281	7 818
315111	Sheer hosiery mills	-	3	2	f	D	D	D	D	D	D	D	816
315119	Other hosiery & sock mills	1	17	12	g	D	D	D	D	D	D	D	7 002
31519	Other apparel knitting mills	3	15	8	1 011	17 258	953	1 901	14 249	20 462	23 541	44 974	981
315191	Outerwear knitting mills	2	11	7	f	D	D	D	D	D	D	D	D
315192	Underwear & nightwear knitting mills	9	4	1	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	278	193	30 525	508 461	26 036	46 598	364 196	1 319 070	1 306 683	2 613 267	32 178
31521	Cut & sew apparel contractors	2	121	73	7 292	92 553	6 399	10 383	74 026	163 207	29 974	191 804	3 875
315211	Men's & boys' cut & sew apparel contractors	1	54	42	5 010	66 895	4 372	7 207	53 324	109 249	21 059	129 393	3 047
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	67	31	2 282	25 658	2 027	3 176	20 702	53 958	8 915	62 411	828
31522	Men's & boys' cut & sew apparel mfg	1	96	75	13 867	233 660	12 283	22 405	181 902	670 834	741 208	1 412 911	17 311
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	7	6	1 726	29 911	1 528	3 035	23 420	79 849	76 173	154 686	2 229
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	6	5	4	1 268	24 476	1 077	1 950	17 660	42 127	88 008	129 881	1 382
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	1	34	25	3 109	47 305	2 654	4 914	37 302	176 456	129 598	314 942	3 022
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	1	17	17	3 446	62 406	3 163	5 596	49 232	165 165	270 388	433 009	6 718
315225	Men's & boys' cut & sew work clothing mfg	-	20	18	3 605	57 448	3 222	5 694	45 035	187 887	150 485	334 464	3 435
315228	Men's & boys' cut & sew other outerwear mfg	1	13	5	713	12 114	639	1 216	9 253	19 350	26 556	45 929	525
31523	Women's & girls' cut & sew apparel mfg	-	47	31	6 737	106 419	5 773	10 812	84 350	358 334	398 225	739 416	5 480
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	3	8	5	f	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	-	9	6	404	4 398	312	449	3 182	9 288	3 105	11 959	60
315233	Women's & girls' cut & sew dress mfg	1	7	2	c	D	D	D	D	D	D	D	12
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	6	5	1 106	22 148	656	1 459	10 545	33 847	73 312	105 950	263
315239	Women's & girls' cut & sew other outerwear mfg	-	17	13	4 429	68 294	4 175	7 590	63 076	295 253	305 262	583 645	D
31529	Other cut & sew apparel mfg	-	14	14	2 629	75 829	1 581	2 998	23 918	126 695	137 276	269 136	5 512
315291	Infants' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	-	9	9	1 908	65 050	923	1 760	14 452	85 585	97 760	188 485	4 843

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3159	Apparel accessories & other apparel mfg	-	41	14	1 750	29 136	1 513	3 121	21 818	67 281	141 330	209 349	1 942
31599	Apparel accessories & other apparel mfg	-	41	14	1 750	29 136	1 513	3 121	21 818	67 281	141 330	209 349	1 942
315991	Hat, cap, & millinery mfg	3	7	4	200	3 415	170	348	2 553	5 447	3 881	9 329	D
315992	Glove & mitten mfg ...	-	3	3	293	3 875	234	424	3 100	6 390	7 591	14 324	D
315999	Other apparel accessories & other apparel mfg	-	31	7	1 257	21 846	1 109	2 349	16 165	55 444	129 858	185 696	1 743
316	Leather & allied product mfg .	-	44	22	2 899	53 520	2 469	4 361	38 114	140 928	116 190	259 249	5 340
3161	Leather & hide tanning & finishing	-	6	2	149	3 009	120	263	2 164	2 348	8 617	12 250	D
31611	Leather & hide tanning & finishing	-	6	2	149	3 009	120	263	2 164	2 348	8 617	12 250	D
316110	Leather & hide tanning & finishing	-	6	2	149	3 009	120	263	2 164	2 348	8 617	12 250	D
3162	Footwear mfg	-	15	10	1 619	26 294	1 446	2 408	20 935	67 416	63 034	131 348	D
31621	Footwear mfg	-	15	10	1 619	26 294	1 446	2 408	20 935	67 416	63 034	131 348	D
316211	Rubber & plastics footwear mfg	-	3	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	8	7	1 273	21 425	1 147	1 829	16 782	49 158	47 035	97 016	1 438
316219	Other footwear mfg ...	-	2	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	1	23	10	1 131	24 217	903	1 690	15 015	71 164	44 539	115 651	2 168
31699	Other leather & allied product mfg	1	23	10	1 131	24 217	903	1 690	15 015	71 164	44 539	115 651	2 168
316991	Luggage mfg	-	3	2	e	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg	-	2	1	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	4	17	7	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	658	179	18 563	411 372	15 825	30 021	300 604	940 942	1 475 097	2 402 457	66 891
3211	Sawmills & wood preservation	3	259	55	3 809	78 882	3 209	5 723	58 057	179 005	328 438	501 607	23 798
32111	Sawmills & wood preservation	3	259	55	3 809	78 882	3 209	5 723	58 057	179 005	328 438	501 607	23 798
321113	Sawmills	3	249	50	3 420	72 558	2 880	5 079	53 410	158 412	242 072	400 326	20 120
321114	Wood preservation ...	3	10	5	389	6 324	329	644	4 647	20 593	86 366	101 281	3 678
3212	Veneer, plywood, & engineered wood product mfg	2	34	11	777	19 499	605	1 251	11 026	43 445	51 243	94 543	3 281
32121	Veneer, plywood, & engineered wood product mfg	2	34	11	777	19 499	605	1 251	11 026	43 445	51 243	94 543	3 281
321211	Hardwood veneer & plywood mfg	1	5	4	123	2 391	102	204	1 907	4 289	6 758	11 076	D
321214	Truss mfg	2	26	7	615	15 546	472	989	8 491	35 994	41 639	77 408	2 590
3219	Other wood product mfg ...	1	365	113	13 977	312 991	12 011	23 047	231 521	718 492	1 095 416	1 806 307	39 812
32191	Millwork	-	125	46	6 714	143 635	5 877	11 516	110 677	330 642	526 994	854 107	21 060
321911	Wood window & door mfg	-	22	10	1 469	33 379	1 302	2 424	27 144	75 509	111 223	186 220	5 121
321912	Cut stock, resawing lumber, & planing....	1	70	21	2 058	40 930	1 798	3 486	31 924	75 310	106 773	182 285	4 370
321918	Other millwork (including flooring) ...	-	33	15	3 187	69 326	2 777	5 606	51 609	179 823	308 998	485 602	11 569
32192	Wood container & pallet mfg	3	128	22	1 525	25 376	1 294	2 229	17 864	52 453	66 740	118 972	3 798
321920	Wood container & pallet mfg	3	128	22	1 525	25 376	1 294	2 229	17 864	52 453	66 740	118 972	3 798
32199	All other wood product mfg	1	112	45	5 738	143 980	4 840	9 302	102 980	335 397	501 682	833 228	14 954
321991	Manufactured home (mobile home) mfg ..	-	16	16	3 547	99 478	3 049	6 005	72 488	249 352	413 878	659 361	9 696
321992	Prefabricated wood building mfg	3	26	11	916	22 296	685	1 379	13 918	46 941	50 713	97 242	2 337
321999	All other miscellaneous wood product mfg ...	2	70	18	1 275	22 206	1 106	1 918	16 574	39 104	37 091	76 625	2 921
322	Paper mfg	-	155	120	17 821	615 817	13 724	29 323	412 636	1 683 382	2 231 828	3 897 797	237 999
3221	Pulp, paper, & paperboard mills	-	16	16	4 701	238 188	3 609	7 960	172 718	743 245	863 498	1 599 556	127 868
32211	Pulp mills	-	3	3	500	28 809	282	590	12 101	66 814	79 488	151 543	D
322110	Pulp mills	-	3	3	500	28 809	282	590	12 101	66 814	79 488	151 543	D
32212	Paper mills	-	7	7	3 046	147 326	2 414	5 244	111 927	463 789	548 834	1 000 276	D
322121	Paper (except newsprint) mills	-	6	6	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	6	6	1 155	62 053	913	2 126	48 690	212 642	235 176	447 737	40 574
322130	Paperboard mills	-	6	6	1 155	62 053	913	2 126	48 690	212 642	235 176	447 737	40 574

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg	-	139	104	13 120	377 629	10 115	21 363	239 918	940 137	1 368 330	2 298 241	110 131
32221	Paperboard container mfg	-	93	71	6 987	209 767	5 473	11 872	136 399	523 831	810 324	1 333 290	58 302
322211	Corrugated & solid fiber box mfg	-	64	49	4 261	127 289	3 251	6 702	75 654	274 928	459 508	735 463	27 478
322212	Folding paperboard box mfg	-	20	15	1 952	62 637	1 522	3 709	44 327	178 697	211 423	389 474	D
322214	Fiber can, tube, drum, & similar products mfg	-	7	6	e	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	25	18	3 862	112 357	2 884	6 308	64 540	283 998	386 007	665 197	37 339
322221	Coated & laminated packaging paper & plastics film mfg	-	5	3	421	15 055	295	658	9 525	46 807	109 286	155 507	4 277
322222	Coated & laminated paper mfg	-	12	9	2 497	73 145	1 758	3 833	36 816	173 594	195 907	366 327	29 443
322224	Uncoated paper & multiwall bag mfg	-	8	6	944	24 157	831	1 817	18 199	63 597	80 814	143 363	3 619
32223	Stationery product mfg ..	-	13	10	1 967	49 126	1 574	2 816	34 577	119 459	158 561	273 227	13 291
322231	Die-cut paper & paperboard office supplies mfg	-	5	3	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	6	6	1 100	28 297	866	1 655	20 361	61 829	73 186	132 652	6 752
322233	Stationery, tablet, & related product mfg ..	-	2	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	8	5	304	6 379	184	367	4 402	12 849	13 438	26 527	1 199
322291	Sanitary paper product mfg	-	1	1	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	7	4	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	869	204	25 074	756 236	19 829	39 741	514 221	1 654 129	1 217 762	2 862 069	146 001
3231	Printing & related support activities	1	869	204	25 074	756 236	19 829	39 741	514 221	1 654 129	1 217 762	2 862 069	146 001
32311	Printing	1	770	178	22 884	678 280	18 130	36 173	462 352	1 515 054	1 171 023	2 676 589	137 578
323110	Commercial lithographic printing ..	2	378	93	10 817	335 794	8 545	16 968	218 743	713 778	524 648	1 223 596	65 262
323111	Commercial gravure printing	-	16	5	1 735	66 117	1 498	3 233	53 897	175 538	180 029	359 319	16 051
323112	Commercial flexographic printing ..	2	21	12	976	35 311	721	1 461	18 004	69 764	69 488	138 452	10 852
323113	Commercial screen printing	-	87	20	1 927	47 141	1 445	3 120	32 361	67 699	110 356	184 124	7 138
323114	Quick printing	2	142	8	909	19 613	635	919	11 048	43 211	24 611	67 915	3 328
323116	Manifold business form printing	2	30	16	1 159	33 378	831	1 651	21 299	138 217	80 788	218 567	4 613
323117	Book printing	-	20	13	4 348	112 859	3 747	7 355	90 427	252 005	140 886	388 506	27 024
323118	Blankbook, looseleaf binder, & device mfg ..	5	4	4	249	5 586	170	441	3 402	8 651	10 470	20 092	525
323119	Other commercial printing	7	65	7	712	20 477	512	974	12 139	42 785	27 998	70 859	2 620
32312	Support activities for printing	4	99	26	2 190	77 956	1 699	3 568	51 869	139 075	46 739	185 480	8 423
323121	Tradebinding & related work	6	27	7	1 055	30 484	913	1 997	24 791	49 537	28 604	77 995	3 271
323122	Prepress services	2	72	19	1 135	47 472	786	1 571	27 078	89 538	18 135	107 485	5 152
324	Petroleum & coal products mfg	-	51	15	1 291	47 943	822	1 699	28 167	195 354	1 737 868	1 938 611	40 948
3241	Petroleum & coal products mfg	-	51	15	1 291	47 943	822	1 699	28 167	195 354	1 737 868	1 938 611	40 948
32411	Petroleum refineries	-	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	2	43	12	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	3	40	10	f	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	-	3	2	c	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	7	7	2	113	3 926	70	128	1 917	7 699	14 982	22 953	340
324191	Petroleum lubricating oil & grease mfg	7	7	2	113	3 926	70	128	1 917	7 699	14 982	22 953	340

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	—	288	126	34 184	1 516 826	19 462	39 912	726 017	5 868 036	4 184 755	10 115 093	611 157
3251	Basic chemical mfg	—	62	29	18 987	986 545	9 517	19 154	426 331	3 186 547	2 233 134	5 476 430	470 789
32512	Industrial gas mfg	—	14	3	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	14	3	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	4	3	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	—	3	2	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	22	10	5 489	258 854	1 894	3 650	74 179	1 110 649	366 883	1 475 215	54 051
325188	All other basic inorganic chemical mfg	—	22	10	5 489	258 854	1 894	3 650	74 179	1 110 649	366 883	1 475 215	54 051
32519	Other basic organic chemical mfg	—	22	13	12 432	673 961	6 853	14 072	315 287	1 578 460	1 601 336	3 239 567	377 076
325191	Gum & wood chemical mfg	1	3	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	18	12	12 281	668 893	6 721	13 843	310 958	1 552 880	1 589 266	3 202 145	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	21	15	3 396	140 495	2 512	5 434	98 464	398 087	553 973	968 779	55 475
32521	Resin & synthetic rubber mfg	1	14	10	977	45 442	679	1 468	29 439	203 270	344 794	546 577	25 345
325211	Plastics material & resin mfg	1	10	8	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	—	4	2	c	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg	—	7	5	2 419	95 053	1 833	3 966	69 025	194 817	209 179	422 202	30 130
325221	Cellulosic organic fiber mfg	—	2	2	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	5	3	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	17	6	523	19 191	360	704	11 078	59 302	124 682	183 147	3 702
32531	Fertilizer mfg	—	10	2	244	10 977	180	391	6 877	40 882	88 218	128 993	2 764
325311	Nitrogenous fertilizer mfg	—	1	1	c	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	—	7	4	279	8 214	180	313	4 201	18 420	36 464	54 154	938
325320	Pesticide & other agricultural chemical mfg	—	7	4	279	8 214	180	313	4 201	18 420	36 464	54 154	938
3254	Pharmaceutical & medicine mfg	—	24	13	3 404	117 212	1 838	3 176	52 643	1 414 037	296 391	1 698 645	21 172
32541	Pharmaceutical & medicine mfg	—	24	13	3 404	117 212	1 838	3 176	52 643	1 414 037	296 391	1 698 645	21 172
325412	Pharmaceutical preparation mfg	—	12	8	3 196	111 175	1 723	2 982	49 527	1 398 079	285 937	1 671 882	19 468
325414	Biological product (except diagnostic) mfg	2	6	3	c	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	36	17	1 271	45 665	671	1 372	19 124	145 787	263 231	410 570	9 364
32551	Paint & coating mfg	2	25	12	929	31 455	504	990	11 790	87 862	185 791	276 333	6 595
325510	Paint & coating mfg	2	25	12	929	31 455	504	990	11 790	87 862	185 791	276 333	6 595
32552	Adhesive mfg	3	11	5	342	14 210	167	382	7 334	57 925	77 440	134 237	2 769
325520	Adhesive mfg	3	11	5	342	14 210	167	382	7 334	57 925	77 440	134 237	2 769
3256	Soap, cleaning compound, & toilet preparation mfg	2	41	15	3 335	93 330	2 362	5 324	52 555	249 071	261 438	512 312	23 128
32561	Soap & cleaning compound mfg	4	34	10	1 108	31 385	613	1 209	13 298	110 484	112 190	221 862	D
325611	Soap & other detergent mfg	6	15	5	619	19 622	258	514	7 136	69 446	55 926	124 721	4 061
325612	Polish & other sanitation good mfg	2	15	4	439	9 728	317	614	4 816	35 200	34 083	68 333	5 319
32562	Toilet preparation mfg	—	7	5	2 227	61 945	1 749	4 115	39 257	138 587	149 248	290 450	D
325620	Toilet preparation mfg	—	7	5	2 227	61 945	1 749	4 115	39 257	138 587	149 248	290 450	D
3259	Other chemical product mfg	1	87	31	3 268	114 388	2 202	4 748	65 822	415 205	451 906	865 210	27 527
32591	Printing ink mfg	5	28	5	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	5	28	5	e	D	D	D	D	D	D	D	D
32592	Explosives mfg	—	4	2	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	4	2	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	—	55	24	2 271	71 222	1 635	3 405	44 247	326 886	350 445	674 966	24 661
325991	Custom compounding of purchased resin	—	31	14	1 373	44 392	1 020	2 142	28 526	206 447	281 610	487 089	16 561
325992	Photographic film, paper, plate, & chemical mfg	1	4	3	c	D	D	D	D	D	D	D	782
325998	All other miscellaneous chemical product & preparation mfg	2	20	7	f	D	D	D	D	D	D	D	7 318

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	—	390	227	35 057	1 021 114	28 181	58 833	723 243	2 769 224	3 039 780	5 801 573	248 008
3261	Plastics product mfg	1	307	182	21 062	529 013	16 702	33 487	354 267	1 482 648	1 688 612	3 164 621	139 706
32611	Unsupported plastics film, sheet, & bag mfg	1	32	21	2 025	61 817	1 641	3 451	46 293	159 759	246 884	408 200	23 189
326111	Unsupported plastics bag mfg	1	12	8	762	19 013	630	1 179	14 536	59 468	64 454	122 073	14 619
326112	Unsupported plastics packaging film & sheet mfg	—	4	4	583	20 560	486	1 075	16 558	49 398	86 765	139 108	D
326113	Unsupported plastics film & sheet (except packaging) mfg	1	16	9	680	22 244	525	1 197	15 199	50 893	95 665	147 019	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	23	10	1 117	32 498	875	1 961	22 386	59 705	93 683	153 327	6 461
326121	Unsupported plastics profile shape mfg	1	15	6	549	14 347	436	959	9 474	33 870	41 507	75 081	1 915
326122	Plastics pipe & pipe fitting mfg	—	8	4	568	18 151	439	1 002	12 912	25 835	52 176	78 246	4 546
32613	Laminated plastics plate, sheet, & shape mfg	—	8	3	661	21 762	566	1 544	17 441	60 006	122 156	183 014	4 416
326130	Laminated plastics plate, sheet, & shape mfg	—	8	3	661	21 762	566	1 544	17 441	60 006	122 156	183 014	4 416
32614	Polystyrene foam product mfg	—	15	8	553	16 278	308	620	6 009	83 893	54 131	135 779	4 277
326140	Polystyrene foam product mfg	—	15	8	553	16 278	308	620	6 009	83 893	54 131	135 779	4 277
32615	Urethane & other foam product (except polystyrene) mfg	2	31	21	2 577	65 539	2 127	3 887	43 901	158 233	216 011	373 176	14 322
326150	Urethane & other foam product (except polystyrene) mfg	2	31	21	2 577	65 539	2 127	3 887	43 901	158 233	216 011	373 176	14 322
32616	Plastics bottle mfg	—	6	6	626	18 557	559	1 240	15 627	62 479	47 456	110 531	3 738
326160	Plastics bottle mfg	—	6	6	626	18 557	559	1 240	15 627	62 479	47 456	110 531	3 738
32619	Other plastics product mfg	1	192	113	13 503	312 562	10 626	20 784	202 610	898 573	908 291	1 800 594	83 303
326191	Plastics plumbing fixture mfg	1	28	9	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	163	104	11 961	276 986	9 638	18 798	184 662	788 502	843 698	1 626 158	77 440
3262	Rubber product mfg	—	83	45	13 995	492 101	11 479	25 346	368 976	1 286 576	1 351 168	2 636 952	108 302
32621	Tire mfg	—	29	8	6 209	276 513	5 150	11 330	214 984	777 992	789 132	1 561 504	62 602
326211	Tire mfg (except retreading)	—	8	6	6 043	273 032	5 017	11 036	212 444	770 533	778 911	1 543 727	62 062
326212	Tire retreading	3	21	2	166	3 481	133	294	2 540	7 459	10 221	17 777	540
32622	Rubber & plastics hoses & belting mfg	—	7	7	2 077	53 616	1 753	3 587	41 365	149 607	161 033	312 932	12 077
326220	Rubber & plastics hoses & belting mfg	—	7	7	2 077	53 616	1 753	3 587	41 365	149 607	161 033	312 932	12 077
32629	Other rubber product mfg	—	47	30	5 709	161 972	4 576	10 429	112 627	358 977	401 003	762 516	33 623
326291	Rubber product mfg for mechanical use	—	17	11	3 471	91 035	2 946	7 140	66 640	194 834	148 209	342 473	25 442
326299	All other rubber product mfg	—	30	19	2 238	70 937	1 630	3 289	45 987	164 143	252 794	420 043	8 181
327	Nonmetallic mineral product mfg	—	367	138	14 247	471 780	11 453	24 562	354 291	1 331 698	999 138	2 323 037	109 282
3271	Clay product & refractory mfg	—	46	22	3 230	90 333	2 587	5 804	67 004	277 338	117 857	394 779	29 846
32711	Pottery, ceramics, & plumbing fixture mfg	—	31	9	1 323	34 270	1 009	2 156	23 395	104 975	30 143	134 145	7 417
327112	Vitreous china, fine earthenware, & other pottery product mfg	1	27	5	438	10 542	313	556	6 396	27 391	11 419	38 620	2 066
327113	Porcelain electrical supply mfg	—	4	4	885	23 728	696	1 600	16 999	77 584	18 724	95 525	5 351
32712	Clay building material & refractories mfg	—	15	13	1 907	56 063	1 578	3 648	43 609	172 363	87 714	260 634	22 429
327121	Brick & structural clay tile mfg	—	4	4	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	5	4	1 139	34 421	947	2 250	27 520	83 587	51 103	134 186	D
327125	Nonclay refractory mfg	—	3	3	295	10 147	239	593	7 662	50 821	20 274	71 918	D
3272	Glass & glass product mfg	—	41	17	5 586	228 995	4 805	10 730	188 104	580 397	424 820	999 091	42 344
32721	Glass & glass product mfg	—	41	17	5 586	228 995	4 805	10 730	188 104	580 397	424 820	999 091	42 344
327211	Flat glass mfg	—	3	3	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	8	3	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	30	11	2 608	65 987	2 279	4 703	51 674	156 419	202 795	362 033	18 748

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TENNESSEE—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	222	80	4 393	124 272	3 284	6 491	80 985	385 322	381 319	765 744	29 345
32731	Cement mfg	—	5	2	227	10 174	171	352	7 230	46 797	28 219	75 379	4 372
327310	Cement mfg	—	5	2	227	10 174	171	352	7 230	46 797	28 219	75 379	4 372
32732	Ready-mix concrete mfg.	2	113	40	2 177	62 140	1 730	3 472	44 137	185 610	225 187	410 168	14 332
327320	Ready-mix concrete mfg	2	113	40	2 177	62 140	1 730	3 472	44 137	185 610	225 187	410 168	14 332
32733	Concrete pipe, brick, & block mfg	2	41	21	875	22 474	549	1 080	11 867	69 022	59 069	128 117	7 475
327331	Concrete block & brick mfg	1	35	18	764	19 917	481	916	10 326	59 907	49 094	109 095	6 952
327332	Concrete pipe mfg	4	6	3	111	2 557	68	164	1 541	9 115	9 975	19 022	523
32739	Other concrete product mfg	1	63	17	1 114	29 484	834	1 587	17 751	83 893	68 844	152 080	3 166
327390	Other concrete product mfg	1	63	17	1 114	29 484	834	1 587	17 751	83 893	68 844	152 080	3 166
3274	Lime & gypsum product mfg	—	6	2	209	6 013	167	344	4 385	14 914	23 435	38 308	D
32741	Lime mfg	—	3	1	166	5 013	130	260	3 536	10 790	13 323	24 112	D
327410	Lime mfg	—	3	1	166	5 013	130	260	3 536	10 790	13 323	24 112	D
3279	Other nonmetallic mineral product mfg	1	52	17	829	22 167	610	1 193	13 813	73 727	51 707	125 115	D
32791	Abrasive product mfg . .	3	3	2	136	4 709	99	218	2 768	13 641	4 266	17 762	D
327910	Abrasive product mfg . .	3	3	2	136	4 709	99	218	2 768	13 641	4 266	17 762	D
32799	All other nonmetallic mineral product mfg	1	49	15	693	17 458	511	975	11 045	60 086	47 441	107 353	D
327991	Cut stone & stone product mfg	4	21	4	194	4 145	156	295	3 122	8 356	5 750	14 013	643
327993	Mineral wool mfg	—	12	7	270	6 745	192	366	3 862	21 113	20 240	41 362	1 158
327999	All other miscellaneous nonmetallic mineral product mfg	—	9	3	138	3 748	83	145	1 686	12 562	10 131	22 507	372
331	Primary metal mfg	—	137	88	16 253	549 850	13 210	26 665	391 470	2 088 202	3 104 473	5 153 714	118 043
3311	Iron & steel mills & ferroalloy mfg	—	9	6	786	33 254	616	1 269	22 577	183 269	249 815	424 964	6 848
33111	Iron & steel mills & ferroalloy mfg	—	9	6	786	33 254	616	1 269	22 577	183 269	249 815	424 964	6 848
331111	Iron & steel mills	—	9	6	786	33 254	616	1 269	22 577	183 269	249 815	424 964	6 848
3312	Steel product mfg from purchased steel	—	23	15	2 002	60 028	1 630	3 110	43 204	212 110	372 544	582 034	21 678
33121	Iron & steel pipes & tubes mfg from purchased steel	—	9	7	1 197	34 431	958	1 619	23 480	121 173	178 735	297 111	8 547
331210	Iron & steel pipes & tubes mfg from purchased steel	—	9	7	1 197	34 431	958	1 619	23 480	121 173	178 735	297 111	8 547
33122	Rolling & drawing of purchased steel	—	14	8	805	25 597	672	1 491	19 724	90 937	193 809	284 923	13 131
331222	Steel wire drawing	—	9	7	753	23 865	639	1 421	18 854	78 226	170 712	249 062	12 657
3313	Alumina & aluminum production & processing . .	—	19	17	4 290	179 014	3 304	6 810	124 185	899 274	1 666 255	2 535 625	45 056
33131	Alumina & aluminum production & processing	—	19	17	4 290	179 014	3 304	6 810	124 185	899 274	1 666 255	2 535 625	45 056
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum .	—	9	8	638	20 755	456	969	14 706	84 095	258 522	342 079	D
331315	Aluminum sheet, plate, & foil mfg	—	4	4	1 941	97 079	1 493	3 047	66 802	578 294	1 072 138	1 620 352	18 194
331316	Aluminum extruded product mfg	—	5	4	g	D	D	D	D	D	D	D	10 650
3314	Nonferrous metal (except aluminum) production & processing	—	22	15	1 547	53 924	1 082	2 279	32 630	273 961	359 349	639 819	9 050
33141	Nonferrous metal (except aluminum) smelting & refining	—	6	4	467	16 804	292	641	8 929	149 180	52 798	203 620	2 190
331419	Other nonferrous metal primary smelting & refining	—	6	4	467	16 804	292	641	8 929	149 180	52 798	203 620	2 190
33142	Copper rolling, drawing, extruding, & alloying . . .	1	6	4	214	6 215	151	291	3 589	17 128	48 170	66 517	1 318
331421	Copper rolling, drawing, & extruding	2	3	2	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	10	7	866	30 905	639	1 347	20 112	107 653	258 381	369 682	5 542
331491	Other nonferrous metal rolling, drawing, & extruding	—	5	5	756	27 444	558	1 163	17 752	97 580	229 253	330 924	3 562
331492	Other nonferrous metal secondary smelting, refining, & alloying . . .	2	5	2	110	3 461	81	184	2 360	10 073	29 128	38 758	1 980

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	—	64	35	7 628	223 630	6 578	13 197	168 874	519 588	456 510	971 272	35 411
33151	Ferrous metal foundries	—	33	16	4 041	126 089	3 464	6 649	89 804	248 269	244 053	489 578	13 435
331511	Iron foundries	—	19	11	3 489	107 289	3 011	5 741	75 961	202 513	187 278	388 442	11 843
331512	Steel investment foundries	—	8	4	c	D	D	D	D	D	D	D	162
331513	Steel foundries (except investment)	—	6	1	e	D	D	D	D	D	D	D	1 430
33152	Nonferrous metal foundries	—	31	19	3 587	97 541	3 114	6 548	79 070	271 319	212 457	481 694	21 976
331521	Aluminum die-casting foundries	—	7	4	884	25 543	740	1 561	19 849	65 676	40 888	105 666	9 269
331522	Nonferrous (except aluminum) die-casting foundries	1	5	5	618	15 973	546	1 286	13 673	38 146	41 555	78 930	3 235
331524	Aluminum foundries (except die-casting) ..	—	14	7	1 853	48 890	1 660	3 307	40 983	151 623	120 270	271 229	8 200
331528	Other nonferrous foundries (except die-casting)	4	4	2	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	1 146	399	43 401	1 247 194	33 800	67 721	846 744	3 164 463	2 848 078	6 003 776	224 498
3321	Forging & stamping	—	66	35	3 632	105 894	2 885	6 358	76 920	254 963	236 808	487 419	17 407
33211	Ferrous metal forging	—	66	35	3 632	105 894	2 885	6 358	76 920	254 963	236 808	487 419	17 407
332111	Iron & steel forging	—	12	5	976	32 539	797	1 765	25 561	81 797	53 752	134 722	7 115
332112	Nonferrous forging	—	2	1	c	D	D	D	D	D	D	D	D
332114	Custom roll forming	—	8	4	213	6 339	140	305	3 676	19 086	22 961	40 103	1 713
332115	Crown & closure mfg	—	2	1	c	D	D	D	D	D	D	D	D
332116	Metal stamping	—	37	21	1 876	47 123	1 498	3 209	32 915	99 205	97 951	196 300	6 904
332117	Powder metallurgy part mfg	—	5	3	c	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	1	33	14	1 323	37 302	1 114	2 038	26 920	92 348	30 843	122 483	4 193
33221	Cutlery & handtool mfg ..	1	33	14	1 323	37 302	1 114	2 038	26 920	92 348	30 843	122 483	4 193
332212	Hand & edge tool mfg ..	1	24	10	1 108	30 987	937	1 669	22 615	73 536	21 798	94 371	3 671
332213	Saw blade & handsaw mfg	—	6	3	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	251	100	10 002	282 710	7 240	14 797	175 653	727 781	710 807	1 432 908	27 057
33231	Plate work & fabricated structural product mfg ..	1	127	43	3 447	106 016	2 526	5 288	64 384	243 005	287 233	527 832	7 869
332311	Prefabricated metal building & component mfg	—	10	3	688	26 085	439	1 039	13 054	44 583	63 473	107 494	1 752
332312	Fabricated structural metal mfg	1	102	36	2 545	73 463	1 926	3 983	47 250	187 739	216 481	402 582	5 492
332313	Plate work mfg	4	15	4	214	6 468	161	266	4 080	10 683	7 279	17 756	625
33232	Ornamental & architectural metal products mfg	—	124	57	6 555	176 694	4 714	9 509	111 269	484 776	423 574	905 076	19 188
332321	Metal window & door mfg	—	36	21	4 162	109 374	2 916	6 158	70 758	330 492	245 973	573 317	10 923
332322	Sheet metal work mfg ..	—	59	30	1 873	52 091	1 438	2 662	31 763	115 547	150 889	267 782	7 238
332323	Ornamental & architectural metal work mfg	1	29	6	520	15 229	360	689	8 748	38 737	26 712	63 977	1 027
3324	Boiler, tank, & shipping container mfg	—	44	29	3 489	105 102	2 822	5 677	76 475	212 623	289 046	503 668	15 986
33241	Power boiler & heat exchanger mfg	—	10	8	892	27 282	695	1 442	18 546	66 947	56 367	122 713	2 411
332410	Power boiler & heat exchanger mfg	—	10	8	892	27 282	695	1 442	18 546	66 947	56 367	122 713	2 411
33242	Metal tank (heavy gauge) mfg	—	15	12	1 026	32 120	853	1 722	24 636	88 074	102 581	190 760	2 967
332420	Metal tank (heavy gauge) mfg	—	15	12	1 026	32 120	853	1 722	24 636	88 074	102 581	190 760	2 967
33243	Metal can, box, & other metal container (light gauge) mfg	—	19	9	1 571	45 700	1 274	2 513	33 293	57 602	130 098	190 195	10 608
332431	Metal can mfg	—	8	4	284	8 986	247	556	7 295	24 439	84 046	110 796	7 829
332439	Other metal container mfg	—	11	5	1 287	36 714	1 027	1 957	25 998	33 163	46 052	79 399	2 779
3325	Hardware mfg	—	20	15	3 959	97 390	3 175	6 613	72 216	270 470	543 821	809 634	40 237
33251	Hardware mfg	—	20	15	3 959	97 390	3 175	6 613	72 216	270 470	543 821	809 634	40 237
332510	Hardware mfg	—	20	15	3 959	97 390	3 175	6 613	72 216	270 470	543 821	809 634	40 237
3326	Spring & wire product mfg ..	—	45	24	2 759	68 971	2 239	4 723	50 556	215 825	183 341	399 792	15 582
33261	Spring & wire product mfg	—	45	24	2 759	68 971	2 239	4 723	50 556	215 825	183 341	399 792	15 582
332612	Spring (light gauge) mfg	—	12	5	f	D	D	D	D	D	D	D	7 865
332618	Other fabricated wire product mfg	1	32	18	1 897	44 842	1 498	3 200	31 274	141 609	112 012	254 174	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	457	87	6 798	218 428	5 314	10 310	142 115	409 182	222 396	628 932	36 189
33271	Machine shops	1	411	63	4 851	153 756	3 793	6 611	100 503	278 372	128 764	405 722	19 099
332710	Machine shops	1	411	63	4 851	153 756	3 793	6 611	100 503	278 372	128 764	405 722	19 099
33272	Turned product & screw, nut, & bolt mfg	1	46	24	1 947	64 672	1 521	3 699	41 612	130 810	93 632	223 210	17 090
332721	Precision turned product mfg	—	30	14	1 006	27 782	803	2 054	19 338	53 065	30 126	82 428	8 568
332722	Bolt, nut, screw, rivet, & washer mfg	1	16	10	941	36 890	718	1 645	22 274	77 745	63 506	140 782	8 522
3328	Coating, engraving, heat treating, & allied activities .	2	115	45	2 666	64 623	2 161	3 969	41 411	155 904	94 407	250 958	15 523
33281	Coating, engraving, heat treating, & allied activities	2	115	45	2 666	64 623	2 161	3 969	41 411	155 904	94 407	250 958	15 523
332811	Metal heat treating	1	13	6	272	7 764	218	3 969	5 801	27 327	4 965	32 168	2 640
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	42	18	1 238	26 570	1 004	1 768	16 830	68 147	54 340	122 949	7 564
332813	Electroplating, plating, polishing, anodizing, & coloring	3	60	21	1 156	30 289	939	1 710	18 780	60 430	35 102	95 841	5 319
3329	Other fabricated metal product mfg	—	115	50	8 773	266 774	6 850	13 236	184 478	825 367	536 609	1 367 982	52 324
33291	Metal valve mfg	—	15	10	2 389	75 557	1 789	3 651	51 714	284 256	165 627	444 090	17 946
332911	Industrial valve mfg	—	8	4	1 453	48 880	1 085	2 179	33 130	160 816	112 718	269 319	7 103
332912	Fluid power valve & hose fitting mfg	—	2	1	c	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	3	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	100	40	6 384	191 217	5 061	9 585	132 764	541 111	370 982	923 892	34 378
332991	Ball & roller bearing mfg	—	8	7	1 690	59 683	1 437	2 901	46 126	201 620	121 590	338 833	10 119
332993	Ammunition (except small arms) mfg	—	3	2	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	2	1	c	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	16	9	1 323	34 105	966	1 939	21 829	108 334	115 220	221 583	11 621
332997	Industrial pattern mfg	—	6	2	506	12 010	439	772	8 682	23 969	3 834	27 663	D
332998	Enameled iron & metal sanitary ware mfg	—	4	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	52	14	1 444	43 597	1 043	2 215	29 986	100 310	98 928	198 070	9 364
333	Machinery mfg	—	547	231	40 469	1 180 628	31 913	63 825	777 766	3 503 724	4 896 285	8 426 910	198 711
3331	Agriculture, construction, & mining machinery mfg	—	48	26	7 563	213 813	6 464	12 942	163 154	700 678	1 356 714	2 046 943	39 370
33311	Agricultural implement mfg	—	26	15	5 766	143 584	5 171	10 102	118 311	430 505	990 485	1 416 391	27 363
333111	Farm machinery & equipment mfg	—	19	8	387	10 149	284	549	6 684	18 253	30 855	48 626	1 603
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	7	7	5 379	133 435	4 887	9 553	111 627	412 252	959 630	1 367 765	25 760
33312	Construction machinery mfg	—	16	9	1 718	68 088	1 235	2 751	43 546	263 475	361 957	619 777	11 797
333120	Construction machinery mfg	—	16	9	1 718	68 088	1 235	2 751	43 546	263 475	361 957	619 777	11 797
3332	Industrial machinery mfg	1	71	32	2 430	77 338	1 594	2 990	39 507	172 339	234 817	412 501	7 086
33321	Sawmill & woodworking machinery mfg	—	9	8	861	24 576	620	1 254	14 740	66 808	137 254	209 066	834
333210	Sawmill & woodworking machinery mfg	—	9	8	861	24 576	620	1 254	14 740	66 808	137 254	209 066	834
33322	Plastics & rubber industry machinery mfg	1	12	5	270	7 375	184	288	4 217	17 109	13 866	31 014	2 240
333220	Plastics & rubber industry machinery mfg	1	12	5	270	7 375	184	288	4 217	17 109	13 866	31 014	2 240
33329	Other industrial machinery mfg	3	50	19	1 299	45 387	790	1 448	20 550	88 422	83 697	172 421	4 012
333292	Textile machinery mfg	1	10	4	345	13 346	208	447	6 589	19 655	22 334	41 986	689
333298	All other industrial machinery mfg	4	28	12	793	25 817	479	792	10 828	55 101	49 952	104 923	2 851

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3333	Commercial & service industry machinery mfg ..	-	34	18	2 386	58 955	1 660	3 025	33 699	165 397	277 431	445 689	10 757
33331	Commercial & service industry machinery mfg	-	34	18	2 386	58 955	1 660	3 025	33 699	165 397	277 431	445 689	10 757
333312	Commercial laundry, drycleaning, & pressing machine mfg	-	3	2	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	1	3	2	f	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	20	11	1 044	27 759	709	1 246	14 236	109 309	85 582	194 691	3 238
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	55	36	14 970	388 910	12 552	25 401	285 951	1 307 470	1 745 500	3 090 718	62 393
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	55	36	14 970	388 910	12 552	25 401	285 951	1 307 470	1 745 500	3 090 718	62 393
333411	Air purification equipment mfg	-	14	7	992	23 653	845	1 482	14 509	74 592	23 745	106 392	D
333414	Heating equipment (except warm air furnaces) mfg	-	9	6	1 090	22 901	849	1 677	14 863	88 845	89 947	174 932	5 071
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	29	22	12 852	341 468	10 832	22 192	256 028	1 142 932	1 630 852	2 807 318	56 442
3335	Metalworking machinery mfg	1	194	59	4 510	175 207	3 249	6 402	102 183	316 973	192 361	508 138	32 118
33351	Metalworking machinery mfg	1	194	59	4 510	175 207	3 249	6 402	102 183	316 973	192 361	508 138	32 118
333511	Industrial mold mfg ...	2	27	10	435	14 748	345	630	10 337	26 261	12 302	36 809	2 392
333512	Machine tool (metal cutting types) mfg ...	-	6	4	c	D	D	D	D	D	D	D	534
333513	Machine tool (metal forming types) mfg ...	1	3	2	107	3 653	82	108	2 025	7 377	5 309	12 580	D
333514	Special die & tool, die set, jig, & fixture mfg ..	1	126	36	1 950	65 274	1 529	2 882	43 574	120 407	46 381	165 371	10 198
333515	Cutting tool & machine tool accessory mfg ..	-	23	5	1 120	42 835	834	1 726	27 394	82 292	46 560	127 665	14 618
333518	Other metalworking machinery mfg	-	7	2	f	D	D	D	D	D	D	D	4 003
3336	Engine, turbine, & power transmission equipment mfg	-	15	8	1 975	53 563	1 664	3 195	35 964	219 191	287 969	512 932	12 910
33361	Engine, turbine, & power transmission equipment mfg	-	15	8	1 975	53 563	1 664	3 195	35 964	219 191	287 969	512 932	12 910
333613	Mechanical power transmission equipment mfg	-	8	4	f	D	D	D	D	D	D	D	6 994
333618	Other engine equipment mfg	-	6	4	1 377	33 880	1 180	2 453	26 084	162 110	255 554	419 928	D
3339	Other general-purpose machinery mfg	-	130	52	6 635	212 842	4 730	9 870	117 308	621 676	801 493	1 409 989	34 077
33391	Pump & compressor mfg	-	21	8	1 382	38 099	964	1 909	19 375	142 569	266 860	406 995	8 670
333911	Pump & pumping equipment mfg	1	11	4	303	10 532	189	410	5 664	24 773	27 964	53 708	2 629
333912	Air & gas compressor mfg	-	7	2	f	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	3	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	38	20	2 140	78 329	1 590	3 552	45 998	142 240	303 113	444 702	6 409
333921	Elevator & moving stairway mfg	-	5	1	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	25	14	1 000	40 376	567	1 108	14 789	95 391	159 751	255 946	2 471
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	6	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	71	24	3 113	96 414	2 176	4 409	51 935	336 867	231 520	558 292	18 998
333991	Power-driven handtool mfg	-	4	3	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg ..	-	4	3	c	D	D	D	D	D	D	D	182
333995	Fluid power cylinder & actuator mfg	-	7	2	185	5 049	157	341	3 875	12 540	9 450	21 970	952
333996	Fluid power pump & motor mfg	-	4	2	e	D	D	D	D	D	D	D	2 009
333999	All other miscellaneous general-purpose machinery mfg	2	43	10	813	23 704	595	1 149	14 829	54 618	39 822	93 434	2 651

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	—	190	79	12 506	386 627	8 618	16 879	201 173	799 646	1 876 290	2 734 966	93 228
3341	Computer & peripheral equipment mfg.....	1	19	5	435	14 746	228	487	6 394	26 724	38 330	70 895	1 249
33411	Computer & peripheral equipment mfg.....	1	19	5	435	14 746	228	487	6 394	26 724	38 330	70 895	1 249
334119	Other computer peripheral equipment mfg.....	1	10	4	361	12 816	194	419	5 294	20 591	31 158	58 022	903
3342	Communications equipment mfg.....	5	28	12	1 431	39 656	915	1 373	15 914	76 293	77 677	155 591	8 462
33421	Telephone apparatus mfg.....	7	8	3	c	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	7	8	3	c	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	4	17	7	1 167	31 771	780	1 178	13 176	60 772	61 630	124 325	7 268
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	4	17	7	1 167	31 771	780	1 178	13 176	60 772	61 630	124 325	7 268
3343	Audio & video equipment mfg.....	—	17	9	4 019	131 078	3 128	5 770	77 250	219 499	1 336 815	1 611 908	38 580
33431	Audio & video equipment mfg.....	—	17	9	4 019	131 078	3 128	5 770	77 250	219 499	1 336 815	1 611 908	38 580
334310	Audio & video equipment mfg.....	—	17	9	4 019	131 078	3 128	5 770	77 250	219 499	1 336 815	1 611 908	38 580
3344	Semiconductor & other electronic component mfg.....	1	40	19	2 346	71 322	1 586	3 270	39 307	161 954	199 086	360 032	16 013
33441	Semiconductor & other electronic component mfg.....	1	40	19	2 346	71 322	1 586	3 270	39 307	161 954	199 086	360 032	16 013
334412	Bare printed circuit board mfg.....	—	6	2	253	6 383	213	411	4 300	11 025	19 603	29 962	788
334413	Semiconductor & related device mfg...	1	3	1	c	D	D	D	D	D	D	D	665
334416	Electronic coil, transformer, & other inductor mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg.....	—	2	1	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	11	7	1 015	34 000	539	1 111	14 671	91 984	98 397	189 523	10 417
334419	Other electronic component mfg.....	7	14	6	358	7 311	273	489	3 969	22 853	20 352	43 154	692
3345	Navigational, measuring, medical, & control instruments mfg.....	—	65	27	3 694	113 117	2 331	5 083	52 685	285 583	199 952	482 796	16 277
33451	Navigational, measuring, medical, & control instruments mfg.....	—	65	27	3 694	113 117	2 331	5 083	52 685	285 583	199 952	482 796	16 277
334510	Electromedical & electrotherapeutic apparatus mfg.....	1	7	2	113	3 648	53	114	1 404	6 153	3 744	10 257	215
334512	Automatic environmental control mfg.....	—	7	5	1 163	29 530	1 015	2 416	23 201	78 699	57 247	133 934	D
334513	Industrial process control instrument mfg.....	—	9	5	579	13 698	455	890	6 663	34 351	27 235	61 033	1 086
334514	Totalizing fluid meter & counting device mfg..	—	1	1	e	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	—	11	5	428	22 589	149	345	5 699	48 390	10 457	59 882	2 549
334517	Irradiation apparatus mfg.....	—	6	2	c	D	D	D	D	D	D	D	116
334518	Watch, clock, & part mfg.....	—	3	1	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg.....	—	13	6	782	24 618	363	702	9 102	53 572	40 714	94 264	4 308
3346	Mfg & reproducing magnetic & optical media..	1	21	7	581	16 708	430	896	9 623	29 593	24 430	53 744	12 647
33461	Mfg & reproducing magnetic & optical media.....	1	21	7	581	16 708	430	896	9 623	29 593	24 430	53 744	12 647
334612	Prerecorded CD (except software), tape, & record reproducing.....	1	19	7	f	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TENNESSEE—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	148	92	25 267	709 880	20 716	41 959	511 459	2 046 163	2 493 095	4 528 483	155 360
3351	Electric lighting equipment mfg	-	26	16	2 147	65 809	1 702	3 550	47 276	199 426	155 767	354 517	7 974
33511	Electric lamp bulb & part mfg	-	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	24	14	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	5	8	3	c	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	9	6	920	24 323	720	1 430	17 422	99 788	98 295	196 832	3 581
335129	Other lighting equipment mfg	1	7	5	342	11 968	222	365	5 128	26 644	24 212	51 223	1 394
3352	Household appliance mfg...	-	22	17	10 170	265 679	8 248	16 537	188 618	944 222	1 125 805	2 062 401	53 835
33521	Small electrical appliance mfg	-	6	4	1 294	26 990	687	1 146	12 582	169 881	143 459	299 519	D
335211	Electric housewares & household fan mfg...	-	6	4	1 294	26 990	687	1 146	12 582	169 881	143 459	299 519	D
33522	Major appliance mfg	-	16	13	8 876	238 689	7 561	15 391	176 036	774 341	982 346	1 762 882	D
335221	Household cooking appliance mfg	-	10	8	h	D	D	D	D	D	D	D	33 649
335222	Household refrigerator & home freezer mfg...	-	1	1	c	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	5	4	4 192	115 527	3 579	7 151	84 502	367 415	532 417	905 670	15 923
3353	Electrical equipment mfg ..	-	59	34	8 796	239 516	7 464	15 451	185 492	579 448	730 456	1 311 419	30 450
33531	Electrical equipment mfg	-	59	34	8 796	239 516	7 464	15 451	185 492	579 448	730 456	1 311 419	30 450
335311	Power, distribution, & specialty transformer mfg	-	9	6	773	21 369	525	1 089	11 671	61 939	65 959	128 815	2 329
335312	Motor & generator mfg	-	23	17	6 274	163 008	5 537	11 638	135 318	317 701	512 893	827 302	21 276
335313	Switchgear & switchboard apparatus mfg	-	14	7	1 465	45 675	1 243	2 450	34 989	175 569	137 678	317 247	6 358
335314	Relay & industrial control mfg	2	13	4	284	9 464	159	274	3 514	24 239	13 926	38 055	487
3359	Other electrical equipment & component mfg	-	41	25	4 154	138 876	3 302	6 421	90 073	323 067	481 067	800 146	63 101
33591	Battery mfg	-	7	3	1 066	40 637	840	1 733	27 065	67 421	141 482	204 152	D
335911	Storage battery mfg...	-	5	2	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg...	-	2	1	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	5	5	473	15 029	353	761	8 162	44 701	128 954	175 031	D
335929	Other communication & energy wire mfg ...	-	5	5	473	15 029	353	761	8 162	44 701	128 954	175 031	D
33593	Wiring device mfg	-	10	8	1 507	42 107	1 263	2 175	30 194	102 558	97 868	199 212	16 676
335931	Current-carrying wiring device mfg	-	5	4	640	14 027	550	819	10 164	30 601	23 733	54 553	D
335932	Noncurrent-carrying wiring device mfg....	-	5	4	867	28 080	713	1 356	20 030	71 957	74 135	144 659	D
33599	All other electrical equipment & component mfg	-	19	9	1 108	41 103	846	1 752	24 652	108 387	112 763	221 751	10 791
335991	Carbon & graphite product mfg	-	5	3	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	14	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	310	177	55 661	2 047 036	44 266	87 638	1 468 849	6 439 807	12 279 813	18 661 304	908 661
3361	Motor vehicle mfg	-	5	4	15 902	835 151	13 069	25 587	639 755	3 026 371	7 480 789	10 479 954	D
33611	Automobile & light duty motor vehicle mfg	-	4	3	j	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	4	3	j	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	51	18	2 149	53 536	1 656	3 151	33 164	92 762	270 068	358 819	D
33621	Motor vehicle body & trailer mfg	-	51	18	2 149	53 536	1 656	3 151	33 164	92 762	270 068	358 819	D
336211	Motor vehicle body mfg	-	14	4	619	16 278	470	925	9 713	16 828	158 231	170 510	3 540
336212	Truck trailer mfg	-	12	4	854	22 825	667	1 273	14 724	50 164	67 407	118 082	D
336213	Motor home mfg	3	4	2	189	4 568	156	333	2 707	6 057	14 925	20 950	D
336214	Travel trailer & camper mfg	1	21	8	487	9 865	363	620	6 020	19 713	29 505	49 277	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg . . .	-	178	114	29 626	898 457	23 485	47 404	627 614	2 761 687	3 860 736	6 618 719	323 336
33631	Motor vehicle gasoline engine & engine parts mfg	1	23	13	4 171	129 992	3 192	6 179	87 674	248 119	219 816	470 876	48 997
336311	Carburetor, piston, piston ring, & valve mfg	-	4	3	1 862	58 757	1 449	2 751	44 269	130 041	63 722	195 791	D
336312	Gasoline engine & engine parts mfg	1	19	10	2 309	71 235	1 743	3 428	43 405	118 078	156 094	275 085	D
33632	Motor vehicle electrical & electronic equipment mfg	2	24	13	1 131	24 935	878	1 848	17 265	63 261	67 635	130 216	6 426
336321	Vehicular lighting equipment mfg	3	3	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	1	21	11	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	11	10	4 242	156 372	3 325	7 186	107 817	371 523	607 432	982 424	63 413
336330	Motor vehicle steering & suspension component (except spring) mfg	-	11	10	4 242	156 372	3 325	7 186	107 817	371 523	607 432	982 424	63 413
33634	Motor vehicle brake system mfg	-	14	11	2 924	90 095	2 238	4 913	59 190	273 724	343 589	613 113	56 346
336340	Motor vehicle brake system mfg	-	14	11	2 924	90 095	2 238	4 913	59 190	273 724	343 589	613 113	56 346
33635	Motor vehicle transmission & power train parts mfg	-	16	8	1 371	41 699	1 027	2 094	29 662	160 546	278 412	436 395	12 652
336350	Motor vehicle transmission & power train parts mfg	-	16	8	1 371	41 699	1 027	2 094	29 662	160 546	278 412	436 395	12 652
33636	Motor vehicle seating & interior trim mfg	2	11	7	2 464	68 615	2 027	4 488	48 322	163 823	409 561	576 885	17 226
336360	Motor vehicle seating & interior trim mfg	2	11	7	2 464	68 615	2 027	4 488	48 322	163 823	409 561	576 885	17 226
33637	Motor vehicle metal stamping	-	19	13	2 061	62 737	1 715	3 248	48 292	136 277	193 484	328 970	8 138
336370	Motor vehicle metal stamping	-	19	13	2 061	62 737	1 715	3 248	48 292	136 277	193 484	328 970	8 138
33639	Other motor vehicle parts mfg	-	60	39	11 262	324 012	9 083	17 448	229 392	1 344 414	1 740 807	3 079 840	110 138
336399	All other motor vehicle parts mfg	-	60	39	11 262	324 012	9 083	17 448	229 392	1 344 414	1 740 807	3 079 840	110 138
3364	Aerospace product & parts mfg	-	19	10	3 054	136 199	2 098	4 160	84 697	290 510	159 183	424 323	16 883
33641	Aerospace product & parts mfg	-	19	10	3 054	136 199	2 098	4 160	84 697	290 510	159 183	424 323	16 883
336413	Other aircraft part & auxiliary equipment mfg	-	15	9	3 012	134 835	2 065	4 096	84 022	285 535	156 486	416 655	16 673
3365	Railroad rolling stock mfg	-	2	1	c	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	1	c	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	1	c	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	38	23	4 341	109 341	3 506	6 486	74 343	220 626	471 280	693 649	18 332
33661	Ship & boat building	-	38	23	4 341	109 341	3 506	6 486	74 343	220 626	471 280	693 649	18 332
336611	Ship building & repairing	-	6	2	e	D	D	D	D	D	D	D	D
336612	Boat building	-	32	21	h	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	3	17	7	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	3	17	7	e	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	8	2	c	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	8	9	5	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TENNESSEE—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	1	561	166	26 529	566 026	22 196	40 948	408 671	1 184 583	1 177 912	2 365 540	56 314
3371	Household & institutional furniture & kitchen cabinet mfg	1	441	114	20 716	421 516	17 688	33 038	319 514	841 188	809 485	1 643 356	35 525
33711	Wood kitchen cabinet & counter top mfg	3	230	30	2 151	40 413	1 792	2 996	29 710	78 557	77 281	155 428	3 745
337110	Wood kitchen cabinet & counter top mfg ...	3	230	30	2 151	40 413	1 792	2 996	29 710	78 557	77 281	155 428	3 745
33712	Household & institutional furniture mfg	—	211	84	18 565	381 103	15 896	30 042	289 804	762 631	732 204	1 487 928	31 780
337121	Upholstered household furniture mfg	—	61	27	8 993	193 330	8 025	15 092	150 123	403 980	373 715	770 023	13 422
337122	Nonupholstered wood household furniture mfg	1	98	33	5 159	100 078	4 484	8 471	79 164	182 879	190 842	374 534	7 236
337124	Metal household furniture mfg	—	9	6	1 693	36 833	1 354	2 575	26 558	62 250	36 168	97 928	5 278
337127	Institutional furniture mfg	—	36	16	2 273	44 539	1 720	3 363	29 415	100 693	116 671	218 159	5 092
337129	Wood television, radio, & sewing machine cabinet mfg	—	4	1	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	96	38	4 765	118 900	3 682	6 374	72 524	271 282	284 861	564 222	18 273
33721	Office furniture (including fixtures) mfg	1	96	38	4 765	118 900	3 682	6 374	72 524	271 282	284 861	564 222	18 273
337211	Wood office furniture mfg	2	15	4	271	5 924	230	360	3 485	10 720	8 818	19 091	358
337212	Custom architectural woodwork & millwork mfg	—	24	13	629	16 357	451	870	10 206	30 703	30 304	61 239	925
337214	Office furniture (except wood) mfg	1	14	9	1 892	44 447	1 331	2 254	24 356	95 494	141 025	242 100	6 739
337215	Showcase, partition, shelving, & locker mfg	—	43	12	1 973	52 172	1 670	2 890	34 477	134 365	104 714	241 792	10 251
3379	Other furniture related product mfg	1	24	14	1 048	25 610	826	1 536	16 633	72 113	83 566	157 962	2 516
33791	Mattress mfg	1	19	10	722	18 449	556	989	11 314	53 111	62 095	114 853	2 227
337910	Mattress mfg	1	19	10	722	18 449	556	989	11 314	53 111	62 095	114 853	2 227
33792	Blind & shade mfg	—	5	4	326	7 161	270	547	5 319	19 002	21 471	43 109	289
337920	Blind & shade mfg	—	5	4	326	7 161	270	547	5 319	19 002	21 471	43 109	289
339	Miscellaneous mfg	—	526	118	19 930	547 213	14 274	26 941	312 502	1 875 371	1 197 855	3 112 531	98 222
3391	Medical equipment & supplies mfg	—	219	35	5 899	199 107	3 800	6 125	89 002	769 598	391 268	1 216 198	46 900
33911	Medical equipment & supplies mfg	—	219	35	5 899	199 107	3 800	6 125	89 002	769 598	391 268	1 216 198	46 900
339112	Surgical & medical instrument mfg	—	23	8	784	34 809	515	870	16 199	162 084	96 668	259 992	9 594
339113	Surgical appliance & supplies mfg	—	31	16	3 965	139 556	2 413	3 803	56 832	552 103	269 848	875 810	34 403
339114	Dental equipment & supplies mfg	3	13	1	e	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	8	9	3	229	4 625	140	199	2 478	10 959	6 882	17 675	1 509
339116	Dental laboratories ...	7	140	6	617	13 138	464	725	8 486	31 098	12 464	43 919	1 078
3399	Other miscellaneous mfg ..	1	307	83	14 031	348 106	10 474	20 816	223 500	1 105 773	806 587	1 896 333	51 322
33991	Jewelry & silverware mfg	5	12	1	107	2 429	64	118	1 224	10 017	6 352	15 674	434
33992	Sporting & athletic goods mfg	3	40	11	1 688	40 248	1 214	2 416	25 141	122 922	118 820	236 647	7 544
339920	Sporting & athletic goods mfg	3	40	11	1 688	40 248	1 214	2 416	25 141	122 922	118 820	236 647	7 544
33993	Doll, toy, & game mfg ...	1	11	2	241	3 495	221	379	2 804	7 713	5 784	13 355	844
339932	Game, toy, & children's vehicle mfg	1	7	2	c	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	32	15	3 756	92 437	2 722	5 189	60 017	431 841	296 318	709 219	9 711
339941	Pen & mechanical pencil mfg	—	4	3	1 330	31 529	835	1 771	17 818	207 584	121 153	312 027	4 470
339942	Lead pencil & art good mfg	—	7	6	1 175	28 880	1 014	1 734	20 140	118 065	48 634	163 629	2 979
339943	Marking device mfg ...	1	14	3	556	12 619	343	720	8 377	33 109	15 511	48 449	567
339944	Carbon paper & inked ribbon mfg	—	7	3	695	19 409	530	964	13 682	73 083	111 020	185 114	1 695
33995	Sign mfg	2	120	20	2 064	55 586	1 288	2 663	26 669	98 236	76 338	185 525	8 405
339950	Sign mfg	2	120	20	2 064	55 586	1 288	2 663	26 669	98 236	76 338	185 525	8 405

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TENNESSEE—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33999	All other miscellaneous mfg	—	92	34	6 175	153 911	4 965	10 051	107 645	435 044	302 975	735 913	24 384
339991	Gasket, packing, & sealing device mfg	—	13	12	1 551	42 885	1 176	2 495	26 645	96 704	91 667	188 820	6 659
339992	Musical instrument mfg	—	19	3	713	19 581	609	1 415	14 574	46 322	24 114	68 186	523
339993	Fastener, button, needle, & pin mfg	—	3	3	e	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	10	6	1 278	27 809	1 089	2 011	20 973	87 290	64 705	151 981	5 753
339995	Burial casket mfg	—	4	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	2	43	8	1 694	36 259	1 310	2 404	23 278	68 915	64 768	133 440	5 956

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN—GA MSA												
	Manufacturing	1	707	277	44 038	1 265 866	33 390	65 958	801 035	3 395 618	4 098 991	7 470 751	332 375
	Chattanooga, TN—GA MSA (GA Part)	2	163	56	9 753	235 937	8 452	16 614	179 525	805 357	980 295	1 764 750	98 458
	Chattanooga, TN—GA MSA (TN Part)	—	544	221	34 285	1 029 929	24 938	49 344	621 510	2 590 261	3 118 696	5 706 001	233 917
311	Food mfg	—	33	19	9 794	265 002	6 228	11 208	124 671	617 181	985 395	1 600 457	68 755
3112	Grain & oilseed milling	—	5	5	578	17 915	370	643	8 069	28 596	324 328	360 719	D
3113	Sugar & confectionery product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	—	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	—	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	6	3	1 542	25 881	1 397	2 271	20 744	50 739	112 625	158 163	2 045
31161	Animal slaughtering & processing	—	6	3	1 542	25 881	1 397	2 271	20 744	50 739	112 625	158 163	2 045
311615	Poultry processing	—	3	3	1 509	25 408	1 369	2 239	20 402	49 447	109 267	153 508	1 943
3118	Bakeries & tortilla mfg	—	16	6	6 346	175 221	3 744	6 906	79 319	464 748	435 342	899 868	D
31181	Bread & bakery product mfg	—	13	3	i	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	4	3	i	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	3	3	e	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	3	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	3	3	467	12 159	357	755	7 564	28 764	44 230	72 853	D
31191	Snack food mfg	—	1	1	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
313	Textile mills	4	35	23	6 554	155 658	5 940	12 633	124 905	378 529	506 176	879 008	61 333
3131	Fiber, yarn, & thread mills .	—	12	10	2 691	60 719	2 528	5 410	55 007	94 225	250 257	347 410	D
31311	Fiber, yarn, & thread mills	—	12	10	2 691	60 719	2 528	5 410	55 007	94 225	250 257	347 410	D
313111	Yarn spinning mills	—	7	6	g	D	D	D	D	D	D	D	4 073
313112	Yarn texturing, throwing, & twisting mills	—	4	3	g	D	D	D	D	D	D	D	D
3132	Fabric mills	8	10	5	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	9	6	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	6	3	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	—	2	1	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	—	1	1	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	2	13	8	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	2	12	8	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	—	4	3	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	2	8	5	1 077	21 918	969	2 036	17 744	43 670	69 610	114 947	4 508
314	Textile product mills	—	25	9	1 213	27 936	907	1 994	18 824	97 942	146 038	244 251	D
3141	Textile furnishings mills ...	—	9	4	f	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	—	6	3	898	21 538	661	1 513	14 821	85 993	134 475	220 477	4 486
314110	Carpet & rug mills	—	6	3	898	21 538	661	1 513	14 821	85 993	134 475	220 477	4 486
3149	Other textile product mills ..	3	16	5	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	26	13	999	15 279	900	1 523	11 839	25 278	25 076	51 821	2 525
3151	Apparel knitting mills	6	12	6	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	5	9	5	486	8 243	450	796	6 622	12 661	13 313	27 250	D
315119	Other hosiery & sock mills	5	8	5	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	11	6	317	4 178	277	400	2 805	7 230	5 464	12 438	D
316	Leather & allied product mfg .	2	11	6	f	D	D	D	D	D	D	D	562
3169	Other leather & allied product mfg	3	8	4	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	3	8	4	e	D	D	D	D	D	D	D	D
316999	All other leather good mfg	3	8	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	18	7	e	D	D	D	D	D	D	D	1 904
3219	Other wood product mfg ...	2	15	5	286	5 243	253	432	3 752	12 032	12 784	24 734	D
322	Paper mfg	—	21	14	1 645	55 634	1 230	2 680	37 853	157 988	176 987	331 436	24 485
3221	Pulp, paper, & paperboard mills	—	4	4	480	22 193	355	829	16 615	70 516	60 388	128 216	9 138
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	17	10	1 165	33 441	875	1 851	21 238	87 472	116 599	203 220	15 347
32221	Paperboard container mfg	—	14	9	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	9	5	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	3	3	418	12 775	306	745	8 018	29 304	30 851	60 739	D
323	Printing & related support activities	4	85	20	2 175	75 778	1 604	3 565	48 468	144 092	133 270	281 872	15 653
3231	Printing & related support activities	4	85	20	2 175	75 778	1 604	3 565	48 468	144 092	133 270	281 872	15 653
32311	Printing	5	75	19	2 122	74 027	1 559	3 474	47 149	139 696	131 330	275 550	D
323110	Commercial lithographic printing ..	6	33	10	1 440	57 067	1 072	2 532	36 595	115 933	96 672	211 307	12 791
323113	Commercial screen printing	—	20	8	550	13 970	390	778	8 789	16 993	29 623	52 444	1 980
325	Chemical mfg	—	40	20	3 099	133 014	2 084	4 650	88 153	415 929	474 683	901 183	D
3251	Basic chemical mfg	—	11	5	515	22 901	287	572	11 928	55 977	121 155	180 122	24 223
32519	Other basic organic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	6	1 801	80 554	1 386	3 305	61 460	209 622	249 764	468 552	D
32521	Resin & synthetic rubber mfg	—	4	4	e	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	2	g	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	—	4	2	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	4	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	39	18	1 231	31 686	1 036	2 124	22 137	112 958	128 104	239 384	20 981
3261	Plastics product mfg	—	31	16	1 141	29 600	966	1 978	20 648	103 927	115 552	218 219	19 688
32615	Urethane & other foam product (except polystyrene) mfg	—	4	4	294	8 221	235	503	5 160	21 540	32 404	54 062	4 354
326150	Urethane & other foam product (except polystyrene) mfg	—	4	4	294	8 221	235	503	5 160	21 540	32 404	54 062	4 354
32619	Other plastics product mfg	—	18	8	625	13 742	541	1 081	10 234	61 221	57 262	116 982	12 847
326199	All other plastics product mfg	—	13	8	f	D	D	D	D	D	D	D	12 796
327	Nonmetallic mineral product mfg	—	30	10	g	D	D	D	D	D	D	D	5 819
3271	Clay product & refractory mfg	—	3	3	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	16	5	310	10 134	250	533	7 279	45 183	29 038	74 725	1 349
331	Primary metal mfg	—	15	10	3 136	99 595	2 686	5 160	68 899	195 577	197 936	391 408	12 642
3315	Foundries	—	10	7	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	7	6	h	D	D	D	D	D	D	D	10 489
331511	Iron foundries	—	6	5	h	D	D	D	D	D	D	D	10 489
332	Fabricated metal product mfg	—	138	43	3 538	103 974	2 680	5 056	65 844	251 526	152 840	404 639	12 394
3321	Forging & stamping	—	5	4	331	8 374	195	426	4 300	12 746	17 268	29 755	D
33211	Forging & stamping	—	5	4	331	8 374	195	426	4 300	12 746	17 268	29 755	D
332114	Custom roll forming ...	—	2	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	28	9	488	15 104	362	716	8 915	38 601	17 457	56 218	D
33231	Plate work & fabricated structural product mfg ..	—	14	4	250	7 313	172	306	3 994	26 703	10 040	36 638	452
3324	Boiler, tank, & shipping container mfg	1	8	6	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	6	5	312	9 707	229	426	6 514	21 276	24 751	46 080	1 471
332420	Metal tank (heavy gauge) mfg	—	6	5	312	9 707	229	426	6 514	21 276	24 751	46 080	1 471
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	59	10	765	20 540	626	870	14 156	47 706	18 392	65 018	2 275
33271	Machine shops	2	55	9	704	18 460	579	751	12 695	43 892	15 621	58 437	1 778
332710	Machine shops	2	55	9	704	18 460	579	751	12 695	43 892	15 621	58 437	1 778
3329	Other fabricated metal product mfg	—	19	5	1 013	31 666	775	1 531	21 818	89 368	51 081	141 803	2 871
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	18	4	e	D	D	D	D	D	D	D	D
333	Machinery	—	53	24	2 766	103 381	1 951	4 095	60 352	323 465	415 829	736 061	14 893
3331	Agriculture, construction, & mining machinery mfg	—	7	5	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
333120	Construction machinery mfg	—	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
3332	Industrial machinery mfg ..	—	14	9	f	D	D	D	D	D	D	D	988
33329	Other industrial machinery mfg	1	11	6	e	D	D	D	D	D	D	D	D
333292	Textile machinery mfg ..	—	8	6	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	4	269	9 210	167	359	2 998	21 442	23 167	44 569	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	6	4	269	9 210	167	359	2 998	21 442	23 167	44 569	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHATTANOOGA, TN-GA MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	4	16	4	402	10 858	310	613	7 301	25 128	12 653	37 734	1 035
33399	All other general-purpose machinery mfg	5	12	3	e	D	D	D	D	D	D	D	928
333999	All other miscellaneous general-purpose machinery mfg	5	8	3	325	8 685	263	519	6 143	19 488	9 955	29 338	D
334	Computer & electronic product mfg	3	19	7	649	19 457	360	757	8 179	50 008	40 217	90 048	3 362
3344	Semiconductor & other electronic component mfg	6	4	3	325	10 387	238	547	5 689	27 477	15 981	44 190	D
33441	Semiconductor & other electronic component mfg	6	4	3	325	10 387	238	547	5 689	27 477	15 981	44 190	D
335	Electrical equipment, appliance, & component mfg	—	9	8	2 186	56 173	1 814	3 422	40 431	302 828	257 796	547 872	D
3352	Household appliance mfg...	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	4	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	16	8	1 146	27 464	935	1 749	20 505	45 698	256 620	296 029	4 450
3362	Motor vehicle body & trailer mfg	—	5	4	880	22 171	715	1 435	16 909	32 139	236 020	261 799	D
33621	Motor vehicle body & trailer mfg	—	5	4	880	22 171	715	1 435	16 909	32 139	236 020	261 799	D
336211	Motor vehicle body mfg	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	42	7	843	19 733	656	1 243	13 804	38 559	35 110	73 056	2 368
3371	Household & institutional furniture & kitchen cabinet mfg	3	31	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	8	4	447	12 025	310	630	7 646	22 004	22 449	44 127	1 605
33721	Office furniture (including fixtures) mfg	—	8	4	447	12 025	310	630	7 646	22 004	22 449	44 127	1 605
337215	Showcase, partition, shelving, & locker mfg	1	5	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	45	9	973	26 878	673	1 053	11 861	70 776	46 410	115 196	3 378
3391	Medical equipment & supplies mfg	—	24	3	500	15 073	368	404	4 789	35 140	23 089	58 210	1 358
33911	Medical equipment & supplies mfg	—	24	3	500	15 073	368	404	4 789	35 140	23 089	58 210	1 358
339113	Surgical appliance & supplies mfg	—	3	2	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	21	6	473	11 805	305	649	7 072	35 636	23 321	56 986	2 020
33995	Sign mfg	—	8	3	329	8 331	212	442	4 804	18 940	13 362	32 015	D
339950	Sign mfg	—	8	3	329	8 331	212	442	4 804	18 940	13 362	32 015	D
	CLARKSVILLE-HOPKINSVILLE, TN-KY MSA												
31-33	Manufacturing	—	139	56	10 988	298 185	9 106	18 413	213 779	1 047 894	1 006 268	2 052 436	86 165
	Clarksville-Hopkinsville, TN-KY MSA (KY Part)	1	56	24	4 469	115 442	3 632	7 513	79 897	332 176	452 316	780 814	23 190
	Clarksville-Hopkinsville, TN-KY MSA (TN Part)	—	83	32	6 519	182 743	5 474	10 900	133 882	715 718	553 952	1 271 622	62 975
315	Apparel mfg	—	6	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	6	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	2	2	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	9	3	323	8 692	267	535	5 244	4 760	24 667	29 532	D
3211	Sawmills & wood preservation	1	5	2	279	8 135	231	491	4 840	3 700	23 533	27 326	D
32111	Sawmills & wood preservation	1	5	2	279	8 135	231	491	4 840	3 700	23 533	27 326	D
321113	Sawmills	—	4	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	CLARKSVILLE–HOPKINSVILLE, TN–KY MSA—Con.													
	Manufacturing—Con.													
322	Paper mfg	-	3	3	e	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	3	3	e	D	D	D	D	D	D	D	D	
32221	Paperboard container mfg	-	3	3	e	D	D	D	D	D	D	D	D	
322215	Nonfolding sanitary food container mfg ...	-	1	1	e	D	D	D	D	D	D	D	D	
323	Printing & related support activities	-	19	3		1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
3231	Printing & related support activities	-	19	3		1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
32311	Printing	-	19	3		1 692	42 942	1 508	2 976	34 094	100 792	48 155	147 515	6 297
323110	Commercial lithographic printing ..	-	4	1	f	D	D	D	D	D	D	D	D	D
323117	Book printing	-	2	1	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	2	e	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	11	5		620	17 179	533	1 211	13 608	38 191	33 992	70 860	1 205
3271	Clay product & refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5		753	25 857	566	1 237	17 999	192 383	157 278	346 846	D
3314	Nonferrous metal (except aluminum) production & processing	-	4	3	f	D	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	2	2	e	D	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	e	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	7		503	13 232	396	786	8 687	35 091	28 382	63 123	943
3326	Spring & wire product mfg .	-	3	2	e	D	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	2	e	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	4	h	D	D	D	D	D	D	D	D	8 334
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	g	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	4	2	e	D	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	e	D	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	-	1	1	e	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	5	3	2	f	D	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	9	1	1	e	D	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	9	1	1	e	D	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	9	1	1	e	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	6		1 218	32 937	917	2 127	20 821	102 022	105 769	208 373	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	6	4	f	D	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON, TN MSA													
31-33	Manufacturing	-	162	75	13 282	401 121	10 675	22 028	273 053	1 541 586	2 075 988	3 549 446	188 754
311	Food mfg	-	11	7	2 014	76 773	1 804	3 939	59 609	429 641	545 720	936 187	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	4	2	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	1	1	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	e	D	D	D	D	D	D	D	445
3152	Cut & sew apparel mfg	2	3	3	253	3 045	241	415	2 665	2 829	854	3 881	D
321	Wood product mfg	1	18	4	681	14 353	619	1 154	12 042	14 542	38 264	53 612	3 116
3219	Other wood product mfg	-	11	2	581	12 360	534	1 009	10 785	9 679	33 787	44 221	D
32191	Millwork	-	2	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	7	6	824	25 636	706	1 491	19 219	87 526	130 481	216 869	17 004
3222	Converted paper product mfg	-	7	6	824	25 636	706	1 491	19 219	87 526	130 481	216 869	17 004
32221	Paperboard container mfg	-	5	4	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	2	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	7	4	251	8 795	177	369	5 403	30 232	65 763	94 223	4 970
326	Plastics & rubber products mfg	-	10	6	510	13 124	441	929	10 116	41 640	42 897	83 855	7 058
3261	Plastics product mfg	-	9	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	8	6	710	23 029	570	1 371	17 840	51 102	45 735	98 230	6 171
3271	Clay product & refractory mfg	-	1	1	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	1	1	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	943	36 975	729	1 550	25 552	141 422	287 856	424 701	3 492
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing . .	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	35	12	1 474	44 224	1 188	2 500	31 032	126 075	111 888	235 653	15 084
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	13	5	e	D	D	D	D	D	D	D	D
33271	Machine shops	-	12	4	371	13 598	289	584	9 635	23 338	11 769	35 000	1 520
332710	Machine shops	-	12	4	371	13 598	289	584	9 635	23 338	11 769	35 000	1 520
3329	Other fabricated metal product mfg	-	4	3	633	19 111	536	1 208	14 214	76 557	59 233	135 039	D
33291	Metal valve mfg	-	2	2	e	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	-	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JACKSON, TN MSA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	9	6	2 945	80 829	2 212	4 044	43 109	331 379	457 081	770 578	20 579
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	-	4	3	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg.	-	2	2	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg.	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.	-	2	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg.	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg.	-	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.	-	6	4	1 058	31 986	734	1 744	18 538	106 460	137 232	239 088	9 838
3363	Motor vehicle parts mfg.	-	5	3	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg.	-	1	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg.	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg.	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.	9	6	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.	9	3	3	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.	9	3	3	e	D	D	D	D	D	D	D	D
JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA													
31-33	Manufacturing	-	571	225	48 454	1 628 128	36 024	72 241	998 349	4 405 437	4 191 955	8 652 607	462 319
	Johnson City—Kingsport—Bristol, TN—VA MSA (TN Part)	-	453	178	38 984	1 380 616	28 551	57 017	825 960	3 736 418	3 262 698	7 062 866	419 848
	Johnson City—Kingsport—Bristol, TN—VA MSA (VA Part)	-	118	47	9 470	247 512	7 473	15 224	172 389	669 019	929 257	1 589 741	42 471
311	Food mfg.	-	22	10	1 352	31 940	585	1 063	12 013	95 197	121 341	216 887	D
3118	Bakeries & tortilla mfg.	-	6	4	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg.	-	6	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	6	4	e	D	D	D	D	D	D	D	D
3119	Other food mfg.	-	3	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg. .	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	2	12	9	2 158	52 277	1 850	3 568	40 258	103 849	164 777	272 880	9 477
3132	Fabric mills	-	4	4	1 211	29 356	1 088	2 212	23 769	60 921	102 725	164 377	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	6	7	4	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	4	4	2	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills	6	3	2	e	D	D	D	D	D	D	D	D
313320	Fabric coating mills ...	6	3	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	13	5	264	5 234	207	335	2 550	17 542	5 981	23 291	255
3149	Other textile product mills..	-	8	5	e	D	D	D	D	D	D	D	247

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con. Manufacturing—Con.												
315	Apparel mfg	3	17	14	1 892	30 892	1 725	3 329	27 617	96 404	46 669	144 309	2 405
3152	Cut & sew apparel mfg	3	13	11	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	7	6	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	6	5	526	8 948	490	1 183	8 400	11 180	2 045	13 221	D
31522	Men's & boys' cut & sew apparel mfg	—	3	3	f	D	D	D	D	D	D	D	1 618
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	1	1	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	2	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	8	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	50	15	1 306	26 883	1 149	2 258	19 562	57 000	120 953	171 681	7 605
3211	Sawmills & wood preservation	2	19	6	e	D	D	D	D	D	D	D	3 623
32111	Sawmills & wood preservation	2	19	6	e	D	D	D	D	D	D	D	3 623
3219	Other wood product mfg ...	—	26	8	806	17 525	704	1 361	12 536	32 411	74 274	105 605	D
32191	Millwork	—	8	4	617	14 185	545	1 100	10 154	25 282	65 031	89 265	D
321918	Other millwork (including flooring) ...	—	3	3	433	10 846	385	812	7 701	19 820	62 426	80 733	D
322	Paper mfg	—	12	11	1 156	42 216	901	1 909	31 227	93 210	224 462	317 260	50 203
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	11	10	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	7	6	385	10 104	281	591	6 129	20 603	35 851	56 082	D
322211	Corrugated & solid fiber box mfg	—	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	71	20	4 225	116 828	3 665	7 553	93 026	257 733	196 929	451 666	31 490
3231	Printing & related support activities	—	71	20	4 225	116 828	3 665	7 553	93 026	257 733	196 929	451 666	31 490
32311	Printing	—	66	20	4 197	116 436	3 641	7 530	92 730	256 661	196 779	450 453	31 445
323110	Commercial lithographic printing ..	2	34	6	419	9 457	314	537	5 803	17 975	14 137	32 258	1 096
323111	Commercial gravure printing	—	3	2	e	D	D	D	D	D	D	D	D
323117	Book printing	—	6	6	2 847	76 919	2 537	5 113	65 000	156 338	114 999	268 105	D
325	Chemical mfg	—	23	9	12 634	672 537	7 070	14 546	312 060	2 022 755	1 386 002	3 458 936	D
3251	Basic chemical mfg	—	4	1	j	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	1	1	j	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	1	1	j	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	3	2	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	—	1	1	e	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	—	2	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	5	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	4	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	—	7	1	544	27 985	320	814	14 372	46 448	14 588	61 048	60
32592	Explosives mfg	—	2	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	—	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	—	26	16	2 023	53 992	1 605	3 188	37 762	157 179	177 442	335 366	7 178
3261	Plastics product mfg	1	17	10	971	23 731	806	1 442	16 047	61 584	69 089	131 273	D
32619	Other plastics product mfg	1	13	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	13	8	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	9	6	1 052	30 261	799	1 746	21 715	95 595	108 353	204 093	D
32629	Other rubber product mfg	—	7	6	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	—	5	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	40	16	2 278	70 644	1 871	3 957	53 049	242 474	138 117	376 116	14 644
3271	Clay product & refractory mfg	—	6	3	379	10 489	303	641	7 524	36 711	14 935	51 427	D
32712	Clay building material & refractories mfg	—	4	3	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	6	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	6	3	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	2	2	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	23	7	372	9 945	279	512	5 568	27 428	22 663	50 203	2 185
331	Primary metal mfg	—	20	12	g	D	D	D	D	D	D	D	11 586
3312	Steel product mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
33121	Iron & steel pipes & tubes mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
331210	Iron & steel pipes & tubes mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
3313	Alumina & aluminum production & processing	—	3	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	3	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	11	5	f	D	D	D	D	D	D	D	1 246
33152	Nonferrous metal foundries	—	4	2	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	99	33	3 818	113 584	3 060	5 854	82 269	292 257	275 723	573 839	16 192
3321	Forging & stamping	1	9	6	707	18 142	525	1 143	12 733	36 287	40 830	77 481	2 229
33211	Forging & stamping	1	9	6	707	18 142	525	1 143	12 733	36 287	40 830	77 481	2 229
332111	Iron & steel forging	2	3	2	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	4	3	331	8 082	258	592	5 556	14 287	22 515	36 893	D
3322	Cutlery & handtool mfg	—	5	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	5	3	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	5	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	15	7	661	16 527	510	1 017	11 437	36 478	48 731	84 635	2 164
33231	Plate work & fabricated structural product mfg	—	10	4	317	8 342	237	433	5 574	21 960	25 470	47 408	1 208
332312	Fabricated structural metal mfg	—	9	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	5	3	344	8 185	273	584	5 863	14 518	23 261	37 227	956
332321	Metal window & door mfg	—	3	2	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	3	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	51	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	48	6	461	12 229	358	605	8 216	21 100	13 409	34 765	1 513
332710	Machine shops	1	48	6	461	12 229	358	605	8 216	21 100	13 409	34 765	1 513

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31-33	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	6	3	848	32 618	702	1 455	24 288	112 411	59 507	183 441	4 963
33299	All other fabricated metal product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	3	3	827	32 111	686	1 430	23 945	111 298	58 640	181 456	4 892
333	Machinery mfg.....	-	44	15	5 102	135 579	4 409	9 016	102 546	351 579	493 406	844 463	19 626
3331	Agriculture, construction, & mining machinery mfg....	3	7	5	537	17 948	411	796	10 111	32 277	58 976	95 443	D
33313	Mining & oil & gas field machinery mfg.....	4	5	3	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg.....	4	5	3	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	-	5	4	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refrig equip mfg.....	-	3	3	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	13	1	542	17 845	469	902	14 376	31 999	15 629	47 437	2 859
33351	Metalworking machinery mfg.....	-	13	1	542	17 845	469	902	14 376	31 999	15 629	47 437	2 859
333515	Cutting tool & machine tool accessory mfg..	-	3	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	11	3	755	21 217	561	1 194	12 488	91 740	42 404	132 384	D
33391	Pump & compressor mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.....	-	6	1	e	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg.	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	11	4	613	17 884	403	818	9 786	49 175	51 160	102 942	D
3344	Semiconductor & other electronic component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	9	5	2 815	69 168	2 032	3 965	41 379	69 075	285 344	359 279	D
3352	Household appliance mfg..	-	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	18	11	2 723	92 563	2 161	4 627	65 621	246 913	248 711	498 182	11 680
3363	Motor vehicle parts mfg ...	-	11	7	2 560	88 465	2 029	4 358	62 900	239 701	238 432	480 585	11 316
33633	Motor vehicle steering & suspension component (except spring) mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	1	e	D	D	D	D	D	D	D	106
336399	All other motor vehicle parts mfg	-	3	1	e	D	D	D	D	D	D	D	106
337	Furniture & related product mfg	1	35	10	1 254	24 433	1 127	2 085	19 656	52 053	39 663	91 653	1 821
3371	Household & institutional furniture & kitchen cabinet mfg	1	30	7	1 076	20 064	969	1 803	16 533	43 497	32 961	76 393	1 723
33712	Household & institutional furniture mfg	1	15	6	985	18 100	896	1 681	15 245	38 900	31 230	70 032	1 163
337122	Nonupholstered wood household furniture mfg	-	5	2	f	D	D	D	D	D	D	D	782
339	Miscellaneous mfg	1	45	9	860	20 338	721	1 437	15 682	44 432	32 627	76 938	3 891
3391	Medical equipment & supplies mfg	3	20	3	284	5 711	257	503	4 814	10 770	4 300	14 892	292
33911	Medical equipment & supplies mfg	3	20	3	284	5 711	257	503	4 814	10 770	4 300	14 892	292
3399	Other miscellaneous mfg ..	-	25	6	576	14 627	464	934	10 868	33 662	28 327	62 046	3 599
33999	All other miscellaneous mfg	-	8	3	438	11 312	372	751	8 877	27 244	25 989	53 227	D
	KNOXVILLE, TN MSA												
31-33	Manufacturing	-	894	289	43 228	1 311 278	31 562	62 757	786 862	4 430 018	4 190 037	8 608 726	234 044
311	Food mfg	1	61	20	2 538	59 858	1 616	3 120	33 383	268 430	320 294	587 503	9 525
3116	Meat product mfg	4	11	6	663	12 450	503	995	7 981	34 771	84 535	118 903	1 636
31161	Animal slaughtering & processing	4	11	6	663	12 450	503	995	7 981	34 771	84 535	118 903	1 636
311612	Meat processed from carcasses	-	5	3	419	7 870	306	613	4 848	19 711	45 298	64 570	953
3118	Bakeries & tortilla mfg	-	14	6	911	19 943	340	635	6 084	49 459	18 111	67 545	D
31181	Bread & bakery product mfg	-	14	6	911	19 943	340	635	6 084	49 459	18 111	67 545	D
311812	Commercial bakeries ..	-	6	5	853	19 536	306	603	5 852	48 596	17 620	66 191	D
3119	Other food mfg	-	7	3	416	9 739	332	664	6 566	53 993	39 805	93 514	D
31191	Snack food mfg	-	1	1	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	1	17	8	1 384	31 021	1 185	2 304	24 109	67 141	48 337	115 821	6 051
3131	Fiber, yarn, & thread mills ..	-	1	1	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	1	1	e	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	1	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	11	5	785	19 017	659	1 367	15 088	36 845	31 429	68 974	4 470
31321	Broadwoven fabric mills ..	-	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	9	5	2	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	9	5	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	19	4	288	5 948	226	357	3 180	14 496	18 786	31 824	654

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KNOXVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	1	29	20	5 271	100 522	4 769	8 980	83 989	324 847	335 149	668 784	6 277
3152	Cut & sew apparel mfg	1	24	18	5 075	97 345	4 599	8 646	81 474	318 104	329 126	656 074	D
31521	Cut & sew apparel contractors	9	5	2	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	9	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	3	13	11	2 327	43 850	2 087	4 021	36 606	105 180	175 810	290 970	3 792
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	9	3	3	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	2	2	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	1	3	3	f	D	D	D	D	D	D	D	383
31523	Women's & girls' cut & sew apparel mfg	—	3	2	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	2	1	g	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	3	3	f	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	—	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	37	11	1 000	28 302	844	1 824	20 333	73 188	93 250	164 723	1 599
3219	Other wood product mfg ...	—	27	8	783	22 236	672	1 444	16 656	58 693	81 366	138 283	997
32199	All other wood product mfg	—	14	6	653	19 761	560	1 250	14 806	52 250	77 284	128 075	772
321991	Manufactured home (mobile home) mfg ..	—	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	15	9	952	34 236	770	1 677	23 098	129 714	133 855	263 533	9 444
3221	Pulp, paper, & paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	13	7	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	12	6	472	16 222	364	784	9 090	42 616	43 899	86 191	1 640
323	Printing & related support activities	2	126	20	1 775	49 481	1 341	2 593	30 816	93 609	110 561	202 895	7 609
3231	Printing & related support activities	2	126	20	1 775	49 481	1 341	2 593	30 816	93 609	110 561	202 895	7 609
32311	Printing	2	118	19	1 707	47 902	1 291	2 528	29 776	90 332	109 775	198 804	7 412
323110	Commercial lithographic printing ..	2	55	7	427	10 838	319	559	6 588	21 294	15 270	36 514	1 084
323112	Commercial flexographic printing ..	6	6	5	363	12 954	273	514	5 865	25 369	28 116	52 843	1 698
323113	Commercial screen printing	—	12	3	509	14 073	425	965	10 980	16 504	51 716	67 825	D
325	Chemical mfg	—	27	7	4 064	190 042	1 199	2 363	43 529	730 335	205 091	935 663	14 859
3251	Basic chemical mfg	—	12	2	h	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	6	2	h	D	D	D	D	D	D	D	583
325188	All other basic inorganic chemical mfg	—	6	2	h	D	D	D	D	D	D	D	583
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	1	1	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	—	1	1	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	36	23	3 461	91 447	2 701	5 566	63 594	226 322	221 063	454 703	17 567
3261	Plastics product mfg	1	32	21	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	4	462	12 765	366	809	8 503	32 437	43 773	75 718	2 310
326121	Unsupported plastics profile shape mfg	1	4	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	24	16	1 415	27 677	1 024	1 625	15 788	95 827	92 588	196 131	6 282
326199	All other plastics product mfg	1	21	16	1 391	27 315	1 009	1 599	15 522	94 937	91 857	194 507	6 246

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	KNOXVILLE, TN MSA—Con.													
31-33	Manufacturing—Con.													
326	Plastics & rubber products mfg—Con.													
3262	Rubber product mfg	-	4	2	g	D	D	D	D	D	D	D	D	
32621	Tire mfg	-	3	1	f	D	D	D	D	D	D	D	D	
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D	
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	53	23		1 618	43 804	1 288	2 613	31 104	131 607	96 915	227 430	14 631
3271	Clay product & refractory mfg	-	11	5		567	14 020	457	1 004	10 531	40 213	18 535	58 524	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	10	4	e		D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	-	3	3	e		D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	29	13		690	20 822	539	1 054	14 260	67 915	56 580	123 759	6 604
32739	Other concrete product mfg	-	13	3		255	7 006	197	392	4 382	19 882	8 084	27 999	757
327390	Other concrete product mfg	-	13	3		255	7 006	197	392	4 382	19 882	8 084	27 999	757
331	Primary metal mfg	-	13	7	g		D	D	D	D	D	D	D	25 970
3313	Alumina & aluminum production & processing ..	-	3	3	g		D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	g		D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f		D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g		D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	139	37		3 518	109 174	2 801	5 740	75 941	267 629	195 204	459 107	20 234
3323	Architectural & structural metals mfg	1	36	12		901	25 502	712	1 248	16 220	41 128	50 782	91 553	1 800
33231	Plate work & fabricated structural product mfg ..	1	23	9		715	21 186	561	1 037	13 213	33 859	45 414	78 961	1 566
332312	Fabricated structural metal mfg	-	19	8		664	19 661	525	977	12 383	31 177	43 878	74 923	1 234
3324	Boiler, tank, & shipping container mfg	3	7	3		308	8 855	258	520	7 062	20 224	13 460	33 586	885
3325	Hardware mfg	-	1	1	e		D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	e		D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	e		D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	53	6		523	18 319	367	1 079	11 053	33 721	12 853	45 584	3 142
33271	Machine shops	2	50	4		449	14 912	301	558	8 735	25 772	10 838	36 231	1 707
332710	Machine shops	2	50	4		449	14 912	301	558	8 735	25 772	10 838	36 231	1 707
3328	Coating, engraving, heat treating, & allied activities.	1	16	6		340	8 298	290	510	5 999	20 821	18 517	39 239	1 490
33281	Coating, engraving, heat treating, & allied activities	1	16	6		340	8 298	290	510	5 999	20 821	18 517	39 239	1 490
3329	Other fabricated metal product mfg	-	19	6		885	31 313	692	1 428	22 685	90 004	61 893	150 283	8 015
33299	All other fabricated metal product mfg	-	19	6		885	31 313	692	1 428	22 685	90 004	61 893	150 283	8 015
332991	Ball & roller bearing mfg	-	2	1	e		D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	-	10	3		385	13 895	250	504	8 860	33 434	13 096	45 306	2 061
333	Machinery mfg	3	54	16		1 145	36 365	754	1 375	19 401	92 600	73 885	163 890	13 809
3332	Industrial machinery mfg ..	6	7	5	e		D	D	D	D	D	D	D	2 905
33329	Other industrial machinery mfg	7	6	4		292	9 581	172	296	4 645	20 380	17 520	37 486	D
333298	All other industrial machinery mfg	7	6	4		292	9 581	172	296	4 645	20 380	17 520	37 486	D
3339	Other general-purpose machinery mfg	1	14	4		277	8 650	200	338	4 494	17 770	10 994	28 800	550

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	KNOXVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	46	18	2 213	85 037	1 246	2 391	32 071	178 928	152 734	336 324	17 510
3343	Audio & video equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	25	10	1 073	45 798	461	955	13 950	118 969	53 753	173 295	6 650
33451	Navigational, measuring, medical, & control instruments mfg.....	-	25	10	1 073	45 798	461	955	13 950	118 969	53 753	173 295	6 650
334516	Analytical laboratory instrument mfg.....	-	9	4	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg.....	-	7	4	528	18 332	277	558	7 546	39 872	24 618	65 014	3 949
335	Electrical equipment, appliance, & component mfg.....	5	16	6	428	11 862	289	574	6 176	25 851	22 712	48 918	1 616
336	Transportation equipment mfg.....	1	45	26	7 655	240 494	6 077	12 487	167 389	920 141	876 757	1 795 734	56 372
3363	Motor vehicle parts mfg ...	1	24	16	5 576	174 306	4 346	8 876	118 472	780 766	686 889	1 466 257	50 497
33631	Motor vehicle gasoline engine & engine parts mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg....	-	2	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg.....	-	3	3	354	10 327	221	463	5 710	35 509	35 534	72 089	D
336350	Motor vehicle transmission & power train parts mfg.....	-	3	3	354	10 327	221	463	5 710	35 509	35 534	72 089	D
33636	Motor vehicle seating & interior trim mfg.....	9	3	2	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg....	9	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg.....	-	9	6	3 312	107 632	2 644	5 267	77 215	650 454	462 630	1 108 332	29 345
336399	All other motor vehicle parts mfg.....	-	9	6	3 312	107 632	2 644	5 267	77 215	650 454	462 630	1 108 332	29 345
3364	Aerospace product & parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	8	5	1 017	27 237	951	2 077	23 062	62 942	146 639	209 682	3 463
33661	Ship & boat building.....	-	8	5	1 017	27 237	951	2 077	23 062	62 942	146 639	209 682	3 463
336612	Boat building.....	-	7	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	64	15	1 153	22 547	927	1 677	16 731	43 971	44 065	87 703	1 862
3371	Household & institutional furniture & kitchen cabinet mfg.....	4	55	13	1 061	20 314	864	1 565	15 691	37 688	37 679	75 061	1 438
33711	Wood kitchen cabinet & counter top mfg.....	6	26	5	399	7 923	318	562	6 031	15 216	12 163	27 341	251
337110	Wood kitchen cabinet & counter top mfg....	6	26	5	399	7 923	318	562	6 031	15 216	12 163	27 341	251
33712	Household & institutional furniture mfg.....	2	29	8	662	12 391	546	1 003	9 660	22 472	25 516	47 720	1 187
337121	Upholstered household furniture mfg.....	4	8	4	281	6 272	253	468	4 963	11 365	14 668	25 885	481
337122	Nonupholstered wood household furniture mfg.....	1	15	4	351	5 397	268	513	4 191	10 363	9 775	19 936	625

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KNOXVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	77	14	2 153	47 636	1 506	2 875	27 182	103 003	102 450	216 465	5 460
3391	Medical equipment & supplies mfg.....	2	41	9	863	14 586	588	1 018	9 197	25 657	56 568	83 452	2 872
33911	Medical equipment & supplies mfg.....	2	41	9	863	14 586	588	1 018	9 197	25 657	56 568	83 452	2 872
339113	Surgical appliance & supplies mfg.....	-	6	4	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	-	36	5	1 290	33 050	918	1 857	17 985	77 346	45 882	133 013	2 588
33995	Sign mfg.....	-	19	2	698	19 407	413	936	7 929	38 350	21 297	69 121	1 342
339950	Sign mfg.....	-	19	2	698	19 407	413	936	7 929	38 350	21 297	69 121	1 342
33999	All other miscellaneous mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
	MEMPHIS, TN-AR-MS MSA												
31-33	Manufacturing	1	1 156	477	58 220	1 868 363	40 561	81 917	1 076 050	6 082 711	8 462 352	14 625 342	505 509
	Memphis, TN-AR-MS MSA (AR Part).....	-	45	23	2 323	56 172	1 824	3 584	36 590	224 511	401 064	620 626	21 399
	Memphis, TN-AR-MS MSA (MS Part).....	1	131	63	7 232	213 445	5 374	11 549	137 729	565 089	805 064	1 369 616	43 345
	Memphis, TN-AR-MS MSA (TN Part).....	-	980	391	48 665	1 598 746	33 363	66 784	901 731	5 293 111	7 256 224	12 635 100	440 765
311	Food mfg.....	-	60	34	5 398	194 011	3 669	7 623	123 463	847 366	1 129 076	1 976 901	D
3112	Grain & oilseed milling	-	7	6	g	D	D	D	D	D	D	D	45 119
31122	Starch & vegetable fats & oils mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
311221	Wet corn milling.....	-	1	1	e	D	D	D	D	D	D	D	D
311222	Soybean processing ..	-	1	1	e	D	D	D	D	D	D	D	D
31123	Breakfast cereal mfg....	-	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg....	-	2	2	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	8	5	f	D	D	D	D	D	D	D	8 715
31141	Frozen food mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	4	8	5	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
31161	Animal slaughtering & processing.....	7	7	4	266	5 659	223	423	4 237	14 100	44 185	58 370	1 023
3118	Bakeries & tortilla mfg.....	1	15	5	1 536	50 692	705	1 287	22 416	123 442	58 008	181 368	4 646
31181	Bread & bakery product mfg.....	-	14	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	5	1 461	49 244	655	1 193	21 472	119 305	53 765	172 981	D
3119	Other food mfg.....	-	8	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	9	6	991	41 169	698	1 479	28 329	318 813	347 180	667 829	19 719
3121	Beverage mfg.....	-	8	5	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
31212	Breweries.....	-	1	1	e	D	D	D	D	D	D	D	D
312120	Breweries.....	-	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	28	12	f	D	D	D	D	D	D	D	1 441
3141	Textile furnishings mills....	-	13	4	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	13	4	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	-	2	2	e	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	15	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills.....	1	7	4	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	4	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	22	11	1 944	63 971	966	2 004	15 571	77 889	84 177	157 123	4 124
3152	Cut & sew apparel mfg	2	15	8	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	9	4	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	9	1	1	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	3	3		1 038	47 362	279	483	5 009	46 880	58 411	99 854
315299	All other cut & sew apparel mfg	—	3	3		1 038	47 362	279	483	5 009	46 880	58 411	99 854
321	Wood product mfg	3	50	17	g	D	D	D	D	D	D	D	3 433
3219	Other wood product mfg	3	41	15		1 045	21 559	908	1 716	17 017	41 860	47 574	90 752
32191	Millwork	3	16	7		674	14 841	591	1 169	12 102	30 271	33 180	64 616
321918	Other millwork (including flooring) ...	3	9	5		580	11 756	512	1 010	9 487	24 214	26 574	51 999
322	Paper mfg	—	36	28		4 348	139 135	3 247	6 988	84 890	326 763	405 708	730 699
3221	Pulp, paper, & paperboard mills	—	5	5		1 138	49 089	804	1 640	27 237	127 912	154 127	281 982
32211	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
322110	Pulp mills	—	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	—	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	31	23		3 210	90 046	2 443	5 348	57 653	198 851	251 581	448 717
32221	Paperboard container mfg	—	20	16		1 849	50 965	1 464	3 119	34 715	106 567	156 015	259 541
322211	Corrugated & solid fiber box mfg	—	14	12		1 454	37 940	1 184	2 449	24 677	80 828	132 547	211 987
322212	Folding paperboard box mfg	—	4	3	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	7	5		1 180	32 933	830	1 919	18 337	81 389	80 575	163 341
322222	Coated & laminated paper mfg	—	3	2	f	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	186	47		4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589
3231	Printing & related support activities	1	186	47		4 751	148 466	3 579	7 004	94 997	341 093	253 934	592 589
32311	Printing	1	160	41		4 392	135 055	3 305	6 447	87 620	318 735	248 470	564 708
323110	Commercial lithographic printing ..	1	78	26		2 742	84 692	2 140	4 161	55 809	174 130	138 788	310 603
323114	Quick printing	2	34	3		287	7 118	183	311	3 767	14 478	7 437	22 226
323116	Manifold business form printing	—	9	4		411	12 681	278	565	7 279	60 139	40 210	100 187
323119	Other commercial printing	7	12	2		285	9 055	217	465	6 539	20 921	18 008	38 879
32312	Support activities for printing	3	26	6		359	13 411	274	557	7 377	22 358	5 464	27 881
323122	Prepress services	3	20	4	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	14	4	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	1	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	88	49		7 690	280 830	4 190	8 265	126 180	1 521 772	1 220 295	2 743 960
3251	Basic chemical mfg	2	15	11		1 905	85 631	945	1 932	39 289	471 166	455 059	941 909
32518	Other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	3	3	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	5	9	6		1 054	42 249	639	1 320	25 590	187 659	325 241	524 537
325199	All other basic organic chemical mfg	5	7	6	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	6	5	4		425	13 705	291	627	10 333	60 406	146 207	210 714
32521	Resin & synthetic rubber mfg	6	5	4		425	13 705	291	627	10 333	60 406	146 207	210 714
325211	Plastics material & resin mfg	6	5	4		425	13 705	291	627	10 333	60 406	146 207	210 714
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	—	6	3		376	14 242	274	564	8 733	44 988	66 841	112 151

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MEMPHIS, TN—AR—MS MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
32541	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
325412	Pharmaceutical preparation mfg	1	5	4	2 161	74 981	1 101	1 870	30 454	626 485	82 135	693 915	D
3255	Paint, coating, & adhesive mfg	1	18	11	g	D	D	D	D	D	D	D	6 736
32551	Paint & coating mfg	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
325510	Paint & coating mfg	1	10	8	951	31 975	548	1 137	14 245	145 515	190 542	335 217	6 128
3256	Soap, cleaning compound, & toilet preparation mfg ..	4	16	8	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	5	13	6	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	8	4	3	512	16 644	224	520	5 429	50 067	32 493	82 025	D
325612	Polish & other sanitation good mfg ..	1	7	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	19	7	610	20 005	349	714	8 131	54 349	166 165	218 304	14 159
32599	All other chemical product & preparation mfg	—	12	6	517	16 892	281	572	5 873	44 981	139 610	183 733	13 566
325998	All other miscellaneous chemical product & preparation mfg	—	8	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	49	31	2 664	76 739	2 087	4 308	54 678	241 292	253 420	496 519	18 570
3261	Plastics product mfg	—	40	28	h	D	D	D	D	D	D	D	17 983
32611	Unsupported plastics film, sheet, & bag mfg ..	—	4	3	e	D	D	D	D	D	D	D	1 412
326112	Unsupported plastics packaging film & sheet mfg	—	2	2	e	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
326160	Plastics bottle mfg	—	5	4	367	10 787	323	723	8 890	38 949	30 857	70 993	D
32619	Other plastics product mfg	—	26	18	1 534	41 626	1 153	2 228	27 816	128 475	127 072	253 976	14 246
326199	All other plastics product mfg	—	21	15	1 406	38 349	1 058	2 001	26 048	122 765	123 123	244 316	14 183
327	Nonmetallic mineral product mfg	2	56	21	1 492	44 912	1 103	2 094	29 575	139 298	108 934	247 656	10 884
3271	Clay product & refractory mfg	3	7	3	e	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	3	7	3	e	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	3	7	3	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	3	32	14	838	25 853	569	1 098	14 453	60 483	58 898	118 803	8 097
32732	Ready-mix concrete mfg	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
327320	Ready-mix concrete mfg	4	19	9	520	17 388	338	640	9 033	34 793	42 850	77 754	3 116
3279	Other nonmetallic mineral product mfg	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D
32799	All other nonmetallic mineral product mfg ...	—	11	3	267	8 976	227	446	7 693	32 506	24 103	56 781	D
331	Primary metal mfg	—	14	9	907	29 740	749	1 753	23 716	76 102	122 174	198 928	7 491
3312	Steel product mfg from purchased steel	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
33122	Rolling & drawing of purchased steel	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
331222	Steel wire drawing	—	3	3	351	10 803	319	745	9 369	40 937	48 437	90 422	D
3313	Alumina & aluminum production & processing ..	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	—	195	81	6 253	184 820	4 704	9 993	118 581	483 285	587 340	1 067 499	29 381
3321	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
33211	Forging & stamping	2	15	8	549	18 145	450	1 081	13 962	44 825	52 784	97 647	1 240
3323	Architectural & structural metals mfg	—	68	35	2 637	70 865	1 947	4 131	41 220	166 734	243 084	412 063	8 362
33231	Plate work & fabricated structural product mfg	—	24	11	594	17 602	429	1 024	10 744	41 242	66 856	108 688	1 719
332312	Fabricated structural metal mfg	1	21	10	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	44	24	2 043	53 263	1 518	3 107	30 476	125 492	176 228	303 375	6 643
332321	Metal window & door mfg	—	15	10	987	24 748	725	1 624	13 870	50 925	60 373	112 016	2 395
332322	Sheet metal work mfg	—	24	13	1 015	27 308	762	1 425	16 013	72 119	113 614	186 682	4 101
3324	Boiler, tank, & shipping container mfg	—	14	10	851	30 968	652	1 428	22 504	84 987	153 663	232 685	5 971
33241	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	4	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	4	301	12 807	256	584	10 946	47 505	120 863	163 938	4 256
332431	Metal can mfg	—	3	3	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	52	11	669	21 852	544	965	13 403	40 468	15 302	55 550	3 226
33271	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
332710	Machine shops	3	45	8	537	17 513	435	731	10 750	31 974	10 111	41 899	2 917
3329	Other fabricated metal product mfg	1	17	10	1 054	28 910	730	1 590	19 296	115 311	76 310	190 565	8 724
33291	Metal valve mfg	1	4	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	13	7	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	4	4	386	10 040	261	583	6 172	56 037	38 576	94 073	4 583
332999	All other miscellaneous fabricated metal product mfg	3	8	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	76	36	6 189	189 340	4 640	9 868	115 659	313 144	875 089	1 209 212	22 702
3333	Commercial & service industry machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	15	10	2 425	64 162	2 074	4 303	47 238	82 284	416 290	521 826	6 426
333411	Air purification equipment mfg	—	6	4	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	8	5	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	30	16	2 177	81 431	1 342	3 136	39 612	116 455	263 222	378 703	8 291
33392	Material handling equipment mfg	—	16	10	1 822	70 633	1 105	2 661	34 169	96 171	236 820	331 287	D
333921	Elevator & moving stairway mfg	—	4	1	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	10	8	705	27 961	392	801	10 861	69 481	129 424	199 099	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN-AR-MS MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	31	14	2 634	83 588	1 820	3 595	47 464	197 520	557 568	758 628	21 098
3342	Communications equipment mfg	8	6	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	3	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	8	4	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	4	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
33451	Navigational, measuring, medical, & control instruments mfg	—	8	4	285	8 567	151	336	3 771	18 514	20 356	39 185	655
335	Electrical equipment, appliance, & component mfg	—	30	14	2 438	65 655	1 557	3 434	40 755	205 229	231 666	431 842	5 724
3351	Electric lighting equipment mfg	—	12	8	g	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	11	7	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg ...	—	5	2	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	4	3	e	D	D	D	D	D	D	D	2 440
3352	Household appliance mfg..	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	2	14	4	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	14	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	34	16	1 661	46 199	1 290	2 347	24 852	127 936	148 966	271 725	5 809
3362	Motor vehicle body & trailer mfg	3	7	3	563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
33621	Motor vehicle body & trailer mfg	3	7	3	563	14 387	487	815	9 286	25 175	45 699	71 010	2 924
336211	Motor vehicle body mfg	8	5	2	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	2	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	22	10	963	28 821	692	1 337	13 641	92 606	93 044	180 102	D
33634	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	69	24	1 766	41 058	1 432	2 685	28 910	84 619	90 180	182 497	3 960
3371	Household & institutional furniture & kitchen cabinet mfg	2	40	13	680	15 234	571	1 041	11 251	27 910	26 657	55 366	608
33711	Wood kitchen cabinet & counter top mfg	1	23	8	312	6 271	256	492	4 492	12 454	10 379	22 983	299
337110	Wood kitchen cabinet & counter top mfg ...	1	23	8	312	6 271	256	492	4 492	12 454	10 379	22 983	299
33712	Household & institutional furniture mfg	4	17	5	368	8 963	315	549	6 759	15 456	16 278	32 383	309
3372	Office furniture (including fixtures) mfg	—	21	5	490	10 547	378	659	6 980	13 631	21 171	39 389	939
33721	Office furniture (including fixtures) mfg	—	21	5	490	10 547	378	659	6 980	13 631	21 171	39 389	939
337215	Showcase, partition, shelving, & locker mfg	—	6	2	282	5 359	231	369	3 829	4 899	15 043	24 572	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MEMPHIS, TN—AR—MS MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3379	Other furniture related product mfg.....	—	8	6	596	15 277	483	985	10 679	43 078	42 352	87 742	2 413
33791	Mattress mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
337910	Mattress mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg.....	—	5	4	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg....	—	5	4	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	99	19	4 073	158 749	2 405	3 757	64 471	469 355	220 678	750 730	32 445
3391	Medical equipment & supplies mfg.....	—	48	8	2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
33911	Medical equipment & supplies mfg.....	—	48	8	2 927	134 450	1 544	2 274	49 404	410 156	169 634	639 899	28 747
339112	Surgical & medical instrument mfg.....	—	8	2	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	—	7	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg. . .	3	51	11	1 146	24 299	861	1 483	15 067	59 199	51 044	110 831	3 698
33992	Sporting & athletic goods mfg.....	3	8	3	268	7 265	178	368	4 195	23 401	15 228	39 749	D
339920	Sporting & athletic goods mfg.....	3	8	3	268	7 265	178	368	4 195	23 401	15 228	39 749	D
33995	Sign mfg.....	2	21	5	e	D	D	D	D	D	D	D	D
339950	Sign mfg.....	2	21	5	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	8	12	2	406	6 318	333	478	4 397	12 279	11 387	23 769	811
339999	All other miscellaneous mfg.....	9	10	1	e	D	D	D	D	D	D	D	D
	NASHVILLE, TN MSA												
31-33	Manufacturing.....	—	1 544	557	84 573	2 791 872	64 381	126 087	1 827 632	8 384 842	13 175 361	21 496 093	1 007 802
311	Food mfg.....	1	79	32	4 959	147 240	3 315	6 999	90 100	690 572	912 858	1 591 745	39 772
3111	Animal food mfg.....	3	8	5	371	11 932	255	510	7 183	51 765	121 015	172 542	3 379
31111	Animal food mfg.....	3	8	5	371	11 932	255	510	7 183	51 765	121 015	172 542	3 379
3115	Dairy product mfg.....	2	5	5	879	30 279	434	1 110	13 840	117 846	245 432	363 033	4 841
31151	Dairy product (except frozen) mfg.....	2	5	5	879	30 279	434	1 110	13 840	117 846	245 432	363 033	4 841
311511	Fluid milk mfg.....	2	3	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	15	6	769	19 858	606	1 011	13 412	72 885	203 652	272 568	D
31161	Animal slaughtering & processing.....	1	15	6	769	19 858	606	1 011	13 412	72 885	203 652	272 568	D
311612	Meat processed from carcasses.....	—	8	3	346	8 333	223	430	5 736	34 799	94 383	129 788	741
311615	Poultry processing....	—	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg....	—	31	9	2 128	66 571	1 502	3 407	45 252	381 990	273 881	648 435	25 680
31181	Bread & bakery product mfg.....	—	26	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	10	5	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	—	5	3	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	—	5	3	g	D	D	D	D	D	D	D	D
3119	Other food mfg.....	8	10	5	f	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	8	4	2	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	9	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	11	8	1 135	41 710	534	1 085	15 062	838 741	242 654	1 071 600	20 830
3121	Beverage mfg.....	4	6	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	4	5	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	4	2	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	—	5	4	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg....	—	3	3	e	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg.....	—	3	3	e	D	D	D	D	D	D	D	D
313	Textile mills.....	—	13	10	2 107	85 790	1 556	3 219	54 772	239 650	300 655	533 711	28 608
3132	Fabric mills.....	—	5	4	1 658	75 048	1 171	2 403	46 695	218 743	277 460	489 789	27 500
31321	Broadwoven fabric mills .	—	3	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills.....	—	3	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills... .	—	2	2	g	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	2	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	—	7	5	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills.....	1	6	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NASHVILLE, TN MSA—Con.												
	Manufacturing—Con.												
314	Textile product mills.....	-	46	12	1 790	37 272	1 426	2 534	24 492	108 613	80 362	190 642	5 497
3141	Textile furnishings mills....	-	22	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	20	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	-	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	24	10	g	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills.....	-	10	5	e	D	D	D	D	D	D	D	D
314911	Textile bag mills.....	-	3	2	303	5 457	251	405	3 297	7 621	7 733	14 537	D
31499	All other textile product mills.....	-	14	5	660	12 546	478	708	7 760	23 815	31 688	57 029	2 064
314999	All other miscellaneous textile product mills..	-	13	5	f	D	D	D	D	D	D	D	2 064
315	Apparel mfg.....	2	27	8	g	D	D	D	D	D	D	D	2 371
3152	Cut & sew apparel mfg....	1	17	6	g	D	D	D	D	D	D	D	2 083
31521	Cut & sew apparel contractors.....	1	10	2	e	D	D	D	D	D	D	D	87
31522	Men's & boys' cut & sew apparel mfg.....	-	5	3	846	15 762	729	1 152	10 576	51 857	11 010	62 491	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg..	-	11	4	f	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	1	4	3	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	1	4	3	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg..	1	4	3	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg.....	-	7	1	e	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg.....	-	7	1	e	D	D	D	D	D	D	D	D
316991	Luggage mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	77	18	2 885	70 495	2 498	4 530	52 154	208 948	311 828	520 291	12 211
3219	Other wood product mfg....	-	56	16	2 726	66 829	2 360	4 289	49 449	201 098	300 105	500 140	11 569
32191	Millwork.....	-	21	6	962	21 892	825	1 554	17 046	93 620	167 258	260 422	3 213
321911	Wood window & door mfg.....	-	7	3	e	D	D	D	D	D	D	D	2 494
321918	Other millwork (including flooring)...	-	6	3	e	D	D	D	D	D	D	D	604
32199	All other wood product mfg.....	-	24	10	1 707	44 003	1 484	2 634	31 628	105 008	130 175	234 584	8 177
321991	Manufactured home (mobile home) mfg..	-	2	2	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg....	1	18	5	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	27	20	2 133	64 908	1 550	3 363	35 665	175 342	213 919	388 685	15 321
3222	Converted paper product mfg.....	-	27	20	2 133	64 908	1 550	3 363	35 665	175 342	213 919	388 685	15 321
32221	Paperboard container mfg.....	-	15	12	877	25 443	666	1 482	16 993	66 915	106 068	172 866	D
322211	Corrugated & solid fiber box mfg.....	-	12	10	f	D	D	D	D	D	D	D	4 859
32222	Paper bag & coated & treated paper mfg.....	1	9	6	g	D	D	D	D	D	D	D	7 402
322222	Coated & laminated paper mfg.....	-	5	4	626	21 934	365	676	6 927	50 385	57 737	107 945	6 463
322224	Uncoated paper & multiwall bag mfg.....	1	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	284	78	7 514	247 936	5 799	11 610	164 955	521 821	357 843	882 832	36 371
3231	Printing & related support activities.....	2	284	78	7 514	247 936	5 799	11 610	164 955	521 821	357 843	882 832	36 371
32311	Printing.....	1	235	61	5 885	188 069	4 541	8 891	123 811	415 164	319 727	738 455	29 884
323110	Commercial lithographic printing...	1	114	35	2 924	98 927	2 270	4 288	61 956	178 254	130 386	308 254	11 998
323111	Commercial gravure printing.....	-	4	2	g	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing..	-	6	4	320	12 011	239	503	7 214	25 223	16 207	41 413	3 274
323113	Commercial screen printing.....	-	26	5	582	12 576	406	979	7 971	20 657	15 952	37 323	349
323114	Quick printing.....	1	50	4	333	7 214	237	315	3 891	15 684	9 586	25 088	1 039
32312	Support activities for printing.....	4	49	17	1 629	59 867	1 258	2 719	41 144	106 657	38 116	144 377	6 487
323121	Tradebinding & related work.....	6	15	4	898	27 266	776	1 694	22 340	44 146	27 676	71 679	3 032
323122	Prepress services.....	2	34	13	731	32 601	482	1 025	18 804	62 511	10 440	72 698	3 455

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NASHVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	59	14	1 993	71 975	1 281	2 714	40 857	248 243	321 969	573 149	26 899
3251	Basic chemical mfg	—	7	2	262	10 822	177	291	6 829	58 778	48 065	108 303	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	6	2	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	28	5	600	20 403	376	797	11 654	66 752	122 353	190 975	3 950
32599	All other chemical product & preparation mfg	—	12	3	391	13 648	264	578	8 425	49 519	76 880	126 461	2 427
325991	Custom compounding of purchased resin	—	8	3	363	12 912	253	559	8 226	48 091	75 296	123 437	2 355
326	Plastics & rubber products mfg	1	82	39	5 486	175 263	4 230	8 352	115 525	466 045	583 032	1 039 502	40 735
3261	Plastics product mfg	1	66	33	3 602	93 997	2 753	5 548	57 681	268 302	334 980	593 442	D
32611	Unsupported plastics film, sheet, & bag mfg	3	7	6	437	12 802	367	705	9 897	19 321	50 168	70 202	2 071
32614	Polystyrene foam product mfg	—	3	1	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg	—	3	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	46	24	2 675	66 186	2 137	4 368	42 794	166 615	182 737	340 626	11 718
326199	All other plastics product mfg	1	40	22	2 596	64 049	2 077	4 252	41 492	160 782	177 804	329 877	11 120
3262	Rubber product mfg	—	16	6	1 884	81 266	1 477	2 804	57 844	197 743	248 052	446 060	D
32621	Tire mfg	—	7	3	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	2	1	g	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	6	9	3	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	6	5	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	70	29	3 185	154 508	2 539	5 832	122 545	363 234	261 100	624 163	25 551
3272	Glass & glass product mfg	—	10	3	1 727	113 997	1 479	3 519	96 513	218 917	111 789	330 633	15 184
32721	Glass & glass product mfg	—	10	3	1 727	113 997	1 479	3 519	96 513	218 917	111 789	330 633	15 184
327211	Flat glass mfg	—	1	1	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	44	21	1 178	32 945	864	1 921	21 740	125 352	135 187	260 413	6 642
32732	Ready-mix concrete mfg	1	23	10	567	16 933	475	1 102	13 160	64 734	78 246	143 186	4 931
327320	Ready-mix concrete mfg	1	23	10	567	16 933	475	1 102	13 160	64 734	78 246	143 186	4 931
32733	Concrete pipe, brick, & block mfg	2	10	7	316	7 943	184	402	4 018	24 244	17 385	42 218	1 189
327331	Concrete block & brick mfg	1	9	7	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	1	11	4	295	8 069	205	417	4 562	36 374	39 556	75 009	522
327390	Other concrete product mfg	1	11	4	295	8 069	205	417	4 562	36 374	39 556	75 009	522
331	Primary metal mfg	—	21	14	2 003	69 308	1 700	3 514	55 630	230 663	471 141	697 852	22 164
3312	Steel product mfg from purchased steel	—	7	5	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	6	4	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	5	4	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	2	e	D	D	D	D	D	D	D	1 908
3315	Foundries	—	8	5	863	29 037	788	1 662	25 799	84 352	72 418	155 719	D
33152	Nonferrous metal foundries	—	4	3	761	26 080	700	1 472	23 651	77 787	68 489	145 508	D
331524	Aluminum foundries (except die-casting)	—	2	1	f	D	D	D	D	D	D	D	D

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	NASHVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	—	221	87	9 829	287 739	7 295	14 655	185 891	688 007	653 646	1 328 829	53 360
3321	Forging & stamping	—	9	7	701	20 990	523	1 158	13 964	30 507	59 976	88 528	3 028
33211	Forging & stamping	—	9	7	701	20 990	523	1 158	13 964	30 507	59 976	88 528	3 028
332116	Metal stamping	—	6	5	602	17 735	460	1 016	12 156	19 148	46 556	65 836	D
3323	Architectural & structural metals mfg	—	55	21	3 283	96 811	2 230	4 599	56 148	234 962	240 899	470 323	8 471
33231	Plate work & fabricated structural product mfg . .	1	28	8	977	33 926	684	1 491	19 363	80 255	97 006	175 850	1 790
332311	Prefabricated metal building & component mfg	—	4	1	e	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	1	21	6	587	17 669	449	952	11 484	57 325	65 431	122 076	1 147
33232	Ornamental & architectural metal products mfg	—	27	13	2 306	62 885	1 546	3 108	36 785	154 707	143 893	294 473	6 681
332321	Metal window & door mfg	—	7	5	1 591	42 104	1 059	2 177	25 262	105 858	97 541	200 372	3 219
332322	Sheet metal work mfg	2	12	3	320	8 995	216	409	4 744	18 532	24 680	43 578	2 738
332323	Ornamental & architectural metal work mfg	1	8	5	395	11 786	271	522	6 779	30 317	21 672	50 523	724
3324	Boiler, tank, & shipping container mfg	—	5	4	1 402	40 915	1 148	2 246	29 520	66 955	59 802	125 787	8 153
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	2	g	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	1	1	g	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	4	3	495	14 873	408	696	11 555	63 526	68 635	128 415	D
33251	Hardware mfg	—	4	3	495	14 873	408	696	11 555	63 526	68 635	128 415	D
332510	Hardware mfg	—	4	3	495	14 873	408	696	11 555	63 526	68 635	128 415	D
3326	Spring & wire product mfg	1	17	7	673	14 326	489	1 130	10 535	72 901	36 817	109 715	3 663
33261	Spring & wire product mfg	1	17	7	673	14 326	489	1 130	10 535	72 901	36 817	109 715	3 663
332618	Other fabricated wire product mfg	1	15	7	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	74	19	1 349	50 501	1 021	2 031	31 990	102 179	68 606	170 395	12 722
33271	Machine shops	3	64	13	752	27 098	578	1 100	17 600	42 153	27 259	69 150	2 411
332710	Machine shops	3	64	13	752	27 098	578	1 100	17 600	42 153	27 259	69 150	2 411
33272	Turned product & screw, nut, & bolt mfg	1	10	6	597	23 403	443	931	14 390	60 026	41 347	101 245	10 311
332721	Precision turned product mfg	—	5	2	280	7 958	223	481	5 967	23 059	8 668	31 747	D
332722	Bolt, nut, screw, rivet, & washer mfg	2	5	4	317	15 445	220	450	8 423	36 967	32 679	69 498	D
3328	Coating, engraving, heat treating, & allied activities .	—	32	17	1 055	23 160	853	1 560	15 829	60 581	34 447	95 429	6 985
33281	Coating, engraving, heat treating, & allied activities	—	32	17	1 055	23 160	853	1 560	15 829	60 581	34 447	95 429	6 985
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	14	7	617	11 985	482	822	7 695	31 589	25 536	57 447	4 648
332813	Electroplating, plating, polishing, anodizing, & coloring	3	14	7	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	15	6	724	21 659	510	1 018	13 448	46 422	81 487	127 438	7 321
33299	All other fabricated metal product mfg	—	15	6	724	21 659	510	1 018	13 448	46 422	81 487	127 438	7 321
332996	Fabricated pipe & pipe fitting mfg	—	3	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	123	49	5 093	188 572	3 558	7 334	102 358	467 368	478 598	958 442	28 249
3332	Industrial machinery mfg . .	1	14	6	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	11	5	e	D	D	D	D	D	D	D	667
3333	Commercial & service industry machinery mfg . .	—	11	6	607	17 362	410	686	9 807	73 459	65 890	142 375	1 724
33331	Commercial & service industry machinery mfg	—	11	6	607	17 362	410	686	9 807	73 459	65 890	142 375	1 724
333319	Other commercial & service industry machinery mfg	—	9	5	f	D	D	D	D	D	D	D	D

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31-33	NASHVILLE, TN MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	6	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	6	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	4	1	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	64	28	2 190	103 573	1 430	3 177	54 138	169 331	120 808	291 103	13 120
33351	Metalworking machinery mfg	1	64	28	2 190	103 573	1 430	3 177	54 138	169 331	120 808	291 103	13 120
333514	Special die & tool, die set, jig, & fixture mfg .	1	45	19	870	34 907	698	1 482	24 742	61 073	23 046	82 900	4 866
333515	Cutting tool & machine tool accessory mfg . .	—	6	3	486	20 795	305	667	10 029	29 902	18 296	47 133	4 099
333518	Other metalworking machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	23	6	540	17 213	347	622	8 800	69 090	69 911	138 883	3 519
334	Computer & electronic product mfg	—	57	20	2 789	79 857	2 033	3 772	41 576	190 036	560 939	751 226	31 250
3342	Communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	7	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	12	4	465	15 352	257	532	5 325	39 630	39 314	79 643	1 918
33441	Semiconductor & other electronic component mfg	—	12	4	465	15 352	257	532	5 325	39 630	39 314	79 643	1 918
3345	Navigational, measuring, medical, & control instruments mfg	—	13	6	628	16 216	473	982	7 857	40 136	29 781	69 740	1 368
33451	Navigational, measuring, medical, & control instruments mfg	—	13	6	628	16 216	473	982	7 857	40 136	29 781	69 740	1 368
334513	Industrial process control instrument mfg	—	3	2	e	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	1	15	5	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	15	5	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	1	15	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	36	21	6 284	170 946	5 339	9 881	119 721	555 307	744 816	1 294 288	31 703
3351	Electric lighting equipment mfg	2	7	4	284	9 938	186	290	3 338	17 308	20 015	37 822	D
33512	Lighting fixture mfg	2	7	4	284	9 938	186	290	3 338	17 308	20 015	37 822	D
3352	Household appliance mfg. .	—	6	6	3 972	100 762	3 593	6 693	78 467	401 885	414 753	807 969	20 294
33521	Small electrical appliance mfg	—	2	2	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg . . .	—	2	2	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	4	4	h	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	3	3	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NASHVILLE, TN MSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	13	8	1 556	45 188	1 199	2 259	28 927	98 115	197 317	297 383	8 120
33531	Electrical equipment mfg	-	13	8	1 556	45 188	1 199	2 259	28 927	98 115	197 317	297 383	8 120
335311	Power, distribution, & specialty transformer mfg	-	1	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	5	4	768	21 545	629	1 099	14 566	45 319	139 870	182 146	4 509
335313	Switchgear & switchboard apparatus mfg	-	3	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	10	3	472	15 058	361	639	8 989	37 999	112 731	151 114	D
33593	Wiring device mfg	-	4	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	73	43	15 643	656 567	12 285	23 279	458 185	1 881 067	6 188 802	8 037 831	555 677
3361	Motor vehicle mfg	-	3	3	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	2	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	2	2	i	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	42	24	4 585	142 200	3 756	7 149	105 610	334 030	590 894	925 846	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	5	3	442	9 629	378	604	7 530	35 098	11 852	47 349	255
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	2	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	3	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	1	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	7	4	766	22 349	655	1 326	18 825	42 450	118 819	162 316	1 874
336370	Motor vehicle metal stamping	-	7	4	766	22 349	655	1 326	18 825	42 450	118 819	162 316	1 874
33639	Other motor vehicle parts mfg	-	17	10	1 675	47 576	1 385	2 181	32 730	104 949	156 518	260 237	28 379
336399	All other motor vehicle parts mfg	-	17	10	1 675	47 576	1 385	2 181	32 730	104 949	156 518	260 237	28 379
3364	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	15	10	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	15	10	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	4	2	e	D	D	D	D	D	D	D	D
336612	Boat building	-	11	8	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	103	31	4 472	113 232	3 509	5 718	71 180	206 382	243 006	454 378	16 979
3371	Household & institutional furniture & kitchen cabinet mfg	1	75	13	1 844	45 035	1 449	2 487	31 816	56 617	45 780	103 009	6 311
33711	Wood kitchen cabinet & counter top mfg	2	52	5	486	10 613	404	701	7 661	18 695	16 200	34 483	834
337110	Wood kitchen cabinet & counter top mfg	2	52	5	486	10 613	404	701	7 661	18 695	16 200	34 483	834
33712	Household & institutional furniture mfg	-	23	8	1 358	34 422	1 045	1 786	24 155	37 922	29 580	68 526	5 477
337122	Nonupholstered wood household furniture mfg	-	15	3	472	12 071	421	762	9 233	21 448	13 725	35 252	1 126
337124	Metal household furniture mfg	-	3	2	754	19 136	523	819	12 723	11 055	10 881	22 226	D

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31-33	NASHVILLE, TN MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	—	23	13	2 367	61 757	1 844	2 841	35 231	134 580	170 567	309 491	10 064
33721	Office furniture (including fixtures) mfg	—	23	13	2 367	61 757	1 844	2 841	35 231	134 580	170 567	309 491	10 064
337214	Office furniture (except wood) mfg	—	5	4	g	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	—	8	3	1 075	32 117	968	1 655	20 914	83 243	69 575	151 600	6 377
3379	Other furniture related product mfg	—	5	5	261	6 440	216	390	4 133	15 185	26 659	41 878	604
33791	Mattress mfg	—	5	5	261	6 440	216	390	4 133	15 185	26 659	41 878	604
337910	Mattress mfg	—	5	5	261	6 440	216	390	4 133	15 185	26 659	41 878	604
339	Miscellaneous mfg	1	116	18	2 849	76 892	1 992	4 134	44 033	172 991	174 336	351 196	12 263
3399	Other miscellaneous mfg	—	76	16	2 630	71 246	1 836	3 867	40 541	159 357	167 699	330 716	11 592
33992	Sporting & athletic goods mfg	—	4	2	e	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	—	4	2	e	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	6	2	e	D	D	D	D	D	D	D	D
339944	Carbon paper & inked ribbon mfg	—	3	2	e	D	D	D	D	D	D	D	D
33995	Sign mfg	5	41	4	457	11 689	297	564	6 003	12 288	17 603	31 651	1 979
339950	Sign mfg	5	41	4	457	11 689	297	564	6 003	12 288	17 603	31 651	1 979
33999	All other miscellaneous mfg	—	20	8	1 426	39 066	1 072	2 388	24 283	106 880	54 719	159 326	4 715
339991	Gasket, packing, & sealing device mfg	—	2	2	f	D	D	D	D	D	D	D	D
339992	Musical instrument mfg	—	7	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANDERSON COUNTY, TN												
	Manufacturing	—	107	42	8 559	327 963	4 679	9 356	135 171	994 454	343 243	1 336 167	27 993
325	Chemical mfg	—	5	2	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	2	1	h	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	1	1	h	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	1	1	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	5	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	30	10	959	36 760	696	1 520	24 321	83 823	43 790	126 351	8 089
3329	Other fabricated metal product mfg	—	7	2	540	21 257	387	824	15 056	52 208	20 985	71 945	D
33299	All other fabricated metal product mfg	—	7	2	540	21 257	387	824	15 056	52 208	20 985	71 945	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ANDERSON COUNTY, TN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	12	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	11	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	11	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	6	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	3	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
BEDFORD COUNTY, TN													
31-33	Manufacturing	-	64	20	5 582	146 575	4 694	8 975	111 984	518 069	801 043	1 302 683	53 681
311	Food mfg	-	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	668	22 003	570	1 504	17 387	67 335	66 847	135 063	D
3261	Plastics product mfg	-	5	4	668	22 003	570	1 504	17 387	67 335	66 847	135 063	D
336	Transportation equipment mfg	-	5	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	6	1 540	33 694	1 195	1 830	22 332	130 968	47 600	175 508	4 048
3399	Other miscellaneous mfg ..	-	11	6	1 540	33 694	1 195	1 830	22 332	130 968	47 600	175 508	4 048
33994	Office supplies (except paper) mfg	-	5	5	1 457	32 060	1 154	1 775	21 757	127 106	44 730	168 769	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	-	4	4	f	D	D	D	D	D	D	D	D
BENTON COUNTY, TN													
31-33	Manufacturing	-	17	10	1 150	23 736	988	1 657	17 860	51 743	51 718	97 505	3 666
BLOUNT COUNTY, TN													
31-33	Manufacturing	-	126	37	7 027	251 925	5 466	11 015	175 429	1 306 777	1 527 156	2 806 931	60 692
326	Plastics & rubber products mfg	-	9	5	1 338	35 962	1 031	2 236	24 785	119 210	105 727	232 535	9 265
3261	Plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
BLOUNT COUNTY, TN														
—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	—	10	6	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	—	4	2	g	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	—	2	1	g	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	—	2	1	g	D	D	D	D	D	D	D	D	
BRADLEY COUNTY, TN														
31-33	Manufacturing	—	142	57		12 974	363 761	10 883	21 362	258 943	1 616 581	1 331 828	2 931 664	139 444
311	Food mfg	—	10	3		1 122	44 110	966	2 164	33 363	486 357	304 853	784 492	D
3113	Sugar & confectionery product mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	—	1	1	f	D	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	1	1	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	—	10	5		2 186	43 515	1 925	3 835	30 352	90 663	84 163	176 982	1 771
3151	Apparel knitting mills	1	4	2	f	D	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills ...	—	3	2	f	D	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	2	2	f	D	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg ...	—	5	3	g	D	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D	1 376
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
325	Chemical mfg	1	5	3	f	D	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	4		3 691	118 658	3 108	6 342	86 065	409 266	388 418	795 401	D
3352	Household appliance mfg ...	—	3	2	h	D	D	D	D	D	D	D	D	D
33522	Major appliance mfg ...	—	3	2	h	D	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	2	2	h	D	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
33591	Battery mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	—	1	1	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	25	7		1 472	26 923	1 374	2 478	21 264	43 361	57 058	101 356	765
3371	Household & institutional furniture & kitchen cabinet mfg	—	19	6		1 361	23 844	1 279	2 322	19 519	37 685	50 760	89 264	667
33712	Household & institutional furniture mfg	—	15	6		1 334	23 170	1 253	2 276	19 063	36 544	50 046	87 401	D
337121	Upholstered household furniture mfg	—	13	5	g	D	D	D	D	D	D	D	D	644
339	Miscellaneous mfg	—	13	4	g	D	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	3	1	f	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	3	1	f	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	—	10	3		506	10 675	447	814	8 309	31 215	20 439	51 920	D
CAMPBELL COUNTY, TN														
31-33	Manufacturing	1	53	19		1 945	49 068	1 529	3 006	31 201	112 082	132 810	243 708	10 534
332	Fabricated metal product mfg	1	16	7		741	22 094	542	1 162	13 519	47 399	40 364	87 608	2 258

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CARROLL COUNTY, TN													
31-33	Manufacturing	1	50	19	3 103	64 126	2 585	4 968	47 899	180 985	277 441	456 748	13 244
315	Apparel mfg	2	7	5	984	13 401	818	1 526	9 672	34 677	50 008	83 549	1 610
3152	Cut & sew apparel mfg	2	7	5	984	13 401	818	1 526	9 672	34 677	50 008	83 549	1 610
332	Fabricated metal product mfg	—	13	3	657	13 413	547	1 071	10 093	45 631	19 647	65 310	3 929
CARTER COUNTY, TN													
31-33	Manufacturing	—	48	16	1 960	50 681	1 556	2 867	35 088	138 850	130 817	273 414	D
332	Fabricated metal product mfg	1	12	3	510	14 014	427	801	10 004	29 310	19 251	48 423	D
CHEATHAM COUNTY, TN													
31-33	Manufacturing	—	42	10	3 060	81 880	2 757	4 991	62 235	300 731	282 688	579 709	D
335	Electrical equipment, appliance, & component mfg	—	5	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	g	D	D	D	D	D	D	D	D
CHESTER COUNTY, TN													
31-33	Manufacturing	—	24	9	853	18 654	716	1 281	12 588	29 017	47 008	76 003	4 905
CLAIBORNE COUNTY, TN													
31-33	Manufacturing	2	34	19	3 584	67 114	3 010	5 391	44 881	160 386	159 577	317 059	4 854
315	Apparel mfg	3	7	5	1 002	16 025	927	1 907	13 329	18 883	16 249	36 102	824
3151	Apparel knitting mills	3	4	3	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	3	4	3	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	6	4	1 904	36 448	1 563	2 288	20 722	71 530	77 892	143 562	1 159
3371	Household & institutional furniture & kitchen cabinet mfg	—	6	4	1 904	36 448	1 563	2 288	20 722	71 530	77 892	143 562	1 159
33712	Household & institutional furniture mfg	—	4	4	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	—	2	2	g	D	D	D	D	D	D	D	D
CLAY COUNTY, TN													
31-33	Manufacturing	3	8	5	771	13 738	641	1 311	8 699	46 944	39 144	85 674	1 542
COCKE COUNTY, TN													
31-33	Manufacturing	2	40	16	2 627	64 627	2 058	4 150	45 786	161 712	227 730	382 819	16 398
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	6	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	4	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COFFEE COUNTY, TN													
31-33	Manufacturing	-	67	40	5 595	178 432	4 376	8 607	115 489	476 437	615 883	1 082 948	56 161
315	Apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	7	1 058	37 981	824	1 613	24 518	76 401	127 685	208 205	12 446
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	8	4	836	26 932	684	1 437	20 049	157 405	75 864	224 813	D
3399	Other miscellaneous mfg ..	-	5	4	825	26 665	675	1 421	19 867	156 851	75 730	224 118	D
CROCKETT COUNTY, TN													
31-33	Manufacturing	-	16	7	1 241	26 597	1 036	1 583	13 056	61 156	98 163	160 796	4 619
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
CUMBERLAND COUNTY, TN													
31-33	Manufacturing	-	47	19	2 437	58 947	1 994	3 623	41 227	228 437	211 628	442 913	8 336
DAVIDSON COUNTY, TN													
31-33	Manufacturing	1	752	261	31 716	1 099 974	23 000	46 213	688 576	3 419 602	3 334 852	6 721 810	213 969
311	Food mfg.....	3	49	18	2 557	73 202	1 500	2 958	37 033	238 686	487 756	721 652	D
3115	Dairy product mfg	3	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	3	3	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	4	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
31161	Animal slaughtering & processing.....	-	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
3118	Bakeries & tortilla mfg.....	4	16	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	8	8	5	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	7	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	6	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	4	5	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	7	7	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ..	-	2	2	g	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	-	29	8	1 408	30 590	1 108	2 041	20 384	98 518	71 423	172 405	D
3141	Textile furnishings mills....	-	12	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills.....	-	10	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills..	-	17	6	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	12	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	-	11	4	626	11 727	453	663	7 270	22 904	30 523	55 008	D
321	Wood product mfg	-	17	6	756	17 071	658	1 278	13 555	83 438	145 551	228 806	D
3219	Other wood product mfg....	-	15	6	f	D	D	D	D	D	D	D	D
32191	Millwork	-	7	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D
3222	Converted paper product mfg.....	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DAVIDSON COUNTY, TN—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	2	185	60	5 181	178 380	3 954	8 106	113 644	319 033	194 667	513 332	22 826
3231	Printing & related support activities.....	2	185	60	5 181	178 380	3 954	8 106	113 644	319 033	194 667	513 332	22 826
32311	Printing	1	142	44	3 628	120 993	2 749	5 496	74 035	218 115	157 675	375 832	16 722
323110	Commercial lithographic printing ..	1	70	29	2 457	88 177	1 919	3 768	54 916	154 490	113 144	267 071	10 334
32312	Support activities for printing	4	43	16	1 553	57 387	1 205	2 610	39 609	100 918	36 992	137 500	6 104
323121	Tradebinding & related work	6	14	4	f	D	D	D	D	D	D	D	D
323122	Prepress services	2	29	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	31	8	817	29 046	539	1 046	18 227	126 171	167 652	296 614	D
326	Plastics & rubber products mfg	1	32	15	1 390	35 200	997	1 741	19 328	136 413	151 369	286 485	D
3261	Plastics product mfg	—	27	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	16	9	637	13 978	535	911	9 625	36 776	34 297	71 273	D
326199	All other plastics product mfg	2	13	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	32	12	2 285	130 790	1 932	4 502	108 035	276 186	184 859	461 526	19 603
3272	Glass & glass product mfg	—	7	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	7	3	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	1	1	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	19	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	93	35	3 715	106 955	2 884	5 714	71 227	229 362	202 242	427 281	15 133
3323	Architectural & structural metals mfg	1	23	6	718	20 929	472	917	10 993	52 285	58 764	110 077	3 407
33232	Ornamental & architectural metal products mfg	1	10	5	551	16 091	364	714	8 590	40 421	39 503	78 867	D
3324	Boiler, tank, & shipping container mfg	—	2	2	g	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	1	1	g	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	45	20	1 967	91 656	1 161	2 508	41 847	152 451	142 573	296 553	10 118
3335	Metalworking machinery mfg	—	20	10	1 423	74 064	837	1 856	32 881	119 070	98 176	219 212	8 948
33351	Metalworking machinery mfg	—	20	10	1 423	74 064	837	1 856	32 881	119 070	98 176	219 212	8 948
333518	Other metalworking machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	28	9	f	D	D	D	D	D	D	D	12 650
3346	Mfg & reproducing magnetic & optical media	1	14	5	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	14	5	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	1	14	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	22	11	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	50	16	829	20 482	647	1 193	13 106	39 892	44 184	84 665	1 611
339	Miscellaneous mfg	2	71	10	1 309	31 893	1 004	2 036	20 147	69 449	53 042	120 603	D
3399	Other miscellaneous mfg ..	1	48	8	1 140	27 383	884	1 829	17 334	59 151	47 392	104 504	D
33999	All other miscellaneous mfg	—	15	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DECATUR COUNTY, TN													
31-33	Manufacturing	-	35	10	1 113	21 760	922	1 705	16 035	66 788	71 489	137 021	2 020
DEKALB COUNTY, TN													
31-33	Manufacturing	1	28	15	2 740	65 727	2 062	4 307	38 804	140 070	194 625	333 892	D
315	Apparel mfg	1	5	5	529	8 349	446	862	5 969	24 949	29 825	53 938	D
3152	Cut & sew apparel mfg	1	5	5	529	8 349	446	862	5 969	24 949	29 825	53 938	D
336	Transportation equipment mfg	1	4	4	1 400	37 995	969	2 171	20 143	62 810	124 271	189 456	D
3363	Motor vehicle parts mfg ...	1	4	4	1 400	37 995	969	2 171	20 143	62 810	124 271	189 456	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	2	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	2	2	2	f	D	D	D	D	D	D	D	D
DICKSON COUNTY, TN													
31-33	Manufacturing	-	51	21	3 574	102 517	3 130	5 827	78 982	348 924	365 464	710 283	33 857
323	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	702	24 682	632	1 274	21 440	91 545	147 512	237 058	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
DYER COUNTY, TN													
31-33	Manufacturing	-	42	18	6 404	183 451	5 059	10 682	120 297	494 675	630 596	1 121 396	53 146
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	2	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	3	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	3	1	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	3	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	1 138	39 317	896	1 873	26 801	83 131	151 261	235 304	D
3262	Rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	2 248
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
FAYETTE COUNTY, TN													
31-33	Manufacturing	1	39	15	1 193	33 295	918	1 794	23 376	166 427	105 722	271 610	5 288

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FENTRESS COUNTY, TN													
31-33	Manufacturing	4	31	12	1 471	22 458	1 299	2 374	18 259	62 103	79 889	141 374	2 077
315	Apparel mfg	-	9	7	889	12 119	831	1 487	10 786	36 794	28 088	64 686	480
3152	Cut & sew apparel mfg	-	7	7	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, TN													
31-33	Manufacturing	-	43	14	1 872	53 132	1 539	3 359	37 830	164 841	272 668	438 188	8 879
326	Plastics & rubber products mfg	-	6	3	725	21 415	533	1 079	13 164	41 163	45 051	86 416	5 949
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
GIBSON COUNTY, TN													
31-33	Manufacturing	1	90	38	7 607	200 746	5 856	11 721	138 734	529 963	554 692	1 085 604	26 019
315	Apparel mfg	-	6	2	f	D	D	D	D	D	D	D	70
3152	Cut & sew apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	6	1 897	55 946	1 427	2 350	38 052	186 256	53 483	237 167	3 867
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	2	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	3	3	g	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	3	1 090	26 621	973	2 387	22 811	61 636	74 075	135 581	D
3353	Electrical equipment mfg ..	-	3	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	4	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	2	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	9	1	1	f	D	D	D	D	D	D	D	D
GILES COUNTY, TN													
31-33	Manufacturing	-	48	21	3 515	104 622	3 001	6 026	75 072	370 476	307 153	679 715	15 102
321	Wood product mfg	-	7	3	513	12 792	463	982	10 145	30 969	59 268	88 828	525
331	Primary metal mfg	-	4	2	505	17 624	401	815	12 871	58 488	66 431	124 833	D
332	Fabricated metal product mfg	1	6	2	f	D	D	D	D	D	D	D	1 318
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAINGER COUNTY, TN													
31-33	Manufacturing	1	35	16	1 321	30 627	1 099	2 051	21 101	71 169	108 785	180 898	2 282
321	Wood product mfg	—	8	5	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	—	5	4	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	4	4	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg . .	—	4	4	f	D	D	D	D	D	D	D	D
GREENE COUNTY, TN													
31-33	Manufacturing	—	107	49	7 990	198 030	6 430	12 684	128 202	465 690	766 603	1 296 707	38 025
322	Paper mfg	—	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	3	3	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	3	994	25 060	823	1 747	17 659	68 488	81 490	150 385	4 292
3315	Foundries	—	3	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) . .	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	24	8	891	17 620	718	1 380	12 584	37 146	31 155	68 110	1 912
3325	Hardware mfg	—	3	3	587	10 265	464	861	7 331	23 510	20 788	44 119	D
33251	Hardware mfg	—	3	3	587	10 265	464	861	7 331	23 510	20 788	44 119	D
332510	Hardware mfg	—	3	3	587	10 265	464	861	7 331	23 510	20 788	44 119	D
333	Machinery mfg	—	14	8	1 636	37 902	1 375	2 569	24 903	145 303	92 750	257 030	5 758
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	2	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . .	—	2	2	f	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	6	5	662	19 323	488	885	9 417	54 655	32 496	85 717	2 219
334	Computer & electronic product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	7	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	6	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	4	2	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
HAMBLEN COUNTY, TN													
31-33	Manufacturing	1	129	69	14 586	369 578	12 020	23 173	265 813	955 980	1 089 846	2 039 164	101 267
311	Food mfg	9	4	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	17	8	663	14 110	564	1 200	10 219	28 609	39 106	67 658	1 274
3219	Other wood product mfg . . .	2	13	6	516	11 033	436	923	8 061	21 340	21 858	43 258	604
32191	Millwork	2	10	6	505	10 890	427	910	7 959	20 983	21 362	42 406	D
322	Paper mfg	—	6	6	766	21 756	490	921	12 445	62 515	87 357	144 556	5 800
3222	Converted paper product mfg	—	6	6	766	21 756	490	921	12 445	62 515	87 357	144 556	5 800
325	Chemical mfg	—	6	4	854	27 795	638	1 246	19 347	95 288	125 889	224 457	7 671
326	Plastics & rubber products mfg	3	15	11	841	21 408	726	1 570	15 116	52 185	65 259	113 560	6 406
3261	Plastics product mfg	3	14	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	14	6	867	25 822	758	1 418	20 138	65 033	34 841	97 456	6 445
333	Machinery mfg	—	15	8	936	29 482	635	1 023	14 166	51 976	102 599	155 872	11 704

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HAMBLEN COUNTY, TN												
	—Con.												
31-33	Manufacturing—												
	Con.												
336	Transportation equipment mfg	-	4	3	2 475	77 982	1 925	3 618	58 414	185 464	152 571	338 998	44 025
3363	Motor vehicle parts mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	21	10	5 172	108 782	4 595	9 169	84 099	248 854	274 694	520 795	13 907
3371	Household & institutional furniture & kitchen cabinet mfg	-	16	9	5 107	107 589	4 534	9 072	83 317	247 087	272 864	517 204	13 865
33712	Household & institutional furniture mfg	-	11	7	h	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	4	2	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	4	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	9	2	f	D	D	D	D	D	D	D	975
3399	Other miscellaneous mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
	HAMILTON COUNTY, TN												
31-33	Manufacturing	-	515	208	32 559	991 381	23 344	46 441	590 069	2 498 215	2 997 078	5 493 190	225 173
311	Food mfg	-	31	19	i	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	5	5	578	17 915	370	643	8 069	28 596	324 328	360 719	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	1 509	25 408	1 369	2 239	20 402	49 447	109 267	153 508	1 943
3118	Bakeries & tortilla mfg	-	15	6	i	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	12	3	i	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	3	i	D	D	D	D	D	D	D	D
313	Textile mills	1	12	5	g	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	-	3	1	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills	-	3	1	f	D	D	D	D	D	D	D	D
313111	Yarn spinning mills ...	-	2	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	3	5	3	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	3	4	3	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	3	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	4	14	7	582	9 603	503	921	7 203	16 293	18 889	36 856	D
316	Leather & allied product mfg .	2	8	6	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	17	12	1 412	48 356	1 035	2 238	32 135	141 197	160 649	298 364	D
3222	Converted paper product mfg	-	13	8	932	26 163	680	1 409	15 520	70 681	100 261	170 148	D
32221	Paperboard container mfg	-	10	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	4	74	20	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	4	74	20	g	D	D	D	D	D	D	D	D
32311	Printing	5	64	19	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	6	29	10	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	18	8	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAMILTON COUNTY, TN—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	-	33	17	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	27	11	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	21	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	20	8	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	3	3	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	12	7	h	D	D	D	D	D	D	D	10 640
3315	Foundries	-	9	6	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	6	5	h	D	D	D	D	D	D	D	D
331511	Iron foundries	-	5	4	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	94	34	h	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	14	5	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	41	19	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg. ...	-	7	5	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
333120	Construction machinery mfg	-	6	5	1 373	57 141	987	2 211	37 103	241 262	339 487	576 417	10 868
334	Computer & electronic product mfg	3	15	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	6	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	29	6	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	36	7	f	D	D	D	D	D	D	D	D
HARDEMAN COUNTY, TN													
31-33	Manufacturing	-	37	14	1 957	51 404	1 637	3 198	37 841	98 650	178 108	274 711	4 066
333	Machinery mfg	-	4	3	517	18 689	440	1 138	14 884	35 563	79 434	114 973	D
HARDIN COUNTY, TN													
31-33	Manufacturing	-	52	22	2 628	69 967	2 185	4 039	53 463	201 671	328 360	530 223	34 850
315	Apparel mfg	-	4	3	631	6 782	534	891	5 345	13 717	34 552	48 311	773
3152	Cut & sew apparel mfg	-	4	3	631	6 782	534	891	5 345	13 717	34 552	48 311	773
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HAWKINS COUNTY, TN													
31-33	Manufacturing	-	50	24	6 534	219 397	5 342	11 124	158 640	557 016	477 641	1 040 897	34 717
323	Printing & related support activities.....	-	6	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	6	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	6	4	g	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	2	f	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
HAYWOOD COUNTY, TN													
31-33	Manufacturing	-	23	12	2 477	64 148	2 111	4 450	49 084	159 420	262 805	425 468	10 585
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
HENDERSON COUNTY, TN													
31-33	Manufacturing	-	47	16	4 302	101 633	3 485	7 460	77 722	253 700	452 353	710 877	25 871
332	Fabricated metal product mfg	-	9	5	1 522	38 977	1 181	2 533	28 440	107 743	189 406	300 171	16 762
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENRY COUNTY, TN													
31-33	Manufacturing	-	66	21	3 483	79 686	2 775	5 420	52 169	202 289	300 584	506 074	14 532
326	Plastics & rubber products mfg	-	4	4	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
HICKMAN COUNTY, TN													
31-33	Manufacturing	-	31	9	1 017	22 174	800	1 627	17 888	74 017	65 776	139 458	4 228
HUMPHREYS COUNTY, TN													
31-33	Manufacturing	-	29	14	1 976	75 382	1 440	2 700	51 041	500 299	358 567	854 066	53 643
325	Chemical mfg	-	5	4	982	48 492	685	1 262	32 663	433 790	248 876	678 582	42 524
3251	Basic chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	f	D	D	D	D	D	D	D	D
JACKSON COUNTY, TN													
31-33	Manufacturing	-	8	5	681	11 768	585	1 034	8 017	68 341	37 436	104 898	D
JEFFERSON COUNTY, TN													
31-33	Manufacturing	-	56	25	2 880	59 731	2 352	3 917	40 956	205 249	229 960	434 024	8 046
337	Furniture & related product mfg	1	13	4	575	7 814	431	693	5 867	17 185	17 421	34 211	865
3371	Household & institutional furniture & kitchen cabinet mfg	-	11	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	10	4	560	7 642	419	683	5 751	16 859	17 137	33 601	D
JOHNSON COUNTY, TN													
31-33	Manufacturing	-	19	9	1 392	29 206	1 261	2 420	26 031	95 086	111 895	206 441	5 303
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
KNOX COUNTY, TN													
31-33	Manufacturing	1	493	154	20 782	550 328	15 926	30 970	346 958	1 486 477	1 739 439	3 245 519	101 134
311	Food mfg	-	31	13	1 764	39 007	992	1 910	17 905	133 050	109 810	242 334	4 096
3118	Bakeries & tortilla mfg	-	12	6	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	12	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	5	853	19 536	306	603	5 852	48 596	17 620	66 191	D
315	Apparel mfg	1	24	16	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	20	15	h	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	3	11	9	g	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	9	3	3	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	1	3	3	f	D	D	D	D	D	D	D	383
31523	Women's & girls' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	g	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D

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31-33	KNOX COUNTY, TN— Con. Manufacturing— Con.												
322	Paper mfg	—	12	6	611	20 824	489	1 036	13 801	52 063	95 856	148 016	D
3222	Converted paper product mfg	—	11	5	f	D	D	D	D	D	D	D	2 089
323	Printing & related support activities	2	88	19	1 590	45 835	1 209	2 384	28 516	86 357	105 902	190 947	7 139
3231	Printing & related support activities	2	88	19	1 590	45 835	1 209	2 384	28 516	86 357	105 902	190 947	7 139
32311	Printing	2	81	18	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	15	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	16	11	1 006	22 908	792	1 413	14 671	55 501	60 020	115 249	D
3261	Plastics product mfg	2	15	11	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	10	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	5	9	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	25	9	663	19 107	539	1 076	13 678	57 818	46 674	103 084	6 188
332	Fabricated metal product mfg	—	68	23	1 880	52 263	1 544	2 786	37 040	116 599	119 292	235 651	6 387
3323	Architectural & structural metals mfg	—	23	11	796	22 816	632	1 079	14 528	36 366	45 010	80 949	1 527
33231	Plate work & fabricated structural product mfg	—	15	9	671	19 990	530	979	12 476	31 240	41 514	72 419	D
332312	Fabricated structural metal mfg	—	13	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	6	25	9	603	20 280	359	674	9 812	41 608	28 919	69 937	2 125
334	Computer & electronic product mfg	—	22	5	1 087	47 859	546	1 087	13 770	103 520	102 479	207 906	14 730
3343	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	13	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	13	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	21	9	2 497	73 334	1 986	4 151	49 465	139 839	308 901	453 529	20 286
3363	Motor vehicle parts mfg	5	13	7	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	2	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	3	33	7	544	11 271	423	821	8 007	23 206	22 799	46 064	1 336
339	Miscellaneous mfg	1	50	6	1 508	37 118	1 059	2 022	20 043	89 314	51 787	150 747	4 089
3399	Other miscellaneous mfg	—	24	3	g	D	D	D	D	D	D	D	2 376
33995	Sign mfg	—	14	2	f	D	D	D	D	D	D	D	D
339950	Sign mfg	—	14	2	f	D	D	D	D	D	D	D	D
31-33	LAUDERDALE COUNTY, TN Manufacturing	—	22	14	3 525	74 427	3 226	6 376	59 954	194 609	163 397	353 817	13 024
321	Wood product mfg	—	4	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32191	Millwork	—	1	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	2	2	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	2	2	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	2	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	2	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
LAUDERDALE COUNTY, TN—Con.														
31-33	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D	
LAWRENCE COUNTY, TN														
31-33	Manufacturing	-	56	22		5 501	145 840	4 943	9 990	122 860	405 053	655 751	1 063 794	20 804
315	Apparel mfg	2	5	4	f	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg	2	5	4	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	7	2	f	D	D	D	D	D	D	D	7 561	
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D	
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D	
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	19	8		533	11 629	448	864	8 615	38 771	35 503	73 628	1 217
333	Machinery mfg	-	4	2	h	D	D	D	D	D	D	D	D	
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	h	D	D	D	D	D	D	D	D	
33311	Agricultural implement mfg	-	1	1	h	D	D	D	D	D	D	D	D	
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D	
LEWIS COUNTY, TN														
31-33	Manufacturing	-	22	3		600	16 429	486	993	12 506	46 977	54 065	101 136	3 582
LINCOLN COUNTY, TN														
31-33	Manufacturing	-	43	15		2 381	62 923	1 834	3 546	42 075	200 646	258 115	455 010	8 779
333	Machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D	
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	g	D	D	D	D	D	D	D	D	
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D	
LOUDON COUNTY, TN														
31-33	Manufacturing	-	45	22		3 150	92 995	2 575	5 696	68 784	458 511	350 359	806 659	28 289
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MCMINN COUNTY, TN													
31-33	Manufacturing	1	74	38	8 791	279 355	6 641	13 644	197 409	763 606	817 175	1 572 222	70 421
311	Food mfg	9	4	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	9	1	1	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	9	1	1	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	9	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	10	8	1 029	16 190	869	1 658	12 505	35 543	29 616	63 777	4 569
3151	Apparel knitting mills	-	5	4	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	4	3	700	11 954	649	1 325	10 077	30 275	27 744	56 622	D
315119	Other hosiery & sock mills	-	4	3	700	11 954	649	1 325	10 077	30 275	27 744	56 622	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	6	4	1 102	31 596	860	1 645	22 138	58 852	67 923	129 089	5 976
3261	Plastics product mfg	1	4	3	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	3	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	12	6	938	17 824	764	1 547	13 993	31 809	28 160	60 852	1 470
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	5	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	5	5	875	16 467	715	1 439	12 740	29 046	26 028	55 871	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCMINN COUNTY, TN													
31-33	Manufacturing	1	48	21	2 632	58 210	1 990	3 633	37 931	195 736	134 677	328 065	8 437
315	Apparel mfg	1	8	7	506	6 514	467	697	5 475	22 870	17 081	38 738	135
3152	Cut & sew apparel mfg	1	8	7	506	6 514	467	697	5 475	22 870	17 081	38 738	135
326	Plastics & rubber products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326191	Plastics plumbing fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
MACON COUNTY, TN													
31-33	Manufacturing	1	38	12	1 403	25 937	1 203	2 029	19 482	30 602	48 312	80 147	4 786

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON COUNTY, TN													
31-33	Manufacturing	-	138	66	12 429	382 467	9 959	20 747	260 465	1 512 569	2 028 980	3 473 443	183 849
311	Food mfg.....	-	11	7	2 014	76 773	1 804	3 939	59 609	429 641	545 720	936 187	D
3119	Other food mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg.	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	14	4	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	-	10	2	f	D	D	D	D	D	D	D	D
32191	Millwork.....	-	2	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)...	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	7	6	824	25 636	706	1 491	19 219	87 526	130 481	216 869	17 004
3222	Converted paper product mfg.....	-	7	6	824	25 636	706	1 491	19 219	87 526	130 481	216 869	17 004
327	Nonmetallic mineral product mfg.....	-	8	6	710	23 029	570	1 371	17 840	51 102	45 735	98 230	6 171
331	Primary metal mfg.....	-	5	5	943	36 975	729	1 550	25 552	141 422	287 856	424 701	3 492
3313	Alumina & aluminum production & processing...	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	26	9	989	30 596	802	1 741	22 412	105 572	68 256	171 757	10 488
333	Machinery mfg.....	-	8	5	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg....	-	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	1 058	31 986	734	1 744	18 538	106 460	137 232	239 088	9 838
3363	Motor vehicle parts mfg....	-	5	3	f	D	D	D	D	D	D	D	D
MARION COUNTY, TN													
31-33	Manufacturing	-	29	13	1 726	38 548	1 594	2 903	31 441	92 046	121 618	212 811	8 744
313	Textile mills.....	-	2	2	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills.	-	2	2	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	-	2	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARSHALL COUNTY, TN													
31-33	Manufacturing	-	45	26	7 552	169 404	6 365	12 854	124 867	633 001	714 359	1 349 122	49 415
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	4	832	22 687	649	1 202	13 584	76 173	87 622	167 527	13 808
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	5	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	5	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	3	3	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D
MAURY COUNTY, TN													
31-33	Manufacturing	-	75	31	11 361	532 581	9 315	18 696	417 117	1 995 300	2 455 794	4 431 676	94 576
326	Plastics & rubber products mfg	4	7	4	681	16 651	530	1 079	10 490	45 731	45 085	90 440	D
3261	Plastics product mfg	4	6	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	5	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	5	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
MEIGS COUNTY, TN													
31-33	Manufacturing	-	13	6	764	14 168	702	1 292	12 422	31 745	93 053	125 140	D
MONROE COUNTY, TN													
31-33	Manufacturing	-	84	35	5 488	144 793	4 402	8 542	97 830	373 617	463 032	834 896	35 370
315	Apparel mfg	1	26	11	874	8 805	808	985	7 181	32 177	20 696	53 240	431
3152	Cut & sew apparel mfg	3	24	9	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	3	13	6	f	D	D	D	D	D	D	D	239
327	Nonmetallic mineral product mfg	-	6	4	646	20 732	520	1 183	14 759	56 236	57 227	113 967	5 238
3272	Glass & glass product mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONROE COUNTY, TN													
—Con.													
31-33	Manufacturing—												
	Con.												
333	Machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	12	9	2 480	71 180	1 947	4 001	47 469	170 869	273 535	446 315	19 599
3363	Motor vehicle parts mfg ...	—	3	2	g	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	5	5	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	5	5	g	D	D	D	D	D	D	D	D
336612	Boat building	—	5	5	g	D	D	D	D	D	D	D	D
MONTGOMERY COUNTY, TN													
31-33	Manufacturing	—	83	32	6 519	182 743	5 474	10 900	133 882	715 718	553 952	1 271 622	62 975
323	Printing & related support activities.....	—	14	3	1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
3231	Printing & related support activities.....	—	14	3	1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
32311	Printing	—	14	3	1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
323110	Commercial lithographic printing ..	—	2	1	f	D	D	D	D	D	D	D	D
323117	Book printing.....	—	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	6	4	540	14 678	472	1 084	11 904	31 718	27 883	58 201	D
333	Machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	g	D	D	D	D	D	D	D	D
MORGAN COUNTY, TN													
31-33	Manufacturing	1	24	6	925	20 141	804	1 300	13 247	45 245	51 994	98 839	2 019
OBION COUNTY, TN													
31-33	Manufacturing	—	46	24	5 656	195 545	4 804	10 565	157 356	665 747	494 689	1 139 995	13 306
315	Apparel mfg	3	4	4	733	9 452	631	1 066	7 300	24 326	54 648	71 414	1 164
3152	Cut & sew apparel mfg	3	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	4	3	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	h	D	D	D	D	D	D	D	D
32621	Tire mfg	—	1	1	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	10	3	f	D	D	D	D	D	D	D	1 658

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OBION COUNTY, TN—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	—	6	4	627	16 183	495	1 205	11 611	47 195	36 277	81 901	1 600
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	1	1	f	D	D	D	D	D	D	D	D
OVERTON COUNTY, TN													
31-33	Manufacturing	1	29	12	1 249	23 730	1 065	1 932	17 659	48 641	77 488	126 359	3 829
PERRY COUNTY, TN													
31-33	Manufacturing	—	15	5	1 689	34 936	1 518	3 953	27 817	58 401	111 732	169 833	16 205
326	Plastics & rubber products mfg	—	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	1	1	f	D	D	D	D	D	D	D	D
POLK COUNTY, TN													
31-33	Manufacturing	1	22	11	1 061	18 282	875	1 588	12 980	34 549	37 730	72 132	4 903
PUTNAM COUNTY, TN													
31-33	Manufacturing	—	141	58	9 927	232 314	7 927	15 016	156 377	736 421	1 025 473	1 757 673	37 171
311	Food mfg	—	7	2	h	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	—	1	1	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	1	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	—	7	4	872	13 158	794	1 282	11 450	39 940	5 316	44 844	457
3152	Cut & sew apparel mfg	—	7	4	872	13 158	794	1 282	11 450	39 940	5 316	44 844	457
31521	Cut & sew apparel contractors	—	5	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	25	8	826	24 365	583	1 112	13 866	65 085	69 457	132 674	4 099
333	Machinery mfg	2	17	6	953	22 801	711	1 439	14 044	50 166	38 275	88 492	3 692
336	Transportation equipment mfg	—	9	6	2 002	57 128	1 476	2 802	36 950	240 166	585 549	825 834	15 396
3363	Motor vehicle parts mfg ...	—	8	6	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	5	3	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	5	3	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	13	6	853	17 727	528	947	10 319	48 865	26 650	75 390	D
3399	Other miscellaneous mfg ..	—	9	5	811	16 980	498	895	9 838	47 541	25 943	73 343	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RHEA COUNTY, TN													
31-33	Manufacturing	-	40	14	4 674	105 624	4 082	8 459	85 832	233 834	200 293	434 702	5 497
315	Apparel mfg	-	9	5	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	6	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	1	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	4	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	3	1	g	D	D	D	D	D	D	D	D
ROANE COUNTY, TN													
31-33	Manufacturing	-	42	17	2 075	47 064	1 628	3 318	30 359	143 362	116 009	255 975	12 991
315	Apparel mfg	-	5	4	772	11 735	599	1 260	7 926	35 695	11 141	46 463	D
ROBERTSON COUNTY, TN													
31-33	Manufacturing	-	74	37	5 019	127 238	3 948	7 592	84 565	296 293	443 343	730 873	D
335	Electrical equipment, appliance, & component mfg	-	3	3	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	5	4	767	20 263	586	945	13 684	73 907	65 520	139 819	D
3363	Motor vehicle parts mfg ...	-	3	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	6	2	f	D	D	D	D	D	D	D	D
RUTHERFORD COUNTY, TN													
31-33	Manufacturing	-	191	74	19 096	754 682	14 819	29 216	516 153	2 481 131	6 370 508	8 851 852	584 684
311	Food mfg	-	7	6	1 703	57 077	1 319	3 035	41 936	385 816	340 833	719 785	D
3118	Bakeries & tortilla mfg	-	4	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	2	2	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	9	2	914	34 040	598	1 389	19 359	96 649	125 437	221 456	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	8	1 995	86 209	1 558	3 022	61 711	198 551	276 670	475 503	D
3262	Rubber product mfg	-	5	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	31	13	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	6	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	20	9	2 005	54 800	1 637	3 220	35 931	233 065	263 005	506 406	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RUTHERFORD COUNTY, TN—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	10	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	1	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	6	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	5	4	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	17	3	714	19 879	549	984	13 320	15 393	10 202	24 880	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
SCOTT COUNTY, TN													
31-33	Manufacturing	-	40	11	2 915	56 453	2 483	5 206	39 141	143 087	189 161	329 953	9 923
315	Apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	12	4	1 101	21 673	930	1 858	12 646	60 116	63 914	120 667	5 245
3219	Other wood product mfg ...	-	6	3	1 052	20 931	886	1 827	12 017	58 529	61 385	116 537	D
32191	Millwork	-	3	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	-	1	1	f	D	D	D	D	D	D	D	D
SEQUATCHIE COUNTY, TN													
31-33	Manufacturing	-	11	4	948	18 304	858	1 763	14 579	77 815	145 234	223 792	2 033
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
SEVIER COUNTY, TN													
31-33	Manufacturing	2	103	23	2 611	64 476	2 046	3 930	43 257	141 610	130 294	272 356	10 501
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBY COUNTY, TN													
31-33	Manufacturing	1	902	355	44 145	1 476 888	29 794	59 506	815 718	4 800 476	6 869 956	11 758 677	408 911
311	Food mfg.....	1	47	26	4 230	158 264	2 675	5 622	97 467	664 209	950 684	1 617 177	60 822
3112	Grain & oilseed milling	-	5	5	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	4	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	14	5	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	13	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	5	1 461	49 244	655	1 193	21 472	119 305	53 765	172 981	D
312	Beverage & tobacco product mfg	-	8	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	19	8	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	12	5	g	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
315299	All other cut & sew apparel mfg.....	-	3	3	1 038	47 362	279	483	5 009	46 880	58 411	99 854	D
321	Wood product mfg	3	40	14	1 046	22 634	902	1 765	17 481	44 387	51 243	96 979	2 673
3219	Other wood product mfg ...	3	33	12	f	D	D	D	D	D	D	D	D
32191	Millwork	3	13	7	659	14 515	579	1 144	11 825	29 468	32 339	62 978	D
321918	Other millwork (including flooring) ...	3	9	5	580	11 756	512	1 010	9 487	24 214	26 574	51 999	814
322	Paper mfg	-	28	21	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	24	17	2 533	71 376	1 901	4 262	45 406	148 362	175 654	324 243	D
32221	Paperboard container mfg	-	15	11	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	9	7	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	5	4	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	163	38	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	2	163	38	h	D	D	D	D	D	D	D	D
32311	Printing	2	137	32	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	66	20	g	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	11	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	11	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	76	42	i	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	2	14	10	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	5	9	6	1 054	42 249	639	1 320	25 590	187 659	325 241	524 537	D
325199	All other basic organic chemical mfg	5	7	6	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
32541	Pharmaceutical & medicine mfg	1	9	5	2 240	78 262	1 140	1 944	31 898	633 588	85 349	704 628	15 231
325412	Pharmaceutical preparation mfg	1	5	4	2 161	74 981	1 101	1 870	30 454	626 485	82 135	693 915	D
3255	Paint, coating, & adhesive mfg	1	15	10	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	2	9	7	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	2	9	7	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	15	7	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	4	12	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SHELBY COUNTY, TN —Con.													
	Manufacturing—Con.													
326	Plastics & rubber products mfg	-	28	19	g	D	D	D	D	D	D	D	7 418	
3261	Plastics product mfg	-	23	18	g	D	D	D	D	D	D	D	D	
32619	Other plastics product mfg	-	15	11	f	D	D	D	D	D	D	D	3 691	
326199	All other plastics product mfg	-	11	8	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	3	38	13		821	24 045	572	1 049	13 849	57 640	58 976	116 352	4 875
3273	Cement & concrete product mfg	4	20	10	f	D	D	D	D	D	D	D	4 168	
332	Fabricated metal product mfg	-	142	59		4 429	130 772	3 411	7 415	83 870	280 471	353 706	633 894	14 752
3323	Architectural & structural metals mfg	-	50	28		2 089	56 100	1 548	3 356	32 714	122 161	171 984	296 587	D
33231	Plate work & fabricated structural product mfg ..	-	18	10		500	14 997	363	892	9 431	32 991	46 100	79 491	D
332312	Fabricated structural metal mfg	-	18	10		500	14 997	363	892	9 431	32 991	46 100	79 491	D
33232	Ornamental & architectural metal products mfg	-	32	18		1 589	41 103	1 185	2 464	23 283	89 170	125 884	217 096	D
332321	Metal window & door mfg	-	13	8	f	D	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	-	15	9	f	D	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	11	8	f	D	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	38	9	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	54	26		4 702	141 362	3 748	7 908	93 745	241 860	770 440	1 034 634	D
3333	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg ..	-	3	2	f	D	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	11	7	g	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	11	7	g	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	5	3	g	D	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	22	12	g	D	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	10	7	f	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	29	12	h	D	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	8	6	3	f	D	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	21	10	g	D	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	8	5	f	D	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	22	10	g	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	15	8	f	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	55	18		1 355	31 850	1 083	1 984	21 668	59 919	63 719	128 879	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	31	10	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
SHELBY COUNTY, TN														
—Con.														
31-33	Manufacturing—													
	Con.													
339	Miscellaneous mfg	—	84	16	h	D	D	D	D	D	D	D	D	
3391	Medical equipment & supplies mfg	—	42	8	h	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	—	42	8	h	D	D	D	D	D	D	D	D	
339113	Surgical appliance & supplies mfg	—	7	4	g	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg	4	42	8	f	D	D	D	D	D	D	D	D	
SMITH COUNTY, TN														
31-33	Manufacturing	1	23	11		1 710	44 877	1 361	2 799	33 330	149 263	251 319	396 612	12 406
SULLIVAN COUNTY, TN														
31-33	Manufacturing	—	182	59		18 602	816 736	12 238	24 749	430 089	2 364 749	1 829 199	4 245 150	310 116
313	Textile mills	—	4	2	f	D	D	D	D	D	D	D	D	D
3132	Fabric mills	—	1	1	f	D	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	1	1	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	5	6	5		530	7 201	497	835	6 177	11 394	4 754	16 253	D
322	Paper mfg	—	3	3	f	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	31	7	g	D	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	31	7	g	D	D	D	D	D	D	D	D	D
32311	Printing	—	30	7	g	D	D	D	D	D	D	D	D	D
323117	Book printing	—	2	2	g	D	D	D	D	D	D	D	D	D
325	Chemical mfg	—	9	3	j	D	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	—	4	1	j	D	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	1	1	j	D	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	1	1	j	D	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	11	4		600	18 276	493	1 106	13 944	62 892	29 868	92 248	D
331	Primary metal mfg	1	12	6	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	30	5		563	14 434	425	830	9 733	30 092	30 073	61 024	D
SUMNER COUNTY, TN														
31-33	Manufacturing	—	205	77		11 852	333 759	9 157	17 191	218 516	803 829	1 131 727	1 932 019	64 636
321	Wood product mfg	—	13	3	g	D	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	11	3	g	D	D	D	D	D	D	D	D	D
32199	All other wood product mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	20	3		955	28 697	794	1 460	21 868	70 293	66 675	140 808	D
3231	Printing & related support activities	—	20	3		955	28 697	794	1 460	21 868	70 293	66 675	140 808	D
32311	Printing	—	18	3	f	D	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	—	1	1	f	D	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	11	8		1 121	29 799	810	1 707	14 821	57 038	92 123	140 624	D
3261	Plastics product mfg	1	10	7	g	D	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	9	6	g	D	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	7	6		1 026	26 296	763	1 626	13 874	54 318	87 188	132 587	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SUMNER COUNTY, TN													
—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	40	15	2 410	70 742	1 766	3 662	43 748	182 202	169 657	347 972	10 562
3323	Architectural & structural metals mfg	-	10	5	g	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	5	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	4	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	11	628	24 101	395	773	12 652	51 306	51 300	103 134	2 392
335	Electrical equipment, appliance, & component mfg	-	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	18	10	1 656	45 589	1 414	2 761	36 331	118 427	233 418	353 633	D
3363	Motor vehicle parts mfg ...	-	13	8	1 572	43 950	1 349	2 664	35 217	116 148	230 286	348 036	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	5	2	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	13	6	1 595	35 610	1 138	1 545	20 315	57 774	114 596	178 828	D
3372	Office furniture (including fixtures) mfg	-	3	3	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	3	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	2	2	g	D	D	D	D	D	D	D	D
TIPTON COUNTY, TN													
31-33	Manufacturing	-	39	21	3 327	88 563	2 651	5 484	62 637	326 208	280 546	604 813	26 566
323	Printing & related support activities	-	3	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	3	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	628	16 085	393	755	9 168	82 231	47 309	128 658	7 476
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
TROUSDALE COUNTY, TN													
31-33	Manufacturing	1	12	6	693	14 371	552	1 135	10 043	32 255	32 054	63 842	1 206
UNICOI COUNTY, TN													
31-33	Manufacturing	-	22	10	1 518	36 251	1 330	2 455	27 329	129 691	74 388	202 499	D
UNION COUNTY, TN													
31-33	Manufacturing	-	20	11	1 099	23 591	870	1 790	17 263	42 189	99 546	141 094	5 435

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WARREN COUNTY, TN													
31-33	Manufacturing	-	73	35	6 610	192 537	5 542	11 629	150 592	523 349	613 898	1 133 324	45 959
326	Plastics & rubber products mfg	-	7	3	f	D	D	D	D	D	D	D	401
3261	Plastics product mfg	-	7	3	f	D	D	D	D	D	D	D	401
32619	Other plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	13	5	568	17 932	426	859	13 289	57 758	32 347	87 646	1 526
333	Machinery mfg	-	18	10	1 800	61 116	1 511	3 034	46 688	210 226	197 547	406 602	8 275
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	1	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, TN													
31-33	Manufacturing	-	151	69	10 370	257 551	8 085	15 822	174 814	546 112	750 653	1 300 906	D
311	Food mfg	-	7	5	f	D	D	D	D	D	D	D	D
313	Textile mills	-	5	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	5	545	13 696	477	989	9 262	25 505	64 575	88 602	3 338
323	Printing & related support activities	-	18	7	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	18	7	f	D	D	D	D	D	D	D	D
32311	Printing	-	15	7	f	D	D	D	D	D	D	D	D
323117	Book printing	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	9	686	17 676	557	1 073	12 537	30 413	25 450	55 174	D
333	Machinery mfg	-	16	5	1 466	39 481	1 182	2 414	29 074	83 293	53 395	133 261	4 476
334	Computer & electronic product mfg	-	6	3	566	16 486	379	731	9 066	41 820	42 694	87 010	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WASHINGTON COUNTY, TN—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	12	6	881	16 930	790	1 439	13 690	37 616	26 487	63 990	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	9	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	6	3	717	13 242	656	1 240	11 504	28 738	20 471	49 144	D
337122	Nonupholstered wood household furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
WAYNE COUNTY, TN													
31-33	Manufacturing	2	28	11	1 487	23 043	1 224	2 143	17 842	50 681	49 516	99 594	4 457
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
WEAKLEY COUNTY, TN													
31-33	Manufacturing	-	45	24	3 287	74 911	2 781	5 805	54 572	213 691	361 256	574 004	9 944
315	Apparel mfg	-	4	4	656	9 194	599	1 232	7 422	11 751	130 215	139 187	1 199
3152	Cut & sew apparel mfg	-	4	4	656	9 194	599	1 232	7 422	11 751	130 215	139 187	1 199
323	Printing & related support activities.....	-	6	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	6	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	2	f	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	4	f	D	D	D	D	D	D	D	1 625
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
WHITE COUNTY, TN													
31-33	Manufacturing	-	49	19	3 442	80 955	2 963	5 920	63 281	254 465	198 667	457 276	17 599
315	Apparel mfg	-	7	4	666	11 294	545	972	8 110	8 612	17 347	37 271	D
3152	Cut & sew apparel mfg	-	6	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WILLIAMSON COUNTY, TN												
31-33	Manufacturing	-	115	37	4 723	130 701	3 581	6 993	73 897	373 716	473 715	846 633	31 089
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	4	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
	WILSON COUNTY, TN												
31-33	Manufacturing	-	114	40	5 533	161 121	3 989	8 064	104 708	360 616	773 064	1 122 914	33 175
332	Fabricated metal product mfg	-	21	9	1 215	30 722	772	1 555	18 628	66 635	79 794	144 228	4 472
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	767	33 606	583	1 330	24 943	28 450	94 457	122 982	D
3363	Motor vehicle parts mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	10	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	6	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALCOA, TN													
31-33	Manufacturing	-	23	8	g	D	D	D	D	D	D	D	24 448
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
ASHLAND CITY, TN													
31-33	Manufacturing	1	19	7	f	D	D	D	D	D	D	D	D
ATHENS, TN													
31-33	Manufacturing	3	33	22	5 601	146 671	4 018	8 189	95 110	303 516	436 105	741 774	26 291
311	Food mfg	9	1	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	9	1	1	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	9	1	1	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	9	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	2	2	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
BARTLETT, TN													
31-33	Manufacturing	-	31	9	1 327	29 542	1 088	2 064	20 710	59 149	179 548	242 766	8 706
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
BOLIVAR, TN													
31-33	Manufacturing	1	8	4	739	14 557	658	1 082	11 186	21 561	31 153	52 823	384
BRISTOL, TN													
31-33	Manufacturing	1	59	20	1 987	46 427	1 486	2 729	26 900	89 082	97 743	190 166	10 607

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BROWNSVILLE, TN													
31-33	Manufacturing	-	21	11	g	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	2	2	g	D	D	D	D	D	D	D	
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	
32622	Rubber & plastics hoses & belting mfg	-	1	1	f	D	D	D	D	D	D	D	
326220	Rubber & plastics hoses & belting mfg..	-	1	1	f	D	D	D	D	D	D	D	
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	
CAMDEN, TN													
31-33	Manufacturing	-	10	6	964	19 087	847	1 397	14 715	43 669	42 554	81 362	3 369
CENTERVILLE, TN													
31-33	Manufacturing	-	11	6	f	D	D	D	D	D	D	2 439	
CHATTANOOGA, TN *													
31-33	Manufacturing	-	389	165	23 272	739 894	17 293	35 640	470 864	1 844 947	2 241 101	4 091 403	153 721
311	Food mfg	-	24	16	h	D	D	D	D	D	D	D	
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	
31134	Nonchocolate confectionery mfg	-	1	1	f	D	D	D	D	D	D	D	
311340	Nonchocolate confectionery mfg ...	-	1	1	f	D	D	D	D	D	D	D	
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	
311615	Poultry processing	-	3	3	1 509	25 408	1 369	2 239	20 402	49 447	109 267	153 508	1 943
3118	Bakeries & tortilla mfg	-	11	5	f	D	D	D	D	D	D	D	
313	Textile mills	1	12	5	g	D	D	D	D	D	D	D	
3131	Fiber, yarn, & thread mills .	-	3	1	f	D	D	D	D	D	D	D	
31311	Fiber, yarn, & thread mills	-	3	1	f	D	D	D	D	D	D	D	
313111	Yarn spinning mills ...	-	2	1	f	D	D	D	D	D	D	D	
3133	Textile & fabric finishing & fabric coating mills	3	5	3	f	D	D	D	D	D	D	D	
31331	Textile & fabric finishing mills	3	4	3	f	D	D	D	D	D	D	D	
313312	Textile & fabric finishing mills	3	2	2	f	D	D	D	D	D	D	D	
322	Paper mfg	-	15	11	g	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	11	7	f	D	D	D	D	D	D	D	
32221	Paperboard container mfg	-	8	6	f	D	D	D	D	D	D	D	
323	Printing & related support activities	5	57	17	g	D	D	D	D	D	D	14 625	
3231	Printing & related support activities	5	57	17	g	D	D	D	D	D	D	14 625	
32311	Printing	5	49	16	g	D	D	D	D	D	D	D	
323110	Commercial lithographic printing ..	6	22	8	g	D	D	D	D	D	D	D	
323113	Commercial screen printing	-	15	7	f	D	D	D	D	D	D	D	
325	Chemical mfg	-	32	17	h	D	D	D	D	D	D	D	
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5	g	D	D	D	D	D	D	D	
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	g	D	D	D	D	D	D	D	
325222	Noncellulosic organic fiber mfg	-	2	2	g	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	22	9	624	17 085	518	1 007	11 512	55 534	60 414	115 169	D
3261	Plastics product mfg	-	17	8	f	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	17	7	f	D	D	D	D	D	D	D	
3271	Clay product & refractory mfg	-	2	2	f	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	CHATTANOOGA, TN * —Con.													
31-33	Manufacturing— Con.													
331	Primary metal mfg	—	11	7	h	D	D	D	D	D	D	D	D	
3315	Foundries	—	8	6	h	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries	—	6	5	h	D	D	D	D	D	D	D	D	
331511	Iron foundries	—	5	4	h	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	—	74	29		2 484	76 764	1 915	3 806	49 819	182 661	122 995	306 809	9 386
3329	Other fabricated metal product mfg	—	11	5		953	30 074	725	1 446	20 631	86 273	48 631	136 328	D
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	—	27	13		2 198	85 982	1 510	3 247	50 862	276 077	378 970	653 975	D
3331	Agriculture, construction, & mining machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	4	3	g	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	13	5	f	D	D	D	D	D	D	D	D	D
	CHURCH HILL, TN													
31-33	Manufacturing	—	6	3		2 045	63 051	1 795	3 748	52 663	188 136	125 744	307 900	9 813
323	Printing & related support activities	—	1	1	f	D	D	D	D	D	D	D	D	D
3231	Printing & related support activities	—	1	1	f	D	D	D	D	D	D	D	D	D
32311	Printing	—	1	1	f	D	D	D	D	D	D	D	D	D
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	1	1	f	D	D	D	D	D	D	D	D	D
	CLARKSVILLE, TN													
31-33	Manufacturing	—	70	27		6 047	169 547	5 104	10 113	125 658	688 667	499 928	1 190 675	D
323	Printing & related support activities	—	14	3		1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
3231	Printing & related support activities	—	14	3		1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
32311	Printing	—	14	3		1 659	42 542	1 485	2 956	33 841	100 160	47 466	146 197	6 274
323110	Commercial lithographic printing	—	2	1	f	D	D	D	D	D	D	D	D	D
323117	Book printing	—	2	1	f	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	6	4		540	14 678	472	1 084	11 904	31 718	27 883	58 201	D
333	Machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	1	1	g	D	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLEVELAND, TN													
31-33	Manufacturing	-	122	49	11 978	321 979	10 174	19 988	232 115	1 440 780	1 188 464	2 618 466	D
311	Food mfg	-	9	3	g	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	8	5	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	3	2	f	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	2	2	f	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	g	D	D	D	D	D	D	D	1 376
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	f	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	3 691	118 658	3 108	6 342	86 065	409 266	388 418	795 401	D
3352	Household appliance mfg ..	-	3	2	h	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	3	2	h	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	-	2	2	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33591	Battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	24	7	g	D	D	D	D	D	D	D	765
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	6	g	D	D	D	D	D	D	D	667
33712	Household & institutional furniture mfg	-	14	6	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	12	5	g	D	D	D	D	D	D	D	644
339	Miscellaneous mfg	-	10	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	3	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
CLINTON, TN													
31-33	Manufacturing	-	20	9	1 660	49 904	1 393	2 736	37 385	126 785	129 636	253 042	10 564
326	Plastics & rubber products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
COLLEGEDALE, TN													
31-33	Manufacturing	-	6	4	i	D	D	D	D	D	D	D	D
311	Food mfg	-	2	2	i	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	1	1	i	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	1	1	i	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	1	1	i	D	D	D	D	D	D	D	D
COLLIERVILLE, TN													
31-33	Manufacturing	-	40	20	3 281	89 913	2 557	5 271	62 540	188 553	595 986	809 860	11 641
333	Machinery mfg	-	10	6	g	D	D	D	D	D	D	D	5 787
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	2	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
COLUMBIA, TN														
31-33	Manufacturing	2	42	15	g	D	D	D	D	D	D	D		
326	Plastics & rubber products mfg	5	6	3	f	D	D	D	D	D	D	D		
3261	Plastics product mfg	6	5	3	f	D	D	D	D	D	D	D		
COOKEVILLE, TN														
31-33	Manufacturing	-	101	44	7 478	176 124	5 747	10 642	111 575	605 190	828 956	1 430 173	28 504	
311	Food mfg	-	3	1	g	D	D	D	D	D	D	D		
3113	Sugar & confectionery product mfg	-	1	1	g	D	D	D	D	D	D	D		
31133	Confectionery mfg from purchased chocolate ...	-	1	1	g	D	D	D	D	D	D	D		
311330	Confectionery mfg from purchased chocolate	-	1	1	g	D	D	D	D	D	D	D		
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D		
3152	Cut & sew apparel mfg	-	4	2	f	D	D	D	D	D	D	D		
332	Fabricated metal product mfg	-	17	5		615	17 188	408	795	9 465	47 066	64 093	109 519	2 421
333	Machinery mfg	2	13	6	f	D	D	D	D	D	D	D	3 656	
336	Transportation equipment mfg	-	6	5	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	6	5	g	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	12	5	f	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg ..	-	9	5		811	16 980	498	895	9 838	47 541	25 943	73 343	D
COVINGTON, TN														
31-33	Manufacturing	-	23	17	h	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	-	3	2	f	D	D	D	D	D	D	D	D	
3231	Printing & related support activities.....	-	3	2	f	D	D	D	D	D	D	D	D	
32311	Printing	-	3	2	f	D	D	D	D	D	D	D	D	
323110	Commercial lithographic printing ..	-	2	1	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D	
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D	
CROSSVILLE, TN														
31-33	Manufacturing	-	34	18	2 303	56 093	1 884	3 451	39 493	222 014	200 691	425 616	7 834	
DAYTON, TN														
31-33	Manufacturing	-	23	11	4 436	102 116	3 887	8 158	83 501	225 987	191 439	417 995	5 081	
315	Apparel mfg	-	4	4	g	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D	
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	-	6	1	g	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	1	g	D	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg	-	3	1	g	D	D	D	D	D	D	D	D	
337121	Upholstered household furniture mfg	-	2	1	g	D	D	D	D	D	D	D	D	

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DICKSON, TN													
31-33	Manufacturing	-	26	13	2 839	80 729	2 547	4 552	64 292	298 719	255 210	549 457	30 143
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
DUNLAP, TN													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
DYERSBURG, TN													
31-33	Manufacturing	-	29	12	4 779	147 768	3 821	8 129	97 765	338 169	402 398	743 476	44 827
313	Textile mills	-	2	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
313241	Wett knit fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	2	1	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	1	g	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	2	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	2	f	D	D	D	D	D	D	D	D
ELIZABETHTON, TN													
31-33	Manufacturing	-	26	11	1 493	41 032	1 184	2 149	28 723	118 140	105 395	227 454	D
ERWIN, TN													
31-33	Manufacturing	-	17	8	f	D	D	D	D	D	D	D	D
FAYETTEVILLE, TN													
31-33	Manufacturing	-	21	10	2 089	57 906	1 597	3 219	38 430	186 788	238 998	422 081	7 871
333	Machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	g	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRANKLIN, TN													
31-33	Manufacturing	-	71	27	3 760	107 258	2 836	5 526	58 069	299 224	404 608	704 157	23 633
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	3	626	15 530	507	699	7 791	87 156	52 077	131 248	D
3352	Household appliance mfg..	-	2	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	2	2	f	D	D	D	D	D	D	D	D
GALLATIN, TN													
31-33	Manufacturing	-	63	29	4 700	139 663	3 698	7 457	92 410	370 966	458 165	822 746	33 331
323	Printing & related support activities	-	5	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	5	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	5	1	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	4	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	3	3	660	17 853	465	999	8 872	33 629	72 153	97 266	D
32619	Other plastics product mfg	1	3	3	660	17 853	465	999	8 872	33 629	72 153	97 266	D
326199	All other plastics product mfg	1	3	3	660	17 853	465	999	8 872	33 629	72 153	97 266	D
332	Fabricated metal product mfg	-	13	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	4	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	4	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	3	f	D	D	D	D	D	D	D	D
GREENEVILLE, TN													
31-33	Manufacturing	-	68	33	5 956	147 570	4 835	9 480	95 800	343 548	584 318	997 006	28 568
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	4	626	12 564	534	997	8 745	26 780	22 295	48 898	1 191
3325	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	13	8	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	f	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	6	5	662	19 323	488	885	9 417	54 655	32 496	85 717	2 219

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREENEVILLE, TN—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
HARRIMAN, TN *													
31-33	Manufacturing	1	7	3	725	11 689	548	1 174	7 637	35 381	13 541	48 538	D
315	Apparel mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
HENDERSONVILLE, TN													
31-33	Manufacturing	—	62	10	1 917	52 688	1 333	2 020	28 460	78 734	224 441	307 168	9 286
337	Furniture & related product mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
HOHENWALD, TN													
31-33	Manufacturing	—	16	3	566	15 678	459	954	11 985	45 829	52 462	98 367	3 466
HUMBOLDT, TN *													
31-33	Manufacturing	1	22	12	2 749	80 109	2 251	5 214	60 813	204 394	288 862	494 762	12 440
335	Electrical equipment, appliance, & component mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	1	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
HUNTINGDON, TN													
31-33	Manufacturing	1	8	4	653	18 500	483	990	12 572	66 492	132 263	201 189	4 832

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)				
JACKSON, TN												
31-33	Manufacturing	-	123	63								
311	Food mfg	-	10	7								
3119	Other food mfg	-	1	1								
31191	Snack food mfg	-	1	1								
311919	Other snack food mfg ..	-	1	1								
321	Wood product mfg	1	7	3								
3219	Other wood product mfg...	-	4	1								
32191	Millwork	-	2	1								
321918	Other millwork (including flooring) ...	-	1	1								
322	Paper mfg	-	6	6								
3222	Converted paper product mfg	-	6	6								
327	Nonmetallic mineral product mfg	-	7	5								
331	Primary metal mfg	-	5	5	943	36 975	729	1 550	25 552	141 422	287 856	424 701
3313	Alumina & aluminum production & processing ..	-	2	2								
33131	Alumina & aluminum production & processing.....	-	2	2								
332	Fabricated metal product mfg	-	23	9								10 384
333	Machinery mfg	-	7	4								
3331	Agriculture, construction, & mining machinery mfg....	-	1	1								
33311	Agricultural implement mfg	-	1	1								
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1								
3339	Other general-purpose machinery mfg	-	3	2								
33391	Pump & compressor mfg	-	2	2								
333912	Air & gas compressor mfg	-	2	2								
335	Electrical equipment, appliance, & component mfg	-	3	2								
3352	Household appliance mfg..	-	1	1								
33522	Major appliance mfg	-	1	1								
335228	Other major household appliance mfg	-	1	1								
336	Transportation equipment mfg	-	6	4	1 058	31 986	734	1 744	18 538	106 460	137 232	239 088
3363	Motor vehicle parts mfg ...	-	5	3								
JEFFERSON CITY, TN												
31-33	Manufacturing	1	15	8	1 250	22 279	939	1 523	14 906	51 827	51 447	102 217
JOHNSON CITY, TN *												
31-33	Manufacturing	-	101	58	8 801	211 458	7 022	13 775	146 079	444 653	625 667	1 074 052
313	Textile mills	-	4	3								
3132	Fabric mills	-	1	1								
31321	Broadwoven fabric mills ..	-	1	1								
313210	Broadwoven fabric mills	-	1	1								
323	Printing & related support activities.....	-	14	7								
3231	Printing & related support activities.....	-	14	7								
32311	Printing	-	12	7								
323117	Book printing.....	-	3	3								
332	Fabricated metal product mfg	-	13	8								
333	Machinery mfg	-	10	4								
334	Computer & electronic product mfg	-	5	3								

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	JOHNSON CITY, TN *— Con.													
	Manufacturing— Con.													
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D	
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D	
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D	
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	-	7	6	f	D	D	D	D	D	D	D	D	
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	4	f	D	D	D	D	D	D	D	D	
33712	Household & institutional furniture mfg	-	3	3	f	D	D	D	D	D	D	D	D	
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D	
	KINGSPORT, TN *													
31-33	Manufacturing	-	61	17	j	D	D	D	D	D	D	D	293 291	
313	Textile mills	-	2	1	f	D	D	D	D	D	D	D	D	
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D	
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D	
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D	
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D	
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D	
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities.....	-	16	3	g	D	D	D	D	D	D	D	D	
3231	Printing & related support activities	-	16	3	g	D	D	D	D	D	D	D	D	
32311	Printing	-	15	3	g	D	D	D	D	D	D	D	D	
323117	Book printing.....	-	2	2	g	D	D	D	D	D	D	D	D	
325	Chemical mfg	-	6	2	j	D	D	D	D	D	D	D	D	
3251	Basic chemical mfg	-	4	1	j	D	D	D	D	D	D	D	D	
32519	Other basic organic chemical mfg	-	1	1	j	D	D	D	D	D	D	D	D	
325199	All other basic organic chemical mfg	-	1	1	j	D	D	D	D	D	D	D	D	
3259	Other chemical product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
32592	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D	
325920	Explosives mfg	-	1	1	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	8	3	f	D	D	D	D	D	D	D	D	
	KNOXVILLE, TN													
31-33	Manufacturing	1	318	110		14 827	394 454	11 352	22 240	253 724	1 060 551	1 348 860	2 429 886	77 686
311	Food mfg	-	19	13		1 689	37 772	941	1 839	17 201	129 935	103 270	232 623	D
3118	Bakeries & tortilla mfg	-	7	6		896	19 826	327	623	6 019	49 162	17 924	67 061	D
31181	Bread & bakery product mfg	-	7	6		896	19 826	327	623	6 019	49 162	17 924	67 061	D
311812	Commercial bakeries ..	-	5	5	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	1	11	7	h	D	D	D	D	D	D	D	D	1 162
3152	Cut & sew apparel mfg	1	8	6	h	D	D	D	D	D	D	D	D	1 162
31522	Men's & boys' cut & sew apparel mfg	4	5	5	g	D	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	9	3	3	f	D	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	69	15		1 283	35 956	983	1 988	23 987	69 093	91 345	158 862	6 567
3231	Printing & related support activities.....	2	69	15		1 283	35 956	983	1 988	23 987	69 093	91 345	158 862	6 567
32311	Printing	2	63	14	g	D	D	D	D	D	D	D	D	D

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KNOXVILLE, TN—Con.													
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	14	7	544	15 962	441	882	11 296	49 872	37 771	86 253	4 797
332	Fabricated metal product mfg	—	52	20	1 646	46 304	1 358	2 494	32 582	104 350	111 318	215 415	5 390
3323	Architectural & structural metals mfg	—	20	9	665	19 249	522	894	11 561	28 230	39 468	67 253	D
33231	Plate work & fabricated structural product mfg ..	—	13	7	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	11	6	f	D	D	D	D	D	D	D	446
334	Computer & electronic product mfg	—	13	2	665	24 590	419	812	9 786	31 504	78 003	111 947	D
3343	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	5	12	6	1 620	48 552	1 237	2 521	30 330	67 946	215 856	287 830	15 699
3363	Motor vehicle parts mfg ...	6	9	5	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	32	5	1 380	34 839	968	1 905	18 753	82 867	47 051	139 806	D
3399	Other miscellaneous mfg ..	—	16	3	g	D	D	D	D	D	D	D	D
33995	Sign mfg	—	11	2	f	D	D	D	D	D	D	D	D
339950	Sign mfg	—	11	2	f	D	D	D	D	D	D	D	D
LAFAYETTE, TN													
31-33	Manufacturing	—	17	8	942	18 698	826	1 462	14 689	16 319	35 762	53 356	3 762
LA VERGNE, TN													
31-33	Manufacturing	—	51	22	h	D	D	D	D	D	D	D	39 424
326	Plastics & rubber products mfg	—	7	3	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	3	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	—	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	—	1	1	g	D	D	D	D	D	D	D	D
LAWRENCEBURG, TN													
31-33	Manufacturing	—	25	12	4 578	129 249	4 123	8 465	109 678	339 631	619 955	957 201	18 956
327	Nonmetallic mineral product mfg	—	3	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	2	1	h	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	—	1	1	h	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	1	1	h	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LEBANON, TN													
31-33	Manufacturing	-	64	28	4 588	134 198	3 321	6 723	88 756	318 155	700 852	1 008 500	29 931
332	Fabricated metal product mfg	-	11	6	945	21 459	564	1 130	12 375	62 227	50 897	111 102	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	7	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
LENOIR CITY, TN													
31-33	Manufacturing	-	17	8	906	25 199	730	1 461	18 207	87 692	53 331	139 184	13 622
LEWISBURG, TN													
31-33	Manufacturing	-	40	26	i	D	D	D	D	D	D	D	49 344
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	5	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	2	2	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	5	5	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	5	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	3	3	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LEXINGTON, TN													
31-33	Manufacturing	-	27	15	3 916	94 463	3 209	6 813	73 220	243 646	441 591	690 055	D
332	Fabricated metal product mfg	-	8	5	g	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	g	D	D	D	D	D	D	D	D
LIVINGSTON, TN													
31-33	Manufacturing	1	22	11	1 187	22 904	1 010	1 854	17 042	47 071	76 379	123 693	D
LOUDON, TN													
31-33	Manufacturing	-	16	10	1 891	58 283	1 611	3 758	45 817	346 171	268 234	613 271	13 372
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCKENZIE, TN *													
31-33	Manufacturing	1	15	10	1 635	33 519	1 401	2 734	26 645	86 650	88 021	172 656	3 706
332	Fabricated metal product mfg	-	5	3	619	12 469	515	1 014	9 485	42 090	17 785	60 872	D
MCMINNVILLE, TN													
31-33	Manufacturing	-	29	16	3 456	90 612	2 856	5 659	71 158	218 274	179 170	395 490	13 318
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
MANCHESTER, TN													
31-33	Manufacturing	-	15	10	g	D	D	D	D	D	D	D	D
MARTIN, TN													
31-33	Manufacturing	-	9	4	g	D	D	D	D	D	D	D	2 810
333	Machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARYVILLE, TN													
31-33	Manufacturing	-	32	9	2 857	98 961	2 210	4 719	71 554	523 202	379 614	897 325	26 302
326	Plastics & rubber products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
MEMPHIS, TN													
31-33	Manufacturing	-	688	271	32 938	1 104 769	22 128	43 870	618 176	3 593 510	5 240 104	8 888 525	343 594
311	Food mfg	1	42	22	3 765	141 220	2 327	4 775	85 611	541 157	871 158	1 413 973	D
3112	Grain & oilseed milling	-	4	4	g	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	-	3	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	14	5	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	13	5	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	5	1 461	49 244	655	1 193	21 472	119 305	53 765	172 981	D
321	Wood product mfg	3	31	13	951	21 169	826	1 645	16 446	41 085	47 770	90 280	2 456
3219	Other wood product mfg ...	3	24	11	f	D	D	D	D	D	D	D	D
32191	Millwork	3	11	7	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	3	7	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	23	19	3 343	114 162	2 426	5 256	68 110	259 903	316 823	576 554	D
3221	Pulp, paper, & paperboard mills	-	4	4	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	19	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	12	9	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	7	5	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	128	32	2 786	90 161	2 080	3 925	57 007	188 697	126 227	313 935	13 342
3231	Printing & related support activities	2	128	32	2 786	90 161	2 080	3 925	57 007	188 697	126 227	313 935	13 342
32311	Printing	2	106	26	2 449	77 237	1 825	3 401	49 997	167 235	121 076	287 264	D
323110	Commercial lithographic printing ..	2	54	17	1 362	41 861	1 039	1 839	27 030	84 637	53 690	137 291	7 112
324	Petroleum & coal products mfg	-	10	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	10	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	58	30	5 473	197 583	2 827	5 287	79 829	1 025 876	610 009	1 636 508	117 970
3251	Basic chemical mfg	-	8	5	g	D	D	D	D	D	D	D	86 265
32519	Other basic organic chemical mfg	-	6	4	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	7	4	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	7	4	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	1	4	3	g	D	D	D	D	D	D	D	14 448
3255	Paint, coating, & adhesive mfg	1	12	8	723	24 746	382	758	9 447	75 585	173 206	250 999	5 448
32551	Paint & coating mfg	2	7	6	f	D	D	D	D	D	D	D	4 943
325510	Paint & coating mfg ...	2	7	6	f	D	D	D	D	D	D	D	4 943
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	13	7	f	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	4	10	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	18	10	759	24 404	581	1 312	17 157	69 436	86 237	158 086	2 444
3261	Plastics product mfg	-	13	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MEMPHIS, TN—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	3	29	12	735	22 305	495	927	12 481	51 876	54 983	106 517	4 777
3273	Cement & concrete product mfg	4	12	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	111	47	3 325	99 138	2 571	5 600	65 268	208 652	255 764	462 802	9 394
3323	Architectural & structural metals mfg	—	36	21	1 502	39 214	1 090	2 279	23 306	82 141	99 170	182 288	2 798
33232	Ornamental & architectural metal products mfg	—	23	13	1 095	26 933	803	1 592	15 914	54 245	61 834	116 824	2 017
332322	Sheet metal work mfg	—	12	7	595	15 926	470	923	10 624	35 100	35 755	71 619	1 154
333	Machinery mfg	—	32	13	1 802	67 773	1 334	2 831	40 691	150 775	220 733	370 545	4 672
3339	Other general-purpose machinery mfg	—	18	8	1 064	44 060	752	1 736	24 974	76 866	185 299	261 369	3 161
33392	Material handling equipment mfg	—	9	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	18	8	2 220	71 674	1 580	3 141	42 104	172 609	528 616	704 792	20 158
3343	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	15	8	1 338	39 146	681	1 561	22 285	145 957	129 783	270 355	D
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	17	7	677	18 327	507	860	9 458	59 261	48 692	100 983	D
337	Furniture & related product mfg	1	47	15	955	21 866	747	1 413	14 666	51 399	46 288	97 636	952
339	Miscellaneous mfg	—	64	13	3 004	115 615	1 830	2 699	49 717	341 196	164 597	565 076	25 871
3391	Medical equipment & supplies mfg	—	32	6	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	32	6	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	4	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	5	32	7	f	D	D	D	D	D	D	D	D
	MILAN, TN												
31-33	Manufacturing	2	20	9	1 674	42 563	1 250	2 423	31 629	147 289	120 473	268 721	8 528
332	Fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	1	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	1	1	f	D	D	D	D	D	D	D	D
	MONTEREY, TN												
31-33	Manufacturing	—	4	3	g	D	D	D	D	D	D	D	D
311	Food mfg	—	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MORRISTOWN, TN *													
31-33	Manufacturing	1	92	60	13 343	334 744	11 111	21 511	244 117	896 655	969 995	1 855 707	94 351
311	Food mfg	9	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	2	10	7	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	6	766	21 756	490	921	12 445	62 515	87 357	144 556	5 800
3222	Converted paper product mfg	—	6	6	766	21 756	490	921	12 445	62 515	87 357	144 556	5 800
326	Plastics & rubber products mfg	4	10	10	766	19 813	661	1 472	14 135	48 470	60 362	104 840	6 346
3261	Plastics product mfg	4	10	10	766	19 813	661	1 472	14 135	48 470	60 362	104 840	6 346
332	Fabricated metal product mfg	—	11	6	855	25 625	749	1 408	20 011	64 707	34 336	96 622	D
333	Machinery mfg	—	7	4	702	22 781	477	749	10 869	43 300	93 259	137 982	11 162
336	Transportation equipment mfg	—	3	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	—	1	1	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	15	9	5 070	106 806	4 558	9 109	83 436	246 311	269 507	513 083	13 770
3371	Household & institutional furniture & kitchen cabinet mfg	—	11	8	i	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	8	6	h	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	—	3	1	h	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	4	4	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	8	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	4	2	f	D	D	D	D	D	D	D	D
MOUNT JULIET, TN													
31-33	Manufacturing	1	30	8	769	22 580	527	1 080	13 465	33 672	64 827	98 238	2 505
MOUNT PLEASANT, TN													
31-33	Manufacturing	—	14	9	f	D	D	D	D	D	D	D	D
MURFREESBORO, TN													
31-33	Manufacturing	—	87	37	5 660	170 762	4 359	8 943	117 465	661 302	755 816	1 415 486	D
311	Food mfg	—	6	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	4	3	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	2	2	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	—	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	8	6	1 110	33 504	884	1 625	22 277	84 448	201 263	288 167	D
3363	Motor vehicle parts mfg ...	—	7	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	6	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	4	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NASHVILLE-DAVIDSON, TN (CC) *												
31-33	Manufacturing	1	752	261	31 716	1 099 974	23 000	46 213	688 576	3 419 602	3 334 852	6 721 810	213 969
311	Food mfg	3	49	18	2 557	73 202	1 500	2 958	37 033	238 686	487 756	721 652	D
3115	Dairy product mfg	3	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	3	3	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	4	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
31161	Animal slaughtering & processing	-	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
3118	Bakeries & tortilla mfg	4	16	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	8	8	5	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	7	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	6	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	4	5	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	7	7	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	-	29	8	1 408	30 590	1 108	2 041	20 384	98 518	71 423	172 405	D
3141	Textile furnishings mills	-	12	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	10	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	-	17	6	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	12	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	-	11	4	626	11 727	453	663	7 270	22 904	30 523	55 008	D
321	Wood product mfg	-	17	6	756	17 071	658	1 278	13 555	83 438	145 551	228 806	D
3219	Other wood product mfg	-	15	6	f	D	D	D	D	D	D	D	D
32191	Millwork	-	7	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D
3222	Converted paper product mfg	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D
323	Printing & related support activities	2	185	60	5 181	178 380	3 954	8 106	113 644	319 033	194 667	513 332	22 826
3231	Printing & related support activities	2	185	60	5 181	178 380	3 954	8 106	113 644	319 033	194 667	513 332	22 826
32311	Printing	1	142	44	3 628	120 993	2 749	5 496	74 035	218 115	157 675	375 832	16 722
323110	Commercial lithographic printing	1	70	29	2 457	88 177	1 919	3 768	54 916	154 490	113 144	267 071	10 334
32312	Support activities for printing	4	43	16	1 553	57 387	1 205	2 610	39 609	100 918	36 992	137 500	6 104
323121	Tradebinding & related work	6	14	4	f	D	D	D	D	D	D	D	D
323122	Prepress services	2	29	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	31	8	817	29 046	539	1 046	18 227	126 171	167 652	296 614	D
326	Plastics & rubber products mfg	1	32	15	1 390	35 200	997	1 741	19 328	136 413	151 369	286 485	D
3261	Plastics product mfg	-	27	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	16	9	637	13 978	535	911	9 625	36 776	34 297	71 273	D
326199	All other plastics product mfg	2	13	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	32	12	2 285	130 790	1 932	4 502	108 035	276 186	184 859	461 526	19 603
3272	Glass & glass product mfg	-	7	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	7	3	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	1	1	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	19	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	93	35	3 715	106 955	2 884	5 714	71 227	229 362	202 242	427 281	15 133
3323	Architectural & structural metals mfg	1	23	6	718	20 929	472	917	10 993	52 285	58 764	110 077	3 407
33232	Ornamental & architectural metal products mfg	1	10	5	551	16 091	364	714	8 590	40 421	39 503	78 867	D
3324	Boiler, tank, & shipping container mfg	-	2	2	g	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	-	1	1	g	D	D	D	D	D	D	D	D
332439	Other metal container mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	NASHVILLE-DAVIDSON, TN (CC) * —Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	45	20	1 967	91 656	1 161	2 508	41 847	152 451	142 573	296 553	10 118
3335	Metalworking machinery mfg	—	20	10	1 423	74 064	837	1 856	32 881	119 070	98 176	219 212	8 948
33351	Metalworking machinery mfg	—	20	10	1 423	74 064	837	1 856	32 881	119 070	98 176	219 212	8 948
333518	Other metalworking machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	28	9	f	D	D	D	D	D	D	D	12 650
3346	Mfg & reproducing magnetic & optical media	1	14	5	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	1	14	5	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	1	14	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	22	11	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	50	16	829	20 482	647	1 193	13 106	39 892	44 184	84 665	1 611
339	Miscellaneous mfg	2	71	10	1 309	31 893	1 004	2 036	20 147	69 449	53 042	120 603	D
3399	Other miscellaneous mfg	1	48	8	1 140	27 383	884	1 829	17 334	59 151	47 392	104 504	D
33999	All other miscellaneous mfg	—	15	5	f	D	D	D	D	D	D	D	D
	NASHVILLE-DAVIDSON (BALANCE), TN *												
31-33	Manufacturing	1	721	253	k	D	D	D	D	D	D	D	D
311	Food mfg	3	47	18	h	D	D	D	D	D	D	D	D
3115	Dairy product mfg	3	3	3	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	3	3	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	4	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
31161	Animal slaughtering & processing	—	10	4	538	14 361	413	617	9 313	47 954	177 847	221 236	2 281
3118	Bakeries & tortilla mfg	4	15	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	8	8	5	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	7	5	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	4	6	4	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	4	5	3	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	—	7	7	g	D	D	D	D	D	D	D	D
3132	Fabric mills	—	2	2	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	2	2	g	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	—	2	2	g	D	D	D	D	D	D	D	D
314	Textile product mills	—	29	8	1 408	30 590	1 108	2 041	20 384	98 518	71 423	172 405	D
3141	Textile furnishings mills	—	12	2	f	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	10	1	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	2	1	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	—	17	6	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	—	12	4	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	—	11	4	626	11 727	453	663	7 270	22 904	30 523	55 008	D
321	Wood product mfg	—	16	5	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	14	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D
3222	Converted paper product mfg	1	11	8	826	24 067	666	1 501	15 498	72 386	69 400	141 470	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NASHVILLE-DAVIDSON (BALANCE), TN *—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	2	176	58	5 040	174 736	3 860	7 908	111 626	313 942	188 910	502 305	22 696
3231	Printing & related support activities.....	2	176	58	5 040	174 736	3 860	7 908	111 626	313 942	188 910	502 305	22 696
32311	Printing.....	1	135	42	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	69	29	g	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	4	41	16	g	D	D	D	D	D	D	D	D
323121	Tradebinding & related work.....	6	12	4	f	D	D	D	D	D	D	D	2 986
323122	Prepress services.....	2	29	12	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	—	31	8	817	29 046	539	1 046	18 227	126 171	167 652	296 614	D
326	Plastics & rubber products mfg.....	1	32	15	1 390	35 200	997	1 741	19 328	136 413	151 369	286 485	D
3261	Plastics product mfg.....	—	27	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	16	9	637	13 978	535	911	9 625	36 776	34 297	71 273	D
326199	All other plastics product mfg.....	2	13	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	—	32	12	2 285	130 790	1 932	4 502	108 035	276 186	184 859	461 526	19 603
3272	Glass & glass product mfg.....	—	7	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	7	3	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	1	19	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	91	35	h	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	1	22	6	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg.....	1	10	5	551	16 091	364	714	8 590	40 421	39 503	78 867	D
3324	Boiler, tank, & shipping container mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
332439	Other metal container mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	40	19	g	D	D	D	D	D	D	D	9 881
3335	Metalworking machinery mfg.....	1	17	9	g	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg.....	1	17	9	g	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	3	27	8	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	1	14	5	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media ..	1	14	5	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	1	14	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	20	9	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	48	16	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	66	9	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg.....	2	44	7	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	—	13	4	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NEWBERN, TN													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	
NEWPORT, TN													
31-33	Manufacturing	3	18	9	1 718	42 636	1 310	2 685	30 169	94 822	158 691	247 359	11 779
312	Beverage & tobacco product mfg	9	1	1	f	D	D	D	D	D	D	D	
3121	Beverage mfg	9	1	1	f	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg	9	1	1	f	D	D	D	D	D	D	D	
312111	Soft drink mfg	9	1	1	f	D	D	D	D	D	D	D	
OAK RIDGE, TN *													
31-33	Manufacturing	-	59	21	5 669	247 306	2 277	4 654	77 985	774 483	120 530	897 286	10 950
325	Chemical mfg	-	4	1	h	D	D	D	D	D	D	D	
3251	Basic chemical mfg	-	2	1	h	D	D	D	D	D	D	D	
32518	Other basic inorganic chemical mfg	-	1	1	h	D	D	D	D	D	D	D	
325188	All other basic inorganic chemical mfg	-	1	1	h	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	22	6	567	23 055	366	820	13 861	51 169	16 065	65 998	D
334	Computer & electronic product mfg	-	11	7	f	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	-	10	6	f	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	-	10	6	f	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	-	1	1	f	D	D	D	D	D	D	D	
ONEIDA, TN													
31-33	Manufacturing	-	15	4	1 247	27 436	1 024	2 142	16 480	75 039	84 095	155 257	5 627
321	Wood product mfg	-	3	2	f	D	D	D	D	D	D	D	
3219	Other wood product mfg	-	2	2	f	D	D	D	D	D	D	D	
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	
321918	Other millwork (including flooring)	-	1	1	f	D	D	D	D	D	D	D	
PARIS, TN													
31-33	Manufacturing	-	33	12	2 187	51 362	1 758	3 596	34 622	142 382	222 622	369 972	11 774
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	
3262	Rubber product mfg	-	2	2	f	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	-	2	1	f	D	D	D	D	D	D	D	
3353	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	
PORTLAND, TN													
31-33	Manufacturing	-	38	23	3 573	95 440	2 727	5 359	64 746	240 413	316 869	557 035	8 730
332	Fabricated metal product mfg	-	8	7	1 304	37 273	925	1 966	22 705	105 290	107 847	211 369	D
3323	Architectural & structural metals mfg	-	2	2	f	D	D	D	D	D	D	D	
33231	Plate work & fabricated structural product mfg	-	2	2	f	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	6	4	975	24 874	842	1 597	21 082	48 631	134 468	184 288	D
3363	Motor vehicle parts mfg ...	-	5	4	f	D	D	D	D	D	D	D	
33637	Motor vehicle metal stamping	-	3	2	f	D	D	D	D	D	D	D	
336370	Motor vehicle metal stamping	-	3	2	f	D	D	D	D	D	D	D	

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PULASKI, TN													
31-33	Manufacturing	-	30	13	2 513	75 556	2 166	4 347	56 331	299 517	228 795	530 645	11 912
331	Primary metal mfg	-	4	2	505	17 624	401	815	12 871	58 488	66 431	124 833	D
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
RED BANK, TN													
31-33	Manufacturing	-	16	6	541	19 484	383	477	5 436	52 054	24 598	76 143	D
RIPLEY, TN													
31-33	Manufacturing	-	10	8	2 339	47 657	2 174	4 196	39 167	117 722	102 896	217 966	5 951
321	Wood product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
ROCKWOOD, TN													
31-33	Manufacturing	-	10	7	586	17 770	460	885	11 453	63 479	49 586	111 384	7 540
ROGERSVILLE, TN													
31-33	Manufacturing	-	12	5	1 123	42 160	946	2 160	32 856	123 847	98 897	233 672	13 518
332	Fabricated metal product mfg	-	3	1	f	D	D	D	D	D	D	D	D
SAVANNAH, TN													
31-33	Manufacturing	2	20	10	1 047	17 057	878	1 443	12 530	38 634	53 225	90 678	1 723
SELMER, TN													
31-33	Manufacturing	2	17	11	1 053	25 114	890	1 723	19 537	78 676	61 695	139 219	4 544
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
SEVIERVILLE, TN													
31-33	Manufacturing	1	33	7	1 308	35 531	986	1 874	22 700	70 850	58 494	130 259	5 412
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHELBYVILLE, TN													
31-33	Manufacturing	—	45	19	5 440	143 711	4 583	8 787	110 276	512 056	793 578	1 288 658	D
311	Food mfg	—	2	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	4	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	9	6	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	—	9	6	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	—	5	5	1 457	32 060	1 154	1 775	21 757	127 106	44 730	168 769	D
339941	Pen & mechanical pencil mfg	—	1	1	f	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	—	4	4	f	D	D	D	D	D	D	D	D
SMITHVILLE, TN													
31-33	Manufacturing	1	18	13	2 541	61 628	1 924	4 049	36 427	132 657	186 363	318 134	D
336	Transportation equipment mfg	1	4	4	1 400	37 995	969	2 171	20 143	62 810	124 271	189 456	D
3363	Motor vehicle parts mfg	1	4	4	1 400	37 995	969	2 171	20 143	62 810	124 271	189 456	D
33634	Motor vehicle brake system mfg	—	2	2	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	—	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	2	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	2	2	2	f	D	D	D	D	D	D	D	D
SMYRNA, TN													
31-33	Manufacturing	—	21	9	i	D	D	D	D	D	D	D	D
325	Chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	1	1	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	1	1	i	D	D	D	D	D	D	D	D
336111	Automobile mfg	—	1	1	i	D	D	D	D	D	D	D	D
SODDY-DAISY, TN													
31-33	Manufacturing	4	19	8	500	11 840	424	764	7 237	40 240	30 404	70 203	894
SOUTH FULTON, TN													
31-33	Manufacturing	—	6	3	631	8 316	542	986	6 284	18 579	38 189	49 207	974
315	Apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
SOUTH PITTSBURG, TN													
31-33	Manufacturing	—	8	5	891	20 039	831	1 365	15 879	31 025	46 382	77 163	1 159

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPARTA, TN													
31-33	Manufacturing	-	19	8	2 006	49 089	1 786	3 600	40 394	122 157	76 493	193 442	10 218
334	Computer & electronic product mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
SPRINGFIELD, TN													
31-33	Manufacturing	-	40	25	4 224	106 550	3 294	6 330	69 939	243 246	384 973	619 557	D
335	Electrical equipment, appliance, & component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
SWEETWATER, TN *													
31-33	Manufacturing	1	24	10	1 046	27 412	721	1 419	16 104	76 407	70 955	147 810	3 795
TRENTON, TN													
31-33	Manufacturing	-	13	5	658	14 013	571	947	10 841	30 755	29 995	60 387	2 222
TULLAHOMA, TN *													
31-33	Manufacturing	-	35	21	2 457	72 967	1 867	3 615	41 765	202 252	235 543	431 064	10 910
UNION CITY, TN													
31-33	Manufacturing	-	21	10	4 141	165 690	3 524	8 160	135 069	595 958	392 190	975 895	9 689
326	Plastics & rubber products mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	-	1	1	h	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	-	1	1	f	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WINCHESTER, TN													
31-33	Manufacturing	-	22	10	1 461	41 922	1 189	2 625	30 360	127 247	183 341	310 779	7 232
326	Plastics & rubber products mfg.....	-	6	3	725	21 415	533	1 079	13 164	41 163	45 051	86 416	5 949
3262	Rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use.....	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
TENNESSEE		TENNESSEE—Con.	
Companies ¹	number.. 6 728	Quantity of electricity purchased for heat and power	1,000 kWh.. 23 976 156
All establishments	number.. 7 407	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 2 234 003
Establishments with 1 to 19 employees	number.. 4 501	Total value of shipments	\$1,000.. 98 503 080
Establishments with 20 to 99 employees	number.. 1 835	Value of resales	\$1,000.. 3 938 349
Establishments with 100 employees or more	number.. 1 071	Value added	\$1,000.. 44 355 170
All employees	number.. 483 823	Total inventories, beginning of year	\$1,000.. 9 764 787
Total compensation ²	\$1,000.. 18 239 681	Finished goods inventories, beginning of year	\$1,000.. 4 414 259
Annual payroll	\$1,000.. 14 351 915	Work-in-process inventories, beginning of year	\$1,000.. 1 814 197
Total fringe benefits	\$1,000.. 3 887 766	Materials and supplies inventories, beginning of year	\$1,000.. 3 536 331
Production workers, average for year	number.. 375 121	Total inventories, end of year	\$1,000.. 9 992 745
Production workers on March 12	number.. 375 158	Finished goods inventories, end of year	\$1,000.. 4 501 015
Production workers on May 12	number.. 376 859	Work-in-process inventories, end of year	\$1,000.. 1 868 897
Production workers on August 12	number.. 374 260	Materials and supplies inventories, end of year	\$1,000.. 3 622 833
Production workers on November 12	number.. 374 207	Gross book value of total assets at beginning of year	\$1,000.. 41 854 027
Production-worker hours	1,000.. 743 819	Total capital expenditures (new and used)	\$1,000.. 3 871 129
Production-worker wages	\$1,000.. 9 468 824	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 494 703
Total cost of materials	\$1,000.. 54 211 506	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 3 376 426
Cost of materials, parts, containers, etc., consumed	\$1,000.. 48 394 389	Total retirements ²	\$1,000.. 1 098 572
Cost of resales	\$1,000.. 3 131 997	Gross book value of total assets at end of year	\$1,000.. 44 626 584
Cost of fuels	\$1,000.. 629 762	Total depreciation during year ²	\$1,000.. 2 761 486
Cost of purchased electricity	\$1,000.. 1 006 853	Total rental payments ²	\$1,000.. 661 502
Cost of contract work	\$1,000.. 1 048 505	Buildings and other structures rental payments ²	\$1,000.. 260 149
		Machinery and equipment rental payments ²	\$1,000.. 401 353

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stackers Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

TENNESSEE

Belle Meade. See “Nashville-Davidson (consolidated city).”

Chattanooga is in Hamilton and Marion Counties; it annexed into Marion County in April 1994.

Farragut is in Knox and Loudon Counties.

Forest Hills. See “Nashville-Davidson (consolidated city).”

Goodlettsville is in Davidson and Sumner Counties; see “Nashville-Davidson (consolidated city).”

Harriman is in Morgan and Roane Counties.

Humboldt is in Gibson and Madison Counties.

Johnson City is in Carter, Sullivan, and Washington Counties.

Kingsport is in Hawkins and Sullivan Counties.

McKenzie is in Carroll, Henry, and Weakley Counties.

Millersville is in Robertson and Sumner Counties.

Morristown is in Hamblen and Jefferson Counties; it annexed into Jefferson County in July 1995.

Nashville-Davidson (balance). See “Nashville-Davidson (consolidated city).”

Nashville-Davidson (consolidated city). The “Metropolitan Government of Nashville and Davidson County” is coextensive with Davidson County. It includes Belle Meade, Forest Hills, Goodlettsville (part in Davidson County), and Oak Hill, which are tabulated separately. “Nashville-Davidson (balance),” which is a place equivalent, includes Berry Hill, Lakewood, and Ridgetop (part in Davidson County), which are not populous enough for separate tabulation.

Oak Hill. See “Nashville-Davidson (consolidated city).”

Oak Ridge is in Anderson and Roane Counties.

Oliver Springs is in Anderson, Morgan, and Roane Counties.

Spring Hill is in Maury and Williamson Counties.

Sweetwater is in McMinn and Monroe Counties.

Tullahoma is in Coffee and Franklin Counties.

White House is in Robertson and Sumner Counties.

Appendix E. Metropolitan Areas

TENNESSEE

Chattanooga, TN—GA MSA

Catoosa County, GA
Dade County, GA
Walker County, GA
Hamilton County, TN
Marion County, TN

Clarksville—Hopkinsville, TN—KY MSA

Christian County, KY
Montgomery County, TN

Jackson, TN MSA

Chester County, TN
Madison County, TN

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol, VA (IC)

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Knox County, TN
Loudon County, TN
Sevier County, TN
Union County, TN

Memphis, TN—AR—MS MSA

Crittenden County, AR
DeSoto County, MS
Fayette County, TN
Shelby County, TN
Tipton County, TN

Nashville, TN MSA

Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Texas

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TEXAS													
31-33	Manufacturing	-	21 808	6 788	959 665	32 760 820	663 929	1 342 337	18 163 055	129 390 041	168 557 010	297 657 003	12 509 148
311	Food mfg.....	-	1 562	485	83 716	2 100 803	63 223	135 646	1 362 738	10 023 561	16 322 801	26 313 112	558 930
3111	Animal food mfg.....	1	129	55	4 114	121 121	2 914	6 398	82 098	655 875	1 434 457	2 070 344	40 524
31111	Animal food mfg.....	1	129	55	4 114	121 121	2 914	6 398	82 098	655 875	1 434 457	2 070 344	40 524
311111	Dog & cat food mfg...	2	14	6	1 018	22 211	845	2 043	16 743	120 659	162 405	283 794	4 308
311119	Other animal food mfg.....	1	115	49	3 096	98 910	2 069	4 355	65 355	535 216	1 272 052	1 786 550	36 216
3112	Grain & oilseed milling....	-	50	33	3 182	93 425	2 408	5 118	60 672	410 569	1 264 321	1 651 717	71 585
31121	Flour milling & malt mfg..	-	26	17	1 634	47 860	1 200	2 503	29 149	199 340	626 819	808 643	10 213
311211	Flour milling.....	-	17	11	1 191	32 266	842	1 670	17 722	130 652	307 905	438 268	8 282
311212	Rice milling.....	-	9	6	443	15 594	358	833	11 427	68 688	318 914	370 375	1 931
31122	Starch & vegetable fats & oils mfg.....	-	24	16	1 548	45 565	1 208	2 615	31 523	211 229	637 502	843 074	61 372
311221	Wet corn milling.....	-	2	1	c	D	D	D	D	D	D	D	D
311223	Other oilseed processing.....	-	13	10	f	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending.....	-	9	5	670	21 045	546	1 126	15 257	161 276	293 315	451 992	D
3113	Sugar & confectionery product mfg.....	-	83	16	2 747	101 728	2 209	4 319	63 928	764 261	575 621	1 327 394	35 844
31131	Sugar mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
311311	Sugarcane mills.....	-	1	1	c	D	D	D	D	D	D	D	D
311312	Cane sugar refining...	-	1	1	f	D	D	D	D	D	D	D	D
311313	Beet sugar mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	46	6	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	46	6	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	1	33	6	487	9 669	409	753	6 792	28 073	24 114	53 018	1 563
311340	Nonchocolate confectionery mfg...	1	33	6	487	9 669	409	753	6 792	28 073	24 114	53 018	1 563
3114	Fruit & vegetable preserving & specialty food mfg.....	2	96	42	7 463	167 281	6 333	13 143	126 635	931 821	692 093	1 633 493	44 803
31141	Frozen food mfg.....	4	29	17	3 822	68 112	3 424	6 884	55 586	185 959	179 350	373 526	14 395
311411	Frozen fruit, juice, & vegetable mfg.....	3	9	6	1 460	19 699	1 311	2 152	16 065	64 017	54 181	126 399	7 685
311412	Frozen specialty food mfg.....	4	20	11	2 362	48 413	2 113	4 732	39 521	121 942	125 169	247 127	6 710
31142	Fruit & vegetable canning, pickling, & drying.....	1	67	25	3 641	99 169	2 909	6 259	71 049	745 862	512 743	1 259 967	30 408
311421	Fruit & vegetable canning.....	3	46	19	g	D	D	D	D	D	D	D	D
311422	Specialty canning.....	1	15	5	1 510	51 917	1 283	2 719	40 749	578 777	266 176	845 155	18 861
311423	Dried & dehydrated food mfg.....	-	6	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	1	63	45	6 043	182 683	3 202	7 022	80 461	557 466	1 538 988	2 100 361	43 638
31151	Dairy product (except frozen) mfg.....	1	43	36	4 541	137 836	2 174	4 679	52 180	380 745	1 311 796	1 700 578	38 657
311511	Fluid milk mfg.....	1	29	26	3 923	122 573	1 655	3 553	41 661	347 781	1 037 787	1 385 777	31 761
311513	Cheese mfg.....	-	10	6	e	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	3	3	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	-	20	9	1 502	44 847	1 028	2 343	28 281	176 721	227 192	399 783	4 981
311520	Ice cream & frozen dessert mfg.....	-	20	9	1 502	44 847	1 028	2 343	28 281	176 721	227 192	399 783	4 981
3116	Meat product mfg.....	-	239	106	32 932	718 994	28 127	65 610	559 010	2 577 169	7 860 853	10 445 440	127 406
31161	Animal slaughtering & processing.....	-	239	106	32 932	718 994	28 127	65 610	559 010	2 577 169	7 860 853	10 445 440	127 406
311611	Animal (except poultry) slaughtering.....	-	102	30	14 055	298 860	12 321	29 268	242 379	794 135	5 250 447	6 046 518	59 406
311612	Meat processed from carcasses.....	-	99	49	7 296	183 950	6 036	12 852	124 195	1 094 099	1 475 356	2 570 434	36 365
311613	Rendering & meat byproduct processing.....	2	20	12	789	21 859	459	1 074	12 567	102 569	105 214	208 457	7 927
311615	Poultry processing....	-	18	15	10 792	214 325	9 311	22 416	179 869	586 366	1 029 836	1 620 031	23 708
3117	Seafood product preparation & packaging..	-	22	9	1 142	18 873	992	1 310	11 192	75 030	113 072	188 020	3 002
31171	Seafood product preparation & packaging.....	-	22	9	1 142	18 873	992	1 310	11 192	75 030	113 072	188 020	3 002
311712	Fresh & frozen seafood processing..	-	19	9	1 139	18 809	989	1 305	11 148	74 865	112 686	187 469	2 984

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	—	666	96	15 481	385 246	8 909	16 673	182 676	1 209 426	851 429	2 058 861	78 755
31181	Bread & bakery product mfg	—	553	64	11 877	299 031	6 199	11 463	126 364	807 927	552 109	1 359 648	42 372
311811	Retail bakeries	5	422	12	1 974	24 569	1 334	1 563	12 692	50 408	30 718	81 255	2 876
311812	Commercial bakeries	—	119	47	9 172	257 590	4 302	8 632	102 080	714 434	474 496	1 189 058	37 020
311813	Frozen cakes, pies, & other pastries mfg	—	12	5	731	16 872	563	1 268	11 592	43 085	46 895	89 335	2 476
31182	Cookie, cracker, & pasta mfg	—	43	14	1 691	51 384	1 317	2 774	35 503	297 547	227 173	522 849	27 455
311821	Cookie & cracker mfg	—	20	7	765	24 093	609	1 180	17 703	45 835	50 959	96 265	12 928
311822	Flour mixes & dough mfg from purchased flour	—	14	6	870	25 760	667	1 542	17 048	245 313	171 733	415 717	14 217
31183	Tortilla mfg	1	70	18	1 913	34 831	1 393	2 436	20 809	103 952	72 147	176 364	8 928
311830	Tortilla mfg	1	70	18	1 913	34 831	1 393	2 436	20 809	103 952	72 147	176 364	8 928
3119	Other food mfg	—	214	83	10 612	311 452	8 129	16 053	196 066	2 841 944	1 991 967	4 837 482	113 373
31191	Snack food mfg	—	54	20	3 122	97 393	2 559	5 564	60 489	598 176	473 114	1 068 825	33 975
311911	Roasted nuts & peanut butter mfg	2	8	6	525	10 382	436	913	7 268	25 428	79 195	102 902	682
311919	Other snack food mfg	—	46	14	2 597	87 011	2 123	4 651	53 221	572 748	393 919	965 923	33 293
31192	Coffee & tea mfg	—	10	5	1 350	57 252	1 064	2 526	42 059	445 609	537 498	990 709	27 405
311920	Coffee & tea mfg	—	10	5	1 350	57 252	1 064	2 526	42 059	445 609	537 498	990 709	27 405
31193	Flavoring syrup & concentrate mfg	—	11	5	e	D	D	D	D	D	D	D	7 441
311930	Flavoring syrup & concentrate mfg	—	11	5	e	D	D	D	D	D	D	D	7 441
31194	Seasoning & dressing mfg	—	31	15	2 133	72 416	1 486	2 710	41 734	423 964	436 970	859 494	28 568
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	16	7	1 208	42 704	918	1 490	26 803	298 110	249 490	547 669	21 638
311942	Spice & extract mfg	1	15	8	925	29 712	568	1 220	14 931	125 854	187 480	311 825	6 930
31199	All other food mfg	2	108	38	h	D	D	D	D	D	D	D	15 984
311991	Perishable prepared food mfg	1	44	19	g	D	D	D	D	D	D	D	7 807
311999	All other miscellaneous food mfg	2	64	19	1 405	30 443	1 144	2 012	20 686	115 286	142 129	257 338	8 177
312	Beverage & tobacco product mfg	—	134	56	11 611	393 200	5 441	10 393	173 870	2 454 696	2 491 331	4 953 713	223 966
3121	Beverage mfg	—	132	55	j	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	101	46	8 503	260 755	3 074	6 641	79 152	1 212 696	1 715 045	2 933 621	91 130
312111	Soft drink mfg	—	35	31	7 429	234 158	2 598	5 767	68 846	1 139 519	1 691 575	2 836 396	84 719
312112	Bottled water mfg	—	11	7	411	13 197	136	176	5 344	37 161	11 583	49 258	1 774
312113	Ice mfg	2	55	8	663	13 400	340	698	4 962	36 016	11 887	47 967	4 637
31212	Breweries	—	18	7	2 890	127 811	2 236	3 523	92 229	1 224 549	754 319	1 982 368	132 117
312120	Breweries	—	18	7	2 890	127 811	2 236	3 523	92 229	1 224 549	754 319	1 982 368	132 117
31213	Wineries	2	13	2	c	D	D	D	D	D	D	D	D
312130	Wineries	2	13	2	c	D	D	D	D	D	D	D	D
313	Textile mills	2	100	27	6 024	129 205	5 157	9 609	99 094	370 373	285 564	650 450	20 063
3132	Fabric mills	1	48	14	2 714	68 899	2 363	4 457	51 821	224 031	197 047	418 092	11 774
31321	Broadwoven fabric mills	—	32	8	2 189	57 520	1 931	3 659	44 136	181 373	160 669	339 530	7 517
313210	Broadwoven fabric mills	—	32	8	2 189	57 520	1 931	3 659	44 136	181 373	160 669	339 530	7 517
31322	Narrow fabric mills & schiffli machine embroidery	—	8	1	160	2 968	142	260	2 129	19 058	7 607	26 230	D
313221	Narrow fabric mills	—	4	1	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	7	4	3	248	5 361	203	353	3 827	15 031	18 375	33 357	1 900
313230	Nonwoven fabric mills	7	4	3	248	5 361	203	353	3 827	15 031	18 375	33 357	1 900
31324	Knit fabric mills	7	4	2	117	3 050	87	185	1 729	8 569	10 396	18 975	D
3133	Textile & fabric finishing & fabric coating mills	5	46	11	3 233	58 950	2 725	5 008	46 129	142 777	85 506	226 306	8 069
31331	Textile & fabric finishing mills	5	41	10	3 185	57 477	2 689	4 932	45 367	137 544	81 629	217 154	7 984
313311	Broadwoven fabric finishing mills	7	36	7	2 531	46 294	2 080	3 739	35 410	95 115	74 006	166 946	7 088
313312	Textile & fabric finishing mills	—	5	3	654	11 183	609	1 193	9 957	42 429	7 623	50 208	896

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
314	Textile product mills	1	414	95	9 512	162 892	7 620	13 604	107 256	346 746	397 181	732 619	15 856
3141	Textile furnishings mills	1	183	39	4 823	78 274	3 886	6 887	54 650	165 553	228 582	381 650	5 286
31412	Curtain & linen mills	—	176	39	4 786	77 538	3 854	6 834	54 114	163 592	225 502	376 609	5 168
314121	Curtain & drapery mills	—	133	15	2 646	43 871	1 990	3 530	27 489	70 700	103 815	171 540	1 978
314129	Other household textile product mills	—	43	24	2 140	33 667	1 864	3 304	26 625	92 892	121 687	205 069	3 190
3149	Other textile product mills ..	2	231	56	4 689	84 618	3 734	6 717	52 606	181 193	168 599	350 969	10 570
31491	Textile bag & canvas mills	2	100	17	1 655	27 787	1 240	2 110	15 541	52 219	53 861	109 008	2 968
314911	Textile bag mills	2	23	9	639	10 219	490	832	5 601	18 729	19 478	38 669	1 296
314912	Canvas & related product mills	3	77	8	1 016	17 568	750	1 278	9 940	33 490	34 383	70 339	1 672
31499	All other textile product mills	2	131	39	3 034	56 831	2 494	4 607	37 065	128 974	114 738	241 961	7 602
314991	Rope, cordage, & twine mills	2	19	3	209	4 486	162	295	2 913	9 210	9 017	18 135	1 945
314999	All other miscellaneous textile product mills ..	2	112	36	2 825	52 345	2 332	4 312	34 152	119 764	105 721	223 826	5 657
315	Apparel mfg	—	679	226	40 003	684 264	33 931	59 275	503 852	2 335 318	2 309 158	4 576 786	51 632
3151	Apparel knitting mills	—	9	3	g	D	D	D	D	D	D	D	1 152
31519	Other apparel knitting mills	—	8	3	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	8	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	538	188	33 733	562 806	28 874	49 705	425 740	1 957 014	1 975 267	3 868 389	40 152
31521	Cut & sew apparel contractors	5	280	52	5 733	83 682	5 318	9 124	72 719	146 070	32 765	171 895	4 944
315211	Men's & boys' cut & sew apparel contractors	2	18	7	1 449	23 447	1 292	2 408	19 908	35 895	10 140	45 276	1 641
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	262	45	4 284	60 235	4 026	6 716	52 811	110 175	22 625	126 619	3 303
31522	Men's & boys' cut & sew apparel mfg	—	81	57	15 770	267 006	13 838	23 403	213 710	1 173 901	1 168 297	2 294 148	13 650
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	12	7	f	D	D	D	D	D	D	D	778
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	8	11	6	435	7 730	314	408	5 799	12 276	22 887	34 266	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	27	23	10 331	188 181	9 569	16 316	158 500	953 238	979 676	1 910 803	10 655
315225	Men's & boys' cut & sew work clothing mfg	—	15	11	3 149	40 391	2 669	4 517	28 347	176 149	111 533	260 997	1 213
315228	Men's & boys' cut & sew other outerwear mfg	—	15	9	928	12 418	768	1 278	9 796	19 051	31 191	52 689	506
31523	Women's & girls' cut & sew apparel mfg	—	139	62	9 926	180 157	7 803	13 406	114 393	567 800	704 445	1 266 621	20 096
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	8	3	720	13 212	466	701	4 280	24 524	63 078	90 669	D
315232	Women's & girls' cut & sew blouse & shirt mfg	1	30	10	542	11 482	401	751	6 426	25 205	47 948	73 152	D
315233	Women's & girls' cut & sew dress mfg	2	30	8	1 562	26 599	777	1 093	11 892	52 082	80 013	130 690	2 301
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	32	19	2 151	37 211	1 931	3 539	27 380	82 843	86 623	166 983	1 039
315239	Women's & girls' cut & sew other outerwear mfg	—	39	22	4 951	91 653	4 228	7 322	64 415	383 146	426 783	805 127	15 215
31529	Other cut & sew apparel mfg	—	38	17	2 304	31 961	1 915	3 772	24 918	69 243	69 760	135 725	1 462
315291	Infants' cut & sew apparel mfg	—	3	3	1 120	16 958	958	2 055	13 304	43 961	41 182	81 802	836
315292	Fur & leather apparel mfg	1	6	2	205	2 825	171	325	2 296	5 445	5 420	10 991	54
315299	All other cut & sew apparel mfg	1	29	12	979	12 178	786	1 392	9 318	19 837	23 158	42 932	572
3159	Apparel accessories & other apparel mfg	1	132	35	h	D	D	D	D	D	D	D	10 328
31599	Apparel accessories & other apparel mfg	1	132	35	h	D	D	D	D	D	D	D	10 328
315991	Hat, cap, & millinery mfg	1	27	16	2 022	30 866	1 631	2 994	20 947	71 739	44 553	118 839	2 318
315993	Men's & boys' neckwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	1	101	17	2 287	55 352	1 541	2 906	25 176	218 449	110 630	332 006	7 972

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TEXAS—Con.												
	Manufacturing—Con.												
316	Leather & allied product mfg .	1	176	43	4 736	96 288	3 649	6 555	52 649	269 116	269 453	551 360	5 410
3161	Leather & hide tanning & finishing	2	23	7	559	11 999	468	762	9 040	66 537	50 975	116 817	1 208
31611	Leather & hide tanning & finishing	2	23	7	559	11 999	468	762	9 040	66 537	50 975	116 817	1 208
316110	Leather & hide tanning & finishing	2	23	7	559	11 999	468	762	9 040	66 537	50 975	116 817	1 208
3162	Footwear mfg	—	55	20	2 888	62 765	2 170	3 985	29 782	157 551	176 035	346 855	2 792
31621	Footwear mfg	—	55	20	2 888	62 765	2 170	3 985	29 782	157 551	176 035	346 855	2 792
316211	Rubber & plastics footwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	2	2	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	1	36	13	1 473	29 217	1 063	1 940	15 561	70 139	111 685	193 980	854
316214	Women's footwear (except athletic) mfg .	—	12	4	881	24 522	727	1 193	8 787	57 197	42 309	100 197	536
3169	Other leather & allied product mfg	3	98	16	1 289	21 524	1 011	1 808	13 827	45 028	42 443	87 688	1 410
31699	Other leather & allied product mfg	3	98	16	1 289	21 524	1 011	1 808	13 827	45 028	42 443	87 688	1 410
316991	Luggage mfg	7	14	2	230	3 979	185	324	2 322	9 410	7 606	16 810	285
316992	Women's handbag & purse mfg	3	7	2	136	2 753	63	120	962	4 472	5 510	9 945	141
316999	All other leather good mfg	1	66	12	853	13 804	703	1 255	9 843	29 357	27 469	57 170	842
321	Wood product mfg	1	757	272	29 601	695 318	25 181	50 873	515 108	1 584 245	2 828 540	4 383 130	135 073
3211	Sawmills & wood preservation	1	134	49	3 623	85 061	3 075	6 510	69 370	246 788	563 232	803 169	29 866
32111	Sawmills & wood preservation	1	134	49	3 623	85 061	3 075	6 510	69 370	246 788	563 232	803 169	29 866
321113	Sawmills	1	112	40	3 002	70 369	2 550	5 458	58 470	201 206	413 456	605 684	26 467
321114	Wood preservation	1	22	9	621	14 692	525	1 052	10 900	45 582	149 776	197 485	3 399
3212	Veneer, plywood, & engineered wood product mfg	—	70	41	6 105	176 459	5 132	12 060	134 610	332 442	678 410	1 000 173	44 533
32121	Veneer, plywood, & engineered wood product mfg	—	70	41	6 105	176 459	5 132	12 060	134 610	332 442	678 410	1 000 173	44 533
321212	Softwood veneer & plywood mfg	—	8	8	3 075	95 164	2 716	6 815	79 380	151 397	367 555	516 785	12 237
321214	Truss mfg	1	35	20	1 561	37 423	1 243	2 414	21 947	72 245	114 586	184 436	3 062
321219	Reconstituted wood product mfg	—	19	11	1 357	41 179	1 072	2 623	31 045	103 562	181 435	278 666	28 929
3219	Other wood product mfg	1	553	182	19 873	433 798	16 974	32 303	311 128	1 005 015	1 586 898	2 579 788	60 674
32191	Millwork	2	228	74	6 737	136 070	5 718	10 972	97 116	323 091	639 314	954 275	18 172
321911	Wood window & door mfg	3	92	29	3 045	59 916	2 493	4 859	40 218	154 687	258 869	413 894	8 721
321912	Cut stock, resawing lumber, & planing	1	40	18	1 448	29 195	1 278	2 444	21 584	74 525	239 462	310 339	4 941
321918	Other millwork (including flooring)	1	96	27	2 244	46 959	1 947	3 669	35 314	93 879	140 983	230 042	4 510
32192	Wood container & pallet mfg	2	141	49	3 250	63 027	2 859	5 597	47 110	113 181	168 765	283 020	7 072
321920	Wood container & pallet mfg	2	141	49	3 250	63 027	2 859	5 597	47 110	113 181	168 765	283 020	7 072
32199	All other wood product mfg	1	184	59	9 886	234 701	8 397	15 734	166 902	568 743	778 819	1 342 493	35 430
321991	Manufactured home (mobile home) mfg	—	27	27	7 267	186 090	6 224	11 738	132 306	455 839	654 461	1 106 183	28 323
321992	Prefabricated wood building mfg	5	27	6	548	12 814	424	889	7 783	26 425	38 667	65 243	1 111
321999	All other miscellaneous wood product mfg	3	130	26	2 071	35 797	1 749	3 107	26 813	86 479	85 691	171 067	5 996
322	Paper mfg	—	298	186	22 106	803 207	16 810	36 404	551 228	2 716 401	3 120 455	5 810 609	221 415
3221	Pulp, paper, & paperboard mills	—	13	12	5 684	290 476	4 385	9 499	216 806	816 379	1 079 508	1 884 549	83 197
32212	Paper mills	—	5	4	2 625	138 174	2 079	4 499	104 086	294 866	421 366	716 557	46 437
322121	Paper (except newsprint) mills	1	2	2	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	3	2	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	8	8	3 059	152 302	2 306	5 000	112 720	521 513	658 142	1 167 992	36 760
322130	Paperboard mills	—	8	8	3 059	152 302	2 306	5 000	112 720	521 513	658 142	1 167 992	36 760
3222	Converted paper product mfg	—	285	174	16 422	512 731	12 425	26 905	334 422	1 900 022	2 040 947	3 926 060	138 218
32221	Paperboard container mfg	1	155	122	10 862	333 088	8 138	17 697	208 557	774 692	1 241 919	2 011 340	73 497
322211	Corrugated & solid fiber box mfg	1	111	91	7 756	238 999	5 673	11 881	137 716	554 049	983 488	1 532 064	57 650
322212	Folding paperboard box mfg	1	23	16	1 426	41 155	1 100	2 437	27 852	97 307	110 174	208 691	7 975
322214	Fiber can, tube, drum, & similar products mfg	—	16	11	542	17 021	429	955	12 677	52 551	68 670	121 177	D
322215	Nonfolding sanitary food container mfg	—	2	2	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TEXAS—Con.												
	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32222	Paper bag & coated & treated paper mfg	—	48	15	1 340	41 579	1 034	2 253	27 967	207 435	211 220	418 617	6 442
322221	Coated & laminated packaging paper & plastics film mfg	1	5	2	253	8 822	202	450	6 080	19 103	30 793	49 366	D
322222	Coated & laminated paper mfg	2	26	2	332	11 813	236	516	7 300	75 204	53 459	128 877	1 315
322224	Uncoated paper & multiwall bag mfg	—	9	5	388	8 341	311	627	5 628	33 110	59 767	93 205	2 024
322225	Laminated aluminum foil mfg for flexible packaging uses	—	2	2	c	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	—	4	4	c	D	D	D	D	D	D	D	408
32223	Stationery product mfg . .	—	45	22	2 370	67 035	1 742	3 421	42 027	195 716	167 811	358 004	16 230
322231	Die-cut paper & paperboard office supplies mfg	1	21	5	625	16 571	505	917	10 411	55 441	36 156	88 126	3 225
322232	Envelope mfg	—	15	13	1 376	41 395	954	1 947	25 298	89 780	100 414	190 601	12 101
322233	Stationery, tablet, & related product mfg . .	—	9	4	369	9 069	283	557	6 318	50 495	31 241	79 277	904
32229	Other converted paper product mfg	—	37	15	1 850	71 029	1 511	3 534	55 871	722 179	419 997	1 138 099	42 049
322291	Sanitary paper product mfg	—	7	2	g	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg . . .	2	30	13	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	2 684	460	43 021	1 251 817	31 570	58 445	776 806	2 875 007	1 847 776	4 709 484	214 459
3231	Printing & related support activities	2	2 684	460	43 021	1 251 817	31 570	58 445	776 806	2 875 007	1 847 776	4 709 484	214 459
32311	Printing	2	2 445	400	38 420	1 105 818	28 064	51 796	684 126	2 607 410	1 786 534	4 380 985	193 891
323110	Commercial lithographic printing . .	2	1 228	234	22 957	699 706	16 801	31 570	436 328	1 513 794	1 063 362	2 570 837	129 439
323111	Commercial gravure printing	9	20	1	112	2 807	93	138	2 085	6 885	7 342	14 195	1 070
323112	Commercial flexographic printing . .	—	44	15	1 188	39 681	843	1 567	22 398	96 924	70 032	165 671	9 008
323113	Commercial screen printing	3	241	37	3 031	67 316	2 123	3 550	36 479	146 617	87 596	234 707	8 589
323114	Quick printing	2	541	23	3 269	76 893	2 384	3 807	46 794	168 133	95 842	264 192	11 625
323115	Digital printing	1	18	3	243	7 163	174	290	3 759	16 040	7 546	23 874	1 836
323116	Manifold business form printing	—	86	50	4 156	123 600	3 187	6 275	83 399	473 695	309 656	778 222	14 698
323117	Book printing	7	33	11	989	32 287	653	1 321	19 053	59 317	56 955	117 455	7 711
323118	Blankbook, looseleaf binder, & device mfg .	—	18	12	1 075	24 753	848	1 779	16 153	62 668	40 364	100 810	6 187
323119	Other commercial printing	5	216	14	1 400	31 612	958	1 499	17 678	63 337	47 839	111 022	3 728
32312	Support activities for printing	2	239	60	4 601	145 999	3 506	6 649	92 680	267 597	61 242	328 499	20 568
323121	Tradebinding & related work	2	72	28	1 848	42 048	1 532	3 103	30 554	70 909	16 154	87 092	3 089
323122	Prepress services	2	167	32	2 753	103 951	1 974	3 546	62 126	196 688	45 088	241 407	17 479
324	Petroleum & coal products mfg	2	194	83	21 403	1 218 123	14 463	32 815	770 230	8 878 367	37 043 494	46 244 639	1 022 801
3241	Petroleum & coal products mfg	2	194	83	21 403	1 218 123	14 463	32 815	770 230	8 878 367	37 043 494	46 244 639	1 022 801
32411	Petroleum refineries . . .	2	49	37	17 602	1 083 081	11 812	27 245	686 234	8 186 118	35 920 578	44 418 490	967 780
324110	Petroleum refineries . . .	2	49	37	17 602	1 083 081	11 812	27 245	686 234	8 186 118	35 920 578	44 418 490	967 780
32412	Asphalt paving, roofing, & saturated materials mfg	2	84	27	2 286	78 216	1 673	3 530	50 845	285 763	534 720	827 011	21 677
324121	Asphalt paving mixture & block mfg	1	59	13	904	27 964	613	1 185	16 499	97 005	200 137	299 288	8 468
324122	Asphalt shingle & coating materials mfg	3	25	14	1 382	50 252	1 060	2 345	34 346	188 758	334 583	527 723	13 209
32419	Other petroleum & coal products mfg	1	61	19	1 515	56 826	978	2 040	33 151	406 486	588 196	999 138	33 344
324191	Petroleum lubricating oil & grease mfg	1	51	13	1 055	38 338	568	1 092	18 789	300 422	436 787	737 243	13 135
324199	All other petroleum & coal products mfg . . .	—	10	6	460	18 488	410	948	14 362	106 064	151 409	261 895	20 209
325	Chemical mfg	—	1 115	472	77 902	4 005 736	47 928	104 097	2 193 901	27 992 924	39 100 251	67 007 331	4 248 599
3251	Basic chemical mfg	—	285	154	35 142	2 081 397	21 547	47 853	1 188 206	16 378 390	24 455 464	40 805 643	2 766 105
32511	Petrochemical mfg	—	21	20	7 225	457 328	4 047	9 163	237 797	7 361 065	9 244 105	16 552 673	845 639
325110	Petrochemical mfg	—	21	20	7 225	457 328	4 047	9 163	237 797	7 361 065	9 244 105	16 552 673	845 639
32512	Industrial gas mfg	—	84	20	1 850	94 705	1 252	2 661	58 744	611 017	513 505	1 138 168	229 071
325120	Industrial gas mfg	—	84	20	1 850	94 705	1 252	2 661	58 744	611 017	513 505	1 138 168	229 071

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3251	Basic chemical mfg—Con.												
32513	Dye & pigment mfg	-	5	3	361	15 218	213	405	7 563	59 388	78 941	137 601	8 553
325131	Inorganic dye & pigment mfg	-	2	2	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	3	1	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	69	37	3 526	188 069	2 314	5 215	118 569	946 711	821 245	1 768 830	209 336
325181	Alkalies & chlorine mfg	-	5	2	f	D	D	D	D	D	D	D	D
325182	Carbon black mfg	-	8	8	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	56	27	2 137	106 838	1 330	2 983	64 175	455 654	427 484	890 640	103 123
32519	Other basic organic chemical mfg	-	106	74	22 180	1 326 077	13 721	30 409	765 533	7 400 209	13 797 668	21 208 371	1 473 506
325192	Cyclic crude & intermediate mfg	-	7	6	1 303	70 246	594	1 395	34 412	593 340	1 331 635	1 953 680	76 091
325199	All other basic organic chemical mfg	-	95	67	20 800	1 253 919	13 067	28 880	729 759	6 799 280	12 458 224	19 239 018	1 396 945
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	84	64	16 564	913 748	10 306	23 261	523 564	6 183 778	10 362 155	16 459 574	1 126 830
32521	Resin & synthetic rubber mfg	-	84	64	16 564	913 748	10 306	23 261	523 564	6 183 778	10 362 155	16 459 574	1 126 830
325211	Plastics material & resin mfg	-	68	53	12 920	722 497	7 882	18 083	409 617	5 336 774	9 229 178	14 517 281	990 925
325212	Synthetic rubber mfg	-	16	11	3 644	191 251	2 424	5 178	113 947	847 004	1 132 977	1 942 293	135 905
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	74	20	2 775	140 694	1 667	3 715	77 436	867 280	719 599	1 592 312	94 464
32531	Fertilizer mfg	2	47	11	674	20 758	492	1 021	12 826	78 031	166 157	242 719	7 443
325311	Nitrogenous fertilizer mfg	1	6	2	127	6 705	94	193	4 534	24 799	46 398	70 978	D
325314	Fertilizer (mixing only) mfg	2	38	8	498	12 776	364	782	7 443	47 635	112 864	159 189	2 989
32532	Pesticide & other agricultural chemical mfg	-	27	9	2 101	119 936	1 175	2 694	64 610	789 249	553 442	1 349 593	87 021
325320	Pesticide & other agricultural chemical mfg	-	27	9	2 101	119 936	1 175	2 694	64 610	789 249	553 442	1 349 593	87 021
3254	Pharmaceutical & medicine mfg	1	94	35	6 493	296 113	3 539	7 359	108 023	1 278 132	475 667	1 752 705	62 356
32541	Pharmaceutical & medicine mfg	1	94	35	6 493	296 113	3 539	7 359	108 023	1 278 132	475 667	1 752 705	62 356
325411	Medicinal & botanical mfg	4	13	5	1 417	52 146	1 225	2 657	46 214	178 411	104 521	280 486	11 938
325412	Pharmaceutical preparation mfg	-	35	13	4 223	218 525	1 896	3 896	50 968	1 034 266	338 735	1 374 284	46 176
325413	In-vitro diagnostic substance mfg	1	11	5	321	11 373	118	223	3 096	27 779	10 720	38 570	2 327
325414	Biological product (except diagnostic) mfg	3	35	12	532	14 069	300	583	7 745	37 676	21 691	59 365	1 915
3255	Paint, coating, & adhesive mfg	-	139	52	4 413	147 158	2 581	5 623	69 221	740 448	949 989	1 683 739	37 082
32551	Paint & coating mfg	-	92	32	3 333	109 232	1 963	4 335	53 897	562 177	770 919	1 327 809	23 199
325510	Paint & coating mfg	-	92	32	3 333	109 232	1 963	4 335	53 897	562 177	770 919	1 327 809	23 199
32552	Adhesive mfg	1	47	20	1 080	37 926	618	1 288	15 324	178 271	179 070	355 930	13 883
325520	Adhesive mfg	1	47	20	1 080	37 926	618	1 288	15 324	178 271	179 070	355 930	13 883
3256	Soap, cleaning compound, & toilet preparation mfg	1	174	47	4 765	146 782	3 093	5 905	74 601	1 348 524	838 924	2 209 293	57 896
32561	Soap & cleaning compound mfg	1	125	30	2 342	75 706	1 409	2 866	38 763	522 308	430 015	958 698	38 933
325611	Soap & other detergent mfg	1	64	14	1 152	36 700	698	1 423	18 149	268 737	144 618	418 239	10 058
325612	Polish & other sanitation good mfg	2	52	13	927	26 759	522	1 011	11 738	152 042	120 557	273 882	2 906
325613	Surface active agent mfg	1	9	3	263	12 247	189	432	8 876	101 529	164 840	266 577	25 969
32562	Toilet preparation mfg	-	49	17	2 423	71 076	1 684	3 039	35 838	826 216	408 909	1 250 595	18 963
325620	Toilet preparation mfg	-	49	17	2 423	71 076	1 684	3 039	35 838	826 216	408 909	1 250 595	18 963
3259	Other chemical product mfg	1	265	100	7 750	279 844	5 195	10 381	152 850	1 196 372	1 298 453	2 504 065	103 866
32591	Printing ink mfg	3	36	10	562	20 701	315	645	10 601	70 089	98 982	170 018	2 801
325910	Printing ink mfg	3	36	10	562	20 701	315	645	10 601	70 089	98 982	170 018	2 801
32592	Explosives mfg	-	10	7	802	28 966	588	1 123	15 630	118 877	73 913	194 260	3 716
325920	Explosives mfg	-	10	7	802	28 966	588	1 123	15 630	118 877	73 913	194 260	3 716

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	TEXAS—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg—Con.												
32599	All other chemical product & preparation mfg	1	219	83	6 386	230 177	4 292	8 613	126 619	1 007 406	1 125 558	2 139 787	97 349
325991	Custom compounding of purchased resin...	—	70	27	2 133	69 264	1 510	2 931	43 408	230 389	402 625	631 338	22 320
325992	Photographic film, paper, plate, & chemical mfg	3	22	6	531	15 819	404	904	10 042	56 058	55 729	110 845	10 982
325998	All other miscellaneous chemical product & preparation mfg	2	127	50	3 722	145 094	2 378	4 778	73 169	720 959	667 204	1 397 604	64 047
326	Plastics & rubber products mfg	1	1 032	491	55 133	1 544 740	43 242	88 866	1 033 903	4 555 567	4 638 553	9 154 856	407 061
3261	Plastics product mfg	1	842	438	49 270	1 339 125	38 796	79 761	901 462	4 067 624	4 244 411	8 276 089	379 711
32611	Unsupported plastics film, sheet, & bag mfg ..	—	98	59	10 966	346 173	8 657	20 054	229 377	1 271 204	1 376 237	2 641 087	118 857
326111	Unsupported plastics bag mfg	—	47	27	5 395	162 380	4 458	10 047	105 903	494 974	602 839	1 094 034	43 640
326112	Unsupported plastics packaging film & sheet mfg	1	12	7	855	25 630	665	1 635	18 546	46 695	115 923	167 020	8 119
326113	Unsupported plastics film & sheet (except packaging) mfg	—	39	25	4 716	158 163	3 534	8 372	104 928	729 535	657 475	1 380 033	67 098
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	76	41	3 670	97 599	2 703	5 127	59 229	250 728	491 099	748 810	25 083
326121	Unsupported plastics profile shape mfg	1	36	16	1 891	46 659	1 281	2 266	26 721	103 496	169 874	284 404	3 444
326122	Plastics pipe & pipe fitting mfg	—	40	25	1 779	50 940	1 422	2 861	32 508	147 232	321 225	464 406	21 639
32613	Laminated plastics plate, sheet, & shape mfg	1	20	7	2 096	96 366	1 785	4 699	73 011	247 421	168 625	415 390	8 364
326130	Laminated plastics plate, sheet, & shape mfg	1	20	7	2 096	96 366	1 785	4 699	73 011	247 421	168 625	415 390	8 364
32614	Polystyrene foam product mfg	3	34	18	1 436	38 889	1 223	2 457	30 039	122 764	158 709	282 348	8 604
326140	Polystyrene foam product mfg	3	34	18	1 436	38 889	1 223	2 457	30 039	122 764	158 709	282 348	8 604
32615	Urethane & other foam product (except polystyrene) mfg	—	47	24	1 966	54 401	1 618	3 334	35 489	193 019	227 491	416 263	10 006
326150	Urethane & other foam product (except polystyrene) mfg	—	47	24	1 966	54 401	1 618	3 334	35 489	193 019	227 491	416 263	10 006
32616	Plastics bottle mfg	1	27	21	1 681	51 638	1 499	3 254	41 781	176 924	218 212	390 186	26 049
326160	Plastics bottle mfg	1	27	21	1 681	51 638	1 499	3 254	41 781	176 924	218 212	390 186	26 049
32619	Other plastics product mfg	1	540	268	27 455	654 059	21 311	40 836	432 536	1 805 564	1 604 038	3 382 005	182 748
326191	Plastics plumbing fixture mfg	1	62	25	g	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	—	3	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	475	242	25 213	601 576	19 483	37 102	394 398	1 668 005	1 484 912	3 123 722	175 333
3262	Rubber product mfg	1	190	53	5 863	205 615	4 446	9 105	132 441	487 943	394 142	878 767	27 350
32621	Tire mfg	—	80	12	2 119	97 014	1 735	3 759	77 167	249 483	224 837	477 113	7 421
326211	Tire mfg (except retreading)	—	9	5	1 725	87 452	1 453	3 168	71 847	231 709	191 066	425 261	6 899
326212	Tire retreading	1	71	7	394	9 562	282	591	5 320	17 774	33 771	51 852	522
32622	Rubber & plastics hoses & belting mfg	3	7	3	283	8 265	189	328	3 967	17 437	20 093	36 498	1 765
326220	Rubber & plastics hoses & belting mfg ..	3	7	3	283	8 265	189	328	3 967	17 437	20 093	36 498	1 765
32629	Other rubber product mfg	1	103	38	3 461	100 336	2 522	5 018	51 307	221 023	149 212	365 156	18 164
326291	Rubber product mfg for mechanical use	1	41	18	1 720	43 509	1 402	2 902	28 669	98 779	66 064	160 963	7 430
326299	All other rubber product mfg	1	62	20	1 741	56 827	1 120	2 116	22 638	122 244	83 148	204 193	10 734

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	TEXAS—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	1 186	371	34 545	1 004 687	27 518	57 063	739 218	3 436 390	2 764 436	6 216 304	295 309
3271	Clay product & refractory mfg	—	135	56	7 198	174 633	5 979	12 045	133 864	543 546	272 401	816 964	31 391
327111	Pottery, ceramics, & plumbing fixture mfg	—	90	24	3 264	79 445	2 696	5 480	61 391	208 631	88 720	302 010	5 090
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	7	5	1 943	54 283	1 616	3 618	45 038	154 813	63 631	224 094	1 038
327112	Vitreous china, fine earthenware, & other pottery product mfg	3	75	16	1 055	16 607	870	1 455	11 362	39 381	16 532	54 696	2 732
327113	Porcelain electrical supply mfg	—	8	3	266	8 555	210	407	4 991	14 437	8 557	23 220	1 320
32712	Clay building material & refractories mfg	1	45	32	3 934	95 188	3 283	6 565	72 473	334 915	183 681	514 954	26 301
327121	Brick & structural clay tile mfg	—	21	17	1 391	33 867	1 094	2 286	23 686	112 719	40 766	151 507	7 227
327122	Ceramic wall & floor tile mfg	—	14	10	2 014	43 087	1 772	3 425	34 952	133 061	75 109	206 821	16 995
327125	Nonclay refractory mfg	2	5	3	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	120	26	5 156	191 869	4 154	8 654	147 971	656 013	404 762	1 074 244	47 022
32721	Glass & glass product mfg	—	120	26	5 156	191 869	4 154	8 654	147 971	656 013	404 762	1 074 244	47 022
327211	Flat glass mfg	—	2	2	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	22	4	1 896	79 522	1 516	3 443	62 319	320 248	114 235	445 616	D
327213	Glass container mfg	—	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	94	18	1 815	52 340	1 445	2 722	38 406	127 665	139 137	268 270	9 626
3273	Cement & concrete product mfg	2	697	220	15 165	429 653	11 830	24 770	302 269	1 456 326	1 462 943	2 911 701	141 667
32731	Cement mfg	—	18	15	1 523	63 600	1 147	2 679	41 814	416 936	219 087	642 830	39 898
327310	Cement mfg	—	18	15	1 523	63 600	1 147	2 679	41 814	416 936	219 087	642 830	39 898
32732	Ready-mix concrete mfg	3	444	114	7 267	206 803	5 720	12 011	151 773	628 328	914 324	1 544 013	71 512
327320	Ready-mix concrete mfg	3	444	114	7 267	206 803	5 720	12 011	151 773	628 328	914 324	1 544 013	71 512
32733	Concrete pipe, brick, & block mfg	—	84	44	2 715	74 060	2 019	4 212	49 390	232 834	181 061	402 016	19 073
327331	Concrete block & brick mfg	1	45	21	1 154	33 191	747	1 604	17 608	80 932	82 632	158 957	15 147
327332	Concrete pipe mfg	—	39	23	1 561	40 869	1 272	2 608	31 782	151 902	98 429	243 059	3 926
32739	Other concrete product mfg	2	151	47	3 660	85 190	2 944	5 868	59 292	178 228	148 471	322 842	11 184
327390	Other concrete product mfg	2	151	47	3 660	85 190	2 944	5 868	59 292	178 228	148 471	322 842	11 184
3274	Lime & gypsum product mfg	—	33	19	1 908	62 435	1 524	3 407	46 077	304 982	228 493	532 384	21 610
32741	Lime mfg	—	6	5	478	16 612	324	759	10 854	59 145	32 776	92 664	2 840
327410	Lime mfg	—	6	5	478	16 612	324	759	10 854	59 145	32 776	92 664	2 840
32742	Gypsum product mfg	—	27	14	1 430	45 823	1 200	2 648	35 223	245 837	195 717	439 720	18 770
327420	Gypsum product mfg	—	27	14	1 430	45 823	1 200	2 648	35 223	245 837	195 717	439 720	18 770
3279	Other nonmetallic mineral product mfg	1	201	50	5 118	146 097	4 031	8 187	109 037	475 523	395 837	881 011	53 619
32791	Abrasive product mfg	—	15	5	1 231	29 053	945	1 865	19 678	47 019	111 872	170 716	3 418
327910	Abrasive product mfg	—	15	5	1 231	29 053	945	1 865	19 678	47 019	111 872	170 716	3 418
32799	All other nonmetallic mineral product mfg	1	186	45	3 887	117 044	3 086	6 322	89 359	428 504	283 965	710 295	50 201
327991	Cut stone & stone product mfg	3	85	16	1 108	27 095	895	1 924	19 858	53 118	34 057	86 479	3 434
327992	Ground or treated mineral & earth mfg	2	34	9	583	16 315	425	829	11 271	64 472	57 675	120 819	4 015
327993	Mineral wool mfg	1	27	9	1 445	54 413	1 232	2 588	45 359	215 483	124 513	341 463	32 460
327999	All other miscellaneous nonmetallic mineral product mfg	1	40	11	751	19 221	534	981	12 871	95 431	67 720	161 534	10 292
331	Primary metal mfg	—	232	137	27 878	995 793	22 266	48 559	722 309	2 707 094	6 643 496	9 447 095	333 311
3311	Iron & steel mills & ferroalloy mfg	—	12	9	5 285	232 643	4 045	9 061	169 501	699 155	1 520 237	2 277 730	100 786
33111	Iron & steel mills & ferroalloy mfg	—	12	9	5 285	232 643	4 045	9 061	169 501	699 155	1 520 237	2 277 730	100 786
331111	Iron & steel mills	—	12	9	5 285	232 643	4 045	9 061	169 501	699 155	1 520 237	2 277 730	100 786

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TEXAS—Con.													
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3312	Steel product mfg from purchased steel	1	31	25	2 481	79 729	1 982	4 392	58 606	204 789	405 459	605 784	24 342
33121	Iron & steel pipes & tubes mfg from purchased steel	1	13	11	1 266	48 181	967	2 312	34 018	127 217	228 438	354 134	11 598
331210	Iron & steel pipes & tubes mfg from purchased steel	1	13	11	1 266	48 181	967	2 312	34 018	127 217	228 438	354 134	11 598
33122	Rolling & drawing of purchased steel	—	18	14	1 215	31 548	1 015	2 080	24 588	77 572	177 021	251 650	12 744
331222	Steel wire drawing	—	13	12	1 140	29 886	957	2 018	23 399	72 771	166 822	236 541	12 367
3313	Alumina & aluminum production & processing ..	—	23	17	5 305	224 370	4 175	9 201	156 272	382 837	1 341 651	1 787 364	104 927
33131	Alumina & aluminum production & processing	—	23	17	5 305	224 370	4 175	9 201	156 272	382 837	1 341 651	1 787 364	104 927
331311	Alumina refining	—	3	3	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	g	D	D	D	D	D	D	D	D
331314	Secondary smelting & alloying of aluminum .	—	5	3	356	8 230	327	403	5 529	17 428	51 155	69 655	D
331315	Aluminum sheet, plate, & foil mfg	—	3	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	8	7	1 416	40 831	1 180	3 075	29 760	73 302	152 502	225 520	4 151
331319	Other aluminum rolling & drawing	—	3	2	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	39	14	3 786	154 813	2 900	6 734	111 490	672 350	2 938 405	3 602 064	52 614
33141	Nonferrous metal (except aluminum) smelting & refining	—	8	4	2 411	111 231	1 897	4 418	81 839	209 292	2 361 977	2 565 991	39 303
331411	Primary smelting & refining of copper	—	3	3	g	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	5	1	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	9	2	f	D	D	D	D	D	D	D	3 024
331421	Copper rolling, drawing, & extruding .	—	7	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing .	—	2	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	22	8	f	D	D	D	D	D	D	D	10 287
331491	Other nonferrous metal rolling, drawing, & extruding	1	12	5	442	13 117	301	635	7 759	119 218	89 095	205 718	7 885
331492	Other nonferrous metal secondary smelting, refining, & alloying ...	—	10	3	e	D	D	D	D	D	D	D	2 402
3315	Foundries	—	127	72	11 021	304 238	9 164	19 171	226 440	747 963	437 744	1 174 153	50 642
33151	Ferrous metal foundries .	—	64	45	8 867	251 606	7 425	15 538	188 389	650 417	351 634	991 737	42 752
331511	Iron foundries	—	32	22	4 635	132 975	3 888	7 978	101 355	370 590	201 525	568 332	22 844
331512	Steel investment foundries	—	14	9	1 863	50 193	1 549	3 284	37 372	141 548	61 160	200 259	9 448
331513	Steel foundries (except investment)	—	18	14	2 369	68 438	1 988	4 276	49 662	138 279	88 949	223 146	10 460
33152	Nonferrous metal foundries	—	63	27	2 154	52 632	1 739	3 633	38 051	97 546	86 110	182 416	7 890
331521	Aluminum die-casting foundries	1	12	7	850	21 240	731	1 642	15 695	42 152	32 225	73 812	4 322
331524	Aluminum foundries (except die-casting) ..	—	25	14	958	23 493	709	1 435	16 265	40 432	39 755	80 272	2 968
331525	Copper foundries (except die-casting) ..	1	18	5	247	5 755	213	420	4 593	10 910	11 007	21 146	86
332	Fabricated metal product mfg	1	4 359	1 293	114 659	3 547 032	85 366	174 806	2 247 708	8 045 140	7 572 435	15 579 512	491 196
3321	Forging & stamping	1	162	88	8 598	285 725	6 573	13 364	185 950	704 003	837 032	1 530 371	66 597
33211	Forging & stamping	1	162	88	8 598	285 725	6 573	13 364	185 950	704 003	837 032	1 530 371	66 597
332111	Iron & steel forging ...	1	37	16	3 207	132 105	2 439	5 217	90 244	328 510	396 296	717 556	41 502
332112	Nonferrous forging ...	—	2	1	e	D	D	D	D	D	D	D	D
332114	Custom roll forming ...	1	31	21	1 511	47 083	1 110	2 245	28 311	120 236	226 393	347 030	3 840
332115	Crown & closure mfg ..	—	2	2	c	D	D	D	D	D	D	D	D
332116	Metal stamping	2	86	47	3 338	88 406	2 682	5 198	57 849	209 278	185 217	392 212	18 525
332117	Powder metallurgy part mfg	4	4	1	c	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	1	51	10	1 644	43 467	1 413	3 121	32 893	86 925	72 239	164 128	5 124
33221	Cutlery & handtool mfg ...	1	51	10	1 644	43 467	1 413	3 121	32 893	86 925	72 239	164 128	5 124
332212	Hand & edge tool mfg .	1	35	8	1 321	34 365	1 170	2 649	27 257	65 210	57 771	126 249	3 928
332213	Saw blade & handsaw mfg	1	9	2	303	8 709	225	450	5 374	20 274	13 728	35 696	1 082

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	1 041	369	34 554	960 583	25 820	53 910	592 966	2 118 177	2 535 099	4 628 643	97 889
33231	Plate work & fabricated structural product mfg ..	1	425	164	15 117	443 450	11 388	24 120	281 299	949 516	1 369 697	2 307 320	39 871
332311	Prefabricated metal building & component mfg	—	72	24	3 087	95 805	2 114	4 667	50 460	148 625	262 903	410 584	6 562
332312	Fabricated structural metal mfg	1	238	111	9 985	287 777	7 620	16 159	190 428	674 454	1 013 863	1 680 243	27 405
332313	Plate work mfg	2	115	29	2 045	59 868	1 654	3 294	40 411	126 437	92 931	216 493	5 904
33232	Ornamental & architectural metal products mfg	—	616	205	19 437	517 133	14 432	29 790	311 667	1 168 661	1 165 402	2 321 323	58 018
332321	Metal window & door mfg	—	108	45	6 958	162 680	5 301	10 985	98 953	315 311	482 498	796 964	11 223
332322	Sheet metal work mfg ..	1	379	133	9 720	285 771	7 049	14 599	170 448	695 872	553 033	1 237 309	41 788
332323	Ornamental & architectural metal work mfg	—	129	27	2 759	68 682	2 082	4 206	42 266	157 478	129 871	287 050	5 007
3324	Boiler, tank, & shipping container mfg	—	182	116	9 847	328 037	7 485	16 157	227 684	794 950	1 183 457	1 974 823	37 248
33241	Power boiler & heat exchanger mfg	—	56	37	3 763	121 255	2 825	6 003	83 243	284 827	249 600	532 131	11 483
332410	Power boiler & heat exchanger mfg	—	56	37	3 763	121 255	2 825	6 003	83 243	284 827	249 600	532 131	11 483
33242	Metal tank (heavy gauge) mfg	—	79	56	3 550	116 032	2 631	5 666	76 547	232 140	352 602	576 823	12 389
332420	Metal tank (heavy gauge) mfg	—	79	56	3 550	116 032	2 631	5 666	76 547	232 140	352 602	576 823	12 389
33243	Metal can, box, & other metal container (light gauge) mfg	—	47	23	2 534	90 750	2 029	4 488	67 894	277 983	581 255	865 869	13 376
332431	Metal can mfg	—	16	12	1 237	55 919	1 042	2 270	45 691	190 833	451 615	648 705	10 570
332439	Other metal container mfg	—	31	11	1 297	34 831	987	2 218	22 203	87 150	129 640	217 164	2 806
3325	Hardware mfg	—	48	15	1 375	37 260	1 010	2 005	26 557	91 926	107 706	196 836	9 229
33251	Hardware mfg	—	48	15	1 375	37 260	1 010	2 005	26 557	91 926	107 706	196 836	9 229
332510	Hardware mfg	—	48	15	1 375	37 260	1 010	2 005	26 557	91 926	107 706	196 836	9 229
3326	Spring & wire product mfg ..	—	109	44	3 472	86 726	2 787	5 676	57 955	195 276	210 955	405 315	17 655
33261	Spring & wire product mfg	—	109	44	3 472	86 726	2 787	5 676	57 955	195 276	210 955	405 315	17 655
332611	Spring (heavy gauge) mfg	—	4	2	126	4 005	111	270	2 786	8 093	6 958	14 924	368
332612	Spring (light gauge) mfg	—	22	14	1 222	32 344	972	1 936	22 257	84 440	69 231	153 296	7 692
332618	Other fabricated wire product mfg	1	83	28	2 124	50 377	1 704	3 470	32 912	102 743	134 766	237 095	9 595
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	1 871	324	23 067	749 611	17 841	34 076	492 363	1 472 463	756 106	2 215 660	119 030
33271	Machine shops	2	1 699	261	19 149	612 504	14 795	27 925	406 163	1 199 153	583 315	1 771 802	90 095
332710	Machine shops	2	1 699	261	19 149	612 504	14 795	27 925	406 163	1 199 153	583 315	1 771 802	90 095
33272	Turned product & screw, nut, & bolt mfg	1	172	63	3 918	137 107	3 046	6 151	86 200	273 310	172 791	443 858	28 935
332721	Precision turned product mfg	1	122	42	2 363	81 930	1 876	3 861	52 431	152 101	76 328	227 878	18 632
332722	Bolt, nut, screw, rivet, & washer mfg	2	50	21	1 555	55 177	1 170	2 290	33 769	121 209	96 463	215 980	10 303
3328	Coating, engraving, heat treating, & allied activities ..	2	378	127	8 194	240 299	6 533	13 553	157 701	498 853	285 249	797 787	32 824
33281	Coating, engraving, heat treating, & allied activities	2	378	127	8 194	240 299	6 533	13 553	157 701	498 853	285 249	797 787	32 824
332811	Metal heat treating	1	51	24	1 693	53 026	1 398	2 675	36 434	111 584	58 845	172 602	6 984
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	1	153	50	3 099	94 615	2 557	5 543	63 884	215 644	146 938	372 889	13 266
332813	Electroplating, plating, polishing, anodizing, & coloring	2	174	53	3 402	92 658	2 578	5 335	57 383	171 625	79 466	252 296	12 574
3329	Other fabricated metal product mfg	—	517	200	23 908	815 324	15 904	32 944	473 639	2 082 567	1 584 592	3 665 949	105 600
33291	Metal valve mfg	—	163	97	10 575	360 948	7 009	14 948	202 481	1 025 397	913 030	1 946 062	67 946
332911	Industrial valve mfg ...	—	80	52	7 069	253 646	4 498	9 551	137 493	756 604	675 475	1 441 978	56 511
332912	Fluid power valve & hose fitting mfg	—	29	9	926	31 888	650	1 308	17 486	100 692	48 360	144 037	2 920
332913	Plumbing fixture fitting & trim mfg	—	6	5	541	14 468	438	856	10 079	35 094	48 783	85 384	1 692
332919	Other metal valve & pipe fitting mfg	2	48	31	2 039	60 946	1 423	3 233	37 423	133 007	140 412	274 663	6 823

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	TEXAS—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg—Con.												
33299	All other fabricated metal product mfg	—	354	103	13 333	454 376	8 895	17 996	271 158	1 057 170	671 562	1 719 887	37 654
332991	Ball & roller bearing mfg	2	5	2	102	3 601	59	119	1 833	4 954	8 285	13 182	813
332993	Ammunition (except small arms) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332994	Small arms mfg	3	19	4	436	9 146	384	521	6 206	23 125	8 365	31 359	1 054
332995	Other ordnance & accessories mfg	—	9	4	3 425	162 072	1 125	2 358	81 216	325 691	14 344	341 329	548
332996	Fabricated pipe & pipe fitting mfg	—	90	42	4 062	124 630	3 278	7 399	85 086	349 279	366 266	705 146	19 601
332997	Industrial pattern mfg	3	32	1	181	4 188	142	224	3 264	6 124	1 957	8 417	328
332998	Enameled iron & metal sanitary ware mfg	—	5	1	210	4 963	185	281	3 854	18 649	15 681	34 425	240
332999	All other miscellaneous fabricated metal product mfg	1	187	48	4 405	129 331	3 354	6 333	82 414	313 582	248 755	562 360	14 964
333	Machinery mfg	1	1 726	632	79 602	2 631 243	54 224	108 899	1 466 700	7 997 116	7 450 446	15 160 842	494 550
3331	Agriculture, construction, & mining machinery mfg	—	452	179	25 660	994 593	17 106	34 129	546 603	2 952 657	2 340 280	5 061 787	209 104
33311	Agricultural implement mfg	2	88	20	1 660	42 838	1 116	2 076	25 085	77 353	109 744	188 228	8 311
333111	Farm machinery & equipment mfg	2	81	19	1 617	41 933	1 081	2 013	24 434	74 366	105 214	180 626	8 163
33312	Construction machinery mfg	—	49	25	4 238	128 340	3 085	6 226	77 791	256 103	365 800	612 891	16 748
333120	Construction machinery mfg	—	49	25	4 238	128 340	3 085	6 226	77 791	256 103	365 800	612 891	16 748
33313	Mining & oil & gas field machinery mfg	—	315	134	19 762	823 415	12 905	25 827	443 727	2 619 201	1 864 736	4 260 668	184 045
333131	Mining machinery & equipment mfg	—	17	5	474	18 940	314	595	7 525	49 554	33 868	82 019	2 240
333132	Oil & gas field machinery & equipment mfg	—	298	129	19 288	804 475	12 591	25 232	436 202	2 569 647	1 830 868	4 178 649	181 805
3332	Industrial machinery mfg	1	235	72	9 713	265 598	7 176	14 523	145 202	1 332 919	1 068 715	2 322 791	81 931
33322	Plastics & rubber industry machinery mfg	3	13	4	172	4 698	115	197	2 521	8 973	8 784	17 459	835
333220	Plastics & rubber industry machinery mfg	3	13	4	172	4 698	115	197	2 521	8 973	8 784	17 459	835
33329	Other industrial machinery mfg	1	208	68	9 488	258 946	7 027	14 263	141 846	1 318 841	1 054 731	2 295 045	80 979
333291	Paper industry machinery mfg	3	9	1	113	3 115	79	125	2 125	8 863	5 916	13 551	333
333293	Printing machinery & equipment mfg	4	29	7	704	26 916	422	842	12 346	65 800	29 323	93 426	1 727
333294	Food product machinery mfg	—	26	10	837	28 133	551	1 069	14 582	35 035	44 160	78 952	1 829
333295	Semiconductor machinery mfg	—	21	10	4 228	84 440	3 677	7 459	53 531	942 998	727 099	1 605 529	58 073
333298	All other industrial machinery mfg	4	114	39	3 529	114 538	2 246	4 697	58 202	264 072	245 597	498 811	18 901
3333	Commercial & service industry machinery mfg	—	116	43	4 630	143 798	2 379	4 460	54 412	427 237	311 241	758 271	21 847
33331	Commercial & service industry machinery mfg	—	116	43	4 630	143 798	2 379	4 460	54 412	427 237	311 241	758 271	21 847
333311	Automatic vending machine mfg	—	4	1	f	D	D	D	D	D	D	D	D
333312	Commercial laundry, drycleaning, & pressing machine mfg	1	7	2	314	10 525	206	458	6 267	17 461	17 924	36 995	D
333313	Office machinery mfg	—	11	5	g	D	D	D	D	D	D	D	7 356
333314	Optical instrument & lens mfg	1	10	3	178	4 153	101	183	1 925	8 345	5 656	14 237	D
333315	Photographic & photocopying equipment mfg	5	17	5	230	7 044	155	285	3 974	11 263	15 218	26 612	1 166
333319	Other commercial & service industry machinery mfg	—	67	27	1 910	64 273	1 222	2 158	30 674	139 904	156 669	298 884	11 292
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	159	90	15 343	438 903	11 320	22 454	269 962	1 285 794	1 537 617	2 869 288	69 854

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg—Con.												
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	159	90	15 343	438 903	11 320	22 454	269 962	1 285 794	1 537 617	2 869 288	69 854
333411	Air purification equipment mfg	1	27	11	971	24 432	708	1 355	12 001	66 065	41 758	107 184	2 388
333412	Industrial & commercial fan & blower mfg	3	13	6	292	8 942	223	467	4 830	23 067	22 982	43 578	2 053
333414	Heating equipment (except warm air furnaces) mfg	2	21	7	881	27 161	546	1 172	11 471	57 425	81 091	137 752	4 654
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	98	66	13 199	378 368	9 843	19 460	241 660	1 139 237	1 391 786	2 580 774	60 759
3335	Metalworking machinery mfg	3	261	47	3 831	121 458	2 855	5 273	80 823	246 345	121 408	359 325	18 902
33351	Metalworking machinery mfg	3	261	47	3 831	121 458	2 855	5 273	80 823	246 345	121 408	359 325	18 902
333511	Industrial mold mfg	2	63	14	777	26 051	629	1 102	18 340	44 977	17 219	61 081	3 475
333514	Special die & tool, die set, jig, & fixture mfg	3	117	13	1 395	42 267	1 047	1 889	28 752	72 940	34 768	106 088	5 881
333515	Cutting tool & machine tool accessory mfg	2	64	15	1 232	37 843	918	1 693	25 747	96 003	42 764	134 983	8 042
333518	Other metalworking machinery mfg	7	10	3	332	11 378	196	448	5 640	24 798	18 917	41 887	718
3336	Engine, turbine, & power transmission equipment mfg	—	58	23	4 081	113 574	2 427	5 285	72 863	360 287	469 413	889 893	29 320
33361	Engine, turbine, & power transmission equipment mfg	—	58	23	4 081	113 574	2 427	5 285	72 863	360 287	469 413	889 893	29 320
333611	Turbine & turbine generator set unit mfg	—	9	5	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	—	12	7	455	18 347	283	568	9 569	33 848	50 398	89 086	D
333613	Mechanical power transmission equipment mfg	—	26	8	1 249	35 505	990	2 238	22 294	82 225	65 834	149 310	4 984
333618	Other engine equipment mfg	3	11	3	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	445	178	16 344	553 319	10 961	22 775	296 835	1 391 877	1 601 772	2 899 487	63 592
33391	Pump & compressor mfg	1	107	44	4 613	155 194	3 118	6 428	88 982	425 682	410 260	811 258	17 896
333911	Pump & pumping equipment mfg	—	66	30	3 350	114 473	2 267	4 496	65 712	293 148	296 483	579 974	11 728
333912	Air & gas compressor mfg	2	37	13	1 188	37 365	804	1 831	21 254	122 893	104 459	212 535	5 681
33392	Material handling equipment mfg	1	119	51	4 922	177 886	3 104	7 086	84 916	476 486	841 080	1 253 965	18 201
333921	Elevator & moving stairway mfg	—	13	8	485	16 960	360	919	9 327	42 599	103 948	143 602	2 270
333922	Conveyor & conveying equipment mfg	1	52	22	1 964	69 449	1 160	2 472	27 606	118 836	160 106	277 628	4 804
333923	Overhead traveling crane, hoist, & monorail system mfg	1	28	12	1 084	33 624	734	1 638	20 194	69 314	100 859	168 704	1 472
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	26	9	1 389	57 853	850	2 057	27 789	245 737	476 167	664 031	9 655
33399	All other general-purpose machinery mfg	1	219	83	6 809	220 239	4 739	9 261	122 937	489 709	350 432	834 264	27 495
333991	Power-driven handtool mfg	1	14	5	642	24 846	340	666	12 470	57 912	21 279	77 374	3 784
333992	Welding & soldering equipment mfg	—	9	4	905	30 850	794	1 299	20 853	116 974	41 288	155 990	D
333993	Packaging machinery mfg	3	25	12	722	25 538	367	736	10 775	53 206	35 250	87 059	1 497
333994	Industrial process furnace & oven mfg	3	16	5	325	9 418	237	444	5 440	20 647	21 459	42 551	795
333995	Fluid power cylinder & actuator mfg	—	15	11	844	28 369	634	1 497	18 436	66 172	51 525	118 761	4 073
333996	Fluid power pump & motor mfg	2	11	3	c	D	D	D	D	D	D	D	849
333999	All other miscellaneous general-purpose machinery mfg	2	125	41	3 139	94 412	2 214	4 341	51 435	159 923	166 244	324 558	12 507

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	1 051	438	135 625	6 096 714	65 514	130 167	1 950 206	28 781 865	19 877 919	48 749 732	2 936 711
3341	Computer & peripheral equipment mfg	-	121	41	14 606	641 851	8 957	13 395	224 997	6 021 839	11 428 748	17 543 280	76 262
33411	Computer & peripheral equipment mfg	-	121	41	14 606	641 851	8 957	13 395	224 997	6 021 839	11 428 748	17 543 280	76 262
334111	Electronic computer mfg	-	49	16	12 283	556 563	7 730	11 099	180 885	5 800 682	11 174 602	17 070 272	59 963
334113	Computer terminal mfg	1	5	3	246	4 838	187	233	2 732	23 527	59 183	82 249	D
334119	Other computer peripheral equipment mfg	1	58	21	2 006	76 829	1 003	1 982	39 953	187 544	189 126	375 085	14 265
3342	Communications equipment mfg	-	138	60	22 108	996 512	10 491	20 601	332 388	4 109 024	2 635 040	6 668 795	247 409
33421	Telephone apparatus mfg	-	42	21	8 889	492 162	3 932	7 548	145 404	2 149 150	1 050 440	3 158 292	66 338
334210	Telephone apparatus mfg	-	42	21	8 889	492 162	3 932	7 548	145 404	2 149 150	1 050 440	3 158 292	66 338
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	69	31	12 428	483 835	6 037	12 142	176 414	1 915 801	1 539 713	3 422 509	178 215
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	69	31	12 428	483 835	6 037	12 142	176 414	1 915 801	1 539 713	3 422 509	178 215
33429	Other communications equipment mfg	5	27	8	791	20 515	522	911	10 570	44 073	44 887	87 994	2 856
334290	Other communications equipment mfg	5	27	8	791	20 515	522	911	10 570	44 073	44 887	87 994	2 856
3343	Audio & video equipment mfg	1	17	7	884	18 708	698	1 563	12 110	40 715	76 963	115 989	7 189
33431	Audio & video equipment mfg	1	17	7	884	18 708	698	1 563	12 110	40 715	76 963	115 989	7 189
334310	Audio & video equipment mfg	1	17	7	884	18 708	698	1 563	12 110	40 715	76 963	115 989	7 189
3344	Semiconductor & other electronic component mfg	-	370	174	61 987	2 867 232	29 785	62 549	840 538	14 875 433	3 598 536	18 472 676	2 344 627
33441	Semiconductor & other electronic component mfg	-	370	174	61 987	2 867 232	29 785	62 549	840 538	14 875 433	3 598 536	18 472 676	2 344 627
334412	Bare printed circuit board mfg	1	89	37	2 822	84 965	2 201	4 400	61 577	119 175	134 080	253 448	14 502
334413	Semiconductor & related device mfg	-	81	47	38 133	1 880 859	16 802	39 323	488 747	11 868 575	1 868 948	13 589 373	2 168 209
334415	Electronic resistor mfg	-	8	4	663	19 789	493	1 035	11 920	73 471	24 792	102 053	5 407
334416	Electronic coil, transformer, & other inductor mfg	2	26	11	551	16 541	371	763	7 074	35 590	17 847	53 395	1 170
334417	Electronic connector mfg	-	11	6	1 618	42 262	1 329	2 299	25 643	121 857	108 344	230 914	11 718
334418	Printed circuit assembly (electronic assembly) mfg	-	49	38	14 482	689 153	6 006	9 662	174 618	2 430 476	1 244 110	3 816 625	127 232
334419	Other electronic component mfg	3	99	31	3 658	131 868	2 531	4 971	69 552	222 095	197 029	419 203	16 181
3345	Navigational, measuring, medical, & control instruments mfg	-	357	144	30 818	1 385 932	13 266	26 375	415 251	3 230 828	1 846 348	5 148 304	174 529
33451	Navigational, measuring, medical, & control instruments mfg	-	357	144	30 818	1 385 932	13 266	26 375	415 251	3 230 828	1 846 348	5 148 304	174 529
334510	Electromedical & electrotherapeutic apparatus mfg	-	24	13	2 613	111 303	1 442	3 141	47 702	268 898	129 673	397 974	29 413
334511	Search, detection, navigation, & guidance instrument mfg	-	47	21	16 660	824 512	6 128	11 847	208 097	1 879 455	895 682	2 849 313	82 110
334512	Automatic environmental control mfg	1	16	7	593	25 579	420	947	13 700	31 131	45 579	78 465	3 341
334513	Industrial process control instrument mfg	1	91	37	3 293	129 462	1 546	3 021	41 590	285 375	214 653	491 877	20 259
334514	Totalizing fluid meter & counting device mfg	1	17	8	600	22 924	388	901	12 810	57 926	57 653	112 347	4 947
334515	Electricity measuring & testing instrument mfg	-	49	19	1 388	57 037	624	1 270	15 780	140 135	99 717	240 020	9 640
334516	Analytical laboratory instrument mfg	-	42	15	3 196	127 163	1 247	2 399	34 581	306 248	195 475	506 167	14 296
334517	Irradiation apparatus mfg	4	2	2	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	63	21	2 299	82 616	1 396	2 708	39 152	245 611	188 935	436 870	10 008

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	TEXAS—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3346	Mfg & reproducing magnetic & optical media	—	48	12	5 222	186 479	2 317	5 684	124 922	504 026	292 284	800 688	86 695
33461	Mfg & reproducing magnetic & optical media	—	48	12	5 222	186 479	2 317	5 684	124 922	504 026	292 284	800 688	86 695
334611	Software reproducing	—	10	4	h	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	1	28	5	f	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	—	10	3	466	13 291	281	785	6 251	94 533	81 636	180 619	18 018
335	Electrical equipment, appliance, & component mfg	1	405	168	23 364	704 373	16 329	32 173	380 157	2 193 888	2 661 876	4 851 553	161 636
3351	Electric lighting equipment mfg	1	59	27	2 449	66 797	1 737	3 694	39 189	192 181	200 888	395 090	8 054
33511	Electric lamp bulb & part mfg	—	3	2	c	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	3	2	c	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	56	25	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture mfg	1	23	6	e	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	13	7	715	18 675	536	1 148	11 019	56 882	73 446	130 235	1 494
335129	Other lighting equipment mfg	1	20	12	1 183	34 202	811	1 768	20 608	100 485	92 736	194 530	5 558
3352	Household appliance mfg	—	21	9	2 643	55 788	2 304	3 354	40 063	301 014	350 096	644 925	26 219
33521	Small electrical appliance mfg	—	13	8	2 465	49 346	2 143	3 066	35 657	288 010	337 014	620 630	D
335211	Electric housewares & household fan mfg	—	9	5	953	19 145	804	1 156	12 421	126 487	55 931	179 003	D
335212	Household vacuum cleaner mfg	—	4	3	1 512	30 201	1 339	1 910	23 236	161 523	281 083	441 627	D
33522	Major appliance mfg	—	8	1	178	6 442	161	288	4 406	13 004	13 082	24 295	D
335221	Household cooking appliance mfg	—	8	1	178	6 442	161	288	4 406	13 004	13 082	24 295	D
3353	Electrical equipment mfg	—	176	54	7 262	255 127	4 598	8 820	119 486	641 135	909 403	1 555 794	40 822
33531	Electrical equipment mfg	—	176	54	7 262	255 127	4 598	8 820	119 486	641 135	909 403	1 555 794	40 822
335311	Power, distribution, & specialty transformer mfg	—	27	8	797	22 681	563	1 108	13 518	58 272	120 832	182 397	5 851
335312	Motor & generator mfg	1	36	13	2 016	79 837	1 196	2 091	36 114	152 146	325 416	482 126	19 266
335313	Switchgear & switchboard apparatus mfg	—	40	11	2 408	79 569	1 764	3 595	47 862	277 049	278 810	552 585	8 700
335314	Relay & industrial control mfg	1	73	22	2 041	73 040	1 075	2 026	21 992	153 668	184 345	338 686	7 005
3359	Other electrical equipment & component mfg	1	149	78	11 010	326 661	7 690	16 305	181 419	1 059 558	1 201 489	2 255 744	86 541
33591	Battery mfg	1	10	6	937	30 194	766	1 757	20 461	90 022	71 928	162 371	4 524
335911	Storage battery mfg	1	9	6	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	21	21	4 863	134 177	3 444	7 732	83 248	515 606	830 845	1 342 533	54 216
335921	Fiber optic cable mfg	—	3	3	780	17 397	557	1 340	9 375	40 302	50 792	89 141	D
335929	Other communication & energy wire mfg	—	18	18	4 083	116 780	2 887	6 392	73 873	475 304	780 053	1 253 392	D
33593	Wiring device mfg	—	43	21	2 737	83 640	1 813	3 346	39 625	224 133	152 720	377 735	16 038
335931	Current-carrying wiring device mfg	1	27	13	1 704	55 157	1 068	1 866	20 738	100 306	68 192	169 555	4 794
335932	Noncurrent-carrying wiring device mfg	—	16	8	1 033	28 483	745	1 480	18 887	123 827	84 528	208 180	11 244
33599	All other electrical equipment & component mfg	4	75	30	2 473	78 650	1 667	3 470	38 085	229 797	145 996	373 105	11 763
335991	Carbon & graphite product mfg	—	4	3	382	13 588	259	553	8 150	44 329	17 929	56 334	D
335999	All other miscellaneous electrical equipment & component mfg	5	71	27	2 091	65 062	1 408	2 917	29 935	185 468	128 067	316 771	D

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	TEXAS—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	811	300	73 952	3 108 713	45 983	91 363	1 571 280	7 382 665	7 574 471	14 766 312	450 619
3361	Motor vehicle mfg	-	14	4	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	12	3	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	8	2	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	2	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	2	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	164	67	6 265	160 749	5 018	9 982	108 457	360 551	560 529	918 165	15 184
33621	Motor vehicle body & trailer mfg	2	164	67	6 265	160 749	5 018	9 982	108 457	360 551	560 529	918 165	15 184
336211	Motor vehicle body mfg	3	41	17	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	1	42	20	2 200	58 436	1 866	3 815	42 627	123 831	233 823	350 959	6 375
336213	Motor home mfg	-	4	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	3	77	28	2 174	50 834	1 767	3 377	34 557	104 805	174 190	279 011	4 600
3363	Motor vehicle parts mfg	1	304	107	15 280	413 918	11 481	21 979	255 719	1 287 080	1 666 630	2 958 412	92 678
33631	Motor vehicle gasoline engine & engine parts mfg	1	61	12	1 694	65 807	1 402	2 486	52 097	109 008	223 659	332 464	17 958
336311	Carburetor, piston, piston ring, & valve mfg	8	14	6	377	10 021	307	553	7 415	19 535	17 216	36 795	2 001
336312	Gasoline engine & engine parts mfg	-	47	6	1 317	55 786	1 095	1 933	44 682	89 473	206 443	295 669	15 957
33632	Motor vehicle electrical & electronic equipment mfg	-	68	30	5 179	126 164	3 817	6 805	71 248	496 901	522 721	1 004 757	26 703
336321	Vehicular lighting equipment mfg	-	5	3	559	17 984	234	459	5 191	53 601	43 361	96 066	1 987
336322	Other motor vehicle electrical & electronic equipment mfg	-	63	27	4 620	108 180	3 583	6 346	66 057	443 300	479 360	908 691	24 716
33633	Motor vehicle steering & suspension component (except spring) mfg	7	10	3	123	3 190	92	109	1 493	4 723	5 214	9 824	686
336330	Motor vehicle steering & suspension component (except spring) mfg	7	10	3	123	3 190	92	109	1 493	4 723	5 214	9 824	686
33634	Motor vehicle brake system mfg	1	9	6	628	17 085	499	886	10 379	40 524	27 725	68 774	3 407
336340	Motor vehicle brake system mfg	1	9	6	628	17 085	499	886	10 379	40 524	27 725	68 774	3 407
33635	Motor vehicle transmission & power train parts mfg	4	35	10	730	15 284	583	1 019	9 965	43 372	40 748	82 074	2 675
336350	Motor vehicle transmission & power train parts mfg	4	35	10	730	15 284	583	1 019	9 965	43 372	40 748	82 074	2 675
33636	Motor vehicle seating & interior trim mfg	-	21	10	1 604	40 624	1 455	2 983	31 837	99 250	144 772	239 657	15 274
336360	Motor vehicle seating & interior trim mfg	-	21	10	1 604	40 624	1 455	2 983	31 837	99 250	144 772	239 657	15 274
33637	Motor vehicle metal stamping	1	13	5	375	8 610	301	577	7 061	25 518	37 079	62 843	1 757
336370	Motor vehicle metal stamping	1	13	5	375	8 610	301	577	7 061	25 518	37 079	62 843	1 757
33639	Other motor vehicle parts mfg	-	87	31	4 947	137 154	3 332	7 114	71 639	467 784	664 712	1 158 019	24 218
336391	Motor vehicle air-conditioning mfg	-	18	9	2 290	61 049	1 482	3 483	31 123	212 527	402 327	641 107	7 676
336399	All other motor vehicle parts mfg	1	69	22	2 657	76 105	1 850	3 631	40 516	255 257	262 385	516 912	16 542
3364	Aerospace product & parts mfg	-	151	61	41 973	2 171 104	20 549	42 196	924 725	4 797 979	3 370 834	7 978 168	203 590
33641	Aerospace product & parts mfg	-	151	61	41 973	2 171 104	20 549	42 196	924 725	4 797 979	3 370 834	7 978 168	203 590
336411	Aircraft mfg	-	31	17	27 551	1 468 756	12 033	26 254	533 573	3 105 165	2 477 979	5 640 299	118 243
336412	Aircraft engine & engine parts mfg	1	26	14	h	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	85	23	7 857	414 330	3 952	7 399	217 029	984 583	330 592	1 141 072	46 833
336414	Guided missile & space vehicle mfg	-	4	3	h	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	1	4	3	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	-	18	14	2 332	67 861	1 926	3 821	46 369	164 851	538 206	704 485	D
33651	Railroad rolling stock mfg	-	18	14	2 332	67 861	1 926	3 821	46 369	164 851	538 206	704 485	D
336510	Railroad rolling stock mfg	-	18	14	2 332	67 861	1 926	3 821	46 369	164 851	538 206	704 485	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TEXAS—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3366	Ship & boat building	2	114	35	3 861	109 343	3 169	5 850	75 987	213 847	227 993	440 712	17 543
33661	Ship & boat building	2	114	35	3 861	109 343	3 169	5 850	75 987	213 847	227 993	440 712	17 543
336611	Ship building & repairing	1	71	27	3 087	93 209	2 587	4 803	66 181	176 571	174 670	351 241	15 282
336612	Boat building	6	43	8	774	16 134	582	1 047	9 806	37 276	53 323	89 471	2 261
3369	Other transportation equipment mfg	3	46	12	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	3	46	12	f	D	D	D	D	D	D	D	D
336999	All other transportation equipment mfg	3	30	10	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	1 034	248	27 706	610 156	21 776	41 950	401 093	1 448 065	1 249 536	2 698 845	73 149
3371	Household & institutional furniture & kitchen cabinet mfg	1	742	131	16 557	331 736	13 328	25 292	231 349	724 991	681 613	1 412 203	41 723
33711	Wood kitchen cabinet & counter top mfg	1	399	63	8 369	174 337	6 690	13 809	122 925	407 055	323 426	730 535	25 226
337110	Wood kitchen cabinet & counter top mfg ...	1	399	63	8 369	174 337	6 690	13 809	122 925	407 055	323 426	730 535	25 226
33712	Household & institutional furniture mfg	2	343	68	8 188	157 399	6 638	11 483	108 424	317 936	358 187	681 668	16 497
337121	Upholstered household furniture mfg	2	84	20	2 224	43 517	1 841	3 238	30 861	79 697	91 829	172 159	3 746
337122	Nonupholstered wood household furniture mfg	3	172	13	1 741	30 817	1 473	2 444	22 093	64 322	43 168	107 134	2 313
337124	Metal household furniture mfg	1	19	8	1 393	25 839	1 157	2 175	19 700	52 621	63 797	122 966	4 469
337127	Institutional furniture mfg	1	54	26	2 721	54 955	2 090	3 468	34 228	116 244	155 273	270 190	5 801
3372	Office furniture (including fixtures) mfg	2	209	80	7 555	202 563	5 765	10 837	121 558	477 772	309 139	784 546	23 637
33721	Office furniture (including fixtures) mfg	2	209	80	7 555	202 563	5 765	10 837	121 558	477 772	309 139	784 546	23 637
337211	Wood office furniture mfg	-	29	11	1 035	28 201	760	1 257	16 798	84 443	45 752	129 101	2 691
337212	Custom architectural woodwork & millwork mfg	1	62	25	1 471	42 886	1 100	1 945	24 576	78 283	43 184	122 067	3 096
337214	Office furniture (except wood) mfg	1	17	6	898	22 808	644	1 318	14 942	73 011	67 514	140 032	5 498
337215	Showcase, partition, shelving, & locker mfg	2	101	38	4 151	108 668	3 261	6 317	65 242	242 035	152 689	393 346	12 352
3379	Other furniture related product mfg	-	83	37	3 594	75 857	2 683	5 821	48 186	245 302	258 784	502 096	7 789
33791	Mattress mfg	1	52	18	1 555	35 851	1 202	2 306	22 574	127 076	127 787	254 531	4 921
337910	Mattress mfg	1	52	18	1 555	35 851	1 202	2 306	22 574	127 076	127 787	254 531	4 921
33792	Blind & shade mfg	-	31	19	2 039	40 006	1 481	3 515	25 612	118 226	130 997	247 565	2 868
337920	Blind & shade mfg	-	31	19	2 039	40 006	1 481	3 515	25 612	118 226	130 997	247 565	2 868
339	Miscellaneous mfg	2	1 859	305	37 566	976 516	26 738	50 775	543 749	2 995 497	2 107 838	5 098 719	147 402
3391	Medical equipment & supplies mfg	1	673	93	15 571	457 922	10 759	19 899	234 566	1 606 493	927 346	2 536 320	79 960
33911	Medical equipment & supplies mfg	1	673	93	15 571	457 922	10 759	19 899	234 566	1 606 493	927 346	2 536 320	79 960
339111	Laboratory apparatus & furniture mfg	2	15	4	276	10 079	176	325	4 128	19 547	16 579	36 345	571
339112	Surgical & medical instrument mfg	2	72	24	4 280	143 098	2 945	5 710	73 738	475 891	260 065	729 032	21 734
339113	Surgical appliance & supplies mfg	-	109	39	7 169	219 877	4 942	9 324	105 436	936 479	526 776	1 476 165	47 911
339114	Dental equipment & supplies mfg	3	34	1	210	6 047	151	298	3 427	10 424	6 378	17 378	349
339115	Ophthalmic goods mfg	1	33	6	1 360	25 234	849	1 473	14 178	53 483	74 900	122 239	5 870
339116	Dental laboratories ...	5	410	19	2 276	53 587	1 696	2 769	33 659	110 669	42 648	155 161	3 525
3399	Other miscellaneous mfg ..	3	1 186	212	21 995	518 594	15 979	30 876	309 183	1 389 004	1 180 492	2 562 399	67 442
33991	Jewelry & silverware mfg	2	154	20	2 822	62 369	2 105	4 167	42 265	142 100	139 936	281 495	4 107
339911	Jewelry (except costume) mfg	2	106	14	2 478	55 434	1 833	3 713	38 108	127 191	129 625	256 570	3 791
339914	Costume jewelry & novelty mfg	5	40	5	265	4 902	216	361	3 065	10 291	7 024	17 063	197
33992	Sporting & athletic goods mfg	1	151	32	2 875	59 638	2 252	4 027	38 567	206 325	166 764	373 621	9 348
339920	Sporting & athletic goods mfg	1	151	32	2 875	59 638	2 252	4 027	38 567	206 325	166 764	373 621	9 348
33993	Doll, toy, & game mfg ...	-	41	8	1 263	26 022	1 106	1 896	17 395	189 010	153 802	342 917	2 957
339932	Game, toy, & children's vehicle mfg	-	26	6	1 192	24 790	1 049	1 816	16 599	185 116	151 743	336 988	2 939

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TEXAS—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg—Con.												
33994	Office supplies (except paper) mfg	1	59	8	848	19 116	536	1 069	11 070	79 838	48 139	126 386	3 493
339941	Pen & mechanical pencil mfg	1	2	1	c	D	D	D	D	D	D	D	D
339942	Lead pencil & art good mfg	2	6	1	c	D	D	D	D	D	D	D	D
339943	Marking device mfg . . .	4	44	4	408	7 906	229	433	4 635	15 241	7 838	23 007	721
339944	Carbon paper & inked ribbon mfg	—	7	2	158	5 295	89	170	2 551	51 183	29 696	79 855	2 198
33995	Sign mfg	4	454	58	5 314	133 577	3 526	6 593	68 903	192 025	230 334	418 894	9 009
339950	Sign mfg	4	454	58	5 314	133 577	3 526	6 593	68 903	192 025	230 334	418 894	9 009
33999	All other miscellaneous mfg	3	327	86	8 873	217 872	6 454	13 124	130 983	579 706	441 517	1 019 086	38 528
339991	Gasket, packing, & sealing device mfg . . .	3	69	35	3 353	99 178	2 331	5 185	59 158	247 285	170 204	416 362	18 675
339993	Fastener, button, needle, & pin mfg	1	10	2	152	1 838	60	110	738	7 452	6 318	13 975	424
339994	Broom, brush, & mop mfg	1	25	5	423	7 124	256	488	3 917	32 615	29 605	62 318	2 577
339995	Burial casket mfg	2	8	2	115	2 441	85	180	1 680	9 026	6 021	14 884	98
339999	All other miscellaneous mfg	4	190	41	4 736	104 780	3 644	7 000	63 683	278 560	226 627	503 854	16 564

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ABILENE, TX MSA												
	Manufacturing	—	118	28	3 062	79 897	2 121	3 922	44 560	531 226	472 693	1 010 679	21 553
311	Food mfg	—	11	4	466	10 674	265	495	4 724	45 280	26 876	72 126	2 307
3118	Bakeries & tortilla mfg	—	7	3	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	—	5	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	4	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	—	4	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	4	2	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	23	5	789	20 967	636	1 317	15 290	67 932	97 449	160 976	4 888
3324	Boiler, tank, & shipping container mfg	—	2	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	4	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AMARILLO, TX MSA													
31-33	Manufacturing	—	203	53	11 110	359 114	7 430	15 560	233 107	855 150	2 755 558	3 624 906	36 651
311	Food mfg	—	21	8	3 662	80 590	3 103	7 058	66 531	133 315	1 372 229	1 507 765	12 067
3116	Meat product mfg	—	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	4	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	2	2	h	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	21	5	358	9 523	258	549	5 873	19 252	10 127	29 443	2 420
3231	Printing & related support activities	1	21	5	358	9 523	258	549	5 873	19 252	10 127	29 443	2 420
32311	Printing	1	20	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	13	6	967	32 896	835	1 657	27 848	168 382	54 959	228 820	5 597
3272	Glass & glass product mfg	—	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	3	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	1	1	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	27	7	3 526	162 132	1 211	2 444	82 122	323 120	15 724	339 536	720
3329	Other fabricated metal product mfg	—	3	2	h	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	2	2	h	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	2	2	h	D	D	D	D	D	D	D	D
333	Machinery mfg	—	18	9	462	14 341	338	646	9 249	25 316	29 362	55 800	1 717
AUSTIN—SAN MARCOS, TX MSA													
31-33	Manufacturing	—	1 192	329	68 826	2 529 356	36 834	75 670	997 863	15 382 557	9 540 552	24 924 886	1 317 089
311	Food mfg	6	81	20	1 809	41 488	1 176	2 282	22 950	118 533	161 157	280 191	10 787
3114	Fruit & vegetable preserving & specialty food mfg	7	13	3	490	13 148	371	807	8 438	48 188	49 544	97 740	D
31141	Frozen food mfg	8	5	2	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	8	4	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	3	36	6	474	7 722	326	583	4 537	18 900	9 133	28 020	1 189
3119	Other food mfg	7	16	3	297	7 040	190	300	3 851	29 242	23 604	52 823	2 045
312	Beverage & tobacco product mfg	—	10	2	457	14 324	103	202	3 169	18 956	72 866	91 385	1 271
3121	Beverage mfg	—	10	2	457	14 324	103	202	3 169	18 956	72 866	91 385	1 271
31211	Soft drink & ice mfg	—	4	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	23	3	340	5 159	234	332	3 316	13 373	7 407	21 038	735
321	Wood product mfg	2	42	12	1 282	27 113	1 008	1 834	16 914	57 706	67 331	124 663	4 471
3212	Veneer, plywood, & engineered wood product mfg	—	5	4	252	7 288	186	387	3 610	12 846	15 767	28 166	216
32121	Veneer, plywood, & engineered wood product mfg	—	5	4	252	7 288	186	387	3 610	12 846	15 767	28 166	216
321214	Truss mfg	—	5	4	252	7 288	186	387	3 610	12 846	15 767	28 166	216
3219	Other wood product mfg ...	1	33	8	992	19 018	788	1 378	12 618	42 885	48 315	91 254	4 040
32199	All other wood product mfg	1	13	4	782	14 713	615	1 046	9 603	34 216	41 185	75 434	3 791
321991	Manufactured home (mobile home) mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	7	11	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUSTIN-SAN MARCOS, TX MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	5	186	35	3 009	86 202	2 142	3 776	51 355	174 982	116 545	292 581	17 418
3231	Printing & related support activities.....	5	186	35	3 009	86 202	2 142	3 776	51 355	174 982	116 545	292 581	17 418
32311	Printing.....	5	164	32	2 752	78 256	1 933	3 376	45 809	161 172	114 252	276 471	16 859
323110	Commercial lithographic printing ..	5	73	18	1 400	43 369	1 041	1 893	26 764	93 068	48 856	141 654	10 379
323114	Quick printing	1	45	3	351	8 076	274	402	4 656	16 484	9 741	26 271	906
323117	Book printing.....	9	3	3	f	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	2	22	3	257	7 946	209	400	5 546	13 810	2 293	16 110	559
325	Chemical mfg	2	35	11	2 109	85 018	1 503	3 270	57 662	213 183	135 354	347 894	20 144
3251	Basic chemical mfg	5	7	2	317	18 444	99	226	6 285	46 049	38 319	84 647	7 879
3254	Pharmaceutical & medicine mfg	—	12	7	1 517	57 797	1 277	2 833	48 388	136 432	66 534	201 753	10 034
32541	Pharmaceutical & medicine mfg	—	12	7	1 517	57 797	1 277	2 833	48 388	136 432	66 534	201 753	10 034
325411	Medicinal & botanical mfg	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	43	20	1 429	39 508	1 048	2 163	21 354	102 260	70 638	171 967	8 117
3261	Plastics product mfg	1	39	19	1 368	38 253	997	2 083	20 503	98 106	65 809	162 846	7 666
32619	Other plastics product mfg	—	30	14	1 034	24 504	729	1 510	15 064	80 617	33 836	113 613	5 088
326199	All other plastics product mfg	—	25	12	840	20 544	566	1 188	12 320	69 987	27 320	96 675	D
327	Nonmetallic mineral product mfg	1	91	26	1 997	58 432	1 592	3 521	41 936	187 709	145 339	333 346	10 877
3271	Clay product & refractory mfg	1	12	4	325	7 312	267	611	5 758	19 478	12 013	30 629	D
32712	Clay building material & refractories mfg	1	4	3	260	5 775	212	502	4 427	15 044	8 111	22 683	1 905
327121	Brick & structural clay tile mfg	1	4	3	260	5 775	212	502	4 427	15 044	8 111	22 683	1 905
3273	Cement & concrete product mfg	1	47	15	1 072	35 274	860	1 951	24 915	129 834	104 646	236 013	6 298
32732	Ready-mix concrete mfg	2	30	8	449	14 307	379	848	11 106	45 424	51 876	97 948	2 304
327320	Ready-mix concrete mfg	2	30	8	449	14 307	379	848	11 106	45 424	51 876	97 948	2 304
32739	Other concrete product mfg	—	11	4	359	9 730	271	565	6 814	20 606	15 524	36 166	1 533
327390	Other concrete product mfg	—	11	4	359	9 730	271	565	6 814	20 606	15 524	36 166	1 533
3279	Other nonmetallic mineral product mfg	1	16	4	317	7 307	249	526	5 315	19 535	13 065	32 312	897
32799	All other nonmetallic mineral product mfg ...	1	16	4	317	7 307	249	526	5 315	19 535	13 065	32 312	897
332	Fabricated metal product mfg	2	165	40	2 903	81 903	2 272	4 458	52 407	178 846	151 243	330 193	11 842
3323	Architectural & structural metals mfg	1	47	14	1 012	30 521	751	1 430	18 965	66 653	75 585	141 756	3 131
33231	Plate work & fabricated structural product mfg ..	1	15	5	377	9 517	280	488	5 813	15 758	28 007	43 807	762
332312	Fabricated structural metal mfg	1	10	5	335	8 337	252	428	5 082	13 495	25 428	38 968	681
33232	Ornamental & architectural metal products mfg	1	32	9	635	21 004	471	942	13 152	50 895	47 578	97 949	2 369
332322	Sheet metal work mfg ..	2	22	6	524	17 321	391	785	10 955	39 710	40 031	79 226	1 930
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	70	13	756	26 150	611	1 193	17 169	55 349	20 479	75 832	4 908
33271	Machine shops	3	63	11	626	20 853	508	971	14 297	46 759	17 335	64 034	3 498
332710	Machine shops	3	63	11	626	20 853	508	971	14 297	46 759	17 335	64 034	3 498
3328	Coating, engraving, heat treating, & allied activities ..	1	13	5	297	6 045	248	435	4 413	11 856	3 858	15 755	293
33281	Coating, engraving, heat treating, & allied activities.....	1	13	5	297	6 045	248	435	4 413	11 856	3 858	15 755	293
3329	Other fabricated metal product mfg	—	15	5	534	12 061	411	873	6 805	21 764	23 333	45 660	2 086
33291	Metal valve mfg	—	5	4	456	10 460	349	777	5 789	17 590	20 046	38 162	1 760
332911	Industrial valve mfg ...	—	3	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	AUSTIN-SAN MARCOS, TX MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg	-	65	21	5 656	124 809	4 757	9 347	79 438	1 021 137	830 730	1 787 620	71 002
3331	Agriculture, construction, & mining machinery mfg.	2	10	4	303	9 057	214	413	5 488	22 851	31 069	54 129	2 275
3332	Industrial machinery mfg ..	-	20	10	4 532	93 542	3 889	7 778	58 084	958 367	773 929	1 668 218	64 574
33329	Other industrial machinery mfg	-	20	10	4 532	93 542	3 889	7 778	58 084	958 367	773 929	1 668 218	64 574
333295	Semiconductor machinery mfg	-	9	5	3 829	68 685	3 456	6 946	47 073	904 255	703 974	1 545 785	57 032
333298	All other industrial machinery mfg	1	9	5	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	4	18	2	360	9 400	284	548	6 615	15 496	7 147	22 400	2 227
33351	Metalworking machinery mfg	4	18	2	360	9 400	284	548	6 615	15 496	7 147	22 400	2 227
3339	Other general-purpose machinery mfg	1	8	3	362	9 579	300	465	7 278	16 751	8 780	25 489	794
33391	Pump & compressor mfg	-	2	2	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	149	80	38 357	1 665 741	14 972	33 260	513 835	12 527 001	7 249 859	19 848 363	1 115 101
3341	Computer & peripheral equipment mfg	-	28	15	h	D	D	D	D	D	D	D	35 833
33411	Computer & peripheral equipment mfg	-	28	15	h	D	D	D	D	D	D	D	35 833
334111	Electronic computer mfg	-	11	5	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	15	9	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	18	10	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	5	4	f	D	D	D	D	D	D	D	7 442
334210	Telephone apparatus mfg	-	5	4	f	D	D	D	D	D	D	D	7 442
33429	Other communications equipment mfg	5	6	3	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	5	6	3	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	52	34	27 641	1 263 428	10 670	24 908	348 771	8 985 390	1 352 807	10 414 541	1 031 202
33441	Semiconductor & other electronic component mfg	-	52	34	27 641	1 263 428	10 670	24 908	348 771	8 985 390	1 352 807	10 414 541	1 031 202
334412	Bare printed circuit board mfg	1	6	4	307	6 422	212	394	4 313	13 218	10 886	24 258	1 245
334413	Semiconductor & related device mfg ...	-	22	15	15 988	653 906	6 416	17 848	203 933	6 801 760	574 663	7 294 898	926 179
334418	Printed circuit assembly (electronic assembly) mfg	-	11	10	10 619	567 170	3 458	5 504	123 308	2 099 604	749 413	3 007 486	102 204
334419	Other electronic component mfg	8	8	4	493	30 692	376	788	14 493	54 652	8 451	62 342	610
3345	Navigational, measuring, medical, & control instruments mfg	-	40	19	g	D	D	D	D	D	D	D	11 005
33451	Navigational, measuring, medical, & control instruments mfg	-	40	19	g	D	D	D	D	D	D	D	11 005
334513	Industrial process control instrument mfg	-	5	4	507	9 526	178	389	4 112	75 661	38 931	111 688	D
334519	Other measuring & controlling device mfg	2	12	4	281	10 261	116	188	3 106	27 928	11 616	39 673	D
3346	Mfg & reproducing magnetic & optical media ..	-	7	1	h	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	7	1	h	D	D	D	D	D	D	D	D
334611	Software reproducing ..	-	3	1	h	D	D	D	D	D	D	D	D

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31-33	AUSTIN-SAN MARCOS, TX MSA—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	42	19	2 566	94 130	1 427	2 757	34 770	223 382	195 372	417 415	16 707
3351	Electric lighting equipment mfg	—	10	6	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	9	5	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	—	5	4	f	D	D	D	D	D	D	D	4 254
3353	Electrical equipment mfg ..	—	10	2	456	20 078	202	401	6 468	47 238	52 861	97 589	D
33531	Electrical equipment mfg	—	10	2	456	20 078	202	401	6 468	47 238	52 861	97 589	D
335312	Motor & generator mfg	—	4	2	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	20	11	1 226	51 132	668	1 215	15 591	100 772	76 036	177 407	D
33592	Communication & energy wire & cable mfg	5	3	3	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	6	2	2	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	3	2	e	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	12	5	288	8 384	210	410	3 629	15 319	13 983	29 431	846
335999	All other miscellaneous electrical equipment & component mfg	2	12	5	288	8 384	210	410	3 629	15 319	13 983	29 431	846
336	Transportation equipment mfg	—	20	4	1 002	41 527	518	919	13 745	99 997	44 318	140 635	10 164
3364	Aerospace product & parts mfg	—	4	3	855	38 452	406	704	11 614	93 681	37 743	128 063	9 154
33641	Aerospace product & parts mfg	—	4	3	855	38 452	406	704	11 614	93 681	37 743	128 063	9 154
336413	Other aircraft part & auxiliary equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	70	11	1 387	27 698	1 106	1 806	19 265	55 816	54 472	110 406	3 428
3371	Household & institutional furniture & kitchen cabinet mfg	2	55	6	905	16 297	750	1 142	12 113	27 285	21 792	49 154	2 375
33711	Wood kitchen cabinet & counter top mfg	3	29	3	320	8 319	283	600	6 723	13 571	8 212	21 701	498
337110	Wood kitchen cabinet & counter top mfg ...	3	29	3	320	8 319	283	600	6 723	13 571	8 212	21 701	498
33712	Household & institutional furniture mfg	2	26	3	585	7 978	467	542	5 390	13 714	13 580	27 453	1 877
337122	Nonupholstered wood household furniture mfg	3	16	1	324	3 740	266	249	2 657	6 034	5 805	11 928	468
3379	Other furniture related product mfg	2	5	3	315	6 941	229	465	4 286	21 974	29 293	51 315	959
339	Miscellaneous mfg	2	122	16	3 906	121 936	2 503	4 905	57 453	353 419	191 713	544 282	13 224
3391	Medical equipment & supplies mfg	—	46	8	1 744	73 034	911	1 738	23 997	233 862	95 071	331 261	8 555
33911	Medical equipment & supplies mfg	—	46	8	1 744	73 034	911	1 738	23 997	233 862	95 071	331 261	8 555
339113	Surgical appliance & supplies mfg	—	7	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	5	76	8	2 162	48 902	1 592	3 167	33 456	119 557	96 642	213 021	4 669
33991	Jewelry & silverware mfg	—	9	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	—	6	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	23	5	876	20 475	753	1 433	14 479	63 385	43 342	104 738	2 081
339999	All other miscellaneous mfg	9	15	4	835	19 337	719	1 370	13 665	60 973	41 815	100 760	1 942

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BEAUMONT-PORT ARTHUR, TX MSA												
	Manufacturing	-	349	117	21 624	1 059 397	15 455	34 878	694 506	5 651 595	13 258 762	18 986 618	827 233
311	Food mfg.....	1	23	6	383	8 211	290	501	4 472	15 768	62 211	78 654	1 352
321	Wood product mfg.....	1	14	7	734	21 439	623	1 581	16 118	39 664	78 917	117 597	5 839
3212	Veneer, plywood, & engineered wood product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	-	6	3	334	10 363	295	710	7 792	16 535	28 723	45 282	899
32192	Wood container & pallet mfg.....	-	3	3	321	10 156	284	691	7 643	16 123	28 391	44 511	876
321920	Wood container & pallet mfg.....	-	3	3	321	10 156	284	691	7 643	16 123	28 391	44 511	876
322	Paper mfg.....	1	5	4	621	32 286	473	1 095	24 563	76 375	159 051	234 363	D
3221	Pulp, paper, & paperboard mills.....	1	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	-	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	-	1	1	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	-	10	8	4 438	283 961	3 096	7 512	191 435	1 604 980	7 890 663	9 558 574	259 518
3241	Petroleum & coal products mfg.....	-	10	8	4 438	283 961	3 096	7 512	191 435	1 604 980	7 890 663	9 558 574	259 518
32411	Petroleum refineries.....	-	7	6	h	D	D	D	D	D	D	D	D
324110	Petroleum refineries..	-	7	6	h	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	43	31	8 526	491 389	5 708	13 084	309 848	3 403 119	4 367 660	7 788 226	507 564
3251	Basic chemical mfg.....	1	19	12	2 630	160 733	1 880	4 858	109 055	1 321 774	1 989 905	3 330 414	302 486
32511	Petrochemical mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg....	-	1	1	e	D	D	D	D	D	D	D	D
32512	Industrial gas mfg.....	-	7	2	632	39 866	456	921	25 609	116 462	234 521	364 192	D
325120	Industrial gas mfg....	-	7	2	632	39 866	456	921	25 609	116 462	234 521	364 192	D
32519	Other basic organic chemical mfg.....	1	7	6	1 533	95 946	1 109	3 176	68 847	990 368	1 176 990	2 168 974	92 082
325199	All other basic organic chemical mfg.....	1	7	6	1 533	95 946	1 109	3 176	68 847	990 368	1 176 990	2 168 974	92 082
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	12	12	5 130	291 506	3 377	7 274	178 312	1 769 524	2 167 151	3 924 920	176 524
32521	Resin & synthetic rubber mfg.....	-	12	12	5 130	291 506	3 377	7 274	178 312	1 769 524	2 167 151	3 924 920	176 524
325211	Plastics material & resin mfg.....	-	7	7	2 940	174 944	1 947	4 347	111 349	1 202 694	1 438 489	2 655 116	99 672
325212	Synthetic rubber mfg..	-	5	5	2 190	116 562	1 430	2 927	66 963	566 830	728 662	1 269 804	76 852
3253	Pesticide, fertilizer, & other agricultural chemical mfg.	-	2	1	e	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	9	5	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg.....	-	9	5	e	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin...	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	3	11	5	385	13 228	311	717	9 690	24 436	66 562	91 662	4 226
3261	Plastics product mfg.....	3	8	4	e	D	D	D	D	D	D	D	4 204
32611	Unsupported plastics film, sheet, & bag mfg..	2	4	4	322	11 765	270	642	8 863	21 600	61 693	83 954	3 970
331	Primary metal mfg.....	-	5	5	1 092	44 752	882	1 970	33 928	53 222	260 188	319 342	13 775
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	-	3	3	f	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	2	2	e	D	D	D	D	D	D	D	D

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31-33	BEAUMONT—PORT ARTHUR, TX MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	81	24	2 542	85 219	1 963	4 362	56 433	214 482	229 683	442 821	11 696
3321	Forging & stamping	-	5	3	343	13 617	239	541	8 954	34 052	42 833	75 205	D
33211	Forging & stamping	-	5	3	343	13 617	239	541	8 954	34 052	42 833	75 205	D
332111	Iron & steel forging ...	-	3	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	20	4	729	22 746	598	1 400	15 432	47 828	67 028	115 690	991
33231	Plate work & fabricated structural product mfg ..	-	8	3	478	13 590	433	1 041	10 806	33 806	56 403	90 260	D
332312	Fabricated structural metal mfg	-	6	3	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	12	1	251	9 156	165	359	4 626	14 022	10 625	25 430	D
3324	Boiler, tank, & shipping container mfg	-	5	3	e	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	4	3	286	9 290	208	441	6 041	22 339	18 897	41 314	1 098
332410	Power boiler & heat exchanger mfg	-	4	3	286	9 290	208	441	6 041	22 339	18 897	41 314	1 098
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	32	2	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	30	2	259	8 140	202	364	5 165	14 120	4 730	19 013	991
332710	Machine shops	1	30	2	259	8 140	202	364	5 165	14 120	4 730	19 013	991
3329	Other fabricated metal product mfg	-	14	9	735	25 351	571	1 254	16 529	79 698	72 735	152 212	3 165
33291	Metal valve mfg	-	4	3	356	13 643	262	640	8 593	44 165	44 580	88 462	2 576
33299	All other fabricated metal product mfg	1	10	6	379	11 708	309	614	7 936	35 533	28 155	63 750	589
333	Machinery mfg	1	24	8	670	23 121	468	991	13 061	78 203	40 196	110 895	2 083
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	19	6	825	25 127	739	1 506	19 363	61 691	42 234	103 997	1 664
3366	Ship & boat building	-	13	6	779	23 679	700	1 432	18 416	58 867	37 217	96 094	1 445
33661	Ship & boat building	-	13	6	779	23 679	700	1 432	18 416	58 867	37 217	96 094	1 445
336611	Ship building & repairing	-	11	6	f	D	D	D	D	D	D	D	D
31-33	BROWNSVILLE—HARLINGEN—SAN BENITO, TX MSA												
	Manufacturing	-	235	67	12 694	242 429	10 505	18 250	169 561	775 190	959 338	1 732 776	32 233
311	Food mfg	-	47	10	1 591	31 352	1 184	1 686	14 515	90 745	180 619	271 252	3 800
3117	Seafood product preparation & packaging ..	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
31171	Seafood product preparation & packaging	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
311712	Fresh & frozen seafood processing ..	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
315	Apparel mfg	-	15	10	5 377	80 750	5 170	8 963	74 719	258 878	282 863	526 750	5 333
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	g	D	D	D	D	D	D	D	D

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	BROWNSVILLE—HARLINGEN—SAN BENITO, TX MSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	—	13	9	h	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	5	5	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	5	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	2	1	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	1	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	10	5	340	7 492	282	527	5 254	22 122	18 562	40 121	1 435
3261	Plastics product mfg	5	8	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	14	5	584	11 426	388	749	7 676	24 022	37 182	66 494	2 756
3279	Other nonmetallic mineral product mfg	1	4	2	e	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	26	10	1 432	29 318	1 086	1 981	21 866	79 924	107 889	186 221	4 016
3323	Architectural & structural metals mfg	—	5	4	992	21 469	735	1 366	16 425	62 655	98 536	160 198	3 286
33231	Plate work & fabricated structural product mfg	—	2	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	6	4	421	7 819	345	554	3 915	26 792	10 105	36 952	1 787
336	Transportation equipment mfg	—	23	7	1 753	48 232	1 198	2 264	27 290	181 198	211 412	401 991	9 025
3363	Motor vehicle parts mfg	—	8	4	940	29 805	533	1 186	12 097	142 057	166 090	307 715	8 277
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	8	11	1	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	8	11	1	e	D	D	D	D	D	D	D	D
336611	Ship building & repairing	8	7	1	e	D	D	D	D	D	D	D	D
	BRYAN—COLLEGE STATION, TX MSA												
31-33	Manufacturing	1	101	25	3 126	79 602	2 203	4 547	44 323	175 554	206 647	382 206	12 355
311	Food mfg	1	6	2	255	8 350	125	231	3 085	14 325	23 286	37 688	462
332	Fabricated metal product mfg	—	20	3	1 211	25 370	951	2 120	17 489	41 360	74 957	118 810	2 011
3323	Architectural & structural metals mfg	—	7	1	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	6	1	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	2	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BRYAN-COLLEGE STATION, TX MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	—	8	5	530	14 663	332	616	6 034	36 411	29 718	65 989	1 356
3371	Household & institutional furniture & kitchen cabinet mfg	—	5	3	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	—	4	3	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	—	4	3	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	3	2	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	3	2	e	D	D	D	D	D	D	D	D
	CORPUS CHRISTI, TX MSA												
31-33	Manufacturing	4	268	73	11 435	476 947	7 847	15 955	297 102	2 912 026	8 173 597	11 223 836	377 182
311	Food mfg	—	25	7	1 249	30 589	901	2 228	17 384	48 606	298 427	346 563	2 790
3116	Meat product mfg	—	4	3	f	D	D	D	D	D	D	D	1 566
31161	Animal slaughtering & processing	—	4	3	f	D	D	D	D	D	D	D	1 566
311611	Animal (except poultry) slaughtering	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	3	16	3	411	7 345	237	500	3 909	18 804	19 755	38 563	1 127
31181	Bread & bakery product mfg	3	15	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	27	4	273	5 503	197	317	3 294	11 212	6 452	17 644	D
3231	Printing & related support activities	3	27	4	273	5 503	197	317	3 294	11 212	6 452	17 644	D
32311	Printing	3	26	4	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	6	10	7	2 793	162 688	1 786	2 983	105 700	1 612 124	6 118 074	7 893 936	228 224
3241	Petroleum & coal products mfg	6	10	7	2 793	162 688	1 786	2 983	105 700	1 612 124	6 118 074	7 893 936	228 224
32411	Petroleum refineries	6	6	5	2 673	159 410	1 727	2 844	104 291	1 593 121	6 080 697	7 836 189	D
324110	Petroleum refineries ..	6	6	5	2 673	159 410	1 727	2 844	104 291	1 593 121	6 080 697	7 836 189	D
325	Chemical mfg	—	16	9	2 013	119 737	1 175	2 718	66 781	849 053	1 244 407	2 069 426	123 974
3251	Basic chemical mfg	—	13	7	g	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	—	1	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	3	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	2	2	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	26	6	263	5 532	213	389	4 421	18 122	32 030	50 344	879
331	Primary metal mfg	—	2	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331311	Alumina refining	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	53	14	1 956	58 131	1 507	3 045	37 849	125 346	134 657	260 478	3 505
3323	Architectural & structural metals mfg	—	15	5	1 356	40 644	1 022	2 059	25 266	89 941	110 938	201 589	1 218
33231	Plate work & fabricated structural product mfg ..	—	9	4	g	D	D	D	D	D	D	D	293
332312	Fabricated structural metal mfg	—	5	3	958	29 802	722	1 458	18 443	64 626	81 559	146 305	D
33232	Ornamental & architectural metal products mfg	—	6	1	e	D	D	D	D	D	D	D	925
332321	Metal window & door mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	4	18	6	514	14 786	369	766	10 238	47 924	32 579	73 045	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CORPUS CHRISTI, TX MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	6	3	431	13 755	273	540	6 496	51 189	47 996	96 735	4 414
3344	Semiconductor & other electronic component mfg	—	3	2	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	2	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	18	6	351	9 012	271	526	6 155	19 655	21 030	40 654	D
3366	Ship & boat building	1	10	4	255	6 976	200	412	4 900	16 066	17 488	33 557	D
33661	Ship & boat building	1	10	4	255	6 976	200	412	4 900	16 066	17 488	33 557	D
	DALLAS—FORT WORTH, TX CMSA												
31-33	Manufacturing	1	6 764	2 249	315 240	11 470 574	204 312	412 601	5 549 497	34 729 511	29 196 640	63 617 160	2 885 945
311	Food mfg	—	318	122	17 525	488 320	12 007	24 568	271 746	2 962 402	3 103 181	6 069 931	131 137
312	Beverage & tobacco product mfg	—	22	11	h	D	D	D	D	D	D	D	D
313	Textile mills	2	38	7	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	152	46	h	D	D	D	D	D	D	D	5 487
315	Apparel mfg	2	323	87	8 738	175 297	6 213	10 912	99 660	586 672	409 138	986 982	15 403
316	Leather & allied product mfg ..	1	30	9	875	17 745	739	1 213	11 855	55 568	69 948	131 511	931
321	Wood product mfg	2	178	65	7 360	166 360	6 201	12 184	115 757	391 363	761 814	1 146 462	19 132
322	Paper mfg	—	142	91	8 816	292 876	6 448	14 197	183 993	797 881	1 034 825	1 825 826	64 932
323	Printing & related support activities	1	1 019	223	20 693	664 869	15 421	30 606	419 903	1 508 124	1 017 290	2 518 089	112 405
324	Petroleum & coal products mfg	4	41	15	1 407	50 442	854	1 837	27 791	190 394	289 035	482 139	D
325	Chemical mfg	1	319	120	13 122	517 287	7 296	15 107	194 491	2 809 788	1 946 644	4 765 557	141 605
326	Plastics & rubber products mfg	1	339	170	17 618	488 564	13 636	28 308	314 454	1 303 105	1 486 986	2 779 560	127 509
327	Nonmetallic mineral product mfg	1	278	115	10 108	301 834	8 208	17 135	226 326	1 015 620	871 068	1 886 678	121 030
331	Primary metal mfg	—	68	31	5 109	156 148	4 061	8 918	109 394	516 388	652 647	1 191 025	55 233
332	Fabricated metal product mfg	1	1 154	366	29 135	863 599	22 330	46 016	547 762	1 974 415	1 825 481	3 792 763	108 814
333	Machinery mfg	1	504	191	21 243	722 618	13 954	27 997	368 146	1 917 072	1 773 580	3 683 246	91 506
334	Computer & electronic product mfg	—	448	197	65 994	3 218 963	31 405	62 785	977 712	10 568 755	5 728 319	16 158 890	1 380 531
335	Electrical equipment, appliance, & component mfg	1	131	63	7 578	205 128	5 585	11 489	119 773	661 780	821 231	1 479 337	51 424
336	Transportation equipment mfg	—	276	117	49 258	2 338 974	27 667	56 292	1 105 865	5 300 498	5 140 292	10 292 325	323 603
337	Furniture & related product mfg	1	375	106	12 242	292 841	9 506	18 747	185 724	697 322	527 548	1 221 354	31 116
339	Miscellaneous mfg	3	609	97	10 534	287 266	7 808	14 765	159 331	690 234	589 509	1 278 025	40 001

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA												
31-33	Manufacturing	1	4 452	1 494	210 507	7 655 117	137 206	275 759	3 697 490	24 629 326	19 411 429	43 667 517	2 210 644
311	Food mfg.....	—	216	85	12 101	339 604	8 124	16 556	187 075	2 288 595	1 961 613	4 253 966	88 076
3112	Grain & oilseed milling	—	3	2	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	—	13	7	601	14 609	443	956	10 383	52 041	50 824	103 376	1 628
31142	Fruit & vegetable canning, pickling, & drying.....	—	9	4	e	D	D	D	D	D	D	D	748
311421	Fruit & vegetable canning.....	—	5	4	366	9 217	275	580	6 560	35 897	32 684	69 091	D
3115	Dairy product mfg.....	1	11	7	1 476	52 110	594	1 313	16 751	156 037	389 764	545 907	17 151
31151	Dairy product (except frozen) mfg.....	2	7	4	1 126	41 241	330	823	9 975	102 850	349 074	451 786	16 199
311511	Fluid milk mfg.....	2	5	4	g	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	—	4	3	350	10 869	264	490	6 776	53 187	40 690	94 121	952
311520	Ice cream & frozen dessert mfg.....	—	4	3	350	10 869	264	490	6 776	53 187	40 690	94 121	952
3116	Meat product mfg.....	1	27	19	2 968	74 370	2 436	5 201	50 936	265 531	579 008	845 809	15 854
31161	Animal slaughtering & processing.....	1	27	19	2 968	74 370	2 436	5 201	50 936	265 531	579 008	845 809	15 854
311611	Animal (except poultry) slaughtering.....	—	5	4	694	14 922	586	1 075	11 049	68 289	164 390	232 793	D
311612	Meat processed from carcasses.....	2	13	9	1 520	42 350	1 209	2 706	27 151	149 779	306 488	456 893	8 615
311615	Poultry processing....	—	5	3	f	D	D	D	D	D	D	D	1 669
3118	Bakeries & tortilla mfg.....	—	93	20	3 522	91 773	1 903	3 735	38 931	246 880	245 294	492 247	23 034
31181	Bread & bakery product mfg.....	—	76	12	2 364	65 507	979	1 787	21 783	163 455	116 501	280 116	D
311812	Commercial bakeries..	—	29	10	2 099	61 905	809	1 596	20 015	155 908	111 729	267 818	7 113
31182	Cookie, cracker, & pasta mfg.....	—	13	6	f	D	D	D	D	D	D	D	10 679
311822	Flour mixes & dough mfg from purchased flour.....	—	5	3	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	—	50	26	3 001	92 315	2 344	4 543	60 446	1 501 093	606 355	2 108 160	25 655
31191	Snack food mfg.....	—	13	6	1 261	40 346	1 033	2 135	25 587	232 627	203 853	437 277	D
311919	Other snack food mfg..	—	11	5	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	—	11	6	785	29 905	605	1 019	20 804	141 744	247 198	387 300	10 560
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg....	—	7	4	e	D	D	D	D	D	D	D	D
31199	All other food mfg.....	2	21	12	f	D	D	D	D	D	D	D	3 126
311991	Perishable prepared food mfg.....	1	10	6	e	D	D	D	D	D	D	D	1 869
311999	All other miscellaneous food mfg.....	2	11	6	e	D	D	D	D	D	D	D	1 257
312	Beverage & tobacco product mfg.....	1	16	8	2 260	79 951	809	1 875	24 010	301 923	529 029	837 104	25 271
3121	Beverage mfg.....	1	16	8	2 260	79 951	809	1 875	24 010	301 923	529 029	837 104	25 271
31211	Soft drink & ice mfg.....	1	13	8	2 253	79 764	805	1 869	23 933	301 721	528 589	836 233	25 199
312111	Soft drink mfg.....	1	7	6	2 153	76 675	758	1 832	22 745	286 293	526 389	818 603	23 687
313	Textile mills.....	2	29	7	402	11 280	249	497	5 107	28 744	40 187	70 079	1 135
3133	Textile & fabric finishing & fabric coating mills.....	2	19	5	252	7 871	128	266	3 135	17 905	30 427	49 482	850
314	Textile product mills.....	—	107	33	3 005	54 283	2 461	4 349	36 449	134 365	146 761	272 119	3 377
3141	Textile furnishings mills....	—	58	19	2 009	35 990	1 714	2 979	25 700	94 066	116 953	201 201	2 154
31412	Curtain & linen mills.....	—	56	19	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	1	37	7	f	D	D	D	D	D	D	D	D
314129	Other household textile product mills.....	—	19	12	1 351	22 124	1 210	2 041	17 569	74 203	91 828	156 718	1 433
3149	Other textile product mills..	1	49	14	996	18 293	747	1 370	10 749	40 299	29 808	70 918	1 223
31491	Textile bag & canvas mills.....	1	21	6	453	7 624	312	526	4 065	15 588	18 394	36 604	733
314912	Canvas & related product mills.....	—	15	3	263	5 058	173	330	2 632	11 584	14 108	28 308	569
31499	All other textile product mills.....	2	28	8	543	10 669	435	844	6 684	24 711	11 414	34 314	490
314999	All other miscellaneous textile product mills..	2	28	8	543	10 669	435	844	6 684	24 711	11 414	34 314	490

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	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	2	237	73	5 665	105 104	3 941	6 871	60 816	219 179	304 197	522 513	7 192
3152	Cut & sew apparel mfg	2	193	60	4 565	84 438	3 132	5 305	48 521	164 621	261 814	425 599	5 278
31521	Cut & sew apparel contractors	5	109	20	1 305	16 455	1 210	1 945	13 966	26 315	5 979	32 261	913
315212	Women's, girls', & infants' cut & sew apparel contractors	5	107	19	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	8	6	253	4 129	161	298	2 127	9 586	6 164	15 410	129
31523	Women's & girls' cut & sew apparel mfg	1	64	28	2 582	58 403	1 422	2 502	28 441	119 185	239 939	358 415	3 881
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	1	e	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	1	18	8	432	9 292	306	570	5 091	19 067	42 620	61 697	425
315233	Women's & girls' cut & sew dress mfg	2	18	5	1 219	23 047	502	816	9 329	47 006	72 689	118 341	2 151
315234	Women's & girls' cut & sew suit, coat, skirt mfg	1	14	9	423	12 713	304	532	7 289	27 576	58 609	84 476	275
31529	Other cut & sew apparel mfg	3	12	6	425	5 451	339	560	3 987	9 535	9 732	19 513	355
315299	All other cut & sew apparel mfg	3	11	6	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	2	40	12	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	40	12	g	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	—	10	5	642	10 781	454	871	6 602	34 594	19 180	54 180	D
315999	Other apparel accessories & other apparel mfg	6	30	7	e	D	D	D	D	D	D	D	1 279
316	Leather & allied product mfg	4	19	6	546	9 246	464	814	6 448	16 129	26 469	43 124	617
3169	Other leather & allied product mfg	2	15	3	255	4 195	219	408	2 877	8 019	6 472	14 616	D
31699	Other leather & allied product mfg	2	15	3	255	4 195	219	408	2 877	8 019	6 472	14 616	D
321	Wood product mfg	2	115	38	3 833	84 635	3 173	6 388	58 330	211 836	357 249	566 492	8 692
3212	Veneer, plywood, & engineered wood product mfg	3	12	5	609	13 494	488	832	8 314	26 751	43 425	69 640	1 133
32121	Veneer, plywood, & engineered wood product mfg	3	12	5	609	13 494	488	832	8 314	26 751	43 425	69 640	1 133
321214	Truss mfg	2	8	5	558	12 143	444	748	7 264	23 387	39 181	61 896	750
3219	Other wood product mfg	3	98	31	3 107	68 759	2 582	5 338	47 869	181 490	262 645	441 795	7 208
32191	Millwork	3	54	19	1 888	37 946	1 505	3 080	24 150	105 780	163 485	269 869	5 230
321911	Wood window & door mfg	3	25	10	1 390	28 170	1 097	2 444	17 252	86 291	145 063	231 571	4 328
321918	Other millwork (including flooring)	5	24	8	436	8 497	359	558	6 198	15 159	15 068	30 691	D
32192	Wood container & pallet mfg	4	20	6	402	7 702	350	693	5 904	15 135	18 206	33 238	917
321920	Wood container & pallet mfg	4	20	6	402	7 702	350	693	5 904	15 135	18 206	33 238	917
32199	All other wood product mfg	1	24	6	817	23 111	727	1 565	17 815	60 575	80 954	138 688	1 061
321991	Manufactured home (mobile home) mfg	—	2	2	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	96	60	5 886	198 785	4 416	9 929	131 514	586 719	713 033	1 295 469	50 088
3221	Pulp, paper, & paperboard mills	—	5	4	505	22 542	307	741	13 155	71 167	82 925	155 185	8 971
32213	Paperboard mills	—	4	4	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	91	56	5 381	176 243	4 109	9 188	118 359	515 552	630 108	1 140 284	41 117
32221	Paperboard container mfg	—	37	30	3 399	112 567	2 649	6 177	78 372	239 047	393 821	633 438	25 667
322211	Corrugated & solid fiber box mfg	1	29	25	2 098	70 914	1 557	3 337	43 257	146 928	294 234	442 476	20 716
322212	Folding paperboard box mfg	—	4	2	e	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	—	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	22	8	628	21 631	476	1 047	14 460	151 794	126 810	278 763	4 442
32223	Stationery product mfg	—	18	11	1 060	35 487	752	1 546	20 765	107 787	94 285	196 023	9 379
322232	Envelope mfg	—	7	7	716	23 775	505	1 070	14 935	48 185	62 598	111 178	6 370

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32229	Other converted paper product mfg	1	14	7	294	6 558	232	418	4 762	16 924	15 192	32 060	1 629
322299	All other converted paper product mfg . . .	1	11	7	287	6 409	226	411	4 644	16 129	14 235	30 307	1 550
323	Printing & related support activities	1	750	160	15 049	503 976	11 220	22 231	317 375	1 163 968	800 287	1 960 729	87 110
3231	Printing & related support activities	1	750	160	15 049	503 976	11 220	22 231	317 375	1 163 968	800 287	1 960 729	87 110
32311	Printing	1	663	132	13 102	424 783	9 865	19 544	273 546	1 021 263	767 751	1 785 858	77 123
323110	Commercial lithographic printing . .	2	313	73	7 492	266 025	5 675	11 747	173 797	553 195	438 795	993 206	54 267
323112	Commercial flexographic printing . .	—	23	11	855	29 764	606	1 134	17 277	71 917	48 152	118 788	3 979
323113	Commercial screen printing	3	60	10	835	17 973	624	1 093	10 226	36 588	28 231	64 315	1 728
323114	Quick printing	2	155	7	879	22 137	613	1 051	13 992	49 643	27 931	77 502	2 937
323116	Manifold business form printing	—	22	15	1 945	55 178	1 527	2 983	38 711	242 427	177 731	417 517	7 530
323119	Other commercial printing	5	61	8	528	14 070	387	687	8 143	28 943	24 073	52 984	1 477
32312	Support activities for printing	2	87	28	1 947	79 193	1 355	2 687	43 829	142 705	32 536	174 871	9 987
323121	Tradebinding & related work	2	29	11	553	14 791	454	932	10 735	24 924	4 719	29 655	876
323122	Prepress services	1	58	17	1 394	64 402	901	1 755	33 094	117 781	27 817	145 216	9 111
324	Petroleum & coal products mfg	4	22	10	878	33 624	629	1 418	21 141	131 562	236 767	373 177	10 824
3241	Petroleum & coal products mfg	4	22	10	878	33 624	629	1 418	21 141	131 562	236 767	373 177	10 824
32412	Asphalt paving, roofing, & saturated materials mfg	4	15	6	693	27 129	535	1 248	18 834	111 758	208 470	324 810	9 621
324122	Asphalt shingle & coating materials mfg	4	12	6	679	26 671	526	1 230	18 599	110 332	205 446	320 293	D
325	Chemical mfg	1	196	80	7 643	249 779	4 747	10 103	123 189	1 830 365	1 374 974	3 205 863	94 376
3251	Basic chemical mfg	2	29	13	625	23 907	374	882	12 449	134 610	65 769	192 213	26 754
32518	Other basic inorganic chemical mfg	2	13	7	371	14 101	241	609	8 128	49 834	39 488	87 822	6 749
325188	All other basic inorganic chemical mfg	2	12	7	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	6	3	548	15 424	395	924	8 556	41 250	121 404	164 208	9 670
32521	Resin & synthetic rubber mfg	3	6	3	548	15 424	395	924	8 556	41 250	121 404	164 208	9 670
325211	Plastics material & resin mfg	3	5	3	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	8	9	2	282	7 984	175	469	4 339	59 209	31 342	89 995	D
32532	Pesticide & other agricultural chemical mfg	8	7	2	e	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	8	7	2	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	41	19	1 988	65 422	1 077	2 567	29 814	410 352	524 199	924 830	22 378
32551	Paint & coating mfg	—	24	10	1 477	45 858	800	1 913	23 031	316 359	444 956	752 400	12 278
325510	Paint & coating mfg	—	24	10	1 477	45 858	800	1 913	23 031	316 359	444 956	752 400	12 278
32552	Adhesive mfg	—	17	9	511	19 564	277	654	6 783	93 993	79 243	172 430	10 100
325520	Adhesive mfg	—	17	9	511	19 564	277	654	6 783	93 993	79 243	172 430	10 100
3256	Soap, cleaning compound, & toilet preparation mfg . .	—	53	21	2 606	85 136	1 734	3 330	41 749	968 226	434 917	1 420 268	19 364
32561	Soap & cleaning compound mfg	1	28	8	757	25 178	462	958	11 678	205 595	97 256	304 330	5 088
325611	Soap & other detergent mfg	1	19	6	580	18 411	366	739	9 272	185 045	73 788	259 069	3 998
32562	Toilet preparation mfg	—	25	13	1 849	59 958	1 272	2 372	30 071	762 631	337 661	1 115 938	14 276
325620	Toilet preparation mfg	—	25	13	1 849	59 958	1 272	2 372	30 071	762 631	337 661	1 115 938	14 276

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS—FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3259	Other chemical product mfg	1	45	17	1 378	46 005	882	1 720	23 693	184 794	182 506	368 410	13 099
32591	Printing ink mfg	2	16	6	e	D	D	D	D	D	D	D	1 543
325910	Printing ink mfg	2	16	6	e	D	D	D	D	D	D	D	1 543
32592	Explosives mfg	—	3	3	e	D	D	D	D	D	D	D	2 217
325920	Explosives mfg	—	3	3	e	D	D	D	D	D	D	D	2 217
32599	All other chemical product & preparation mfg	1	26	8	640	21 293	382	788	9 272	74 877	104 481	180 238	9 339
325998	All other miscellaneous chemical product & preparation mfg	1	17	5	514	17 947	298	640	7 536	67 667	90 055	158 637	8 544
326	Plastics & rubber products mfg	1	210	98	10 562	300 292	8 563	18 084	201 771	841 183	997 192	1 827 088	77 336
3261	Plastics product mfg	1	180	87	9 677	276 889	7 885	16 783	187 523	785 347	937 460	1 710 967	73 751
32611	Unsupported plastics film, sheet, & bag mfg ..	1	28	16	2 661	95 513	2 142	5 177	59 374	209 539	338 943	546 511	24 641
326111	Unsupported plastics bag mfg	1	13	9	1 471	60 775	1 190	2 782	34 261	106 117	193 354	295 702	15 632
326113	Unsupported plastics film & sheet (except packaging) mfg	—	12	5	1 115	32 753	902	2 287	23 818	101 274	138 203	241 170	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	15	6	426	12 660	327	687	8 166	29 518	42 990	71 057	2 536
326121	Unsupported plastics profile shape mfg	1	11	4	264	7 837	206	423	4 685	16 969	13 615	30 527	808
32614	Polystyrene foam product mfg	2	15	5	708	21 180	624	1 283	17 023	57 271	77 307	134 375	4 140
326140	Polystyrene foam product mfg	2	15	5	708	21 180	624	1 283	17 023	57 271	77 307	134 375	4 140
32615	Urethane & other foam product (except polystyrene) mfg	—	15	8	551	15 087	446	934	10 644	42 378	57 049	95 838	1 994
326150	Urethane & other foam product (except polystyrene) mfg	—	15	8	551	15 087	446	934	10 644	42 378	57 049	95 838	1 994
32616	Plastics bottle mfg	—	8	5	401	12 911	353	785	11 066	47 515	61 943	106 602	10 439
326160	Plastics bottle mfg	—	8	5	401	12 911	353	785	11 066	47 515	61 943	106 602	10 439
32619	Other plastics product mfg	—	96	47	4 918	119 013	3 986	7 898	80 985	397 911	358 189	754 326	29 926
326191	Plastics plumbing fixture mfg	—	13	6	593	14 094	507	1 041	11 086	43 599	34 813	78 551	2 734
326199	All other plastics product mfg	—	83	41	4 325	104 919	3 479	6 857	69 899	354 312	323 376	675 775	27 192
3262	Rubber product mfg	1	30	11	885	23 403	678	1 301	14 248	55 836	59 732	116 121	3 585
32629	Other rubber product mfg	1	18	8	684	17 793	527	995	10 721	41 491	36 968	78 986	3 245
326299	All other rubber product mfg	1	12	6	542	13 971	420	779	8 494	34 775	30 113	65 449	2 710
327	Nonmetallic mineral product mfg	1	177	78	7 242	216 187	5 997	12 433	164 149	778 798	633 194	1 415 680	78 911
3271	Clay product & refractory mfg	1	26	11	2 097	53 074	1 835	3 775	40 821	173 046	93 006	263 679	17 415
32712	Clay building material & refractories mfg	1	10	9	1 872	46 315	1 659	3 452	36 756	161 432	85 786	244 659	16 200
327121	Brick & structural clay tile mfg	—	4	4	e	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	5	4	1 347	31 743	1 248	2 654	26 694	115 453	64 532	178 085	D
3272	Glass & glass product mfg	2	26	7	693	18 601	552	872	13 222	55 510	39 624	95 707	6 297
32721	Glass & glass product mfg	2	26	7	693	18 601	552	872	13 222	55 510	39 624	95 707	6 297
327215	Glass product mfg made of purchased glass	4	19	6	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	1	88	43	3 148	99 537	2 553	5 712	75 015	379 152	393 336	773 839	45 514
32731	Cement mfg	—	4	4	461	17 622	371	898	12 797	156 779	60 441	220 153	19 409
327310	Cement mfg	—	4	4	461	17 622	371	898	12 797	156 779	60 441	220 153	19 409
32732	Ready-mix concrete mfg.	2	46	21	1 238	43 541	1 054	2 600	35 192	130 634	261 817	392 763	12 965
327320	Ready-mix concrete mfg	2	46	21	1 238	43 541	1 054	2 600	35 192	130 634	261 817	392 763	12 965
32733	Concrete pipe, brick, & block mfg	—	13	8	706	19 888	552	1 141	14 288	60 134	43 241	101 490	9 014
327332	Concrete pipe mfg	—	7	5	582	15 334	491	1 006	12 297	51 667	35 045	84 652	D
32739	Other concrete product mfg	2	25	10	743	18 486	576	1 073	12 738	31 605	27 837	59 433	4 126
327390	Other concrete product mfg	2	25	10	743	18 486	576	1 073	12 738	31 605	27 837	59 433	4 126
3279	Other nonmetallic mineral product mfg	1	28	14	1 167	40 001	952	1 868	31 827	156 962	81 148	242 295	8 997
32799	All other nonmetallic mineral product mfg ...	1	27	13	g	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	6	2	597	26 900	514	1 117	22 713	124 554	58 912	187 431	D
331	Primary metal mfg	—	45	19	3 959	122 080	3 121	7 026	84 541	455 550	599 253	1 076 249	50 886
3311	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	5	4	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	5	4	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	5	4	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	2	10	3	371	11 878	261	455	7 239	81 353	36 144	118 056	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	7	3	349	11 100	243	430	6 858	78 643	32 556	111 831	D
3315	Foundries	—	24	8	1 359	33 178	1 089	2 239	23 622	73 343	41 022	112 009	4 314
33151	Ferrous metal foundries .	—	8	3	916	23 765	779	1 591	16 612	58 542	30 207	86 157	D
331513	Steel foundries (except investment)	—	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	16	5	443	9 413	310	648	7 010	14 801	10 815	25 852	D
332	Fabricated metal product mfg	1	687	226	19 389	568 667	14 894	30 990	359 733	1 289 208	1 139 743	2 419 911	71 598
3321	Forging & stamping	1	35	19	1 284	42 006	937	1 932	24 956	109 396	88 723	196 700	7 957
33211	Forging & stamping	1	35	19	1 284	42 006	937	1 932	24 956	109 396	88 723	196 700	7 957
332112	Nonferrous forging	—	1	1	e	D	D	D	D	D	D	D	D
332116	Metal stamping	1	20	11	582	17 682	460	891	11 741	41 599	30 510	72 359	2 546
3322	Cutlery & handtool mfg.	1	11	1	517	12 995	471	1 046	10 449	22 072	30 549	56 449	1 927
33221	Cutlery & handtool mfg. ...	1	11	1	517	12 995	471	1 046	10 449	22 072	30 549	56 449	1 927
332212	Hand & edge tool mfg.	1	6	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	194	88	8 078	231 398	6 121	13 238	143 922	522 342	501 487	1 013 988	20 554
33231	Plate work & fabricated structural product mfg ..	—	43	21	1 221	36 232	903	1 943	22 398	88 909	119 246	202 580	4 905
332312	Fabricated structural metal mfg	—	24	13	756	23 863	538	1 201	14 499	67 329	99 323	160 926	3 479
332313	Plate work mfg	3	11	4	285	6 688	241	442	4 991	14 396	7 725	22 025	944
33232	Ornamental & architectural metal products mfg	—	151	67	6 857	195 166	5 218	11 295	121 524	433 433	382 241	811 408	15 649
332321	Metal window & door mfg	—	26	16	2 690	73 438	2 007	4 261	41 899	131 414	205 644	334 591	4 168
332322	Sheet metal work mfg.	1	97	46	3 719	108 370	2 857	6 303	70 881	272 916	153 536	424 715	10 764
332323	Ornamental & architectural metal work mfg	1	28	5	448	13 358	354	731	8 744	29 103	23 061	52 102	717
3324	Boiler, tank, & shipping container mfg	—	21	10	597	16 943	472	1 036	11 949	39 659	72 176	112 391	1 918
33243	Metal can, box, & other metal container (light gauge) mfg	—	10	5	394	10 825	343	801	8 100	27 615	51 922	78 153	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3326	Spring & wire product mfg .	—	27	13	1 223	30 195	1 014	2 183	21 341	71 470	66 879	139 647	5 865
33261	Spring & wire product mfg	—	27	13	1 223	30 195	1 014	2 183	21 341	71 470	66 879	139 647	5 865
332612	Spring (light gauge) mfg	—	9	6	632	17 678	488	1 060	13 057	50 082	46 729	97 942	4 339
332618	Other fabricated wire product mfg	—	17	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	256	46	3 440	110 234	2 629	5 154	68 545	210 550	108 009	316 222	16 717
33271	Machine shops	2	230	34	2 853	89 697	2 166	4 199	57 558	170 837	85 702	254 869	12 789
332710	Machine shops	2	230	34	2 853	89 697	2 166	4 199	57 558	170 837	85 702	254 869	12 789
33272	Turned product & screw, nut, & bolt mfg	2	26	12	587	20 537	463	955	10 987	39 713	22 307	61 353	3 928
332721	Precision turned product mfg	3	17	8	e	D	D	D	D	D	D	D	3 101
3328	Coating, engraving, heat treating, & allied activities .	1	79	24	1 440	39 976	1 073	2 124	23 308	67 172	25 702	93 097	4 809
33281	Coating, engraving, heat treating, & allied activities	1	79	24	1 440	39 976	1 073	2 124	23 308	67 172	25 702	93 097	4 809
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	32	8	495	15 060	394	777	8 674	25 358	11 817	37 169	1 545
332813	Electroplating, plating, polishing, anodizing, & coloring	2	40	13	837	21 745	588	1 174	12 345	35 124	11 572	46 956	2 180
3329	Other fabricated metal product mfg	—	56	21	2 666	81 393	2 070	4 063	52 948	238 839	236 335	473 972	11 493
33291	Metal valve mfg	—	13	11	1 308	43 394	1 001	2 039	27 007	128 157	147 181	272 552	9 234
332911	Industrial valve mfg	—	6	6	976	33 458	717	1 460	20 029	111 715	132 425	241 901	8 530
33299	All other fabricated metal product mfg	—	43	10	1 358	37 999	1 069	2 024	25 941	110 682	89 154	201 420	2 259
332999	All other miscellaneous fabricated metal product mfg	—	32	8	1 051	29 418	801	1 601	19 890	83 375	69 281	154 231	1 644
333	Machinery mfg	1	289	103	11 797	413 751	7 876	15 657	216 550	1 152 415	1 007 269	2 146 322	47 397
3331	Agriculture, construction, & mining machinery mfg	1	38	17	2 999	117 595	1 942	3 737	62 998	381 220	263 379	644 903	12 474
33312	Construction machinery mfg	1	9	3	351	10 992	247	410	6 648	29 476	24 896	55 188	816
333120	Construction machinery mfg	1	9	3	351	10 992	247	410	6 648	29 476	24 896	55 188	816
33313	Mining & oil & gas field machinery mfg	1	24	14	2 627	106 144	1 679	3 298	56 007	350 418	236 527	586 396	11 540
333132	Oil & gas field machinery & equipment mfg	1	21	13	2 489	101 294	1 568	3 120	54 078	337 801	229 991	566 699	10 782
3332	Industrial machinery mfg	6	61	14	1 287	47 409	706	1 428	19 704	121 440	92 655	208 970	5 905
33329	Other industrial machinery mfg	6	54	12	1 209	44 855	657	1 338	18 383	116 364	87 278	198 373	5 471
333293	Printing machinery & equipment mfg	7	9	3	e	D	D	D	D	D	D	D	638
333295	Semiconductor machinery mfg	—	9	4	e	D	D	D	D	D	D	D	793
333298	All other industrial machinery mfg	8	22	4	519	18 967	280	652	8 813	55 151	49 775	100 372	3 794
3333	Commercial & service industry machinery mfg	1	32	13	968	29 993	644	1 115	15 355	74 342	87 800	161 163	5 368
33331	Commercial & service industry machinery mfg	1	32	13	968	29 993	644	1 115	15 355	74 342	87 800	161 163	5 368
333319	Other commercial & service industry machinery mfg	—	9	4	537	15 870	403	619	9 339	40 379	50 279	90 567	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	34	21	2 742	72 543	2 092	4 187	44 217	200 903	202 916	402 757	6 285
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	34	21	2 742	72 543	2 092	4 187	44 217	200 903	202 916	402 757	6 285
333411	Air purification equipment mfg	—	10	5	607	14 245	473	899	7 764	34 446	25 221	58 361	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	16	12	1 801	48 112	1 390	2 789	31 477	136 598	150 747	289 695	2 964

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3335	Metalworking machinery mfg	7	47	8	683	23 971	488	1 001	15 291	46 469	26 455	70 398	2 574
33351	Metalworking machinery mfg	7	47	8	683	23 971	488	1 001	15 291	46 469	26 455	70 398	2 574
333514	Special die & tool, die set, jig, & fixture mfg .	4	27	4	263	9 955	200	352	6 833	17 318	7 194	24 069	1 289
333518	Other metalworking machinery mfg	9	3	2	266	8 851	164	389	4 635	19 743	15 074	32 980	D
3339	Other general-purpose machinery mfg	—	69	27	2 909	112 245	1 918	4 012	56 128	313 896	293 251	599 595	14 340
33391	Pump & compressor mfg	—	7	2	290	8 482	158	307	3 690	38 103	35 147	68 353	3 669
33392	Material handling equipment mfg	—	19	9	1 066	47 686	595	1 542	18 563	95 976	162 937	257 552	4 942
333922	Conveyor & conveying equipment mfg	—	6	3	498	26 160	181	401	5 751	43 208	44 219	86 964	1 665
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	7	3	313	11 661	221	510	6 852	23 841	33 596	58 265	D
33399	All other general-purpose machinery mfg	—	43	16	1 553	56 077	1 165	2 163	33 875	179 817	95 167	273 690	5 729
333992	Welding & soldering equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	1	22	7	361	13 780	264	559	8 507	33 778	30 912	64 610	1 883
334	Computer & electronic product mfg	—	358	166	57 474	2 855 309	25 888	50 487	776 715	9 439 759	4 830 376	14 124 066	1 297 328
3341	Computer & peripheral equipment mfg	4	30	7	1 190	90 859	542	750	28 597	295 250	186 452	421 637	D
33411	Computer & peripheral equipment mfg	4	30	7	1 190	90 859	542	750	28 597	295 250	186 452	421 637	D
334111	Electronic computer mfg	5	10	2	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	17	5	e	D	D	D	D	D	D	D	4 435
3342	Communications equipment mfg	—	66	32	13 960	668 663	5 751	10 861	182 984	3 188 839	1 938 559	5 063 626	182 451
33421	Telephone apparatus mfg	—	27	15	7 215	412 396	3 043	6 227	115 906	1 827 505	841 941	2 623 592	48 810
334210	Telephone apparatus mfg	—	27	15	7 215	412 396	3 043	6 227	115 906	1 827 505	841 941	2 623 592	48 810
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	32	15	6 638	253 227	2 629	4 491	65 539	1 355 613	1 088 724	2 426 454	133 230
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	32	15	6 638	253 227	2 629	4 491	65 539	1 355 613	1 088 724	2 426 454	133 230
3343	Audio & video equipment mfg	—	7	4	479	10 279	400	813	7 127	38 555	40 711	76 577	D
33431	Audio & video equipment mfg	—	7	4	479	10 279	400	813	7 127	38 555	40 711	76 577	D
334310	Audio & video equipment mfg	—	7	4	479	10 279	400	813	7 127	38 555	40 711	76 577	D
3344	Semiconductor & other electronic component mfg	—	159	80	21 494	1 077 484	11 303	22 404	282 124	3 690 973	1 479 777	5 088 404	957 187
33441	Semiconductor & other electronic component mfg	—	159	80	21 494	1 077 484	11 303	22 404	282 124	3 690 973	1 479 777	5 088 404	957 187
334412	Bare printed circuit board mfg	—	43	19	1 807	58 206	1 470	2 968	45 253	67 963	91 260	158 590	9 718
334413	Semiconductor & related device mfg ...	—	39	21	13 837	825 134	6 028	12 646	148 475	3 177 729	812 461	3 927 911	913 574
334416	Electronic coil, transformer, & other inductor mfg	1	8	6	268	7 857	166	343	3 137	16 840	7 279	24 085	351
334417	Electronic connector mfg	—	3	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	24	20	2 959	96 827	1 821	2 883	35 987	292 306	403 655	677 736	19 753
334419	Other electronic component mfg	1	37	12	2 198	77 410	1 469	3 005	42 466	111 911	144 420	255 097	11 260

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	74	35	18 882	930 294	6 710	13 106	223 591	1 974 787	1 054 889	3 092 206	93 886
33451	Navigational, measuring, medical, & control instruments mfg	—	74	35	18 882	930 294	6 710	13 106	223 591	1 974 787	1 054 889	3 092 206	93 886
334510	Electromedical & electrotherapeutic apparatus mfg	—	6	2	397	18 777	66	147	3 100	39 252	28 720	70 308	2 815
334511	Search, detection, navigation, & guidance instrument mfg	—	13	8	j	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	1	5	2	350	17 166	253	607	9 716	9 787	27 060	38 861	D
334513	Industrial process control instrument mfg	—	19	9	930	46 236	414	920	11 615	57 873	60 778	115 187	4 159
334515	Electricity measuring & testing instrument mfg	—	15	7	517	20 873	221	388	5 060	45 747	22 875	67 543	1 495
334516	Analytical laboratory instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	—	22	8	1 469	77 730	1 182	2 553	52 292	251 355	129 988	381 616	40 487
33461	Mfg & reproducing magnetic & optical media	—	22	8	1 469	77 730	1 182	2 553	52 292	251 355	129 988	381 616	40 487
334611	Software reproducing .	—	5	3	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	13	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	100	52	5 131	147 732	3 851	8 520	87 452	453 000	687 938	1 144 679	42 846
3351	Electric lighting equipment mfg	3	20	13	689	17 922	493	1 056	9 307	40 437	42 159	83 890	D
33512	Lighting fixture mfg	3	20	13	689	17 922	493	1 056	9 307	40 437	42 159	83 890	D
335121	Residential electric lighting fixture mfg ...	1	10	6	339	7 577	250	483	3 736	15 043	13 862	30 035	179
335129	Other lighting equipment mfg	4	7	6	307	9 311	213	517	4 926	23 101	26 079	49 325	1 009
3353	Electrical equipment mfg ..	1	35	12	1 149	35 546	772	1 613	18 684	71 722	74 305	145 857	3 317
33531	Electrical equipment mfg	1	35	12	1 149	35 546	772	1 613	18 684	71 722	74 305	145 857	3 317
335313	Switchgear & switchboard apparatus mfg	—	10	2	308	10 599	208	430	6 308	30 343	34 584	65 227	668
335314	Relay & industrial control mfg	1	15	6	654	19 449	409	850	8 347	31 712	31 209	62 288	2 277
3359	Other electrical equipment & component mfg	1	42	25	3 044	88 431	2 381	5 395	56 086	319 578	555 339	876 646	37 361
33591	Battery mfg	—	5	3	452	16 095	392	961	12 551	65 059	48 923	115 002	1 582
335911	Storage battery mfg ...	—	4	3	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	9	9	1 755	44 020	1 359	3 180	28 817	198 885	453 141	651 593	31 382
335921	Fiber optic cable mfg ..	—	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	7	7	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	6	21	9	595	20 942	446	906	10 444	42 694	32 452	75 649	3 163
335999	All other miscellaneous electrical equipment & component mfg	7	20	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	137	59	21 393	945 330	14 300	27 063	587 563	2 303 996	2 267 638	4 361 499	113 236
3361	Motor vehicle mfg	—	3	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	8	12	3	257	7 959	207	386	5 709	18 569	29 827	50 373	1 555
33621	Motor vehicle body & trailer mfg	8	12	3	257	7 959	207	386	5 709	18 569	29 827	50 373	1 555

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS-FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg ...	1	74	34	4 583	116 524	3 485	7 113	71 363	323 342	467 482	799 354	21 611
33631	Motor vehicle gasoline engine & engine parts mfg	—	14	3	612	20 223	478	990	14 103	55 575	75 802	130 458	5 402
336312	Gasoline engine & engine parts mfg	—	13	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	19	13	1 551	38 161	1 133	2 235	19 962	93 783	73 460	165 914	5 787
336321	Vehicular lighting equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	3	16	11	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	—	4	4	558	15 282	444	798	9 280	36 521	22 720	59 663	3 069
336340	Motor vehicle brake system mfg	—	4	4	558	15 282	444	798	9 280	36 521	22 720	59 663	3 069
33639	Other motor vehicle parts mfg	—	22	8	1 519	36 219	1 146	2 681	23 655	124 887	278 217	413 497	5 799
336391	Motor vehicle air-conditioning mfg	—	4	3	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	4	18	5	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	37	16	14 948	754 791	9 124	16 752	452 126	1 740 562	1 099 404	2 615 784	72 675
33641	Aerospace product & parts mfg	—	37	16	14 948	754 791	9 124	16 752	452 126	1 740 562	1 099 404	2 615 784	72 675
336411	Aircraft mfg	—	7	5	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	6	4	1 603	51 386	1 014	1 984	31 170	149 116	284 470	389 056	17 649
336413	Other aircraft part & auxiliary equipment mfg	—	21	4	i	D	D	D	D	D	D	D	25 772
336414	Guided missile & space vehicle mfg ...	—	1	1	h	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	3	3	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	3	3	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	230	66	8 662	206 026	6 730	13 602	129 939	507 028	362 694	868 269	24 385
3371	Household & institutional furniture & kitchen cabinet mfg	1	167	36	5 172	107 824	4 067	7 946	73 929	258 559	205 190	463 483	12 898
33711	Wood kitchen cabinet & counter top mfg	—	81	21	3 570	70 710	2 781	5 528	47 212	188 120	124 651	311 804	9 651
337110	Wood kitchen cabinet & counter top mfg ...	—	81	21	3 570	70 710	2 781	5 528	47 212	188 120	124 651	311 804	9 651
33712	Household & institutional furniture mfg	3	86	15	1 602	37 114	1 286	2 418	26 717	70 439	80 539	151 679	3 247
337121	Upholstered household furniture mfg	2	25	5	818	19 047	647	1 226	13 509	35 795	44 200	80 984	1 588
337122	Nonupholstered wood household furniture mfg	7	45	4	364	7 669	315	581	5 663	12 235	11 161	23 193	735
3372	Office furniture (including fixtures) mfg	2	49	24	2 788	78 460	2 195	4 294	45 249	187 935	91 930	278 555	10 216
33721	Office furniture (including fixtures) mfg	2	49	24	2 788	78 460	2 195	4 294	45 249	187 935	91 930	278 555	10 216
337212	Custom architectural woodwork & millwork mfg	4	14	5	267	10 511	195	388	6 091	18 751	12 134	30 683	1 075
337215	Showcase, partition, shelving, & locker mfg	1	28	14	2 214	60 312	1 749	3 476	33 729	139 430	55 455	193 571	7 912
3379	Other furniture related product mfg	—	14	6	702	19 742	468	1 362	10 761	60 534	65 574	126 231	1 271
33792	Blind & shade mfg	—	7	4	458	10 895	289	965	6 667	26 034	37 615	63 886	504
337920	Blind & shade mfg	—	7	4	458	10 895	289	965	6 667	26 034	37 615	63 886	504

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	DALLAS—FORT WORTH, TX CMSA—Con.												
	Dallas, TX PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	3	416	67	7 630	209 476	5 753	10 866	117 623	495 004	395 566	883 119	29 963
3391	Medical equipment & supplies mfg.....	2	143	20	3 320	98 880	2 496	4 470	51 562	319 280	126 436	442 738	17 826
33911	Medical equipment & supplies mfg.....	2	143	20	3 320	98 880	2 496	4 470	51 562	319 280	126 436	442 738	17 826
339112	Surgical & medical instrument mfg.....	3	20	8	1 129	42 646	766	1 467	22 124	122 909	60 551	181 869	9 672
339113	Surgical appliance & supplies mfg.....	—	18	6	1 289	34 986	1 031	1 728	16 297	148 049	40 029	186 258	4 238
339115	Ophthalmic goods mfg.....	2	10	1	341	6 863	291	594	4 743	16 023	12 087	28 122	2 923
339116	Dental laboratories ...	5	87	4	497	12 474	369	627	7 644	28 130	11 038	39 607	864
3399	Other miscellaneous mfg ..	4	273	47	4 310	110 596	3 257	6 396	66 061	175 724	269 130	440 381	12 137
33991	Jewelry & silverware mfg.....	1	43	3	518	13 329	446	814	9 162	27 448	34 417	62 089	614
339911	Jewelry (except costume) mfg.....	—	32	2	449	11 908	389	723	8 311	23 985	30 830	55 099	567
33992	Sporting & athletic goods mfg.....	2	28	5	361	9 524	299	532	7 205	51 764	26 679	77 152	2 229
339920	Sporting & athletic goods mfg.....	2	28	5	361	9 524	299	532	7 205	51 764	26 679	77 152	2 229
33995	Sign mfg.....	5	110	20	1 761	50 544	1 216	2 538	26 419	20 437	132 631	150 420	3 352
339950	Sign mfg.....	5	110	20	1 761	50 544	1 216	2 538	26 419	20 437	132 631	150 420	3 352
33999	All other miscellaneous mfg.....	5	67	17	1 411	29 540	1 116	2 194	19 062	58 940	61 403	119 664	4 952
339999	All other miscellaneous mfg.....	6	45	11	1 137	22 816	914	1 783	15 297	43 129	48 199	90 788	3 970
	Fort Worth—Arlington, TX PMSA												
31-33	Manufacturing	1	2 312	755	104 733	3 815 457	67 106	136 842	1 852 007	10 100 185	9 785 211	19 949 643	675 301
311	Food mfg.....	1	102	37	5 424	148 716	3 883	8 012	84 671	673 807	1 141 568	1 815 965	43 061
3111	Animal food mfg.....	—	8	4	250	8 518	147	254	4 324	33 164	77 168	110 503	1 044
31111	Animal food mfg.....	—	8	4	250	8 518	147	254	4 324	33 164	77 168	110 503	1 044
3112	Grain & oilseed milling	—	3	3	350	10 202	251	616	6 801	64 494	212 576	277 862	2 308
3114	Fruit & vegetable preserving & specialty food mfg.....	7	8	4	362	10 125	243	509	6 169	41 923	43 221	85 342	3 586
31142	Fruit & vegetable canning, pickling, & drying.....	7	6	4	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	—	5	4	564	19 627	386	839	12 289	81 839	164 758	246 615	3 324
31151	Dairy product (except frozen) mfg.....	—	5	4	564	19 627	386	839	12 289	81 839	164 758	246 615	3 324
311511	Fluid milk mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	11	6	1 260	32 328	1 077	2 229	20 044	87 353	262 668	349 164	15 672
31161	Animal slaughtering & processing.....	2	11	6	1 260	32 328	1 077	2 229	20 044	87 353	262 668	349 164	15 672
311612	Meat processed from carcasses.....	2	6	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	46	5	1 273	35 507	760	1 448	17 257	144 967	57 478	202 620	2 454
31181	Bread & bakery product mfg.....	1	41	3	1 101	31 109	631	1 235	14 764	131 033	49 003	180 152	D
311812	Commercial bakeries ..	1	9	3	f	D	D	D	D	D	D	D	1 066
3119	Other food mfg.....	—	13	8	1 222	29 395	902	1 944	15 687	211 136	316 319	526 928	14 009
31199	All other food mfg.....	—	4	3	817	15 172	618	1 294	8 262	39 857	38 765	78 930	2 256
311991	Perishable prepared food mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries.....	—	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries.....	—	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	45	13	f	D	D	D	D	D	D	D	2 110
3141	Textile furnishings mills....	2	20	6	e	D	D	D	D	D	D	D	513
31412	Curtain & linen mills.....	2	19	6	e	D	D	D	D	D	D	D	D
3149	Other textile product mills..	2	25	7	e	D	D	D	D	D	D	D	1 597
31499	All other textile product mills.....	2	17	7	e	D	D	D	D	D	D	D	1 583
314999	All other miscellaneous textile product mills ..	3	13	6	327	6 202	269	442	3 880	11 059	9 222	20 338	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	DALLAS—FORT WORTH, TX CMSA—Con.												
	Fort Worth—Arlington, TX PMSA—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg	2	86	14	3 073	70 193	2 272	4 041	38 844	367 493	104 941	464 469	8 211
3152	Cut & sew apparel mfg	4	67	11	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	52	7	649	13 148	621	1 030	11 837	38 771	7 809	42 851	1 114
315212	Women's, girls' & infants' cut & sew apparel contractors ..	9	52	7	649	13 148	621	1 030	11 837	38 771	7 809	42 851	1 114
31522	Men's & boys' cut & sew apparel mfg	3	9	3	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	9	1	1	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	-	2	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	19	3	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	19	3	g	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	17	2	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	11	3	329	8 499	275	399	5 407	39 439	43 479	88 387	314
321	Wood product mfg	2	63	27	3 527	81 725	3 028	5 796	57 427	179 527	404 565	579 970	10 440
3219	Other wood product mfg ...	2	57	25	3 473	80 567	2 989	5 739	56 850	177 137	401 767	574 773	10 325
32191	Millwork	-	21	6	726	14 502	645	1 208	11 327	39 788	184 225	220 313	1 539
321912	Cut stock, resawing lumber, & planing....	-	7	3	f	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	2	13	7	354	6 583	307	587	4 812	11 625	13 111	24 665	788
321920	Wood container & pallet mfg	2	13	7	354	6 583	307	587	4 812	11 625	13 111	24 665	788
32199	All other wood product mfg	3	23	12	2 393	59 482	2 037	3 944	40 711	125 724	204 431	329 795	7 998
321991	Manufactured home (mobile home) mfg ..	3	8	8	2 178	55 345	1 854	3 612	37 649	118 500	192 055	310 299	7 600
322	Paper mfg	-	46	31	2 930	94 091	2 032	4 268	52 479	211 162	321 792	530 357	14 844
3222	Converted paper product mfg	-	46	31	2 930	94 091	2 032	4 268	52 479	211 162	321 792	530 357	14 844
32221	Paperboard container mfg	-	34	26	2 391	76 683	1 692	3 524	42 109	171 194	262 889	432 233	13 576
322211	Corrugated & solid fiber box mfg	-	19	16	1 722	57 296	1 227	2 518	29 318	127 756	202 764	328 962	11 139
322212	Folding paperboard box mfg	-	9	5	350	8 819	222	473	5 028	18 208	18 062	36 704	1 474
32222	Paper bag & coated & treated paper mfg	-	5	3	312	10 336	210	485	6 426	25 581	40 543	65 821	461
323	Printing & related support activities.....	1	269	63	5 644	160 893	4 201	8 375	102 528	344 156	217 003	557 360	25 295
3231	Printing & related support activities.....	1	269	63	5 644	160 893	4 201	8 375	102 528	344 156	217 003	557 360	25 295
32311	Printing	1	240	54	4 670	139 299	3 397	6 762	86 538	306 876	206 138	509 130	21 895
323110	Commercial lithographic printing ..	1	115	27	2 552	85 329	1 848	3 925	52 671	148 976	112 835	261 084	12 590
323113	Commercial screen printing	1	24	7	310	7 701	204	388	4 603	17 842	9 278	26 958	604
323114	Quick printing	2	55	1	275	6 691	216	331	4 424	16 276	9 294	25 548	1 394
323116	Manifold business form printing	-	13	9	612	19 289	460	829	11 872	72 212	31 036	100 866	1 863
323118	Blankbook, looseleaf binder, & device mfg .	1	3	3	468	8 213	376	788	6 501	21 678	18 359	39 367	D
32312	Support activities for printing	2	29	9	974	21 594	804	1 613	15 990	37 280	10 865	48 230	3 400
323121	Tradebinding & related work	1	9	6	747	14 152	642	1 351	11 395	23 209	7 480	30 632	1 466
324	Petroleum & coal products mfg	2	19	5	529	16 818	225	419	6 650	58 832	52 268	108 962	D
3241	Petroleum & coal products mfg	2	19	5	529	16 818	225	419	6 650	58 832	52 268	108 962	D
32412	Asphalt paving, roofing, & saturated materials mfg	1	10	2	252	8 598	164	313	4 925	36 184	33 530	68 076	765

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31-33	DALLAS-FORT WORTH, TX CMSA—Con. Fort Worth-Arlington, TX PMSA—Con. Manufacturing—Con.												
325	Chemical mfg	1	123	40	5 479	267 508	2 549	5 004	71 302	979 423	571 670	1 559 694	47 229
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	3	6	3	356	17 913	153	354	5 801	67 153	140 530	206 292	4 360
32521	Resin & synthetic rubber mfg	3	6	3	356	17 913	153	354	5 801	67 153	140 530	206 292	4 360
325212	Synthetic rubber mfg	—	2	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	13	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	13	4	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	7	3	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	20	7	539	16 274	315	535	9 309	53 156	80 235	135 636	2 140
32551	Paint & coating mfg	—	9	2	e	D	D	D	D	D	D	D	479
325510	Paint & coating mfg	—	9	2	e	D	D	D	D	D	D	D	479
3256	Soap, cleaning compound, & toilet preparation mfg	2	23	4	285	7 875	161	315	4 281	34 405	29 398	62 922	973
32561	Soap & cleaning compound mfg	2	21	4	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	2	54	19	1 392	44 075	941	1 710	22 041	136 641	158 082	297 468	9 897
32592	Explosives mfg	—	4	3	310	14 682	216	473	6 104	35 240	32 912	69 214	D
325920	Explosives mfg	—	4	3	310	14 682	216	473	6 104	35 240	32 912	69 214	D
32599	All other chemical product & preparation mfg	2	41	13	930	24 379	626	1 052	12 860	79 544	94 109	174 207	7 749
325991	Custom compounding of purchased resin	1	20	7	484	11 738	364	606	7 705	41 562	66 268	107 872	5 037
325998	All other miscellaneous chemical product & preparation mfg	2	14	4	316	8 687	173	283	2 933	28 102	18 602	46 879	D
326	Plastics & rubber products mfg	2	129	72	7 056	188 272	5 073	10 224	112 683	461 922	489 794	952 472	50 173
3261	Plastics product mfg	2	102	63	5 943	148 888	4 396	8 933	98 954	379 383	446 834	828 745	43 175
32611	Unsupported plastics film, sheet, & bag mfg	—	7	5	360	12 583	239	622	7 580	28 324	81 920	113 887	3 241
32613	Laminated plastics plate, sheet, & shape mfg	1	4	1	260	7 702	173	435	4 508	17 201	9 972	26 677	523
326130	Laminated plastics plate, sheet, & shape mfg	1	4	1	260	7 702	173	435	4 508	17 201	9 972	26 677	523
32615	Urethane & other foam product (except polystyrene) mfg	3	8	4	362	8 425	306	583	6 088	24 926	33 824	58 879	2 586
326150	Urethane & other foam product (except polystyrene) mfg	3	8	4	362	8 425	306	583	6 088	24 926	33 824	58 879	2 586
32616	Plastics bottle mfg	5	5	5	265	7 929	229	497	6 095	26 817	31 718	57 773	2 647
326160	Plastics bottle mfg	5	5	5	265	7 929	229	497	6 095	26 817	31 718	57 773	2 647
32619	Other plastics product mfg	1	69	40	4 378	103 575	3 200	6 343	69 400	258 325	242 923	501 482	32 362
326199	All other plastics product mfg	1	62	35	4 201	100 393	3 053	6 041	66 902	249 024	237 194	486 542	32 076
3262	Rubber product mfg	—	27	9	1 113	39 384	677	1 291	13 729	82 539	42 960	123 727	6 998
32629	Other rubber product mfg	—	23	9	1 075	38 416	656	1 245	13 155	78 760	40 976	117 963	6 812
326291	Rubber product mfg for mechanical use	—	9	3	489	9 488	432	809	7 207	25 883	21 014	47 361	953
326299	All other rubber product mfg	—	14	6	586	28 928	224	436	5 948	52 877	19 962	70 602	5 859
327	Nonmetallic mineral product mfg	2	101	37	2 866	85 647	2 211	4 702	62 177	236 822	237 874	470 998	42 119
3271	Clay product & refractory mfg	2	11	5	397	7 780	286	506	5 345	17 953	9 775	27 463	1 126
32712	Clay building material & refractories mfg	2	5	4	331	6 704	227	408	4 542	15 435	8 421	23 808	1 088
3273	Cement & concrete product mfg	3	55	20	1 367	40 423	1 057	2 305	28 243	110 146	131 749	239 314	10 458
32732	Ready-mix concrete mfg	4	32	11	736	23 685	581	1 358	17 303	67 248	94 019	161 865	7 369
327320	Ready-mix concrete mfg	4	32	11	736	23 685	581	1 358	17 303	67 248	94 019	161 865	7 369
32733	Concrete pipe, brick, & block mfg	—	5	4	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	4	17	5	354	8 589	271	553	5 861	18 914	11 267	29 448	D
327390	Other concrete product mfg	4	17	5	354	8 589	271	553	5 861	18 914	11 267	29 448	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS—FORT WORTH, TX CMSA—Con.												
	Fort Worth—Arlington, TX PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3274	Lime & gypsum product mfg	-	4	4	282	7 228	222	528	4 912	25 765	20 806	46 554	D
3279	Other nonmetallic mineral product mfg	2	17	4	630	23 886	516	1 108	19 670	65 440	59 910	124 587	27 280
32799	All other nonmetallic mineral product mfg ...	1	15	4	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	23	12	1 150	34 068	940	1 892	24 853	60 838	53 394	114 776	4 347
3315	Foundries	-	17	10	989	29 612	806	1 567	21 524	49 606	28 977	78 380	3 543
33151	Ferrous metal foundries .	-	5	3	689	21 659	567	1 125	16 152	33 019	20 470	53 034	D
331513	Steel foundries (except investment)	-	2	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	2	12	7	300	7 953	239	442	5 372	16 587	8 507	25 346	D
332	Fabricated metal product mfg	1	467	140	9 746	294 932	7 436	15 026	188 029	685 207	685 738	1 372 852	37 216
3321	Forging & stamping	-	21	17	1 100	30 967	870	1 829	22 327	74 782	66 595	141 693	4 364
33211	Forging & stamping	-	21	17	1 100	30 967	870	1 829	22 327	74 782	66 595	141 693	4 364
332111	Iron & steel forging	-	4	3	339	11 893	271	673	9 254	26 809	20 467	47 791	D
332116	Metal stamping	1	14	12	612	14 897	493	950	10 158	33 919	23 919	57 796	2 312
3322	Cutlery & handtool mfg	-	8	3	355	10 215	270	559	6 652	23 187	14 151	38 458	1 030
33221	Cutlery & handtool mfg ..	-	8	3	355	10 215	270	559	6 652	23 187	14 151	38 458	1 030
3323	Architectural & structural metals mfg	-	106	35	2 494	72 804	1 883	4 045	45 598	203 288	191 812	394 006	8 831
33231	Plate work & fabricated structural product mfg ..	1	46	16	1 060	29 469	796	1 793	19 382	80 502	84 910	165 174	2 892
332312	Fabricated structural metal mfg	1	26	9	609	16 815	441	958	10 571	50 712	50 305	101 032	2 134
332313	Plate work mfg	1	12	4	293	8 458	236	556	5 999	18 844	16 728	35 147	488
33232	Ornamental & architectural metal products mfg	-	60	19	1 434	43 335	1 087	2 252	26 216	122 786	106 902	228 832	5 939
332322	Sheet metal work mfg .	-	35	14	1 062	32 766	792	1 674	19 514	92 271	81 927	173 317	5 130
3324	Boiler, tank, & shipping container mfg	1	13	3	365	15 656	274	619	10 916	33 922	110 057	142 392	2 976
3326	Spring & wire product mfg .	1	12	5	309	8 009	245	450	5 583	20 590	16 272	36 892	943
33261	Spring & wire product mfg	1	12	5	309	8 009	245	450	5 583	20 590	16 272	36 892	943
332618	Other fabricated wire product mfg	2	9	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	192	36	2 497	77 882	1 908	3 467	49 737	155 196	118 431	269 376	10 254
33271	Machine shops	1	166	24	1 952	60 859	1 480	2 699	38 448	123 437	95 409	214 597	6 728
332710	Machine shops	1	166	24	1 952	60 859	1 480	2 699	38 448	123 437	95 409	214 597	6 728
33272	Turned product & screw, nut, & bolt mfg	4	26	12	545	17 023	428	768	11 289	31 759	23 022	54 779	3 526
332721	Precision turned product mfg	3	20	7	343	11 799	276	528	7 790	25 906	14 821	40 739	2 256
3328	Coating, engraving, heat treating, & allied activities .	-	45	13	754	21 412	599	1 223	14 020	35 198	18 317	66 496	2 820
33281	Coating, engraving, heat treating, & allied activities	-	45	13	754	21 412	599	1 223	14 020	35 198	18 317	66 496	2 820
332813	Electroplating, plating, polishing, anodizing, & coloring	-	23	5	365	10 157	275	542	6 059	20 092	6 876	26 927	1 178
3329	Other fabricated metal product mfg	-	58	23	1 634	51 193	1 196	2 440	28 981	122 718	137 826	254 748	5 492
33291	Metal valve mfg	-	11	9	659	22 712	443	961	12 845	66 807	48 488	112 023	2 642
332912	Fluid power valve & hose fitting mfg	-	4	3	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	47	14	975	28 481	753	1 479	16 136	55 911	89 338	142 725	2 850
332996	Fabricated pipe & pipe fitting mfg	-	8	5	e	D	D	D	D	D	D	D	906
332999	All other miscellaneous fabricated metal product mfg	-	27	7	554	15 418	447	846	9 130	29 978	50 062	79 333	1 788

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	DALLAS—FORT WORTH, TX CMSA—Con.												
	Fort Worth—Arlington, TX PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	215	88	9 446	308 867	6 078	12 340	151 596	764 657	766 311	1 536 924	44 109
3331	Agriculture, construction, & mining machinery mfg.	-	33	15	1 955	72 234	1 574	2 790	42 067	166 100	261 022	419 667	11 415
33313	Mining & oil & gas field machinery mfg.	-	22	11	1 744	65 530	1 427	2 525	38 688	146 014	242 330	381 630	10 755
333132	Oil & gas field machinery & equipment mfg.	-	20	11	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg. ..	2	39	11	881	32 378	568	1 242	16 983	69 375	38 153	104 602	2 005
33329	Other industrial machinery mfg.	1	30	9	801	30 211	513	1 156	15 904	65 144	34 265	96 529	1 744
333293	Printing machinery & equipment mfg.	2	12	4	403	16 087	252	543	7 977	40 435	15 622	55 527	1 012
3333	Commercial & service industry machinery mfg. ..	-	20	8	1 559	52 542	364	737	8 803	226 047	117 410	364 396	11 427
33331	Commercial & service industry machinery mfg.	-	20	8	1 559	52 542	364	737	8 803	226 047	117 410	364 396	11 427
333313	Office machinery mfg. .	-	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg.	-	14	6	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	1	28	13	1 700	50 689	1 208	2 482	28 016	84 853	142 980	228 123	8 154
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg. .	1	28	13	1 700	50 689	1 208	2 482	28 016	84 853	142 980	228 123	8 154
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	1	19	12	1 428	42 007	1 045	2 075	24 255	66 935	132 001	199 250	D
3335	Metalworking machinery mfg.	1	37	8	341	11 221	233	438	7 125	21 775	8 956	30 343	1 118
33351	Metalworking machinery mfg.	1	37	8	341	11 221	233	438	7 125	21 775	8 956	30 343	1 118
3336	Engine, turbine, & power transmission equipment mfg.	-	6	5	926	25 722	746	1 821	15 902	50 196	44 227	95 215	2 977
33361	Engine, turbine, & power transmission equipment mfg.	-	6	5	926	25 722	746	1 821	15 902	50 196	44 227	95 215	2 977
333613	Mechanical power transmission equipment mfg.	-	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	1	52	28	2 084	64 081	1 385	2 830	32 700	146 311	153 563	294 578	7 013
33391	Pump & compressor mfg.	-	4	2	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg.	-	3	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.	1	30	17	1 199	35 229	855	1 921	19 453	58 635	103 685	159 954	3 730
333921	Elevator & moving stairway mfg.	1	7	6	e	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg.	-	16	9	752	20 882	527	1 227	11 241	32 567	67 841	98 085	1 711
33399	All other general-purpose machinery mfg.	2	18	9	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.	2	90	31	8 520	363 654	5 517	12 298	200 997	1 128 996	897 943	2 034 824	83 203
3341	Computer & peripheral equipment mfg.	-	14	4	f	D	D	D	D	D	D	D	5 423
33411	Computer & peripheral equipment mfg.	-	14	4	f	D	D	D	D	D	D	D	5 423
334111	Electronic computer mfg.	-	3	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.	4	11	5	4 020	192 961	2 126	5 370	87 456	505 167	413 411	916 543	45 139
33421	Telephone apparatus mfg.	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.	-	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.	5	5	3	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.	5	5	3	h	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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	DALLAS-FORT WORTH, TX CMSA—Con.												
	Fort Worth-Arlington, TX PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	30	11	2 626	106 354	2 089	4 359	76 516	224 018	154 707	385 965	28 994
33441	Semiconductor & other electronic component mfg	—	30	11	2 626	106 354	2 089	4 359	76 516	224 018	154 707	385 965	28 994
334413	Semiconductor & related device mfg ...	—	4	1	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	32	11	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	32	11	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	1	10	6	641	25 174	327	535	10 246	85 364	34 902	123 919	D
335	Electrical equipment, appliance, & component mfg	1	31	11	2 447	57 396	1 734	2 969	32 321	208 780	133 293	334 658	8 578
3352	Household appliance mfg..	—	2	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	2	2	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	13	4	688	18 190	510	980	11 449	48 189	56 308	104 873	2 154
33531	Electrical equipment mfg	1	13	4	688	18 190	510	980	11 449	48 189	56 308	104 873	2 154
335313	Switchgear & switchboard apparatus mfg	—	3	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	12	5	1 128	26 382	701	1 388	12 829	52 927	36 695	86 339	D
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	3	7	3	456	12 048	136	217	2 560	20 847	4 344	23 334	402
335931	Current-carrying wiring device mfg	3	5	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	139	58	27 865	1 393 644	13 367	29 229	518 302	2 996 502	2 872 654	5 930 826	210 367
3361	Motor vehicle mfg	—	4	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	4	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	30	14	1 462	38 288	1 164	2 441	24 934	86 489	130 694	214 971	D
33621	Motor vehicle body & trailer mfg	1	30	14	1 462	38 288	1 164	2 441	24 934	86 489	130 694	214 971	D
336211	Motor vehicle body mfg	3	7	4	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	1	10	5	471	14 523	369	865	8 855	42 985	50 029	89 728	D
336213	Motor home mfg	—	1	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	3	12	4	379	9 435	312	580	6 405	17 404	34 064	52 380	D
3363	Motor vehicle parts mfg ...	1	51	22	2 585	68 378	1 717	3 672	32 623	187 375	234 528	435 861	13 519
33632	Motor vehicle electrical & electronic equipment mfg	—	10	4	407	11 466	217	482	4 470	25 948	22 959	49 588	1 739
336322	Other motor vehicle electrical & electronic equipment mfg	1	9	3	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	1	8	3	358	7 165	286	639	4 821	16 663	23 170	38 019	722
336350	Motor vehicle transmission & power train parts mfg	1	8	3	358	7 165	286	639	4 821	16 663	23 170	38 019	722
33639	Other motor vehicle parts mfg	1	16	8	1 432	40 371	868	1 942	17 750	122 378	151 753	290 574	4 445
336391	Motor vehicle air-conditioning mfg	—	7	5	g	D	D	D	D	D	D	D	D

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	DALLAS-FORT WORTH, TX CMSA—Con.												
	Fort Worth-Arlington, TX PMSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3364	Aerospace product & parts mfg	—	37	15	20 334	1 140 250	7 398	16 946	340 734	2 336 185	1 751 686	4 141 175	95 361
33641	Aerospace product & parts mfg	—	37	15	20 334	1 140 250	7 398	16 946	340 734	2 336 185	1 751 686	4 141 175	95 361
336411	Aircraft mfg	—	9	3	j	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	8	7	5	554	15 223	375	780	8 196	45 930	30 779	74 134	1 662
336413	Other aircraft part & auxiliary equipment mfg	—	20	7	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	6	5	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	6	5	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	6	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	145	40	3 580	86 815	2 776	5 145	55 785	190 294	164 854	353 085	6 731
3371	Household & institutional furniture & kitchen cabinet mfg	2	94	19	1 527	31 010	1 265	2 310	22 474	63 251	57 435	120 157	2 009
33711	Wood kitchen cabinet & counter top mfg	2	62	10	868	19 069	722	1 383	13 783	40 303	29 543	69 671	1 291
337110	Wood kitchen cabinet & counter top mfg ...	2	62	10	868	19 069	722	1 383	13 783	40 303	29 543	69 671	1 291
33712	Household & institutional furniture mfg	2	32	9	659	11 941	543	927	8 691	22 948	27 892	50 486	718
337127	Institutional furniture mfg	1	12	6	373	6 934	290	480	4 737	12 451	19 337	31 648	317
3372	Office furniture (including fixtures) mfg	2	40	16	1 579	46 755	1 123	2 130	26 597	100 557	77 951	177 315	3 622
33721	Office furniture (including fixtures) mfg	2	40	16	1 579	46 755	1 123	2 130	26 597	100 557	77 951	177 315	3 622
337211	Wood office furniture mfg	—	6	2	e	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	1	11	7	332	9 093	240	359	4 286	14 195	5 793	20 206	801
337215	Showcase, partition, shelving, & locker mfg	5	18	7	771	21 859	562	1 205	13 969	42 834	47 274	89 952	2 188
3379	Other furniture related product mfg	—	11	5	474	9 050	388	705	6 714	26 486	29 468	55 613	1 100
33791	Mattress mfg	1	8	2	258	5 553	218	361	4 332	18 265	22 290	40 149	937
337910	Mattress mfg	1	8	2	258	5 553	218	361	4 332	18 265	22 290	40 149	937
339	Miscellaneous mfg	3	193	30	2 904	77 790	2 055	3 899	41 708	195 230	193 943	394 906	10 038
3391	Medical equipment & supplies mfg	5	68	10	971	31 458	671	1 247	16 051	66 515	52 637	123 528	4 774
33911	Medical equipment & supplies mfg	5	68	10	971	31 458	671	1 247	16 051	66 515	52 637	123 528	4 774
339112	Surgical & medical instrument mfg	8	9	3	279	14 976	162	372	5 780	41 355	17 411	58 710	2 947
339113	Surgical appliance & supplies mfg	—	11	5	404	9 409	300	505	5 605	9 981	29 376	43 568	1 376
3399	Other miscellaneous mfg ..	2	125	20	1 933	46 332	1 384	2 652	25 657	128 715	141 306	271 378	5 264
33992	Sporting & athletic goods mfg	—	15	3	448	7 970	384	711	5 421	29 690	46 659	79 580	1 376
339920	Sporting & athletic goods mfg	—	15	3	448	7 970	384	711	5 421	29 690	46 659	79 580	1 376
33995	Sign mfg	3	41	5	499	13 431	313	630	6 833	34 593	17 071	52 360	676
339950	Sign mfg	3	41	5	499	13 431	313	630	6 833	34 593	17 071	52 360	676
33999	All other miscellaneous mfg	1	39	7	656	18 279	453	893	9 667	48 789	66 075	112 652	2 602
339999	All other miscellaneous mfg	2	24	4	347	9 088	246	455	4 738	25 524	24 389	49 355	805

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EL PASO, TX MSA													
31-33	Manufacturing	1	652	216	36 723	773 944	29 598	54 684	528 653	3 300 010	4 720 097	7 966 475	234 102
311	Food mfg	1	62	14	1 588	35 263	1 104	2 465	20 418	110 301	162 193	272 862	9 268
3111	Animal food mfg	—	3	1	e	D	D	D	D	D	D	D	D
31111	Animal food mfg	—	3	1	e	D	D	D	D	D	D	D	D
311111	Dog & cat food mfg	—	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	4	4	3	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	4	3	3	e	D	D	D	D	D	D	D	D
311422	Specialty canning	5	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	6	5	358	8 200	161	326	2 925	20 621	65 761	86 976	1 505
31151	Dairy product (except frozen) mfg	—	5	5	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	4	4	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	32	3	351	10 074	186	298	4 027	20 659	23 316	44 107	5 189
31181	Bread & bakery product mfg	—	25	3	321	9 243	161	251	3 516	15 854	19 046	35 027	D
312	Beverage & tobacco product mfg	—	5	3	386	10 624	67	149	1 464	26 985	49 828	76 631	2 636
3121	Beverage mfg	—	5	3	386	10 624	67	149	1 464	26 985	49 828	76 631	2 636
31211	Soft drink & ice mfg	—	5	3	386	10 624	67	149	1 464	26 985	49 828	76 631	2 636
312111	Soft drink mfg	—	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills	5	12	7	3 008	51 837	2 627	4 832	43 584	139 036	58 906	194 383	8 427
3133	Textile & fabric finishing & fabric coating mills	6	9	6	h	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	6	9	6	h	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	8	7	4	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	—	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	73	36	11 669	219 176	10 486	19 203	166 588	838 688	959 151	1 762 193	19 950
3152	Cut & sew apparel mfg	—	69	35	j	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	42	15	h	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	8	4	1 243	20 964	1 149	2 192	18 038	30 383	8 713	38 328	1 535
315212	Women's, girls', & infants' cut & sew apparel contractors	2	34	11	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	13	10	4 713	102 571	4 154	7 900	76 931	470 503	590 425	1 035 026	4 040
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	11	9	h	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	13	9	3 998	71 299	3 572	6 281	49 800	292 845	350 448	638 317	13 560
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	2	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	10	8	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	2	24	9	1 045	19 924	691	1 266	9 439	36 982	60 152	104 467	678
3162	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
31621	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
316213	Men's footwear (except athletic) mfg	1	12	7	f	D	D	D	D	D	D	D	380
321	Wood product mfg	5	24	7	f	D	D	D	D	D	D	D	704
3219	Other wood product mfg	6	23	6	e	D	D	D	D	D	D	D	D
32191	Millwork	7	11	4	328	5 137	277	415	3 981	9 257	15 838	25 133	425
322	Paper mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
3222	Converted paper product mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
32221	Paperboard container mfg	1	13	12	1 035	25 328	841	1 773	16 666	73 856	93 046	166 257	D
322211	Corrugated & solid fiber box mfg	—	10	9	804	19 644	653	1 351	12 803	60 336	81 188	140 830	2 077
323	Printing & related support activities	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
3231	Printing & related support activities	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
32311	Printing	1	63	10	648	15 001	471	755	9 038	30 717	19 997	50 356	2 696
323110	Commercial lithographic printing	1	31	5	372	8 482	259	455	5 416	17 605	12 275	29 673	783
32312	Support activities for printing	7	8	1	294	3 329	263	263	2 948	5 100	450	5 461	431
323122	Prepress services	7	8	1	294	3 329	263	263	2 948	5 100	450	5 461	431

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31-33	EL PASO, TX MSA— Con. Manufacturing— Con.												
324	Petroleum & coal products mfg	9	2	1	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	9	2	1	e	D	D	D	D	D	D	D	D
32411	Petroleum refineries	9	2	1	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	9	2	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	36	19	3 364	72 048	2 667	5 200	52 689	192 529	203 655	390 774	39 145
3261	Plastics product mfg	1	33	19	3 357	71 931	2 660	5 189	52 596	192 292	203 342	390 220	39 138
32611	Unsupported plastics film, sheet, & bag mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	30	17	2 980	63 304	2 342	4 540	47 382	156 923	185 080	337 011	37 159
326199	All other plastics product mfg	—	29	17	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	15	6	696	16 296	240	502	5 289	31 854	34 573	64 753	D
3273	Cement & concrete product mfg	—	9	5	637	14 401	196	402	4 081	28 502	30 970	57 802	D
32732	Ready-mix concrete mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	—	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	9	6	g	D	D	D	D	D	D	D	31 746
3311	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	5	4	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	2	2	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	—	2	2	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	1	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding ..	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	4	95	27	1 995	46 849	1 569	3 108	30 425	98 704	124 414	222 794	8 736
3321	Forging & stamping	7	6	4	431	13 434	316	661	7 495	27 296	46 513	74 255	2 686
33211	Forging & stamping	7	6	4	431	13 434	316	661	7 495	27 296	46 513	74 255	2 686
3323	Architectural & structural metals mfg	2	27	10	878	17 980	725	1 554	12 552	41 279	58 570	99 069	3 309
33232	Ornamental & architectural metal products mfg	—	20	6	642	11 714	543	1 145	8 405	24 673	28 132	51 636	2 575
332323	Ornamental & architectural metal work mfg	—	11	4	509	9 059	439	957	6 681	16 714	25 208	41 500	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	41	5	321	6 961	237	374	4 693	13 371	5 812	19 100	783
33271	Machine shops	5	35	3	254	5 446	184	290	3 609	10 250	3 697	13 854	539
332710	Machine shops	5	35	3	254	5 446	184	290	3 609	10 250	3 697	13 854	539
333	Machinery mfg	5	43	9	948	16 993	770	1 358	11 927	41 477	22 301	65 000	9 700
3332	Industrial machinery mfg ..	9	3	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	9	3	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	6	29	4	348	8 598	266	361	6 154	15 175	4 859	19 866	D
33351	Metalworking machinery mfg	6	29	4	348	8 598	266	361	6 154	15 175	4 859	19 866	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EL PASO, TX MSA— Con. Manufacturing— Con.												
334	Computer & electronic product mfg.....	1	22	11	1 369	27 046	1 019	1 789	15 366	85 675	78 156	167 985	8 298
3343	Audio & video equipment mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	13	6	851	15 751	625	822	9 089	57 841	19 670	80 550	3 493
33441	Semiconductor & other electronic component mfg.....	—	13	6	851	15 751	625	822	9 089	57 841	19 670	80 550	3 493
334413	Semiconductor & related device mfg...	—	1	1	308	2 158	182	—	—	—	—	—	—
334415	Electronic resistor mfg.....	—	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	20	12	2 146	46 507	1 697	2 525	29 035	319 452	383 389	704 302	26 313
3352	Household appliance mfg...	—	3	3	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg...	—	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
33531	Electrical equipment mfg.....	—	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
3359	Other electrical equipment & component mfg.....	6	5	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	17	5	692	14 788	519	1 085	9 424	95 650	102 152	180 849	4 752
3363	Motor vehicle parts mfg...	—	13	5	f	D	D	D	D	D	D	D	4 681
33632	Motor vehicle electrical & electronic equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	—	4	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	22	4	824	12 588	769	1 329	10 301	29 293	16 197	45 524	1 724
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	18	3	775	11 815	733	1 273	9 816	27 628	15 198	42 832	1 663
33712	Household & institutional furniture mfg.....	—	8	3	732	11 066	698	1 223	9 263	26 068	14 023	40 080	D
337124	Metal household furniture mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	53	12	1 976	42 565	1 397	2 377	22 733	303 556	353 196	662 848	9 326
3391	Medical equipment & supplies mfg.....	—	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
33911	Medical equipment & supplies mfg.....	—	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
339113	Surgical appliance & supplies mfg.....	—	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg...	—	29	7	1 190	22 107	1 005	1 744	15 127	202 933	166 799	371 327	3 222
33993	Doll, toy, & game mfg...	—	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
	HOUSTON— GALVESTON— BRAZORIA, TX CMSA												
31-33	Manufacturing	—	5 387	1 679	202 631	7 901 450	138 225	281 431	4 478 385	37 479 611	62 526 384	99 862 240	4 449 501
311	Food mfg.....	—	269	71	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	—	20	10	h	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	89	16	g	D	D	D	D	D	D	D	2 028
315	Apparel mfg.....	5	56	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	3	106	29	g	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	49	24	h	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	616	96	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	1	46	23	i	D	D	D	D	D	D	D	D
325	Chemical mfg	—	401	204	37 644	2 124 355	23 014	50 010	1 168 539	17 343 696	26 099 353	43 363 108	2 943 873
326	Plastics & rubber products mfg	1	269	120	j	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	214	53	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	55	31	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 521	494	40 763	1 384 179	30 162	62 905	866 004	3 025 776	2 792 956	5 812 136	195 812
333	Machinery mfg	—	516	199	k	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	271	94	j	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	125	43	i	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	136	47	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	164	34	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	434	83	8 056	223 750	5 487	11 361	122 957	667 774	321 618	990 378	D
	Brazoria, TX PMSA												
31-33	Manufacturing	—	199	60	14 149	682 947	10 011	20 120	425 116	2 579 286	8 174 294	10 760 986	793 692
311	Food mfg	—	10	4	278	22 150	229	508	20 322	261 991	351 808	594 654	D
324	Petroleum & coal products mfg	—	4	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	4	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	25	17	7 373	406 664	4 963	9 134	244 123	1 964 798	5 147 530	7 147 085	680 401
3251	Basic chemical mfg	—	13	11	5 496	310 869	3 579	6 275	178 429	1 592 098	4 607 716	6 242 195	597 225
32511	Petrochemical mfg	—	5	5	1 354	78 863	877	1 607	45 264	647 591	1 948 842	2 623 929	123 402
325110	Petrochemical mfg	—	5	5	1 354	78 863	877	1 607	45 264	647 591	1 948 842	2 623 929	123 402
32518	Other basic inorganic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	4	3	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	3	3	3 843	215 515	2 486	4 203	121 452	884 847	2 600 894	3 489 188	D
325199	All other basic organic chemical mfg	—	3	3	3 843	215 515	2 486	4 203	121 452	884 847	2 600 894	3 489 188	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
32521	Resin & synthetic rubber mfg	—	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
325211	Plastics material & resin mfg	—	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
331	Primary metal mfg	—	2	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	—	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Brazoria, TX PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	62	17	1 101	33 571	851	1 788	25 304	65 523	49 553	115 161	2 571
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	27	5	350	10 610	270	576	8 170	16 714	11 579	28 353	921
33271	Machine shops	1	21	4	250	7 212	193	403	5 962	11 563	7 238	18 803	599
332710	Machine shops	1	21	4	250	7 212	193	403	5 962	11 563	7 238	18 803	599
333	Machinery mfg	1	15	5	486	13 976	288	610	9 808	29 391	22 187	50 932	889
3339	Other general-purpose machinery mfg	4	6	3	295	6 343	160	367	5 041	10 651	5 126	15 787	232
33399	All other general-purpose machinery mfg	4	2	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	10	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	3	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	2	g	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	12	4	387	9 484	272	502	5 267	21 912	11 323	32 835	1 214
	Galveston—Texas City, TX PMSA												
31-33	Manufacturing	1	160	35	7 279	392 507	4 817	10 921	244 497	1 761 759	7 422 044	9 182 629	183 618
324	Petroleum & coal products mfg	1	5	4	2 462	141 147	1 655	4 262	100 623	944 638	5 439 982	6 387 122	84 632
3241	Petroleum & coal products mfg	1	5	4	2 462	141 147	1 655	4 262	100 623	944 638	5 439 982	6 387 122	84 632
32411	Petroleum refineries	1	4	4	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	1	4	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	—	15	7	2 807	182 779	1 777	4 162	109 478	692 674	1 859 742	2 552 498	89 459
3251	Basic chemical mfg	—	10	6	2 734	180 637	1 725	4 071	108 078	686 484	1 857 170	2 543 715	89 210
32519	Other basic organic chemical mfg	—	6	4	2 651	176 560	1 689	3 980	106 325	655 570	1 843 997	2 499 694	88 738
325192	Cyclic crude & intermediate mfg	—	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	5	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	33	10	691	24 273	565	1 152	18 049	36 622	26 814	61 050	2 293
	Houston, TX PMSA												
31-33	Manufacturing	—	5 028	1 584	181 203	6 825 996	123 397	250 390	3 808 772	33 138 566	46 930 046	79 918 625	3 472 191
311	Food mfg	—	249	65	10 697	308 093	7 511	15 551	176 707	1 195 016	1 692 259	2 879 915	85 893
3113	Sugar & confectionery product mfg	—	8	1	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	—	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining ...	—	1	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	16	8	1 717	32 752	1 573	3 538	27 412	67 117	75 939	143 112	2 855
31141	Frozen food mfg	2	7	5	1 499	26 081	1 397	3 151	24 009	51 811	40 728	92 522	2 518
311412	Frozen specialty food mfg	2	7	5	1 499	26 081	1 397	3 151	24 009	51 811	40 728	92 522	2 518
3115	Dairy product mfg	2	8	4	634	24 061	200	489	8 798	76 211	166 223	238 518	5 811
31151	Dairy product (except frozen) mfg	3	4	3	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	3	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	-	30	10	1 585	36 548	1 215	2 550	22 500	274 641	304 520	576 104	4 992
31161	Animal slaughtering & processing.....	-	30	10	1 585	36 548	1 215	2 550	22 500	274 641	304 520	576 104	4 992
311612	Meat processed from carcasses.....	-	15	6	1 325	30 696	1 047	2 243	19 351	244 373	250 167	491 488	4 408
3118	Bakeries & tortilla mfg.....	1	138	20	3 430	92 199	1 987	3 585	42 068	209 430	150 969	359 617	17 517
31181	Bread & bakery product mfg.....	1	121	15	2 623	66 840	1 368	2 333	24 579	161 006	94 486	254 860	D
311811	Retail bakeries.....	5	89	3	e	D	D	D	D	D	D	D	844
311812	Commercial bakeries.....	-	27	9	1 881	55 519	869	1 565	18 070	130 942	72 811	203 678	5 185
311813	Frozen cakes, pies, & other pastries mfg... ..	-	5	3	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	2	10	3	529	21 071	393	819	14 610	39 994	48 461	88 236	D
311821	Cookie & cracker mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
31183	Tortilla mfg.....	2	7	2	278	4 288	226	433	2 879	8 430	8 022	16 521	D
311830	Tortilla mfg.....	2	7	2	278	4 288	226	433	2 879	8 430	8 022	16 521	D
3119	Other food mfg.....	-	36	16	2 298	78 584	1 791	3 836	52 494	467 911	620 169	1 096 806	37 105
31191	Snack food mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	21	8	864	18 552	676	1 209	12 164	61 570	84 788	146 280	D
311991	Perishable prepared food mfg.....	5	11	5	327	5 477	211	273	2 468	12 308	20 095	32 405	D
311999	All other miscellaneous food mfg.....	-	10	3	537	13 075	465	936	9 696	49 262	64 693	113 875	4 799
312	Beverage & tobacco product mfg.....	-	19	10	3 009	105 698	1 705	2 707	62 257	923 915	675 522	1 601 538	118 714
3121	Beverage mfg.....	-	18	10	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	15	9	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	7	6	g	D	D	D	D	D	D	D	D
31212	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	83	16	1 418	26 878	1 101	1 888	16 024	48 231	38 841	86 884	1 929
3141	Textile furnishings mills....	2	33	7	522	8 769	423	717	5 640	14 522	12 924	27 389	528
31412	Curtain & linen mills.....	2	33	7	522	8 769	423	717	5 640	14 522	12 924	27 389	528
314121	Curtain & drapery mills.....	2	28	4	356	5 951	282	474	3 566	10 997	8 523	19 463	324
3149	Other textile product mills..	4	50	9	896	18 109	678	1 171	10 384	33 709	25 917	59 495	1 401
31491	Textile bag & canvas mills.....	3	24	3	354	7 339	239	368	3 625	12 912	12 591	25 322	402
314912	Canvas & related product mills.....	3	18	2	289	6 236	187	297	3 121	11 288	10 355	21 478	344
31499	All other textile product mills.....	5	26	6	542	10 770	439	803	6 759	20 797	13 326	34 173	999
314999	All other miscellaneous textile product mills..	5	24	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	5	55	7	630	10 203	486	727	5 908	17 651	12 081	29 336	857
3152	Cut & sew apparel mfg.....	6	39	6	538	8 414	408	650	5 097	13 786	10 242	23 514	737
31523	Women's & girls' cut & sew apparel mfg.....	6	15	3	312	4 800	198	235	2 204	7 586	7 935	15 072	502
315239	Women's & girls' cut & sew other outerwear mfg.....	6	6	3	279	4 261	175	206	1 907	6 385	6 363	12 289	481
321	Wood product mfg.....	3	101	29	2 229	52 606	1 882	4 068	37 961	104 609	177 312	278 943	8 365
3211	Sawmills & wood preservation.....	2	12	5	269	6 388	236	402	4 980	16 369	42 892	58 583	1 459
32111	Sawmills & wood preservation.....	2	12	5	269	6 388	236	402	4 980	16 369	42 892	58 583	1 459
3212	Veneer, plywood, & engineered wood product mfg.....	-	7	5	637	18 994	543	1 486	14 079	34 041	66 262	98 139	3 491
32121	Veneer, plywood, & engineered wood product mfg.....	-	7	5	637	18 994	543	1 486	14 079	34 041	66 262	98 139	3 491
321212	Softwood veneer & plywood mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
321214	Truss mfg.....	-	3	3	e	D	D	D	D	D	D	D	D

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	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg . . .	5	82	19	1 323	27 224	1 103	2 180	18 902	54 199	68 158	122 221	3 415
32191	Millwork	4	34	7	524	9 964	451	810	7 264	21 237	24 164	44 790	871
32192	Wood container & pallet mfg	4	21	7	316	6 742	278	613	5 037	13 786	18 990	33 072	1 561
321920	Wood container & pallet mfg	4	21	7	316	6 742	278	613	5 037	13 786	18 990	33 072	1 561
32199	All other wood product mfg	7	27	5	483	10 518	374	757	6 601	19 176	25 004	44 359	983
322	Paper mfg	—	48	24	3 058	130 676	2 308	4 964	90 006	285 063	415 113	700 074	48 768
3221	Pulp, paper, & paperboard mills	—	3	3	g	D	D	D	D	D	D	D	38 530
32212	Paper mills	—	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	2	45	21	g	D	D	D	D	D	D	D	10 238
32221	Paperboard container mfg	2	23	15	907	29 438	608	1 311	15 342	64 699	91 787	156 430	4 619
322211	Corrugated & solid fiber box mfg	1	19	12	719	22 354	466	1 024	11 144	44 140	79 341	123 018	3 139
32223	Stationery product mfg	—	7	3	274	6 438	219	411	4 766	19 049	8 849	27 289	D
323	Printing & related support activities	3	580	95	9 016	260 852	6 556	11 768	156 759	590 692	341 444	928 950	47 653
3231	Printing & related support activities	3	580	95	9 016	260 852	6 556	11 768	156 759	590 692	341 444	928 950	47 653
32311	Printing	3	535	83	8 302	235 980	6 006	10 632	138 787	541 366	330 696	868 809	44 597
323110	Commercial lithographic printing	3	277	57	5 703	167 261	4 175	7 320	100 862	388 992	241 367	626 278	33 570
323113	Commercial screen printing	4	45	8	769	20 815	521	892	9 860	41 087	24 536	67 038	3 518
323114	Quick printing	2	119	6	852	20 483	614	1 082	11 560	47 879	27 855	76 137	3 899
323116	Manifold business form printing	4	18	6	399	12 987	284	610	8 349	35 004	21 820	56 867	1 057
323119	Other commercial printing	7	54	2	303	7 578	200	321	4 105	13 183	9 041	22 259	1 083
32312	Support activities for printing	4	45	12	714	24 872	550	1 136	17 972	49 326	10 748	60 141	3 056
323122	Prepress services	4	32	6	469	17 846	350	728	13 714	37 472	9 203	46 634	2 538
324	Petroleum & coal products mfg	1	37	17	5 363	331 484	3 389	8 404	192 302	2 972 359	9 966 477	12 977 289	241 794
3241	Petroleum & coal products mfg	1	37	17	5 363	331 484	3 389	8 404	192 302	2 972 359	9 966 477	12 977 289	241 794
32411	Petroleum refineries	1	10	8	4 641	305 867	2 826	7 312	174 915	2 825 852	9 755 600	12 621 464	233 489
324110	Petroleum refineries	1	10	8	4 641	305 867	2 826	7 312	174 915	2 825 852	9 755 600	12 621 464	233 489
32412	Asphalt paving, roofing, & saturated materials mfg	—	10	4	407	13 807	334	658	9 736	45 606	99 225	146 202	3 347
324122	Asphalt shingle & coating materials mfg	—	5	3	284	10 358	224	516	7 271	29 447	77 752	108 583	2 122
32419	Other petroleum & coal products mfg	3	17	5	315	11 810	229	434	7 651	100 901	111 652	209 623	4 958
324191	Petroleum lubricating oil & grease mfg	3	15	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg	—	361	180	27 464	1 534 912	16 274	36 714	814 938	14 686 224	19 092 081	33 663 525	2 174 013
3251	Basic chemical mfg	—	109	74	13 777	843 087	8 063	18 577	449 976	9 853 858	11 695 948	21 478 753	1 285 807
32511	Petrochemical mfg	—	11	10	4 635	302 173	2 393	5 812	149 689	6 101 363	6 047 981	12 082 746	534 405
325110	Petrochemical mfg	—	11	10	4 635	302 173	2 393	5 812	149 689	6 101 363	6 047 981	12 082 746	534 405
32512	Industrial gas mfg	—	22	9	f	D	D	D	D	D	D	D	131 288
325120	Industrial gas mfg	—	22	9	f	D	D	D	D	D	D	D	131 288
32518	Other basic inorganic chemical mfg	—	20	14	1 668	97 841	1 078	2 373	61 733	520 156	388 522	913 490	D
325181	Alkalies & chlorine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	18	12	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	—	54	40	6 765	410 016	4 151	9 392	220 298	2 922 631	5 054 906	7 968 588	477 740
325192	Cyclic crude & intermediate mfg	—	4	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	—	50	37	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	37	29	6 488	389 583	3 615	8 762	204 405	3 266 502	5 855 810	9 065 674	735 340
32521	Resin & synthetic rubber mfg	—	37	29	6 488	389 583	3 615	8 762	204 405	3 266 502	5 855 810	9 065 674	735 340
325211	Plastics material & resin mfg	—	30	25	5 483	335 996	2 840	7 000	165 744	3 073 063	5 586 915	8 612 481	D
325212	Synthetic rubber mfg	—	7	4	1 005	53 587	775	1 762	38 661	193 439	268 895	453 193	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	18	8	1 558	96 545	916	2 096	54 296	538 129	465 953	1 011 335	63 153
32532	Pesticide & other agricultural chemical mfg	—	10	5	1 422	91 796	819	1 882	51 551	513 833	425 692	947 742	60 879
325320	Pesticide & other agricultural chemical mfg	—	10	5	1 422	91 796	819	1 882	51 551	513 833	425 692	947 742	60 879
3254	Pharmaceutical & medicine mfg	3	17	4	405	16 168	231	419	6 876	99 365	34 137	135 503	6 545
32541	Pharmaceutical & medicine mfg	3	17	4	405	16 168	231	419	6 876	99 365	34 137	135 503	6 545
3255	Paint, coating, & adhesive mfg	—	45	15	1 337	47 236	893	1 926	22 864	210 751	265 246	478 012	9 423
32551	Paint & coating mfg	—	34	11	1 129	40 001	785	1 722	20 182	181 836	231 246	415 485	8 114
325510	Paint & coating mfg	—	34	11	1 129	40 001	785	1 722	20 182	181 836	231 246	415 485	8 114
3256	Soap, cleaning compound, & toilet preparation mfg	2	54	16	1 317	38 465	834	1 500	21 096	202 157	205 557	409 306	28 440
32561	Soap & cleaning compound mfg	1	44	13	899	29 940	549	1 147	17 281	175 359	172 439	349 271	26 107
325611	Soap & other detergent mfg	2	23	5	e	D	D	D	D	D	D	D	1 727
325612	Polish & other sanitation good mfg	1	15	5	400	9 830	209	412	4 337	95 690	65 329	161 024	985
32562	Toilet preparation mfg	6	10	3	418	8 525	285	353	3 815	26 798	33 118	60 035	2 333
325620	Toilet preparation mfg	6	10	3	418	8 525	285	353	3 815	26 798	33 118	60 035	2 333
3259	Other chemical product mfg	1	81	34	2 582	103 828	1 722	3 434	55 425	515 462	569 430	1 084 942	45 305
32599	All other chemical product & preparation mfg	1	72	33	2 481	100 211	1 661	3 310	53 355	504 452	547 144	1 051 574	44 747
325991	Custom compounding of purchased resin	—	28	13	1 133	38 431	800	1 595	23 674	115 690	222 268	335 085	11 416
325998	All other miscellaneous chemical product & preparation mfg	1	37	18	1 236	58 309	788	1 579	27 789	380 212	314 819	697 746	32 476
326	Plastics & rubber products mfg	1	257	119	10 252	285 194	7 789	15 266	179 284	793 641	777 164	1 546 452	71 179
3261	Plastics product mfg	1	210	107	9 365	257 917	7 112	13 812	164 125	741 073	731 747	1 453 047	65 501
32611	Unsupported plastics film, sheet, & bag mfg	1	34	16	1 822	55 427	1 312	2 645	34 614	195 215	206 617	399 006	17 158
326111	Unsupported plastics bag mfg	3	18	7	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	12	8	1 097	39 963	662	1 403	24 087	155 414	147 078	299 545	9 211
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	2	19	9	814	22 569	476	992	9 931	49 058	57 539	106 391	4 456
326121	Unsupported plastics profile shape mfg	—	8	3	387	9 582	129	270	2 969	14 241	9 714	23 941	677
326122	Plastics pipe & pipe fitting mfg	3	11	6	427	12 987	347	722	6 962	34 817	47 825	82 450	3 779
32615	Urethane & other foam product (except polystyrene) mfg	1	13	7	349	8 083	280	616	5 376	17 979	30 299	48 487	734
326150	Urethane & other foam product (except polystyrene) mfg	1	13	7	349	8 083	280	616	5 376	17 979	30 299	48 487	734
32616	Plastics bottle mfg	—	9	8	797	26 444	712	1 570	20 599	88 830	110 301	197 800	9 297
326160	Plastics bottle mfg	—	9	8	797	26 444	712	1 570	20 599	88 830	110 301	197 800	9 297
32619	Other plastics product mfg	1	128	64	5 461	142 662	4 243	7 825	91 907	382 899	316 217	683 554	33 341
326191	Plastics plumbing fixture mfg	3	11	5	e	D	D	D	D	D	D	D	D
326192	Resilient floor covering mfg	—	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	116	58	4 762	120 413	3 725	6 740	76 755	330 990	262 735	574 915	30 004

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	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3262	Rubber product mfg	1	47	12	887	27 277	677	1 454	15 159	52 568	45 417	93 405	5 678
32629	Other rubber product mfg	1	30	10	695	20 509	554	1 212	12 324	44 028	29 286	69 744	4 822
326291	Rubber product mfg for mechanical use	1	14	6	377	12 233	307	709	7 739	24 934	13 722	34 491	3 524
326299	All other rubber product mfg	1	16	4	318	8 276	247	503	4 585	19 094	15 564	35 253	1 298
327	Nonmetallic mineral product mfg	3	193	48	3 744	106 403	3 047	6 241	77 433	350 192	343 255	688 743	26 224
3271	Clay product & refractory mfg	3	16	4	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	2	31	5	434	10 721	351	756	8 267	22 313	18 555	40 571	1 172
32721	Glass & glass product mfg	2	31	5	434	10 721	351	756	8 267	22 313	18 555	40 571	1 172
327215	Glass product mfg made of purchased glass	1	23	4	294	7 053	225	490	4 848	17 438	15 469	33 112	954
3273	Cement & concrete product mfg	3	103	32	2 311	68 556	1 942	4 025	51 622	226 957	251 718	474 089	18 221
32732	Ready-mix concrete mfg	4	64	17	1 322	43 369	1 140	2 449	34 016	147 689	191 693	338 824	14 993
327320	Ready-mix concrete mfg	4	64	17	1 322	43 369	1 140	2 449	34 016	147 689	191 693	338 824	14 993
32733	Concrete pipe, brick, & block mfg	—	19	6	e	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg	—	11	5	319	9 413	282	565	7 620	39 648	22 813	60 820	348
32739	Other concrete product mfg	3	19	8	508	10 977	407	766	7 232	25 797	19 712	45 206	1 137
327390	Other concrete product mfg	3	19	8	508	10 977	407	766	7 232	25 797	19 712	45 206	1 137
3279	Other nonmetallic mineral product mfg	2	39	5	524	14 544	359	675	8 786	60 250	46 624	106 940	3 201
32799	All other nonmetallic mineral product mfg	1	32	4	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	53	30	2 807	91 657	2 235	4 761	66 874	226 381	507 793	735 928	27 922
3311	Iron & steel mills & ferroalloy mfg	—	4	3	292	9 419	237	549	7 940	7 650	162 633	174 401	3 554
33111	Iron & steel mills & ferroalloy mfg	—	4	3	292	9 419	237	549	7 940	7 650	162 633	174 401	3 554
331111	Iron & steel mills	—	4	3	292	9 419	237	549	7 940	7 650	162 633	174 401	3 554
3312	Steel product mfg from purchased steel	1	18	15	1 545	53 283	1 233	2 752	39 286	150 057	282 482	428 821	15 887
33121	Iron & steel pipes & tubes mfg from purchased steel	1	10	9	1 035	40 720	792	1 870	29 224	112 090	208 489	318 270	D
331210	Iron & steel pipes & tubes mfg from purchased steel	1	10	9	1 035	40 720	792	1 870	29 224	112 090	208 489	318 270	D
33122	Rolling & drawing of purchased steel	—	8	6	510	12 563	441	882	10 062	37 967	73 993	110 551	D
331222	Steel wire drawing	—	7	6	f	D	D	D	D	D	D	D	D
3315	Foundries	1	18	7	613	18 443	496	1 020	12 791	39 584	26 672	66 259	5 541
33151	Ferrous metal foundries	—	10	5	509	15 551	411	865	10 593	36 265	19 335	55 758	5 259
331513	Steel foundries (except investment)	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 426	467	38 971	1 326 335	28 746	59 965	822 651	2 923 631	2 716 589	5 635 925	190 948
3321	Forging & stamping	1	46	23	3 025	116 209	2 193	4 536	71 806	305 267	415 549	713 753	35 131
33211	Forging & stamping	1	46	23	3 025	116 209	2 193	4 536	71 806	305 267	415 549	713 753	35 131
332111	Iron & steel forging	1	13	6	1 511	70 885	1 046	2 268	43 523	201 925	273 878	469 118	25 995
332114	Custom roll forming	—	11	8	703	22 162	505	980	13 312	52 802	107 678	160 709	D
332116	Metal stamping	4	20	9	f	D	D	D	D	D	D	D	7 404
3323	Architectural & structural metals mfg	1	291	103	8 565	258 382	6 167	12 821	146 302	498 649	598 045	1 089 882	24 517
33231	Plate work & fabricated structural product mfg	1	132	52	4 866	155 003	3 591	7 787	88 335	258 114	376 519	632 345	12 093
332311	Prefabricated metal building & component mfg	—	19	10	2 191	71 998	1 481	3 326	36 710	98 665	173 447	271 186	4 734
332312	Fabricated structural metal mfg	1	73	31	2 016	60 241	1 606	3 438	37 260	114 140	171 873	287 139	5 101
332313	Plate work mfg	2	40	11	659	22 764	504	1 023	14 365	45 309	31 199	74 020	2 258

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg—Con.												
33232	Ornamental & architectural metal products mfg.....	1	159	51	3 699	103 379	2 576	5 034	57 967	240 535	221 526	457 537	12 424
332321	Metal window & door mfg.....	2	29	12	943	20 811	674	1 338	11 921	43 226	58 036	101 184	1 441
332322	Sheet metal work mfg.	1	97	31	2 093	62 396	1 447	2 881	34 536	150 130	127 426	272 713	9 804
332323	Ornamental & architectural metal work mfg.....	-	33	8	663	20 172	455	815	11 510	47 179	36 064	83 640	1 179
3324	Boiler, tank, & shipping container mfg.....	-	64	47	4 003	144 470	3 047	6 728	101 797	351 372	496 495	853 587	13 144
33241	Power boiler & heat exchanger mfg.....	-	23	19	1 615	54 188	1 253	2 679	37 744	138 425	127 166	262 678	6 133
332410	Power boiler & heat exchanger mfg.....	-	23	19	1 615	54 188	1 253	2 679	37 744	138 425	127 166	262 678	6 133
33242	Metal tank (heavy gauge) mfg.....	-	26	19	1 228	46 281	882	2 011	32 050	76 204	70 314	146 936	4 113
332420	Metal tank (heavy gauge) mfg.....	-	26	19	1 228	46 281	882	2 011	32 050	76 204	70 314	146 936	4 113
33243	Metal can, box, & other metal container (light gauge) mfg.....	-	15	9	1 160	44 001	912	2 038	32 003	136 743	299 015	443 973	2 898
332431	Metal can mfg.....	-	6	4	500	25 082	413	942	20 325	82 470	209 331	697 777	D
332439	Other metal container mfg.....	-	9	5	660	18 919	499	1 096	11 678	54 273	89 684	144 196	D
3326	Spring & wire product mfg.	1	30	13	981	30 721	778	1 602	18 007	59 379	54 416	114 704	6 375
33261	Spring & wire product mfg.....	1	30	13	981	30 721	778	1 602	18 007	59 379	54 416	114 704	6 375
332618	Other fabricated wire product mfg.....	2	22	8	673	19 935	515	1 114	12 350	36 527	41 540	78 947	3 968
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	2	614	120	8 620	317 126	6 737	13 785	211 071	591 576	270 495	856 557	54 173
33271	Machine shops.....	2	548	99	7 084	262 221	5 547	11 317	175 965	490 523	210 259	697 205	42 155
332710	Machine shops.....	2	548	99	7 084	262 221	5 547	11 317	175 965	490 523	210 259	697 205	42 155
33272	Turned product & screw, nut, & bolt mfg.....	1	66	21	1 536	54 905	1 190	2 468	35 106	101 053	60 236	159 352	12 018
332721	Precision turned product mfg.....	-	41	11	848	31 441	672	1 417	20 412	59 914	26 556	85 547	7 028
332722	Bolt, nut, screw, rivet, & washer mfg.....	3	25	10	688	23 464	518	1 051	14 694	41 139	33 680	73 805	4 990
3328	Coating, engraving, heat treating, & allied activities.	1	143	60	4 104	133 289	3 323	7 158	89 912	302 304	192 737	492 407	17 022
33281	Coating, engraving, heat treating, & allied activities.....	1	143	60	4 104	133 289	3 323	7 158	89 912	302 304	192 737	492 407	17 022
332811	Metal heat treating....	-	27	15	1 252	39 912	1 033	1 945	27 357	85 135	49 173	134 129	4 611
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	61	25	1 686	55 743	1 394	3 209	38 708	146 316	104 390	248 372	8 399
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	55	20	1 166	37 634	896	2 004	23 847	70 853	39 174	109 906	4 012
3329	Other fabricated metal product mfg.....	-	220	98	9 423	319 402	6 312	12 995	179 331	798 287	674 415	1 484 237	39 639
33291	Metal valve mfg.....	1	94	54	5 483	195 913	3 325	6 970	101 858	511 507	407 510	931 320	22 856
332911	Industrial valve mfg....	-	44	30	3 691	141 184	2 106	4 316	70 099	384 093	295 806	691 701	17 306
332912	Fluid power valve & hose fitting mfg.....	2	15	3	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	3	34	20	1 496	43 965	1 040	2 320	27 242	93 142	100 839	195 487	4 811
33299	All other fabricated metal product mfg.....	-	126	44	3 940	123 489	2 987	6 025	77 473	286 780	266 905	552 917	16 783
332996	Fabricated pipe & pipe fitting mfg.....	-	45	23	2 066	60 840	1 612	3 623	38 150	142 974	183 553	325 302	9 949
332999	All other miscellaneous fabricated metal product mfg.....	-	57	18	1 618	54 927	1 170	1 996	34 010	129 550	77 570	207 306	6 124

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	—	492	192	25 124	974 892	15 667	32 165	527 297	3 132 163	2 884 616	5 832 849	227 400
3331	Agriculture, construction, & mining machinery mfg.	—	160	79	12 775	566 857	8 025	16 662	297 759	1 845 325	1 209 605	2 850 327	147 488
33312	Construction machinery mfg.	1	13	5	596	20 983	399	818	11 057	20 039	47 490	69 684	2 561
333120	Construction machinery mfg.	1	13	5	596	20 983	399	818	11 057	20 039	47 490	69 684	2 561
33313	Mining & oil & gas field machinery mfg.	—	142	73	12 131	544 447	7 590	15 794	285 546	1 823 830	1 160 964	2 778 029	144 661
333132	Oil & gas field machinery & equipment mfg.	—	138	71	j	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg. ..	3	41	13	1 006	34 440	557	1 105	16 580	54 203	68 734	120 544	4 151
33329	Other industrial machinery mfg.	3	37	13	990	34 103	547	1 094	16 402	53 457	68 132	119 194	4 108
333294	Food product machinery mfg.	—	5	2	281	10 272	175	344	5 111	8 842	18 828	27 538	1 207
333298	All other industrial machinery mfg.	4	27	11	693	23 242	361	730	11 002	43 307	48 432	89 457	2 846
3333	Commercial & service industry machinery mfg. ..	1	28	10	681	25 958	408	760	11 766	61 685	49 182	108 538	2 586
33331	Commercial & service industry machinery mfg.	1	28	10	681	25 958	408	760	11 766	61 685	49 182	108 538	2 586
333319	Other commercial & service industry machinery mfg.	—	21	10	629	24 608	375	713	11 037	58 560	46 386	102 504	2 236
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	37	18	2 641	76 681	1 889	3 689	49 960	331 524	446 183	822 558	20 200
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	—	37	18	2 641	76 681	1 889	3 689	49 960	331 524	446 183	822 558	20 200
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	—	22	13	2 398	70 634	1 712	3 383	46 615	316 973	434 193	796 944	19 697
3335	Metalworking machinery mfg.	2	63	14	1 007	31 753	770	1 392	20 915	76 733	34 970	109 469	8 329
33351	Metalworking machinery mfg.	2	63	14	1 007	31 753	770	1 392	20 915	76 733	34 970	109 469	8 329
333515	Cutting tool & machine tool accessory mfg. ..	2	27	8	622	19 310	473	925	12 983	48 146	20 651	67 843	5 835
3336	Engine, turbine, & power transmission equipment mfg.	—	20	7	2 390	60 856	1 171	2 513	42 530	249 225	347 703	651 412	23 314
33361	Engine, turbine, & power transmission equipment mfg.	—	20	7	2 390	60 856	1 171	2 513	42 530	249 225	347 703	651 412	23 314
333611	Turbine & turbine generator set unit mfg.	—	7	4	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	1	143	51	4 624	178 347	2 847	6 044	87 787	513 468	728 239	1 170 001	21 332
33391	Pump & compressor mfg.	1	36	15	1 468	56 538	962	2 044	28 430	164 041	177 933	326 826	6 146
333911	Pump & pumping equipment mfg.	1	24	9	874	36 081	542	1 077	17 001	86 085	118 145	195 648	4 547
333912	Air & gas compressor mfg.	—	10	5	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg.	—	31	12	1 371	57 932	763	1 798	25 586	237 770	472 059	652 146	7 366
333922	Conveyor & conveying equipment mfg.	3	10	3	298	9 124	174	327	3 803	18 814	21 042	40 637	616
333924	Industrial truck, tractor, trailer, & stacker machinery mfg.	—	9	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.	2	76	24	1 785	63 877	1 122	2 202	33 771	111 657	78 247	191 029	7 820
333991	Power-driven handtool mfg.	—	4	3	516	21 346	267	518	10 325	47 096	11 601	57 905	D
333999	All other miscellaneous general-purpose machinery mfg.	3	46	12	825	26 082	555	1 037	14 231	33 151	37 970	71 817	3 291

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	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	250	90	17 061	688 248	10 402	16 834	245 417	3 427 085	5 918 399	9 496 087	104 569
3341	Computer & peripheral equipment mfg	-	32	9	i	D	D	D	D	D	D	D	14 106
33411	Computer & peripheral equipment mfg	-	32	9	i	D	D	D	D	D	D	D	14 106
334111	Electronic computer mfg	-	19	4	i	D	D	D	D	D	D	D	11 447
334119	Other computer peripheral equipment mfg	4	10	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	4	20	6	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	4	14	6	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	4	14	6	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	57	19	h	D	D	D	D	D	D	D	58 601
33441	Semiconductor & other electronic component mfg	1	57	19	h	D	D	D	D	D	D	D	58 601
334412	Bare printed circuit board mfg	4	25	9	398	10 760	312	625	6 899	22 768	20 541	43 813	1 455
334413	Semiconductor & related device mfg	-	5	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	132	56	5 105	195 512	2 788	5 586	83 014	476 738	363 447	837 435	24 188
33451	Navigational, measuring, medical, & control instruments mfg	1	132	56	5 105	195 512	2 788	5 586	83 014	476 738	363 447	837 435	24 188
334510	Electromedical & electrotherapeutic apparatus mfg	2	7	5	487	18 883	184	354	5 059	34 211	13 542	47 666	D
334513	Industrial process control instrument mfg	1	47	21	1 450	61 346	666	1 261	21 046	114 088	97 554	210 628	5 183
334514	Totalizing fluid meter & counting device mfg	1	6	4	380	15 080	245	615	8 716	39 172	24 866	62 820	D
334516	Analytical laboratory instrument mfg	2	21	6	542	16 628	351	735	9 984	36 495	16 261	52 936	924
334519	Other measuring & controlling device mfg	-	23	11	1 570	57 549	1 002	1 926	29 540	187 258	159 190	348 156	8 157
335	Electrical equipment, appliance, & component mfg	1	115	40	6 103	207 034	3 940	7 981	106 781	477 227	672 097	1 152 722	37 579
3351	Electric lighting equipment mfg	-	14	5	542	15 010	424	931	10 320	49 843	64 609	114 997	D
33512	Lighting fixture mfg	-	13	5	f	D	D	D	D	D	D	D	1 187
335122	Commercial/industrial/institutional electric lighting fixture mfg	-	4	3	346	7 065	286	610	5 415	31 899	47 698	79 732	D
3353	Electrical equipment mfg	-	60	17	2 914	113 237	1 842	3 420	54 480	164 290	392 825	563 022	16 959
33531	Electrical equipment mfg	-	60	17	2 914	113 237	1 842	3 420	54 480	164 290	392 825	563 022	16 959
335312	Motor & generator mfg	-	6	3	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	15	4	1 240	44 242	895	1 844	25 760	56 263	142 838	198 885	3 878
335314	Relay & industrial control mfg	3	31	9	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	36	18	2 602	77 323	1 638	3 555	41 051	259 722	209 799	466 345	19 150
33592	Communication & energy wire & cable mfg	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	10	5	f	D	D	D	D	D	D	D	4 104
335931	Current-carrying wiring device mfg	-	5	3	e	D	D	D	D	D	D	D	2 153
335932	Noncurrent-carrying wiring device mfg	-	5	2	362	10 689	307	682	8 421	61 954	30 436	92 570	1 951

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33599	All other electrical equipment & component mfg	6	23	11	919	30 442	566	1 232	12 939	78 624	47 094	127 755	D
335999	All other miscellaneous electrical equipment & component mfg	6	22	10	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	123	43	3 375	103 330	2 700	4 912	67 733	176 832	247 985	425 065	17 242
3362	Motor vehicle body & trailer mfg	3	17	10	423	12 315	356	746	7 914	24 748	45 378	68 849	822
33621	Motor vehicle body & trailer mfg	3	17	10	423	12 315	356	746	7 914	24 748	45 378	68 849	822
3363	Motor vehicle parts mfg ...	6	44	10	833	18 836	679	877	12 718	30 931	44 591	76 850	3 865
33632	Motor vehicle electrical & electronic equipment mfg	4	9	2	346	6 921	292	293	5 148	7 032	10 780	18 450	549
336322	Other motor vehicle electrical & electronic equipment mfg	4	8	2	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	33	12	1 491	49 870	1 199	2 294	32 808	79 909	95 722	175 642	10 326
33661	Ship & boat building	1	33	12	1 491	49 870	1 199	2 294	32 808	79 909	95 722	175 642	10 326
336611	Ship building & repairing	—	28	12	1 462	49 383	1 175	2 258	32 466	78 863	94 663	173 526	10 301
3369	Other transportation equipment mfg	3	14	5	272	9 322	218	547	6 048	18 280	44 751	62 349	D
33699	Other transportation equipment mfg	3	14	5	272	9 322	218	547	6 048	18 280	44 751	62 349	D
336999	All other transportation equipment mfg	3	9	5	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	156	33	3 172	66 263	2 402	4 501	43 729	159 088	136 509	293 991	5 386
3371	Household & institutional furniture & kitchen cabinet mfg	4	103	11	983	18 467	737	1 259	12 913	38 196	35 295	73 044	1 448
33711	Wood kitchen cabinet & counter top mfg	3	36	3	260	6 210	217	404	4 680	11 871	10 255	22 106	471
337110	Wood kitchen cabinet & counter top mfg ...	3	36	3	260	6 210	217	404	4 680	11 871	10 255	22 106	471
33712	Household & institutional furniture mfg	5	67	8	723	12 257	520	855	8 233	26 325	25 040	50 938	977
337121	Upholstered household furniture mfg	6	26	4	253	3 777	220	303	3 040	7 136	7 911	15 034	213
3372	Office furniture (including fixtures) mfg	1	36	11	860	24 670	689	1 337	16 049	47 051	26 142	73 802	1 481
33721	Office furniture (including fixtures) mfg	1	36	11	860	24 670	689	1 337	16 049	47 051	26 142	73 802	1 481
337212	Custom architectural woodwork & millwork mfg	—	16	5	457	13 580	355	667	8 382	30 452	9 876	40 864	547
337215	Showcase, partition, shelving, & locker mfg	2	13	5	328	9 445	272	577	6 515	13 325	13 284	26 584	780
3379	Other furniture related product mfg	—	17	11	1 329	23 126	976	1 905	14 767	73 841	75 072	147 145	2 457
33791	Mattress mfg	1	10	6	404	7 307	277	528	4 673	22 009	23 048	45 063	768
337910	Mattress mfg	1	10	6	404	7 307	277	528	4 673	22 009	23 048	45 063	768
33792	Blind & shade mfg	—	7	5	925	15 819	699	1 377	10 094	51 832	52 024	102 082	1 689
337920	Blind & shade mfg	—	7	5	925	15 819	699	1 377	10 094	51 832	52 024	102 082	1 689
339	Miscellaneous mfg	2	403	78	7 589	212 829	5 157	10 783	116 904	643 013	308 143	952 511	35 254
3391	Medical equipment & supplies mfg	1	137	20	2 349	75 527	1 693	3 376	40 678	324 659	93 397	416 467	11 374
33911	Medical equipment & supplies mfg	1	137	20	2 349	75 527	1 693	3 376	40 678	324 659	93 397	416 467	11 374
339112	Surgical & medical instrument mfg	4	20	7	625	25 360	369	728	9 633	51 230	27 761	76 104	3 255
339113	Surgical appliance & supplies mfg	—	20	7	951	31 004	767	1 648	18 845	237 972	47 935	285 787	6 881
339116	Dental laboratories ...	3	82	5	595	15 080	445	795	9 994	28 617	10 360	39 571	926

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	HOUSTON—GALVESTON—BRAZORIA, TX CMSA—Con.												
	Houston, TX PMSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . . .	3	266	58	5 240	137 302	3 464	7 407	76 226	318 354	214 746	536 044	23 880
33991	Jewelry & silverware mfg	5	34	5	485	11 688	359	783	7 018	24 826	25 185	51 171	426
339911	Jewelry (except costume) mfg	4	22	4	407	9 613	297	632	5 717	20 625	22 794	44 579	365
33992	Sporting & athletic goods mfg	2	26	4	262	5 671	195	356	3 728	13 553	11 773	25 287	583
339920	Sporting & athletic goods mfg	2	26	4	262	5 671	195	356	3 728	13 553	11 773	25 287	583
33995	Sign mfg	3	105	16	1 022	26 767	637	1 160	12 739	56 035	29 962	86 042	1 953
339950	Sign mfg	3	105	16	1 022	26 767	637	1 160	12 739	56 035	29 962	86 042	1 953
33999	All other miscellaneous mfg	2	85	30	3 255	89 124	2 156	4 879	50 670	215 932	142 615	360 323	20 515
339991	Gasket, packing, & sealing device mfg	3	34	19	1 931	59 856	1 223	2 888	33 375	144 036	87 871	232 549	12 949
339999	All other miscellaneous mfg	1	40	9	1 144	26 889	835	1 793	15 702	66 335	49 204	116 633	7 284
	KILLEEN—TEMPLE, TX MSA												
31-33	Manufacturing	—	160	52	7 921	236 466	6 171	13 542	165 987	716 524	691 699	1 403 617	50 818
315	Apparel mfg	1	12	3	321	3 713	209	354	2 375	5 403	7 157	13 305	212
3152	Cut & sew apparel mfg	1	12	3	321	3 713	209	354	2 375	5 403	7 157	13 305	212
321	Wood product mfg	—	7	4	428	11 649	390	691	7 313	26 938	42 791	69 336	15 202
3219	Other wood product mfg	—	6	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	16	2	364	6 104	213	398	3 632	20 603	3 863	24 489	1 045
3231	Printing & related support activities	—	16	2	364	6 104	213	398	3 632	20 603	3 863	24 489	1 045
32311	Printing	—	16	2	364	6 104	213	398	3 632	20 603	3 863	24 489	1 045
323113	Commercial screen printing	—	4	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	17	10	2 925	118 786	2 382	6 265	89 799	418 222	327 633	745 050	18 731
3261	Plastics product mfg	—	16	10	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	—	3	2	g	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	—	3	2	g	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	—	1	1	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	—	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	11	6	455	12 252	348	728	8 721	65 589	59 317	121 438	D
326199	All other plastics product mfg	—	9	6	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	5	5	654	17 011	560	1 323	11 822	31 774	26 310	57 161	1 998
3315	Foundries	—	5	5	654	17 011	560	1 323	11 822	31 774	26 310	57 161	1 998
33152	Nonferrous metal foundries	—	2	2	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	9	4	640	18 873	517	1 179	12 685	38 410	31 070	68 921	2 123
3339	Other general-purpose machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	2	2	e	D	D	D	D	D	D	D	D

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31-33	KILLEEN-TEMPLE, TX MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	27	7	1 426	29 215	1 038	1 642	18 784	71 215	71 697	142 265	4 557
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	4	g	D	D	D	D	D	D	D	2 898
33712	Household & institutional furniture mfg	-	9	3	1 024	19 979	757	1 202	13 003	37 331	46 042	82 741	D
337127	Institutional furniture mfg	-	3	3	998	19 622	736	1 170	12 728	36 576	45 488	81 426	D
3372	Office furniture (including fixtures) mfg	1	6	3	318	7 783	210	340	4 701	31 185	23 539	54 700	1 659
33721	Office furniture (including fixtures) mfg	1	6	3	318	7 783	210	340	4 701	31 185	23 539	54 700	1 659
	LAREDO, TX MSA												
31-33	Manufacturing	1	87	15	1 402	28 081	969	1 530	15 533	136 779	120 963	258 590	18 501
316	Leather & allied product mfg .	-	3	1	e	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
316212	House slipper mfg	-	1	1	e	D	D	D	D	D	D	D	D
	LONGVIEW-MARSHALL, TX MSA												
31-33	Manufacturing	-	326	128	16 739	543 994	12 378	24 531	342 069	1 718 638	2 381 715	4 090 189	203 315
311	Food mfg	5	17	6	261	5 732	186	306	3 647	14 168	44 181	57 983	1 663
312	Beverage & tobacco product mfg	-	2	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	1	e	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	e	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	273	4 245	235	452	3 051	6 058	11 396	17 739	D
3159	Apparel accessories & other apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	2	2	e	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	19	8	431	8 077	387	769	6 593	20 537	38 282	56 627	6 098
3211	Sawmills & wood preservation	1	5	5	285	5 694	261	522	4 806	16 053	32 395	46 252	5 525
32111	Sawmills & wood preservation	1	5	5	285	5 694	261	522	4 806	16 053	32 395	46 252	5 525
323	Printing & related support activities.....	1	17	4	258	6 389	203	354	4 717	14 044	11 173	25 111	669
3231	Printing & related support activities.....	1	17	4	258	6 389	203	354	4 717	14 044	11 173	25 111	669
32311	Printing	1	17	4	258	6 389	203	354	4 717	14 044	11 173	25 111	669
325	Chemical mfg	-	12	8	2 952	164 151	1 762	3 616	86 692	692 319	1 002 539	1 694 391	132 623
3251	Basic chemical mfg	-	4	3	h	D	D	D	D	D	D	D	121 615
32519	Other basic organic chemical mfg	-	2	2	h	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	2	2	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	11	5	728	18 582	576	1 086	12 081	60 125	44 696	104 299	8 639
3261	Plastics product mfg	1	10	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	4	7	2	365	10 252	299	433	6 211	20 496	21 201	41 721	D
326199	All other plastics product mfg	4	6	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	28	13	1 092	21 786	937	2 026	17 683	39 243	26 557	67 810	2 389
3271	Clay product & refractory mfg	2	18	10	993	19 431	853	1 846	15 934	32 757	18 716	53 519	2 198
32711	Pottery, ceramics, & plumbing fixture mfg ...	2	16	9	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	2	2	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	5	14	7	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	LONGVIEW—MARSHALL, TX MSA—Con. Manufacturing—Con.												
331	Primary metal mfg	—	8	5	921	23 842	771	1 941	16 954	92 237	134 395	224 047	3 477
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	—	1	1	e	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	6	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	4	3	e	D	D	D	D	D	D	D	624
331512	Steel investment foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	96	32	2 751	83 536	2 199	4 123	59 101	168 229	246 886	414 854	13 899
3321	Forging & stamping	9	1	1	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	9	1	1	e	D	D	D	D	D	D	D	D
332111	Iron & steel forging	9	1	1	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	14	6	308	7 155	236	355	4 289	11 035	11 347	22 501	176
3324	Boiler, tank, & shipping container mfg	—	11	8	f	D	D	D	D	D	D	D	6 345
33242	Metal tank (heavy gauge) mfg	—	7	6	648	22 167	545	1 248	14 645	54 261	127 629	180 892	D
332420	Metal tank (heavy gauge) mfg	—	7	6	648	22 167	545	1 248	14 645	54 261	127 629	180 892	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	43	13	783	22 369	601	1 028	14 968	37 902	23 854	61 494	4 424
33271	Machine shops	—	40	11	679	19 151	509	835	12 446	33 953	19 474	53 205	2 936
332710	Machine shops	—	40	11	679	19 151	509	835	12 446	33 953	19 474	53 205	2 936
3329	Other fabricated metal product mfg	1	16	3	348	9 337	277	542	6 689	19 218	20 153	38 526	1 102
33299	All other fabricated metal product mfg	1	13	2	299	7 595	240	469	5 710	15 585	17 673	32 570	878
333	Machinery mfg	1	34	21	3 032	92 042	2 161	4 253	61 762	160 439	235 797	389 787	12 858
3331	Agriculture, construction, & mining machinery mfg	—	12	6	1 905	61 456	1 364	2 749	43 510	78 605	152 004	225 241	8 497
33312	Construction machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	2	2	g	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	2	10	4	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	2	9	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	7	6	586	13 847	407	656	7 427	32 766	37 516	70 991	2 229
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	7	6	586	13 847	407	656	7 427	32 766	37 516	70 991	2 229
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	5	4	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	6	9	6	404	12 453	295	642	7 924	39 044	38 595	76 949	1 458
334	Computer & electronic product mfg	1	15	6	888	25 543	587	1 007	10 585	132 912	75 614	208 412	2 032
3342	Communications equipment mfg	—	4	4	f	D	D	D	D	D	D	D	1 759
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	3	7	2	289	7 341	134	236	2 615	14 543	23 904	40 498	1 158
3359	Other electrical equipment & component mfg	3	3	2	e	D	D	D	D	D	D	D	D

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	LONGVIEW—MARSHALL, TX MSA—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	1	15	7	1 615	47 975	1 306	2 811	33 512	148 175	318 589	464 014	5 999
3362	Motor vehicle body & trailer mfg	—	1	1	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	1	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	6	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	2	1	e	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	3	2	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	3	2	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	3	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	13	4	394	7 320	311	524	5 044	28 314	22 002	49 818	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	12	3	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	—	6	2	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	—	6	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	9	19	1	280	4 419	180	204	2 382	8 643	6 138	14 789	459
3399	Other miscellaneous mfg ..	9	15	1	266	4 195	171	194	2 274	8 052	5 808	13 857	426
	LUBBOCK, TX MSA												
31-33	Manufacturing	—	258	71	7 286	203 827	5 026	9 809	99 960	881 411	695 508	1 566 439	142 257
311	Food mfg	—	32	12	1 496	42 562	936	2 046	21 030	144 765	279 515	424 057	65 324
3112	Grain & oilseed milling	—	2	2	e	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	—	2	2	e	D	D	D	D	D	D	D	D
311223	Other oilseed processing.....	—	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	11	2	419	10 938	168	400	4 051	24 909	14 593	39 515	1 020
31181	Bread & bakery product mfg	—	10	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	3	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	13	4	323	7 294	268	491	4 683	13 889	10 543	24 461	1 183
3219	Other wood product mfg ...	1	13	4	323	7 294	268	491	4 683	13 889	10 543	24 461	1 183
323	Printing & related support activities.....	4	34	4	348	9 633	250	459	6 556	18 719	12 775	31 499	1 144
3231	Printing & related support activities.....	4	34	4	348	9 633	250	459	6 556	18 719	12 775	31 499	1 144
32311	Printing	4	32	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	10	3	685	17 111	496	889	7 663	38 255	38 897	78 085	3 895
3261	Plastics product mfg	—	6	3	656	16 394	482	853	7 329	36 752	35 358	73 041	D
32619	Other plastics product mfg	—	4	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	43	8	765	20 850	555	1 173	12 651	65 536	61 148	121 607	8 376
3323	Architectural & structural metals mfg	—	18	3	317	9 824	202	457	4 714	31 004	39 553	70 590	5 348

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LUBBOCK, TX MSA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	31	18	1 863	48 233	1 396	2 856	26 966	105 160	155 380	256 094	5 725
3331	Agriculture, construction, & mining machinery mfg.	-	8	4	656	17 899	531	1 044	9 073	53 038	73 818	121 931	2 446
33312	Construction machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg.	-	11	6	457	11 821	329	666	6 536	22 885	18 714	41 215	D
33329	Other industrial machinery mfg.	-	11	6	457	11 821	329	666	6 536	22 885	18 714	41 215	D
333298	All other industrial machinery mfg.	-	10	6	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	-	9	6	683	17 229	486	1 042	10 303	27 675	59 927	87 765	2 798
33391	Pump & compressor mfg.	-	4	3	305	9 378	191	389	4 982	15 444	34 112	49 867	1 415
333911	Pump & pumping equipment mfg.	-	4	3	305	9 378	191	389	4 982	15 444	34 112	49 867	1 415
33399	All other general-purpose machinery mfg.	-	5	3	378	7 851	295	653	5 321	12 231	25 815	37 898	1 383
333999	All other miscellaneous general-purpose machinery mfg.	-	3	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg.	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.	5	27	5	335	6 917	249	364	3 927	17 864	12 807	30 882	D
MCALLEN—EDINBURG—MISSION, TX MSA													
31-33	Manufacturing	-	261	67	10 284	178 274	8 159	13 667	123 139	671 915	749 801	1 428 173	40 651
311	Food mfg.	1	50	14	2 119	32 302	1 611	2 567	21 246	107 244	152 517	264 763	11 275
3114	Fruit & vegetable preserving & specialty food mfg.	1	6	5	1 081	17 120	887	1 346	11 707	57 874	83 894	146 968	7 057
31141	Frozen food mfg.	4	3	3	f	D	D	D	D	D	D	D	3 142
311411	Frozen fruit, juice, & vegetable mfg.	4	3	3	f	D	D	D	D	D	D	D	3 142
31142	Fruit & vegetable canning, pickling, & drying	-	3	2	e	D	D	D	D	D	D	D	3 915
311423	Dried & dehydrated food mfg.	-	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.	-	4	2	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	2	e	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	-	7	2	e	D	D	D	D	D	D	D	D
3121	Beverage mfg.	-	7	2	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.	-	6	2	e	D	D	D	D	D	D	D	D
314	Textile product mills.	-	5	3	314	5 930	251	504	3 774	12 074	12 875	25 179	D
315	Apparel mfg.	-	18	11	4 191	60 755	3 617	5 748	47 791	275 484	287 226	564 881	1 906
3152	Cut & sew apparel mfg.	-	17	11	h	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.	-	8	6	h	D	D	D	D	D	D	D	657
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.	-	4	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.	-	1	1	g	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg.	-	2	2	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.	-	4	3	g	D	D	D	D	D	D	D	1 232
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.	-	1	1	e	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.	-	1	1	f	D	D	D	D	D	D	D	D

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31-33	MCALLEN-EDINBURG-MISSION, TX MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	5	4	406	11 791	311	620	7 306	30 773	63 837	94 012	1 084
3222	Converted paper product mfg	-	5	4	406	11 791	311	620	7 306	30 773	63 837	94 012	1 084
32221	Paperboard container mfg	-	5	4	406	11 791	311	620	7 306	30 773	63 837	94 012	1 084
322211	Corrugated & solid fiber box mfg	-	4	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	13	6	466	8 563	342	632	6 177	20 965	12 440	34 157	712
3261	Plastics product mfg	1	11	6	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	9	6	e	D	D	D	D	D	D	D	679
326199	All other plastics product mfg	1	8	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	29	3	338	8 589	269	444	6 032	26 128	25 223	51 400	D
333	Machinery mfg	-	11	3	505	9 954	399	750	6 942	30 195	19 789	49 340	675
3331	Agriculture, construction, & mining machinery mfg	-	5	2	e	D	D	D	D	D	D	D	631
33312	Construction machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	e	D	D	D	D	D	D	D	D
	ODESSA-MIDLAND, TX MSA												
31-33	Manufacturing	1	338	87	5 961	192 141	4 094	8 142	106 979	657 802	962 617	1 612 232	51 770
325	Chemical mfg	1	19	8	648	26 215	432	1 007	16 762	232 396	343 554	566 510	27 710
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	14	2	312	8 032	253	580	5 301	11 939	20 410	32 720	860
3261	Plastics product mfg	1	7	1	255	6 462	211	506	4 477	8 142	17 931	26 540	698
32619	Other plastics product mfg	1	7	1	255	6 462	211	506	4 477	8 142	17 931	26 540	698
326199	All other plastics product mfg	1	6	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	15	4	257	7 878	170	270	4 744	48 512	26 919	75 578	1 396
332	Fabricated metal product mfg	1	105	26	1 565	48 552	1 178	2 467	30 191	104 929	76 662	182 386	5 141
3324	Boiler, tank, & shipping container mfg	-	9	6	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	8	6	356	11 901	256	589	6 659	25 596	26 420	53 104	1 056
332420	Metal tank (heavy gauge) mfg	-	8	6	356	11 901	256	589	6 659	25 596	26 420	53 104	1 056
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	59	8	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	57	8	549	17 639	416	866	11 510	40 160	15 452	55 633	1 970
332710	Machine shops	1	57	8	549	17 639	416	866	11 510	40 160	15 452	55 633	1 970
333	Machinery mfg	2	75	27	1 469	45 700	984	1 923	26 159	106 762	85 204	190 297	8 407
3331	Agriculture, construction, & mining machinery mfg	2	40	10	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	2	39	10	f	D	D	D	D	D	D	D	4 341
333132	Oil & gas field machinery & equipment mfg	2	38	10	634	20 060	452	820	11 519	47 236	40 213	85 130	D
3339	Other general-purpose machinery mfg	1	24	14	663	20 728	398	874	11 231	51 536	35 290	86 543	3 457
33391	Pump & compressor mfg	-	18	12	567	17 348	326	717	9 026	44 183	30 462	74 392	2 974
333911	Pump & pumping equipment mfg	-	12	8	371	12 297	207	450	6 047	32 908	23 961	56 587	2 306
334	Computer & electronic product mfg	2	11	3	381	19 886	129	259	2 589	50 164	18 943	68 572	1 099

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31-33	ODESSA—MIDLAND, TX MSA—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	7	14	7	533	14 529	355	627	7 924	28 208	38 377	66 689	2 251
3362	Motor vehicle body & trailer mfg	9	5	2	328	8 258	234	417	4 933	17 148	31 478	48 773	1 440
33621	Motor vehicle body & trailer mfg	9	5	2	328	8 258	234	417	4 933	17 148	31 478	48 773	1 440
336214	Travel trailer & camper mfg	9	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	18	3	258	5 203	212	313	3 194	11 824	6 919	18 361	253
	SAN ANGELO, TX MSA												
31-33	Manufacturing	2	100	28	4 452	105 090	3 579	7 162	74 707	367 257	463 431	827 641	10 494
311	Food mfg	6	17	7	836	16 326	704	1 518	11 796	46 021	164 035	212 576	3 371
3116	Meat product mfg	6	7	4	695	13 321	614	1 075	10 272	34 919	149 022	186 578	1 797
31161	Animal slaughtering & processing	6	7	4	695	13 321	614	1 075	10 272	34 919	149 022	186 578	1 797
311611	Animal (except poultry) slaughtering	7	5	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	5	638	12 189	596	1 142	11 299	40 695	27 754	68 317	591
3152	Cut & sew apparel mfg	—	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	13	3	536	13 932	395	840	11 896	24 990	113 550	137 131	795
3323	Architectural & structural metals mfg	—	5	2	e	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	—	4	2	e	D	D	D	D	D	D	D	668
332312	Fabricated structural metal mfg	—	4	2	e	D	D	D	D	D	D	D	668
339	Miscellaneous mfg	—	14	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	5	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	5	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D
	SAN ANTONIO, TX MSA												
31-33	Manufacturing	1	1 296	354	45 807	1 244 717	32 599	63 623	700 493	3 692 290	3 792 894	7 480 693	302 685
311	Food mfg	—	147	41	6 404	146 052	4 363	8 555	82 669	621 384	733 521	1 355 628	38 412
3115	Dairy product mfg	—	7	5	f	D	D	D	D	D	D	D	2 386
31151	Dairy product (except frozen) mfg	—	4	4	470	12 106	228	463	4 267	40 610	152 215	192 876	2 349
311511	Fluid milk mfg	—	4	4	470	12 106	228	463	4 267	40 610	152 215	192 876	2 349
3116	Meat product mfg	—	16	7	1 585	28 416	1 325	2 564	21 626	118 616	186 093	304 812	2 397
31161	Animal slaughtering & processing	—	16	7	1 585	28 416	1 325	2 564	21 626	118 616	186 093	304 812	2 397
311611	Animal (except poultry) slaughtering	—	5	1	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	9	5	f	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	70	13	1 961	40 632	1 090	2 148	20 481	97 417	95 799	193 081	15 847
31181	Bread & bakery product mfg	—	61	11	1 811	37 695	975	1 968	18 515	87 485	90 455	177 826	15 700
311812	Commercial bakeries .	—	12	6	1 128	23 303	448	918	8 979	56 739	54 343	111 000	13 386
311813	Frozen cakes, pies, & other pastries mfg ...	—	3	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	1	27	9	1 784	52 760	1 303	2 579	28 790	329 985	204 403	534 430	16 241
31191	Snack food mfg	2	9	4	665	16 912	540	1 133	10 061	83 843	88 746	172 782	D
311911	Roasted nuts & peanut butter mfg	9	2	2	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	—	7	2	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	—	4	2	f	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, & other prepared sauce mfg	—	1	1	e	D	D	D	D	D	D	D	D
311942	Spice & extract mfg ...	—	3	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN ANTONIO, TX MSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	1	15	10	1 889	56 848	851	1 758	19 307	306 120	265 719	574 498	21 637
3121	Beverage mfg	1	14	9	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	—	9	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	—	5	5	1 338	43 942	489	1 146	11 199	248 426	218 051	469 290	17 035
31212	Breweries	9	5	2	e	D	D	D	D	D	D	D	D
312120	Breweries	9	5	2	e	D	D	D	D	D	D	D	D
313	Textile mills	1	10	3	1 000	26 913	815	1 279	17 366	87 610	59 771	143 930	3 457
3132	Fabric mills	1	8	3	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	—	6	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	6	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	20	6	1 697	25 665	1 289	2 435	17 100	35 327	65 745	98 988	1 332
3141	Textile furnishings mills	—	9	2	g	D	D	D	D	D	D	D	752
31412	Curtain & linen mills	—	9	2	g	D	D	D	D	D	D	D	752
314121	Curtain & drapery mills	—	8	1	g	D	D	D	D	D	D	D	D
3149	Other textile product mills	5	11	4	e	D	D	D	D	D	D	D	580
31491	Textile bag & canvas mills	7	5	2	311	3 807	282	510	2 495	4 688	3 605	8 295	510
315	Apparel mfg	—	35	5	1 355	22 501	1 237	2 119	19 606	75 813	51 687	127 455	1 370
3152	Cut & sew apparel mfg	—	24	3	970	16 831	885	1 441	15 185	64 973	47 892	112 667	1 281
31522	Men's & boys' cut & sew apparel mfg	—	3	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	2	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	5	7	2	e	D	D	D	D	D	D	D	130
3159	Apparel accessories & other apparel mfg	1	11	2	385	5 670	352	678	4 421	10 840	3 795	14 788	89
31599	Apparel accessories & other apparel mfg	1	11	2	385	5 670	352	678	4 421	10 840	3 795	14 788	89
315991	Hat, cap, & millinery mfg	—	2	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	16	7	981	26 736	818	1 403	10 685	62 779	49 794	111 900	937
3162	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	—	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	3	39	10	853	19 965	736	1 327	12 387	33 715	47 071	80 866	3 379
3219	Other wood product mfg	4	36	9	782	17 835	679	1 235	11 501	29 799	41 686	71 602	3 145
32191	Millwork	4	16	6	551	12 916	470	870	8 202	20 330	33 616	53 945	2 520
321911	Wood window & door mfg	2	6	3	259	5 960	214	380	3 195	9 976	19 549	29 526	D
322	Paper mfg	—	17	10	697	20 090	520	1 096	11 639	49 164	89 563	138 039	5 355
3222	Converted paper product mfg	—	17	10	697	20 090	520	1 096	11 639	49 164	89 563	138 039	5 355
32221	Paperboard container mfg	—	10	8	545	16 259	397	863	9 123	41 256	78 475	118 835	4 491
322211	Corrugated & solid fiber box mfg	—	8	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	186	31	3 043	79 790	2 121	3 614	46 040	219 940	120 693	338 220	11 268
3231	Printing & related support activities	2	186	31	3 043	79 790	2 121	3 614	46 040	219 940	120 693	338 220	11 268
32311	Printing	2	171	29	2 873	75 781	1 998	3 396	43 127	211 096	118 900	327 643	10 766
323110	Commercial lithographic printing	2	93	18	2 053	53 541	1 398	2 339	29 957	156 601	95 023	249 672	6 729
323114	Quick printing	4	41	3	293	7 714	207	342	4 505	14 004	7 659	21 667	680
324	Petroleum & coal products mfg	5	13	5	321	11 304	195	412	5 942	43 968	155 484	201 404	4 312
3241	Petroleum & coal products mfg	5	13	5	321	11 304	195	412	5 942	43 968	155 484	201 404	4 312
325	Chemical mfg	1	47	13	963	31 201	554	1 071	14 391	134 247	90 017	229 588	13 418
3254	Pharmaceutical & medicine mfg	—	14	6	492	15 924	297	576	8 430	62 941	31 481	94 441	5 167
32541	Pharmaceutical & medicine mfg	—	14	6	492	15 924	297	576	8 430	62 941	31 481	94 441	5 167
325412	Pharmaceutical preparation mfg	—	4	1	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SAN ANTONIO, TX MSA—Con.												
	Manufacturing—Con.												
326	Plastics & rubber products mfg	3	60	23	2 943	74 788	2 298	4 267	44 906	151 501	180 635	332 492	11 016
3261	Plastics product mfg	3	48	20	2 822	72 029	2 224	4 129	43 758	146 509	174 021	320 845	10 758
32613	Laminated plastics plate, sheet, & shape mfg	9	2	1	e	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	9	2	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	33	15	2 238	56 568	1 761	3 407	34 274	90 595	127 566	218 492	7 404
326199	All other plastics product mfg	2	29	13	2 071	53 620	1 632	3 147	32 407	84 467	122 944	207 728	7 137
327	Nonmetallic mineral product mfg	—	83	28	2 238	66 979	1 781	3 817	46 296	285 697	184 011	471 797	24 668
3273	Cement & concrete product mfg	—	52	22	1 627	50 739	1 293	2 825	33 930	232 202	153 114	387 556	16 584
32731	Cement mfg	—	4	4	483	20 905	347	873	12 898	137 008	72 257	211 675	12 869
327310	Cement mfg	—	4	4	483	20 905	347	873	12 898	137 008	72 257	211 675	12 869
32732	Ready-mix concrete mfg	—	26	8	399	10 452	343	678	8 451	41 848	41 050	83 041	1 683
327320	Ready-mix concrete mfg	—	26	8	399	10 452	343	678	8 451	41 848	41 050	83 041	1 683
32733	Concrete pipe, brick, & block mfg	3	8	5	251	7 035	179	367	4 276	22 468	12 281	34 839	1 065
32739	Other concrete product mfg	—	14	5	494	12 347	424	907	8 305	30 878	27 526	58 001	967
327390	Other concrete product mfg	—	14	5	494	12 347	424	907	8 305	30 878	27 526	58 001	967
3274	Lime & gypsum product mfg	—	3	2	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	8	7	1 525	53 653	1 188	2 617	38 411	94 390	294 620	393 756	10 374
3311	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	5	5	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	3	430	9 814	356	786	7 450	13 652	12 473	26 040	D
331513	Steel foundries (except investment)	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	181	50	3 314	83 468	2 448	4 953	51 485	184 240	160 226	343 416	14 717
3321	Forging & stamping	1	6	5	387	9 166	315	638	6 707	31 543	33 579	64 396	2 734
33211	Forging & stamping	1	6	5	387	9 166	315	638	6 707	31 543	33 579	64 396	2 734
3323	Architectural & structural metals mfg	—	70	21	1 436	38 353	1 091	2 362	23 095	75 157	79 237	154 477	4 099
33231	Plate work & fabricated structural product mfg	—	29	9	644	17 641	524	1 151	11 898	34 805	36 810	71 578	900
332312	Fabricated structural metal mfg	—	22	8	469	12 795	360	832	8 135	21 168	25 222	46 836	785
33232	Ornamental & architectural metal products mfg	1	41	12	792	20 712	567	1 211	11 197	40 352	42 427	82 899	3 199
332322	Sheet metal work mfg	1	26	9	426	12 251	297	587	6 317	24 007	22 507	46 418	1 514
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	59	11	618	14 808	484	812	10 277	29 402	12 995	42 277	2 757
33271	Machine shops	1	55	9	543	13 223	419	697	9 030	26 124	10 747	36 690	2 096
332710	Machine shops	1	55	9	543	13 223	419	697	9 030	26 124	10 747	36 690	2 096
3328	Coating, engraving, heat treating, & allied activities	3	17	5	285	7 420	228	455	4 612	11 926	4 564	17 214	1 411
33281	Coating, engraving, heat treating, & allied activities	3	17	5	285	7 420	228	455	4 612	11 926	4 564	17 214	1 411
333	Machinery mfg	3	57	22	3 959	104 519	2 736	5 448	58 684	204 275	323 969	527 305	12 627
3331	Agriculture, construction, & mining machinery mfg	3	10	4	690	18 508	374	731	9 385	40 523	55 188	93 804	3 025
33311	Agricultural implement mfg	—	5	2	e	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	5	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	14	8	2 407	60 886	1 754	3 388	34 501	115 005	222 968	336 430	7 012
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	14	8	2 407	60 886	1 754	3 388	34 501	115 005	222 968	336 430	7 012
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	3	11	8	2 402	60 780	1 750	3 383	34 446	114 748	222 757	335 956	7 001

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN ANTONIO, TX MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	3	16	8	643	18 585	486	1 116	11 355	37 252	38 426	78 200	2 155
33392	Material handling equipment mfg	1	7	4	275	8 460	185	360	4 520	15 681	19 438	35 803	D
333922	Conveyor & conveying equipment mfg	—	5	4	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	6	8	3	e	D	D	D	D	D	D	D	1 385
333999	All other miscellaneous general-purpose machinery mfg	9	4	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	38	13	2 379	99 479	1 206	2 359	32 021	318 418	116 827	438 883	66 554
3344	Semiconductor & other electronic component mfg	—	9	6	1 840	78 331	1 005	1 990	25 737	278 565	82 198	361 323	D
33441	Semiconductor & other electronic component mfg	—	9	6	1 840	78 331	1 005	1 990	25 737	278 565	82 198	361 323	D
334413	Semiconductor & related device mfg	—	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	3	22	4	331	12 492	139	255	3 831	25 255	22 190	48 324	1 764
33451	Navigational, measuring, medical, & control instruments mfg	3	22	4	331	12 492	139	255	3 831	25 255	22 190	48 324	1 764
335	Electrical equipment, appliance, & component mfg	3	22	7	687	18 421	560	1 098	9 922	49 634	42 969	90 618	4 971
3359	Other electrical equipment & component mfg	4	6	3	423	8 437	359	713	4 538	27 895	24 996	52 486	1 660
336	Transportation equipment mfg	1	59	18	3 972	153 197	2 893	5 700	84 997	472 253	517 544	984 665	35 194
3363	Motor vehicle parts mfg	—	24	4	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	3	21	11	2 173	101 647	1 579	3 634	54 674	164 015	137 755	296 032	18 080
33641	Aerospace product & parts mfg	3	21	11	2 173	101 647	1 579	3 634	54 674	164 015	137 755	296 032	18 080
336411	Aircraft mfg	3	5	4	1 676	82 594	1 237	3 043	43 339	115 697	115 410	223 805	D
336413	Other aircraft part & auxiliary equipment mfg	1	12	5	330	14 729	218	350	8 497	39 431	17 712	58 504	D
337	Furniture & related product mfg	1	82	20	2 243	46 814	1 796	4 285	34 381	94 424	92 325	186 529	7 814
3371	Household & institutional furniture & kitchen cabinet mfg	1	53	11	1 745	36 252	1 404	3 507	27 418	72 252	71 693	143 579	6 685
33711	Wood kitchen cabinet & counter top mfg	1	30	7	1 298	27 743	1 045	2 899	21 159	57 791	58 322	116 198	5 807
337110	Wood kitchen cabinet & counter top mfg	1	30	7	1 298	27 743	1 045	2 899	21 159	57 791	58 322	116 198	5 807
33712	Household & institutional furniture mfg	1	23	4	447	8 509	359	608	6 259	14 461	13 371	27 381	878
3372	Office furniture (including fixtures) mfg	3	17	4	265	5 558	208	374	3 681	9 951	6 174	16 203	701
33721	Office furniture (including fixtures) mfg	3	17	4	265	5 558	208	374	3 681	9 951	6 174	16 203	701
339	Miscellaneous mfg	1	161	25	3 344	76 334	2 194	4 010	42 258	167 391	150 703	310 716	9 873
3391	Medical equipment & supplies mfg	1	62	10	1 601	35 241	948	1 534	18 274	70 341	83 925	147 415	6 671
33911	Medical equipment & supplies mfg	1	62	10	1 601	35 241	948	1 534	18 274	70 341	83 925	147 415	6 671
339113	Surgical appliance & supplies mfg	—	6	2	343	9 364	222	388	5 642	19 280	17 586	36 028	D
339115	Ophthalmic goods mfg	—	3	1	f	D	D	D	D	D	D	D	D
339116	Dental laboratories	4	41	5	338	8 248	247	401	4 797	15 749	4 505	20 448	312

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN ANTONIO, TX MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg . . .	1	99	15	1 743	41 093	1 246	2 476	23 984	97 050	66 778	163 301	3 202
33992	Sporting & athletic goods mfg	1	23	5	748	17 590	559	1 111	10 546	41 623	28 201	69 313	1 777
339920	Sporting & athletic goods mfg	1	23	5	748	17 590	559	1 111	10 546	41 623	28 201	69 313	1 777
33995	Sign mfg	3	43	6	489	12 860	313	609	7 026	23 829	13 454	37 551	716
339950	Sign mfg	3	43	6	489	12 860	313	609	7 026	23 829	13 454	37 551	716
33999	All other miscellaneous mfg	—	16	3	254	5 380	192	388	3 146	19 554	12 792	32 643	164
	SHERMAN—DENISON, TX MSA												
31-33	Manufacturing	—	140	47	10 223	365 407	7 871	16 069	224 933	2 188 029	1 375 544	3 557 264	212 766
311	Food mfg	—	17	8	1 743	60 004	1 560	3 358	49 664	888 838	607 369	1 492 563	20 012
3112	Grain & oilseed milling	—	4	3	323	11 212	282	529	8 084	87 861	133 641	217 805	3 914
31122	Starch & vegetable fats & oils mfg	—	3	2	e	D	D	D	D	D	D	D	D
311225	Fats & oils refining & blending	—	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	6	2	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	1	1	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	1	1	e	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	4	4	669	18 811	598	1 202	15 418	113 254	75 335	189 440	6 868
3261	Plastics product mfg	—	4	4	669	18 811	598	1 202	15 418	113 254	75 335	189 440	6 868
32619	Other plastics product mfg	—	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	6	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	—	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	5	4	736	20 549	613	1 242	15 254	29 759	103 692	131 207	5 760
3313	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	35	8	1 179	36 135	957	1 894	26 357	138 299	127 856	263 084	11 547
3325	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	—	3	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	2	1	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	3	586	18 735	416	902	11 186	57 267	33 320	89 576	2 652
3331	Agriculture, construction, & mining machinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SHERMAN-DENISON, TX MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	7	5	3 138	148 269	1 922	3 909	60 097	729 347	209 614	941 194	145 275
3344	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	8	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
31-33	TEXARKANA, TX-TEXARKANA, AR MSA		100	33	6 330	227 682	4 665	9 383	152 714	622 529	855 184	1 471 136	57 204
	Texarkana, TX—Texarkana, AR MSA (AR Part).....	-	25	8	2 274	99 726	1 648	3 092	68 033	263 404	236 887	495 614	25 144
	Texarkana, TX—Texarkana, AR MSA (TX Part).....	-	75	25	4 056	127 956	3 017	6 291	84 681	359 125	618 297	975 522	32 060
321	Wood product mfg.....	-	9	5	638	12 405	515	1 101	10 228	26 210	62 894	89 399	3 027
3211	Sawmills & wood preservation.....	-	5	3	340	7 586	241	578	6 303	21 820	40 823	62 362	D
32111	Sawmills & wood preservation.....	-	5	3	340	7 586	241	578	6 303	21 820	40 823	62 362	D
321113	Sawmills.....	1	4	2	e	D	D	D	D	D	D	D	1 535
3219	Other wood product mfg....	-	3	2	e	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	7	6	3	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading).....	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	1	1	e	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	21	7	1 165	36 091	825	1 742	18 158	83 394	67 259	148 657	5 115
3329	Other fabricated metal product mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	-	3	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TYLER, TX MSA													
31-33	Manufacturing	-	213	66	10 969	381 088	8 450	17 061	262 592	1 112 957	1 180 233	2 299 149	49 581
311	Food mfg	2	12	6	645	17 940	441	987	9 411	69 437	85 924	155 432	2 741
326	Plastics & rubber products mfg	-	16	11	2 105	95 608	1 712	3 600	75 351	219 608	181 540	402 016	6 428
3261	Plastics product mfg	-	11	6	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	5	5	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	17	4	325	9 504	259	545	7 493	57 541	41 456	99 008	1 559
331	Primary metal mfg	-	2	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	43	14	873	22 726	596	1 008	12 426	61 660	49 338	110 626	2 799
3324	Boiler, tank, & shipping container mfg	2	4	4	273	6 218	170	238	2 593	13 352	11 635	24 285	301
333	Machinery mfg	-	18	9	4 008	141 266	3 009	6 172	91 504	448 588	406 034	859 012	17 140
3332	Industrial machinery mfg ..	9	3	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	9	3	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	9	3	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	4	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	4	4	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refriq equip mfg	-	4	4	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	19	5	484	9 589	388	701	6 719	32 117	38 949	71 156	2 096
3399	Other miscellaneous mfg ..	-	11	4	408	7 776	336	614	5 603	28 539	35 832	63 953	1 827
33992	Sporting & athletic goods mfg	-	4	3	356	6 496	310	566	4 839	26 022	34 048	59 651	1 669
339920	Sporting & athletic goods mfg	-	4	3	356	6 496	310	566	4 839	26 022	34 048	59 651	1 669
VICTORIA, TX MSA													
31-33	Manufacturing	-	71	17	3 064	119 483	2 265	4 815	82 409	592 547	657 109	1 245 290	97 903
311	Food mfg	-	5	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	4	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	3	437	10 408	373	916	7 308	35 339	43 249	79 286	D
3261	Plastics product mfg	-	6	3	e	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	2	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	7	2	309	6 596	272	591	5 175	20 074	25 334	42 617	689
3273	Cement & concrete product mfg	-	7	2	309	6 596	272	591	5 175	20 074	25 334	42 617	689
32739	Other concrete product mfg	-	3	2	e	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	-	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	3	297	9 357	220	467	6 392	16 602	18 876	35 331	1 511

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WACO, TX MSA													
31-33	Manufacturing	-	261	101	16 474	481 690	11 828	23 908	291 166	2 100 437	1 772 646	3 855 638	70 075
311	Food mfg.....	-	19	10	3 095	94 482	2 240	4 894	59 170	716 731	424 124	1 128 705	21 758
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg....	-	7	2	e	D	D	D	D	D	D	D	334
31181	Bread & bakery product mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	3	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	8	2	449	6 275	363	715	4 791	9 415	14 731	22 548	188
3152	Cut & sew apparel mfg....	-	5	2	e	D	D	D	D	D	D	D	174
31529	Other cut & sew apparel mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
315299	All other cut & sew apparel mfg.....	-	3	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	14	7	2 033	50 421	1 696	2 952	34 243	130 733	194 845	325 874	3 029
3219	Other wood product mfg...	-	13	6	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	6	5	1 857	47 474	1 547	2 674	31 679	124 032	176 151	300 896	2 126
321991	Manufactured home (mobile home) mfg ..	-	5	5	g	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	13	10	1 513	43 635	1 253	2 712	33 750	163 384	201 585	366 709	16 146
3222	Converted paper product mfg.....	-	13	10	1 513	43 635	1 253	2 712	33 750	163 384	201 585	366 709	16 146
32221	Paperboard container mfg.....	-	7	5	745	20 662	575	1 402	15 108	59 736	92 333	149 637	10 785
322211	Corrugated & solid fiber box mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	40	9	799	18 954	617	1 133	12 853	45 625	29 122	74 540	1 561
3231	Printing & related support activities.....	1	40	9	799	18 954	617	1 133	12 853	45 625	29 122	74 540	1 561
32311	Printing.....	1	36	8	738	18 065	567	1 055	12 243	44 254	28 755	72 791	D
323110	Commercial lithographic printing ..	1	18	4	406	9 417	297	496	6 018	20 302	9 351	29 628	446
325	Chemical mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	7	5	288	7 680	218	401	5 289	20 566	33 700	54 038	1 846
327	Nonmetallic mineral product mfg.....	-	14	12	1 074	34 935	934	1 863	28 170	108 339	111 037	220 678	3 011
3272	Glass & glass product mfg.	-	2	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	1	9	8	485	13 061	409	873	9 828	36 842	32 496	69 930	1 139

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WACO, TX MSA—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	45	12	1 406	46 607	975	2 061	29 027	118 789	125 704	245 193	6 588
3323	Architectural & structural metals mfg	2	15	7	647	18 090	456	991	10 785	41 866	70 846	112 883	2 631
33231	Plate work & fabricated structural product mfg . .	3	8	5	495	13 936	352	747	8 636	33 185	56 458	90 446	1 385
332312	Fabricated structural metal mfg	3	5	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	18	1	e	D	D	D	D	D	D	D	D
33272	Turned product & screw, nut, & bolt mfg	—	1	1	e	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	18	8	1 194	36 124	766	1 514	17 464	89 205	116 130	202 211	1 414
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	4	3	380	13 250	250	481	5 960	22 069	54 777	76 351	577
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	4	3	380	13 250	250	481	5 960	22 069	54 777	76 351	577
333414	Heating equipment (except warm air furnaces) mfg	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	8	3	f	D	D	D	D	D	D	D	440
33392	Material handling equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	4	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	7	2 284	87 031	1 070	2 221	35 355	341 046	225 585	566 011	5 508
3364	Aerospace product & parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	3	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	21	8	558	13 294	461	1 041	8 160	29 153	37 165	67 177	468
3371	Household & institutional furniture & kitchen cabinet mfg	—	18	5	400	10 050	330	609	5 623	17 314	29 946	48 366	370
33712	Household & institutional furniture mfg	—	8	4	335	8 569	277	555	4 698	16 664	28 493	44 426	259
339	Miscellaneous mfg	—	22	2	430	11 319	243	470	4 617	29 806	13 376	43 465	1 082
3391	Medical equipment & supplies mfg	—	8	2	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	8	2	e	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	2	1	e	D	D	D	D	D	D	D	D
WICHITA FALLS, TX MSA													
31-33	Manufacturing	—	156	43	7 939	255 222	6 272	12 591	183 526	770 572	666 070	1 437 271	57 878
315	Apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg . . .	—	1	1	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	—	6	3	319	7 710	262	439	5 707	17 732	20 723	38 461	477
3219	Other wood product mfg . . .	—	6	3	319	7 710	262	439	5 707	17 732	20 723	38 461	477
326	Plastics & rubber products mfg	—	6	4	1 183	29 990	1 014	1 901	21 154	172 992	121 046	291 097	8 950
3261	Plastics product mfg	—	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg . .	—	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	—	1	1	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	2	2	e	D	D	D	D	D	D	D	D
326122	Plastics pipe & pipe fitting mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WICHITA FALLS, TX MSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	—	8	5	1 570	68 528	1 171	2 686	50 472	226 680	129 931	361 024	D
3272	Glass & glass product mfg	—	2	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	2	2	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg	—	1	1	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	4	2	f	D	D	D	D	D	D	D	D
3315	Foundries	—	4	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	37	14	1 466	40 287	1 183	2 532	28 574	91 999	88 593	179 294	3 645
3322	Cutlery & handtool mfg	—	2	1	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	2	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	2	1	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	4	4	471	14 746	340	715	9 333	45 425	52 705	96 870	1 139
33241	Power boiler & heat exchanger mfg	—	2	2	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	24	6	544	17 520	355	660	9 434	38 865	30 981	71 332	905
3333	Commercial & service industry machinery mfg	—	5	2	278	9 427	185	403	5 553	15 461	15 802	32 710	161
33331	Commercial & service industry machinery mfg	—	5	2	278	9 427	185	403	5 553	15 461	15 802	32 710	161
333312	Commercial laundry, drycleaning, & pressing machine mfg	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANDERSON COUNTY, TX												
	Manufacturing	2	41	10	1 419	36 142	1 138	2 336	24 619	123 763	167 116	287 350	4 291
31-33	ANGELINA COUNTY, TX												
	Manufacturing	-	88	30	7 536	212 761	6 405	14 809	168 329	511 312	859 431	1 363 570	59 878
311	Food mfg	-	7	4	2 078	33 321	1 917	5 443	27 480	94 954	229 236	322 736	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	15	8	1 182	34 688	971	2 297	27 662	84 098	162 002	243 176	D
3212	Veneer, plywood, & engineered wood product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	5	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	1 194	33 779	1 004	2 085	29 371	62 829	64 326	126 667	4 242
3315	Foundries	-	3	3	1 194	33 779	1 004	2 085	29 371	62 829	64 326	126 667	4 242
33151	Ferrous metal foundries	-	2	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	AUSTIN COUNTY, TX												
	Manufacturing	-	32	15	947	26 760	728	1 553	18 052	68 354	86 038	153 611	3 383
31-33	BASTROP COUNTY, TX												
	Manufacturing	2	52	12	801	18 475	570	1 159	11 762	38 565	37 761	78 302	6 112
31-33	BELL COUNTY, TX												
	Manufacturing	-	135	46	7 365	224 478	5 778	12 740	158 228	696 861	659 766	1 351 290	49 576
326	Plastics & rubber products mfg	-	14	8	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	13	8	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	3	2	g	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	3	2	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	654	17 011	560	1 323	11 822	31 774	26 310	57 161	1 998
3315	Foundries	-	5	5	654	17 011	560	1 323	11 822	31 774	26 310	57 161	1 998
333	Machinery mfg	-	9	4	640	18 873	517	1 179	12 685	38 410	31 070	68 921	2 123
337	Furniture & related product mfg	-	21	7	1 399	28 878	1 016	1 613	18 533	70 491	71 277	141 115	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	14	4	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	5	3	g	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	3	3	998	19 622	736	1 170	12 728	36 576	45 488	81 426	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
BEXAR COUNTY, TX													
31-33	Manufacturing	1	1 101	286	35 919	986 530	25 245	49 944	539 696	2 716 359	2 854 117	5 565 500	238 055
311	Food mfg	-	127	33	5 014	120 970	3 254	6 213	64 108	512 928	665 534	1 178 816	35 757
3115	Dairy product mfg	-	6	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	10	4	f	D	D	D	D	D	D	D	1 241
31161	Animal slaughtering & processing	-	10	4	f	D	D	D	D	D	D	D	1 241
3118	Bakeries & tortilla mfg	-	65	13	1 941	40 485	1 074	2 138	20 397	97 117	95 609	192 591	15 826
31181	Bread & bakery product mfg	-	56	11	1 791	37 548	959	1 958	18 431	87 185	90 265	177 336	15 679
311812	Commercial bakeries	-	11	6	g	D	D	D	D	D	D	D	13 386
3119	Other food mfg	-	25	8	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	3	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	15	10	1 889	56 848	851	1 758	19 307	306 120	265 719	574 498	21 637
3121	Beverage mfg	1	14	9	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	9	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	5	5	1 338	43 942	489	1 146	11 199	248 426	218 051	469 290	17 035
314	Textile product mills	-	19	6	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	9	2	g	D	D	D	D	D	D	D	752
31412	Curtain & linen mills	-	9	2	g	D	D	D	D	D	D	D	752
314121	Curtain & drapery mills	-	8	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	33	5	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	23	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	13	7	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	3	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	3	2	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	-	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	32	8	f	D	D	D	D	D	D	D	3 137
3219	Other wood product mfg	4	31	8	f	D	D	D	D	D	D	D	D
32191	Millwork	4	14	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	15	9	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	15	9	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	9	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	172	27	g	D	D	D	D	D	D	D	10 090
3231	Printing & related support activities	2	172	27	g	D	D	D	D	D	D	D	10 090
32311	Printing	2	157	25	g	D	D	D	D	D	D	D	9 588
323110	Commercial lithographic printing	2	86	15	g	D	D	D	D	D	D	D	5 637
325	Chemical mfg	1	41	10	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	5	47	16	2 103	56 118	1 551	3 151	31 846	102 704	110 853	209 139	7 762
3261	Plastics product mfg	5	37	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	25	9	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	22	8	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	62	18	1 406	41 717	1 143	2 413	28 330	150 495	121 887	273 760	14 648
3273	Cement & concrete product mfg	-	39	16	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	139	39	2 413	62 969	1 838	3 699	39 703	126 913	111 303	238 744	7 602
3323	Architectural & structural metals mfg	-	53	17	1 132	31 557	886	1 914	18 958	65 591	68 582	134 252	2 644
33231	Plate work & fabricated structural product mfg	-	21	8	f	D	D	D	D	D	D	D	824
33232	Ornamental & architectural metal products mfg	1	32	9	f	D	D	D	D	D	D	D	1 820
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	47	11	569	13 757	446	761	9 563	27 369	11 968	39 217	2 633

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	BEXAR COUNTY, TX—Con.													
31-33	Manufacturing—Con.													
333	Machinery mfg	3	45	16	h	D	D	D	D	D	D	D	9 832	
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	12	7	g	D	D	D	D	D	D	D	D	
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	3	12	7	g	D	D	D	D	D	D	D	D	
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	3	9	7	g	D	D	D	D	D	D	D	D	
3339	Other general-purpose machinery mfg	3	12	5	f	D	D	D	D	D	D	D	D	
334	Computer & electronic product mfg	—	34	12	g	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D	
334413	Semiconductor & related device mfg	—	2	2	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	3	19	6	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	3	54	17	h	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	3	21	11		2 173	101 647	1 579	3 634	54 674	164 015	137 755	296 032	18 080
33641	Aerospace product & parts mfg	3	21	11		2 173	101 647	1 579	3 634	54 674	164 015	137 755	296 032	18 080
336411	Aircraft mfg	3	5	4		1 676	82 594	1 237	3 043	43 339	115 697	115 410	223 805	D
337	Furniture & related product mfg	1	70	19		2 059	43 854	1 646	4 062	32 241	88 369	88 951	177 477	7 628
3371	Household & institutional furniture & kitchen cabinet mfg	1	43	10	g	D	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	1	25	7		1 282	27 420	1 032	2 878	20 922	57 204	57 886	115 173	5 780
337110	Wood kitchen cabinet & counter top mfg	1	25	7		1 282	27 420	1 032	2 878	20 922	57 204	57 886	115 173	5 780
339	Miscellaneous mfg	1	143	20		2 755	62 632	1 774	3 142	34 194	141 924	138 267	274 782	5 691
3391	Medical equipment & supplies mfg	—	58	9	g	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	58	9	g	D	D	D	D	D	D	D	D	D
339115	Ophthalmic goods mfg	—	3	1	f	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	1	85	11	g	D	D	D	D	D	D	D	D	D
	BOSQUE COUNTY, TX													
31-33	Manufacturing	1	18	8		548	13 442	406	851	7 818	34 498	39 099	74 929	D
	BOWIE COUNTY, TX													
31-33	Manufacturing	—	75	25		4 056	127 956	3 017	6 291	84 681	359 125	618 297	975 522	32 060
321	Wood product mfg	—	7	5	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	4	2	g	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	17	6	f	D	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	4	2	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRAZORIA COUNTY, TX													
31-33	Manufacturing	-	199	60	14 149	682 947	10 011	20 120	425 116	2 579 286	8 174 294	10 760 986	793 692
324	Petroleum & coal products mfg	-	4	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	4	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	25	17	7 373	406 664	4 963	9 134	244 123	1 964 798	5 147 530	7 147 085	680 401
3251	Basic chemical mfg	-	13	11	5 496	310 869	3 579	6 275	178 429	1 592 098	4 607 716	6 242 195	597 225
32511	Petrochemical mfg	-	5	5	1 354	78 863	877	1 607	45 264	647 591	1 948 842	2 623 929	123 402
325110	Petrochemical mfg	-	5	5	1 354	78 863	877	1 607	45 264	647 591	1 948 842	2 623 929	123 402
32519	Other basic organic chemical mfg	-	3	3	3 843	215 515	2 486	4 203	121 452	884 847	2 600 894	3 489 188	D
325199	All other basic organic chemical mfg	-	3	3	3 843	215 515	2 486	4 203	121 452	884 847	2 600 894	3 489 188	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
32521	Resin & synthetic rubber mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
325211	Plastics material & resin mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
331	Primary metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	2	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	62	17	1 101	33 571	851	1 788	25 304	65 523	49 553	115 161	2 571
334	Computer & electronic product mfg	-	10	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	2	g	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
BRAZOS COUNTY, TX													
31-33	Manufacturing	1	101	25	3 126	79 602	2 203	4 547	44 323	175 554	206 647	382 206	12 355
332	Fabricated metal product mfg	-	20	3	1 211	25 370	951	2 120	17 489	41 360	74 957	118 810	2 011
3323	Architectural & structural metals mfg	-	7	1	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	6	1	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	5	530	14 663	332	616	6 034	36 411	29 718	65 989	1 356

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWN COUNTY, TX													
31-33	Manufacturing	-	39	13	3 055	98 678	2 393	5 205	73 317	489 432	350 265	848 531	30 586
326	Plastics & rubber products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	2	g	D	D	D	D	D	D	D	752
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
BURNET COUNTY, TX													
31-33	Manufacturing	1	42	5	714	16 693	599	1 292	11 881	41 766	32 268	72 534	2 918
CALDWELL COUNTY, TX													
31-33	Manufacturing	4	18	7	556	9 703	375	607	6 193	19 611	19 362	39 220	1 722
CALHOUN COUNTY, TX													
31-33	Manufacturing	-	20	7	3 815	208 791	2 274	5 208	132 678	520 836	2 099 805	2 689 330	210 376
325	Chemical mfg	-	5	3	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331311	Alumina refining	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMERON COUNTY, TX													
31-33	Manufacturing	-	235	67	12 694	242 429	10 505	18 250	169 561	775 190	959 338	1 732 776	32 233
311	Food mfg	-	47	10	1 591	31 352	1 184	1 686	14 515	90 745	180 619	271 252	3 800
3117	Seafood product preparation & packaging..	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
31171	Seafood product preparation & packaging	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
311712	Fresh & frozen seafood processing..	-	6	3	685	11 437	585	774	5 868	54 708	66 981	121 689	1 851
315	Apparel mfg	-	15	10	5 377	80 750	5 170	8 963	74 719	258 878	282 863	526 750	5 333
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	13	9	h	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	5	5	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	5	5	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	14	5	584	11 426	388	749	7 676	24 022	37 182	66 494	2 756
332	Fabricated metal product mfg	-	26	10	1 432	29 318	1 086	1 981	21 866	79 924	107 889	186 221	4 016
3323	Architectural & structural metals mfg	-	5	4	992	21 469	735	1 366	16 425	62 655	98 536	160 198	3 286
33231	Plate work & fabricated structural product mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	2	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	23	7	1 753	48 232	1 198	2 264	27 290	181 198	211 412	401 991	9 025
3363	Motor vehicle parts mfg ...	-	8	4	940	29 805	533	1 186	12 097	142 057	166 090	307 715	8 277
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
CASS COUNTY, TX													
31-33	Manufacturing	-	26	7	546	11 383	451	936	7 961	35 088	30 218	63 908	1 815
CHAMBERS COUNTY, TX													
31-33	Manufacturing	-	15	7	1 499	83 471	751	2 099	32 219	910 144	1 080 636	1 989 717	D
325	Chemical mfg	-	5	5	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	g	D	D	D	D	D	D	D	D
CHEROKEE COUNTY, TX													
31-33	Manufacturing	1	91	38	3 178	67 018	2 681	5 594	49 365	167 018	157 100	327 442	17 406
321	Wood product mfg	-	19	10	693	12 212	614	1 248	9 856	22 265	47 058	68 257	1 953
333	Machinery mfg	-	13	5	550	12 909	459	1 045	9 755	38 607	23 404	61 652	1 170
339	Miscellaneous mfg	2	5	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLLIN COUNTY, TX													
31-33	Manufacturing	-	318	96	21 326	972 288	11 033	23 643	343 086	3 447 661	2 852 587	6 235 937	323 997
311	Food mfg	-	11	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	33	6	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	33	6	g	D	D	D	D	D	D	D	D
32311	Printing	-	31	5	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	13	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	36	10	1 141	38 238	879	1 848	24 058	146 373	96 558	238 056	7 978
3329	Other fabricated metal product mfg	-	8	4	788	25 834	602	1 268	17 119	121 193	83 490	204 208	D
33291	Metal valve mfg	-	4	4	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	59	33	13 774	748 242	5 251	11 086	193 122	2 629 460	1 602 557	4 165 285	247 377
3341	Computer & peripheral equipment mfg	-	6	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	6	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	16	10	i	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	10	8	i	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	10	8	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	4	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	4	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	22	14	g	D	D	D	D	D	D	D	92 034
33441	Semiconductor & other electronic component mfg	-	22	14	g	D	D	D	D	D	D	D	92 034
334413	Semiconductor & related device mfg ...	-	8	4	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	13	7	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	13	7	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	5	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	6	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	19	5	1 613	44 988	1 063	2 431	24 490	164 249	323 461	499 662	7 365
3363	Motor vehicle parts mfg ...	-	10	2	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	5	1	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	f	D	D	D	D	D	D	D	D
COLORADO COUNTY, TX													
31-33	Manufacturing	1	29	6	825	17 373	694	1 452	13 317	41 411	35 068	76 037	2 244

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COMAL COUNTY, TX													
31-33	Manufacturing	-	84	28	4 016	101 220	3 036	5 954	62 626	344 471	219 058	558 646	21 200
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	7	f	D	D	D	D	D	D	D	5 911
339	Miscellaneous mfg	1	14	5	567	13 334	409	851	7 874	24 480	11 630	34 137	4 131
COOKE COUNTY, TX													
31-33	Manufacturing	1	68	28	3 318	88 187	2 713	5 642	64 737	209 554	229 752	437 708	26 219
311	Food mfg	-	7	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	7	683	16 036	572	1 175	11 449	39 826	49 384	87 821	14 262
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
CORYELL COUNTY, TX													
31-33	Manufacturing	1	25	6	556	11 988	393	802	7 759	19 663	31 933	52 327	1 242
DALLAS COUNTY, TX													
31-33	Manufacturing	1	3 383	1 165	151 686	5 499 356	97 974	197 672	2 612 050	17 555 104	12 760 872	29 962 543	1 618 362
311	Food mfg	-	179	73	11 059	315 228	7 295	14 860	169 982	2 184 181	1 841 350	4 027 797	D
3115	Dairy product mfg	1	10	6	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	2	7	4	1 126	41 241	330	823	9 975	102 850	349 074	451 786	16 199
311511	Fluid milk mfg	2	5	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	20	15	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	20	15	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	2	11	8	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	4	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	78	19	h	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	62	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	26	9	g	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	12	6	f	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	-	5	3	f	D	D	D	D	D	D	D	D
31183	Tortilla mfg	-	4	2	f	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	4	2	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	46	24	h	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	11	6	g	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	10	5	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	11	6	785	29 905	605	1 019	20 804	141 744	247 198	387 300	10 560
31199	All other food mfg	2	19	10	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	13	8	2 248	79 581	805	1 867	23 924	300 504	528 501	835 184	25 021
3121	Beverage mfg	1	13	8	2 248	79 581	805	1 867	23 924	300 504	528 501	835 184	25 021
31211	Soft drink & ice mfg	1	11	8	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	7	6	2 153	76 675	758	1 832	22 745	286 293	526 389	818 603	23 687
314	Textile product mills	-	87	31	2 659	47 517	2 208	3 925	32 434	127 007	134 775	252 820	2 859
3141	Textile furnishings mills ...	-	49	18	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	47	18	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	-	17	12	g	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	1	38	13	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DALLAS COUNTY, TX—Con.												
	Manufacturing—Con.												
315	Apparel mfg	2	210	66	4 890	91 591	3 352	5 879	53 570	200 022	240 699	436 497	5 882
3152	Cut & sew apparel mfg	2	170	53	h	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	99	19	g	D	D	D	D	D	D	D	821
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	97	18	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	2	60	27	g	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	2	18	5	1 219	23 047	502	816	9 329	47 006	72 689	118 341	2 151
3159	Apparel accessories & other apparel mfg	2	36	12	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	2	36	12	g	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	—	10	5	642	10 781	454	871	6 602	34 594	19 180	54 180	D
321	Wood product mfg	3	65	25	1 958	44 681	1 596	3 098	28 798	91 082	122 711	212 914	4 829
3212	Veneer, plywood, & engineered wood product mfg	3	8	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	3	8	3	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	2	55	22	1 429	32 470	1 176	2 392	21 334	67 219	81 124	148 033	D
32191	Millwork	1	28	13	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	—	14	7	f	D	D	D	D	D	D	D	2 058
322	Paper mfg	—	75	47	4 679	156 484	3 567	8 132	106 210	424 572	495 792	916 262	29 508
3222	Converted paper product mfg	—	72	45	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	29	23	2 759	91 707	2 155	5 104	64 861	182 678	295 113	479 122	11 369
322211	Corrugated & solid fiber box mfg	1	23	20	g	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ...	—	15	11	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	7	7	716	23 775	505	1 070	14 935	48 185	62 598	111 178	6 370
323	Printing & related support activities	2	636	148	13 041	445 479	9 550	19 202	269 255	1 030 218	624 880	1 650 899	D
3231	Printing & related support activities	2	636	148	13 041	445 479	9 550	19 202	269 255	1 030 218	624 880	1 650 899	D
32311	Printing	2	557	121	j	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	264	69	i	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	—	18	9	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	3	45	10	779	17 166	583	1 044	9 739	35 058	26 723	61 263	D
323114	Quick printing	2	132	4	744	18 875	522	899	11 920	42 038	23 949	65 777	2 497
323116	Manifold business form printing	—	19	13	g	D	D	D	D	D	D	D	D
323119	Other commercial printing	4	53	8	500	13 286	366	652	7 694	27 248	22 994	50 259	D
32312	Support activities for printing	1	79	27	g	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	2	26	10	f	D	D	D	D	D	D	D	D
323122	Prepress services	1	53	17	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	154	61	6 640	218 894	4 161	8 722	108 873	1 718 589	1 237 792	2 956 487	65 717
3255	Paint, coating, & adhesive mfg	—	29	13	1 684	55 730	871	2 070	25 298	379 632	470 294	838 820	15 952
32551	Paint & coating mfg	—	17	7	g	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	—	17	7	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	47	20	2 537	83 713	1 713	3 290	40 979	963 140	431 274	1 411 545	19 121
32561	Soap & cleaning compound mfg	1	24	7	f	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	1	16	5	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	—	23	13	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	—	23	13	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	34	13	g	D	D	D	D	D	D	D	11 672
32599	All other chemical product & preparation mfg	1	18	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS COUNTY, TX—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	146	68	6 882	207 892	5 590	12 070	135 869	495 455	591 149	1 077 085	50 878
3261	Plastics product mfg	1	123	59	6 145	188 541	5 015	10 979	123 639	447 628	545 294	982 832	47 874
32611	Unsupported plastics film, sheet, & bag mfg	1	24	15	g	D	D	D	D	D	D	D	24 335
326111	Unsupported plastics bag mfg	1	11	9	g	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	10	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	56	27	2 383	58 796	1 957	3 860	39 768	147 231	117 101	261 534	10 957
326199	All other plastics product mfg	1	51	25	2 136	52 055	1 742	3 461	34 148	126 879	107 114	231 263	10 441
3262	Rubber product mfg	1	23	9	737	19 351	575	1 091	12 230	47 827	45 855	94 253	3 004
32629	Other rubber product mfg	2	13	6	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	2	9	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	98	44	4 403	120 827	3 625	7 372	89 219	360 263	374 717	732 528	40 120
3271	Clay product & refractory mfg	1	15	8	g	D	D	D	D	D	D	D	16 325
32712	Clay building material & refractories mfg	1	7	6	g	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	5	4	1 347	31 743	1 248	2 654	26 694	115 453	64 532	178 085	D
3273	Cement & concrete product mfg	1	41	23	1 761	55 499	1 358	2 974	40 076	155 044	227 926	382 798	19 408
32732	Ready-mix concrete mfg	1	19	9	612	23 402	497	1 227	18 037	82 850	168 275	251 316	6 296
327320	Ready-mix concrete mfg	1	19	9	612	23 402	497	1 227	18 037	82 850	168 275	251 316	6 296
32733	Concrete pipe, brick, & block mfg	—	8	6	f	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	13	7	583	15 234	439	803	10 355	25 441	23 705	49 455	D
327390	Other concrete product mfg	2	13	7	583	15 234	439	803	10 355	25 441	23 705	49 455	D
331	Primary metal mfg	1	30	12	g	D	D	D	D	D	D	D	D
3315	Foundries	—	16	5	1 117	29 051	955	2 007	20 878	67 778	36 531	101 698	D
33151	Ferrous metal foundries	—	6	3	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	528	179	14 311	423 944	11 102	23 173	269 366	944 244	785 335	1 727 544	53 271
3321	Forging & stamping	1	30	17	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	1	30	17	g	D	D	D	D	D	D	D	D
332116	Metal stamping	2	19	11	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	153	68	5 848	165 423	4 574	9 937	105 156	410 891	322 768	730 386	13 453
33231	Plate work & fabricated structural product mfg	2	26	10	503	13 522	369	698	7 961	32 049	39 455	71 507	1 362
33232	Ornamental & architectural metal products mfg	—	127	58	5 345	151 901	4 205	9 239	97 195	378 842	283 313	658 879	12 091
332321	Metal window & door mfg	—	20	13	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	84	40	3 172	94 552	2 470	5 496	62 344	245 829	133 589	377 427	9 399
3324	Boiler, tank, & shipping container mfg	—	15	9	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	—	22	9	676	18 406	533	1 212	12 448	42 477	32 927	76 313	3 919
33261	Spring & wire product mfg	—	22	9	676	18 406	533	1 212	12 448	42 477	32 927	76 313	3 919
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	194	37	2 768	91 475	2 091	4 120	56 112	173 819	90 960	262 744	D
33271	Machine shops	1	173	27	2 277	72 680	1 710	3 317	46 309	138 629	72 254	209 512	10 816
332710	Machine shops	1	173	27	2 277	72 680	1 710	3 317	46 309	138 629	72 254	209 512	10 816
3328	Coating, engraving, heat treating, & allied activities	2	64	21	1 213	33 150	920	1 816	19 840	54 748	19 202	74 207	4 345
33281	Coating, engraving, heat treating, & allied activities	2	64	21	1 213	33 150	920	1 816	19 840	54 748	19 202	74 207	4 345
332813	Electroplating, plating, polishing, anodizing, & coloring	2	31	11	682	18 550	487	963	10 357	29 073	10 284	39 588	1 874

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS COUNTY, TX—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	—	36	15	1 535	47 636	1 219	2 330	31 467	105 291	142 178	246 814	5 525
33291	Metal valve mfg	1	9	7	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	27	8	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	20	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	222	90	9 206	331 963	5 821	11 630	163 577	871 823	746 110	1 609 966	40 500
3331	Agriculture, construction, & mining machinery mfg. . . .	1	25	15	2 728	109 968	1 723	3 402	58 734	359 417	244 759	604 337	D
33313	Mining & oil & gas field machinery mfg	1	18	12	g	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	1	16	12	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg . .	6	47	13	1 192	43 797	649	1 336	18 098	111 379	87 047	193 200	5 357
33329	Other industrial machinery mfg	6	42	12	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	8	18	4	507	18 420	272	637	8 565	53 945	48 707	98 093	D
3333	Commercial & service industry machinery mfg . .	1	28	13	939	28 779	629	1 085	14 914	71 704	86 444	157 237	D
33331	Commercial & service industry machinery mfg	1	28	13	939	28 779	629	1 085	14 914	71 704	86 444	157 237	D
333319	Other commercial & service industry machinery mfg	—	8	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	27	15	1 644	41 616	1 199	2 309	22 015	108 839	108 077	216 777	4 924
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . .	2	27	15	1 644	41 616	1 199	2 309	22 015	108 839	108 077	216 777	4 924
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	2	12	8	946	22 091	706	1 326	12 215	57 407	68 935	129 580	2 195
3335	Metalworking machinery mfg	7	36	8	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	7	36	8	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	52	23	1 887	76 061	1 108	2 422	33 220	164 083	154 158	315 407	D
33392	Material handling equipment mfg	—	14	7	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	33	14	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	274	122	37 882	1 874 054	17 345	33 553	499 231	6 136 987	2 910 832	8 956 695	1 013 367
3341	Computer & peripheral equipment mfg	7	23	6	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	7	23	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	47	21	i	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	16	7	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	16	7	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	26	12	3 502	133 424	1 771	2 703	45 293	681 972	495 026	1 174 589	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	26	12	3 502	133 424	1 771	2 703	45 293	681 972	495 026	1 174 589	D

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	DALLAS COUNTY, TX—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	—	128	63	19 070	979 471	9 658	19 202	233 305	3 533 006	1 246 785	4 686 550	864 254
33441	Semiconductor & other electronic component mfg	—	128	63	19 070	979 471	9 658	19 202	233 305	3 533 006	1 246 785	4 686 550	864 254
334412	Bare printed circuit board mfg	—	40	18	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	29	16	12 598	774 527	5 290	11 289	130 622	3 072 644	676 151	3 677 480	D
334418	Printed circuit assembly (electronic assembly) mfg	—	17	13	2 574	85 732	1 535	2 317	29 631	269 304	382 660	633 049	D
334419	Other electronic component mfg	2	30	11	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	54	24	11 491	560 289	3 193	6 599	109 764	935 610	618 777	1 579 432	D
33451	Navigational, measuring, medical, & control instruments mfg	—	54	24	11 491	560 289	3 193	6 599	109 764	935 610	618 777	1 579 432	D
334511	Search, detection, navigation, & guidance instrument mfg	—	6	4	i	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	14	5	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	—	3	3	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	—	17	5	g	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	17	5	g	D	D	D	D	D	D	D	D
334611	Software reproducing .	—	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	79	44	4 173	119 810	3 062	6 684	68 223	313 717	301 590	617 155	D
3351	Electric lighting equipment mfg	3	18	11	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	3	18	11	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	24	11	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	24	11	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	13	6	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	34	20	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	2	7	7	g	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg..	—	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	6	18	8	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	7	17	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	86	41	13 788	650 358	8 412	15 965	371 379	1 523 523	936 357	2 234 644	72 798
3363	Motor vehicle parts mfg ...	2	51	24	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	11	3	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	11	3	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	4	15	11	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	5	13	10	718	15 254	571	1 114	9 411	31 642	29 836	60 996	D
33634	Motor vehicle brake system mfg	—	4	4	558	15 282	444	798	9 280	36 521	22 720	59 663	3 069
336340	Motor vehicle brake system mfg	—	4	4	558	15 282	444	798	9 280	36 521	22 720	59 663	3 069

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
DALLAS COUNTY, TX—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	—	26	15	j	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	26	15	j	D	D	D	D	D	D	D	D	
336411	Aircraft mfg	—	5	4	f	D	D	D	D	D	D	D	D	
336412	Aircraft engine & engine parts mfg	—	4	4	g	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	—	14	4	i	D	D	D	D	D	D	D	D	
336414	Guided missile & space vehicle mfg ...	—	1	1	h	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	151	44		5 775	132 084	4 384	9 075	85 577	334 382	284 133	618 176	12 938
3371	Household & institutional furniture & kitchen cabinet mfg	1	110	24		4 262	88 758	3 282	6 558	59 805	221 691	173 935	395 697	9 606
33711	Wood kitchen cabinet & counter top mfg	—	50	12		2 882	55 559	2 188	4 427	35 778	157 579	99 737	256 634	6 642
337110	Wood kitchen cabinet & counter top mfg ...	—	50	12		2 882	55 559	2 188	4 427	35 778	157 579	99 737	256 634	6 642
33712	Household & institutional furniture mfg	2	60	12		1 380	33 199	1 094	2 131	24 027	64 112	74 198	139 063	2 964
337121	Upholstered household furniture mfg	2	17	5		746	17 884	582	1 129	12 636	33 861	42 115	76 963	D
3372	Office furniture (including fixtures) mfg	4	31	14	f	D	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	4	31	14	f	D	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	6	18	7	f	D	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	10	6	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	4	309	49		5 065	151 925	3 753	7 086	80 345	284 206	296 777	576 745	20 715
3391	Medical equipment & supplies mfg	2	103	11		1 627	64 650	1 196	2 013	30 174	179 472	80 924	259 234	11 180
33911	Medical equipment & supplies mfg	2	103	11		1 627	64 650	1 196	2 013	30 174	179 472	80 924	259 234	11 180
339112	Surgical & medical instrument mfg	3	15	4		522	24 807	320	641	11 111	71 268	36 207	107 398	6 211
339113	Surgical appliance & supplies mfg	—	9	2	f	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	5	206	38		3 438	87 275	2 557	5 073	50 171	104 734	215 853	317 511	9 535
33995	Sign mfg	5	90	18		1 589	45 812	1 107	2 294	24 063	11 461	127 397	136 512	D
339950	Sign mfg	5	90	18		1 589	45 812	1 107	2 294	24 063	11 461	127 397	136 512	D
33999	All other miscellaneous mfg	5	50	13		1 208	24 541	965	1 900	15 999	47 154	49 411	95 926	D
339999	All other miscellaneous mfg	6	34	8	f	D	D	D	D	D	D	D	D	D
DEAF SMITH COUNTY, TX														
31-33	Manufacturing	1	32	9		1 128	28 874	857	1 665	19 608	125 018	245 700	376 692	6 443
311	Food mfg	—	13	6		921	23 925	703	1 395	16 243	114 021	235 176	355 175	D
DENTON COUNTY, TX														
31-33	Manufacturing	—	305	80		13 556	459 845	9 544	18 056	247 374	1 393 842	1 333 134	2 741 808	92 273
326	Plastics & rubber products mfg	1	22	9		504	10 272	306	569	5 594	17 923	18 831	36 651	3 083
327	Nonmetallic mineral product mfg	2	21	7		553	15 506	466	1 052	12 002	44 188	39 153	83 144	3 497
332	Fabricated metal product mfg	—	43	15		1 161	31 571	914	1 892	20 362	75 338	81 751	155 741	2 561
333	Machinery mfg	—	21	3		844	30 236	699	1 155	20 066	116 580	40 996	156 301	2 433
3339	Other general-purpose machinery mfg	—	7	2	f	D	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	5	2	f	D	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DENTON COUNTY, TX													
—Con.													
31-33	Manufacturing—												
	Con.												
334	Computer & electronic product mfg	—	12	4	5 028	215 407	2 658	4 789	73 117	620 541	280 903	915 398	D
3342	Communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	4	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	4	3	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	14	5	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	32	10	1 394	27 763	1 166	2 261	18 559	49 365	35 051	84 467	4 278
3372	Office furniture (including fixtures) mfg	—	7	5	1 048	20 373	879	1 736	13 095	37 756	25 218	62 937	3 410
33721	Office furniture (including fixtures) mfg	—	7	5	1 048	20 373	879	1 736	13 095	37 756	25 218	62 937	3 410
337215	Showcase, partition, shelving, & locker mfg	—	6	5	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	32	7	1 000	22 824	819	1 527	14 776	46 428	45 100	91 863	3 836
3399	Other miscellaneous mfg	1	19	4	521	13 278	435	856	8 846	23 953	30 321	54 750	D
DEWITT COUNTY, TX													
31-33	Manufacturing	1	24	8	721	16 431	563	1 097	11 220	39 108	47 938	87 898	1 336
EASTLAND COUNTY, TX													
31-33	Manufacturing	—	25	9	713	17 424	566	1 197	11 341	41 776	55 886	98 299	2 703
ECTOR COUNTY, TX													
31-33	Manufacturing	—	203	56	3 526	115 632	2 536	5 169	71 376	489 460	803 718	1 286 163	43 244
325	Chemical mfg	1	12	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	82	19	1 176	37 161	871	1 825	22 579	79 478	55 870	136 705	4 094
333	Machinery mfg	1	47	21	1 090	33 017	757	1 432	19 444	78 885	55 032	131 695	6 795
3339	Other general-purpose machinery mfg	1	21	12	542	16 129	357	765	9 735	39 617	24 073	63 322	2 797

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ELLIS COUNTY, TX													
31-33	Manufacturing	1	174	68	9 635	284 961	7 726	16 044	205 368	1 109 833	1 261 928	2 397 934	122 888
326	Plastics & rubber products mfg	-	17	9	1 393	35 526	1 178	2 445	28 272	137 842	184 669	320 450	9 446
3261	Plastics product mfg	-	14	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	4 832
327	Nonmetallic mineral product mfg	-	19	12	1 568	60 437	1 304	2 808	47 670	330 093	148 518	484 795	30 921
3273	Cement & concrete product mfg	-	10	6	657	22 259	551	1 254	16 769	170 956	72 863	245 412	19 822
3279	Other nonmetallic mineral product mfg	-	5	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	-	5	4	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	30	9	1 030	26 020	726	1 522	16 660	53 584	78 702	132 563	3 775
333	Machinery mfg	-	10	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	8	5	764	16 742	675	1 417	11 619	34 651	22 729	57 131	D
3363	Motor vehicle parts mfg ...	1	6	5	f	D	D	D	D	D	D	D	D
EL PASO COUNTY, TX													
31-33	Manufacturing	1	652	216	36 723	773 944	29 598	54 684	528 653	3 300 010	4 720 097	7 966 475	234 102
311	Food mfg	1	62	14	1 588	35 263	1 104	2 465	20 418	110 301	162 193	272 862	9 268
313	Textile mills	5	12	7	3 008	51 837	2 627	4 832	43 584	139 036	58 906	194 383	8 427
3133	Textile & fabric finishing & fabric coating mills	6	9	6	h	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	6	9	6	h	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	8	7	4	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	73	36	11 669	219 176	10 486	19 203	166 588	838 688	959 151	1 762 193	19 950
3152	Cut & sew apparel mfg	-	69	35	j	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	42	15	h	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	8	4	1 243	20 964	1 149	2 192	18 038	30 383	8 713	38 328	1 535
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	34	11	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	13	10	4 713	102 571	4 154	7 900	76 931	470 503	590 425	1 035 026	4 040
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	11	9	h	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	13	9	3 998	71 299	3 572	6 281	49 800	292 845	350 448	638 317	13 560
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	2	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	10	8	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	2	24	9	1 045	19 924	691	1 266	9 439	36 982	60 152	104 467	678
3162	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
31621	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
316213	Men's footwear (except athletic) mfg .	1	12	7	f	D	D	D	D	D	D	D	380
321	Wood product mfg	5	24	7	f	D	D	D	D	D	D	D	704
322	Paper mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
3222	Converted paper product mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
32221	Paperboard container mfg	1	13	12	1 035	25 328	841	1 773	16 666	73 856	93 046	166 257	D
322211	Corrugated & solid fiber box mfg	-	10	9	804	19 644	653	1 351	12 803	60 336	81 188	140 830	2 077

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	EL PASO COUNTY, TX —Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
3231	Printing & related support activities.....	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
32311	Printing	1	63	10	648	15 001	471	755	9 038	30 717	19 997	50 356	2 696
326	Plastics & rubber products mfg	1	36	19	3 364	72 048	2 667	5 200	52 689	192 529	203 655	390 774	39 145
3261	Plastics product mfg	1	33	19	3 357	71 931	2 660	5 189	52 596	192 292	203 342	390 220	39 138
32619	Other plastics product mfg	—	30	17	2 980	63 304	2 342	4 540	47 382	156 923	185 080	337 011	37 159
326199	All other plastics product mfg.....	—	29	17	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	15	6	696	16 296	240	502	5 289	31 854	34 573	64 753	D
3273	Cement & concrete product mfg	—	9	5	637	14 401	196	402	4 081	28 502	30 970	57 802	D
331	Primary metal mfg	—	9	6	g	D	D	D	D	D	D	D	31 746
3314	Nonferrous metal (except aluminum) production & processing.....	—	5	4	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining.....	—	2	2	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper....	—	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	4	95	27	1 995	46 849	1 569	3 108	30 425	98 704	124 414	222 794	8 736
3323	Architectural & structural metals mfg	2	27	10	878	17 980	725	1 554	12 552	41 279	58 570	99 069	3 309
33232	Ornamental & architectural metal products mfg.....	—	20	6	642	11 714	543	1 145	8 405	24 673	28 132	51 636	2 575
332323	Ornamental & architectural metal work mfg	—	11	4	509	9 059	439	957	6 681	16 714	25 208	41 500	D
333	Machinery mfg	5	43	9	948	16 993	770	1 358	11 927	41 477	22 301	65 000	9 700
334	Computer & electronic product mfg.....	1	22	11	1 369	27 046	1 019	1 789	15 366	85 675	78 156	167 985	8 298
3344	Semiconductor & other electronic component mfg	—	13	6	851	15 751	625	822	9 089	57 841	19 670	80 550	3 493
33441	Semiconductor & other electronic component mfg	—	13	6	851	15 751	625	822	9 089	57 841	19 670	80 550	3 493
335	Electrical equipment, appliance, & component mfg	—	20	12	2 146	46 507	1 697	2 525	29 035	319 452	383 389	704 302	26 313
3352	Household appliance mfg..	—	3	3	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	3	3	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
33531	Electrical equipment mfg	—	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
336	Transportation equipment mfg	—	17	5	692	14 788	519	1 085	9 424	95 650	102 152	180 849	4 752
3363	Motor vehicle parts mfg ...	—	13	5	f	D	D	D	D	D	D	D	4 681
337	Furniture & related product mfg	1	22	4	824	12 588	769	1 329	10 301	29 293	16 197	45 524	1 724
3371	Household & institutional furniture & kitchen cabinet mfg	—	18	3	775	11 815	733	1 273	9 816	27 628	15 198	42 832	1 663
33712	Household & institutional furniture mfg	—	8	3	732	11 066	698	1 223	9 263	26 068	14 023	40 080	D
337124	Metal household furniture mfg	—	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	53	12	1 976	42 565	1 397	2 377	22 733	303 556	353 196	662 848	9 326
3391	Medical equipment & supplies mfg	—	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
33911	Medical equipment & supplies mfg	—	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
339113	Surgical appliance & supplies mfg	—	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	—	29	7	1 190	22 107	1 005	1 744	15 127	202 933	166 799	371 327	3 222
33993	Doll, toy, & game mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ERATH COUNTY, TX													
31-33	Manufacturing	-	37	9	2 186	53 260	1 534	3 251	33 000	118 976	261 725	387 676	8 682
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg . . .	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg . .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	2	630	17 723	376	941	8 990	47 939	80 674	129 067	5 071
FANNIN COUNTY, TX													
31-33	Manufacturing	1	40	14	1 784	43 570	1 510	2 814	30 691	139 412	201 140	340 559	7 389
FAYETTE COUNTY, TX													
31-33	Manufacturing	1	39	14	1 056	23 155	821	1 517	14 939	57 603	91 548	148 555	4 662
FORT BEND COUNTY, TX													
31-33	Manufacturing	1	270	89	11 923	452 721	7 187	14 716	202 280	1 493 427	1 225 277	2 704 876	148 793
311	Food mfg	-	14	4	1 097	51 590	803	2 014	27 567	174 230	344 996	512 645	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining . . .	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	19	8	652	19 016	556	1 273	14 359	52 091	55 123	104 022	4 511
332	Fabricated metal product mfg	-	75	26	2 897	92 969	1 961	3 552	57 662	272 460	280 997	559 204	16 562
3324	Boiler, tank, & shipping container mfg	-	3	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	16	9	1 393	37 331	783	1 036	19 376	129 537	120 861	258 575	6 801
33291	Metal valve mfg	-	9	6	1 063	33 167	532	798	16 723	118 643	114 059	240 950	6 302
332911	Industrial valve mfg . . .	-	5	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	5	20	9	801	34 868	489	1 201	17 841	81 065	66 697	144 476	4 868
334	Computer & electronic product mfg	-	31	13	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	11	5	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	11	5	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	15	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	2	15	6	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	15	8	1 472	40 368	866	1 753	22 525	133 688	145 519	274 993	13 211
3359	Other electrical equipment & component mfg	-	9	6	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GALVESTON COUNTY, TX													
31-33	Manufacturing	1	160	35	7 279	392 507	4 817	10 921	244 497	1 761 759	7 422 044	9 182 629	183 618
324	Petroleum & coal products mfg	1	5	4	2 462	141 147	1 655	4 262	100 623	944 638	5 439 982	6 387 122	84 632
3241	Petroleum & coal products mfg	1	5	4	2 462	141 147	1 655	4 262	100 623	944 638	5 439 982	6 387 122	84 632
32411	Petroleum refineries	1	4	4	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	1	4	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	15	7	2 807	182 779	1 777	4 162	109 478	692 674	1 859 742	2 552 498	89 459
3251	Basic chemical mfg	-	10	6	2 734	180 637	1 725	4 071	108 078	686 484	1 857 170	2 543 715	89 210
32519	Other basic organic chemical mfg	-	6	4	2 651	176 560	1 689	3 980	106 325	655 570	1 843 997	2 499 694	88 738
325192	Cyclic crude & intermediate mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	5	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	33	10	691	24 273	565	1 152	18 049	36 622	26 814	61 050	2 293
GILLESPIE COUNTY, TX													
31-33	Manufacturing	2	45	6	721	13 119	554	1 207	9 714	26 978	41 576	70 656	1 006
GONZALES COUNTY, TX													
31-33	Manufacturing	2	19	7	747	16 777	586	926	10 877	44 538	129 061	173 645	2 929
311	Food mfg	2	8	5	593	13 524	448	654	8 709	37 165	123 443	160 365	1 840
GRAY COUNTY, TX													
31-33	Manufacturing	-	20	6	1 082	53 231	704	1 640	30 200	190 077	232 233	419 856	15 121
325	Chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
GRAYSON COUNTY, TX													
31-33	Manufacturing	-	140	47	10 223	365 407	7 871	16 069	224 933	2 188 029	1 375 544	3 557 264	212 766
311	Food mfg	-	17	8	1 743	60 004	1 560	3 358	49 664	888 838	607 369	1 492 563	20 012
3116	Meat product mfg	-	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	4	669	18 811	598	1 202	15 418	113 254	75 335	189 440	6 868
3261	Plastics product mfg	-	4	4	669	18 811	598	1 202	15 418	113 254	75 335	189 440	6 868
327	Nonmetallic mineral product mfg	-	6	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	4	736	20 549	613	1 242	15 254	29 759	103 692	131 207	5 760
332	Fabricated metal product mfg	-	35	8	1 179	36 135	957	1 894	26 357	138 299	127 856	263 084	11 547
3325	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	3	586	18 735	416	902	11 186	57 267	33 320	89 576	2 652

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GRAYSON COUNTY, TX —Con.												
31-33	Manufacturing— Con.												
334	Computer & electronic product mfg.....	-	7	5	3 138	148 269	1 922	3 909	60 097	729 347	209 614	941 194	145 275
3344	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	5	4	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	8	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
	GREGG COUNTY, TX												
31-33	Manufacturing	-	205	83	13 008	447 553	9 627	19 012	279 554	1 391 945	2 024 157	3 408 638	165 327
325	Chemical mfg.....	-	6	5	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	11	5	728	18 582	576	1 086	12 081	60 125	44 696	104 299	8 639
3261	Plastics product mfg.....	1	10	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	65	22	2 231	70 062	1 810	3 509	49 976	143 771	229 413	372 881	D
3324	Boiler, tank, & shipping container mfg.....	-	11	8	f	D	D	D	D	D	D	D	6 345
33242	Metal tank (heavy gauge) mfg.....	-	7	6	648	22 167	545	1 248	14 645	54 261	127 629	180 892	D
332420	Metal tank (heavy gauge) mfg.....	-	7	6	648	22 167	545	1 248	14 645	54 261	127 629	180 892	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	31	9	545	14 295	442	723	9 635	25 003	14 251	38 922	D
333	Machinery mfg.....	2	23	16	2 816	84 883	2 009	3 949	57 425	138 846	222 602	355 415	D
3331	Agriculture, construction, & mining machinery mfg....	-	9	6	1 887	61 081	1 350	2 736	43 306	77 656	151 421	223 728	8 445
33312	Construction machinery mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg.....	2	7	4	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg.....	2	6	4	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	1	6	5	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	1	6	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREGG COUNTY, TX—Con.													
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	10	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	12	5	g	D	D	D	D	D	D	D	D
GRIMES COUNTY, TX													
31-33	Manufacturing	-	21	9	1 910	63 307	1 666	3 586	47 013	203 152	187 661	386 851	11 855
332	Fabricated metal product mfg.....	-	12	7	g	D	D	D	D	D	D	D	10 678
3321	Forging & stamping.....	-	2	2	f	D	D	D	D	D	D	D	D
33211	Forging & stamping.....	-	2	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
GUADALUPE COUNTY, TX													
31-33	Manufacturing	-	90	35	5 592	150 368	4 115	7 321	93 947	616 743	698 039	1 320 331	41 945
311	Food mfg.....	1	9	3	g	D	D	D	D	D	D	D	1 119
3116	Meat product mfg.....	-	4	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	4	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing.....	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	9	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
HALE COUNTY, TX													
31-33	Manufacturing	-	32	13	h	D	D	D	D	D	D	D	16 762
311	Food mfg.....	-	10	7	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	3	3	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	-	1	1	g	D	D	D	D	D	D	D	D
HARDIN COUNTY, TX													
31-33	Manufacturing	1	37	13	1 016	30 012	808	1 996	21 139	62 710	111 125	173 081	6 675
321	Wood product mfg.....	1	9	6	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
HARRIS COUNTY, TX													
31-33	Manufacturing	-	4 374	1 386	158 572	5 991 250	108 800	220 526	3 390 217	29 799 670	43 557 172	73 227 741	3 026 910
311	Food mfg	-	222	59	9 276	246 060	6 546	13 290	145 687	1 007 620	1 298 218	2 305 037	55 026
3114	Fruit & vegetable preserving & specialty food mfg	1	15	7	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	2	7	5	1 499	26 081	1 397	3 151	24 009	51 811	40 728	92 522	2 518
311412	Frozen specialty food mfg	2	7	5	1 499	26 081	1 397	3 151	24 009	51 811	40 728	92 522	2 518
3116	Meat product mfg	-	24	10	g	D	D	D	D	D	D	D	4 896
31161	Animal slaughtering & processing	-	24	10	g	D	D	D	D	D	D	D	4 896
311612	Meat processed from carcasses	-	12	6	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	129	20	h	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	113	15	h	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	27	9	1 881	55 519	869	1 565	18 070	130 942	72 811	203 678	5 185
31182	Cookie, cracker, & pasta mfg	2	9	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	33	15	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	7	4	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	7	4	f	D	D	D	D	D	D	D	D
31199	All other food mfg	1	20	8	f	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	-	10	3	537	13 075	465	936	9 696	49 262	64 693	113 875	4 799
312	Beverage & tobacco product mfg	-	15	9	h	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	14	9	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	11	8	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	6	5	g	D	D	D	D	D	D	D	D
31212	Breweries	-	3	1	g	D	D	D	D	D	D	D	D
312120	Breweries	-	3	1	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	75	14	1 309	25 449	1 014	1 806	15 175	45 208	37 219	82 236	1 895
3149	Other textile product mills	4	46	8	f	D	D	D	D	D	D	D	D
31499	All other textile product mills	5	23	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	6	53	6	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	5	38	6	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	79	19	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	5	71	15	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	46	23	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	3	3	g	D	D	D	D	D	D	D	38 530
32212	Paper mills	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	2	43	20	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	21	14	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	18	12	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	543	94	i	D	D	D	D	D	D	D	D
3231	Printing & related support activities	3	543	94	i	D	D	D	D	D	D	D	D
32311	Printing	3	499	82	i	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	257	57	i	D	D	D	D	D	D	D	33 208
323113	Commercial screen printing	4	43	8	f	D	D	D	D	D	D	D	D
323114	Quick printing	4	114	5	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	4	44	12	f	D	D	D	D	D	D	D	3 056
324	Petroleum & coal products mfg	1	33	16	5 312	329 499	3 355	8 346	191 063	2 966 446	9 942 569	12 947 053	D
3241	Petroleum & coal products mfg	1	33	16	5 312	329 499	3 355	8 346	191 063	2 966 446	9 942 569	12 947 053	D
32411	Petroleum refineries	1	8	7	h	D	D	D	D	D	D	D	D
324110	Petroleum refineries	1	8	7	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HARRIS COUNTY, TX—Con.												
	Manufacturing—Con.												
	Chemical mfg	-	319	161	24 978	1 407 374	14 847	33 159	757 329	13 465 807	17 677 811	31 029 442	1 919 114
325	Basic chemical mfg	-	100	71	13 498	827 279	7 879	18 126	438 447	9 753 260	11 361 999	21 045 661	D
32511	Petrochemical mfg	-	11	10	4 635	302 173	2 393	5 812	149 689	6 101 363	6 047 981	12 082 746	534 405
325110	Petrochemical mfg	-	11	10	4 635	302 173	2 393	5 812	149 689	6 101 363	6 047 981	12 082 746	534 405
32512	Industrial gas mfg	-	20	9	f	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	-	20	9	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	20	14	1 668	97 841	1 078	2 373	61 733	520 156	388 522	913 490	D
325181	Alkalies & chlorine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	18	12	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	48	37	i	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	4	3	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	44	34	i	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	35	27	i	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	35	27	i	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	28	23	h	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	7	4	1 005	53 587	775	1 762	38 661	193 439	268 895	453 193	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	15	7	g	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	9	4	g	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	9	4	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	-	41	13	g	D	D	D	D	D	D	D	9 355
32551	Paint & coating mfg	-	31	10	g	D	D	D	D	D	D	D	8 046
325510	Paint & coating mfg	-	31	10	g	D	D	D	D	D	D	D	8 046
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	47	15	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	1	38	12	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	1	69	27	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	1	62	27	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resin	1	24	10	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	31	15	f	D	D	D	D	D	D	D	22 143
326	Plastics & rubber products mfg	1	222	102	9 311	258 270	7 063	13 816	163 896	723 509	690 244	1 389 479	67 388
3261	Plastics product mfg	1	184	94	8 675	238 882	6 557	12 705	152 281	684 685	666 347	1 331 444	62 681
32611	Unsupported plastics film, sheet, & bag mfg ..	1	31	16	g	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	3	18	7	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	11	8	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	3	16	7	f	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	-	9	8	797	26 444	712	1 570	20 599	88 830	110 301	197 800	9 297
326160	Plastics bottle mfg	-	9	8	797	26 444	712	1 570	20 599	88 830	110 301	197 800	9 297
32619	Other plastics product mfg	1	109	54	4 885	126 471	3 782	6 941	82 195	336 665	269 992	591 022	31 269
326199	All other plastics product mfg	2	98	49	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	2	38	8	636	19 388	506	1 111	11 615	38 824	23 897	58 035	4 707
32629	Other rubber product mfg	2	24	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	149	33	h	D	D	D	D	D	D	D	18 907
3273	Cement & concrete product mfg	4	73	20	g	D	D	D	D	D	D	D	12 190
32732	Ready-mix concrete mfg	4	44	11	f	D	D	D	D	D	D	D	10 906
327320	Ready-mix concrete mfg	4	44	11	f	D	D	D	D	D	D	D	10 906

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARRIS COUNTY, TX—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	1	45	23	1 947	60 245	1 542	3 131	44 097	151 460	406 303	560 304	19 162
3312	Steel product mfg from purchased steel	1	14	12	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	2	8	7	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	2	8	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	1 239	425	34 357	1 173 886	25 590	54 092	728 970	2 488 404	2 241 583	4 716 678	166 599
3321	Forging & stamping	1	37	20	2 918	112 216	2 123	4 393	69 508	293 717	402 000	689 300	34 005
33211	Forging & stamping	1	37	20	2 918	112 216	2 123	4 393	69 508	293 717	402 000	689 300	34 005
332111	Iron & steel forging	1	10	5	g	D	D	D	D	D	D	D	D
332114	Custom roll forming	—	9	8	f	D	D	D	D	D	D	D	D
332116	Metal stamping	4	16	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	258	97	7 980	239 043	5 802	12 066	137 648	463 456	565 027	1 022 073	D
33231	Plate work & fabricated structural product mfg	—	117	51	4 709	150 448	3 468	7 574	85 512	251 160	369 139	618 023	11 614
332311	Prefabricated metal building & component mfg	—	16	10	2 158	70 875	1 456	3 280	36 040	97 235	171 413	267 701	D
332312	Fabricated structural metal mfg	1	65	31	1 948	58 786	1 551	3 364	36 359	111 030	168 698	280 845	4 927
332313	Plate work mfg	2	36	10	603	20 787	461	930	13 113	42 895	29 028	69 477	D
33232	Ornamental & architectural metal products mfg	1	141	46	3 271	88 595	2 334	4 492	52 136	212 296	195 888	404 050	D
332321	Metal window & door mfg	2	28	11	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	1	82	28	g	D	D	D	D	D	D	D	7 510
332323	Ornamental & architectural metal work mfg	—	31	7	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	57	42	3 160	111 286	2 312	5 068	73 848	221 033	258 208	484 890	D
33241	Power boiler & heat exchanger mfg	1	21	17	g	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	21	17	g	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	25	19	g	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	25	19	g	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	11	6	f	D	D	D	D	D	D	D	D
332439	Other metal container mfg	—	8	5	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg	1	29	13	f	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	1	29	13	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	2	21	8	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	523	107	7 551	278 646	5 901	12 166	186 493	521 779	237 522	754 514	47 697
33271	Machine shops	2	466	88	6 220	231 262	4 863	10 045	155 912	435 138	183 641	615 854	36 586
332710	Machine shops	2	466	88	6 220	231 262	4 863	10 045	155 912	435 138	183 641	615 854	36 586
33272	Turned product & screw, nut, & bolt mfg	1	57	19	1 331	47 384	1 038	2 121	30 581	86 641	53 881	138 660	11 111
332721	Precision turned product mfg	—	35	10	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	3	22	9	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	1	133	57	3 983	128 838	3 230	6 962	86 967	292 878	189 358	479 582	16 307
33281	Coating, engraving, heat treating, & allied activities	1	133	57	3 983	128 838	3 230	6 962	86 967	292 878	189 358	479 582	16 307
332811	Metal heat treating	—	26	14	g	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	54	24	g	D	D	D	D	D	D	D	7 907
332813	Electroplating, plating, polishing, anodizing, & coloring	1	53	19	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HARRIS COUNTY, TX—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	1	187	87	7 568	267 224	5 277	11 521	152 400	620 830	521 640	1 143 399	31 425
33291	Metal valve mfg	1	79	46	4 038	150 206	2 601	5 850	79 181	349 567	265 145	616 340	15 394
332911	Industrial valve mfg . . .	—	34	24	2 400	100 646	1 448	3 333	48 859	232 001	159 295	392 485	10 273
332919	Other metal valve & pipe fitting mfg	3	32	19	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	108	41	3 530	117 018	2 676	5 671	73 219	271 263	256 495	527 059	16 031
332996	Fabricated pipe & pipe fitting mfg	—	39	21	1 973	58 658	1 543	3 473	36 758	140 366	180 073	319 220	9 692
332999	All other miscellaneous fabricated metal product mfg	—	50	17	g	D	D	D	D	D	D	D	5 746
333	Machinery mfg	—	420	164	22 462	865 750	13 860	28 626	459 460	2 738 956	2 632 497	5 193 545	204 278
3331	Agriculture, construction, & mining machinery mfg	—	139	69	11 162	492 937	6 910	14 365	248 610	1 549 959	1 034 159	2 384 556	128 359
33312	Construction machinery mfg	1	12	5	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	1	12	5	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	122	63	j	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	118	61	j	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg . .	2	28	10	f	D	D	D	D	D	D	D	3 762
33329	Other industrial machinery mfg	2	25	10	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	3	17	8	f	D	D	D	D	D	D	D	2 488
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	35	17	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	35	17	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	21	13	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	53	12	872	27 598	682	1 255	18 351	68 255	30 335	96 573	7 649
33351	Metalworking machinery mfg	2	53	12	872	27 598	682	1 255	18 351	68 255	30 335	96 573	7 649
333515	Cutting tool & machine tool accessory mfg . .	2	21	7	542	17 195	430	859	11 541	43 004	18 347	60 633	5 469
3336	Engine, turbine, & power transmission equipment mfg	—	18	7	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	18	7	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	6	4	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	126	42	4 108	159 510	2 494	5 387	77 720	460 066	678 925	1 065 663	19 248
33391	Pump & compressor mfg	1	32	13	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	1	20	7	f	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	—	10	5	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	29	11	g	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	9	4	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	65	18	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool mfg	—	4	3	516	21 346	267	518	10 325	47 096	11 601	57 905	D
333999	All other miscellaneous general-purpose machinery mfg	3	40	8	f	D	D	D	D	D	D	D	3 070

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	HARRIS COUNTY, TX—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg	-	202	70	j	D	D	D	D	D	D	D	41 236	
3341	Computer & peripheral equipment mfg	-	28	8	i	D	D	D	D	D	D	D	D	
33411	Computer & peripheral equipment mfg	-	28	8	i	D	D	D	D	D	D	D	D	
334111	Electronic computer mfg	-	16	3	i	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	5	44	13	f	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	5	44	13	f	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	1	106	46	h	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	1	106	46	h	D	D	D	D	D	D	D	D	
334513	Industrial process control instrument mfg	1	37	17	g	D	D	D	D	D	D	D	D	
334516	Analytical laboratory instrument mfg	2	19	6	f	D	D	D	D	D	D	D	D	
334519	Other measuring & controlling device mfg	-	17	9	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	93	32		4 611	166 243	3 060	6 210	84 033	342 447	525 655	875 692	24 310
3353	Electrical equipment mfg ..	-	52	16		2 804	110 547	1 757	3 340	52 778	161 825	389 810	556 489	16 860
33531	Electrical equipment mfg	-	52	16		2 804	110 547	1 757	3 340	52 778	161 825	389 810	556 489	16 860
335312	Motor & generator mfg	-	6	3	g	D	D	D	D	D	D	D	D	
335313	Switchgear & switchboard apparatus mfg	-	11	3	g	D	D	D	D	D	D	D	D	
335314	Relay & industrial control mfg	3	28	9	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	3	26	12	g	D	D	D	D	D	D	D	D	
33593	Wiring device mfg	-	8	3	f	D	D	D	D	D	D	D	D	
33599	All other electrical equipment & component mfg	7	18	9	f	D	D	D	D	D	D	D	D	
335999	All other miscellaneous electrical equipment & component mfg	7	17	8	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	3	109	38	h	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg	6	37	8	f	D	D	D	D	D	D	D	D	
3366	Ship & boat building	1	32	11	g	D	D	D	D	D	D	D	D	
33661	Ship & boat building	1	32	11	g	D	D	D	D	D	D	D	D	
336611	Ship building & repairing	1	27	11	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	143	32	h	D	D	D	D	D	D	D	5 012	
3371	Household & institutional furniture & kitchen cabinet mfg	4	95	11	f	D	D	D	D	D	D	D	1 405	
33712	Household & institutional furniture mfg	5	64	8	f	D	D	D	D	D	D	D	953	
3372	Office furniture (including fixtures) mfg	1	31	10	f	D	D	D	D	D	D	D	1 150	
33721	Office furniture (including fixtures) mfg	1	31	10	f	D	D	D	D	D	D	D	1 150	
3379	Other furniture related product mfg	-	17	11		1 329	23 126	976	1 905	14 767	73 841	75 072	147 145	
33792	Blind & shade mfg	-	7	5		925	15 819	699	1 377	10 094	51 832	52 024	102 082	
337920	Blind & shade mfg	-	7	5		925	15 819	699	1 377	10 094	51 832	52 024	102 082	
339	Miscellaneous mfg	2	344	66		6 680	187 726	4 539	9 565	103 764	591 892	275 844	869 337	32 105
3391	Medical equipment & supplies mfg	1	113	16	g	D	D	D	D	D	D	D	9 973	
33911	Medical equipment & supplies mfg	1	113	16	g	D	D	D	D	D	D	D	9 973	
339112	Surgical & medical instrument mfg	4	15	6	f	D	D	D	D	D	D	D	D	
339113	Surgical appliance & supplies mfg	-	15	5	f	D	D	D	D	D	D	D	D	
339116	Dental laboratories ...	3	71	4	f	D	D	D	D	D	D	D	876	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	HARRIS COUNTY, TX—Con.													
	Manufacturing—Con.													
339	Miscellaneous mfg—Con.													
3399	Other miscellaneous mfg . . .	3	231	50	h	D	D	D	D	D	D	D	22 132	
33995	Sign mfg	3	93	14	f	D	D	D	D	D	D	D	D	
339950	Sign mfg	3	93	14	f	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg	2	73	27	h	D	D	D	D	D	D	D	19 240	
339991	Gasket, packing, & sealing device mfg	3	28	18	g	D	D	D	D	D	D	D	11 824	
339999	All other miscellaneous mfg	1	35	7	f	D	D	D	D	D	D	D	D	
	HARRISON COUNTY, TX													
31-33	Manufacturing	1	90	38		3 128	83 247	2 368	4 925	55 321	301 381	303 456	600 427	35 446
	HAYS COUNTY, TX													
31-33	Manufacturing	1	108	29		3 389	96 186	2 388	4 376	50 651	249 927	227 899	477 028	18 248
332	Fabricated metal product mfg	1	16	8		848	22 738	644	1 414	13 650	51 986	74 513	126 953	3 157
335	Electrical equipment, appliance, & component mfg	—	8	4	f	D	D	D	D	D	D	D	D	D
	HENDERSON COUNTY, TX													
31-33	Manufacturing	—	49	14		1 880	38 292	1 490	2 826	26 163	127 235	87 570	214 292	4 267
339	Miscellaneous mfg	—	7	2	f	D	D	D	D	D	D	D	D	583
3391	Medical equipment & supplies mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	4	2	f	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	2	1	f	D	D	D	D	D	D	D	D	D
	HIDALGO COUNTY, TX													
31-33	Manufacturing	—	261	67		10 284	178 274	8 159	13 667	123 139	671 915	749 801	1 428 173	40 651
311	Food mfg	1	50	14		2 119	32 302	1 611	2 567	21 246	107 244	152 517	264 763	11 275
3114	Fruit & vegetable preserving & specialty food mfg	1	6	5	1 081	17 120	887	1 346	11 707	57 874	83 894	146 968	7 057	
31141	Frozen food mfg	4	3	3	f	D	D	D	D	D	D	D	3 142	
311411	Frozen fruit, juice, & vegetable mfg	4	3	3	f	D	D	D	D	D	D	D	3 142	
315	Apparel mfg	—	18	11	4 191	60 755	3 617	5 748	47 791	275 484	287 226	564 881	1 906	
3152	Cut & sew apparel mfg	—	17	11	h	D	D	D	D	D	D	D	D	
31522	Men's & boys' cut & sew apparel mfg	—	8	6	h	D	D	D	D	D	D	D	657	
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	4	2	f	D	D	D	D	D	D	D	D	
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	1	1	g	D	D	D	D	D	D	D	D	
315225	Men's & boys' cut & sew work clothing mfg	—	2	2	g	D	D	D	D	D	D	D	D	
31523	Women's & girls' cut & sew apparel mfg	—	4	3	g	D	D	D	D	D	D	D	1 232	
315239	Women's & girls' cut & sew other outerwear mfg	—	1	1	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	—	11	3	505	9 954	399	750	6 942	30 195	19 789	49 340	675	
	HILL COUNTY, TX													
31-33	Manufacturing	1	37	10		1 237	30 670	1 055	2 142	23 670	78 559	99 112	174 409	3 432
	HOPKINS COUNTY, TX													
31-33	Manufacturing	—	43	16		1 463	41 351	1 103	2 345	27 673	229 360	299 002	526 142	18 592
	HOUSTON COUNTY, TX													
31-33	Manufacturing	—	24	9		618	13 311	530	1 028	9 829	50 922	80 237	131 803	3 353

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOWARD COUNTY, TX													
31-33	Manufacturing	-	27	13	1 124	34 596	851	1 486	23 530	157 899	568 448	726 199	10 529
HUNT COUNTY, TX													
31-33	Manufacturing	-	58	26	7 223	255 995	5 621	10 257	180 614	669 402	804 582	1 478 922	30 730
321	Wood product mfg	3	8	7	959	15 433	774	1 658	10 204	66 277	159 725	224 454	2 433
3219	Other wood product mfg ...	4	6	5	f	D	D	D	D	D	D	D	D
32191	Millwork	5	5	4	f	D	D	D	D	D	D	D	2 116
321911	Wood window & door mfg	5	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	1 098	29 739	940	1 886	19 719	142 079	140 790	284 235	D
3261	Plastics product mfg	-	4	3	1 098	29 739	940	1 886	19 719	142 079	140 790	284 235	D
32619	Other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	h	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	h	D	D	D	D	D	D	D	D
HUTCHINSON COUNTY, TX													
31-33	Manufacturing	-	30	10	1 718	89 066	1 346	2 605	54 985	373 656	1 587 431	1 949 086	D
324	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	5	f	D	D	D	D	D	D	D	D
JACKSON COUNTY, TX													
31-33	Manufacturing	-	11	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
JASPER COUNTY, TX													
31-33	Manufacturing	-	29	9	1 911	76 569	1 524	3 226	58 894	234 285	319 055	543 174	12 232
321	Wood product mfg	-	7	6	547	13 692	447	1 059	9 898	29 115	73 776	101 433	4 146
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D

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JEFFERSON COUNTY, TX													
31-33	Manufacturing	-	230	79	14 471	727 033	10 170	23 112	469 663	4 398 680	11 445 345	15 920 187	674 295
324	Petroleum & coal products mfg	-	9	7	h	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	9	7	h	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	6	5	h	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	6	5	h	D	D	D	D	D	D	D	D
325	Chemical mfg	-	30	21	i	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	1	17	11	h	D	D	D	D	D	D	D	D
32512	Industrial gas mfg	-	6	2	f	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	-	6	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	7	6	1 533	95 946	1 109	3 176	68 847	990 368	1 176 990	2 168 974	92 082
325199	All other basic organic chemical mfg	1	7	6	1 533	95 946	1 109	3 176	68 847	990 368	1 176 990	2 168 974	92 082
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	6	6	2 118	116 447	1 389	2 937	66 632	880 577	1 098 555	1 976 359	D
32521	Resin & synthetic rubber mfg	-	6	6	2 118	116 447	1 389	2 937	66 632	880 577	1 098 555	1 976 359	D
325211	Plastics material & resin mfg	1	3	3	f	D	D	D	D	D	D	D	13 796
325212	Synthetic rubber mfg..	-	3	3	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	52	18	g	D	D	D	D	D	D	D	9 891
3329	Other fabricated metal product mfg	-	10	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
JOHNSON COUNTY, TX													
31-33	Manufacturing	1	170	49	5 942	161 339	4 521	8 939	106 119	523 925	463 769	981 391	44 428
315	Apparel mfg	2	5	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	11	8	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	11	8	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	6	5	665	20 199	521	1 097	11 908	46 265	65 110	110 956	D
321991	Manufactured home (mobile home) mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	12	4	636	26 762	513	1 164	21 106	73 692	55 285	125 776	D
332	Fabricated metal product mfg	-	34	5	601	18 654	479	1 053	13 784	72 430	43 604	116 102	D
333	Machinery mfg	2	21	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KAUFMAN COUNTY, TX													
31-33	Manufacturing	-	109	34	4 274	120 377	3 132	6 017	68 068	267 160	254 544	521 300	12 782
332	Fabricated metal product mfg	-	25	9	1 331	37 662	946	1 911	22 115	52 863	81 385	133 853	2 691
3323	Architectural & structural metals mfg	-	8	3	992	29 375	705	1 446	17 287	34 511	68 642	102 791	1 949
33232	Ornamental & architectural metal products mfg	-	6	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	2	527	12 453	465	966	9 438	37 478	32 613	69 998	D
337	Furniture & related product mfg	-	8	3	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	3	2	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
KERR COUNTY, TX													
31-33	Manufacturing	2	49	5	960	24 932	652	1 203	14 192	53 538	42 675	92 903	2 654
336	Transportation equipment mfg	1	3	2	f	D	D	D	D	D	D	D	D
LAMAR COUNTY, TX													
31-33	Manufacturing	-	60	22	4 809	160 984	4 036	8 613	125 691	1 336 663	725 249	2 056 311	55 389
311	Food mfg	-	7	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	11	6	887	27 180	761	1 510	21 909	57 469	70 314	129 632	2 528
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
LAMB COUNTY, TX													
31-33	Manufacturing	-	14	3	678	16 668	567	1 154	13 270	53 574	68 014	123 587	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
LAVACA COUNTY, TX													
31-33	Manufacturing	-	46	22	2 127	37 232	1 568	2 743	20 903	92 806	97 602	192 504	4 734
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LIBERTY COUNTY, TX													
31-33	Manufacturing	-	41	12	1 220	36 099	986	2 019	26 661	84 924	128 915	209 843	D
321	Wood product mfg	-	7	5	f	D	D	D	D	D	D	D	D
LIMESTONE COUNTY, TX													
31-33	Manufacturing	4	17	6	790	15 354	686	1 108	11 159	40 582	39 160	80 062	4 211
LUBBOCK COUNTY, TX													
31-33	Manufacturing	-	258	71	7 286	203 827	5 026	9 809	99 960	881 411	695 508	1 566 439	142 257
311	Food mfg	-	32	12	1 496	42 562	936	2 046	21 030	144 765	279 515	424 057	65 324
326	Plastics & rubber products mfg	-	10	3	685	17 111	496	889	7 663	38 255	38 897	78 085	3 895
3261	Plastics product mfg	-	6	3	656	16 394	482	853	7 329	36 752	35 358	73 041	D
32619	Other plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	43	8	765	20 850	555	1 173	12 651	65 536	61 148	121 607	8 376
333	Machinery mfg	-	31	18	1 863	48 233	1 396	2 856	26 966	105 160	155 380	256 094	5 725
3331	Agriculture, construction, & mining machinery mfg.	-	8	4	656	17 899	531	1 044	9 073	53 038	73 818	121 931	2 446
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	6	683	17 229	486	1 042	10 303	27 675	59 927	87 765	2 798
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg.	-	1	1	f	D	D	D	D	D	D	D	D
MCLENNAN COUNTY, TX													
31-33	Manufacturing	-	261	101	16 474	481 690	11 828	23 908	291 166	2 100 437	1 772 646	3 855 638	70 075
311	Food mfg	-	19	10	3 095	94 482	2 240	4 894	59 170	716 731	424 124	1 128 705	21 758
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate ...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	7	2 033	50 421	1 696	2 952	34 243	130 733	194 845	325 874	3 029
3219	Other wood product mfg ...	-	13	6	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	6	5	1 857	47 474	1 547	2 674	31 679	124 032	176 151	300 896	2 126
321991	Manufactured home (mobile home) mfg ..	-	5	5	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	13	10	1 513	43 635	1 253	2 712	33 750	163 384	201 585	366 709	16 146
3222	Converted paper product mfg	-	13	10	1 513	43 635	1 253	2 712	33 750	163 384	201 585	366 709	16 146
32221	Paperboard container mfg	-	7	5	745	20 662	575	1 402	15 108	59 736	92 333	149 637	10 785
322211	Corrugated & solid fiber box mfg	-	6	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	40	9	799	18 954	617	1 133	12 853	45 625	29 122	74 540	1 561
3231	Printing & related support activities	1	40	9	799	18 954	617	1 133	12 853	45 625	29 122	74 540	1 561
32311	Printing	1	36	8	738	18 065	567	1 055	12 243	44 254	28 755	72 791	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MCLENNAN COUNTY, TX—Con.													
	Manufacturing—Con.													
325	Chemical mfg	-	3	2	f	D	D	D	D	D	D	D	D	
3254	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	2	1	f	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	-	2	1	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	-	14	12		1 074	34 935	934	1 863	28 170	108 339	111 037	220 678	3 011
332	Fabricated metal product mfg	1	45	12		1 406	46 607	975	2 061	29 027	118 789	125 704	245 193	6 588
3323	Architectural & structural metals mfg	2	15	7		647	18 090	456	991	10 785	41 866	70 846	112 883	2 631
333	Machinery mfg	-	18	8		1 194	36 124	766	1 514	17 464	89 205	116 130	202 211	1 414
3339	Other general-purpose machinery mfg	1	8	3	f	D	D	D	D	D	D	D	D	440
33392	Material handling equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg	-	3	2	f	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	14	7		2 284	87 031	1 070	2 221	35 355	341 046	225 585	566 011	5 508
3364	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	21	8		558	13 294	461	1 041	8 160	29 153	37 165	67 177	468
	MATAGORDA COUNTY, TX													
31-33	Manufacturing	-	29	5	f	D	D	D	D	D	D	D	D	19 564
325	Chemical mfg	-	5	4	f	D	D	D	D	D	D	D	D	18 729
	MAVERICK COUNTY, TX													
31-33	Manufacturing	1	19	7		1 091	13 218	1 001	1 504	10 499	20 276	57 054	77 997	1 056
315	Apparel mfg	1	5	4		774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
3152	Cut & sew apparel mfg	1	5	4		774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
31522	Men's & boys' cut & sew apparel mfg	1	5	4		774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
315225	Men's & boys' cut & sew work clothing mfg	-	3	3	f	D	D	D	D	D	D	D	D	D
	MEDINA COUNTY, TX													
31-33	Manufacturing	1	23	4		556	13 795	418	786	9 903	33 172	17 716	50 479	1 419
	MIDLAND COUNTY, TX													
31-33	Manufacturing	3	135	31		2 435	76 509	1 558	2 973	35 603	168 342	158 899	326 069	8 526
	MILAM COUNTY, TX													
31-33	Manufacturing	-	9	5		1 559	65 332	1 251	2 523	44 456	129 771	322 847	456 000	14 359
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	g	D	D	D	D	D	D	D	D	D
	MONTAGUE COUNTY, TX													
31-33	Manufacturing	1	21	6		505	8 919	374	691	5 373	22 193	22 329	44 109	676

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONTGOMERY COUNTY, TX													
31-33	Manufacturing	1	285	74	6 706	219 132	4 837	9 492	134 781	722 502	819 988	1 540 850	58 258
325	Chemical mfg	1	22	8	f	D	D	D	D	D	D	D	21 097
326	Plastics & rubber products mfg	-	22	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	88	9	1 014	34 536	760	1 491	22 547	100 487	144 115	248 293	4 553
333	Machinery mfg	-	38	14	1 297	52 483	976	1 813	39 726	231 868	119 484	347 802	15 277
3331	Agriculture, construction, & mining machinery mfg.	-	11	5	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	10	5	852	39 019	668	1 317	31 102	198 879	103 406	299 364	13 947
333132	Oil & gas field machinery & equipment mfg	-	10	5	852	39 019	668	1 317	31 102	198 879	103 406	299 364	13 947
334	Computer & electronic product mfg	8	14	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	23	8	f	D	D	D	D	D	D	D	2 306
MOORE COUNTY, TX													
31-33	Manufacturing	-	19	4	2 865	72 546	2 411	5 416	56 068	534 026	2 084 046	2 663 212	11 502
311	Food mfg	-	3	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
MORRIS COUNTY, TX													
31-33	Manufacturing	-	16	9	2 224	95 668	1 601	3 753	65 549	247 444	421 754	688 008	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
NACOGDOCHES COUNTY, TX													
31-33	Manufacturing	1	60	25	3 475	99 326	2 817	5 743	72 889	265 876	498 542	771 336	19 636
311	Food mfg	-	7	5	712	23 787	543	1 339	18 093	48 541	227 499	279 893	D
321	Wood product mfg	5	17	8	615	15 410	519	1 019	11 604	49 612	63 621	110 699	5 022
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
NAVARRO COUNTY, TX													
31-33	Manufacturing	-	49	20	2 191	58 468	1 628	3 365	38 845	183 920	149 072	336 031	7 841
NEWTON COUNTY, TX													
31-33	Manufacturing	-	10	3	620	15 784	525	1 293	13 197	34 110	102 295	133 209	D
321	Wood product mfg	-	7	3	616	15 722	522	1 290	13 160	33 912	102 136	132 851	D
NOLAN COUNTY, TX													
31-33	Manufacturing	-	17	9	1 043	27 726	758	1 520	18 425	125 882	74 348	176 728	11 949

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
NUECES COUNTY, TX													
31-33	Manufacturing	5	223	61	8 925	373 770	5 951	11 856	226 118	2 452 515	7 391 668	9 988 536	D
311	Food mfg	-	20	7	g	D	D	D	D	D	D	D	2 740
3116	Meat product mfg	-	4	3	f	D	D	D	D	D	D	D	1 566
31161	Animal slaughtering & processing	-	4	3	f	D	D	D	D	D	D	D	1 566
311611	Animal (except poultry) slaughtering	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	6	10	7	2 793	162 688	1 786	2 983	105 700	1 612 124	6 118 074	7 893 936	228 224
3241	Petroleum & coal products mfg	6	10	7	2 793	162 688	1 786	2 983	105 700	1 612 124	6 118 074	7 893 936	228 224
32411	Petroleum refineries	6	6	5	2 673	159 410	1 727	2 844	104 291	1 593 121	6 080 697	7 836 189	D
324110	Petroleum refineries ..	6	6	5	2 673	159 410	1 727	2 844	104 291	1 593 121	6 080 697	7 836 189	D
325	Chemical mfg	-	10	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	7	4	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	44	11	g	D	D	D	D	D	D	D	3 198
333	Machinery mfg	4	17	6	f	D	D	D	D	D	D	D	D
ORANGE COUNTY, TX													
31-33	Manufacturing	-	82	25	6 137	302 352	4 477	9 770	203 704	1 190 205	1 702 292	2 893 350	146 263
322	Paper mfg	1	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	1	2	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	12	10	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	6	6	3 012	175 059	1 988	4 337	111 680	888 947	1 068 596	1 948 561	D
32521	Resin & synthetic rubber mfg	-	6	6	3 012	175 059	1 988	4 337	111 680	888 947	1 068 596	1 948 561	D
325211	Plastics material & resin mfg	-	4	4	g	D	D	D	D	D	D	D	85 876
325212	Synthetic rubber mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	3	f	D	D	D	D	D	D	D	D
PALO PINTO COUNTY, TX													
31-33	Manufacturing	1	37	14	1 183	32 570	803	1 350	14 828	76 407	60 655	134 237	13 472
PANOLA COUNTY, TX													
31-33	Manufacturing	-	12	2	1 092	19 694	961	1 872	15 676	98 762	27 653	125 031	8 159
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
PARKER COUNTY, TX													
31-33	Manufacturing	2	101	29	2 538	63 465	1 940	3 615	39 760	164 016	147 600	310 761	10 118
326	Plastics & rubber products mfg	1	5	4	752	17 953	643	1 272	13 441	48 831	53 488	103 298	D
PARMER COUNTY, TX													
31-33	Manufacturing	-	6	3	g	D	D	D	D	D	D	D	D
311	Food mfg	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POLK COUNTY, TX													
31-33	Manufacturing	-	25	8	1 693	54 627	1 498	3 198	44 987	101 876	195 416	295 775	8 264
321	Wood product mfg	-	11	6	1 573	51 589	1 395	3 068	43 310	95 543	189 505	283 448	7 674
3212	Veneer, plywood, & engineered wood product mfg	-	3	3	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	-	3	3	g	D	D	D	D	D	D	D	D
321212	Softwood veneer & plywood mfg	-	2	2	g	D	D	D	D	D	D	D	D
POTTER COUNTY, TX													
31-33	Manufacturing	-	145	39	i	D	D	D	D	D	D	D	D
311	Food mfg	-	14	5	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	9	4	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	5	h	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	h	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	h	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	2	2	h	D	D	D	D	D	D	D	D
RANDALL COUNTY, TX													
31-33	Manufacturing	-	58	14	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	-	1	1	f	D	D	D	D	D	D	D	D
RED RIVER COUNTY, TX													
31-33	Manufacturing	-	18	8	1 171	24 367	1 048	1 995	16 458	59 719	67 723	127 031	1 227
332	Fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	2	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	2	f	D	D	D	D	D	D	D	D
REEVES COUNTY, TX													
31-33	Manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
ROCKWALL COUNTY, TX													
31-33	Manufacturing	3	56	11	927	24 003	686	1 244	14 767	59 089	56 212	114 781	5 345

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RUNNELS COUNTY, TX													
31-33	Manufacturing	-	15	8	1 453	28 089	979	1 994	13 936	81 154	89 891	151 144	2 867
332	Fabricated metal product mfg	-	4	3	861	18 289	550	1 098	7 763	47 473	46 503	90 494	1 868
3323	Architectural & structural metals mfg	-	2	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	2	2	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	-	1	1	f	D	D	D	D	D	D	D	D
RUSK COUNTY, TX													
31-33	Manufacturing	1	51	16	1 302	29 353	1 006	2 084	20 685	85 810	85 466	170 306	3 898
SAN PATRICIO COUNTY, TX													
31-33	Manufacturing	-	45	12	2 510	103 177	1 896	4 099	70 984	459 511	781 929	1 235 300	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331311	Alumina refining	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	3	f	D	D	D	D	D	D	D	307
3323	Architectural & structural metals mfg	-	5	3	f	D	D	D	D	D	D	D	240
33231	Plate work & fabricated structural product mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	3	2	f	D	D	D	D	D	D	D	D
SHELBY COUNTY, TX													
31-33	Manufacturing	-	29	10	1 989	39 316	1 419	3 361	31 506	199 299	109 048	303 229	2 801
311	Food mfg	-	5	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	10	3	504	12 949	453	901	9 943	25 395	39 634	59 241	1 312
SMITH COUNTY, TX													
31-33	Manufacturing	-	213	66	10 969	381 088	8 450	17 061	262 592	1 112 957	1 180 233	2 299 149	49 581
311	Food mfg	2	12	6	645	17 940	441	987	9 411	69 437	85 924	155 432	2 741
326	Plastics & rubber products mfg	-	16	11	2 105	95 608	1 712	3 600	75 351	219 608	181 540	402 016	6 428
3262	Rubber product mfg	-	5	5	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	43	14	873	22 726	596	1 008	12 426	61 660	49 338	110 626	2 799
333	Machinery mfg	-	18	9	4 008	141 266	3 009	6 172	91 504	448 588	406 034	859 012	17 140
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	4	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	4	4	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	4	4	h	D	D	D	D	D	D	D	D
STEPHENS COUNTY, TX													
31-33	Manufacturing	-	18	5	562	12 985	479	924	8 785	57 797	36 335	94 252	627

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	TARRANT COUNTY, TX												
31-33	Manufacturing	1	2 009	673	95 970	3 583 248	60 428	123 854	1 701 453	9 393 761	9 157 886	18 621 591	616 866
311	Food mfg	-	91	34	5 095	141 614	3 618	7 550	79 710	654 788	1 083 934	1 736 977	D
3115	Dairy product mfg	-	4	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	4	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	7	4	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	7	4	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	45	5	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	40	3	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	1	9	3	f	D	D	D	D	D	D	D	1 066
3119	Other food mfg	-	12	8	g	D	D	D	D	D	D	D	D
31199	All other food mfg	-	4	3	817	15 172	618	1 294	8 262	39 857	38 765	78 930	2 256
311991	Perishable prepared food mfg	-	3	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	5	3	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	39	10	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	78	12	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	8	62	9	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	9	50	7	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	9	50	7	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	16	3	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	16	3	g	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	14	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	50	18	h	D	D	D	D	D	D	D	5 572
3219	Other wood product mfg ...	2	44	16	h	D	D	D	D	D	D	D	5 457
32191	Millwork	-	17	5	f	D	D	D	D	D	D	D	D
32199	All other wood product mfg	4	17	7	1 728	39 283	1 516	2 847	28 803	79 459	139 321	218 839	D
321991	Manufactured home (mobile home) mfg ..	4	5	5	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	44	29	h	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	44	29	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	32	24	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	18	15	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	248	60	5 381	155 020	4 026	8 034	99 280	337 530	210 505	544 203	24 933
3231	Printing & related support activities	1	248	60	5 381	155 020	4 026	8 034	99 280	337 530	210 505	544 203	24 933
32311	Printing	1	221	52	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	110	25	g	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	13	9	612	19 289	460	829	11 872	72 212	31 036	100 866	1 863
32312	Support activities for printing	2	27	8	f	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	1	8	5	f	D	D	D	D	D	D	D	D
325	Chemical mfg	2	110	37	5 223	259 054	2 391	4 677	68 284	952 809	546 369	1 507 394	46 205
3254	Pharmaceutical & medicine mfg	1	13	4	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	13	4	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	7	3	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	2	17	7	516	15 444	307	517	9 155	51 819	77 676	131 758	D
3259	Other chemical product mfg	2	47	18	g	D	D	D	D	D	D	D	9 605
32599	All other chemical product & preparation mfg	2	36	13	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TARRANT COUNTY, TX —Con.												
31-33	Manufacturing— Con.												
326	Plastics & rubber products mfg.....	2	114	64	5 903	160 045	4 104	8 356	92 817	382 973	411 094	793 609	44 161
3261	Plastics product mfg.....	2	91	57	i	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	2	59	34	3 661	83 299	2 616	5 200	55 591	202 700	182 830	385 060	27 109
326199	All other plastics product mfg.....	2	54	31	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	—	23	7	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	—	19	7	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	—	12	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	3	76	30	1 997	54 016	1 506	3 203	37 146	148 113	172 846	319 437	12 919
3273	Cement & concrete product mfg.....	3	44	19	g	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.....	3	27	11	678	22 179	532	1 271	16 094	63 524	88 352	152 452	6 956
327320	Ready-mix concrete mfg.....	3	27	11	678	22 179	532	1 271	16 094	63 524	88 352	152 452	6 956
331	Primary metal mfg.....	—	23	12	1 150	34 068	940	1 892	24 853	60 838	53 394	114 776	4 347
3315	Foundries.....	—	17	10	989	29 612	806	1 567	21 524	49 606	28 977	78 380	3 543
33151	Ferrous metal foundries.....	—	5	3	689	21 659	567	1 125	16 152	33 019	20 470	53 034	D
331513	Steel foundries (except investment).....	—	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	399	128	8 665	263 920	6 606	13 303	166 107	583 966	626 896	1 213 653	33 394
3321	Forging & stamping.....	—	18	16	f	D	D	D	D	D	D	D	D
33211	Forging & stamping.....	—	18	16	f	D	D	D	D	D	D	D	D
332116	Metal stamping.....	1	13	12	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	—	91	33	2 277	67 406	1 722	3 686	42 044	178 807	174 737	352 443	D
33231	Plate work & fabricated structural product mfg..	1	37	14	903	25 388	680	1 521	16 666	58 158	70 394	128 305	D
33232	Ornamental & architectural metal products mfg.....	—	54	19	1 374	42 018	1 042	2 165	25 378	120 649	104 343	224 138	5 824
332322	Sheet metal work mfg.....	—	31	14	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	162	32	g	D	D	D	D	D	D	D	D
33271	Machine shops.....	1	137	20	1 695	53 856	1 297	2 362	33 851	110 694	90 175	196 438	6 117
332710	Machine shops.....	1	137	20	1 695	53 856	1 297	2 362	33 851	110 694	90 175	196 438	6 117
33272	Turned product & screw, nut, & bolt mfg.....	4	25	12	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities.....	—	41	12	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities.....	—	41	12	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	—	49	20	1 403	45 217	1 026	2 127	24 916	89 415	116 464	200 617	4 971
33291	Metal valve mfg.....	1	9	7	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	40	13	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	—	25	7	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	183	74	8 620	282 416	5 489	11 099	136 529	712 450	707 370	1 427 013	40 707
3331	Agriculture, construction, & mining machinery mfg....	—	23	10	g	D	D	D	D	D	D	D	10 704
33313	Mining & oil & gas field machinery mfg.....	—	15	7	1 480	56 432	1 210	2 124	32 689	128 962	232 284	355 174	D
333132	Oil & gas field machinery & equipment mfg.....	—	13	7	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg..	2	35	10	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	1	26	8	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg..	—	18	7	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	18	7	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg.....	—	2	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	TARRANT COUNTY, TX —Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	28	13	1 700	50 689	1 208	2 482	28 016	84 853	142 980	228 123	8 154
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	1	28	13	1 700	50 689	1 208	2 482	28 016	84 853	142 980	228 123	8 154
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	1	19	12	1 428	42 007	1 045	2 075	24 255	66 935	132 001	199 250	D
3336	Engine, turbine, & power transmission equipment mfg	—	6	5	926	25 722	746	1 821	15 902	50 196	44 227	95 215	2 977
33361	Engine, turbine, & power transmission equipment mfg	—	6	5	926	25 722	746	1 821	15 902	50 196	44 227	95 215	2 977
333613	Mechanical power transmission equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	41	21	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	21	11	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	10	4	500	12 972	353	808	7 187	14 912	39 645	52 088	D
33399	All other general-purpose machinery mfg	1	17	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	81	29	i	D	D	D	D	D	D	D	82 477
3341	Computer & peripheral equipment mfg	—	10	4	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	10	4	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	2	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	4	10	5	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	2	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	4	3	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	4	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	29	11	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	29	11	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	3	1	g	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	29	9	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	29	9	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	9	5	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	27	9	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	11	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	11	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	1	12	5	1 128	26 382	701	1 388	12 829	52 927	36 695	86 339	D
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TARRANT COUNTY, TX —Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	120	53	k	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	23	11	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	2	23	11	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	49	22	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	1	15	8	g	D	D	D	D	D	D	D	4 445
336391	Motor vehicle air-conditioning mfg	-	7	5	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	32	14	j	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	32	14	j	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	8	3	j	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	8	6	5	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	17	6	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	6	5	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	6	5	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	6	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	122	38	h	D	D	D	D	D	D	D	6 212
3371	Household & institutional furniture & kitchen cabinet mfg	2	75	17	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	3	51	9	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	3	51	9	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	2	24	8	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	2	37	16	g	D	D	D	D	D	D	D	3 598
33721	Office furniture (including fixtures) mfg	2	37	16	g	D	D	D	D	D	D	D	3 598
337215	Showcase, partition, shelving, & locker mfg	4	15	7	f	D	D	D	D	D	D	D	2 164
339	Miscellaneous mfg	3	172	27	2 629	72 375	1 883	3 625	39 145	184 002	167 763	356 986	8 762
3391	Medical equipment & supplies mfg	5	59	9	857	29 620	587	1 134	14 994	66 784	36 975	107 007	D
33911	Medical equipment & supplies mfg	5	59	9	857	29 620	587	1 134	14 994	66 784	36 975	107 007	D
3399	Other miscellaneous mfg ..	2	113	18	1 772	42 755	1 296	2 491	24 151	117 218	130 788	249 979	D
33999	All other miscellaneous mfg	1	34	5	f	D	D	D	D	D	D	D	D
TAYLOR COUNTY, TX													
31-33	Manufacturing	-	118	28	3 062	79 897	2 121	3 922	44 560	531 226	472 693	1 010 679	21 553
332	Fabricated metal product mfg	-	23	5	789	20 967	636	1 317	15 290	67 932	97 449	160 976	4 888
TITUS COUNTY, TX													
31-33	Manufacturing	-	42	19	4 792	102 362	4 411	10 050	89 818	188 752	658 638	845 315	6 326
311	Food mfg	-	8	7	h	D	D	D	D	D	D	D	3 402
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	h	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
TOM GREEN COUNTY, TX													
31-33	Manufacturing	2	100	28	4 452	105 090	3 579	7 162	74 707	367 257	463 431	827 641	10 494
311	Food mfg.....	6	17	7	836	16 326	704	1 518	11 796	46 021	164 035	212 576	3 371
3116	Meat product mfg.....	6	7	4	695	13 321	614	1 075	10 272	34 919	149 022	186 578	1 797
31161	Animal slaughtering & processing.....	6	7	4	695	13 321	614	1 075	10 272	34 919	149 022	186 578	1 797
311611	Animal (except poultry) slaughtering.....	7	5	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	—	6	5	638	12 189	596	1 142	11 299	40 695	27 754	68 317	591
3152	Cut & sew apparel mfg....	—	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	13	3	536	13 932	395	840	11 896	24 990	113 550	137 131	795
339	Miscellaneous mfg.....	—	14	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	—	5	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	5	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
TRAVIS COUNTY, TX													
31-33	Manufacturing	—	774	203	52 353	1 986 211	26 364	56 581	764 679	11 400 690	3 290 601	14 692 900	1 202 129
311	Food mfg.....	7	55	13	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	25	8	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg...	1	20	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	5	153	32	h	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	5	153	32	h	D	D	D	D	D	D	D	D
32311	Printing.....	6	132	29	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	5	60	17	g	D	D	D	D	D	D	D	D
323117	Book printing.....	9	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	22	8	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg.....	—	8	5	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	8	5	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	25	10	561	14 565	340	716	8 285	37 562	37 280	74 422	D
3261	Plastics product mfg.....	1	23	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	44	11	853	26 098	686	1 516	19 682	82 811	73 990	156 929	3 980
332	Fabricated metal product mfg.....	3	87	14	912	27 696	716	1 376	18 124	65 620	38 634	103 739	3 714
333	Machinery mfg.....	—	41	12	h	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	17	7	h	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	—	17	7	h	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg.....	—	7	3	h	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg.....	—	8	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	101	54	k	D	D	D	D	D	D	D	1 059 135
3341	Computer & peripheral equipment mfg.....	1	19	9	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	1	19	9	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	—	8	3	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	13	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	TRAVIS COUNTY, TX—Con.													
	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3344	Semiconductor & other electronic component mfg	-	32	23	k	D	D	D	D	D	D	D	1 021 682	
33441	Semiconductor & other electronic component mfg	-	32	23	k	D	D	D	D	D	D	D	1 021 682	
334413	Semiconductor & related device mfg ...	-	16	12	j	D	D	D	D	D	D	D	921 904	
334418	Printed circuit assembly (electronic assembly) mfg	-	8	7	j	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	-	26	15	g	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	-	26	15	g	D	D	D	D	D	D	D	D	
3346	Mfg & reproducing magnetic & optical media .	-	7	1	h	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	-	7	1	h	D	D	D	D	D	D	D	D	
334611	Software reproducing .	-	3	1	h	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	27	13	g	D	D	D	D	D	D	D	7 678	
3351	Electric lighting equipment mfg	-	8	5	f	D	D	D	D	D	D	D	D	
33512	Lighting fixture mfg	-	7	4	f	D	D	D	D	D	D	D	D	
335129	Other lighting equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	3	13	7	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	14	2	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	2	38	8		1 082	21 292	856	1 421	14 741	46 270	47 985	94 373	3 031
3371	Household & institutional furniture & kitchen cabinet mfg	2	27	4	f	D	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	1	17	2	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	85	10	g	D	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	37	5	g	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	37	5	g	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	6	3	f	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	3	48	5	g	D	D	D	D	D	D	D	D	D
33991	Jewelry & silverware mfg	-	6	1	g	D	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	5	1	g	D	D	D	D	D	D	D	D	D
	TYLER COUNTY, TX													
31-33	Manufacturing	1	13	3		565	8 894	372	715	6 384	18 815	23 029	42 122	1 144
	UPSHUR COUNTY, TX													
31-33	Manufacturing	1	31	7		603	13 194	383	594	7 194	25 312	54 102	81 124	2 542
	UVALDE COUNTY, TX													
31-33	Manufacturing	5	17	4		710	9 410	611	1 049	6 728	29 674	19 850	50 735	1 691
	VAL VERDE COUNTY, TX													
31-33	Manufacturing	-	24	7		522	10 181	314	347	3 800	37 339	88 211	125 414	2 631
	VAN ZANDT COUNTY, TX													
31-33	Manufacturing	2	38	5		622	16 184	490	918	11 578	38 412	29 577	68 178	4 359

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VICTORIA COUNTY, TX													
31-33	Manufacturing	-	71	17	3 064	119 483	2 265	4 815	82 409	592 547	657 109	1 245 290	97 903
325	Chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
WALKER COUNTY, TX													
31-33	Manufacturing	2	38	11	677	14 732	557	1 143	10 065	40 513	46 505	90 759	2 244
WALLER COUNTY, TX													
31-33	Manufacturing	1	43	16	1 283	43 323	836	1 538	22 614	127 899	118 058	245 598	6 214
332	Fabricated metal product mfg	-	14	6	580	21 537	345	644	11 347	57 057	41 438	98 149	D
WASHINGTON COUNTY, TX													
31-33	Manufacturing	-	41	24	2 982	81 942	2 277	4 971	56 243	280 574	256 285	529 233	19 408
311	Food mfg	-	7	3	f	D	D	D	D	D	D	D	1 926
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	5	785	21 408	586	1 244	15 187	56 126	41 984	96 669	5 816
WEBB COUNTY, TX													
31-33	Manufacturing	1	87	15	1 402	28 081	969	1 530	15 533	136 779	120 963	258 590	18 501
WHARTON COUNTY, TX													
31-33	Manufacturing	-	46	15	2 152	51 894	1 874	3 956	39 182	160 238	211 747	372 345	7 431
326	Plastics & rubber products mfg	-	5	5	722	18 825	635	1 347	13 512	101 927	102 101	202 553	2 423
3261	Plastics product mfg	-	5	5	722	18 825	635	1 347	13 512	101 927	102 101	202 553	2 423
WICHITA COUNTY, TX													
31-33	Manufacturing	-	153	43	7 927	254 890	6 263	12 579	183 336	769 755	665 468	1 435 865	D
326	Plastics & rubber products mfg	-	5	4	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	8	5	1 570	68 528	1 171	2 686	50 472	226 680	129 931	361 024	D
3272	Glass & glass product mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	3	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	37	14	1 466	40 287	1 183	2 532	28 574	91 999	88 593	179 294	3 645
333	Machinery mfg	2	23	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WILBARGER COUNTY, TX													
31-33	Manufacturing	—	9	3	681	19 792	552	1 496	14 881	99 949	142 695	236 709	1 150
311	Food mfg	—	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	—	2	1	f	D	D	D	D	D	D	D	D
WILLIAMSON COUNTY, TX													
31-33	Manufacturing	—	240	78	11 727	418 781	7 137	12 947	164 578	3 673 764	5 964 929	9 637 436	88 878
326	Plastics & rubber products mfg	—	13	9	803	23 387	653	1 353	12 017	60 052	28 070	87 476	4 878
3261	Plastics product mfg	—	13	9	803	23 387	653	1 353	12 017	60 052	28 070	87 476	4 878
32619	Other plastics product mfg	—	11	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	25	9	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	47	15	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	16	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	38	22	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	9	6	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	9	6	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	3	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	6	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	4	4	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	3	14	9	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	3	14	9	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	11	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	11	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	20	5	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	8	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	8	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	12	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	7	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	9	6	2	f	D	D	D	D	D	D	D	D
WISE COUNTY, TX													
31-33	Manufacturing	2	54	16	1 340	37 792	1 004	1 933	25 431	106 992	76 943	180 316	8 163
WOOD COUNTY, TX													
31-33	Manufacturing	1	45	7	649	13 474	562	1 000	9 860	37 254	106 107	143 388	1 660
YOUNG COUNTY, TX													
31-33	Manufacturing	—	28	10	1 043	28 332	787	1 760	14 917	142 390	104 810	248 397	8 369

Table 3. Industry Statistics for Counties: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ABILENE, TX *													
31-33	Manufacturing	-	106	25	2 798	73 951	1 900	3 567	40 174	519 341	452 194	977 493	20 884
332	Fabricated metal product mfg	-	21	5	f	D	D	D	D	D	D	D	D
ADDISON, TX													
31-33	Manufacturing	6	43	12	612	21 207	384	753	10 991	48 687	36 201	85 050	3 395
ALLEN, TX													
31-33	Manufacturing	2	16	5	509	19 094	371	774	11 527	57 494	25 592	81 346	D
ALVIN, TX													
31-33	Manufacturing	-	23	7	g	D	D	D	D	D	D	D	25 446
325	Chemical mfg	-	4	3	f	D	D	D	D	D	D	D	16 085
3251	Basic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
AMARILLO, TX *													
31-33	Manufacturing	-	176	44	i	D	D	D	D	D	D	D	D
311	Food mfg	-	18	6	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	12	6	951	32 629	829	1 644	27 638	167 944	54 652	228 070	5 585
3272	Glass & glass product mfg .	-	3	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	1	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	5	h	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	2	2	h	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	2	h	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	-	2	2	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARLINGTON, TX													
31-33	Manufacturing	—	323	102	13 408	481 586	9 335	19 166	294 924	1 374 814	1 515 204	2 909 808	171 651
323	Printing & related support activities.....	—	47	14	874	23 009	613	1 132	14 311	71 700	38 725	108 726	3 496
3231	Printing & related support activities.....	—	47	14	874	23 009	613	1 132	14 311	71 700	38 725	108 726	3 496
32311	Printing	—	43	14	837	21 847	582	1 086	13 477	69 641	37 886	105 831	D
326	Plastics & rubber products mfg.....	—	17	13	2 024	58 066	1 152	2 169	25 511	153 194	130 828	281 160	21 061
3261	Plastics product mfg.....	—	12	10	1 591	33 793	1 052	1 964	22 206	110 739	120 048	230 268	15 681
32619	Other plastics product mfg.....	—	8	6	1 352	28 234	877	1 610	18 959	89 640	75 869	165 391	13 950
326199	All other plastics product mfg.....	—	8	6	1 352	28 234	877	1 610	18 959	89 640	75 869	165 391	13 950
332	Fabricated metal product mfg.....	2	61	22	1 417	43 796	1 042	2 159	26 603	103 195	88 334	191 878	4 010
333	Machinery mfg.....	—	19	10	2 260	82 028	919	2 130	22 852	270 308	176 014	465 035	11 768
3333	Commercial & service industry machinery mfg ..	—	3	3	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	11	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	—	5	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	—	5	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg...	—	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	17	6	h	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
ATHENS, TX													
31-33	Manufacturing	—	27	8	1 504	29 687	1 210	2 314	20 306	109 677	67 191	176 809	2 587
339	Miscellaneous mfg.....	—	5	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
AUSTIN, TX *													
31-33	Manufacturing	—	596	165	46 780	1 892 118	21 199	46 075	677 120	10 541 882	2 598 696	13 235 101	1 139 000
311	Food mfg.....	7	50	12	g	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	12	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	5	138	27	2 469	70 242	1 749	3 032	42 127	143 504	96 120	240 666	15 152
3231	Printing & related support activities.....	5	138	27	2 469	70 242	1 749	3 032	42 127	143 504	96 120	240 666	15 152
32311	Printing	6	119	25	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	5	55	14	1 121	34 557	841	1 483	21 082	74 948	37 626	112 311	8 790
323117	Book printing.....	9	3	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	19	6	1 725	71 112	1 255	2 762	50 112	167 471	108 701	275 567	17 451
3254	Pharmaceutical & medicine mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	6	3	g	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	33	9	692	21 191	566	1 305	16 629	65 839	54 352	120 434	D
332	Fabricated metal product mfg.....	2	46	9	533	15 817	413	767	10 425	43 291	22 790	65 892	2 194

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	AUSTIN, TX *—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	26	6	1 167	47 335	571	1 113	16 126	95 364	122 012	230 471	10 476
3332	Industrial machinery mfg ..	-	10	4	1 014	42 679	465	955	13 373	86 523	114 974	214 706	9 638
33329	Other industrial machinery mfg	-	10	4	1 014	42 679	465	955	13 373	86 523	114 974	214 706	9 638
333298	All other industrial machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	87	48	k	D	D	D	D	D	D	D	1 057 026
3341	Computer & peripheral equipment mfg	-	18	10	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	18	10	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	7	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	31	23	26 340	1 228 381	9 721	23 017	330 149	8 889 293	1 289 638	10 258 177	1 022 329
33441	Semiconductor & other electronic component mfg	-	31	23	26 340	1 228 381	9 721	23 017	330 149	8 889 293	1 289 638	10 258 177	1 022 329
334413	Semiconductor & related device mfg ...	-	15	12	15 479	634 533	6 121	17 193	195 966	6 747 089	555 472	7 224 336	921 808
334418	Printed circuit assembly (electronic assembly) mfg	-	8	7	j	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	19	9	635	24 639	293	661	8 791	84 375	50 724	136 444	D
33451	Navigational, measuring, medical, & control instruments mfg	-	19	9	635	24 639	293	661	8 791	84 375	50 724	136 444	D
3346	Mfg & reproducing magnetic & optical media .	-	6	1	h	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	-	6	1	h	D	D	D	D	D	D	D	D
334611	Software reproducing .	-	3	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	20	9	1 143	45 507	685	1 367	16 803	111 916	79 496	191 614	3 553
3351	Electric lighting equipment mfg	-	7	4	f	D	D	D	D	D	D	D	2 269
33512	Lighting fixture mfg	-	6	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	27	6	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	17	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	68	10	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	31	6	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	31	6	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	7	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	37	4	1 334	33 063	874	1 816	21 871	66 879	61 456	127 157	2 516
33991	Jewelry & silverware mfg	-	6	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	5	1	g	D	D	D	D	D	D	D	D
	BALCH SPRINGS, TX												
31-33	Manufacturing	5	25	8	527	10 309	423	780	6 899	19 222	16 498	35 699	1 310
	BALLINGER, TX												
31-33	Manufacturing	-	8	4	679	13 616	350	701	5 214	35 193	53 045	83 618	1 531

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BAYTOWN, TX *													
31-33	Manufacturing	-	44	20	h	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	3	2	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	2	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	13	8	1 428	90 236	762	2 040	42 539	651 448	1 155 351	1 754 615	D
3251	Basic chemical mfg	-	9	7	g	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
BEAUMONT, TX													
31-33	Manufacturing	-	131	40	5 882	250 922	4 083	8 687	158 116	1 210 461	3 808 903	5 041 494	151 592
324	Petroleum & coal products mfg	-	2	2	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	2	2	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	10	8	1 391	75 801	901	1 903	45 057	537 004	590 527	1 126 962	75 050
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	31	11	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
BEDFORD, TX													
31-33	Manufacturing	-	24	3	f	D	D	D	D	D	D	D	9 294
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
BELTON, TX													
31-33	Manufacturing	1	26	9	1 054	25 246	779	1 399	14 819	66 302	60 588	125 413	15 770
BIG SPRING, TX													
31-33	Manufacturing	-	22	10	f	D	D	D	D	D	D	D	2 086
BISHOP, TX													
31-33	Manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
BONHAM, TX													
31-33	Manufacturing	-	15	7	1 056	26 303	928	1 763	19 134	100 972	123 495	224 456	5 008
BRECKENRIDGE, TX													
31-33	Manufacturing	-	17	5	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRENHAM, TX													
31-33	Manufacturing	-	36	21	2 876	79 740	2 196	4 811	55 055	269 778	251 842	513 978	18 727
311	Food mfg	-	6	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	4	f	D	D	D	D	D	D	D	D
BROWNSVILLE, TX													
31-33	Manufacturing	-	110	29	6 511	123 612	5 235	8 470	80 527	443 267	515 376	963 280	19 805
311	Food mfg	-	20	2	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	-	4	2	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	4	2	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing	-	4	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	10	6	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	9	6	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	3	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	5	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	2	2	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	5	1 298	36 446	808	1 470	16 775	148 237	174 968	323 962	8 408
3363	Motor vehicle parts mfg	-	5	3	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
BROWNWOOD, TX													
31-33	Manufacturing	-	28	10	2 745	91 092	2 185	4 845	68 620	476 667	297 880	781 042	28 392
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	2	g	D	D	D	D	D	D	D	752
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRYAN, TX													
31-33	Manufacturing	-	73	18	2 527	63 360	1 863	3 997	37 914	134 588	174 671	309 332	D
332	Fabricated metal product mfg	-	15	2	g	D	D	D	D	D	D	D	1 920
3323	Architectural & structural metals mfg	-	6	1	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	5	1	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	2	1	g	D	D	D	D	D	D	D	D
BURLESON, TX *													
31-33	Manufacturing	1	44	10	1 091	35 118	824	1 707	20 808	79 528	93 513	172 262	6 421
321	Wood product mfg	-	5	5	618	18 974	478	1 017	10 833	45 008	58 387	103 184	D
3219	Other wood product mfg ...	-	5	5	618	18 974	478	1 017	10 833	45 008	58 387	103 184	D
32199	All other wood product mfg	-	3	3	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg ..	-	3	3	f	D	D	D	D	D	D	D	D
CARROLLTON, TX *													
31-33	Manufacturing	1	227	106	13 714	532 527	9 569	21 326	256 549	1 362 395	1 151 241	2 501 999	D
323	Printing & related support activities.....	2	43	12	823	28 445	623	1 212	18 170	64 099	33 364	98 199	2 997
3231	Printing & related support activities.....	2	43	12	823	28 445	623	1 212	18 170	64 099	33 364	98 199	2 997
32311	Printing	2	39	11	788	27 337	594	1 143	17 488	62 409	33 009	96 152	2 925
323110	Commercial lithographic printing ..	1	17	7	583	19 807	439	865	12 666	33 656	20 486	54 307	2 434
325	Chemical mfg	-	10	7	651	21 826	431	863	10 817	175 969	115 178	293 408	5 851
326	Plastics & rubber products mfg	-	8	5	882	39 507	678	1 521	20 052	63 217	115 218	176 692	3 218
3261	Plastics product mfg	-	7	4	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	29	14	1 831	45 900	1 573	3 511	30 649	123 575	98 271	220 634	2 192
3323	Architectural & structural metals mfg	-	10	8	1 504	34 203	1 306	2 976	23 481	93 802	72 434	165 880	1 319
33232	Ornamental & architectural metal products mfg	-	9	7	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	3	3	975	23 028	838	1 848	15 169	56 061	48 702	104 530	832
333	Machinery mfg	1	24	13	1 787	80 461	986	1 931	32 987	178 795	137 105	315 211	7 523
3331	Agriculture, construction, & mining machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	2	3	3	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	2	3	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	7	5	506	26 438	202	391	5 852	46 636	26 827	74 922	3 046
334	Computer & electronic product mfg	1	29	18	2 932	179 058	1 701	4 206	63 655	427 612	144 255	565 883	72 613
3344	Semiconductor & other electronic component mfg	1	9	7	1 877	130 774	1 193	3 007	44 227	382 588	80 146	456 973	66 583
33441	Semiconductor & other electronic component mfg	1	9	7	1 877	130 774	1 193	3 007	44 227	382 588	80 146	456 973	66 583
334413	Semiconductor & related device mfg ...	-	3	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	9	8	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	9	8	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CARROLLTON, TX *—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	1	9	5	949	24 704	659	1 496	11 604	28 889	49 855	76 592	3 325
3359	Other electrical equipment & component mfg	2	5	3	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	1	1	f	D	D	D	D	D	D	D	D
335921	Fiber optic cable mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	8	5	741	20 152	545	1 073	11 718	61 441	59 855	121 966	1 446
3371	Household & institutional furniture & kitchen cabinet mfg	3	6	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	3	3	3	f	D	D	D	D	D	D	D	D
31-33	CEDAR PARK, TX *												
	Manufacturing	—	12	5	f	D	D	D	D	D	D	D	D
31-33	CENTER, TX												
	Manufacturing	—	12	6	1 737	34 595	1 206	2 985	27 883	191 331	51 908	238 059	2 261
311	Food mfg	—	2	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	—	1	1	g	D	D	D	D	D	D	D	D
31-33	CLARKSVILLE, TX												
	Manufacturing	—	14	7	g	D	D	D	D	D	D	D	1 159
332	Fabricated metal product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	2	2	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	2	2	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	—	2	2	f	D	D	D	D	D	D	D	D
31-33	CLEBURNE, TX												
	Manufacturing	1	35	13	2 429	59 398	1 869	3 291	40 859	288 797	144 858	426 843	27 669
315	Apparel mfg	2	3	2	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	2	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	2	2	2	f	D	D	D	D	D	D	D	D
31-33	COMMERCE, TX												
	Manufacturing	—	8	4	629	15 919	527	1 115	11 973	65 026	48 511	115 147	D
31-33	CONROE, TX												
	Manufacturing	1	91	33	2 544	86 411	1 772	3 486	49 626	321 502	483 942	806 789	29 233
31-33	CORINTH, TX												
	Manufacturing	—	4	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	1	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)	
	CORPUS CHRISTI, TX *													
31-33	Manufacturing	6	205	55	i	D	D	D	D	D	D	234 948		
311	Food mfg.....	-	18	7	g	D	D	D	D	D	D	D		
3116	Meat product mfg.....	-	4	3	f	D	D	D	D	D	D	1 566		
31161	Animal slaughtering & processing.....	-	4	3	f	D	D	D	D	D	D	1 566		
311611	Animal (except poultry) slaughtering.....	-	1	1	f	D	D	D	D	D	D	D		
324	Petroleum & coal products mfg.....	7	8	5	g	D	D	D	D	D	D	D		
3241	Petroleum & coal products mfg.....	7	8	5	g	D	D	D	D	D	D	D		
32411	Petroleum refineries.....	7	5	4	g	D	D	D	D	D	D	D		
324110	Petroleum refineries..	7	5	4	g	D	D	D	D	D	D	D		
325	Chemical mfg.....	-	9	5	f	D	D	D	D	D	D	17 085		
3251	Basic chemical mfg.....	-	6	3	f	D	D	D	D	D	D	D		
332	Fabricated metal product mfg.....	-	40	10		1 009	29 132	802	1 609	19 607	64 758	55 206	120 266	D
	CORSICANA, TX													
31-33	Manufacturing	-	41	17	g	D	D	D	D	D	D	6 632		
	CROWLEY, TX *													
31-33	Manufacturing	1	16	8	542	18 247	401	888	11 366	62 854	42 132	102 657	3 297	
	DALLAS, TX *													
31-33	Manufacturing	1	1 762	605	77 920	2 884 092	48 530	98 531	1 337 305	9 756 190	6 252 975	15 722 924	1 033 013	
311	Food mfg.....	-	119	54	7 857	223 405	4 849	9 952	108 519	1 782 537	1 244 419	3 028 683	46 878	
3115	Dairy product mfg.....	1	8	5	g	D	D	D	D	D	D	D	D	
31151	Dairy product (except frozen) mfg.....	2	6	3	g	D	D	D	D	D	D	D	D	
311511	Fluid milk mfg.....	2	4	3	g	D	D	D	D	D	D	D	D	
3116	Meat product mfg.....	1	15	10	1 903	45 939	1 592	3 269	31 191	166 786	429 204	595 373	D	
31161	Animal slaughtering & processing.....	1	15	10	1 903	45 939	1 592	3 269	31 191	166 786	429 204	595 373	D	
311612	Meat processed from carcasses.....	2	8	5	f	D	D	D	D	D	D	D	D	
311615	Poultry processing.....	-	3	2	f	D	D	D	D	D	D	D	D	
3118	Bakeries & tortilla mfg.....	-	50	16	2 891	79 224	1 413	2 770	30 801	215 680	170 596	385 829	D	
31181	Bread & bakery product mfg.....	-	41	10	2 135	62 276	821	1 599	19 860	155 103	111 408	266 699	7 165	
311812	Commercial bakeries..	-	19	9	2 001	60 174	742	1 494	18 875	150 686	108 884	259 761	D	
31183	Tortilla mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	
311830	Tortilla mfg.....	-	3	2	f	D	D	D	D	D	D	D	D	
3119	Other food mfg.....	-	30	17	1 292	38 333	1 007	2 100	22 698	1 205 032	195 512	1 402 808	12 883	
31199	All other food mfg.....	2	13	9	f	D	D	D	D	D	D	D	2 403	
312	Beverage & tobacco product mfg.....	1	8	4	g	D	D	D	D	D	D	D	7 305	
3121	Beverage mfg.....	1	8	4	g	D	D	D	D	D	D	D	7 305	
31211	Soft drink & ice mfg.....	1	6	4	g	D	D	D	D	D	D	D	D	
312111	Soft drink mfg.....	1	4	3	f	D	D	D	D	D	D	D	D	
314	Textile product mills.....	-	55	24	2 221	40 941	1 870	3 419	28 348	115 228	124 857	231 233	D	
3141	Textile furnishings mills....	-	34	17	1 634	28 701	1 436	2 497	21 341	86 041	103 298	179 711	1 698	
31412	Curtain & linen mills.....	-	32	17	g	D	D	D	D	D	D	D	D	
314129	Other household textile product mills.....	-	14	11	1 314	21 644	1 185	1 998	17 212	73 575	91 306	155 607	1 425	
3149	Other textile product mills..	1	21	7	587	12 240	434	922	7 007	29 187	21 559	51 522	D	
315	Apparel mfg.....	3	107	35	2 809	58 180	1 711	3 169	30 505	114 162	149 765	263 133	4 299	
3152	Cut & sew apparel mfg....	2	79	26	g	D	D	D	D	D	D	D	D	
31523	Women's & girls' cut & sew apparel mfg.....	2	35	18	1 738	37 160	821	1 459	17 301	73 806	120 261	193 487	2 405	
315233	Women's & girls' cut & sew dress mfg.....	2	11	4	1 056	17 890	393	700	6 481	33 367	61 177	94 696	D	
3159	Apparel accessories & other apparel mfg.....	4	25	9	f	D	D	D	D	D	D	D	1 297	
31599	Apparel accessories & other apparel mfg.....	4	25	9	f	D	D	D	D	D	D	D	1 297	
321	Wood product mfg.....	2	32	14	1 143	27 579	913	1 887	17 339	55 252	62 711	117 210	D	
3219	Other wood product mfg....	1	27	12	856	19 910	692	1 437	12 486	39 436	42 160	81 143	D	
32191	Millwork.....	-	16	9	664	16 518	522	1 089	9 858	32 583	33 361	65 573	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DALLAS, TX *—Con.												
	Manufacturing—Con.												
322	Paper mfg	1	42	26	2 782	93 002	2 184	5 214	69 034	262 278	267 250	530 184	20 389
3222	Converted paper product mfg	1	40	25	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	1	15	11	1 641	52 898	1 346	3 293	42 246	107 745	135 466	243 197	5 999
322211	Corrugated & solid fiber box mfg.	2	10	9	f	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg.	—	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg.	1	8	6	523	16 170	369	802	9 942	35 127	46 487	81 626	6 613
323	Printing & related support activities	2	373	92	8 209	276 252	6 101	11 908	168 028	621 568	335 763	957 776	43 377
3231	Printing & related support activities	2	373	92	8 209	276 252	6 101	11 908	168 028	621 568	335 763	957 776	43 377
32311	Printing	2	321	75	7 005	229 032	5 227	10 236	140 493	537 807	316 832	855 414	37 802
323110	Commercial lithographic printing	2	169	44	4 191	154 067	3 010	5 894	90 505	316 284	224 315	541 724	24 819
323113	Commercial screen printing	2	26	8	576	12 447	423	747	6 848	23 639	21 441	44 758	1 194
323116	Manifold business form printing	—	10	5	1 031	26 175	915	1 903	21 749	125 235	23 486	148 755	D
32312	Support activities for printing	2	52	17	1 204	47 220	874	1 672	27 535	83 761	18 931	102 362	5 575
323122	Prepress services	2	34	11	869	38 725	580	1 085	20 837	69 325	16 651	85 635	5 149
325	Chemical mfg	1	85	27	3 748	116 702	2 301	4 624	60 192	1 019 927	575 426	1 609 052	36 996
3255	Paint, coating, & adhesive mfg	1	15	5	735	14 945	276	417	5 722	76 994	73 170	146 156	D
32551	Paint & coating mfg	—	8	2	605	10 838	201	263	3 928	31 194	48 097	75 164	D
325510	Paint & coating mfg	—	8	2	605	10 838	201	263	3 928	31 194	48 097	75 164	D
3256	Soap, cleaning compound, & toilet preparation mfg.	—	27	6	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg.	—	10	4	1 049	37 600	769	1 504	21 031	680 230	261 530	955 696	10 027
325620	Toilet preparation mfg.	—	10	4	1 049	37 600	769	1 504	21 031	680 230	261 530	955 696	10 027
3259	Other chemical product mfg	—	20	9	913	29 536	573	1 126	15 617	125 927	112 522	238 807	7 123
326	Plastics & rubber products mfg	2	74	32	2 772	78 668	2 267	4 583	54 350	182 250	214 954	396 673	19 461
3261	Plastics product mfg	2	59	25	2 240	64 562	1 857	3 825	45 547	145 939	175 640	319 626	16 979
32619	Other plastics product mfg	2	28	10	1 077	27 791	889	1 727	18 373	60 247	57 771	116 933	4 958
326199	All other plastics product mfg	2	28	10	1 077	27 791	889	1 727	18 373	60 247	57 771	116 933	4 958
3262	Rubber product mfg	1	15	7	532	14 106	410	758	8 803	36 311	39 314	77 047	2 482
327	Nonmetallic mineral product mfg	1	52	26	2 431	68 712	2 058	4 181	51 915	226 945	249 430	476 742	22 748
3271	Clay product & refractory mfg	2	7	4	979	23 900	901	1 849	20 355	92 599	36 001	128 108	D
32712	Clay building material & refractories mfg	2	4	3	f	D	D	D	D	D	D	D	D
327122	Ceramic wall & floor tile mfg	—	2	1	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	21	15	842	30 295	667	1 532	21 709	92 629	165 124	258 461	15 632
331	Primary metal mfg	—	10	3	834	21 806	709	1 470	14 991	53 312	34 062	84 565	D
3315	Foundries	—	7	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	242	83	5 560	173 919	4 132	8 525	105 289	367 587	361 273	724 171	D
3323	Architectural & structural metals mfg	1	76	30	1 988	61 979	1 425	2 970	34 857	150 438	151 625	300 365	4 563
33232	Ornamental & architectural metal products mfg	—	63	25	1 705	53 505	1 231	2 571	30 228	128 955	119 456	246 855	3 794
332321	Metal window & door mfg	—	13	7	618	17 725	431	837	8 611	40 079	67 923	107 351	963
332322	Sheet metal work mfg	1	33	16	872	28 507	633	1 416	17 319	71 610	44 664	115 412	2 558
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	74	18	1 316	42 175	950	1 872	25 735	86 536	52 144	137 118	D
33271	Machine shops	1	65	14	1 154	36 824	826	1 672	22 676	75 114	45 367	119 160	6 633
332710	Machine shops	1	65	14	1 154	36 824	826	1 672	22 676	75 114	45 367	119 160	6 633
3328	Coating, engraving, heat treating, & allied activities	1	30	11	546	15 906	420	841	9 233	25 023	8 287	33 438	2 136
33281	Coating, engraving, heat treating, & allied activities	1	30	11	546	15 906	420	841	9 233	25 023	8 287	33 438	2 136
3329	Other fabricated metal product mfg	—	19	8	696	22 253	571	1 088	13 963	24 191	78 149	100 873	3 925

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS, TX *—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	2	110	45	4 679	155 322	3 029	5 945	79 142	453 173	364 909	810 799	24 234
3331	Agriculture, construction, & mining machinery mfg.	1	11	6	933	37 320	625	1 330	21 297	166 712	50 092	215 709	7 435
33313	Mining & oil & gas field machinery mfg.	1	6	4	784	33 126	517	1 137	18 975	154 087	39 308	191 840	D
333132	Oil & gas field machinery & equipment mfg.	1	6	4	784	33 126	517	1 137	18 975	154 087	39 308	191 840	D
3332	Industrial machinery mfg. ..	9	19	5	673	25 145	335	703	10 330	69 572	58 194	122 258	4 337
33329	Other industrial machinery mfg.	9	17	5	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg. ..	1	17	9	729	21 899	503	824	12 304	51 181	63 565	114 822	4 353
33331	Commercial & service industry machinery mfg.	1	17	9	729	21 899	503	824	12 304	51 181	63 565	114 822	4 353
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.	2	15	11	1 278	31 206	939	1 693	15 609	75 692	80 263	158 011	2 230
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg. .	2	15	11	1 278	31 206	939	1 693	15 609	75 692	80 263	158 011	2 230
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.	-	10	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.	1	23	7	588	19 080	357	793	9 888	56 260	60 380	112 157	4 690
334	Computer & electronic product mfg.	-	97	37	16 285	920 878	6 174	12 817	199 804	2 959 094	820 678	3 708 020	701 628
3342	Communications equipment mfg.	1	15	7	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.	-	5	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.	-	5	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.	1	7	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.	1	7	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.	-	43	16	8 390	553 859	2 453	4 975	57 056	2 286 615	444 354	2 668 303	D
33441	Semiconductor & other electronic component mfg.	-	43	16	8 390	553 859	2 453	4 975	57 056	2 286 615	444 354	2 668 303	D
334413	Semiconductor & related device mfg.	-	12	6	i	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.	-	19	8	5 048	233 778	1 912	4 131	68 493	280 745	107 702	379 129	D
33451	Navigational, measuring, medical, & control instruments mfg.	-	19	8	5 048	233 778	1 912	4 131	68 493	280 745	107 702	379 129	D
334511	Search, detection, navigation, & guidance instrument mfg.	-	2	2	h	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media. .	-	7	3	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.	-	7	3	f	D	D	D	D	D	D	D	D
334611	Software reproducing. .	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.	1	40	20	1 658	46 626	1 217	2 626	25 976	108 668	119 627	228 835	5 946
3353	Electrical equipment mfg. ..	1	16	8	766	23 175	545	1 224	13 234	55 611	52 630	107 466	1 927
33531	Electrical equipment mfg.	1	16	8	766	23 175	545	1 224	13 234	55 611	52 630	107 466	1 927
3359	Other electrical equipment & component mfg.	-	12	6	539	14 463	420	846	8 314	29 249	45 809	75 517	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DALLAS, TX *—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	-	43	23	8 269	399 917	4 283	8 148	218 379	975 298	687 785	1 457 412	46 435
3363	Motor vehicle parts mfg ...	5	26	12	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	14	9	7 118	372 604	3 370	6 534	200 841	931 295	541 175	1 263 071	41 667
33641	Aerospace product & parts mfg	-	14	9	7 118	372 604	3 370	6 534	200 841	931 295	541 175	1 263 071	41 667
336411	Aircraft mfg	-	4	3	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	7	3	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	88	26	2 325	56 960	1 845	4 114	38 991	113 129	120 971	232 851	6 139
3371	Household & institutional furniture & kitchen cabinet mfg	1	63	14	1 443	31 760	1 234	2 535	23 624	63 545	67 385	130 100	4 177
33711	Wood kitchen cabinet & counter top mfg	-	25	6	646	11 807	575	1 200	8 453	30 045	28 319	57 528	2 177
337110	Wood kitchen cabinet & counter top mfg ...	-	25	6	646	11 807	575	1 200	8 453	30 045	28 319	57 528	2 177
33712	Household & institutional furniture mfg	2	38	8	797	19 953	659	1 335	15 171	33 500	39 066	72 572	2 000
3372	Office furniture (including fixtures) mfg	6	20	10	528	16 829	395	780	10 179	30 684	22 524	52 789	1 553
33721	Office furniture (including fixtures) mfg	6	20	10	528	16 829	395	780	10 179	30 684	22 524	52 789	1 553
339	Miscellaneous mfg	5	163	27	2 736	69 070	2 093	4 104	41 834	67 082	175 168	236 951	8 542
3399	Other miscellaneous mfg ..	5	118	23	g	D	D	D	D	D	D	D	D
33995	Sign mfg	4	45	11	1 049	30 218	780	1 613	17 131	S	S	82 790	1 968
339950	Sign mfg	4	45	11	1 049	30 218	780	1 613	17 131	S	S	82 790	1 968
33999	All other miscellaneous mfg	5	31	9	998	19 133	804	1 570	12 970	35 770	37 954	73 318	3 608
339999	All other miscellaneous mfg	7	22	5	f	D	D	D	D	D	D	D	2 772
	DECATUR, TX												
31-33	Manufacturing	1	9	4	594	17 350	439	888	11 628	56 762	31 363	83 165	4 870
	DEER PARK, TX												
31-33	Manufacturing	-	31	18	4 364	260 708	2 650	6 154	154 673	4 599 765	2 989 847	7 582 992	222 049
325	Chemical mfg	-	12	10	3 751	241 244	2 261	5 325	143 019	4 562 160	2 956 744	7 510 439	220 379
3251	Basic chemical mfg	-	8	7	h	D	D	D	D	D	D	D	D
32511	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	4	4	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	4	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	f	D	D	D	D	D	D	D	D
	DENISON, TX												
31-33	Manufacturing	-	33	11	2 157	67 295	1 745	3 613	48 605	463 961	325 996	785 512	19 916
333	Machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DENTON, TX													
31-33	Manufacturing	-	73	22	4 187	143 653	3 313	6 417	105 404	519 941	825 958	1 350 009	43 026
333	Machinery mfg	-	9	3	789	28 472	660	1 094	18 974	113 245	37 881	149 875	2 156
3339	Other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	f	D	D	D	D	D	D	D	D
DUNCANVILLE, TX													
31-33	Manufacturing	1	40	12	2 452	50 269	1 744	3 383	30 748	146 646	88 647	237 256	5 492
337	Furniture & related product mfg	-	4	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	2	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	2	2	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
EAGLE PASS, TX													
31-33	Manufacturing	1	18	6	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	5	4	774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
3152	Cut & sew apparel mfg	1	5	4	774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
31522	Men's & boys' cut & sew apparel mfg	1	5	4	774	8 798	726	1 234	7 576	6 833	49 870	57 275	D
315225	Men's & boys' cut & sew work clothing mfg	-	3	3	f	D	D	D	D	D	D	D	D
EDINBURG, TX													
31-33	Manufacturing	-	26	13	2 134	32 518	1 817	2 587	24 357	236 144	234 661	471 489	5 254
315	Apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D
EL CAMPO, TX													
31-33	Manufacturing	-	25	8	1 213	29 838	1 065	2 206	23 222	55 670	77 917	134 895	3 881

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	EL PASO, TX												
31-33	Manufacturing	1	599	205	33 212	716 201	26 525	48 858	482 300	3 115 892	4 522 184	7 602 078	225 309
311	Food mfg	-	52	13	1 407	30 934	962	2 197	17 247	78 552	132 702	211 593	8 356
313	Textile mills	4	11	6	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	5	8	5	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	5	8	5	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	8	6	3	g	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	71	35	j	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	67	34	j	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	41	14	g	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	2	34	11	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	13	10	4 713	102 571	4 154	7 900	76 931	470 503	590 425	1 035 026	4 040
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	11	9	h	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	12	9	h	D	D	D	D	D	D	D	13 560
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	2	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	9	8	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	2	24	9	1 045	19 924	691	1 266	9 439	36 982	60 152	104 467	678
3162	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
31621	Footwear mfg	2	18	8	914	17 331	636	1 176	8 711	32 986	53 798	94 030	429
316213	Men's footwear (except athletic) mfg .	1	12	7	f	D	D	D	D	D	D	D	380
322	Paper mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
3222	Converted paper product mfg	1	18	13	1 102	28 076	897	1 887	18 599	78 022	98 110	175 572	4 508
32221	Paperboard container mfg	1	13	12	1 035	25 328	841	1 773	16 666	73 856	93 046	166 257	D
322211	Corrugated & solid fiber box mfg	-	10	9	804	19 644	653	1 351	12 803	60 336	81 188	140 830	2 077
323	Printing & related support activities.....	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
3231	Printing & related support activities.....	2	71	11	942	18 330	734	1 018	11 986	35 817	20 447	55 817	3 127
32311	Printing	1	63	10	648	15 001	471	755	9 038	30 717	19 997	50 356	2 696
326	Plastics & rubber products mfg	1	33	19	3 349	71 615	2 652	5 169	52 282	190 417	202 516	387 657	D
3261	Plastics product mfg	1	31	19	h	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	28	17	h	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	27	17	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	14	6	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	8	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	7	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	5	4	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	2	2	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	5	84	23	g	D	D	D	D	D	D	D	8 017
333	Machinery mfg	5	40	9	931	16 587	757	1 341	11 650	40 701	21 934	63 902	D
334	Computer & electronic product mfg	1	20	10	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	11	5	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	11	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EL PASO, TX—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	19	12	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg. . .	-	3	3	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	3	3	g	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
33531	Electrical equipment mfg	-	11	5	643	17 108	391	666	7 517	205 433	132 716	337 441	D
336	Transportation equipment mfg	-	15	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	13	5	f	D	D	D	D	D	D	D	4 681
337	Furniture & related product mfg	-	18	4	799	12 236	748	1 304	10 040	28 641	15 757	44 422	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	15	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	7	3	f	D	D	D	D	D	D	D	D
337124	Metal household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	52	12	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
33911	Medical equipment & supplies mfg	-	24	5	786	20 458	392	633	7 606	100 623	186 397	291 521	6 104
339113	Surgical appliance & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	28	7	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg	-	1	1	f	D	D	D	D	D	D	D	D
ENNIS, TX													
31-33	Manufacturing	2	57	30	3 515	87 338	2 782	5 662	60 079	296 274	354 794	649 042	21 754
332	Fabricated metal product mfg	1	13	6	691	16 841	485	1 046	11 241	38 765	53 579	92 558	2 904
EULESS, TX													
31-33	Manufacturing	2	41	16	1 060	31 004	711	1 339	17 335	68 365	38 827	107 135	3 522
EVERMAN, TX													
31-33	Manufacturing	-	17	5	848	28 235	728	1 040	20 984	65 819	164 874	238 323	5 438
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FARMERS BRANCH, TX												
31-33	Manufacturing	-	134	52	7 477	251 186	5 595	12 429	137 144	795 433	510 226	1 299 640	91 249
323	Printing & related support activities.....	-	28	7	976	37 430	755	2 052	25 561	81 563	41 638	123 752	4 055
3231	Printing & related support activities.....	-	28	7	976	37 430	755	2 052	25 561	81 563	41 638	123 752	4 055
32311	Printing	-	24	6	887	33 389	690	1 913	23 054	74 396	39 770	114 686	3 592
323110	Commercial lithographic printing ..	-	8	3	672	26 653	533	1 619	19 425	59 820	32 219	92 306	2 193
326	Plastics & rubber products mfg	1	13	8	825	25 131	681	1 492	15 875	58 765	80 121	134 965	7 802
3261	Plastics product mfg	-	12	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	4	715	19 705	585	1 334	14 495	48 205	48 568	101 958	2 205
334	Computer & electronic product mfg.....	-	17	5	2 154	91 225	1 458	3 230	32 070	385 963	111 933	489 700	66 741
3344	Semiconductor & other electronic component mfg	-	7	4	2 039	84 962	1 406	3 139	30 221	376 769	106 749	474 900	66 128
33441	Semiconductor & other electronic component mfg	-	7	4	2 039	84 962	1 406	3 139	30 221	376 769	106 749	474 900	66 128
334413	Semiconductor & related device mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	4	4	531	18 997	436	1 112	14 249	73 650	59 147	133 922	D
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	f	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	FORT WORTH, TX *												
31-33	Manufacturing	1	821	300	56 215	2 337 949	31 800	66 959	964 857	5 885 255	5 260 111	11 198 254	321 608
311	Food mfg	-	45	24	4 034	114 130	2 801	5 839	63 991	471 003	689 137	1 158 876	25 005
3116	Meat product mfg	-	5	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	2	2	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	14	3	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	11	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	7	5	f	D	D	D	D	D	D	D	D
31199	All other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	2	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	4	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	3	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	18	7	1 176	23 491	1 038	2 006	18 127	43 055	106 084	149 419	2 847
3219	Other wood product mfg ...	4	15	7	1 171	23 443	1 034	2 002	18 090	42 896	105 647	148 829	D
32199	All other wood product mfg	5	6	2	f	D	D	D	D	D	D	D	2 050
321991	Manufactured home (mobile home) mfg ..	5	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	18	13	1 128	35 105	694	1 396	18 704	74 157	134 233	206 364	7 836
3222	Converted paper product mfg	-	18	13	1 128	35 105	694	1 396	18 704	74 157	134 233	206 364	7 836
32221	Paperboard container mfg	-	14	10	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	8	7	641	20 073	429	871	10 901	47 636	85 589	131 792	6 592
323	Printing & related support activities.....	1	113	28	2 673	83 845	2 005	4 106	52 318	155 525	122 338	277 281	16 035
3231	Printing & related support activities.....	1	113	28	2 673	83 845	2 005	4 106	52 318	155 525	122 338	277 281	16 035
32311	Printing	1	100	25	2 513	78 730	1 889	3 878	49 153	146 063	120 507	265 824	14 432
323110	Commercial lithographic printing ..	2	54	16	1 567	57 558	1 160	2 517	34 565	94 792	76 183	170 867	8 791

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	FORT WORTH, TX *—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	41	13	3 504	202 033	1 351	2 794	39 771	733 613	240 843	982 852	36 632
3254	Pharmaceutical & medicine mfg	1	8	3	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	8	3	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	5	3	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	43	21	1 633	41 793	1 270	2 679	30 092	97 738	112 133	209 786	12 011
3261	Plastics product mfg	3	31	18	1 452	36 203	1 132	2 414	26 872	83 932	101 493	185 250	11 355
32619	Other plastics product mfg	3	21	11	1 084	23 648	819	1 751	18 094	46 280	49 231	95 924	7 339
326199	All other plastics product mfg	3	21	11	1 084	23 648	819	1 751	18 094	46 280	49 231	95 924	7 339
327	Nonmetallic mineral product mfg	4	31	15	1 028	25 763	794	1 655	18 476	65 852	64 354	130 356	5 900
3273	Cement & concrete product mfg	3	15	8	533	15 488	442	962	11 584	44 759	46 640	91 375	4 549
331	Primary metal mfg	—	16	9	f	D	D	D	D	D	D	D	3 476
3315	Foundries	—	13	8	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	5	3	689	21 659	567	1 125	16 152	33 019	20 470	53 034	D
331513	Steel foundries (except investment)	—	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	157	49	3 567	111 515	2 763	5 570	70 527	237 320	263 938	508 230	12 981
3323	Architectural & structural metals mfg	—	42	14	988	30 103	772	1 589	18 190	78 722	55 684	133 750	2 462
33232	Ornamental & architectural metal products mfg	—	30	11	704	21 494	563	1 143	13 034	60 928	37 118	97 292	1 562
332322	Sheet metal work mfg	—	19	9	582	17 815	472	972	10 910	50 911	30 459	80 600	1 199
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	55	12	832	26 404	664	1 200	17 279	51 740	27 233	78 398	D
33271	Machine shops	—	43	7	599	17 563	482	838	11 613	31 236	19 727	50 319	1 989
332710	Machine shops	—	43	7	599	17 563	482	838	11 613	31 236	19 727	50 319	1 989
3329	Other fabricated metal product mfg	—	24	9	787	26 652	568	1 245	14 346	57 826	50 426	104 520	2 367
333	Machinery mfg	1	67	33	2 830	86 374	2 068	4 293	47 766	173 906	206 378	371 461	11 954
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	11	8	971	29 301	673	1 436	15 286	39 682	79 841	119 823	5 903
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	1	11	8	971	29 301	673	1 436	15 286	39 682	79 841	119 823	5 903
333415	AC & warm air heating & commercial/ industrial refig equip mfg	2	9	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	14	6	523	14 495	392	773	8 758	35 703	57 480	90 871	2 116
334	Computer & electronic product mfg	3	32	14	h	D	D	D	D	D	D	D	44 607
3341	Computer & peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	5	5	3	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	5	4	3	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	5	4	3	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	11	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	11	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	FORT WORTH, TX *—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	12	5	1 477	32 624	1 007	1 609	16 593	131 428	67 897	190 792	5 394
3359	Other electrical equipment & component mfg	-	7	4	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	47	24	21 982	1 180 174	8 687	19 643	365 999	2 432 368	1 948 776	4 432 567	101 209
3363	Motor vehicle parts mfg ...	2	21	12	1 353	35 308	962	2 100	18 694	82 577	103 151	185 446	D
33639	Other motor vehicle parts mfg	2	6	5	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	14	8	19 786	1 120 489	7 043	16 202	330 078	2 290 571	1 726 451	4 069 987	92 760
33641	Aerospace product & parts mfg	-	14	8	19 786	1 120 489	7 043	16 202	330 078	2 290 571	1 726 451	4 069 987	92 760
336411	Aircraft mfg	-	6	3	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	6	3	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg...	-	5	4	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	5	4	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	5	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	41	14	g	D	D	D	D	D	D	D	2 641
3372	Office furniture (including fixtures) mfg	3	19	10	f	D	D	D	D	D	D	D	1 910
33721	Office furniture (including fixtures) mfg	3	19	10	f	D	D	D	D	D	D	D	1 910
339	Miscellaneous mfg	3	81	15	1 604	47 232	1 150	2 259	24 090	113 830	114 668	232 451	6 729
3391	Medical equipment & supplies mfg	6	27	5	542	22 128	350	722	9 847	49 628	26 271	78 617	3 671
33911	Medical equipment & supplies mfg	6	27	5	542	22 128	350	722	9 847	49 628	26 271	78 617	3 671
3399	Other miscellaneous mfg ..	2	54	10	1 062	25 104	800	1 537	14 243	64 202	88 397	153 834	3 058
	FREDERICKSBURG, TX												
31-33	Manufacturing	1	35	6	678	11 820	518	1 149	8 925	24 698	39 818	66 882	864
	FREEPORT, TX												
31-33	Manufacturing	-	34	19	5 892	287 070	4 478	8 793	206 199	1 009 553	2 764 857	3 718 425	D
325	Chemical mfg	-	11	8	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	5	3	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
32521	Resin & synthetic rubber mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
325211	Plastics material & resin mfg	-	4	3	1 727	89 396	1 303	2 685	63 130	286 253	437 998	719 591	78 183
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
	FRIONA, TX												
31-33	Manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FRISCO, TX *													
31-33	Manufacturing	-	18	9	519	15 556	441	871	10 999	84 976	50 936	133 050	2 525
GAINESVILLE, TX													
31-33	Manufacturing	1	47	21	2 590	66 674	2 252	4 713	52 398	161 321	146 121	300 097	20 844
326	Plastics & rubber products mfg	-	9	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
GALENA PARK, TX													
31-33	Manufacturing	-	9	6	f	D	D	D	D	D	D	D	D
GALVESTON, TX													
31-33	Manufacturing	1	32	5	592	15 832	538	887	13 504	24 149	36 364	56 319	3 820
GARLAND, TX *													
31-33	Manufacturing	-	377	141	16 285	556 548	9 809	18 523	233 150	1 467 003	1 450 798	2 944 630	84 455
311	Food mfg	-	12	6	1 206	39 405	942	1 767	26 744	153 844	231 408	386 283	20 528
3116	Meat product mfg	1	4	4	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	4	4	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	59	24	1 525	21 661	1 222	2 036	16 072	56 094	49 013	103 389	901
3152	Cut & sew apparel mfg	1	53	21	g	D	D	D	D	D	D	D	463
31521	Cut & sew apparel contractors	6	37	12	622	6 829	573	879	6 115	10 442	2 154	12 573	240
315212	Women's, girls', & infants' cut & sew apparel contractors ..	5	36	11	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	9	1 103	41 634	677	1 430	18 665	316 462	372 936	683 559	10 733
3255	Paint, coating, & adhesive mfg	-	5	3	f	D	D	D	D	D	D	D	6 549
32551	Paint & coating mfg	-	4	2	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg ...	-	4	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	10	6	686	16 539	594	1 159	13 515	24 303	25 118	49 142	867
332	Fabricated metal product mfg	1	94	34	3 083	91 369	2 414	4 613	57 213	199 424	107 995	305 280	10 537
3323	Architectural & structural metals mfg	1	27	15	1 455	41 933	1 177	2 487	28 221	96 145	44 205	139 236	3 985
33232	Ornamental & architectural metal products mfg	1	22	13	1 374	40 449	1 106	2 393	27 123	93 622	42 418	134 827	D
332322	Sheet metal work mfg .	1	21	12	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	3	39	5	588	18 007	480	855	11 229	34 369	13 713	48 258	1 910
333	Machinery mfg	-	19	6	736	25 179	450	904	12 697	85 611	113 775	202 799	798
3331	Agriculture, construction, & mining machinery mfg ...	-	4	3	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	-	4	3	f	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	GARLAND, TX *—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	—	38	20	5 236	246 488	1 368	2 638	40 412	423 470	386 973	847 721	23 059
3344	Semiconductor & other electronic component mfg	1	24	13	1 266	42 667	934	1 855	31 086	38 114	61 114	103 435	7 935
33441	Semiconductor & other electronic component mfg	1	24	13	1 266	42 667	934	1 855	31 086	38 114	61 114	103 435	7 935
334412	Bare printed circuit board mfg	—	8	4	680	23 517	575	1 185	22 048	7 316	41 776	49 142	D
3345	Navigational, measuring, medical, & control instruments mfg	—	5	3	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	5	3	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	3	3	h	D	D	D	D	D	D	D	D
	GEORGETOWN, TX												
31-33	Manufacturing	2	54	14	g	D	D	D	D	D	D	D	6 221
334	Computer & electronic product mfg	3	13	6	f	D	D	D	D	D	D	D	3 357
	GLADEWATER, TX *												
31-33	Manufacturing	4	17	4	500	12 090	346	649	6 339	22 847	18 677	41 210	1 174
	GRAHAM, TX												
31-33	Manufacturing	—	14	4	f	D	D	D	D	D	D	D	D
	GRAND PRAIRIE, TX *												
31-33	Manufacturing	1	232	97	12 709	464 027	9 277	19 194	286 695	1 121 505	913 761	2 014 195	50 477
322	Paper mfg	—	7	7	730	25 797	531	1 093	16 112	57 957	100 718	158 384	D
3222	Converted paper product mfg	—	7	7	730	25 797	531	1 093	16 112	57 957	100 718	158 384	D
323	Printing & related support activities	—	24	10	1 140	28 875	885	1 899	19 936	69 819	26 173	95 004	2 352
3231	Printing & related support activities	—	24	10	1 140	28 875	885	1 899	19 936	69 819	26 173	95 004	2 352
32311	Printing	1	19	7	572	18 083	405	868	11 080	51 567	21 044	71 711	999
32312	Support activities for printing	—	5	3	568	10 792	480	1 031	8 856	18 252	5 129	23 293	1 353
323121	Tradebinding & related work	—	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	19	10	1 637	45 065	1 304	3 349	32 152	130 207	169 427	304 431	10 397
3261	Plastics product mfg	—	17	9	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	—	3	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	54	19	1 424	44 619	1 010	2 132	26 073	99 904	112 418	212 968	8 559
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	26	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	18	8	703	20 435	487	1 050	11 818	49 664	54 745	100 790	2 650
335	Electrical equipment, appliance, & component mfg	—	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	21	10	3 692	197 370	2 567	4 821	118 373	406 407	134 521	526 695	14 233
3364	Aerospace product & parts mfg	—	13	6	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	13	6	h	D	D	D	D	D	D	D	D
336414	Guided missile & space vehicle mfg	—	1	1	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GRAND PRAIRIE, TX * —Con.												
31-33	Manufacturing— Con.												
337	Furniture & related product mfg	2	9	5	633	18 958	435	753	10 112	48 896	31 165	79 017	977
	GRAPEVINE, TX *												
31-33	Manufacturing	1	36	12	1 539	47 631	929	1 928	22 956	139 495	158 182	310 406	7 072
336	Transportation equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	—	1	1	f	D	D	D	D	D	D	D	D
	GREENVILLE, TX												
31-33	Manufacturing	2	30	15	1 629	34 058	1 263	2 543	20 441	146 685	205 789	351 692	5 835
321	Wood product mfg	6	3	3	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	6	2	2	f	D	D	D	D	D	D	D	D
32191	Millwork	6	2	2	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	6	2	2	f	D	D	D	D	D	D	D	D
	HALTOM CITY, TX												
31-33	Manufacturing	2	138	43	3 292	89 664	2 355	4 561	52 254	183 132	177 775	361 289	9 609
332	Fabricated metal product mfg	1	42	10	722	20 778	565	1 120	14 308	37 318	28 248	65 431	1 798
333	Machinery mfg	—	13	4	545	17 109	318	654	8 066	32 726	45 787	78 872	1 382
	HARLINGEN, TX												
31-33	Manufacturing	—	65	21	4 480	86 146	3 872	7 433	67 697	229 228	336 346	562 443	7 394
311	Food mfg	—	15	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	3	3	h	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	2	2	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	—	1	1	f	D	D	D	D	D	D	D	D
	HENDERSON, TX												
31-33	Manufacturing	1	22	13	940	21 789	725	1 506	15 764	68 629	64 311	131 972	2 832
	HEREFORD, TX												
31-33	Manufacturing	—	24	5	589	15 478	476	787	10 729	54 785	174 130	234 363	D
311	Food mfg	—	9	4	f	D	D	D	D	D	D	D	2 773
	HILLSBORO, TX												
31-33	Manufacturing	—	15	5	998	25 440	881	1 862	20 315	69 913	86 619	153 392	2 557

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	HOUSTON, TX *												
31-33	Manufacturing	1	2 969	914	104 218	3 599 309	72 361	141 747	2 024 013	13 318 807	19 275 747	32 595 787	1 127 813
311	Food mfg.....	-	165	51	7 829	217 970	5 292	10 456	121 078	945 444	1 223 220	2 170 256	52 004
3114	Fruit & vegetable preserving & specialty food mfg.....	3	12	6	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	7	6	4	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	7	6	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	17	10	1 506	35 360	1 144	2 447	21 574	269 821	293 551	560 458	4 822
31161	Animal slaughtering & processing.....	-	17	10	1 506	35 360	1 144	2 447	21 574	269 821	293 551	560 458	4 822
311612	Meat processed from carcasses.....	-	10	6	1 309	30 376	1 033	2 222	19 125	243 493	248 247	488 681	D
3118	Bakeries & tortilla mfg.....	1	92	18	3 122	87 759	1 790	3 327	39 842	200 268	144 766	344 214	D
31181	Bread & bakery product mfg.....	-	80	13	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	21	7	g	D	D	D	D	D	D	D	5 014
31182	Cookie, cracker, & pasta mfg.....	2	8	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	28	13	1 884	61 205	1 458	2 973	42 126	365 684	540 797	916 783	D
31192	Coffee & tea mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg.....	1	17	8	854	18 364	668	1 199	12 048	60 931	84 121	144 974	D
311999	All other miscellaneous food mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	-	15	9	h	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	-	14	9	h	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	-	11	8	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
31212	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
312120	Breweries.....	-	3	1	g	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	58	8	959	20 094	725	1 381	11 613	36 894	28 282	64 979	1 536
3149	Other textile product mills..	3	36	5	676	14 755	504	947	8 270	27 910	20 379	48 150	1 162
315	Apparel mfg.....	6	45	6	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	5	33	6	f	D	D	D	D	D	D	D	724
321	Wood product mfg.....	4	51	12	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg....	5	47	10	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	38	19	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills.....	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	1	1	f	D	D	D	D	D	D	D	D
322122	Newsprint mills.....	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	2	37	18	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	19	13	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	1	16	11	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	436	85	7 782	231 920	5 730	10 374	140 330	525 251	305 850	827 854	D
3231	Printing & related support activities.....	3	436	85	7 782	231 920	5 730	10 374	140 330	525 251	305 850	827 854	D
32311	Printing.....	3	394	73	i	D	D	D	D	D	D	D	36 983
323110	Commercial lithographic printing..	2	208	50	5 058	152 693	3 771	6 639	92 138	357 851	224 032	577 835	29 397
323113	Commercial screen printing.....	4	34	8	f	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	4	42	12	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	2	20	8	2 233	141 808	1 453	3 685	85 572	874 995	3 330 991	4 166 819	135 874
3241	Petroleum & coal products mfg.....	2	20	8	2 233	141 808	1 453	3 685	85 572	874 995	3 330 991	4 166 819	135 874
32411	Petroleum refineries.....	2	4	3	1 829	126 332	1 135	3 017	74 898	766 181	3 189 791	3 918 546	130 951
324110	Petroleum refineries..	2	4	3	1 829	126 332	1 135	3 017	74 898	766 181	3 189 791	3 918 546	130 951

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	HOUSTON, TX *—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	151	54	6 795	319 262	4 153	8 801	174 337	1 799 974	2 805 989	4 603 914	357 313
3251	Basic chemical mfg	1	24	13	2 392	138 594	1 185	2 657	66 554	768 123	1 491 173	2 258 978	235 287
32511	Petrochemical mfg	1	4	4	1 330	82 142	662	1 530	39 564	503 065	1 165 730	1 674 870	192 748
325110	Petrochemical mfg	1	4	4	1 330	82 142	662	1 530	39 564	503 065	1 165 730	1 674 870	192 748
32519	Other basic organic chemical mfg	1	12	6	647	36 314	272	593	15 485	162 558	249 538	406 273	26 769
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	10	6	1 228	66 246	981	2 159	49 592	407 236	772 920	1 173 485	60 246
32521	Resin & synthetic rubber mfg	—	10	6	1 228	66 246	981	2 159	49 592	407 236	772 920	1 173 485	60 246
325212	Synthetic rubber mfg	—	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	24	10	1 051	37 698	725	1 619	18 840	170 797	204 253	379 585	7 746
32551	Paint & coating mfg	—	18	8	914	33 130	661	1 507	17 614	153 113	188 937	347 116	7 255
325510	Paint & coating mfg	—	18	8	914	33 130	661	1 507	17 614	153 113	188 937	347 116	7 255
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	34	8	732	18 042	431	654	8 751	115 519	120 100	239 450	4 339
32561	Soap & cleaning compound mfg	2	27	7	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	4	41	13	804	26 503	505	978	14 456	126 657	115 066	241 592	22 718
32599	All other chemical product & preparation mfg	4	37	13	753	24 673	475	915	13 363	120 340	99 428	219 621	22 290
326	Plastics & rubber products mfg	1	137	74	7 355	200 348	5 649	10 805	130 650	596 213	580 155	1 155 577	53 903
3261	Plastics product mfg	1	118	69	i	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	—	26	12	1 639	46 191	1 178	2 349	29 477	177 400	175 827	350 226	13 612
326113	Unsupported plastics film & sheet (except packaging) mfg	—	9	5	977	33 218	579	1 216	20 066	143 642	128 702	269 287	D
32616	Plastics bottle mfg	—	7	6	f	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	—	7	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	65	40	4 005	103 804	3 136	5 622	68 373	286 754	234 538	505 049	26 865
326199	All other plastics product mfg	1	59	37	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	97	21	1 496	41 166	1 198	2 294	29 067	129 814	135 168	264 220	9 255
3273	Cement & concrete product mfg	2	43	11	768	22 861	642	1 247	17 432	76 292	86 493	161 658	6 793
331	Primary metal mfg	2	30	13	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	2	9	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	805	273	20 683	687 115	15 527	32 232	431 361	1 418 775	1 229 590	2 647 038	89 185
3321	Forging & stamping	1	26	16	g	D	D	D	D	D	D	D	9 933
33211	Forging & stamping	1	26	16	g	D	D	D	D	D	D	D	9 933
332114	Custom roll forming	—	9	8	f	D	D	D	D	D	D	D	D
332116	Metal stamping	5	10	5	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	166	58	4 199	122 695	3 134	6 294	71 591	224 317	284 805	506 726	9 587
33231	Plate work & fabricated structural product mfg ..	1	72	31	2 318	72 579	1 771	3 748	41 789	124 912	192 332	314 888	5 733
332311	Prefabricated metal building & component mfg	—	7	5	688	21 676	506	1 151	11 469	38 501	55 634	93 573	1 334
332312	Fabricated structural metal mfg	—	42	19	1 185	35 308	914	1 897	20 296	55 521	122 245	178 606	3 161
33232	Ornamental & architectural metal products mfg	1	94	27	1 881	50 116	1 363	2 546	29 802	99 405	92 473	191 838	3 854
332322	Sheet metal work mfg	2	51	16	1 007	27 598	773	1 507	16 908	53 028	37 442	90 229	2 263
3324	Boiler, tank, & shipping container mfg	—	34	25	1 926	70 533	1 348	3 062	44 976	136 046	168 808	313 311	5 875
33241	Power boiler & heat exchanger mfg	1	13	10	614	22 078	434	970	13 267	45 496	36 710	81 082	D
332410	Power boiler & heat exchanger mfg	1	13	10	614	22 078	434	970	13 267	45 496	36 710	81 082	D
33242	Metal tank (heavy gauge) mfg	—	15	11	779	29 292	527	1 136	19 852	45 558	42 849	89 409	2 697
332420	Metal tank (heavy gauge) mfg	—	15	11	779	29 292	527	1 136	19 852	45 558	42 849	89 409	2 697
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	4	533	19 163	387	956	11 857	44 992	89 249	142 820	D
3326	Spring & wire product mfg ..	—	21	8	f	D	D	D	D	D	D	D	2 912
33261	Spring & wire product mfg	—	21	8	f	D	D	D	D	D	D	D	2 912

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HOUSTON, TX *—Con. Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	328	73	5 029	181 221	3 876	7 958	121 774	341 161	164 504	501 859	32 055
33271	Machine shops	2	289	59	4 225	154 779	3 258	6 719	104 700	294 669	128 882	420 512	23 463
332710	Machine shops	2	289	59	4 225	154 779	3 258	6 719	104 700	294 669	128 882	420 512	23 463
33272	Turned product & screw, nut, & bolt mfg	2	39	14	804	26 442	618	1 239	17 074	46 492	35 622	81 347	8 592
3328	Coating, engraving, heat treating, & allied activities .	1	95	37	2 686	86 429	2 188	4 572	57 119	198 529	115 047	311 711	11 072
33281	Coating, engraving, heat treating, & allied activities	1	95	37	2 686	86 429	2 188	4 572	57 119	198 529	115 047	311 711	11 072
332811	Metal heat treating	1	16	7	762	22 739	649	1 094	15 194	53 130	13 617	66 792	2 918
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	37	14	1 052	35 407	858	1 964	24 091	92 690	85 219	175 896	5 709
332813	Electroplating, plating, polishing, anodizing, & coloring	2	42	16	872	28 283	681	1 514	17 834	52 709	16 211	69 023	2 445
3329	Other fabricated metal product mfg	1	126	56	4 546	152 201	3 231	6 688	90 038	354 817	282 382	634 198	17 644
33291	Metal valve mfg	2	52	28	2 297	72 428	1 546	3 296	40 505	175 264	146 855	319 292	9 284
332911	Industrial valve mfg	1	19	12	993	34 230	669	1 408	17 587	84 906	57 533	139 951	5 145
332919	Other metal valve & pipe fitting mfg	3	24	14	1 196	33 664	790	1 744	20 603	68 531	83 632	152 573	3 809
33299	All other fabricated metal product mfg	—	74	28	2 249	79 773	1 685	3 392	49 533	179 553	135 527	314 906	8 360
332996	Fabricated pipe & pipe fitting mfg	1	27	12	f	D	D	D	D	D	D	D	3 123
332999	All other miscellaneous fabricated metal product mfg	—	33	13	1 050	43 204	734	1 391	25 967	105 924	59 424	165 317	4 695
333	Machinery mfg	—	266	106	16 707	649 409	10 108	21 314	340 968	1 963 533	2 043 471	3 914 018	156 333
3331	Agriculture, construction, & mining machinery mfg	—	84	44	7 681	357 475	4 788	10 067	177 755	886 016	574 343	1 351 727	89 936
33312	Construction machinery mfg	1	9	5	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	1	9	5	f	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	73	39	7 099	337 054	4 400	9 278	167 088	867 060	528 012	1 284 349	87 389
333132	Oil & gas field machinery & equipment mfg	—	70	37	i	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	3	18	7	f	D	D	D	D	D	D	D	2 512
33329	Other industrial machinery mfg	3	15	7	567	18 016	291	556	8 038	26 870	41 789	67 979	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	24	10	2 138	63 582	1 484	2 857	40 839	316 674	415 058	770 189	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	24	10	2 138	63 582	1 484	2 857	40 839	316 674	415 058	770 189	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg	—	13	7	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	34	6	562	17 330	439	796	11 644	48 514	17 657	64 648	5 337
33351	Metalworking machinery mfg	3	34	6	562	17 330	439	796	11 644	48 514	17 657	64 648	5 337
3336	Engine, turbine, & power transmission equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	11	5	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	—	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	81	30	3 356	131 061	1 955	4 294	61 629	412 055	622 468	960 690	15 883
33391	Pump & compressor mfg	—	25	11	1 154	41 860	751	1 650	21 302	114 948	136 748	235 980	3 723
333911	Pump & pumping equipment mfg	1	16	6	f	D	D	D	D	D	D	D	2 420
333912	Air & gas compressor mfg	—	8	5	544	17 950	391	904	9 937	70 805	52 860	117 244	D
33392	Material handling equipment mfg	—	18	6	1 037	46 416	542	1 346	19 033	212 629	440 087	594 382	6 665
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	4	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HOUSTON, TX *—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	2	38	13	1 165	42 785	662	1 298	21 294	84 478	45 633	130 328	5 495
334	Computer & electronic product mfg	—	157	59	12 490	496 265	8 404	13 034	200 462	2 823 625	5 683 801	8 663 903	38 204
3341	Computer & peripheral equipment mfg	—	21	8	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	21	8	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	12	3	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	4	32	12	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	4	32	12	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	87	38	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	87	38	h	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	1	28	13	f	D	D	D	D	D	D	D	2 660
334519	Other measuring & controlling device mfg	—	14	8	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	72	24	3 080	105 065	2 088	4 479	53 723	229 228	285 530	517 382	11 176
3353	Electrical equipment mfg ..	1	38	12	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	1	38	12	g	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	—	9	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	5	22	9	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	7	16	8	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	7	16	8	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	66	18	g	D	D	D	D	D	D	D	9 655
3363	Motor vehicle parts mfg ...	6	30	7	f	D	D	D	D	D	D	D	3 250
3366	Ship & boat building	—	16	4	f	D	D	D	D	D	D	D	5 830
33661	Ship & boat building	—	16	4	f	D	D	D	D	D	D	D	5 830
336611	Ship building & repairing	—	15	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	106	27	2 651	54 888	1 973	3 766	35 408	138 593	118 925	255 707	4 513
3371	Household & institutional furniture & kitchen cabinet mfg	4	71	9	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	5	48	7	599	10 018	422	685	6 576	22 264	21 118	43 048	858
3372	Office furniture (including fixtures) mfg	2	20	8	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	2	20	8	f	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	15	10	g	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	6	4	f	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	6	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	236	47	4 582	125 754	3 187	6 530	71 461	466 240	189 311	655 614	19 724
3391	Medical equipment & supplies mfg	1	87	14	1 702	50 217	1 300	2 519	29 792	274 090	71 812	345 692	8 648
33911	Medical equipment & supplies mfg	1	87	14	1 702	50 217	1 300	2 519	29 792	274 090	71 812	345 692	8 648
339113	Surgical appliance & supplies mfg	—	14	5	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOUSTON, TX *—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg ..	3	149	33	2 880	75 537	1 887	4 011	41 669	192 150	117 499	309 922	11 076
33995	Sign mfg	3	58	8	524	14 989	357	671	7 736	34 167	16 046	50 185	922
339950	Sign mfg	3	58	8	524	14 989	357	671	7 736	34 167	16 046	50 185	922
33999	All other miscellaneous mfg	2	47	16	1 651	44 745	1 049	2 338	24 855	124 465	71 930	195 653	9 329
339991	Gasket, packing, & sealing device mfg...	2	19	12	1 243	37 827	789	1 903	20 714	97 958	59 057	156 201	8 691
HUMBLE, TX													
31-33	Manufacturing	1	34	11	745	25 211	496	1 146	14 806	57 767	28 199	82 110	6 661
HURST, TX													
31-33	Manufacturing	2	43	10	716	17 459	522	882	12 460	48 617	54 107	104 733	1 689
HUTCHINS, TX													
31-33	Manufacturing	-	13	6	670	19 371	496	1 004	12 865	77 044	30 930	104 861	1 901
INGLESIDE, TX													
31-33	Manufacturing	-	11	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33231	Plate work & fabricated structural product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332312	Fabricated structural metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
IOWA PARK, TX													
31-33	Manufacturing	-	6	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
IRVING, TX													
31-33	Manufacturing	1	240	73	11 146	435 944	7 072	13 613	190 865	1 256 787	1 382 295	2 590 882	112 900
311	Food mfg	-	8	4	1 093	32 816	856	1 753	22 497	195 777	245 388	439 733	2 787
3119	Other food mfg	-	4	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	3	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	3	2	2	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	3	2	2	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg	3	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	55	13	1 023	37 275	699	1 381	19 428	88 109	95 479	181 549	8 198
3231	Printing & related support activities.....	1	55	13	1 023	37 275	699	1 381	19 428	88 109	95 479	181 549	8 198
32311	Printing	1	46	8	611	16 488	457	871	10 381	49 428	86 837	134 308	D
333	Machinery mfg	4	17	10	778	29 969	520	1 169	16 271	64 074	52 483	113 738	3 172

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	IRVING, TX—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	23	13	4 760	219 098	2 572	4 099	72 741	614 938	572 277	1 144 690	76 618
3344	Semiconductor & other electronic component mfg.....	—	15	9	2 816	100 246	1 857	3 097	42 280	265 414	287 553	532 964	D
33441	Semiconductor & other electronic component mfg.....	—	15	9	2 816	100 246	1 857	3 097	42 280	265 414	287 553	532 964	D
334413	Semiconductor & related device mfg...	—	2	2	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	3	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	3	1	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	—	20	3	559	25 900	466	711	10 688	74 519	30 246	103 115	3 518
3391	Medical equipment & supplies mfg.....	—	10	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	10	2	f	D	D	D	D	D	D	D	D
	JACKSONVILLE, TX												
31-33	Manufacturing	1	54	30	2 511	54 814	2 101	4 455	39 981	141 924	109 428	255 669	14 755
333	Machinery mfg.....	—	9	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	2	4	2	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
	KATY, TX *												
31-33	Manufacturing	1	35	9	536	15 383	395	687	8 905	42 723	43 759	84 097	2 980
	KAUFMAN, TX												
31-33	Manufacturing	—	16	8	749	16 696	599	1 183	11 124	37 768	37 292	74 874	1 945
	KENNEDALE, TX												
31-33	Manufacturing	2	43	5	567	16 933	410	722	9 779	52 595	27 711	79 492	1 942
	KERRVILLE, TX												
31-33	Manufacturing	1	28	2	682	19 069	412	748	9 461	33 970	25 702	56 239	1 963
	KILGORE, TX *												
31-33	Manufacturing	2	35	17	2 007	54 906	1 534	3 246	32 989	115 143	110 648	223 506	6 221
	LANCASTER, TX												
31-33	Manufacturing	—	30	14	1 275	35 858	1 023	2 141	25 062	106 972	85 319	191 010	3 440

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
LA PORTE, TX														
31-33	Manufacturing	-	35	18	2 442	132 511	1 568	3 414	78 058	785 420	1 015 068	1 819 102	264 677	
325	Chemical mfg	-	13	9	g	D	D	D	D	D	D	D	262 904	
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	3		599	36 999	396	918	21 175	304 725	577 432	887 384	96 592
32521	Resin & synthetic rubber mfg	-	4	3		599	36 999	396	918	21 175	304 725	577 432	887 384	96 592
325211	Plastics material & resin mfg	-	4	3		599	36 999	396	918	21 175	304 725	577 432	887 384	96 592
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
LAREDO, TX														
31-33	Manufacturing	1	86	15	g	D	D	D	D	D	D	D	D	
LEWISVILLE, TX *														
31-33	Manufacturing	-	85	28	5 347	219 532	3 155	6 767	88 563	617 939	315 105	930 818	37 111	
332	Fabricated metal product mfg	-	16	9	730	19 674	551	1 143	12 687	48 559	58 857	105 649	1 489	
334	Computer & electronic product mfg	-	4	1	h	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	h	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	h	D	D	D	D	D	D	D	D	
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	h	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	7	3	820	15 949	707	1 588	10 968	23 716	18 343	42 616	2 877	
3372	Office furniture (including fixtures) mfg	1	3	3	784	15 273	678	1 534	10 459	22 527	17 528	40 599	2 839	
33721	Office furniture (including fixtures) mfg	1	3	3	784	15 273	678	1 534	10 459	22 527	17 528	40 599	2 839	
337215	Showcase, partition, shelving, & locker mfg	1	3	3	784	15 273	678	1 534	10 459	22 527	17 528	40 599	2 839	
LONGVIEW, TX *														
31-33	Manufacturing	-	135	55	10 208	374 781	7 476	14 850	236 436	1 249 706	1 830 941	3 074 284	157 185	
325	Chemical mfg	-	4	4	h	D	D	D	D	D	D	D	D	
3251	Basic chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D	
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D	
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	37	13	1 576	49 363	1 294	2 683	35 308	94 707	164 422	258 422	D	
3324	Boiler, tank, & shipping container mfg	-	5	5	f	D	D	D	D	D	D	D	D	
33242	Metal tank (heavy gauge) mfg	-	4	4	f	D	D	D	D	D	D	D	D	
332420	Metal tank (heavy gauge) mfg	-	4	4	f	D	D	D	D	D	D	D	D	
333	Machinery mfg	1	15	13	2 598	80 329	1 856	3 688	55 291	129 976	196 144	319 601	D	
3331	Agriculture, construction, & mining machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D	
33312	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D	
333120	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	10	5	1 335	40 175	1 093	2 384	28 550	127 959	289 603	415 719	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LUBBOCK, TX													
31-33	Manufacturing	-	210	58	6 357	182 339	4 331	8 479	86 796	828 864	644 966	1 464 997	138 702
311	Food mfg	-	27	11	1 438	41 533	888	1 952	20 207	143 027	274 248	417 054	D
326	Plastics & rubber products mfg	-	8	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	34	7	582	15 222	405	781	8 737	50 286	49 794	95 170	D
333	Machinery mfg	-	25	14	1 623	42 639	1 224	2 560	24 073	93 887	144 312	234 560	5 660
3331	Agriculture, construction, & mining machinery mfg....	-	6	3	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	6	683	17 229	486	1 042	10 303	27 675	59 927	87 765	2 798
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
LUFKIN, TX													
31-33	Manufacturing	-	52	16	5 006	120 105	4 347	10 614	96 464	283 175	480 160	763 217	29 953
311	Food mfg	-	7	4	2 078	33 321	1 917	5 443	27 480	94 954	229 236	322 736	D
3116	Meat product mfg	-	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	1 194	33 779	1 004	2 085	29 371	62 829	64 326	126 667	4 242
3315	Foundries	-	3	3	1 194	33 779	1 004	2 085	29 371	62 829	64 326	126 667	4 242
33151	Ferrous metal foundries ..	-	2	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	1	1	f	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
MCALLEN, TX													
31-33	Manufacturing	1	100	29	3 709	69 549	2 779	4 782	43 137	260 836	246 967	511 395	24 068
311	Food mfg	3	15	5	568	9 002	456	712	6 219	38 860	41 188	84 174	3 860
315	Apparel mfg	-	6	3	925	12 281	767	1 194	6 846	23 742	31 049	54 705	488
3152	Cut & sew apparel mfg	-	6	3	925	12 281	767	1 194	6 846	23 742	31 049	54 705	488
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
MCKINNEY, TX													
31-33	Manufacturing	-	48	22	4 537	203 996	2 729	5 993	87 430	720 084	592 847	1 327 855	58 570
332	Fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	6 131
3329	Other fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	5	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
MANSFIELD, TX *													
31-33	Manufacturing	2	70	37	2 715	77 869	2 113	4 252	50 194	180 286	257 501	434 494	13 240
332	Fabricated metal product mfg	-	13	7	510	17 837	432	983	12 984	43 111	45 932	88 075	2 284
MARSHALL, TX													
31-33	Manufacturing	3	53	19	1 407	29 465	1 102	2 016	20 466	105 716	116 317	223 191	D
MERCEDES, TX													
31-33	Manufacturing	-	11	3	534	7 578	413	747	5 076	14 677	35 916	50 733	D
MESQUITE, TX													
31-33	Manufacturing	-	72	23	3 338	111 121	2 395	4 632	68 052	739 695	418 378	1 147 294	32 895
334	Computer & electronic product mfg	-	2	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	g	D	D	D	D	D	D	D	D
MIDLAND, TX *													
31-33	Manufacturing	3	73	12	901	32 391	461	776	9 995	77 473	41 970	119 109	2 876
MIDLOTHIAN, TX													
31-33	Manufacturing	-	17	6	1 774	70 025	1 360	3 029	48 360	425 322	487 774	939 073	79 528
327	Nonmetallic mineral product mfg	-	6	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	g	D	D	D	D	D	D	D	D
MINERAL WELLS, TX *													
31-33	Manufacturing	2	31	15	1 060	25 740	736	1 338	15 664	74 625	50 997	124 619	11 502
MISSION, TX													
31-33	Manufacturing	1	27	5	1 176	22 100	1 050	2 008	18 542	88 371	89 491	177 934	3 940
315	Apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
MISSOURI CITY, TX *													
31-33	Manufacturing	-	18	6	675	28 315	480	835	17 180	75 115	83 685	163 417	1 493
MOUNT PLEASANT, TX													
31-33	Manufacturing	-	29	14	4 544	97 011	4 225	9 738	86 636	178 062	643 541	819 987	5 758
311	Food mfg	-	8	7	h	D	D	D	D	D	D	D	3 402
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	D
311615	Poultry processing	-	3	3	h	D	D	D	D	D	D	D	D
NACOGDOCHES, TX													
31-33	Manufacturing	1	36	18	3 101	92 493	2 507	5 230	67 758	232 756	480 406	719 591	18 606
311	Food mfg	-	6	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NAVASOTA, TX													
31-33	Manufacturing	-	11	5	f	D	D	D	D	D	D	D	1 244
NEW BRAUNFELS, TX *													
31-33	Manufacturing	-	59	23	3 525	86 238	2 726	5 359	54 129	274 768	179 702	449 858	16 687
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	10	5	524	10 762	361	780	6 506	33 731	31 786	64 358	D
339	Miscellaneous mfg	1	9	5	552	13 000	399	833	7 712	23 921	11 236	33 193	4 120
NORTH RICHLAND HILLS, TX													
31-33	Manufacturing	-	33	9	1 980	59 445	1 478	2 990	29 342	233 129	173 141	405 301	19 680
315	Apparel mfg	-	2	1	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	2	1	g	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	2	1	g	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	2	1	g	D	D	D	D	D	D	D	D
ODESSA, TX *													
31-33	Manufacturing	1	120	28	1 886	62 107	1 366	2 737	38 629	201 812	556 767	758 905	17 857
332	Fabricated metal product mfg	1	38	9	646	19 833	473	986	11 534	47 455	32 175	79 867	1 963
ORANGE, TX													
31-33	Manufacturing	1	31	12	1 842	80 964	1 333	2 710	49 646	377 681	377 984	750 802	33 601
325	Chemical mfg	-	6	6	g	D	D	D	D	D	D	D	28 892
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	4	4	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	4	4	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	2	2	f	D	D	D	D	D	D	D	D
PALESTINE, TX													
31-33	Manufacturing	-	22	6	667	13 879	566	1 086	10 189	48 160	53 130	98 523	1 330

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PARIS, TX													
31-33	Manufacturing	-	44	19	4 585	156 988	3 839	8 228	122 180	1 329 043	708 996	2 032 280	54 472
311	Food mfg	-	6	3	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	f	D	D	D	D	D	D	D	D
311422	Specialty canning	-	1	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	3	1	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	3	1	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	-	2	2	f	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	1	1	f	D	D	D	D	D	D	D	D
PASADENA, TX													
31-33	Manufacturing	-	100	39	5 905	270 665	4 111	9 078	155 506	1 434 970	3 488 799	4 893 445	276 176
311	Food mfg	-	5	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	23	19	3 005	164 801	1 802	3 641	83 056	1 138 352	2 423 438	3 532 647	237 412
3251	Basic chemical mfg	-	14	11	1 866	99 932	1 311	2 570	55 123	681 736	1 213 951	1 888 992	D
32519	Other basic organic chemical mfg	-	7	6	1 438	77 066	1 037	1 986	38 854	497 314	870 749	1 367 380	87 823
325199	All other basic organic chemical mfg	-	6	5	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	5	5	g	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	5	5	g	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	5	5	g	D	D	D	D	D	D	D	D
PEARLAND, TX *													
31-33	Manufacturing	4	57	12	793	21 786	605	1 198	14 102	39 435	38 010	76 472	3 320
PECOS, TX													
31-33	Manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	1	1	f	D	D	D	D	D	D	D	D
PLAINVIEW, TX													
31-33	Manufacturing	-	21	10	g	D	D	D	D	D	D	D	16 128
311	Food mfg	-	9	6	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PLANO, TX *												
31-33	Manufacturing	-	124	29	8 614	448 558	4 460	9 584	151 027	1 478 608	1 115 255	2 547 517	58 891
323	Printing & related support activities.....	-	21	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	21	5	f	D	D	D	D	D	D	D	D
32311	Printing	-	19	4	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	9	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	27	12	5 911	361 947	2 426	5 285	91 842	1 202 066	664 852	1 820 074	D
3342	Communications equipment mfg.....	-	9	5	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	6	5	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	6	5	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	7	4	767	36 934	597	1 231	24 578	33 258	78 186	112 256	D
33441	Semiconductor & other electronic component mfg.....	-	7	4	767	36 934	597	1 231	24 578	33 258	78 186	112 256	D
334419	Other electronic component mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
	PORT ARTHUR, TX												
31-33	Manufacturing	-	33	14	3 915	234 894	2 799	6 475	159 348	1 454 445	5 223 001	6 712 233	217 057
324	Petroleum & coal products mfg.....	-	4	4	h	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg.....	-	4	4	h	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	3	3	h	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	3	3	h	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
	PORT NECHES, TX												
31-33	Manufacturing	2	16	4	1 251	69 270	974	3 011	52 734	627 138	793 887	1 425 330	D
325	Chemical mfg.....	3	4	2	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg.....	3	4	2	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	3	2	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg.....	3	2	1	f	D	D	D	D	D	D	D	D
	RICHARDSON, TX *												
31-33	Manufacturing	-	179	51	11 246	444 453	5 049	8 888	121 498	1 883 412	1 499 784	3 350 472	247 144
334	Computer & electronic product mfg.....	-	63	29	9 398	376 724	3 795	6 373	87 252	1 704 466	1 376 598	3 046 943	235 872
3341	Computer & peripheral equipment mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	16	9	i	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	-	10	8	4 608	183 752	1 392	1 834	33 645	1 199 702	898 000	2 078 155	120 514
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	-	10	8	4 608	183 752	1 392	1 834	33 645	1 199 702	898 000	2 078 155	120 514
3344	Semiconductor & other electronic component mfg.....	-	24	11	2 984	91 060	1 744	3 245	30 237	217 413	356 139	584 379	95 594
33441	Semiconductor & other electronic component mfg.....	-	24	11	2 984	91 060	1 744	3 245	30 237	217 413	356 139	584 379	95 594
334413	Semiconductor & related device mfg...	-	8	4	1 922	54 740	1 125	2 106	16 630	93 692	121 461	226 633	D
334418	Printed circuit assembly (electronic assembly) mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	15	6	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	15	6	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROCKWALL, TX													
31-33	Manufacturing	3	36	9	715	20 047	516	1 055	12 355	50 660	47 015	97 154	D
ROSENBERG, TX													
31-33	Manufacturing	2	26	7	899	41 999	672	1 736	23 852	154 345	113 557	266 742	16 961
ROUND ROCK, TX *													
31-33	Manufacturing	-	69	30	i	D	D	D	D	D	D	D	55 391
334	Computer & electronic product mfg.....	-	14	10	h	D	D	D	D	D	D	D	38 644
3341	Computer & peripheral equipment mfg	-	4	4	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	4	4	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
ROWLETT, TX *													
31-33	Manufacturing	4	44	9	771	20 313	581	1 128	12 949	33 283	29 200	62 597	3 220
SAGINAW, TX													
31-33	Manufacturing	1	32	15	1 457	39 124	1 218	2 420	25 131	97 195	345 563	437 099	6 687
SAN ANGELO, TX													
31-33	Manufacturing	2	85	26	4 323	101 844	3 480	6 984	72 742	353 578	452 832	803 403	9 691
311	Food mfg.....	7	14	6	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	7	5	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	7	5	3	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	7	4	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	6	5	638	12 189	596	1 142	11 299	40 695	27 754	68 317	591
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	8	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	14	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	5	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	5	1	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SAN ANTONIO, TX													
31-33	Manufacturing	1	953	261	32 870	911 606	23 027	45 409	494 247	2 552 048	2 656 154	5 199 676	228 347
311	Food mfg	-	117	31	4 673	113 341	2 979	5 580	58 687	498 703	650 574	1 149 656	34 562
3115	Dairy product mfg	-	6	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	9	4	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	9	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	58	11	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	49	9	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	10	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	24	8	g	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg	-	3	2	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	14	10	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	1	13	9	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	9	7	g	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	5	5	1 338	43 942	489	1 146	11 199	248 426	218 051	469 290	17 035
314	Textile product mills	-	18	6	g	D	D	D	D	D	D	D	1 310
3141	Textile furnishings mills	-	8	2	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	-	8	2	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	-	7	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	31	5	1 324	22 014	1 212	2 071	19 233	75 085	51 379	126 419	1 334
3152	Cut & sew apparel mfg	-	21	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	3	1	f	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	2	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	11	7	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	3	2	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	3	2	f	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg	-	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	4	28	8	f	D	D	D	D	D	D	D	3 106
3219	Other wood product mfg	4	27	8	f	D	D	D	D	D	D	D	D
32191	Millwork	4	13	5	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	15	9	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	15	9	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	9	7	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	158	27	g	D	D	D	D	D	D	D	10 000
3231	Printing & related support activities	2	158	27	g	D	D	D	D	D	D	D	10 000
32311	Printing	2	143	25	g	D	D	D	D	D	D	D	9 498
323110	Commercial lithographic printing	2	79	15	g	D	D	D	D	D	D	D	5 586
325	Chemical mfg	1	34	8	759	25 834	455	866	12 128	117 503	76 641	199 096	D
326	Plastics & rubber products mfg	5	41	13	1 961	53 791	1 443	2 919	30 492	98 470	108 153	202 286	D
3261	Plastics product mfg	5	32	10	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	20	6	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	3	18	6	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	41	10	742	22 203	583	1 250	14 281	85 493	63 614	149 779	11 088
3273	Cement & concrete product mfg	-	22	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	115	32	1 939	51 608	1 484	3 026	31 865	103 923	92 168	196 347	6 646
3323	Architectural & structural metals mfg	-	42	13	f	D	D	D	D	D	D	D	2 186
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	44	10	525	13 228	411	737	9 203	26 304	11 562	37 746	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SAN ANTONIO, TX— Con.												
31-33	Manufacturing— Con.												
333	Machinery mfg	1	36	15	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	11	6	1 411	36 096	1 104	2 019	22 914	83 731	140 944	221 850	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	—	11	6	1 411	36 096	1 104	2 019	22 914	83 731	140 944	221 850	D
333415	AC & warm air heating & commercial industrial refrig equip mfg	—	8	6	1 406	35 990	1 100	2 014	22 859	83 474	140 733	221 376	D
3339	Other general-purpose machinery mfg	3	9	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	34	12	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	8	6	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	2	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	3	16	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	48	16	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	3	20	11	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	3	20	11	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	3	5	4	1 676	82 594	1 237	3 043	43 339	115 697	115 410	223 805	D
337	Furniture & related product mfg	1	58	19	1 990	42 692	1 594	3 981	31 488	85 593	87 071	172 833	7 358
3371	Household & institutional furniture & kitchen cabinet mfg	1	37	10	1 559	33 467	1 250	3 285	25 222	66 509	68 296	134 876	6 603
33711	Wood kitchen cabinet & counter top mfg	1	22	7	1 270	27 103	1 022	2 852	20 673	56 734	57 456	114 274	5 749
337110	Wood kitchen cabinet & counter top mfg ...	1	22	7	1 270	27 103	1 022	2 852	20 673	56 734	57 456	114 274	5 749
339	Miscellaneous mfg	1	123	20	2 675	60 911	1 725	3 053	33 219	138 173	136 198	269 073	5 541
3391	Medical equipment & supplies mfg	—	50	9	1 462	32 335	856	1 391	16 838	67 207	80 821	141 755	D
33911	Medical equipment & supplies mfg	—	50	9	1 462	32 335	856	1 391	16 838	67 207	80 821	141 755	D
339115	Ophthalmic goods mfg	—	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	1	73	11	1 213	28 576	869	1 662	16 381	70 966	55 377	127 318	D
	SAN BENITO, TX												
31-33	Manufacturing	—	18	7	808	13 904	720	1 360	11 892	63 530	62 178	122 696	1 761
	SAN MARCOS, TX *												
31-33	Manufacturing	—	42	19	1 972	54 047	1 305	2 415	26 467	122 874	124 703	245 663	13 698
332	Fabricated metal product mfg	1	7	4	500	11 903	386	889	8 085	30 283	51 450	82 466	1 906
335	Electrical equipment, appliance, & component mfg	—	4	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SEGUIN, TX													
31-33	Manufacturing	-	43	17	3 365	84 055	2 438	3 974	51 545	450 670	467 315	918 637	26 160
311	Food mfg	-	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
SHERMAN, TX													
31-33	Manufacturing	-	58	22	6 992	274 391	5 265	10 821	159 925	1 681 085	993 553	2 672 032	188 875
311	Food mfg	-	11	5	1 227	42 020	1 131	2 462	35 962	625 720	444 937	1 068 401	12 775
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	5	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	2	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	1	1	f	D	D	D	D	D	D	D	D
SILSBEE, TX													
31-33	Manufacturing	1	11	6	579	18 757	462	1 219	13 044	34 513	62 707	96 206	D
SOUTH HOUSTON, TX													
31-33	Manufacturing	2	52	9	711	21 770	572	998	14 139	46 164	32 318	78 365	3 268

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STAFFORD, TX *													
31-33	Manufacturing	-	110	36	5 404	206 372	2 561	4 562	55 924	664 156	266 137	926 759	73 226
332	Fabricated metal product mfg	-	33	14	g	D	D	D	D	D	D	D	8 491
3329	Other fabricated metal product mfg	-	9	7	1 001	21 520	486	627	8 649	78 041	58 012	139 889	5 115
33291	Metal valve mfg	-	6	5	f	D	D	D	D	D	D	D	D
33291 1	Industrial valve mfg ...	-	3	3	f	D	D	D	D	D	D	D	4 459
334	Computer & electronic product mfg	-	17	5	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	5	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	5	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	3	1	g	D	D	D	D	D	D	D	D
STEPHENVILLE, TX													
31-33	Manufacturing	-	29	7	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	8	2	630	17 723	376	941	8 990	47 939	80 674	129 067	5 071
SUGAR LAND, TX													
31-33	Manufacturing	-	40	18	2 703	105 344	1 691	3 741	56 438	414 019	580 041	983 389	37 849
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	1	1	f	D	D	D	D	D	D	D	D
311312	Cane sugar refining ...	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	5	4	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	2	2	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
SULPHUR SPRINGS, TX													
31-33	Manufacturing	-	32	13	1 277	37 198	940	2 026	24 382	216 431	284 527	498 818	18 209
SWEETWATER, TX													
31-33	Manufacturing	-	11	5	560	11 339	392	722	7 510	55 367	36 236	66 822	3 130
TAYLOR, TX													
31-33	Manufacturing	5	19	12	1 304	26 793	1 058	2 056	19 159	92 223	54 203	144 475	4 711
339	Miscellaneous mfg	9	4	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	9	3	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	2	2	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	9	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TEMPLE, TX													
31-33	Manufacturing	-	59	32	5 515	182 965	4 332	10 050	131 634	596 066	571 827	1 164 662	31 852
326	Plastics & rubber products mfg	-	9	6	2 624	111 611	2 162	5 870	85 641	404 938	318 718	722 977	D
3261	Plastics product mfg	-	8	6	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg	-	2	2	g	D	D	D	D	D	D	D	D
326130	Laminated plastics plate, sheet, & shape mfg	-	2	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	4	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	5	1 130	22 579	833	1 326	14 707	42 182	54 727	96 444	3 093
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	3	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D
TERRELL, TX													
31-33	Manufacturing	-	32	15	2 490	77 267	1 844	3 699	42 186	165 947	133 624	297 819	7 286
332	Fabricated metal product mfg	-	8	4	897	27 239	599	1 180	15 150	23 452	63 764	86 762	1 920
3323	Architectural & structural metals mfg	-	3	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	3	1	f	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	1	1	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	1	1	f	D	D	D	D	D	D	D	D
TEXARKANA, TX													
31-33	Manufacturing	1	49	15	2 717	90 286	2 097	4 352	61 170	289 887	313 046	608 268	D
322	Paper mfg	-	4	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	12	3	667	20 523	491	1 063	10 030	21 604	24 920	47 166	380
TEXAS CITY, TX *													
31-33	Manufacturing	1	27	14	5 408	327 226	3 569	8 697	213 115	1 632 210	7 286 810	8 921 993	173 989
324	Petroleum & coal products mfg	2	3	3	g	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	2	3	3	g	D	D	D	D	D	D	D	D
32411	Petroleum refineries	2	3	3	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	2	3	3	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	8	6	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	8	6	h	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	4	h	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	4	3	g	D	D	D	D	D	D	D	D
TOMBALL, TX *													
31-33	Manufacturing	3	25	7	503	14 943	395	764	9 491	31 190	36 281	67 680	4 960

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
TYLER, TX													
31-33	Manufacturing	-	115	38	9 228	338 968	7 143	14 827	237 136	996 129	1 066 708	2 068 836	42 385
311	Food mfg	1	10	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	8	g	D	D	D	D	D	D	D	5 849
3262	Rubber product mfg	-	5	5	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	2	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	5	h	D	D	D	D	D	D	D	16 819
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
UVALDE, TX													
31-33	Manufacturing	6	8	2	f	D	D	D	D	D	D	D	D
VERNON, TX													
31-33	Manufacturing	-	9	3	681	19 792	552	1 496	14 881	99 949	142 695	236 709	1 150
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	2	1	f	D	D	D	D	D	D	D	D
VICTORIA, TX													
31-33	Manufacturing	-	60	14	2 765	110 995	2 040	4 316	76 486	569 184	630 545	1 195 526	96 757
325	Chemical mfg	-	5	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
WACO, TX													
31-33	Manufacturing	-	177	83	14 884	444 333	10 629	21 641	268 888	1 987 836	1 636 453	3 608 252	66 187
311	Food mfg	-	11	6	h	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	11	7	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	10	6	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	5	5	g	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) mfg	-	5	5	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	8	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	10	8	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	7	5	745	20 662	575	1 402	15 108	59 736	92 333	149 637	10 785
322211	Corrugated & solid fiber box mfg	-	6	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	35	9	783	18 589	604	1 115	12 629	44 913	28 779	73 485	1 525
3231	Printing & related support activities	1	35	9	783	18 589	604	1 115	12 629	44 913	28 779	73 485	1 525
32311	Printing	1	31	8	722	17 700	554	1 037	12 019	43 542	28 412	71 736	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WACO, TX—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	—	3	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	2	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	2	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	2	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	10	8		760	28 830	665	1 304	23 767	92 691	83 910	177 902
332	Fabricated metal product mfg	1	23	10		1 187	40 908	818	1 735	25 831	107 977	113 994	223 363
333	Machinery mfg	—	12	8	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	5	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg	—	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	4	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg	—	1	1	g	D	D	D	D	D	D	D	D
WAXAHACHIE, TX													
31-33	Manufacturing	—	44	20		3 311	104 301	2 714	5 681	80 629	340 426	370 281	713 848
326	Plastics & rubber products mfg	1	8	5		871	24 025	746	1 581	19 957	73 367	115 270	188 014
3261	Plastics product mfg	1	7	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	4	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	—	1	1	f	D	D	D	D	D	D	D	D
327993	Mineral wool mfg	—	1	1	f	D	D	D	D	D	D	D	D
WEATHERFORD, TX													
31-33	Manufacturing	1	43	8		1 203	29 132	967	1 719	18 743	82 003	83 988	166 270
326	Plastics & rubber products mfg	—	2	2	f	D	D	D	D	D	D	D	D
WESLACO, TX													
31-33	Manufacturing	—	18	5		1 414	24 884	1 032	1 898	16 575	12 374	65 147	77 806
315	Apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	—	1	1	f	D	D	D	D	D	D	D	D
WHITE SETTLEMENT, TX													
31-33	Manufacturing	3	14	4		561	14 678	445	916	9 360	30 415	16 187	47 332

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WICHITA FALLS, TX *												
31-33	Manufacturing	-	121	31	6 090	205 968	4 731	9 591	148 570	570 299	494 700	1 069 645	48 303
327	Nonmetallic mineral product mfg	-	6	4	g	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	g	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	3	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	25	10	1 173	32 112	933	2 043	22 171	80 021	51 597	131 481	3 343
336	Transportation equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
	WILLIS, TX												
31-33	Manufacturing	8	12	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	9	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	9	1	1	f	D	D	D	D	D	D	D	D
	WINTERS, TX												
31-33	Manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	1	1	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
332323	Ornamental & architectural metal work mfg	-	1	1	f	D	D	D	D	D	D	D	D
	WOODVILLE, TX												
31-33	Manufacturing	1	7	2	f	D	D	D	D	D	D	D	D
	WYLIE, TX *												
31-33	Manufacturing	1	36	15	1 647	44 890	1 218	2 827	28 431	152 333	302 950	467 114	8 085
336	Transportation equipment mfg	1	5	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	-	1	1	f	D	D	D	D	D	D	D	D
	YOAKUM, TX *												
31-33	Manufacturing	-	26	14	1 015	16 319	698	1 128	9 070	28 644	45 867	78 273	1 207

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
TEXAS		TEXAS—Con.	
Companies ¹	19 795	Quantity of electricity purchased for heat and power	1,000 kWh.. 64 463 278
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 16 991 176
All establishments	21 808	Total value of shipments	\$1,000.. 297 657 003
Establishments with 1 to 19 employees	15 020	Value of resales	\$1,000.. 10 145 289
Establishments with 20 to 99 employees	4 909	Value added	\$1,000.. 129 390 041
Establishments with 100 employees or more	1 879	Total inventories, beginning of year	\$1,000.. 28 738 782
All employees	959 665	Finished goods inventories, beginning of year	\$1,000.. 11 592 204
Total compensation ²	\$1,000.. 40 975 491	Work-in-process inventories, beginning of year	\$1,000.. 7 480 607
Annual payroll	\$1,000.. 32 760 820	Materials and supplies inventories, beginning of year	\$1,000.. 9 665 971
Total fringe benefits	\$1,000.. 8 214 671	Total inventories, end of year	\$1,000.. 29 593 498
Production workers, average for year	663 929	Finished goods inventories, end of year	\$1,000.. 11 730 127
Production workers on March 12	659 218	Work-in-process inventories, end of year	\$1,000.. 7 639 034
Production workers on May 12	662 349	Materials and supplies inventories, end of year	\$1,000.. 10 224 337
Production workers on August 12	665 477	Gross book value of total assets at beginning of year	\$1,000.. 131 727 257
Production workers on November 12	668 672	Total capital expenditures (new and used)	\$1,000.. 12 509 148
Production-worker hours	1 342 337	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 1 468 416
Production-worker wages	\$1,000.. 18 163 055	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 11 040 732
Total cost of materials	\$1,000.. 168 557 010	Total retirements ²	\$1,000.. 3 114 495
Cost of materials, parts, containers, etc., consumed	\$1,000.. 150 488 560	Gross book value of total assets at end of year	\$1,000.. 141 121 910
Cost of resales	\$1,000.. 7 623 240	Total depreciation during year ²	\$1,000.. 9 086 800
Cost of fuels	\$1,000.. 4 013 217	Total rental payments ²	\$1,000.. 2 114 390
Cost of purchased electricity	\$1,000.. 2 758 095	Buildings and other structures rental payments ²	\$1,000.. 863 372
Cost of contract work	\$1,000.. 3 673 898	Machinery and equipment rental payments ²	\$1,000.. 1 251 018

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

TEXAS

Abernathy is in Hale and Lubbock Counties.

Abilene is in Jones and Taylor Counties.

Amarillo is in Potter and Randall Counties.

Aransas Pass is in Aransas, Nueces, and San Patricio Counties.

Austin is in Travis and Williamson Counties.

Azle is in Parker and Tarrant Counties.

Baytown is in Chambers and Harris Counties.

Burleson is in Johnson and Tarrant Counties.

Carrollton is in Collin, Dallas, and Denton Counties.

Cedar Hill is in Dallas and Ellis Counties.

Cedar Park is in Travis and Williamson Counties.

Coppell is in Dallas and Denton Counties.

Copperas Cove is in Coryell and Lampasas Counties.

Corpus Christi is in Kleberg, Nueces, and San Patricio Counties.

Crowley is in Johnson and Tarrant Counties.

Dalhart is in Dallam and Hartley Counties.

Dallas is in Collin, Dallas, Denton, Kaufman, and Rockwall Counties.

Denver City is in Gaines and Yoakum Counties; it annexed into Gaines County in December 1991, but this change was not submitted to the Census Bureau until October 1992.

Fair Oaks Ranch is in Bexar, Comal, and Kendall Counties.

Flower Mound is in Dallas, Denton, and Tarrant Counties.

Fort Worth is in Denton and Tarrant Counties.

Friendswood is in Galveston and Harris Counties.

Frisco is in Collin and Denton Counties.

Garland is in Collin, Dallas, and Rockwall Counties.

Gladewater is in Gregg and Upshur Counties.

Glenn Heights is in Dallas and Ellis Counties.

Grand Prairie is in Dallas, Ellis, and Tarrant Counties.

Grapevine is in Dallas, Denton, and Tarrant Counties.

Hamlin is in Fisher and Jones Counties.

Houston is in Fort Bend, Harris, and Montgomery Counties.

Katy is in Fort Bend, Harris, and Waller Counties.

Kilgore is in Gregg and Rusk Counties.

League City is in Galveston and Harris Counties.

Leander is in Travis and Williamson Counties.

Lewisville is in Dallas and Denton Counties.

Longview is in Gregg and Harrison Counties.

Lytle is in Atascosa, Bexar, and Medina Counties.

McGregor is in Coryell and McLennan Counties; it annexed into Coryell County in November 1996.

Mansfield is in Ellis, Johnson, and Tarrant Counties.

Midland is in Martin and Midland Counties.

Mineral Wells is in Palo Pinto and Parker Counties.

Missouri City is in Fort Bend and Harris Counties.

Monahans is in Ward and Winkler Counties.

New Braunfels is in Comal and Guadalupe Counties.

Odessa is in Ector and Midland Counties.

Ovilla is in Dallas and Ellis Counties.

Pearland is in Brazoria and Harris Counties.

Plano is in Collin and Denton Counties.

Portland is in Nueces and San Patricio Counties.

Progreso was incorporated in November 1991, but this change was not submitted to the Census Bureau until September 1992.

Richardson is in Collin and Dallas Counties.

Rio Grande City was incorporated in May 1993.

Round Rock is in Travis and Williamson Counties.

Rowlett is in Dallas and Rockwall Counties.

Royse City is in Collin and Rockwall Counties.

Sachse is in Collin and Dallas Counties.

San Diego is in Duval and Jim Wells Counties.

San Marcos is in Caldwell and Hays Counties.

Schertz is in Bexar, Comal, and Guadalupe Counties.

Seabrook is in Chambers, Galveston, and Harris Counties.

Seagoville is in Dallas and Kaufman Counties.

Southlake is in Denton and Tarrant Counties.

Stafford is in Fort Bend and Harris Counties.

Stamford is in Haskell and Jones Counties.

Texas City is in Chambers and Galveston Counties; it annexed into Chambers County in October 1992.

Tomball is in Harris and Montgomery Counties.

Trophy Club is in Denton and Tarrant Counties.

Wichita Falls is in Wichita County; it detached from Archer County in October 1996.

Winnsboro is in Franklin and Wood Counties.

Wylie is in Collin, Dallas, and Rockwall Counties.

Yoakum is in DeWitt and Lavaca Counties.

Appendix E. Metropolitan Areas

TEXAS

Abilene, TX MSA

Taylor County, TX

Amarillo, TX MSA

Potter County, TX

Randall County, TX

Austin—San Marcos, TX MSA

Bastrop County, TX

Caldwell County, TX

Hays County, TX

Travis County, TX

Williamson County, TX

Beaumont—Port Arthur, TX MSA

Hardin County, TX

Jefferson County, TX

Orange County, TX

Brazoria, TX PMSA

Brazoria County, TX

Brownsville—Harlingen—San Benito, TX MSA

Cameron County, TX

Bryan—College Station, TX MSA

Brazos County, TX

Corpus Christi, TX MSA

Nueces County, TX

San Patricio County, TX

Dallas, TX PMSA

Collin County, TX

Dallas County, TX

Denton County, TX

Ellis County, TX

Henderson County, TX

Hunt County, TX

Kaufman County, TX

Rockwall County, TX

Dallas—Fort Worth, TX CMSA

Dallas, TX PMSA

Collin County, TX

Dallas County, TX

Denton County, TX

Ellis County, TX

Henderson County, TX

Hunt County, TX

Kaufman County, TX

Rockwall County, TX

Fort Worth—Arlington, TX PMSA

Hood County, TX

Johnson County, TX

Parker County, TX

Tarrant County, TX

El Paso, TX MSA

El Paso County, TX

Fort Worth—Arlington, TX PMSA

Hood County, TX

Johnson County, TX

Parker County, TX

Tarrant County, TX

Galveston—Texas City, TX PMSA

Galveston County, TX

Houston, TX PMSA

Chambers County, TX

Fort Bend County, TX

Harris County, TX

Liberty County, TX

Montgomery County, TX

Waller County, TX

Houston—Galveston—Brazoria, TX CMSA

Brazoria, TX PMSA

Brazoria County, TX

Galveston—Texas City, TX PMSA

Galveston County, TX

Houston, TX PMSA

Chambers County, TX

Fort Bend County, TX

Harris County, TX

Liberty County, TX

Montgomery County, TX

Waller County, TX

Killeen—Temple, TX MSA

Bell County, TX

Coryell County, TX

Laredo, TX MSA

Webb County, TX

Longview—Marshall, TX MSA

Gregg County, TX

Harrison County, TX

Upshur County, TX

Lubbock, TX MSA

Lubbock County, TX

McAllen—Edinburg—Mission, TX MSA

Hidalgo County, TX

Odessa—Midland, TX MSA

Ector County, TX

Midland County, TX

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX

Comal County, TX

Guadalupe County, TX

Wilson County, TX

Sherman—Denison, TX MSA

Grayson County, TX

Texarkana, TX—Texarkana, AR MSA

Miller County, AR

Bowie County, TX

Tyler, TX MSA

Smith County, TX

Victoria, TX MSA

Victoria County, TX

Waco, TX MSA

McLennan County, TX

Wichita Falls, TX MSA

Archer County, TX

Wichita County, TX

Utah

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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1997 Economic Census
Manufacturing
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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UTAH													
31-33	Manufacturing	1	2 860	861	119 140	3 726 130	84 129	166 797	2 218 705	11 343 518	12 788 711	24 014 379	942 313
311	Food mfg	1	246	92	12 736	304 067	9 596	17 405	196 488	1 013 589	2 004 930	3 024 549	74 608
3111	Animal food mfg	3	16	5	506	16 697	335	635	8 546	50 004	108 537	158 545	2 666
31111	Animal food mfg	3	16	5	506	16 697	335	635	8 546	50 004	108 537	158 545	2 666
311111	Dog & cat food mfg	-	2	2	e	D	D	D	D	D	D	D	D
311119	Other animal food mfg	5	14	3	c	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	8	6	271	9 806	184	422	5 716	25 232	122 221	149 435	1 043
31121	Flour milling & malt mfg	-	8	6	271	9 806	184	422	5 716	25 232	122 221	149 435	1 043
311211	Flour milling	-	8	6	271	9 806	184	422	5 716	25 232	122 221	149 435	1 043
3113	Sugar & confectionery product mfg	1	29	7	886	13 324	802	916	9 228	26 678	21 798	48 966	2 561
31133	Confectionery mfg from purchased chocolate	-	9	4	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	9	4	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	17	3	619	8 524	566	534	5 717	15 616	14 688	30 685	1 342
311340	Nonchocolate confectionery mfg	-	17	3	619	8 524	566	534	5 717	15 616	14 688	30 685	1 342
3114	Fruit & vegetable preserving & specialty food mfg	1	12	6	1 790	40 000	1 436	1 883	30 324	76 383	239 584	313 910	11 988
31141	Frozen food mfg	1	7	5	1 534	35 943	1 299	1 598	27 034	71 652	235 836	307 524	D
311411	Frozen fruit, juice, & vegetable mfg	-	3	2	175	3 232	143	206	1 549	10 966	5 894	16 882	D
311412	Frozen specialty food mfg	1	4	3	1 359	32 711	1 156	1 392	25 485	60 686	229 942	290 642	7 641
31142	Fruit & vegetable canning, pickling, & drying	1	5	1	256	4 057	137	285	3 290	4 731	3 748	6 386	D
311421	Fruit & vegetable canning	1	5	1	256	4 057	137	285	3 290	4 731	3 748	6 386	D
3115	Dairy product mfg	-	31	19	2 553	69 274	1 577	3 188	40 112	270 171	662 366	940 894	20 550
31151	Dairy product (except frozen) mfg	-	25	16	2 246	64 013	1 419	2 951	36 901	261 016	649 556	918 806	19 422
311511	Fluid milk mfg	-	6	5	e	D	D	D	D	D	D	D	5 190
311513	Cheese mfg	-	8	6	929	23 947	790	1 712	20 276	53 260	444 096	506 579	D
311514	Dry, condensed, & evaporated dairy product mfg	-	10	5	863	26 144	394	734	9 719	148 709	76 464	223 975	9 313
31152	Ice cream & frozen dessert mfg	1	6	3	307	5 261	158	237	3 211	9 155	12 810	22 088	1 128
311520	Ice cream & frozen dessert mfg	1	6	3	307	5 261	158	237	3 211	9 155	12 810	22 088	1 128
3116	Meat product mfg	1	31	11	2 216	46 315	1 985	4 214	37 439	119 509	567 458	686 323	8 712
31161	Animal slaughtering & processing	1	31	11	2 216	46 315	1 985	4 214	37 439	119 509	567 458	686 323	8 712
311611	Animal (except poultry) slaughtering	-	19	3	1 154	26 230	1 039	2 363	21 842	64 856	436 071	501 483	D
311612	Meat processed from carcasses	1	9	6	e	D	D	D	D	D	D	D	1 231
311615	Poultry processing	9	2	1	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	1	7	5	189	4 903	135	288	2 177	12 415	10 682	21 999	920
31171	Seafood product preparation & packaging	1	7	5	189	4 903	135	288	2 177	12 415	10 682	21 999	920
311712	Fresh & frozen seafood processing	1	6	4	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	91	23	3 202	73 192	2 165	4 017	43 802	272 626	168 010	440 090	12 365
31181	Bread & bakery product mfg	2	79	19	2 387	51 557	1 491	2 683	27 563	161 895	78 465	240 600	6 132
311811	Retail bakeries	5	42	4	347	4 087	232	287	2 238	8 655	4 918	13 408	383
311812	Commercial bakeries	-	33	12	1 584	38 590	853	1 595	18 821	126 858	42 837	169 788	4 278
311813	Frozen cakes, pies, & other pastries mfg	5	4	3	457	8 880	406	801	6 504	26 382	30 710	57 404	1 471
31182	Cookie, cracker, & pasta mfg	1	11	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	5	3	648	18 192	536	1 020	13 671	95 576	74 502	169 917	5 420
311822	Flour mixes & dough mfg from purchased flour	9	4	1	c	D	D	D	D	D	D	D	D
3119	Other food mfg	-	21	10	1 123	30 556	977	1 842	19 144	160 571	104 274	264 387	13 803
31191	Snack food mfg	-	8	3	553	16 404	493	986	10 647	111 608	38 673	150 179	D
311919	Other snack food mfg	-	8	3	553	16 404	493	986	10 647	111 608	38 673	150 179	D
31199	All other food mfg	1	9	7	563	14 026	479	848	8 440	48 782	65 360	113 776	9 848
311991	Perishable prepared food mfg	1	5	3	259	6 261	233	414	4 251	16 791	22 608	39 363	1 725
311999	All other miscellaneous food mfg	1	4	4	304	7 765	246	434	4 189	31 991	42 752	74 413	8 123
312	Beverage & tobacco product mfg	1	16	6	550	15 381	217	470	5 789	90 388	201 736	291 959	7 389
3121	Beverage mfg	1	16	6	550	15 381	217	470	5 789	90 388	201 736	291 959	7 389
31211	Soft drink & ice mfg	1	13	5	484	13 719	199	439	4 885	86 868	200 129	287 472	D
312111	Soft drink mfg	1	5	5	463	13 367	185	414	4 652	85 850	199 021	285 344	7 177

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	UTAH—Con.												
	Manufacturing—Con.												
313	Textile mills	9	14	1	105	2 005	89	139	1 436	3 800	2 811	6 587	391
314	Textile product mills	1	65	24	1 447	29 563	1 104	1 879	18 303	68 259	85 676	157 470	2 812
3141	Textile furnishings mills	2	17	2	156	2 569	127	232	1 766	5 951	7 871	13 664	579
31412	Curtain & linen mills	2	17	2	156	2 569	127	232	1 766	5 951	7 871	13 664	579
3149	Other textile product mills ..	1	48	22	1 291	26 994	977	1 647	16 537	62 308	77 805	143 806	2 233
31491	Textile bag & canvas mills	1	22	9	436	8 860	330	575	4 938	18 968	12 833	31 672	619
314911	Textile bag mills	—	12	4	245	3 985	194	368	2 346	6 997	4 593	11 510	236
314912	Canvas & related product mills	1	10	5	191	4 875	136	207	2 592	11 971	8 240	20 162	383
31499	All other textile product mills	1	26	13	855	18 134	647	1 072	11 599	43 340	64 972	112 134	1 614
314991	Rope, cordage, & twine mills	2	3	3	221	5 842	178	386	3 736	21 550	22 727	44 008	D
314999	All other miscellaneous textile product mills ..	1	23	10	634	12 292	469	686	7 863	21 790	42 245	68 126	D
315	Apparel mfg	1	63	23	2 039	31 960	1 667	2 974	23 414	54 439	44 139	101 020	703
3152	Cut & sew apparel mfg	—	42	18	1 739	27 916	1 421	2 551	20 656	47 843	38 441	88 638	381
31521	Cut & sew apparel contractors	2	17	7	336	3 929	295	492	3 217	5 158	622	5 803	144
315212	Women's, girls', & infants' cut & sew apparel contractors ..	3	14	6	c	D	D	D	D	D	D	D	129
31522	Men's & boys' cut & sew apparel mfg	2	7	3	220	3 561	143	243	2 380	8 457	5 334	13 991	77
315228	Men's & boys' cut & sew other outerwear mfg	—	2	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	14	8	1 143	19 737	950	1 755	14 605	32 938	31 688	66 544	128
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	—	7	4	e	D	D	D	D	D	D	D	97
315239	Women's & girls' cut & sew other outerwear mfg	—	3	1	c	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	4	15	4	e	D	D	D	D	D	D	D	270
31599	Apparel accessories & other apparel mfg	4	15	4	e	D	D	D	D	D	D	D	270
315999	Other apparel accessories & other apparel mfg	7	10	2	c	D	D	D	D	D	D	D	242
316	Leather & allied product mfg .	4	13	5	220	3 298	182	281	2 251	12 165	11 238	23 199	264
3169	Other leather & allied product mfg	2	8	4	177	2 378	145	222	1 593	10 034	7 648	17 439	D
31699	Other leather & allied product mfg	2	8	4	177	2 378	145	222	1 593	10 034	7 648	17 439	D
316991	Luggage mfg	1	5	4	149	2 085	129	196	1 394	9 424	7 018	16 187	126
321	Wood product mfg	1	135	30	2 098	41 764	1 671	2 954	29 865	81 919	131 795	213 147	7 504
3211	Sawmills & wood preservation	5	20	4	233	4 459	213	376	3 971	9 741	13 102	21 927	1 336
32111	Sawmills & wood preservation	5	20	4	233	4 459	213	376	3 971	9 741	13 102	21 927	1 336
321113	Sawmills	5	18	4	c	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	20	13	646	13 264	476	849	8 299	27 874	35 200	63 087	3 063
32121	Veneer, plywood, & engineered wood product mfg	—	20	13	646	13 264	476	849	8 299	27 874	35 200	63 087	3 063
321214	Truss mfg	—	19	12	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	1	95	13	1 219	24 041	982	1 729	17 595	44 304	83 493	128 133	3 105
32191	Millwork	1	52	6	833	17 464	676	1 228	12 871	29 392	64 934	94 567	1 812
321911	Wood window & door mfg	—	18	1	351	7 453	298	499	5 827	11 306	38 839	50 077	880
321912	Cut stock, resawing lumber, & planing	—	10	1	261	5 992	187	403	3 918	10 230	18 333	28 921	669
321918	Other millwork (including flooring) ...	4	24	4	221	4 019	191	326	3 126	7 856	7 762	15 569	263
32192	Wood container & pallet mfg	1	14	5	208	3 418	161	262	2 244	7 178	11 830	18 999	1 024
321920	Wood container & pallet mfg	1	14	5	208	3 418	161	262	2 244	7 178	11 830	18 999	1 024
32199	All other wood product mfg	2	29	2	178	3 159	145	239	2 480	7 734	6 729	14 567	269
321999	All other miscellaneous wood product mfg ...	1	21	1	115	1 742	91	145	1 410	3 950	3 004	7 048	99

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	-	32	21	2 757	87 117	2 157	4 840	62 782	482 562	314 183	781 892	43 301
3222	Converted paper product mfg	-	32	21	2 757	87 117	2 157	4 840	62 782	482 562	314 183	781 892	43 301
32221	Paperboard container mfg	-	16	13	1 195	35 644	902	1 730	22 667	69 363	126 406	197 672	17 371
322211	Corrugated & solid fiber box mfg	-	6	6	543	16 974	381	771	10 275	35 606	79 683	117 358	D
322212	Folding paperboard box mfg	-	6	4	505	15 805	395	698	10 207	27 180	40 759	67 998	4 982
32222	Paper bag & coated & treated paper mfg	-	3	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	6	4	e	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	-	3	1	c	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	2	2	c	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	7	3	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ..	7	6	2	c	D	D	D	D	D	D	D	400
323	Printing & related support activities	2	310	84	7 809	240 762	5 535	10 249	124 609	555 112	421 175	976 282	31 924
3231	Printing & related support activities	2	310	84	7 809	240 762	5 535	10 249	124 609	555 112	421 175	976 282	31 924
32311	Printing	2	270	79	7 250	227 027	5 065	9 435	115 581	522 411	415 739	938 258	29 908
323110	Commercial lithographic printing ..	3	121	35	2 478	68 803	1 918	3 475	43 360	135 988	104 772	240 221	9 175
323112	Commercial flexographic printing ..	-	7	6	220	7 955	157	313	3 621	12 876	16 368	29 337	675
323113	Commercial screen printing	1	34	9	803	16 893	646	1 114	11 058	34 539	21 253	56 140	2 660
323114	Quick printing	1	46	8	534	10 276	358	523	6 259	21 297	13 479	34 815	1 704
323115	Digital printing	5	9	2	113	3 212	71	144	1 918	7 608	4 372	11 977	402
323116	Manifold business form printing	5	14	10	1 213	34 067	989	1 955	26 875	162 279	76 037	239 042	4 414
323117	Book printing	-	7	4	439	14 803	310	609	9 761	43 246	56 143	98 651	2 021
323118	Blankbook, looseleaf binder, & device mfg ..	-	6	4	g	D	D	D	D	D	D	D	D
323119	Other commercial printing	9	20	1	199	5 045	147	256	3 029	10 357	7 267	17 647	733
32312	Support activities for printing	1	40	5	559	13 735	470	814	9 028	32 701	5 436	38 024	2 016
323121	Tradebinding & related work	-	17	3	329	7 018	279	558	5 098	13 946	2 936	16 806	933
323122	Prepress services	1	23	2	230	6 717	191	256	3 930	18 755	2 500	21 218	1 083
324	Petroleum & coal products mfg	-	18	8	1 555	73 397	1 196	2 583	51 080	454 902	1 357 755	1 806 997	47 036
3241	Petroleum & coal products mfg	-	18	8	1 555	73 397	1 196	2 583	51 080	454 902	1 357 755	1 806 997	47 036
32411	Petroleum refineries	-	6	5	827	41 157	544	1 220	26 748	360 882	1 287 703	1 642 881	37 632
324110	Petroleum refineries ..	-	6	5	827	41 157	544	1 220	26 748	360 882	1 287 703	1 642 881	37 632
32412	Asphalt paving, roofing, & saturated materials mfg	-	7	3	696	31 233	629	1 322	23 634	90 363	63 226	153 726	D
324121	Asphalt paving mixture & block mfg	-	6	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	120	43	5 520	172 753	3 319	6 044	84 010	686 125	594 824	1 267 454	92 549
3251	Basic chemical mfg	-	19	7	900	37 555	578	1 267	20 505	124 500	93 343	211 576	43 191
32518	Other basic inorganic chemical mfg	-	9	5	780	32 363	514	1 126	18 229	85 415	70 236	149 411	D
325188	All other basic inorganic chemical mfg	-	8	5	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	8	4	3	113	2 190	77	69	1 316	7 934	11 543	19 701	D
32521	Resin & synthetic rubber mfg	8	4	3	113	2 190	77	69	1 316	7 934	11 543	19 701	D
325211	Plastics material & resin mfg	8	3	3	c	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg ..	2	10	1	115	3 940	71	126	2 144	13 127	24 539	37 860	2 193

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3254	Pharmaceutical & medicine mfg	1	30	18	2 333	68 871	1 417	2 467	31 101	350 016	236 561	582 670	31 947
32541	Pharmaceutical & medicine mfg	1	30	18	2 333	68 871	1 417	2 467	31 101	350 016	236 561	582 670	31 947
325411	Medicinal & botanical mfg	2	13	9	1 048	32 946	617	1 072	14 141	118 461	100 554	215 818	24 976
325412	Pharmaceutical preparation mfg	—	12	6	969	24 950	626	1 059	13 439	197 234	113 429	311 138	5 308
325413	In-vitro diagnostic substance mfg	1	2	1	c	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	—	3	2	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	19	6	1 297	36 980	676	1 231	15 813	103 804	163 713	265 623	7 317
32561	Soap & cleaning compound mfg	—	16	4	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	8	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	3	28	8	706	21 333	473	841	12 533	81 927	58 254	138 257	6 388
32592	Explosives mfg	—	3	2	184	7 360	114	245	3 864	17 792	18 618	35 805	D
325920	Explosives mfg	—	3	2	184	7 360	114	245	3 864	17 792	18 618	35 805	D
32599	All other chemical product & preparation mfg	6	21	5	461	11 958	319	508	7 447	52 778	29 914	81 433	D
325998	All other miscellaneous chemical product & preparation mfg	5	10	4	386	10 215	265	420	6 358	42 791	25 832	67 376	3 215
326	Plastics & rubber products mfg	2	140	52	4 132	106 191	3 192	6 189	70 187	275 531	255 300	530 450	22 553
3261	Plastics product mfg	1	123	46	3 574	90 410	2 787	5 412	60 119	230 508	221 553	450 945	20 278
32611	Unsupported plastics film, sheet, & bag mfg ..	—	8	3	557	13 742	510	1 002	11 670	33 059	39 257	70 694	2 115
326111	Unsupported plastics bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	6	2	c	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	4	8	5	238	6 323	175	386	3 981	15 330	34 063	49 184	3 689
326122	Plastics pipe & pipe fitting mfg	4	5	4	c	D	D	D	D	D	D	D	3 610
32614	Polystyrene foam product mfg	1	8	3	136	3 401	106	239	2 297	22 641	11 504	34 098	2 732
326140	Polystyrene foam product mfg	1	8	3	136	3 401	106	239	2 297	22 641	11 504	34 098	2 732
32615	Urethane & other foam product (except polystyrene) mfg	1	8	1	c	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	1	8	1	c	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	4	3	192	4 767	157	363	3 583	18 099	17 926	35 484	3 547
326160	Plastics bottle mfg	—	4	3	192	4 767	157	363	3 583	18 099	17 926	35 484	3 547
32619	Other plastics product mfg	1	85	31	2 329	59 371	1 743	3 253	36 832	131 540	105 416	238 366	7 930
326191	Plastics plumbing fixture mfg	1	6	4	278	6 574	205	379	4 051	15 399	11 082	26 602	493
326199	All other plastics product mfg	2	79	27	2 051	52 797	1 538	2 874	32 781	116 141	94 334	211 764	7 437
3262	Rubber product mfg	3	17	6	558	15 781	405	777	10 068	45 023	33 747	79 505	2 275
32622	Rubber & plastics hoses & belting mfg	—	1	1	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	1	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	3	12	4	383	11 942	290	589	8 039	35 581	24 586	60 639	D
326291	Rubber product mfg for mechanical use	—	5	1	228	7 589	179	363	5 216	21 813	8 475	30 246	D
326299	All other rubber product mfg	6	7	3	155	4 353	111	226	2 823	13 768	16 111	30 393	1 250

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	132	50	4 163	120 709	3 223	6 316	88 181	339 532	293 174	631 496	116 055
3271	Clay product & refractory mfg	—	16	5	360	9 623	267	467	6 418	26 462	9 063	35 519	550
32712	Clay building material & refractories mfg	—	5	3	276	8 357	198	369	5 481	23 598	8 304	31 885	D
327121	Brick & structural clay tile mfg	—	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	2	17	2	141	2 986	110	182	2 062	5 710	8 575	14 317	620
32721	Glass & glass product mfg	2	17	2	141	2 986	110	182	2 062	5 710	8 575	14 317	620
327215	Glass product mfg made of purchased glass	1	15	2	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	71	32	2 525	82 464	2 015	4 291	60 716	229 850	217 785	445 997	107 852
32731	Cement mfg	—	3	3	263	10 998	187	352	7 376	62 071	26 469	87 209	D
327310	Cement mfg	—	3	3	263	10 998	187	352	7 376	62 071	26 469	87 209	D
32732	Ready-mix concrete mfg	2	34	17	1 290	43 647	1 050	2 389	34 330	107 202	123 161	230 897	13 753
327320	Ready-mix concrete mfg	2	34	17	1 290	43 647	1 050	2 389	34 330	107 202	123 161	230 897	13 753
32733	Concrete pipe, brick, & block mfg	1	15	9	444	14 175	337	726	9 092	40 635	31 294	71 732	D
327331	Concrete block & brick mfg	3	9	5	206	6 131	134	272	3 548	18 893	16 465	35 753	D
327332	Concrete pipe mfg	—	6	4	238	8 044	203	454	5 544	21 742	14 829	35 979	D
32739	Other concrete product mfg	3	19	3	528	13 644	441	824	9 918	19 942	36 861	56 159	D
327390	Other concrete product mfg	3	19	3	528	13 644	441	824	9 918	19 942	36 861	56 159	D
3274	Lime & gypsum product mfg	—	6	4	229	8 855	179	403	6 555	30 041	25 665	55 260	2 418
32742	Gypsum product mfg	—	4	2	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	—	4	2	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	22	7	908	16 781	652	973	12 430	47 469	32 086	80 403	4 615
32799	All other nonmetallic mineral product mfg ...	1	20	6	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	1	10	2	132	3 447	110	206	2 663	7 123	3 339	10 928	59
327999	All other miscellaneous nonmetallic mineral product mfg	—	5	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	1	45	29	6 929	275 331	5 445	11 725	210 065	1 242 145	1 691 435	2 900 230	123 724
3311	Iron & steel mills & ferroalloy mfg	—	3	2	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	h	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	6	2	2	c	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	9	1	1	c	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	9	1	1	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	5	5	848	22 183	678	1 067	15 948	70 890	78 283	146 410	D
33131	Alumina & aluminum production & processing	—	5	5	848	22 183	678	1 067	15 948	70 890	78 283	146 410	D
331316	Aluminum extruded product mfg	—	4	4	f	D	D	D	D	D	D	D	4 449
3314	Nonferrous metal (except aluminum) production & processing	3	12	7	1 728	74 593	1 236	2 867	56 557	641 674	847 660	1 456 332	72 744
33141	Nonferrous metal (except aluminum) smelting & refining	3	5	4	g	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	4	2	2	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	—	3	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	7	3	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	-	23	13	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	11	8	1 015	28 880	861	1 852	22 358	71 707	43 252	114 486	D
331511	Iron foundries	-	5	4	431	13 130	328	640	8 646	41 061	33 879	75 942	1 798
331512	Steel investment foundries	-	3	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	2	12	5	e	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting) ..	2	7	3	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	459	125	10 071	316 908	7 320	14 667	205 993	752 154	688 099	1 422 112	38 435
3321	Forging & stamping	-	12	3	330	7 825	190	372	3 521	20 325	20 018	40 006	1 302
33211	Forging & stamping	-	12	3	330	7 825	190	372	3 521	20 325	20 018	40 006	1 302
332116	Metal stamping	-	6	2	287	6 777	159	321	2 811	17 556	18 437	35 583	D
3323	Architectural & structural metals mfg	-	141	54	4 341	146 348	3 274	6 519	96 130	392 638	410 728	777 462	14 736
33231	Plate work & fabricated structural product mfg ..	-	67	31	2 240	73 711	1 730	3 374	51 421	239 282	287 593	500 106	7 152
332312	Fabricated structural metal mfg	-	55	28	2 037	68 098	1 584	3 133	48 338	226 649	265 713	465 645	6 414
332313	Plate work mfg	1	4	2	113	2 690	94	150	1 888	5 294	4 084	9 192	D
33232	Ornamental & architectural metal products mfg	-	74	23	2 101	72 637	1 544	3 145	44 709	153 356	123 135	277 356	7 584
332321	Metal window & door mfg	-	9	3	192	6 792	105	215	2 626	14 119	14 869	28 942	533
332322	Sheet metal work mfg ..	-	43	15	1 526	53 210	1 146	2 357	35 002	117 122	86 490	204 487	6 319
332323	Ornamental & architectural metal work mfg	1	22	5	383	12 635	293	573	7 081	22 115	21 776	43 927	732
3324	Boiler, tank, & shipping container mfg	-	14	10	833	28 747	605	1 256	18 865	53 380	73 800	131 441	3 048
33241	Power boiler & heat exchanger mfg	9	2	2	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	9	2	2	c	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	-	7	5	506	18 530	362	858	13 161	35 304	57 679	96 843	1 470
332420	Metal tank (heavy gauge) mfg	-	7	5	506	18 530	362	858	13 161	35 304	57 679	96 843	1 470
33243	Metal can, box, & other metal container (light gauge) mfg	-	5	3	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	-	5	3	c	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	9	4	337	10 259	196	337	3 759	19 264	16 027	35 549	262
33251	Hardware mfg	-	9	4	337	10 259	196	337	3 759	19 264	16 027	35 549	262
332510	Hardware mfg	-	9	4	337	10 259	196	337	3 759	19 264	16 027	35 549	262
3326	Spring & wire product mfg .	-	6	2	128	3 491	112	185	2 703	6 196	16 684	22 934	D
33261	Spring & wire product mfg	-	6	2	128	3 491	112	185	2 703	6 196	16 684	22 934	D
332618	Other fabricated wire product mfg	-	5	2	c	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	173	27	1 812	51 044	1 382	2 516	36 133	105 659	48 294	153 884	9 736
33271	Machine shops	3	159	22	1 446	40 528	1 109	1 927	28 783	82 820	33 750	116 792	7 008
332710	Machine shops	3	159	22	1 446	40 528	1 109	1 927	28 783	82 820	33 750	116 792	7 008
33272	Turned product & screw, nut, & bolt mfg	1	14	5	366	10 516	273	589	7 350	22 839	14 544	37 092	2 728
332721	Precision turned product mfg	-	9	2	129	3 595	108	226	2 792	6 918	2 005	8 995	D
332722	Bolt, nut, screw, rivet, & washer mfg	1	5	3	237	6 921	165	363	4 558	15 921	12 539	28 097	D
3328	Coating, engraving, heat treating, & allied activities .	3	34	9	477	13 584	380	1 294	8 875	24 700	15 015	39 600	1 945
33281	Coating, engraving, heat treating, & allied activities	3	34	9	477	13 584	380	1 294	8 875	24 700	15 015	39 600	1 945
332812	Metal coating/ engraving (exc jewelry/silverware)/ allied services	4	18	5	250	7 578	215	995	4 736	14 142	11 421	25 577	1 476
332813	Electroplating, plating, polishing, anodizing, & coloring	3	15	4	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg	1	64	15	1 738	53 615	1 126	2 081	34 705	127 207	85 786	216 236	6 327
33291	Metal valve mfg	—	5	3	599	22 775	211	509	13 901	55 818	34 641	93 874	D
332911	Industrial valve mfg	—	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	59	12	1 139	30 840	915	1 572	20 804	71 389	51 145	122 362	D
332996	Fabricated pipe & pipe fitting mfg	2	12	4	366	13 325	290	561	9 338	22 592	14 310	37 703	1 707
332999	All other miscellaneous fabricated metal product mfg	1	29	5	550	12 499	438	653	7 253	36 507	29 067	64 238	1 893
333	Machinery mfg	—	164	47	6 524	230 016	4 057	8 082	128 714	588 531	489 526	1 050 680	30 303
3331	Agriculture, construction, & mining machinery mfg.	—	21	10	797	25 033	552	1 056	15 694	71 635	69 240	131 456	2 489
33312	Construction machinery mfg	—	6	2	132	3 596	94	169	2 278	6 273	20 387	25 237	D
333120	Construction machinery mfg	—	6	2	132	3 596	94	169	2 278	6 273	20 387	25 237	D
33313	Mining & oil & gas field machinery mfg	—	12	7	601	20 383	417	824	12 621	63 664	46 581	102 176	1 762
333131	Mining machinery & equipment mfg	—	9	5	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	4	20	6	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	3	16	4	292	8 954	168	321	4 530	21 133	17 457	38 539	893
333294	Food product machinery mfg	5	6	2	150	4 740	93	182	2 403	11 375	8 249	19 581	493
3333	Commercial & service industry machinery mfg	1	32	8	576	16 492	269	492	6 802	54 990	52 630	105 556	1 489
33331	Commercial & service industry machinery mfg	1	32	8	576	16 492	269	492	6 802	54 990	52 630	105 556	1 489
333319	Other commercial & service industry machinery mfg	1	18	6	435	12 356	180	315	4 679	44 944	45 582	88 264	783
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	3	431	11 244	306	648	6 636	28 444	25 789	54 429	2 627
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	3	431	11 244	306	648	6 636	28 444	25 789	54 429	2 627
333412	Industrial & commercial fan & blower mfg	—	3	1	c	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) mfg	—	9	2	293	7 673	186	417	4 022	21 347	20 525	42 223	D
3335	Metalworking machinery mfg	2	32	3	266	6 053	200	382	4 366	15 482	9 414	24 896	2 494
33351	Metalworking machinery mfg	2	32	3	266	6 053	200	382	4 366	15 482	9 414	24 896	2 494
333514	Special die & tool, die set, jig, & fixture mfg	—	17	2	156	3 163	112	222	2 371	9 800	6 857	16 801	2 131
3336	Engine, turbine, & power transmission equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	4	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	38	15	3 643	149 061	2 175	4 607	82 272	367 628	276 799	626 477	18 098
33391	Pump & compressor mfg	—	3	2	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	11	3	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	—	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	24	10	2 543	104 793	1 525	3 243	61 755	252 124	178 569	416 699	12 490
333993	Packaging machinery mfg	—	4	3	164	6 784	97	197	2 879	12 662	12 700	24 798	D
333994	Industrial process furnace & oven mfg	—	1	1	e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	3	2	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	14	3	617	27 586	220	545	9 609	66 809	68 766	135 051	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg	-	157	60	15 659	591 356	8 210	17 311	212 583	1 644 512	1 937 711	3 570 458	128 139
3341	Computer & peripheral equipment mfg	-	20	5	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	20	5	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	4	2	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	2	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	8	11	1	c	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	2	19	6	1 257	44 349	590	1 071	12 069	97 805	134 008	222 949	D
33421	Telephone apparatus mfg	9	5	1	c	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	9	5	1	c	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	11	5	1 109	38 067	520	925	10 154	84 185	120 954	195 915	4 740
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	11	5	1 109	38 067	520	925	10 154	84 185	120 954	195 915	4 740
3343	Audio & video equipment mfg	3	9	3	c	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg	3	9	3	c	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg	3	9	3	c	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	56	22	3 827	119 569	2 871	5 367	73 176	171 077	154 052	336 573	26 923
33441	Semiconductor & other electronic component mfg	1	56	22	3 827	119 569	2 871	5 367	73 176	171 077	154 052	336 573	26 923
334412	Bare printed circuit board mfg	2	20	8	1 349	33 801	985	1 769	19 869	71 573	63 344	135 233	9 324
334413	Semiconductor & related device mfg	1	7	2	613	38 252	514	1 083	24 620	8 541	31 330	51 769	6 587
334415	Electronic resistor mfg	-	3	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	4	5	4	c	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	1	18	5	550	16 291	340	572	6 643	33 780	23 329	56 974	3 074
3345	Navigational, measuring, medical, & control instruments mfg	-	39	18	6 933	240 243	3 617	8 444	99 020	650 761	362 445	1 030 505	32 973
33451	Navigational, measuring, medical, & control instruments mfg	-	39	18	6 933	240 243	3 617	8 444	99 020	650 761	362 445	1 030 505	32 973
334510	Electromedical & electrotherapeutic apparatus mfg	-	5	3	2 517	60 953	1 844	4 335	38 139	187 913	98 835	281 457	15 462
334511	Search, detection, navigation, & guidance instrument mfg	-	4	2	h	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg	-	2	1	c	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	8	2	218	10 388	106	202	3 014	14 290	10 382	25 961	1 428
334517	Irradiation apparatus mfg	-	6	5	1 144	43 190	455	1 347	14 335	157 226	126 697	286 361	10 203
334519	Other measuring & controlling device mfg	1	3	2	c	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media	1	14	6	f	D	D	D	D	D	D	D	15 452
33461	Mfg & reproducing magnetic & optical media	1	14	6	f	D	D	D	D	D	D	D	15 452
334612	Prerecorded CD (except software), tape, & record reproducing	1	10	5	f	D	D	D	D	D	D	D	13 483

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	UTAH—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	36	18	1 489	44 323	1 027	1 873	26 583	173 313	236 446	410 608	22 062
3351	Electric lighting equipment mfg	-	6	2	165	4 106	129	233	2 651	11 840	12 550	24 451	142
33512	Lighting fixture mfg	-	6	2	165	4 106	129	233	2 651	11 840	12 550	24 451	142
3352	Household appliance mfg ..	-	2	2	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	4	11	2	c	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	4	11	2	c	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	17	12	1 087	32 696	708	1 311	19 149	147 780	208 424	356 922	21 024
33592	Communication & energy wire & cable mfg	-	3	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	13	9	706	21 301	404	659	11 294	84 014	65 197	154 306	D
335991	Carbon & graphite product mfg	-	3	2	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	6	10	7	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	96	25	14 609	563 529	11 676	23 646	405 078	1 680 110	1 236 900	2 925 956	74 798
3362	Motor vehicle body & trailer mfg	-	20	9	1 088	28 695	912	1 605	21 748	79 036	111 977	180 289	1 763
33621	Motor vehicle body & trailer mfg	-	20	9	1 088	28 695	912	1 605	21 748	79 036	111 977	180 289	1 763
336212	Truck trailer mfg	-	3	1	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	13	7	e	D	D	D	D	D	D	D	647
3363	Motor vehicle parts mfg ...	-	31	7	7 138	216 588	6 403	13 753	189 303	903 185	704 740	1 591 079	63 450
33632	Motor vehicle electrical & electronic equipment mfg	7	9	2	105	2 370	89	161	1 588	4 626	4 284	9 013	D
336322	Other motor vehicle electrical & electronic equipment mfg	7	9	2	105	2 370	89	161	1 588	4 626	4 284	9 013	D
33634	Motor vehicle brake system mfg	-	2	1	c	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	11	4	6 740	207 266	6 127	13 259	183 887	867 176	680 369	1 539 484	62 146
336399	All other motor vehicle parts mfg	-	11	4	6 740	207 266	6 127	13 259	183 887	867 176	680 369	1 539 484	62 146
3364	Aerospace product & parts mfg	-	22	5	6 103	310 191	4 195	7 917	189 547	685 950	400 449	1 121 430	9 136
33641	Aerospace product & parts mfg	-	22	5	6 103	310 191	4 195	7 917	189 547	685 950	400 449	1 121 430	9 136
336413	Other aircraft part & auxiliary equipment mfg	1	15	2	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	4	3	5 491	294 238	3 798	7 403	180 335	660 739	371 812	1 060 469	D
3369	Other transportation equipment mfg	1	16	2	205	6 545	130	314	3 826	4 572	16 036	22 121	296
33699	Other transportation equipment mfg	1	16	2	205	6 545	130	314	3 826	4 572	16 036	22 121	296
336999	All other transportation equipment mfg	1	9	1	c	D	D	D	D	D	D	D	167
337	Furniture & related product mfg	1	257	54	5 648	130 235	4 513	8 524	94 771	255 193	217 808	473 214	9 570
3371	Household & institutional furniture & kitchen cabinet mfg	1	202	32	3 854	90 384	3 118	6 118	67 660	185 442	141 841	326 532	5 629
33711	Wood kitchen cabinet & counter top mfg	2	122	22	1 921	44 368	1 465	2 604	30 866	81 705	51 372	133 135	3 072
337110	Wood kitchen cabinet & counter top mfg ...	2	122	22	1 921	44 368	1 465	2 604	30 866	81 705	51 372	133 135	3 072
33712	Household & institutional furniture mfg	1	80	10	1 933	46 016	1 653	3 514	36 794	103 737	90 469	193 397	2 557
337121	Upholstered household furniture mfg	-	19	3	1 111	28 525	989	2 274	24 845	62 665	49 299	112 810	689
337122	Nonupholstered wood household furniture mfg	4	48	4	566	11 500	496	948	8 787	23 053	26 742	48 510	907
337127	Institutional furniture mfg	1	9	2	211	5 155	131	237	2 525	15 847	13 077	28 886	898

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	UTAH—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	44	15	1 163	25 853	923	1 712	18 709	53 762	47 299	101 462	2 101
33721	Office furniture (including fixtures) mfg	1	44	15	1 163	25 853	923	1 712	18 709	53 762	47 299	101 462	2 101
337212	Custom architectural woodwork & millwork mfg	2	19	7	415	9 707	352	646	7 215	17 989	18 840	37 277	1 174
337215	Showcase, partition, shelving, & locker mfg	1	19	6	610	13 095	449	827	8 958	28 125	22 467	50 184	718
3379	Other furniture related product mfg	—	11	7	631	13 998	472	694	8 402	15 989	28 668	45 220	1 840
33791	Mattress mfg	—	7	5	c	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	7	5	c	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	2	4	2	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	2	4	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	342	64	13 080	345 465	8 733	18 646	176 523	889 237	572 050	1 448 619	68 193
3391	Medical equipment & supplies mfg	—	155	32	5 406	175 750	3 413	7 236	68 951	497 315	158 446	645 501	38 009
33911	Medical equipment & supplies mfg	—	155	32	5 406	175 750	3 413	7 236	68 951	497 315	158 446	645 501	38 009
339112	Surgical & medical instrument mfg	—	26	16	3 584	130 232	2 156	4 970	44 950	387 875	108 445	485 056	31 565
339113	Surgical appliance & supplies mfg	2	20	10	532	13 456	381	726	7 278	37 996	25 585	62 864	2 822
339114	Dental equipment & supplies mfg	—	12	2	569	14 158	331	703	6 442	36 654	8 156	45 041	D
339115	Ophthalmic goods mfg	—	4	1	c	D	D	D	D	D	D	D	210
339116	Dental laboratories	6	92	3	472	12 301	357	565	7 786	25 750	9 354	36 724	672
3399	Other miscellaneous mfg ..	—	187	32	7 674	169 715	5 320	11 410	107 572	391 922	413 604	803 118	30 184
33991	Jewelry & silverware mfg	—	31	2	1 574	34 753	1 179	2 106	23 108	45 204	110 817	155 577	D
339911	Jewelry (except costume) mfg	—	20	2	g	D	D	D	D	D	D	D	1 326
33992	Sporting & athletic goods mfg	—	47	15	4 045	84 958	2 676	6 247	52 246	223 716	241 483	464 078	18 291
339920	Sporting & athletic goods mfg	—	47	15	4 045	84 958	2 676	6 247	52 246	223 716	241 483	464 078	18 291
33994	Office supplies (except paper) mfg	—	11	2	301	5 683	193	518	4 649	30 510	17 467	47 734	D
339943	Marking device mfg	—	10	1	e	D	D	D	D	D	D	D	D
33995	Sign mfg	1	52	5	742	19 114	501	986	10 782	35 858	17 619	52 684	3 323
339950	Sign mfg	1	52	5	742	19 114	501	986	10 782	35 858	17 619	52 684	3 323
33999	All other miscellaneous mfg	2	40	7	928	24 277	721	1 464	16 069	54 224	24 914	79 223	5 271
339991	Gasket, packing, & sealing device mfg	—	5	2	591	16 881	463	942	11 056	39 200	11 046	49 817	D
339999	All other miscellaneous mfg	5	28	5	306	6 769	235	478	4 511	13 464	11 806	25 979	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FLAGSTAFF, AZ-UT MSA													
31-33	Manufacturing	-	101	15	2 487	81 859	1 411	2 913	33 697	358 079	241 868	603 701	27 506
	Flagstaff, AZ-UT MSA (AZ Part)	-	95	13	g	D	D	D	D	D	D	D	D
	Flagstaff, AZ-UT MSA (UT Part)	-	6	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	13	3	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	6	1	g	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	3	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	7	2	e	D	D	D	D	D	D	D	D
PROVO-OREM, UT MSA													
31-33	Manufacturing	1	390	126	15 949	461 039	11 682	20 977	299 873	1 191 855	1 481 751	2 667 289	158 097
311	Food mfg	-	28	11	2 900	65 625	2 133	2 720	42 256	203 166	269 004	469 094	19 611
3113	Sugar & confectionery product mfg	-	3	2	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	1	1	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg	-	1	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	4	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	3	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	2	1	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	1	1	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	-	1	1	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	13	7	548	7 672	446	894	5 499	11 159	14 196	25 570	184
3152	Cut & sew apparel mfg	-	11	6	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	e	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	-	2	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	3	42	12	1 286	36 114	955	1 844	22 281	66 954	69 820	136 674	3 606
3231	Printing & related support activities	3	42	12	1 286	36 114	955	1 844	22 281	66 954	69 820	136 674	3 606
32311	Printing	3	40	12	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	4	14	6	604	16 965	475	1 048	11 325	25 271	26 590	51 739	1 710
325	Chemical mfg	2	19	10	911	29 982	596	924	15 766	106 553	115 147	219 226	54 505
3254	Pharmaceutical & medicine mfg	1	7	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	1	7	4	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	1	5	4	512	17 627	308	443	7 969	67 514	59 514	125 572	D
3259	Other chemical product mfg	4	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	17	4	376	8 621	301	579	5 783	16 649	12 266	28 820	1 214
3261	Plastics product mfg	2	17	4	376	8 621	301	579	5 783	16 649	12 266	28 820	1 214
327	Nonmetallic mineral product mfg	3	18	9	1 099	23 980	791	1 320	18 471	71 508	55 873	128 114	6 394
3273	Cement & concrete product mfg	5	10	6	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PROVO-OREM, UT MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	13	10	3 520	139 765	2 838	6 024	103 233	378 980	640 950	1 020 375	D
3311	Iron & steel mills & ferroalloy mfg	—	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	1	1	h	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	10	7	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	7	5	e	D	D	D	D	D	D	D	D
331511	Iron foundries	—	5	4	431	13 130	328	640	8 646	41 061	33 879	75 942	1 798
332	Fabricated metal product mfg	1	61	20	1 924	62 668	1 267	2 544	38 292	125 733	107 613	236 754	7 135
3323	Architectural & structural metals mfg	—	15	7	571	17 058	456	955	11 093	29 953	40 677	70 310	2 490
33231	Plate work & fabricated structural product mfg	—	8	5	255	7 698	214	456	5 110	12 777	22 226	34 704	1 539
332312	Fabricated structural metal mfg	—	7	5	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	7	2	316	9 360	242	499	5 983	17 176	18 451	35 606	951
3329	Other fabricated metal product mfg	—	13	5	715	25 403	300	593	14 342	55 977	38 221	97 617	2 692
33291	Metal valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	20	9	531	15 880	361	677	9 651	32 515	38 289	68 643	1 914
3331	Agriculture, construction, & mining machinery mfg	—	5	4	287	8 339	205	378	6 099	15 836	28 090	42 604	D
334	Computer & electronic product mfg	2	28	11	933	28 837	604	1 126	13 219	75 222	37 610	114 686	D
3345	Navigational, measuring, medical, & control instruments mfg	—	7	4	379	12 699	222	390	4 027	20 784	9 883	31 765	D
33451	Navigational, measuring, medical, & control instruments mfg	—	7	4	379	12 699	222	390	4 027	20 784	9 883	31 765	D
336	Transportation equipment mfg	1	11	3	304	6 946	190	335	3 717	29 444	21 054	43 348	838
3363	Motor vehicle parts mfg	—	3	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	42	9	701	13 954	546	902	9 169	31 439	26 518	57 720	1 314
3371	Household & institutional furniture & kitchen cabinet mfg	1	33	5	498	9 550	386	637	6 353	24 463	19 144	43 297	1 062
33712	Household & institutional furniture mfg	—	17	3	e	D	D	D	D	D	D	D	970
339	Miscellaneous mfg	3	47	4	315	6 743	214	312	3 259	13 442	10 455	24 504	D
	SALT LAKE CITY-OGDEN, UT MSA												
31-33	Manufacturing	1	1 878	575	79 040	2 544 165	54 197	109 117	1 419 224	8 209 726	8 782 542	16 846 649	573 566
311	Food mfg	1	145	58	5 972	147 973	4 128	7 931	83 956	539 279	680 781	1 222 598	28 494
3113	Sugar & confectionery product mfg	—	18	5	410	8 653	353	588	5 430	23 805	14 982	39 250	1 551
3114	Fruit & vegetable preserving & specialty food mfg	4	5	3	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg	4	3	3	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	5	2	2	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	14	8	714	19 481	337	723	9 474	68 103	147 824	216 343	6 162
31151	Dairy product (except frozen) mfg	—	10	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	—	5	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	9	5	e	D	D	D	D	D	D	D	1 262
31161	Animal slaughtering & processing	—	9	5	e	D	D	D	D	D	D	D	1 262
311612	Meat processed from carcasses	1	6	4	364	8 050	312	605	5 808	27 125	96 255	123 246	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SALT LAKE CITY— OGDEN, UT MSA— Con. Manufacturing— Con.												
311	Food mfg—Con.												
3118	Bakeries & tortilla mfg	2	67	20	h	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	1	57	17	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	28	12	1 536	38 043	826	1 559	18 552	125 364	41 900	167 357	4 203
311813	Frozen cakes, pies, & other pastries mfg	5	4	3	457	8 880	406	801	6 504	26 382	30 710	57 404	1 471
31182	Cookie, cracker, & pasta mfg	5	9	3	e	D	D	D	D	D	D	D	D
3119	Other food mfg	—	17	8	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	7	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	7	3	f	D	D	D	D	D	D	D	D
31199	All other food mfg	1	6	5	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	1	9	5	487	13 841	200	435	4 968	87 849	201 003	289 322	7 348
3121	Beverage mfg	1	9	5	487	13 841	200	435	4 968	87 849	201 003	289 322	7 348
31211	Soft drink & ice mfg	1	8	5	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	1	5	5	463	13 367	185	414	4 652	85 850	199 021	285 344	7 177
314	Textile product mills	1	44	18	1 046	21 862	779	1 366	12 422	57 617	55 884	113 951	1 914
3149	Other textile product mills	1	32	17	975	20 835	720	1 266	11 731	55 287	53 664	109 486	D
31491	Textile bag & canvas mills	—	15	8	395	8 186	300	520	4 531	17 583	11 126	28 584	D
31499	All other textile product mills	2	17	9	580	12 649	420	746	7 200	37 704	42 538	80 902	1 249
314999	All other miscellaneous textile product mills	1	14	6	359	6 807	242	360	3 464	16 154	19 811	36 894	D
315	Apparel mfg	1	38	12	1 162	19 671	919	1 518	14 149	29 444	23 763	55 464	446
3152	Cut & sew apparel mfg	1	23	10	1 025	17 724	823	1 381	12 999	25 978	20 571	48 519	208
31523	Women's & girls' cut & sew apparel mfg	—	9	5	f	D	D	D	D	D	D	D	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	70	17	1 109	22 608	853	1 574	15 402	45 119	61 482	106 806	4 225
3212	Veneer, plywood, & engineered wood product mfg	—	9	7	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg	—	9	7	e	D	D	D	D	D	D	D	D
321214	Truss mfg	—	8	6	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	59	10	767	15 516	601	1 125	10 855	29 504	41 357	70 965	D
32191	Millwork	1	36	5	524	10 881	413	786	7 640	18 822	27 147	46 062	1 030
322	Paper mfg	—	28	17	2 243	74 546	1 745	4 046	53 797	437 003	244 484	670 112	D
3222	Converted paper product mfg	—	28	17	2 243	74 546	1 745	4 046	53 797	437 003	244 484	670 112	D
32221	Paperboard container mfg	—	14	11	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	4	4	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	6	4	505	15 805	395	698	10 207	27 180	40 759	67 998	4 982
32222	Paper bag & coated & treated paper mfg	—	3	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	7	3	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	230	65	5 564	180 684	3 790	6 942	82 852	401 162	301 033	702 172	24 359
3231	Printing & related support activities	1	230	65	5 564	180 684	3 790	6 942	82 852	401 162	301 033	702 172	24 359
32311	Printing	1	195	60	i	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	91	25	1 656	47 421	1 269	2 164	29 154	102 198	74 558	176 308	7 001
323113	Commercial screen printing	—	22	7	609	12 696	506	885	8 576	26 055	14 075	40 444	2 365
323114	Quick printing	2	32	6	367	7 238	248	373	4 531	14 906	9 378	24 328	1 164
323116	Manifold business form printing	—	12	8	f	D	D	D	D	D	D	D	D
323117	Book printing	—	6	3	e	D	D	D	D	D	D	D	D
323118	Blankbook, looseleaf binder, & device mfg	—	5	4	g	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	35	5	f	D	D	D	D	D	D	D	D
323121	Tradebinding & related work	—	15	3	e	D	D	D	D	D	D	D	933

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SALT LAKE CITY— OGDEN, UT MSA— Con. Manufacturing— Con.												
324	Petroleum & coal products mfg	-	13	7	1 426	69 894	1 088	2 343	48 398	435 864	1 346 385	1 777 244	D
3241	Petroleum & coal products mfg	-	13	7	1 426	69 894	1 088	2 343	48 398	435 864	1 346 385	1 777 244	D
32411	Petroleum refineries	-	6	5	827	41 157	544	1 220	26 748	360 882	1 287 703	1 642 881	37 632
324110	Petroleum refineries	-	6	5	827	41 157	544	1 220	26 748	360 882	1 287 703	1 642 881	37 632
32412	Asphalt paving, roofing, & saturated materials mfg	-	5	2	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	-	4	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	76	26	3 790	115 669	2 246	4 130	56 050	475 808	421 497	887 578	31 830
3251	Basic chemical mfg	-	11	4	637	25 932	437	910	15 272	91 116	70 867	155 490	D
32518	Other basic inorganic chemical mfg	-	5	3	559	22 363	407	849	14 296	61 776	59 049	113 910	D
325188	All other basic inorganic chemical mfg	-	4	3	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	1	19	12	1 538	43 368	950	1 704	20 409	251 088	155 839	405 133	11 449
32541	Pharmaceutical & medicine mfg	1	19	12	1 538	43 368	950	1 704	20 409	251 088	155 839	405 133	11 449
325411	Medicinal & botanical mfg	3	6	4	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	10	6	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	12	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	11	2	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	5	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	94	40	2 864	77 681	2 171	4 351	50 039	194 909	193 354	387 583	16 944
3261	Plastics product mfg	1	79	35	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	53	25	1 815	48 376	1 336	2 601	29 305	102 207	82 633	186 065	5 876
326199	All other plastics product mfg	1	50	23	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	3	15	5	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	3	11	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	62	24	1 842	56 382	1 459	2 994	39 916	127 005	132 980	259 713	13 519
3273	Cement & concrete product mfg	1	30	16	1 341	42 972	1 099	2 359	31 849	94 521	114 318	207 942	12 403
32732	Ready-mix concrete mfg	-	12	8	567	20 643	472	1 107	16 525	50 062	57 212	107 903	D
327320	Ready-mix concrete mfg	-	12	8	567	20 643	472	1 107	16 525	50 062	57 212	107 903	D
32733	Concrete pipe, brick, & block mfg	2	7	5	275	9 442	210	473	5 964	25 863	21 276	46 258	D
32739	Other concrete product mfg	3	11	3	499	12 887	417	779	9 360	18 596	35 830	53 781	D
327390	Other concrete product mfg	3	11	3	499	12 887	417	779	9 360	18 596	35 830	53 781	D
331	Primary metal mfg	3	26	14	2 174	77 806	1 592	3 619	61 024	621 480	813 843	1 399 303	69 702
3313	Alumina & aluminum production & processing ..	2	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	2	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	3	10	5	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	4	4	3	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	4	2	2	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	6	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	12	6	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	4	3	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries	-	1	1	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SALT LAKE CITY— OGDEN, UT MSA— Con. Manufacturing— Con.												
332	Fabricated metal product mfg	1	306	85	6 482	200 289	4 804	9 881	129 697	481 003	402 035	856 609	24 481
3321	Forging & stamping	—	7	3	293	7 109	166	334	3 062	18 751	18 911	37 317	D
332111	Forging & stamping	—	7	3	293	7 109	166	334	3 062	18 751	18 911	37 317	D
332116	Metal stamping	—	4	2	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	98	37	2 785	91 548	2 105	4 239	58 569	251 762	223 020	444 022	9 093
33231	Plate work & fabricated structural product mfg	—	41	19	1 202	33 791	959	1 852	23 094	125 121	127 581	221 000	3 387
332312	Fabricated structural metal mfg	—	34	17	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	57	18	1 583	57 757	1 146	2 387	35 475	126 641	95 439	223 022	5 706
332322	Sheet metal work mfg	—	35	12	1 230	44 509	923	1 920	29 488	99 477	70 466	170 940	4 832
3324	Boiler, tank, & shipping container mfg	—	8	6	562	19 174	399	816	12 757	31 126	56 487	91 855	2 355
33242	Metal tank (heavy gauge) mfg	—	4	3	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	4	3	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	111	21	1 345	40 004	1 014	1 932	28 615	84 569	36 814	121 121	6 869
33271	Machine shops	2	101	18	1 056	31 467	801	1 464	22 660	65 633	26 442	91 920	5 588
332710	Machine shops	2	101	18	1 056	31 467	801	1 464	22 660	65 633	26 442	91 920	5 588
33272	Turned product & screw, nut, & bolt mfg	—	10	3	289	8 537	213	468	5 955	18 936	10 372	29 201	1 281
3328	Coating, engraving, heat treating, & allied activities	3	29	6	345	8 587	266	1 059	6 070	17 222	8 994	26 094	1 011
33281	Coating, engraving, heat treating, & allied activities	3	29	6	345	8 587	266	1 059	6 070	17 222	8 994	26 094	1 011
3329	Other fabricated metal product mfg	1	38	8	805	22 903	656	1 173	16 217	58 726	38 542	97 292	D
33299	All other fabricated metal product mfg	1	35	7	f	D	D	D	D	D	D	D	3 160
332996	Fabricated pipe & pipe fitting mfg	2	8	4	336	12 554	267	519	8 817	20 965	12 819	34 664	1 631
332999	All other miscellaneous fabricated metal product mfg	1	18	1	273	4 863	228	320	3 235	21 497	15 681	35 918	D
333	Machinery mfg	—	112	31	5 105	192 114	3 098	6 498	105 518	468 260	378 296	828 179	25 413
3331	Agriculture, construction, & mining machinery mfg	—	11	4	318	11 237	227	477	6 342	26 997	24 113	49 725	D
33313	Mining & oil & gas field machinery mfg	—	8	3	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	4	13	6	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	1	23	5	374	11 969	172	341	4 740	22 351	33 534	56 168	976
33331	Commercial & service industry machinery mfg	1	23	5	374	11 969	172	341	4 740	22 351	33 534	56 168	976
333319	Other commercial & service industry machinery mfg	—	12	3	267	8 627	100	192	2 946	14 692	27 952	42 798	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	2	381	9 478	292	627	6 391	25 064	24 193	49 368	2 546
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	2	381	9 478	292	627	6 391	25 064	24 193	49 368	2 546
3339	Other general-purpose machinery mfg	—	27	12	3 490	144 021	2 068	4 392	79 672	357 238	267 548	607 571	D
33391	Pump & compressor mfg	—	2	2	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	8	3	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	—	2	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	17	7	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace & oven mfg	—	1	1	e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	3	2	g	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	9	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SALT LAKE CITY— OGDEN, UT MSA— Con.												
	Manufacturing— Con.												
334	Computer & electronic product mfg.....	-	116	42	13 691	533 667	6 832	14 751	182 816	1 513 615	1 874 355	3 373 560	104 191
3341	Computer & peripheral equipment mfg.....	-	18	4	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	18	4	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	1	14	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	1	9	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	1	9	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	2	45	17	h	D	D	D	D	D	D	D	19 638
33441	Semiconductor & other electronic component mfg.....	2	45	17	h	D	D	D	D	D	D	D	19 638
334412	Bare printed circuit board mfg.....	2	19	8	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	1	5	2	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	1	14	3	439	13 767	264	453	5 378	29 110	20 419	49 310	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	29	11	6 265	215 784	3 261	7 806	90 950	603 226	340 304	959 156	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	29	11	6 265	215 784	3 261	7 806	90 950	603 226	340 304	959 156	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	5	3	2 517	60 953	1 844	4 335	38 139	187 913	98 835	281 457	15 462
334511	Search, detection, navigation, & guidance instrument mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg.....	-	5	4	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media.	2	5	4	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	2	5	4	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing.....	2	4	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	25	11	1 098	33 781	734	1 415	20 848	151 943	207 730	360 072	D
3359	Other electrical equipment & component mfg.....	-	13	9	959	29 822	630	1 240	18 388	143 307	199 870	343 400	D
33592	Communication & energy wire & cable mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg....	-	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg.....	1	9	6	578	18 427	326	588	10 533	79 541	56 643	140 784	D
335991	Carbon & graphite product mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	66	14	9 548	337 027	8 086	16 299	258 145	1 249 554	905 994	2 139 020	61 491
3362	Motor vehicle body & trailer mfg.....	-	13	7	883	23 729	754	1 324	18 564	68 082	97 086	156 910	1 428
33621	Motor vehicle body & trailer mfg.....	-	13	7	883	23 729	754	1 324	18 564	68 082	97 086	156 910	1 428
336212	Truck trailer mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg.....	1	9	5	e	D	D	D	D	D	D	D	368

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	SALT LAKE CITY—OGDEN, UT MSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3363	Motor vehicle parts mfg ...	-	26	4	i	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg	-	10	3	i	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg	-	10	3	i	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	-	14	2	g	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	-	14	2	g	D	D	D	D	D	D	D	D	
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	151	36		3 217	76 302	2 496	4 559	52 470	135 289	123 805	259 397	6 164
3371	Household & institutional furniture & kitchen cabinet mfg	2	113	21		1 895	46 101	1 457	2 769	31 880	85 705	65 345	150 943	2 954
33711	Wood kitchen cabinet & counter top mfg	1	68	16		1 434	35 782	1 069	2 047	24 480	64 539	38 656	103 195	2 273
337110	Wood kitchen cabinet & counter top mfg ...	1	68	16		1 434	35 782	1 069	2 047	24 480	64 539	38 656	103 195	2 273
33712	Household & institutional furniture mfg	3	45	5		461	10 319	388	722	7 400	21 166	26 689	47 748	681
337122	Nonupholstered wood household furniture mfg	3	25	2	e		D	D	D	D	D	D	D	421
3372	Office furniture (including fixtures) mfg	1	28	9	f		D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	1	28	9	f		D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	2	13	5	e		D	D	D	D	D	D	D	1 071
337215	Showcase, partition, shelving, & locker mfg	-	10	3		364	8 421	282	561	5 997	17 801	14 262	31 546	D
3379	Other furniture related product mfg	-	10	6	f		D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	3	1	e		D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	3	1	e		D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	248	50		10 037	288 910	7 024	14 231	144 371	745 811	402 330	1 134 959	57 944
3391	Medical equipment & supplies mfg	-	116	28		5 150	169 295	3 236	6 955	65 510	479 434	151 193	620 036	37 128
33911	Medical equipment & supplies mfg	-	116	28		5 150	169 295	3 236	6 955	65 510	479 434	151 193	620 036	37 128
339112	Surgical & medical instrument mfg	-	21	15		3 531	127 639	2 122	4 915	43 851	381 232	105 425	475 321	31 093
339113	Surgical appliance & supplies mfg	2	14	7		432	11 517	314	595	6 060	31 699	23 408	54 261	2 604
339114	Dental equipment & supplies mfg	-	9	2		565	14 093	328	700	6 411	36 488	8 072	44 789	D
339116	Dental laboratories ...	6	67	3		373	10 443	284	473	6 693	20 975	7 382	29 849	D
3399	Other miscellaneous mfg ..	1	132	22		4 887	119 615	3 788	7 276	78 861	266 377	251 137	514 923	20 816
33991	Jewelry & silverware mfg	-	20	1	g		D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	11	1	g		D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	1	36	9		1 760	44 604	1 472	2 817	30 128	137 797	102 477	238 182	11 410
339920	Sporting & athletic goods mfg	1	36	9		1 760	44 604	1 472	2 817	30 128	137 797	102 477	238 182	11 410
33995	Sign mfg	1	41	4		618	16 170	418	852	9 235	28 759	12 703	40 993	D
339950	Sign mfg	1	41	4		618	16 170	418	852	9 235	28 759	12 703	40 993	D
33999	All other miscellaneous mfg	1	23	6	f		D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	5	2		591	16 881	463	942	11 056	39 200	11 046	49 817	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOX ELDER COUNTY, UT													
31-33	Manufacturing	-	51	12	5 725	270 692	4 340	8 834	189 497	661 548	577 639	1 271 556	10 344
336	Transportation equipment mfg	-	3	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	2	1	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
CACHE COUNTY, UT													
31-33	Manufacturing	-	149	48	8 355	195 008	6 089	12 813	132 854	534 182	1 243 625	1 785 582	40 038
311	Food mfg	-	26	10	2 530	65 178	2 196	4 653	52 979	206 430	903 424	1 120 663	15 457
3115	Dairy product mfg	-	9	4	896	24 909	754	1 583	20 560	57 302	415 146	482 964	D
31151	Dairy product (except frozen) mfg	-	7	3	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	4	3	762	22 054	652	1 467	18 723	48 674	403 388	462 078	D
3116	Meat product mfg	-	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	3	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	6	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	9	12	3	650	16 657	552	1 047	14 296	54 137	37 845	92 177	D
3231	Printing & related support activities	9	12	3	650	16 657	552	1 047	14 296	54 137	37 845	92 177	D
32311	Printing	9	10	3	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	5	544	12 422	464	772	9 701	31 450	27 587	58 651	D
3261	Plastics product mfg	-	10	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	8	3	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	3	2	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	3	2	g	D	D	D	D	D	D	D	D
DAVIS COUNTY, UT													
31-33	Manufacturing	1	227	65	7 170	202 788	5 664	10 817	136 411	634 784	965 792	1 592 115	47 885
311	Food mfg	3	20	7	613	16 569	494	940	10 510	55 897	58 667	113 610	2 050
332	Fabricated metal product mfg	1	41	14	1 361	43 044	1 088	2 171	30 023	118 973	68 636	186 938	5 895
3323	Architectural & structural metals mfg	-	11	6	732	22 207	579	1 259	15 205	82 756	39 626	120 372	2 556
336	Transportation equipment mfg	-	15	4	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	3	2	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DAVIS COUNTY, UT—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	29	5	1 358	30 364	1 158	2 201	21 857	96 922	62 472	155 611	D
3399	Other miscellaneous mfg ..	-	19	2	895	21 379	783	1 546	16 652	75 091	47 208	118 790	D
33992	Sporting & athletic goods mfg	-	6	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	6	1	f	D	D	D	D	D	D	D	D
IRON COUNTY, UT													
31-33	Manufacturing	-	50	12	1 520	37 852	1 208	1 925	23 674	103 532	105 483	206 380	18 298
SALT LAKE COUNTY, UT													
31-33	Manufacturing	1	1 441	442	53 424	1 706 389	35 180	71 094	879 884	4 968 611	5 094 898	10 012 161	369 891
311	Food mfg	1	104	41	4 191	98 903	2 993	5 700	58 564	372 505	439 840	814 496	22 533
3118	Bakeries & tortilla mfg	2	52	16	1 866	38 441	1 200	2 230	22 218	123 190	69 212	192 766	5 498
31181	Bread & bakery product mfg	2	43	14	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	21	9	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	13	6	f	D	D	D	D	D	D	D	D
314	Textile product mills	1	34	14	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	-	24	13	f	D	D	D	D	D	D	D	D
315	Apparel mfg	1	29	10	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	18	8	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	7	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	51	11	809	17 250	620	1 196	12 013	33 625	48 679	82 482	3 006
3219	Other wood product mfg ...	1	46	7	618	13 063	479	935	9 273	24 047	35 738	59 889	D
322	Paper mfg	-	22	13	g	D	D	D	D	D	D	D	18 076
3222	Converted paper product mfg	-	22	13	g	D	D	D	D	D	D	D	18 076
32221	Paperboard container mfg	-	11	8	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	191	57	5 124	171 882	3 491	6 491	77 563	375 608	282 905	658 519	23 454
3231	Printing & related support activities	1	191	57	5 124	171 882	3 491	6 491	77 563	375 608	282 905	658 519	23 454
32311	Printing	1	158	52	h	D	D	D	D	D	D	D	21 498
323110	Commercial lithographic printing ..	2	76	22	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	17	6	f	D	D	D	D	D	D	D	2 333
323116	Manifold business form printing	-	9	6	518	15 308	406	813	10 957	80 072	24 485	105 134	D
323118	Blankbook, looseleaf binder, & device mfg ..	-	5	4	g	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	33	5	f	D	D	D	D	D	D	D	1 956
325	Chemical mfg	1	56	18	2 424	73 603	1 313	2 436	32 339	307 955	288 452	594 581	20 188
3254	Pharmaceutical & medicine mfg	2	10	6	661	19 586	369	725	8 813	150 009	78 345	227 543	D
32541	Pharmaceutical & medicine mfg	2	10	6	661	19 586	369	725	8 813	150 009	78 345	227 543	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	10	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	9	2	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	5	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	77	31	2 418	65 802	1 819	3 588	40 797	162 199	145 817	308 718	13 579
3261	Plastics product mfg	2	64	27	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	43	20	g	D	D	D	D	D	D	D	4 783
326199	All other plastics product mfg	1	40	18	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	44	19	g	D	D	D	D	D	D	D	11 126
3273	Cement & concrete product mfg	1	21	13	g	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg ..	-	10	7	f	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	-	10	7	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SALT LAKE COUNTY, UT—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	3	22	10	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	4	9	4	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	4	4	3	f	D	D	D	D	D	D	D	D
331411	Primary smelting & refining of copper	4	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	225	60	4 195	122 247	2 997	6 334	76 457	300 052	277 600	550 685	13 879
3323	Architectural & structural metals mfg	1	73	25	1 554	46 870	1 137	2 205	28 299	130 847	147 340	248 781	3 791
33231	Plate work & fabricated structural product mfg	1	31	14	850	22 984	666	1 254	16 093	79 764	90 137	140 230	2 166
332312	Fabricated structural metal mfg	1	25	13	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	42	11	704	23 886	471	951	12 206	51 083	57 203	108 551	1 625
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	84	18	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	77	16	853	25 939	637	1 205	18 900	56 316	21 223	77 415	5 128
332710	Machine shops	1	77	16	853	25 939	637	1 205	18 900	56 316	21 223	77 415	5 128
333	Machinery mfg	-	86	24	3 002	119 154	1 708	3 578	60 043	293 397	223 189	515 398	13 174
3339	Other general-purpose machinery mfg	-	18	7	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	11	4	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	8	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	101	39	j	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	14	3	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	14	3	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	4	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	13	5	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	8	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	8	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	41	16	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	2	41	16	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	2	19	8	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	1	5	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	25	10	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	25	10	i	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	2	h	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	5	4	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SALT LAKE COUNTY, UT—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	19	8	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	9	7	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	8	6	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	42	6	2 484	116 015	1 708	3 375	61 753	270 748	157 841	428 328	D
3363	Motor vehicle parts mfg ...	1	20	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	7	1	g	D	D	D	D	D	D	D	177
33641	Aerospace product & parts mfg	-	7	1	g	D	D	D	D	D	D	D	177
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	124	30	2 434	59 750	1 934	3 666	41 575	115 966	102 081	218 045	3 842
3371	Household & institutional furniture & kitchen cabinet mfg	2	92	17	1 583	39 587	1 252	2 373	27 590	72 731	57 337	129 897	D
33711	Wood kitchen cabinet & counter top mfg	1	54	12	1 161	29 876	897	1 701	20 663	52 746	31 850	84 530	D
337110	Wood kitchen cabinet & counter top mfg ...	1	54	12	1 161	29 876	897	1 701	20 663	52 746	31 850	84 530	D
3372	Office furniture (including fixtures) mfg	1	23	8	f	D	D	D	D	D	D	D	1 396
33721	Office furniture (including fixtures) mfg	1	23	8	f	D	D	D	D	D	D	D	1 396
339	Miscellaneous mfg	-	185	42	8 303	250 467	5 563	11 580	116 839	631 443	317 189	940 703	D
3391	Medical equipment & supplies mfg	-	90	25	4 633	159 365	2 821	6 258	59 837	455 191	134 704	579 536	35 386
33911	Medical equipment & supplies mfg	-	90	25	4 633	159 365	2 821	6 258	59 837	455 191	134 704	579 536	35 386
339112	Surgical & medical instrument mfg	-	21	15	3 531	127 639	2 122	4 915	43 851	381 232	105 425	475 321	31 093
339114	Dental equipment & supplies mfg	-	6	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	95	17	3 670	91 102	2 742	5 322	57 002	176 252	182 485	361 167	D
33991	Jewelry & silverware mfg	-	14	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	-	9	1	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	24	6	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	24	6	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	19	6	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	5	2	591	16 881	463	942	11 056	39 200	11 046	49 817	D
	SANPETE COUNTY, UT												
31-33	Manufacturing	7	18	5	908	16 908	808	1 635	13 647	53 209	65 805	116 736	D
311	Food mfg	9	7	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	3	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	3	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	9	1	1	f	D	D	D	D	D	D	D	D
	SUMMIT COUNTY, UT												
31-33	Manufacturing	-	40	7	861	21 413	505	868	15 402	38 943	40 429	86 192	D
	TOOELE COUNTY, UT												
31-33	Manufacturing	1	27	9	1 737	56 782	1 382	3 272	39 511	169 427	171 647	342 760	16 644
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
UTAH COUNTY, UT													
31-33	Manufacturing	1	390	126	15 949	461 039	11 682	20 977	299 873	1 191 855	1 481 751	2 667 289	158 097
311	Food mfg.....	-	28	11	2 900	65 625	2 133	2 720	42 256	203 166	269 004	469 094	19 611
3114	Fruit & vegetable preserving & specialty food mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg.....	-	13	7	548	7 672	446	894	5 499	11 159	14 196	25 570	184
3152	Cut & sew apparel mfg....	-	11	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	42	12	1 286	36 114	955	1 844	22 281	66 954	69 820	136 674	3 606
3231	Printing & related support activities.....	3	42	12	1 286	36 114	955	1 844	22 281	66 954	69 820	136 674	3 606
32311	Printing.....	3	40	12	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing..	4	14	6	604	16 965	475	1 048	11 325	25 271	26 590	51 739	1 710
325	Chemical mfg.....	2	19	10	911	29 982	596	924	15 766	106 553	115 147	219 226	54 505
3254	Pharmaceutical & medicine mfg.....	1	7	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	1	7	4	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	1	5	4	512	17 627	308	443	7 969	67 514	59 514	125 572	D
327	Nonmetallic mineral product mfg.....	3	18	9	1 099	23 980	791	1 320	18 471	71 508	55 873	128 114	6 394
3279	Other nonmetallic mineral product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg....	-	1	1	f	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	13	10	3 520	139 765	2 838	6 024	103 233	378 980	640 950	1 020 375	D
3311	Iron & steel mills & ferroalloy mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills.....	-	1	1	h	D	D	D	D	D	D	D	D
3315	Foundries.....	-	10	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	61	20	1 924	62 668	1 267	2 544	38 292	125 733	107 613	236 754	7 135
3323	Architectural & structural metals mfg.....	-	15	7	571	17 058	456	955	11 093	29 953	40 677	70 310	2 490
3329	Other fabricated metal product mfg.....	-	13	5	715	25 403	300	593	14 342	55 977	38 221	97 617	2 692
333	Machinery mfg.....	1	20	9	531	15 880	361	677	9 651	32 515	38 289	68 643	1 914
334	Computer & electronic product mfg.....	2	28	11	933	28 837	604	1 126	13 219	75 222	37 610	114 686	D
337	Furniture & related product mfg.....	2	42	9	701	13 954	546	902	9 169	31 439	26 518	57 720	1 314
WASHINGTON COUNTY, UT													
31-33	Manufacturing	3	92	29	1 949	48 442	1 501	2 834	33 809	133 769	108 996	243 444	10 450

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEBER COUNTY, UT												
31-33	Manufacturing	-	210	68	18 446	634 988	13 353	27 206	402 929	2 606 331	2 721 852	5 242 373	155 790
311	Food mfg	-	21	10	1 168	32 501	641	1 291	14 882	110 877	182 274	294 492	3 911
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	1	1	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	-	1	1	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	8	5	1 054	30 305	756	1 436	19 494	122 870	101 989	217 823	10 346
3254	Pharmaceutical & medicine mfg	-	4	3	608	13 332	434	772	8 109	66 125	54 321	120 575	D
32541	Pharmaceutical & medicine mfg	-	4	3	608	13 332	434	772	8 109	66 125	54 321	120 575	D
325412	Pharmaceutical preparation mfg	-	3	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	40	11	926	34 998	719	1 376	23 217	61 978	55 799	118 986	4 707
333	Machinery mfg	-	12	5	1 872	66 925	1 206	2 548	40 798	159 307	132 507	274 607	9 304
3339	Other general-purpose machinery mfg	-	6	4	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	4	3	g	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	9	3	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	f	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	4	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	12	4	599	12 743	439	663	8 560	11 626	17 719	29 556	1 462

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BOUNTIFUL, UT													
31-33	Manufacturing	1	37	7	504	12 315	375	618	8 796	26 982	27 234	54 054	1 610
BRIGHAM CITY, UT													
31-33	Manufacturing	-	18	5	649	27 638	456	864	19 507	94 925	127 037	226 646	2 049
CEDAR CITY, UT													
31-33	Manufacturing	-	44	12	1 493	37 241	1 185	1 881	23 175	101 877	101 910	201 288	18 110
CLEARFIELD, UT													
31-33	Manufacturing	-	49	29	3 745	103 607	3 104	6 022	72 279	297 448	307 512	603 161	23 823
332	Fabricated metal product mfg	-	11	8	549	18 737	457	835	13 422	41 659	29 995	72 405	3 122
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	6	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	2	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	2	1	f	D	D	D	D	D	D	D	D
DRAPER, UT *													
31-33	Manufacturing	-	34	15	1 562	50 383	1 040	2 341	21 837	134 257	62 437	189 676	7 080
339	Miscellaneous mfg	-	8	6	993	37 564	578	1 436	11 946	110 221	18 702	121 878	5 720
3391	Medical equipment & supplies mfg	-	7	5	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	7	5	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	-	3	2	f	D	D	D	D	D	D	D	4 745
GRANTSVILLE, UT													
31-33	Manufacturing	-	7	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	f	D	D	D	D	D	D	D	D
LINDON, UT													
31-33	Manufacturing	1	28	8	686	19 397	531	1 023	11 671	42 305	40 721	83 072	2 810

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
LOGAN, UT													
31-33	Manufacturing	1	79	30	5 455	124 543	3 628	8 000	78 096	283 940	620 350	909 777	24 497
311	Food mfg	-	11	5	753	19 414	636	1 350	16 318	39 639	342 298	385 561	3 855
3115	Dairy product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	9	8	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	8	2	f	D	D	D	D	D	D	D	D
32311	Printing	9	6	2	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	9	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	7	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	2	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	1	1	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	1	1	g	D	D	D	D	D	D	D	D
MAPLETON, UT													
31-33	Manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
MURRAY, UT													
31-33	Manufacturing	3	148	29	2 680	61 858	2 032	3 441	37 129	136 911	110 525	247 295	16 245
NORTH SALT LAKE, UT													
31-33	Manufacturing	1	38	13	1 304	37 152	1 003	1 983	25 198	112 208	223 834	336 901	6 666
332	Fabricated metal product mfg	-	8	3	567	16 874	441	978	11 911	48 911	13 729	62 470	1 849
3323	Architectural & structural metals mfg	-	4	3	f	D	D	D	D	D	D	D	D
OGDEN, UT													
31-33	Manufacturing	-	130	45	13 226	410 903	10 339	20 815	313 521	1 546 457	1 198 065	2 696 517	94 433
311	Food mfg	-	16	9	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	6	5	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	3	3	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	22	6	579	24 194	449	898	16 813	37 385	36 154	74 382	2 947
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
333921	Elevator & moving stairway mfg	-	1	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
OGDEN, UT—Con.														
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg.....	—	4	1	f	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	
33451	Navigational, measuring, medical, & control instruments mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg.....	—	8	4	i	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg... ..	—	1	1	i	D	D	D	D	D	D	D	D	
33639	Other motor vehicle parts mfg.....	—	1	1	i	D	D	D	D	D	D	D	D	
336399	All other motor vehicle parts mfg.....	—	1	1	i	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg.....	1	7	4		12 357	415	633	8 268	10 613	17 129	27 955	D	
OREM, UT														
31-33	Manufacturing	4	99	28		2 359	61 307	1 688	3 136	36 777	142 014	129 927	272 609	47 238
PLEASANT GROVE, UT														
31-33	Manufacturing	5	26	10		700	15 154	526	861	9 436	33 064	42 751	75 313	2 212
PROVO, UT														
31-33	Manufacturing	1	93	29		3 367	79 799	2 440	4 462	52 635	191 371	154 196	346 749	21 868
327	Nonmetallic mineral product mfg.....	—	3	3		692	10 154	483	660	8 305	31 673	23 660	56 371	D
3279	Other nonmetallic mineral product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg... ..	—	1	1	f	D	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D	D
ROY, UT														
31-33	Manufacturing	—	11	2	g	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	1	1	g	D	D	D	D	D	D	D	D	D
ST. GEORGE, UT														
31-33	Manufacturing	3	60	20		1 377	35 462	1 043	2 060	24 466	107 637	83 368	191 326	7 951

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SALT LAKE CITY, UT												
31-33	Manufacturing	-	512	189	25 306	813 770	15 769	32 213	401 929	2 306 155	2 603 382	4 894 820	152 315
311	Food mfg	1	41	21	2 193	55 083	1 364	2 601	29 305	190 204	209 118	400 371	12 179
3118	Bakeries & tortilla mfg	1	16	6	902	21 838	471	946	11 545	73 257	26 914	100 216	3 135
31181	Bread & bakery product mfg	1	15	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	4	739	18 791	362	723	9 725	68 408	20 607	89 035	2 685
315	Apparel mfg	-	6	3	597	11 450	476	796	8 480	14 847	13 543	30 237	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	9	8	1 092	31 694	778	1 596	20 174	101 270	109 977	202 312	16 829
3222	Converted paper product mfg	-	9	8	1 092	31 694	778	1 596	20 174	101 270	109 977	202 312	16 829
32221	Paperboard container mfg	-	5	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	69	22	1 676	48 821	1 305	2 440	30 023	149 945	69 850	219 881	3 275
3231	Printing & related support activities	1	69	22	1 676	48 821	1 305	2 440	30 023	149 945	69 850	219 881	3 275
32311	Printing	1	52	21	1 526	45 149	1 187	2 279	27 470	138 108	67 923	206 154	2 957
323110	Commercial lithographic printing ..	2	30	9	648	21 115	501	920	11 348	44 502	33 952	78 283	1 272
325	Chemical mfg	1	23	9	1 573	49 080	863	1 590	22 286	130 401	191 160	319 871	9 601
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	4	2	g	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	3	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	29	16	1 434	43 025	1 059	2 255	27 604	112 789	100 307	214 135	6 477
3261	Plastics product mfg	2	24	14	1 150	33 862	840	1 827	21 448	85 737	87 982	174 646	5 607
32619	Other plastics product mfg	1	15	10	884	25 882	625	1 317	15 786	55 072	47 359	103 718	1 621
326199	All other plastics product mfg	1	15	10	884	25 882	625	1 317	15 786	55 072	47 359	103 718	1 621
332	Fabricated metal product mfg	-	90	31	2 223	68 337	1 630	3 688	41 664	179 468	171 925	325 439	7 961
3323	Architectural & structural metals mfg	-	32	13	905	27 477	662	1 314	15 483	91 275	105 310	167 952	2 126
33231	Plate work & fabricated structural product mfg ..	-	15	7	505	13 161	399	772	9 314	56 272	61 909	89 332	1 182
333	Machinery mfg	-	31	8	1 550	65 196	779	1 751	26 071	162 992	147 768	310 579	9 883
3339	Other general-purpose machinery mfg	-	6	4	948	45 496	352	821	14 678	110 917	101 298	212 077	6 758
33399	All other general-purpose machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	37	14	5 765	233 427	2 407	5 509	77 905	589 499	347 864	958 218	34 319
3341	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	2	10	4	921	22 787	649	1 287	14 688	53 759	45 759	99 623	8 605
33441	Semiconductor & other electronic component mfg	2	10	4	921	22 787	649	1 287	14 688	53 759	45 759	99 623	8 605
334412	Bare printed circuit board mfg	1	6	3	858	20 696	628	1 244	13 692	46 968	42 754	89 793	7 957
3345	Navigational, measuring, medical, & control instruments mfg	-	12	5	3 603	148 561	1 353	3 357	51 253	400 779	230 613	651 938	D
33451	Navigational, measuring, medical, & control instruments mfg	-	12	5	3 603	148 561	1 353	3 357	51 253	400 779	230 613	651 938	D
334511	Search, detection, navigation, & guidance instrument mfg	-	3	2	h	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	16	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SALT LAKE CITY, UT—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	2	32	12	801	20 777	607	1 183	12 674	38 641	35 909	74 550	883
3371	Household & institutional furniture & kitchen cabinet mfg	2	23	8	563	13 841	434	857	9 069	24 037	19 504	43 565	522
339	Miscellaneous mfg	—	64	14	3 528	98 190	2 419	4 704	50 295	255 573	193 541	448 030	13 345
3391	Medical equipment & supplies mfg	—	23	5	759	29 342	369	694	7 544	128 237	37 118	162 307	6 525
33911	Medical equipment & supplies mfg	—	23	5	759	29 342	369	694	7 544	128 237	37 118	162 307	6 525
339112	Surgical & medical instrument mfg	—	9	4	636	25 823	294	602	6 156	119 860	26 946	143 772	6 122
3399	Other miscellaneous mfg ..	—	41	9	2 769	68 848	2 050	4 010	42 751	127 336	156 423	285 723	6 820
33991	Jewelry & silverware mfg	—	7	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) mfg	—	6	1	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	—	12	3	660	18 133	493	980	9 465	51 537	35 159	89 555	D
339920	Sporting & athletic goods mfg	—	12	3	660	18 133	493	980	9 465	51 537	35 159	89 555	D
SANDY, UT													
31-33	Manufacturing	1	92	20	2 662	82 102	1 838	3 818	39 998	187 820	120 897	309 505	17 015
334	Computer & electronic product mfg	—	8	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	14	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	12	3	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	12	3	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
SOUTH JORDAN, UT													
31-33	Manufacturing	—	12	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	4	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg	—	4	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	—	4	2	g	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	—	1	1	f	D	D	D	D	D	D	D	D
SOUTH SALT LAKE, UT													
31-33	Manufacturing	2	131	48	2 967	75 449	2 125	3 995	44 030	175 381	174 043	350 616	10 738
311	Food mfg	2	12	5	583	11 641	508	1 005	8 238	34 609	52 570	87 740	2 082
323	Printing & related support activities	2	30	12	590	15 984	434	876	10 928	33 636	22 618	56 553	4 250
3231	Printing & related support activities	2	30	12	590	15 984	434	876	10 928	33 636	22 618	56 553	4 250
32311	Printing	2	26	11	526	14 410	385	765	9 627	30 365	21 852	52 516	3 436
SPANISH FORK, UT													
31-33	Manufacturing	—	19	8	1 125	33 585	886	1 623	21 254	91 719	137 011	226 478	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPRINGVILLE, UT													
31-33	Manufacturing	-	31	14	2 622	77 122	1 861	2 748	50 301	174 907	300 221	476 727	24 248
311	Food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	7	3	676	25 830	275	597	15 026	53 803	38 533	95 550	2 892
3329	Other fabricated metal product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
TAYLORSVILLE, UT *													
31-33	Manufacturing	-	20	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
TOOELE, UT													
31-33	Manufacturing	-	14	3	f	D	D	D	D	D	D	D	D
TREMONTON, UT													
31-33	Manufacturing	-	11	2	1 028	27 078	901	2 161	23 526	60 695	53 290	114 588	804
337	Furniture & related product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WEST JORDAN, UT													
31-33	Manufacturing	1	76	30	2 567	91 116	1 920	3 810	58 090	155 966	268 053	433 541	9 992
334	Computer & electronic product mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg....	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEST VALLEY CITY, UT												
31-33	Manufacturing	—	170	59	6 627	230 771	4 163	7 908	105 712	637 803	568 962	1 199 360	54 563
323	Printing & related support activities.....	—	32	12	1 864	85 945	953	1 901	22 385	143 846	156 181	299 729	12 565
3231	Printing & related support activities.....	—	32	12	1 864	85 945	953	1 901	22 385	143 846	156 181	299 729	12 565
32311	Printing	—	26	9	1 570	78 598	698	1 436	18 122	129 109	153 869	282 703	11 764
323118	Blankbook, looseleaf binder, & device mfg .	—	2	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	3	667	30 174	527	1 047	23 621	83 228	24 149	106 916	1 253
3339	Other general-purpose machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	2	1	f	D	D	D	D	D	D	D	D
333995	Fluid power cylinder & actuator mfg	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	12	9	1 025	35 091	501	827	9 554	82 047	119 831	192 254	6 385
3344	Semiconductor & other electronic component mfg	3	7	6	f	D	D	D	D	D	D	D	2 688
33441	Semiconductor & other electronic component mfg	3	7	6	f	D	D	D	D	D	D	D	2 688
339	Miscellaneous mfg.....	—	20	4	581	15 904	439	805	9 831	37 030	13 161	50 072	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
UTAH		UTAH—Con.	
Companies ¹	number.. 2 769	Quantity of electricity purchased for heat and power	1,000 kWh.. 5 325 506
All establishments	number.. 2 860	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 433 548
Establishments with 1 to 19 employees	number.. 1 999	Total value of shipments	\$1,000.. 24 014 379
Establishments with 20 to 99 employees	number.. 635	Value of resales	\$1,000.. 1 055 126
Establishments with 100 employees or more	number.. 226	Value added	\$1,000.. 11 343 518
All employees	number.. 119 140	Total inventories, beginning of year	\$1,000.. 2 649 354
Total compensation ²	\$1,000.. 4 605 001	Finished goods inventories, beginning of year	\$1,000.. 949 631
Annual payroll	\$1,000.. 3 726 130	Work-in-process inventories, beginning of year	\$1,000.. 728 979
Total fringe benefits	\$1,000.. 878 871	Materials and supplies inventories, beginning of year	\$1,000.. 970 744
Production workers, average for year	number.. 84 129	Total inventories, end of year	\$1,000.. 2 915 285
Production workers on March 12	number.. 83 364	Finished goods inventories, end of year	\$1,000.. 1 030 072
Production workers on May 12	number.. 83 791	Work-in-process inventories, end of year	\$1,000.. 763 111
Production workers on August 12	number.. 84 499	Materials and supplies inventories, end of year	\$1,000.. 1 122 102
Production workers on November 12	number.. 84 862	Gross book value of total assets at beginning of year	\$1,000.. 8 046 592
Production-worker hours	1,000.. 166 797	Total capital expenditures (new and used)	\$1,000.. 942 313
Production-worker wages	\$1,000.. 2 218 705	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 108 591
Total cost of materials	\$1,000.. 12 788 711	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 833 722
Cost of materials, parts, containers, etc., consumed	\$1,000.. 11 405 698	Total retirements ²	\$1,000.. 267 607
Cost of resales	\$1,000.. 757 243	Gross book value of total assets at end of year	\$1,000.. 8 721 298
Cost of fuels	\$1,000.. 136 960	Total depreciation during year ²	\$1,000.. 605 141
Cost of purchased electricity	\$1,000.. 199 735	Total rental payments ²	\$1,000.. 218 977
Cost of contract work	\$1,000.. 289 075	Buildings and other structures rental payments ²	\$1,000.. 105 714
		Machinery and equipment rental payments ²	\$1,000.. 113 263

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

UTAH

Draper is in Salt Lake and Utah Counties.

Park City is in Summit and Wasatch Counties.

Taylorsville was incorporated in April 1996.

Appendix E. Metropolitan Areas

UTAH

Flagstaff, AZ—UT MSA

Coconino County, AZ

Kane County, UT

Provo—Orem, UT MSA

Utah County, UT

Salt Lake City—Ogden, UT MSA

Davis County, UT

Salt Lake County, UT

Weber County, UT

Virginia

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA													
31-33	Manufacturing	-	5 986	2 042	370 595	11 557 793	279 682	559 635	7 412 163	43 563 006	40 367 360	83 814 009	3 425 293
311	Food mfg.....	-	436	154	33 703	784 426	26 040	51 928	542 045	4 381 776	4 974 034	9 334 276	241 531
3111	Animal food mfg.....	-	32	11	803	20 653	461	1 034	12 325	92 935	502 967	596 912	D
31111	Animal food mfg.....	-	32	11	803	20 653	461	1 034	12 325	92 935	502 967	596 912	D
311111	Dog & cat food mfg...	-	4	2	147	4 046	120	294	3 303	17 450	47 961	65 624	D
311119	Other animal food mfg.....	-	28	9	656	16 607	341	740	9 022	75 485	455 006	531 288	D
3112	Grain & oilseed milling....	3	17	5	284	9 853	200	414	6 267	102 217	260 128	361 409	16 253
31121	Flour milling & malt mfg..	1	12	2	132	3 706	95	199	2 335	23 057	102 445	126 136	D
311211	Flour milling.....	1	12	2	132	3 706	95	199	2 335	23 057	102 445	126 136	D
31122	Starch & vegetable fats & oils mfg.....	4	5	3	152	6 147	105	215	3 932	79 160	157 683	235 273	D
311225	Fats & oils refining & blending.....	9	4	2	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	16	6	1 563	34 712	1 347	2 558	26 607	282 982	163 280	445 141	D
31133	Confectionery mfg from purchased chocolate...	-	9	4	g	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	9	4	g	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg.....	2	5	2	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg...	2	5	2	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	1	17	10	2 115	46 238	1 769	3 456	33 754	232 744	193 215	426 193	D
31141	Frozen food mfg.....	-	7	4	1 285	25 825	1 144	2 103	21 717	186 248	109 549	295 752	D
311411	Frozen fruit, juice, & vegetable mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	6	3	g	D	D	D	D	D	D	D	2 278
31142	Fruit & vegetable canning, pickling, & drying.....	5	10	6	830	20 413	625	1 353	12 037	46 496	83 666	130 441	3 948
311421	Fruit & vegetable canning.....	5	9	6	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	15	12	2 245	75 764	1 419	3 199	42 620	758 782	506 767	1 266 462	27 180
31151	Dairy product (except frozen) mfg.....	-	11	10	g	D	D	D	D	D	D	D	25 192
311511	Fluid milk mfg.....	-	9	8	g	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg.....	-	4	2	c	D	D	D	D	D	D	D	1 988
311520	Ice cream & frozen dessert mfg.....	-	4	2	c	D	D	D	D	D	D	D	1 988
3116	Meat product mfg.....	-	74	43	17 756	356 564	14 933	30 296	274 264	1 410 620	2 322 946	3 712 689	60 999
31161	Animal slaughtering & processing.....	-	74	43	17 756	356 564	14 933	30 296	274 264	1 410 620	2 322 946	3 712 689	60 999
311611	Animal (except poultry) slaughtering.....	-	24	7	h	D	D	D	D	D	D	D	8 988
311612	Meat processed from carcasses.....	4	25	15	2 655	57 754	2 156	4 364	42 660	213 634	362 884	576 613	9 547
311613	Rendering & meat byproduct processing.....	-	10	8	e	D	D	D	D	D	D	D	5 708
311615	Poultry processing....	-	15	13	10 162	188 255	8 834	18 136	152 856	386 006	1 134 648	1 517 754	36 756
3117	Seafood product preparation & packaging..	2	47	16	1 217	20 464	902	1 362	12 562	67 287	91 287	158 574	D
31171	Seafood product preparation & packaging.....	2	47	16	1 217	20 464	902	1 362	12 562	67 287	91 287	158 574	D
311712	Fresh & frozen seafood processing..	2	44	16	1 206	20 340	892	1 353	12 475	66 962	90 538	157 505	3 861
3118	Bakeries & tortilla mfg.....	-	185	34	5 326	153 378	3 350	6 316	92 430	861 487	347 808	1 208 108	42 165
31181	Bread & bakery product mfg.....	1	172	27	3 409	74 980	1 758	3 080	31 717	189 569	109 046	298 425	27 044
311811	Retail bakeries.....	3	120	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries..	-	50	21	2 602	63 812	1 260	2 390	25 921	168 270	96 022	264 031	25 776
31182	Cookie, cracker, & pasta mfg.....	-	13	7	1 917	78 398	1 592	3 236	60 713	671 918	238 762	909 683	15 121
311821	Cookie & cracker mfg..	-	5	2	g	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	-	3	3	390	11 206	329	574	8 725	45 795	25 524	71 430	4 211
311823	Dry pasta mfg.....	-	5	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	33	17	2 394	66 800	1 659	3 293	41 216	572 722	585 636	1 158 788	19 878
31191	Snack food mfg	—	8	5	903	24 293	463	972	12 364	224 275	192 246	415 547	7 625
311911	Roasted nuts & peanut butter mfg	—	5	3	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	3	2	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	4	3	743	23 903	630	1 169	17 588	264 977	302 861	570 034	7 902
311920	Coffee & tea mfg	—	4	3	743	23 903	630	1 169	17 588	264 977	302 861	570 034	7 902
31194	Seasoning & dressing mfg	—	10	5	c	D	D	D	D	D	D	D	D
311942	Spice & extract mfg	—	7	5	198	6 107	96	195	2 508	22 721	17 599	40 064	1 755
31199	All other food mfg	—	10	4	526	11 964	455	939	8 516	59 127	70 714	129 294	2 440
311991	Perishable prepared food mfg	—	3	3	e	D	D	D	D	D	D	D	D
311999	All other miscellaneous food mfg	—	7	1	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	72	38	13 273	683 342	7 874	15 172	367 080	8 290 995	3 628 384	11 905 760	340 722
3121	Beverage mfg	—	58	24	3 408	137 457	1 849	3 857	79 446	1 249 043	1 058 208	2 296 776	D
31211	Soft drink & ice mfg	—	35	19	1 886	50 811	770	1 418	18 652	357 946	523 095	870 312	D
312111	Soft drink mfg	—	20	15	1 666	47 203	657	1 184	16 861	348 037	515 767	853 318	D
312113	Ice mfg	1	13	3	c	D	D	D	D	D	D	D	1 001
31212	Breweries	—	14	3	g	D	D	D	D	D	D	D	52 001
312120	Breweries	—	14	3	g	D	D	D	D	D	D	D	52 001
31214	Distilleries	—	2	1	c	D	D	D	D	D	D	D	D
312140	Distilleries	—	2	1	c	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	14	14	9 865	545 885	6 025	11 315	287 634	7 041 952	2 570 176	9 608 984	D
31221	Tobacco stemming & redrying	—	7	7	g	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	7	7	g	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	7	7	i	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	2	2	i	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	5	5	g	D	D	D	D	D	D	D	D
313	Textile mills	1	88	60	20 726	513 358	17 603	37 371	388 533	1 191 876	1 841 246	3 063 160	174 190
3131	Fiber, yarn, & thread mills	—	10	8	1 440	30 356	1 261	2 563	23 144	76 867	127 805	200 121	30 047
31311	Fiber, yarn, & thread mills	—	10	8	1 440	30 356	1 261	2 563	23 144	76 867	127 805	200 121	30 047
313111	Yarn spinning mills	—	4	3	470	10 902	423	981	8 628	35 131	41 020	75 558	D
313112	Yarn texturing, throwing, & twisting mills	—	6	5	970	19 454	838	1 582	14 516	41 736	86 785	124 563	D
3132	Fabric mills	2	53	40	16 916	427 852	14 195	30 244	324 508	952 015	1 434 981	2 423 809	127 275
31321	Broadwoven fabric mills	2	30	23	13 676	344 536	11 517	24 785	264 628	813 061	1 231 492	2 078 540	81 535
313210	Broadwoven fabric mills	2	30	23	13 676	344 536	11 517	24 785	264 628	813 061	1 231 492	2 078 540	81 535
31322	Narrow fabric mills & schiffli machine embroidery	—	7	5	1 160	21 882	944	1 898	16 394	25 218	21 434	48 123	2 093
313221	Narrow fabric mills	—	6	5	g	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	8	6	668	23 621	495	1 032	12 783	46 955	72 984	118 803	D
313230	Nonwoven fabric mills	—	8	6	668	23 621	495	1 032	12 783	46 955	72 984	118 803	D
31324	Knit fabric mills	—	8	6	1 412	37 813	1 239	2 529	30 703	66 781	109 071	178 343	D
313249	Other knit fabric & lace mills	—	4	4	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	25	12	2 370	55 150	2 147	4 564	40 881	162 994	278 460	439 230	16 868
31331	Textile & fabric finishing mills	—	23	11	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	—	17	6	1 470	36 355	1 401	3 233	28 022	118 675	224 461	340 932	D
313312	Textile & fabric finishing mills	—	6	5	f	D	D	D	D	D	D	D	D
31332	Fabric coating mills	—	2	1	c	D	D	D	D	D	D	D	D
313320	Fabric coating mills	—	2	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA—Con.													
31-33	Manufacturing—Con.												
314	Textile product mills	—	152	29	4 175	86 833	3 412	6 471	63 928	192 050	367 957	562 321	15 062
3141	Textile furnishings mills	—	81	10	2 537	52 921	2 150	4 221	42 332	133 637	272 914	408 651	10 924
31411	Carpet & rug mills	—	2	1	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	—	2	1	g	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	79	9	g	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	—	79	9	g	D	D	D	D	D	D	D	D
314129	Other household textile product mills	2	70	3	e	D	D	D	D	D	D	D	D
31419	Other textile product mills	—	9	6	895	14 055	810	1 532	10 322	37 723	82 308	119 521	5 581
31491	Textile bag & canvas mills	1	71	19	1 638	33 912	1 262	2 250	21 596	58 413	95 043	153 670	4 138
314911	Textile bag mills	3	30	6	343	7 649	270	502	4 771	11 692	8 238	19 893	751
314912	Canvas & related product mills	—	4	3	130	2 590	104	198	1 646	3 889	2 069	5 903	129
31499	All other textile product mills	4	26	3	213	5 059	166	304	3 125	7 803	6 169	13 990	622
314992	Tire cord & tire fabric mills	1	41	13	1 295	26 263	992	1 748	16 825	46 721	86 805	133 777	3 387
314999	All other miscellaneous textile product mills	—	1	1	c	D	D	D	D	D	D	D	D
315	Apparel mfg	1	226	127	26 203	454 208	23 060	43 129	368 034	1 114 724	1 145 291	2 236 932	33 403
3151	Apparel knitting mills	—	17	13	5 300	110 909	4 666	9 148	89 186	144 533	273 054	418 176	13 811
31511	Hosiery & sock mills	—	8	6	2 092	36 810	2 003	4 197	33 727	47 099	47 542	92 448	4 213
315111	Sheer hosiery mills	—	1	1	c	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	7	5	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	9	7	3 208	74 099	2 663	4 951	55 459	97 434	225 512	325 728	9 598
315191	Outerwear knitting mills	—	9	7	3 208	74 099	2 663	4 951	55 459	97 434	225 512	325 728	9 598
315192	Underwear & nightwear knitting mills	—	8	6	h	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	1	1	c	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	164	106	20 161	332 033	17 748	32 813	270 860	950 059	857 529	1 786 007	18 600
315211	Men's & boys' cut & sew apparel contractors	1	82	47	6 599	92 087	5 964	10 992	77 992	230 568	43 410	276 317	5 024
315212	Women's, girls', & infants' cut & sew apparel contractors	2	19	14	2 234	32 608	2 083	3 782	29 041	51 981	25 180	79 941	1 921
31522	Men's & boys' cut & sew apparel mfg	—	63	33	4 365	59 479	3 881	7 210	48 951	178 587	18 230	196 376	3 103
315221	Men's & boys' cut & sew underwear & nightwear mfg	1	36	28	9 331	170 402	8 485	15 492	142 228	442 531	485 892	930 075	7 444
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	9	6	3	519	10 952	487	1 088	9 461	35 100	31 196	66 460	1 220
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	19	17	6 594	128 600	6 155	11 232	110 293	280 955	307 175	590 802	3 523
315228	Men's & boys' cut & sew other outerwear mfg	—	3	3	g	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	—	7	4	f	D	D	D	D	D	D	D	352
315232	Women's & girls' cut & sew blouse & shirt mfg	1	35	25	2 993	49 146	2 219	4 465	36 655	193 725	258 361	426 519	D
315233	Women's & girls' cut & sew dress mfg	—	9	5	379	5 548	330	661	4 353	19 074	19 768	38 418	422
315239	Women's & girls' cut & sew other outerwear mfg	1	8	7	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	2	16	12	1 681	29 036	1 344	2 700	21 349	91 774	155 049	249 337	2 901
315291	Infants' cut & sew apparel mfg	—	11	6	1 238	20 398	1 080	1 864	13 985	83 235	69 866	153 096	D
315299	All other cut & sew apparel mfg	—	3	3	g	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	—	7	3	c	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	4	45	8	742	11 266	646	1 168	7 988	20 132	14 708	32 749	992
315991	Hat, cap, & millinery mfg	4	45	8	742	11 266	646	1 168	7 988	20 132	14 708	32 749	992
315992	Glove & mitten mfg	5	10	5	e	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	—	3	2	c	D	D	D	D	D	D	D	D
		5	32	1	126	2 264	105	166	1 467	10 198	6 240	14 260	512

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA—Con.													
31-33	Manufacturing—Con.												
316	Leather & allied product mfg .	4	19	6	709	9 195	583	1 034	6 347	15 006	14 924	32 731	763
3162	Footwear mfg	6	5	4	530	5 991	456	809	4 707	6 729	8 117	15 608	649
31621	Footwear mfg	6	5	4	530	5 991	456	809	4 707	6 729	8 117	15 608	649
316213	Men's footwear (except athletic) mfg .	—	2	2	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) mfg .	9	3	2	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	3	12	2	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	3	12	2	c	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	3	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	1	582	226	19 612	470 535	15 995	32 479	335 838	1 117 087	1 670 030	2 774 487	133 805
3211	Sawmills & wood preservation	2	259	89	5 343	131 336	4 591	9 329	95 993	349 748	626 532	965 444	51 044
32111	Sawmills & wood preservation	2	259	89	5 343	131 336	4 591	9 329	95 993	349 748	626 532	965 444	51 044
321113	Sawmills	1	240	78	4 497	106 635	3 884	7 861	83 098	276 983	389 898	665 173	44 844
321114	Wood preservation	3	19	11	846	24 701	707	1 468	12 895	72 765	236 634	300 271	6 200
3212	Veneer, plywood, & engineered wood product mfg	—	63	40	4 285	116 944	3 465	7 201	84 535	286 779	450 519	735 736	52 123
32121	Veneer, plywood, & engineered wood product mfg	—	63	40	4 285	116 944	3 465	7 201	84 535	286 779	450 519	735 736	52 123
321211	Hardwood veneer & plywood veneer	—	19	13	1 500	34 591	1 269	2 444	25 347	86 615	177 047	262 182	4 749
321212	Softwood veneer & plywood mfg	—	3	2	e	D	D	D	D	D	D	D	D
321214	Truss mfg	1	29	15	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	—	12	10	1 341	42 693	1 108	2 459	33 210	113 035	156 642	268 839	42 777
3219	Other wood product mfg	1	260	97	9 984	222 255	7 939	15 949	155 310	480 560	592 979	1 073 307	30 638
32191	Millwork	1	128	51	5 708	135 182	4 526	9 689	96 547	288 618	364 423	653 232	18 503
321911	Wood window & door mfg	—	37	19	2 786	69 896	2 085	4 970	48 235	127 200	155 567	284 764	7 473
321912	Cut stock, resawing lumber, & planing	1	48	14	1 428	29 686	1 257	2 403	24 008	80 467	97 880	176 899	5 312
321918	Other millwork (including flooring)	4	43	18	1 494	35 600	1 184	2 316	24 304	80 951	110 976	191 569	5 718
32192	Wood container & pallet mfg	2	60	22	1 491	26 794	1 273	2 215	19 332	52 812	69 446	121 404	4 346
321920	Wood container & pallet mfg	2	60	22	1 491	26 794	1 273	2 215	19 332	52 812	69 446	121 404	4 346
32199	All other wood product mfg	1	72	24	2 785	60 279	2 140	4 045	39 431	139 130	159 110	298 671	7 789
321991	Manufactured home (mobile home) mfg	—	3	3	793	19 369	668	1 352	13 211	49 478	56 015	104 786	D
321992	Prefabricated wood building mfg	1	24	11	1 384	29 161	955	1 652	17 278	56 058	70 921	127 427	2 934
321999	All other miscellaneous wood product mfg	2	45	10	608	11 749	517	1 041	8 942	33 594	32 174	66 458	D
322	Paper mfg	—	105	80	15 670	636 939	11 839	25 873	427 880	1 887 984	2 345 907	4 212 214	352 903
3221	Pulp, paper, & paperboard mills	—	12	12	6 695	344 013	4 960	11 175	237 175	1 144 225	1 240 344	2 377 500	D
32212	Paper mills	—	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	2	2	g	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	9	9	h	D	D	D	D	D	D	D	200 589
322130	Paperboard mills	—	9	9	h	D	D	D	D	D	D	D	200 589
3222	Converted paper product mfg	—	93	68	8 975	292 926	6 879	14 698	190 705	743 759	1 105 563	1 834 714	D
32221	Paperboard container mfg	—	57	45	5 313	187 967	3 977	8 659	122 575	442 610	669 930	1 110 747	46 515
322211	Corrugated & solid fiber box mfg	—	33	27	2 716	92 799	1 966	4 224	57 755	218 289	332 436	550 761	20 163
322212	Folding paperboard box mfg	1	13	11	2 197	83 439	1 714	3 821	57 083	188 566	278 593	465 527	24 954
322213	Setup paperboard box mfg	—	3	3	c	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	—	8	4	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	14	10	1 628	57 734	1 242	2 847	37 624	172 765	293 127	458 261	8 324
322221	Coated & laminated packaging paper & plastics film mfg	—	1	1	c	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	7	4	504	16 067	312	725	7 320	77 441	125 332	197 787	3 786
322224	Uncoated paper & multiwall bag mfg	2	3	2	359	9 883	326	821	8 670	20 993	40 494	62 566	832
322225	Laminated aluminum foil mfg for flexible packaging uses	—	1	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg—Con.												
3222	Converted paper product mfg—Con.												
32222	Paper bag & coated & treated paper mfg—Con.												
322226	Surface-coated paperboard mfg	-	2	2	c	D	D	D	D	D	D	D	
32223	Stationery product mfg ..	-	15	8	1 490	34 567	1 227	2 240	20 852	98 918	95 512	189 248	5 760
322232	Envelope mfg	-	6	4	547	16 630	407	882	9 797	38 495	28 701	66 943	3 394
322233	Stationery, tablet, & related product mfg ..	-	4	3	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	7	5	544	12 658	433	952	9 654	29 466	46 994	76 458	D
322299	All other converted paper product mfg ...	-	7	5	544	12 658	433	952	9 654	29 466	46 994	76 458	D
323	Printing & related support activities.....	1	888	164	20 741	634 294	15 226	28 860	433 394	1 391 935	1 073 799	2 462 743	205 569
3231	Printing & related support activities.....	1	888	164	20 741	634 294	15 226	28 860	433 394	1 391 935	1 073 799	2 462 743	205 569
32311	Printing	1	813	152	19 947	613 400	14 614	27 627	419 552	1 352 832	1 066 043	2 415 788	203 084
323110	Commercial lithographic printing ..	2	409	87	10 778	347 981	7 628	14 577	232 512	679 169	537 686	1 216 046	148 816
323111	Commercial gravure printing	-	14	9	1 915	66 112	1 607	2 727	53 655	164 341	185 170	347 657	27 247
323112	Commercial flexographic printing ..	1	15	7	395	11 634	288	627	7 144	20 774	25 870	46 386	3 547
323113	Commercial screen printing	4	63	8	736	14 342	553	1 077	9 272	25 842	33 107	59 121	1 696
323114	Quick printing	2	195	11	1 340	31 418	947	1 560	19 586	65 728	35 453	101 311	4 415
323116	Manifold business form printing	-	23	12	1 349	41 201	909	1 730	27 359	156 222	79 942	235 639	8 764
323117	Book printing.....	-	13	9	2 708	82 506	2 181	4 390	59 177	203 811	142 282	345 997	6 720
323118	Blankbook, looseleaf binder, & device mfg ..	-	4	3	183	3 989	127	271	2 330	8 731	6 034	14 805	360
323119	Other commercial printing.....	4	66	5	468	11 768	322	571	7 059	21 281	18 868	40 283	1 277
32312	Support activities for printing	2	75	12	794	20 894	612	1 233	13 842	39 103	7 756	46 955	2 485
323121	Tradebinding & related work	2	19	5	359	7 892	278	546	4 824	14 425	2 982	17 437	910
323122	Prepress services	2	56	7	435	13 002	334	687	9 018	24 678	4 774	29 518	1 575
324	Petroleum & coal products mfg	-	20	5	605	25 953	335	727	13 308	126 100	436 998	560 125	13 411
3241	Petroleum & coal products mfg	-	20	5	605	25 953	335	727	13 308	126 100	436 998	560 125	13 411
32411	Petroleum refineries	-	2	2	e	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	2	14	2	205	6 116	94	165	2 486	13 607	21 083	34 276	D
324121	Asphalt paving mixture & block mfg	2	12	1	c	D	D	D	D	D	D	D	2 961
32419	Other petroleum & coal products mfg	-	4	1	c	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil & grease mfg	-	3	1	c	D	D	D	D	D	D	D	D
325	Chemical mfg	-	185	77	20 271	879 208	14 128	30 070	540 214	5 378 726	3 761 258	9 081 361	408 042
3251	Basic chemical mfg	-	34	11	3 675	183 062	2 844	5 714	128 853	830 896	488 304	1 302 058	68 806
32512	Industrial gas mfg	2	17	3	127	4 919	60	129	2 206	35 394	17 438	52 805	D
325120	Industrial gas mfg	2	17	3	127	4 919	60	129	2 206	35 394	17 438	52 805	D
32513	Dye & pigment mfg	-	2	2	c	D	D	D	D	D	D	D	D
325131	Inorganic dye & pigment mfg	-	1	1	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	9	3	1 821	91 694	1 448	2 782	71 226	349 095	48 657	397 746	8 144
325188	All other basic inorganic chemical mfg	-	9	3	1 821	91 694	1 448	2 782	71 226	349 095	48 657	397 746	8 144
32519	Other basic organic chemical mfg	-	5	3	1 545	79 738	1 228	2 569	52 147	428 506	401 717	812 870	51 106
325199	All other basic organic chemical mfg	-	5	3	1 545	79 738	1 228	2 569	52 147	428 506	401 717	812 870	51 106

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VIRGINIA—Con.												
	Manufacturing—Con.												
325	Chemical mfg—Con.												
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	16	12	8 705	385 445	6 214	14 344	251 626	1 512 391	1 115 439	2 603 197	128 165
32521	Resin & synthetic rubber mfg	-	7	3	261	11 571	159	371	7 350	5 681	210 171	214 896	8 136
325211	Plastics material & resin mfg	-	5	2	c	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg . .	-	9	9	8 444	373 874	6 055	13 973	244 276	1 506 710	905 268	2 388 301	120 029
325221	Cellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	8	8	i	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	2	24	7	407	11 623	274	505	6 705	58 237	73 132	129 066	2 898
32531	Fertilizer mfg	1	20	4	293	7 958	215	387	5 237	37 443	55 388	91 424	2 133
325314	Fertilizer (mixing only) mfg	-	14	3	192	5 007	139	253	3 275	23 982	36 885	59 189	678
32532	Pesticide & other agricultural chemical mfg	5	4	3	114	3 665	59	118	1 468	20 794	17 744	37 642	765
325320	Pesticide & other agricultural chemical mfg	5	4	3	114	3 665	59	118	1 468	20 794	17 744	37 642	765
3254	Pharmaceutical & medicine mfg	-	16	10	2 677	130 244	1 332	3 039	48 478	1 813 571	1 294 543	3 105 264	171 259
32541	Pharmaceutical & medicine mfg	-	16	10	2 677	130 244	1 332	3 039	48 478	1 813 571	1 294 543	3 105 264	171 259
325411	Medicinal & botanical mfg	-	4	2	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	8	4	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance mfg	-	3	3	e	D	D	D	D	D	D	D	3 526
3255	Paint, coating, & adhesive mfg	-	24	11	950	40 753	635	1 270	23 384	257 382	322 018	569 088	12 650
32551	Paint & coating mfg	-	17	8	823	35 683	540	1 089	20 736	234 643	279 576	507 807	7 151
325510	Paint & coating mfg	-	17	8	823	35 683	540	1 089	20 736	234 643	279 576	507 807	7 151
32552	Adhesive mfg	-	7	3	127	5 070	95	181	2 648	22 739	42 442	61 281	5 499
325520	Adhesive mfg	-	7	3	127	5 070	95	181	2 648	22 739	42 442	61 281	5 499
3256	Soap, cleaning compound, & toilet preparation mfg . .	-	22	6	1 542	41 330	1 074	2 003	22 194	692 610	286 747	978 693	9 176
32561	Soap & cleaning compound mfg	1	16	3	e	D	D	D	D	D	D	D	2 832
325612	Polish & other sanitation good mfg . .	3	9	2	129	3 853	71	154	1 668	10 304	11 045	21 260	644
325613	Surface active agent mfg	-	3	1	c	D	D	D	D	D	D	D	1 799
32562	Toilet preparation mfg	-	6	3	g	D	D	D	D	D	D	D	6 344
325620	Toilet preparation mfg	-	6	3	g	D	D	D	D	D	D	D	6 344
3259	Other chemical product mfg	1	49	20	2 315	86 751	1 755	3 195	58 974	213 639	181 075	393 995	15 088
32591	Printing ink mfg	3	18	10	432	19 291	242	496	9 555	50 469	107 607	157 829	1 566
325910	Printing ink mfg	3	18	10	432	19 291	242	496	9 555	50 469	107 607	157 829	1 566
32592	Explosives mfg	-	2	1	g	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	2	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	1	29	9	f	D	D	D	D	D	D	D	13 522
325991	Custom compounding of purchased resin . .	1	10	4	301	8 306	224	476	5 211	20 737	17 734	38 663	2 182
325998	All other miscellaneous chemical product & preparation mfg	-	8	3	242	10 055	160	298	5 126	31 996	43 919	75 115	D
326	Plastics & rubber products mfg	-	197	117	21 899	683 707	17 365	34 208	474 703	2 464 944	1 958 190	4 393 313	196 871
3261	Plastics product mfg	-	156	98	15 642	445 878	12 341	24 465	297 992	1 703 123	1 447 231	3 118 466	159 820
32611	Unsupported plastics film, sheet, & bag mfg . .	-	27	18	4 090	144 641	3 112	6 448	93 056	685 334	498 059	1 168 930	72 601
326111	Unsupported plastics bag mfg	2	7	5	g	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	1	3	1	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	17	12	2 754	106 050	1 949	3 810	61 246	508 146	349 515	844 668	54 885
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	11	6	619	14 902	482	935	9 128	56 002	44 142	98 043	3 516
326121	Unsupported plastics profile shape mfg	2	6	3	310	7 400	249	497	4 439	32 575	18 031	50 596	1 964
326122	Plastics pipe & pipe fitting mfg	-	5	3	309	7 502	233	438	4 689	23 427	26 111	47 447	1 552

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA—Con.													
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32614	Polystyrene foam product mfg.....	-	13	8	525	14 156	415	833	9 388	62 810	41 287	102 165	2 435
326140	Polystyrene foam product mfg.....	-	13	8	525	14 156	415	833	9 388	62 810	41 287	102 165	2 435
32615	Urethane & other foam product (except polystyrene) mfg.....	-	4	3	521	13 272	420	603	10 809	57 867	59 882	113 965	D
326150	Urethane & other foam product (except polystyrene) mfg.....	-	4	3	521	13 272	420	603	10 809	57 867	59 882	113 965	D
32616	Plastics bottle mfg.....	2	7	6	804	22 490	734	1 575	18 301	87 996	83 045	169 623	19 209
326160	Plastics bottle mfg.....	2	7	6	804	22 490	734	1 575	18 301	87 996	83 045	169 623	19 209
32619	Other plastics product mfg.....	-	91	57	9 067	235 830	7 166	14 044	156 857	751 459	719 603	1 462 865	60 523
326191	Plastics plumbing fixture mfg.....	1	9	7	835	17 447	742	1 554	13 933	36 218	37 047	73 422	1 819
326199	All other plastics product mfg.....	-	82	50	8 232	218 383	6 424	12 490	142 924	715 241	682 556	1 389 443	58 704
3262	Rubber product mfg.....	-	41	19	6 257	237 829	5 024	9 743	176 711	761 821	510 959	1 274 847	37 051
32621	Tire mfg.....	-	21	5	h	D	D	D	D	D	D	D	22 608
326211	Tire mfg (except retreading).....	-	8	3	h	D	D	D	D	D	D	D	D
326212	Tire retreading.....	-	13	2	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg.....	-	20	14	h	D	D	D	D	D	D	D	14 443
326291	Rubber product mfg for mechanical use.....	1	8	6	g	D	D	D	D	D	D	D	3 745
326299	All other rubber product mfg.....	-	12	8	1 948	53 753	1 493	3 083	35 164	192 398	102 026	294 300	10 698
327	Nonmetallic mineral product mfg.....	1	350	132	12 114	341 601	9 304	18 979	233 090	944 602	779 270	1 727 436	85 245
3271	Clay product & refractory mfg.....	2	31	12	1 160	29 239	805	1 603	17 275	76 210	61 982	140 150	8 172
32711	Pottery, ceramics, & plumbing fixture mfg...	-	18	2	315	6 081	150	281	2 562	16 882	15 983	32 907	890
327112	Vitreous china, fine earthenware, & other pottery product mfg..	-	18	2	315	6 081	150	281	2 562	16 882	15 983	32 907	890
32712	Clay building material & refractories mfg.....	3	13	10	845	23 158	655	1 322	14 713	59 328	45 999	107 243	7 282
327121	Brick & structural clay tile mfg.....	-	7	7	659	15 492	546	1 110	11 071	37 817	15 834	55 387	4 014
327125	Nonclay refractory mfg.....	8	2	1	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.	-	44	17	2 873	74 366	2 349	4 703	53 051	203 739	165 751	372 475	15 682
32721	Glass & glass product mfg.....	-	44	17	2 873	74 366	2 349	4 703	53 051	203 739	165 751	372 475	15 682
327212	Other pressed & blown glass & glassware mfg.....	-	8	1	e	D	D	D	D	D	D	D	D
327213	Glass container mfg..	-	2	2	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	-	34	14	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	1	239	88	6 251	179 238	4 778	9 881	122 599	494 961	419 255	912 730	39 102
32731	Cement mfg.....	-	6	3	302	11 927	176	417	6 431	51 493	56 280	107 107	4 566
327310	Cement mfg.....	-	6	3	302	11 927	176	417	6 431	51 493	56 280	107 107	4 566
32732	Ready-mix concrete mfg.	1	125	40	2 310	68 015	1 858	3 934	51 716	193 984	207 871	402 342	22 128
327320	Ready-mix concrete mfg.....	1	125	40	2 310	68 015	1 858	3 934	51 716	193 984	207 871	402 342	22 128
32733	Concrete pipe, brick, & block mfg.....	1	49	24	1 602	45 824	1 182	2 334	28 016	117 419	81 611	197 534	6 641
327331	Concrete block & brick mfg.....	2	31	9	533	13 722	329	639	7 438	46 279	40 202	85 186	2 564
327332	Concrete pipe mfg.....	1	18	15	1 069	32 102	853	1 695	20 578	71 140	41 409	112 348	4 077
32739	Other concrete product mfg.....	2	59	21	2 037	53 472	1 562	3 196	36 436	132 065	73 493	205 747	5 767
327390	Other concrete product mfg.....	2	59	21	2 037	53 472	1 562	3 196	36 436	132 065	73 493	205 747	5 767
3274	Lime & gypsum product mfg.....	-	8	6	731	23 829	579	1 220	17 714	72 783	54 943	127 442	7 188
32741	Lime mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
327410	Lime mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
32742	Gypsum product mfg....	-	5	3	e	D	D	D	D	D	D	D	D
327420	Gypsum product mfg..	-	5	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg.....	1	28	9	1 099	34 929	793	1 572	22 451	96 909	77 339	174 639	15 101
32791	Abrasive product mfg . . .	—	2	2	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg . .	—	2	2	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	1	26	7	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg.....	1	8	1	126	2 751	108	174	1 931	3 827	3 705	7 767	D
327993	Mineral wool mfg	—	3	1	c	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product mfg.....	1	11	4	408	14 864	305	659	10 530	40 673	27 957	70 149	10 601
331	Primary metal mfg	—	49	31	7 342	251 983	6 086	12 696	191 219	665 539	1 139 600	1 803 693	69 477
3311	Iron & steel mills & ferroalloy mfg	—	4	2	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	4	2	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	4	2	f	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	6	5	e	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	4	4	e	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	3	3	185	4 876	162	364	3 793	9 327	23 798	33 224	D
3313	Alumina & aluminum production & processing ..	—	7	6	1 923	67 760	1 650	3 691	54 603	211 595	558 770	776 745	16 486
33131	Alumina & aluminum production & processing.....	—	7	6	1 923	67 760	1 650	3 691	54 603	211 595	558 770	776 745	16 486
331314	Secondary smelting & alloying of aluminum .	—	1	1	c	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	3	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg.....	—	3	3	978	29 671	865	1 947	24 296	55 578	116 309	175 030	8 406
3314	Nonferrous metal (except aluminum) production & processing.....	—	9	4	433	15 075	324	690	7 658	45 672	91 712	135 086	4 786
33142	Copper rolling, drawing, extruding, & alloying ...	—	3	1	e	D	D	D	D	D	D	D	830
331421	Copper rolling, drawing, & extruding .	—	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	6	3	c	D	D	D	D	D	D	D	3 956
331491	Other nonferrous metal rolling, drawing, & extruding	—	5	3	c	D	D	D	D	D	D	D	D
3315	Foundries	—	23	14	4 105	131 147	3 378	6 667	97 384	294 676	288 501	577 033	D
33151	Ferrous metal foundries .	—	13	10	2 528	85 364	2 106	4 375	65 298	154 681	189 903	345 218	9 046
331511	Iron foundries	—	11	9	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	10	4	1 577	45 783	1 272	2 292	32 086	139 995	98 598	231 815	D
331525	Copper foundries (except die-casting) ..	—	5	1	c	D	D	D	D	D	D	D	76
331528	Other nonferrous foundries (except die-casting)	—	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	768	219	20 631	649 623	15 453	30 177	415 432	1 624 459	1 484 830	3 083 347	98 400
3321	Forging & stamping	—	29	14	1 407	50 127	886	1 736	24 080	127 454	101 389	217 036	7 824
33211	Forging & stamping	—	29	14	1 407	50 127	886	1 736	24 080	127 454	101 389	217 036	7 824
332112	Nonferrous forging	—	2	2	e	D	D	D	D	D	D	D	D
332114	Custom roll forming	—	10	6	337	10 045	188	415	5 176	21 395	30 237	51 337	868
332116	Metal stamping.....	1	14	5	375	11 756	290	568	7 120	23 839	27 688	51 663	490
332117	Powder metallurgy part mfg	—	1	1	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	17	7	1 361	43 543	1 070	2 013	27 313	145 767	84 761	229 608	8 640
33221	Cutlery & handtool mfg ..	—	17	7	1 361	43 543	1 070	2 013	27 313	145 767	84 761	229 608	8 640
332211	Cutlery & flatware (except precious) mfg	—	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	1	13	5	e	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	c	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	1	203	89	6 021	178 166	4 465	8 629	111 953	381 221	466 375	842 257	24 131
33231	Plate work & fabricated structural product mfg ..	1	95	48	3 471	104 733	2 586	5 103	66 250	217 235	309 859	523 960	11 330
332311	Prefabricated metal building & component mfg	—	7	3	379	9 599	333	685	7 799	16 695	15 317	27 877	1 595
332312	Fabricated structural metal mfg	1	71	36	2 389	73 693	1 711	3 354	44 971	167 343	268 142	436 896	6 380
332313	Plate work mfg	—	17	9	703	21 441	542	1 064	13 480	33 197	26 400	59 187	3 355
33232	Ornamental & architectural metal products mfg	1	108	41	2 550	73 433	1 879	3 526	45 703	163 986	156 516	318 297	12 801
332321	Metal window & door mfg	—	16	5	644	18 347	478	1 028	12 223	55 941	67 196	122 458	995
332322	Sheet metal work mfg ..	—	68	32	1 607	45 989	1 203	2 105	28 083	90 608	79 164	168 268	10 931
332323	Ornamental & architectural metal work mfg	5	24	4	299	9 097	198	393	5 397	17 437	10 156	27 571	875
3324	Boiler, tank, & shipping container mfg	—	18	14	1 590	65 717	1 262	2 311	48 684	194 538	402 224	590 801	10 911
33241	Power boiler & heat exchanger mfg	—	3	3	251	11 886	117	192	4 069	16 127	43 914	61 538	D
332410	Power boiler & heat exchanger mfg	—	3	3	251	11 886	117	192	4 069	16 127	43 914	61 538	D
33242	Metal tank (heavy gauge) mfg	—	8	6	391	11 220	312	597	8 382	25 752	21 874	49 008	D
332420	Metal tank (heavy gauge) mfg	—	8	6	391	11 220	312	597	8 382	25 752	21 874	49 008	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	7	5	948	42 611	833	1 522	36 233	152 659	336 436	480 255	6 241
332431	Metal can mfg	—	5	4	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	8	7	1 019	32 274	727	1 546	19 775	86 114	41 238	125 972	3 331
33251	Hardware mfg	—	8	7	1 019	32 274	727	1 546	19 775	86 114	41 238	125 972	3 331
332510	Hardware mfg	—	8	7	1 019	32 274	727	1 546	19 775	86 114	41 238	125 972	3 331
3326	Spring & wire product mfg .	—	9	3	577	11 363	480	875	6 357	32 528	24 952	54 305	2 439
33261	Spring & wire product mfg	—	9	3	577	11 363	480	875	6 357	32 528	24 952	54 305	2 439
332618	Other fabricated wire product mfg	—	8	3	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	370	57	5 000	150 196	3 920	7 160	104 526	311 759	139 906	450 423	22 424
33271	Machine shops	2	348	44	3 809	120 178	2 995	5 415	82 094	209 634	78 902	287 949	15 336
332710	Machine shops	2	348	44	3 809	120 178	2 995	5 415	82 094	209 634	78 902	287 949	15 336
33272	Turned product & screw, nut, & bolt mfg	—	22	13	1 191	30 018	925	1 745	22 432	102 125	61 004	162 474	7 088
332721	Precision turned product mfg	—	14	7	356	8 393	234	471	5 373	15 890	7 011	23 227	1 037
332722	Bolt, nut, screw, rivet, & washer mfg	—	8	6	835	21 625	691	1 274	17 059	86 235	53 993	139 247	6 051
3328	Coating, engraving, heat treating, & allied activities .	1	55	9	726	20 075	547	1 072	12 256	40 190	13 972	53 815	3 432
33281	Coating, engraving, heat treating, & allied activities	1	55	9	726	20 075	547	1 072	12 256	40 190	13 972	53 815	3 432
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	1	18	4	193	4 292	153	316	2 970	8 646	4 965	13 661	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	31	4	487	14 500	360	673	8 413	29 317	6 143	35 064	2 850
3329	Other fabricated metal product mfg	—	59	19	2 930	98 162	2 096	4 835	60 488	304 888	210 013	519 130	15 268
33291	Metal valve mfg	—	7	5	1 115	39 750	758	1 671	23 671	111 096	81 518	197 403	5 734
332911	Industrial valve mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting & trim mfg	—	2	2	c	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	52	14	1 815	58 412	1 338	3 164	36 817	193 792	128 495	321 727	9 534
332991	Ball & roller bearing mfg	—	2	2	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	5	2	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	3	33	9	735	23 071	513	1 050	13 593	33 796	19 399	52 493	3 290

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VIRGINIA—Con. Manufacturing— Con.												
333	Machinery mfg	-	348	141	21 343	712 234	14 892	30 996	409 707	1 622 092	2 115 850	3 805 337	122 359
3331	Agriculture, construction, & mining machinery mfg.	1	47	19	3 219	98 867	2 106	4 154	53 457	255 474	529 653	803 588	17 373
33311	Agricultural implement mfg	-	12	5	1 068	34 156	749	1 292	19 949	128 411	274 109	405 763	10 282
333111	Farm machinery & equipment mfg.	5	10	4	e	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	7	2	446	14 164	265	609	6 687	41 106	41 808	85 104	1 235
333120	Construction machinery mfg	-	7	2	446	14 164	265	609	6 687	41 106	41 808	85 104	1 235
33313	Mining & oil & gas field machinery mfg	1	28	12	1 705	50 547	1 092	2 253	26 821	85 957	213 736	312 721	5 856
333131	Mining machinery & equipment mfg	2	26	11	g	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	72	30	2 938	109 268	1 889	4 079	61 523	271 794	235 544	512 051	16 446
33322	Plastics & rubber industry machinery mfg	-	9	5	862	27 856	547	1 310	18 143	68 569	40 996	110 393	3 960
333220	Plastics & rubber industry machinery mfg	-	9	5	862	27 856	547	1 310	18 143	68 569	40 996	110 393	3 960
33329	Other industrial machinery mfg	-	57	25	2 049	80 725	1 322	2 729	42 916	201 822	193 648	399 241	12 449
333293	Printing machinery & equipment mfg	-	10	3	463	20 363	333	713	13 220	38 775	31 424	75 969	3 600
333294	Food product machinery mfg	1	11	6	380	13 714	247	506	7 037	24 103	32 828	55 077	2 110
333295	Semiconductor machinery mfg	-	1	1	c	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	24	13	886	33 961	564	1 144	17 311	107 175	110 119	219 459	4 632
3333	Commercial & service industry machinery mfg ..	-	42	17	2 190	83 529	1 553	3 237	46 285	137 827	236 466	380 592	30 470
33331	Commercial & service industry machinery mfg	-	42	17	2 190	83 529	1 553	3 237	46 285	137 827	236 466	380 592	30 470
333313	Office machinery mfg ..	2	3	3	c	D	D	D	D	D	D	D	692
333314	Optical instrument & lens mfg	-	5	1	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	-	18	5	582	26 174	424	882	12 506	39 064	121 050	158 776	D
333319	Other commercial & service industry machinery mfg	-	15	8	779	25 952	636	1 190	19 903	36 690	42 245	84 844	1 761
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	31	16	6 183	176 564	5 062	10 544	123 241	380 993	622 956	1 007 607	23 303
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	31	16	6 183	176 564	5 062	10 544	123 241	380 993	622 956	1 007 607	23 303
333411	Air purification equipment mfg	1	7	3	442	9 583	302	610	5 302	22 958	30 789	52 831	D
333414	Heating equipment (except warm air furnaces) mfg	-	10	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	13	10	5 431	157 927	4 495	9 438	111 688	338 587	569 832	904 183	19 450
3335	Metalworking machinery mfg	-	52	16	1 821	67 521	1 228	2 482	40 099	186 068	87 542	272 052	8 964
33351	Metalworking machinery mfg	-	52	16	1 821	67 521	1 228	2 482	40 099	186 068	87 542	272 052	8 964
333511	Industrial mold mfg ...	-	8	3	132	3 781	92	142	2 253	10 858	13 932	24 794	681
333512	Machine tool (metal cutting types) mfg ...	-	2	2	e	D	D	D	D	D	D	D	D
333513	Machine tool (metal forming types) mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	2	25	5	601	19 883	433	862	12 707	35 811	12 719	47 076	3 848
333515	Cutting tool & machine tool accessory mfg ..	-	10	4	401	11 336	313	640	8 556	38 691	15 430	54 467	D
3336	Engine, turbine, & power transmission equipment mfg	-	11	4	632	17 906	345	669	8 573	76 104	98 904	157 181	6 867
33361	Engine, turbine, & power transmission equipment mfg	-	11	4	632	17 906	345	669	8 573	76 104	98 904	157 181	6 867
333612	Speed changer, industrial high-speed drive, & gear mfg	-	3	3	570	15 934	295	596	7 228	73 866	95 477	150 818	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	93	39	4 360	158 579	2 709	5 831	76 529	313 832	304 785	672 266	18 936
33391	Pump & compressor mfg	-	9	4	531	18 103	322	633	8 433	40 982	64 874	106 377	2 826
333911	Pump & pumping equipment mfg	-	5	1	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	4	3	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	31	13	1 733	66 190	1 069	2 583	31 021	166 517	146 376	307 842	8 241
333921	Elevator & moving stairway mfg	-	3	1	c	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	16	7	973	39 156	561	1 492	16 751	75 101	68 373	142 618	5 098
333923	Overhead traveling crane, hoist, & monorail system mfg	-	5	2	455	16 470	333	696	9 354	63 287	33 975	96 137	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	-	7	3	c	D	D	D	D	D	D	D	372
33399	All other general-purpose machinery mfg	1	53	22	2 096	74 286	1 318	2 615	37 075	106 333	93 535	258 047	7 869
333992	Welding & soldering equipment mfg	1	3	1	c	D	D	D	D	D	D	D	213
333993	Packaging machinery mfg	-	9	8	622	24 604	383	718	11 273	1 666	23 807	84 769	2 858
333995	Fluid power cylinder & actuator mfg	-	2	1	c	D	D	D	D	D	D	D	D
333996	Fluid power pump & motor mfg	1	5	1	233	11 132	159	369	6 567	26 364	13 777	40 903	233
333997	Scale & balance (except laboratory) mfg	-	1	1	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	3	31	10	840	25 916	542	1 041	13 504	49 647	41 902	89 390	4 267
334	Computer & electronic product mfg	-	268	124	29 832	1 195 088	15 627	29 368	468 359	3 223 162	3 157 760	6 381 489	590 659
3341	Computer & peripheral equipment mfg	-	35	17	5 532	165 600	2 805	5 330	73 857	367 427	1 127 659	1 493 234	56 400
33411	Computer & peripheral equipment mfg	-	35	17	5 532	165 600	2 805	5 330	73 857	367 427	1 127 659	1 493 234	56 400
334111	Electronic computer mfg	-	15	9	1 524	40 368	1 106	1 945	22 116	184 788	465 044	651 123	12 480
334119	Other computer peripheral equipment mfg	-	16	8	3 996	124 984	1 691	3 371	51 539	181 939	661 836	840 622	43 888
3342	Communications equipment mfg	-	61	27	6 918	322 004	3 250	5 241	112 024	969 453	1 268 933	2 247 309	126 203
33421	Telephone apparatus mfg	1	16	10	2 088	82 644	925	1 755	22 588	198 452	213 308	420 412	11 838
334210	Telephone apparatus mfg	1	16	10	2 088	82 644	925	1 755	22 588	198 452	213 308	420 412	11 838
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	33	17	4 757	237 066	2 290	3 428	88 760	765 000	1 051 609	1 817 580	114 107
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	33	17	4 757	237 066	2 290	3 428	88 760	765 000	1 051 609	1 817 580	114 107
3343	Audio & video equipment mfg	1	8	2	256	7 006	182	342	3 552	15 894	14 004	30 071	933
33431	Audio & video equipment mfg	1	8	2	256	7 006	182	342	3 552	15 894	14 004	30 071	933
334310	Audio & video equipment mfg	1	8	2	256	7 006	182	342	3 552	15 894	14 004	30 071	933
3344	Semiconductor & other electronic component mfg	-	68	36	7 589	250 434	5 546	10 823	171 146	738 159	312 386	1 041 306	357 498
33441	Semiconductor & other electronic component mfg	-	68	36	7 589	250 434	5 546	10 823	171 146	738 159	312 386	1 041 306	357 498
334412	Bare printed circuit board mfg	-	12	6	2 861	117 226	2 295	4 538	90 255	340 751	115 288	461 973	21 142
334413	Semiconductor & related device mfg ...	-	16	5	1 055	37 148	408	800	13 675	49 631	33 524	78 115	D
334414	Electronic capacitor mfg	-	2	2	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	-	1	1	e	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	-	4	1	c	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	8	5	1 252	43 351	816	1 565	31 103	194 166	86 700	274 185	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg—Con.												
33441	Semiconductor & other electronic component mfg—Con.												
334418	Printed circuit assembly (electronic assembly) mfg	-	7	6	387	9 810	312	561	5 552	15 513	21 247	37 690	D
334419	Other electronic component mfg	1	17	10	1 161	25 800	931	1 831	17 393	100 590	35 838	132 465	D
3345	Navigational, measuring, medical, & control instruments mfg	-	74	37	8 896	429 472	3 320	6 581	94 103	1 092 204	374 740	1 469 175	40 151
33451	Navigational, measuring, medical, & control instruments mfg	-	74	37	8 896	429 472	3 320	6 581	94 103	1 092 204	374 740	1 469 175	40 151
334510	Electromedical & electrotherapeutic apparatus mfg	9	4	1	c	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	18	13	6 393	350 703	2 084	4 344	63 862	919 510	247 963	1 168 380	25 380
334513	Industrial process control instrument mfg	1	15	6	396	16 193	174	353	4 948	37 166	23 534	60 698	1 313
334514	Totalizing fluid meter & counting device mfg	-	2	1	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	3	10	4	e	D	D	D	D	D	D	D	2 167
334516	Analytical laboratory instrument mfg	5	11	5	374	15 350	115	232	3 290	29 562	12 555	41 866	1 075
334518	Watch, clock, & part mfg	-	3	3	396	7 612	353	658	5 743	20 410	15 005	34 933	D
334519	Other measuring & controlling device mfg	1	11	4	346	11 838	167	319	3 758	24 205	11 373	35 818	755
3346	Mfg & reproducing magnetic & optical media	-	22	5	641	20 572	524	1 051	13 677	40 025	60 038	100 394	9 474
33461	Mfg & reproducing magnetic & optical media	-	22	5	641	20 572	524	1 051	13 677	40 025	60 038	100 394	9 474
334612	Prerecorded CD (except software), tape, & record reproducing	-	11	3	e	D	D	D	D	D	D	D	D
334613	Magnetic & optical recording media mfg	1	7	2	272	7 518	232	470	5 637	2 715	46 007	48 916	1 909
335	Electrical equipment, appliance, & component mfg	-	106	47	11 673	385 589	7 052	13 976	192 257	1 124 045	1 003 771	2 103 214	47 551
3351	Electric lighting equipment mfg	-	17	6	g	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	16	5	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	2	2	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	61	25	7 503	263 677	3 945	7 893	107 801	692 957	541 172	1 215 065	32 640
33531	Electrical equipment mfg	-	61	25	7 503	263 677	3 945	7 893	107 801	692 957	541 172	1 215 065	32 640
335311	Power, distribution, & specialty transformer mfg	-	12	6	1 331	42 419	844	1 788	23 546	118 341	105 996	224 540	11 291
335312	Motor & generator mfg	-	13	8	1 446	38 882	1 019	1 973	24 148	113 039	49 600	162 861	3 272
335313	Switchgear & switchboard apparatus mfg	-	9	3	677	16 175	424	855	7 737	34 734	44 808	78 885	1 590
335314	Relay & industrial control mfg	-	27	8	4 049	166 201	1 658	3 277	52 370	426 843	340 768	748 779	16 487

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VIRGINIA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	-	26	14	2 180	58 015	1 660	3 123	40 728	176 170	285 648	455 156	10 133
33592	Communication & energy wire & cable mfg	-	6	6	1 430	41 649	1 110	2 204	31 758	134 157	239 421	365 196	8 730
335921	Fiber optic cable mfg...	-	2	2	c	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	4	4	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	2	13	6	671	14 085	495	827	7 710	36 895	43 622	82 252	1 222
335999	All other miscellaneous electrical equipment & component mfg	2	13	6	671	14 085	495	827	7 710	36 895	43 622	82 252	1 222
336	Transportation equipment mfg	-	175	78	36 782	1 390 636	30 181	61 488	990 964	4 947 150	5 887 475	10 842 887	196 714
3361	Motor vehicle mfg	-	8	3	h	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	7	2	h	D	D	D	D	D	D	D	D
336111	Automobile mfg	-	3	1	c	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	4	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	27	10	g	D	D	D	D	D	D	D	3 925
33621	Motor vehicle body & trailer mfg	-	27	10	g	D	D	D	D	D	D	D	3 925
336211	Motor vehicle body mfg	-	13	7	498	12 746	386	756	8 293	21 627	38 917	60 475	2 781
336212	Truck trailer mfg	-	4	1	f	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	-	8	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	72	37	7 620	240 896	6 038	12 042	163 393	678 079	932 409	1 613 266	78 784
33631	Motor vehicle gasoline engine & engine parts mfg	-	19	7	2 199	74 091	1 641	3 418	47 418	190 805	123 952	315 862	15 421
336311	Carburetor, piston, piston ring, & valve mfg	1	3	1	102	3 150	78	166	2 187	6 580	3 253	9 899	311
336312	Gasoline engine & engine parts mfg	-	16	6	2 097	70 941	1 563	3 252	45 231	184 225	120 699	305 963	15 110
33632	Motor vehicle electrical & electronic equipment mfg	2	20	10	g	D	D	D	D	D	D	D	4 530
336321	Vehicular lighting equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	3	19	9	995	20 272	797	1 247	11 124	51 659	52 872	108 781	D
33634	Motor vehicle brake system mfg	-	7	7	1 687	55 033	1 367	2 791	37 188	101 999	111 288	216 964	26 950
336340	Motor vehicle brake system mfg	-	7	7	1 687	55 033	1 367	2 791	37 188	101 999	111 288	216 964	26 950
33635	Motor vehicle transmission & power train parts mfg	1	10	4	g	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	1	10	4	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	6	13	8	1 423	43 352	1 120	2 178	30 127	123 739	89 105	213 327	11 422
336399	All other motor vehicle parts mfg	6	13	8	1 423	43 352	1 120	2 178	30 127	123 739	89 105	213 327	11 422
3364	Aerospace product & parts mfg	-	14	5	653	41 732	346	684	17 486	305 037	315 937	609 656	2 668
33641	Aerospace product & parts mfg	-	14	5	653	41 732	346	684	17 486	305 037	315 937	609 656	2 668
336414	Guided missile & space vehicle mfg ...	-	1	1	c	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	2	2	e	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	-	2	1	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	2	1	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA—Con.													
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3366	Ship & boat building	—	49	21	22 224	826 408	18 571	37 667	578 100	1 411 662	847 407	2 259 118	44 037
33661	Ship & boat building	—	49	21	22 224	826 408	18 571	37 667	578 100	1 411 662	847 407	2 259 118	44 037
336611	Ship building & repairing	—	36	18	22 086	823 172	18 464	37 474	575 955	1 405 867	839 825	2 245 692	43 864
336612	Boat building	8	13	3	138	3 236	107	193	2 145	5 795	7 582	13 426	173
337	Furniture & related product mfg	1	472	110	23 671	505 571	20 591	41 271	394 899	1 207 521	973 983	2 175 392	63 925
3371	Household & institutional furniture & kitchen cabinet mfg	1	375	72	20 060	413 435	17 884	35 759	332 647	978 972	796 377	1 772 155	46 721
33711	Wood kitchen cabinet & counter top mfg	2	212	16	2 964	69 349	2 461	4 799	52 744	224 614	144 618	367 150	4 553
337110	Wood kitchen cabinet & counter top mfg ...	2	212	16	2 964	69 349	2 461	4 799	52 744	224 614	144 618	367 150	4 553
33712	Household & institutional furniture mfg	—	163	56	17 096	344 086	15 423	30 960	279 903	754 358	651 759	1 405 005	42 168
337121	Upholstered household furniture mfg	1	29	12	1 735	38 320	1 539	3 240	29 770	84 690	85 677	170 611	2 295
337122	Nonupholstered wood household furniture mfg	—	107	37	14 680	289 978	13 306	26 840	238 750	641 175	537 613	1 173 298	37 949
337127	Institutional furniture mfg	3	16	5	428	11 445	351	546	7 814	22 128	17 671	39 767	1 532
337129	Wood television, radio, & sewing machine cabinet mfg	—	2	1	c	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	71	28	2 882	74 038	2 141	4 359	50 323	169 272	121 098	287 643	13 582
33721	Office furniture (including fixtures) mfg	1	71	28	2 882	74 038	2 141	4 359	50 323	169 272	121 098	287 643	13 582
337212	Custom architectural woodwork & millwork mfg	1	33	12	833	23 264	605	1 119	13 771	50 861	26 259	77 984	D
337214	Office furniture (except wood) mfg	—	3	3	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	32	12	1 327	30 826	972	1 968	21 116	65 661	53 622	116 083	2 336
3379	Other furniture related product mfg	2	26	10	729	18 098	566	1 153	11 929	59 277	56 508	115 594	3 622
33791	Mattress mfg	2	15	8	585	15 224	446	925	9 799	53 128	46 589	99 518	3 489
337910	Mattress mfg	2	15	8	585	15 224	446	925	9 799	53 128	46 589	99 518	3 489
33792	Blind & shade mfg	2	11	2	144	2 874	120	228	2 130	6 149	9 919	16 076	133
337920	Blind & shade mfg	2	11	2	144	2 874	120	228	2 130	6 149	9 919	16 076	133
339	Miscellaneous mfg	1	480	77	9 620	263 470	7 036	13 362	154 932	651 233	606 803	1 271 791	34 691
3391	Medical equipment & supplies mfg	1	225	25	3 476	95 357	2 422	4 607	59 637	297 262	230 115	525 997	17 560
33911	Medical equipment & supplies mfg	1	225	25	3 476	95 357	2 422	4 607	59 637	297 262	230 115	525 997	17 560
339112	Surgical & medical instrument mfg	—	12	4	757	24 026	631	1 175	19 560	97 632	55 826	154 108	4 561
339113	Surgical appliance & supplies mfg	1	30	9	1 190	31 214	768	1 629	19 436	126 753	139 068	264 734	6 547
339115	Ophthalmic goods mfg	—	10	3	647	17 519	389	758	6 891	29 052	15 507	42 881	5 090
339116	Dental laboratories ...	6	153	6	720	17 334	530	843	10 810	36 397	13 923	50 905	1 110
3399	Other miscellaneous mfg ...	—	255	52	6 144	168 113	4 614	8 755	95 295	353 971	376 688	745 794	17 131
33991	Jewelry & silverware mfg	—	30	2	339	8 807	265	418	4 919	21 424	44 897	68 233	1 716
339911	Jewelry (except costume) mfg	—	19	1	202	6 093	154	294	3 481	14 034	34 750	51 008	1 287
33992	Sporting & athletic goods mfg	—	25	5	888	28 403	494	1 070	10 680	48 602	76 814	138 426	3 275
339920	Sporting & athletic goods mfg	—	25	5	888	28 403	494	1 070	10 680	48 602	76 814	138 426	3 275
33993	Doll, toy, & game mfg ...	7	17	3	141	2 076	120	177	1 428	4 381	3 169	7 586	237
339932	Game, toy, & children's vehicle mfg	6	14	3	c	D	D	D	D	D	D	D	D
33995	Sign mfg	1	113	17	1 230	35 435	828	1 616	18 316	59 420	40 669	99 211	1 660
339950	Sign mfg	1	113	17	1 230	35 435	828	1 616	18 316	59 420	40 669	99 211	1 660
33999	All other miscellaneous mfg	—	63	24	3 463	91 369	2 857	5 372	58 502	216 833	209 040	426 936	10 074
339991	Gasket, packing, & sealing device mfg ...	—	12	8	1 263	33 456	1 009	2 052	21 872	90 018	80 413	173 174	6 167
339993	Fastener, button, needle, & pin mfg	—	3	1	c	D	D	D	D	D	D	D	177
339994	Broom, brush, & mop mfg	—	4	3	151	5 278	114	216	3 094	9 475	11 803	21 479	D
339999	All other miscellaneous mfg	—	37	12	1 914	49 771	1 633	2 927	31 681	110 918	113 895	223 193	3 043

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHARLOTTESVILLE, VA MSA													
31-33	Manufacturing	1	142	36	6 980	235 662	4 214	8 385	100 118	623 379	549 758	1 162 515	35 099
311	Food mfg	—	16	2	f	D	D	D	D	D	D	D	1 819
3114	Fruit & vegetable preserving & specialty food mfg	—	2	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	2	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	2	1	f	D	D	D	D	D	D	D	D
313	Textile mills	9	2	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	9	1	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	9	1	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	15	8	2 088	76 845	1 012	2 036	24 788	178 799	97 500	281 607	14 105
3342	Communications equipment mfg	—	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	6	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	6	4	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	2	2	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media ..	—	1	1	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	—	1	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	4	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	2	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	12	3	455	9 951	398	723	7 712	39 911	27 875	68 265	D
3371	Household & institutional furniture & kitchen cabinet mfg	2	10	2	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	2	5	2	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	4	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	19	5	385	13 119	271	553	7 404	24 586	42 185	68 141	1 203

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DANVILLE, VA MSA												
31-33	Manufacturing	1	106	46	15 092	420 079	12 391	24 860	307 747	1 292 414	1 542 403	2 845 998	90 795
311	Food mfg	-	4	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	2	1	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	1	1	e	D	D	D	D	D	D	D	D
311823	Dry pasta mfg	-	1	1	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	3	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	3	3	f	D	D	D	D	D	D	D	D
31221	Tobacco stemming & redrying	-	3	3	f	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	-	3	3	f	D	D	D	D	D	D	D	D
313	Textile mills	5	4	4	i	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	2	2	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	2	2	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	7	6	g	D	D	D	D	D	D	D	1 484
3151	Apparel knitting mills	-	2	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	5	5	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	23	8	1 014	25 614	834	1 689	19 479	67 507	110 887	178 732	5 874
3212	Veneer, plywood, & engineered wood product mfg	-	6	4	624	17 179	523	1 040	13 606	43 085	77 758	121 126	4 098
32121	Veneer, plywood, & engineered wood product mfg	-	6	4	624	17 179	523	1 040	13 606	43 085	77 758	121 126	4 098
321211	Hardwood veneer & plywood mfg	-	3	2	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	10	2	258	5 822	198	455	4 000	17 449	23 828	41 114	640
322	Paper mfg	-	3	3	479	15 040	292	700	6 901	52 403	72 621	121 605	3 892
3222	Converted paper product mfg	-	3	3	479	15 040	292	700	6 901	52 403	72 621	121 605	3 892
32222	Paper bag & coated & treated paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	10	3	313	7 438	215	393	5 230	16 106	13 823	29 967	698
3231	Printing & related support activities	1	10	3	313	7 438	215	393	5 230	16 106	13 823	29 967	698
32311	Printing	1	10	3	313	7 438	215	393	5 230	16 106	13 823	29 967	698
326	Plastics & rubber products mfg	-	4	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	3	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	3	523	19 523	401	879	13 685	72 533	24 991	98 050	D
3272	Glass & glass product mfg	-	2	2	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DANVILLE, VA MSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	4	3	e	D	D	D	D	D	D	D	D
	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA												
31-33	Manufacturing	-	571	225	48 454	1 628 128	36 024	72 241	998 349	4 405 437	4 191 955	8 652 607	462 319
	Johnson City—Kingsport—Bristol, TN—VA MSA (TN Part)	-	453	178	38 984	1 380 616	28 551	57 017	825 960	3 736 418	3 262 698	7 062 866	419 848
	Johnson City—Kingsport—Bristol, TN—VA MSA (VA Part)	-	118	47	9 470	247 512	7 473	15 224	172 389	669 019	929 257	1 589 741	42 471
311	Food mfg	-	22	10	1 352	31 940	585	1 063	12 013	95 197	121 341	216 887	D
3118	Bakeries & tortilla mfg	-	6	4	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	6	4	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	4	e	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	2	12	9	2 158	52 277	1 850	3 568	40 258	103 849	164 777	272 880	9 477
3132	Fabric mills	-	4	4	1 211	29 356	1 088	2 212	23 769	60 921	102 725	164 377	D
31321	Broadwoven fabric mills ..	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	6	7	4	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	4	4	2	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills	6	3	2	e	D	D	D	D	D	D	D	D
313320	Fabric coating mills ...	6	3	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	-	13	5	264	5 234	207	335	2 550	17 542	5 981	23 291	255
3149	Other textile product mills ..	-	8	5	e	D	D	D	D	D	D	D	247
315	Apparel mfg	3	17	14	1 892	30 892	1 725	3 329	27 617	96 404	46 669	144 309	2 405
3152	Cut & sew apparel mfg	3	13	11	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	5	7	6	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	6	5	526	8 948	490	1 183	8 400	11 180	2 045	13 221	D
31522	Men's & boys' cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	1 618
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	e	D	D	D	D	D	D	D	D
315225	Men's & boys' cut & sew work clothing mfg	-	2	2	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	8	3	2	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	50	15	1 306	26 883	1 149	2 258	19 562	57 000	120 953	171 681	7 605
3211	Sawmills & wood preservation	2	19	6	e	D	D	D	D	D	D	D	3 623
32111	Sawmills & wood preservation	2	19	6	e	D	D	D	D	D	D	D	3 623
3219	Other wood product mfg ...	-	26	8	806	17 525	704	1 361	12 536	32 411	74 274	105 605	D
32191	Millwork	-	8	4	617	14 185	545	1 100	10 154	25 282	65 031	89 265	D
321918	Other millwork (including flooring) ...	-	3	3	433	10 846	385	812	7 701	19 820	62 426	80 733	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con. Manufacturing—Con.												
322	Paper mfg	-	12	11	1 156	42 216	901	1 909	31 227	93 210	224 462	317 260	50 203
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	11	10	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	7	6	385	10 104	281	591	6 129	20 603	35 851	56 082	D
322211	Corrugated & solid fiber box mfg	-	4	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	71	20	4 225	116 828	3 665	7 553	93 026	257 733	196 929	451 666	31 490
3231	Printing & related support activities	-	71	20	4 225	116 828	3 665	7 553	93 026	257 733	196 929	451 666	31 490
32311	Printing	-	66	20	4 197	116 436	3 641	7 530	92 730	256 661	196 779	450 453	31 445
323110	Commercial lithographic printing ..	2	34	6	419	9 457	314	537	5 803	17 975	14 137	32 258	1 096
323111	Commercial gravure printing	-	3	2	e	D	D	D	D	D	D	D	D
323117	Book printing	-	6	6	2 847	76 919	2 537	5 113	65 000	156 338	114 999	268 105	D
325	Chemical mfg	-	23	9	12 634	672 537	7 070	14 546	312 060	2 022 755	1 386 002	3 458 936	D
3251	Basic chemical mfg	-	4	1	j	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	j	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	j	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	2	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	-	1	1	e	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	1	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	5	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	4	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	7	1	544	27 985	320	814	14 372	46 448	14 588	61 048	60
32592	Explosives mfg	-	2	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	26	16	2 023	53 992	1 605	3 188	37 762	157 179	177 442	335 366	7 178
3261	Plastics product mfg	1	17	10	971	23 731	806	1 442	16 047	61 584	69 089	131 273	D
32619	Other plastics product mfg	1	13	8	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	13	8	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	9	6	1 052	30 261	799	1 746	21 715	95 595	108 353	204 093	D
32629	Other rubber product mfg	-	7	6	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	-	2	2	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	5	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	40	16	2 278	70 644	1 871	3 957	53 049	242 474	138 117	376 116	14 644
3271	Clay product & refractory mfg	-	6	3	379	10 489	303	641	7 524	36 711	14 935	51 427	D
32712	Clay building material & refractories mfg	-	4	3	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	6	3	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	6	3	g	D	D	D	D	D	D	D	D
327211	Flat glass mfg	-	2	2	g	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	23	7	372	9 945	279	512	5 568	27 428	22 663	50 203	2 185

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	20	12	g	D	D	D	D	D	D	D	11 586
3312	Steel product mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
33121	Iron & steel pipes & tubes mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
331210	Iron & steel pipes & tubes mfg from purchased steel	1	3	3	819	20 131	667	1 042	13 162	70 698	72 654	143 740	3 248
3313	Alumina & aluminum production & processing	—	3	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	3	2	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	2	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	11	5	f	D	D	D	D	D	D	D	1 246
33152	Nonferrous metal foundries	—	4	2	e	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	99	33	3 818	113 584	3 060	5 854	82 269	292 257	275 723	573 839	16 192
3321	Forging & stamping	1	9	6	707	18 142	525	1 143	12 733	36 287	40 830	77 481	2 229
33211	Forging & stamping	1	9	6	707	18 142	525	1 143	12 733	36 287	40 830	77 481	2 229
332111	Iron & steel forging	2	3	2	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	4	3	331	8 082	258	592	5 556	14 287	22 515	36 893	D
3322	Cutlery & handtool mfg	—	5	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	5	3	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	—	5	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	15	7	661	16 527	510	1 017	11 437	36 478	48 731	84 635	2 164
33231	Plate work & fabricated structural product mfg	—	10	4	317	8 342	237	433	5 574	21 960	25 470	47 408	1 208
332312	Fabricated structural metal mfg	—	9	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	—	5	3	344	8 185	273	584	5 863	14 518	23 261	37 227	956
332321	Metal window & door mfg	—	3	2	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	3	2	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	51	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	48	6	461	12 229	358	605	8 216	21 100	13 409	34 765	1 513
332710	Machine shops	1	48	6	461	12 229	358	605	8 216	21 100	13 409	34 765	1 513
3329	Other fabricated metal product mfg	—	6	3	848	32 618	702	1 455	24 288	112 411	59 507	183 441	4 963
33299	All other fabricated metal product mfg	—	5	3	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	—	3	3	827	32 111	686	1 430	23 945	111 298	58 640	181 456	4 892
333	Machinery mfg	—	44	15	5 102	135 579	4 409	9 016	102 546	351 579	493 406	844 463	19 626
3331	Agriculture, construction, & mining machinery mfg	3	7	5	537	17 948	411	796	10 111	32 277	58 976	95 443	D
33313	Mining & oil & gas field machinery mfg	4	5	3	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	4	5	3	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	4	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refig equip mfg	—	3	3	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	13	1	542	17 845	469	902	14 376	31 999	15 629	47 437	2 859
33351	Metalworking machinery mfg	—	13	1	542	17 845	469	902	14 376	31 999	15 629	47 437	2 859
333515	Cutting tool & machine tool accessory mfg	—	3	1	e	D	D	D	D	D	D	D	D

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	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	-	11	3	755	21 217	561	1 194	12 488	91 740	42 404	132 384	D
33391	Pump & compressor mfg	-	2	1	e	D	D	D	D	D	D	D	D
333913	Measuring & dispensing pump mfg	-	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	6	1	e	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg .	-	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	11	4	613	17 884	403	818	9 786	49 175	51 160	102 942	D
3344	Semiconductor & other electronic component mfg	-	1	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	5	2 815	69 168	2 032	3 965	41 379	69 075	285 344	359 279	D
3352	Household appliance mfg..	-	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	1	e	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	18	11	2 723	92 563	2 161	4 627	65 621	246 913	248 711	498 182	11 680
3363	Motor vehicle parts mfg ...	-	11	7	2 560	88 465	2 029	4 358	62 900	239 701	238 432	480 585	11 316
33633	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	-	1	1	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	2	1	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	3	1	e	D	D	D	D	D	D	D	106
336399	All other motor vehicle parts mfg	-	3	1	e	D	D	D	D	D	D	D	106
337	Furniture & related product mfg	1	35	10	1 254	24 433	1 127	2 085	19 656	52 053	39 663	91 653	1 821
3371	Household & institutional furniture & kitchen cabinet mfg	1	30	7	1 076	20 064	969	1 803	16 533	43 497	32 961	76 393	1 723
33712	Household & institutional furniture mfg	1	15	6	985	18 100	896	1 681	15 245	38 900	31 230	70 032	1 163
337122	Nonupholstered wood household furniture mfg	-	5	2	f	D	D	D	D	D	D	D	782

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	JOHNSON CITY—KINGSPORT—BRISTOL, TN—VA MSA—Con.												
31-33	Manufacturing—Con.												
339	Miscellaneous mfg	1	45	9	860	20 338	721	1 437	15 682	44 432	32 627	76 938	3 891
3391	Medical equipment & supplies mfg	3	20	3	284	5 711	257	503	4 814	10 770	4 300	14 892	292
33911	Medical equipment & supplies mfg	3	20	3	284	5 711	257	503	4 814	10 770	4 300	14 892	292
3399	Other miscellaneous mfg	—	25	6	576	14 627	464	934	10 868	33 662	28 327	62 046	3 599
33999	All other miscellaneous mfg	—	8	3	438	11 312	372	751	8 877	27 244	25 989	53 227	D
	LYNCHBURG, VA MSA												
31-33	Manufacturing	—	298	116	23 078	770 249	16 681	32 945	450 081	2 921 277	2 487 136	5 391 470	273 375
311	Food mfg	—	18	10	1 739	49 171	1 227	2 583	30 653	640 065	252 442	890 726	18 400
3115	Dairy product mfg	—	3	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	3	2	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	5	4	338	6 172	239	455	4 304	18 014	30 199	47 933	D
31161	Animal slaughtering & processing	—	5	4	338	6 172	239	455	4 304	18 014	30 199	47 933	D
313	Textile mills	1	3	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	1	3	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	1	2	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	1	2	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	—	6	1	e	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	—	5	1	e	D	D	D	D	D	D	D	D
31412	Curtain & linen mills	—	5	1	e	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	6	9	5	303	3 893	245	479	3 087	8 564	7 716	16 232	D
3152	Cut & sew apparel mfg	6	9	5	303	3 893	245	479	3 087	8 564	7 716	16 232	D
321	Wood product mfg	2	43	10	772	17 861	653	1 214	13 649	42 497	78 702	119 507	6 435
3211	Sawmills & wood preservation	2	25	4	282	5 856	232	392	4 257	14 021	34 765	47 511	1 203
32111	Sawmills & wood preservation	2	25	4	282	5 856	232	392	4 257	14 021	34 765	47 511	1 203
321113	Sawmills	4	24	4	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	5	17	5	e	D	D	D	D	D	D	D	D
32191	Millwork	6	7	4	263	5 810	235	444	4 663	16 439	12 592	28 980	D
322	Paper mfg	—	7	5	1 395	58 654	1 126	2 709	40 029	143 804	229 755	373 263	D
3221	Pulp, paper, & paperboard mills	—	3	3	1 091	49 193	906	2 169	33 694	120 229	195 388	315 179	38 861
32213	Paperboard mills	—	3	3	1 091	49 193	906	2 169	33 694	120 229	195 388	315 179	38 861
322130	Paperboard mills	—	3	3	1 091	49 193	906	2 169	33 694	120 229	195 388	315 179	38 861
3222	Converted paper product mfg	—	4	2	304	9 461	220	540	6 335	23 575	34 367	58 084	D
32221	Paperboard container mfg	—	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	27	8	1 973	57 376	1 573	2 632	41 532	129 389	83 866	212 460	29 206
3231	Printing & related support activities	—	27	8	1 973	57 376	1 573	2 632	41 532	129 389	83 866	212 460	29 206
32311	Printing	—	24	8	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	2	15	6	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	9	6	2 220	96 578	1 723	3 305	71 620	379 287	78 159	458 786	4 737
3251	Basic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	1	1	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	1	1	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	1	1	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LYNCHBURG, VA MSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	-	11	6	1 524	47 542	1 163	2 382	31 713	174 306	139 336	309 105	21 928
3261	Plastics product mfg	-	9	5	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	19	7	287	6 846	232	425	4 938	17 477	13 222	31 734	1 925
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	54	18	2 090	81 560	1 299	2 786	41 594	264 491	155 652	412 151	11 963
3321	Forging & stamping	-	4	3	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	4	3	e	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg	-	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	4	29	8	f	D	D	D	D	D	D	D	D
33271	Machine shops	4	28	8	592	22 595	472	911	16 371	34 636	12 982	47 135	1 906
332710	Machine shops	4	28	8	592	22 595	472	911	16 371	34 636	12 982	47 135	1 906
3329	Other fabricated metal product mfg	-	6	2	f	D	D	D	D	D	D	D	5 501
33291	Metal valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	21	11	1 673	69 717	952	2 249	33 535	151 965	100 333	256 072	7 484
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	5	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	5	3	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	2	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	5	2	e	D	D	D	D	D	D	D	1 147
33351	Metalworking machinery mfg	-	5	2	e	D	D	D	D	D	D	D	1 147
333513	Machine tool (metal forming types) mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	10	6	810	34 952	401	1 102	12 708	66 074	61 953	127 824	D
33392	Material handling equipment mfg	-	6	3	619	28 024	309	918	10 203	50 907	55 537	105 921	D
333922	Conveyor & conveying equipment mfg	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	13	10	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	6	6	564	14 278	452	1 088	8 645	35 164	21 358	51 475	2 003
33441	Semiconductor & other electronic component mfg	-	6	6	564	14 278	452	1 088	8 645	35 164	21 358	51 475	2 003
334419	Other electronic component mfg	-	3	3	260	6 002	202	509	3 464	16 156	9 695	20 883	D

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	LYNCHBURG, VA MSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	5	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	3	358	10 535	262	450	5 848	23 090	27 770	50 206	3 055
3363	Motor vehicle parts mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	26	8	2 002	39 874	1 739	3 125	30 414	87 205	77 346	169 851	3 758
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	5	1 620	31 212	1 407	2 397	23 800	72 699	63 188	140 927	3 094
33712	Household & institutional furniture mfg	-	9	4	1 424	27 288	1 244	2 062	20 889	60 015	53 182	118 045	D
337121	Upholstered household furniture mfg	-	1	1	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	1	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	6	3	382	8 662	332	728	6 614	14 506	14 158	28 924	664
33721	Office furniture (including fixtures) mfg	-	6	3	382	8 662	332	728	6 614	14 506	14 158	28 924	664
339	Miscellaneous mfg	-	15	2	439	11 164	357	789	7 475	37 117	13 654	52 276	D
3399	Other miscellaneous mfg ..	-	8	1	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	5	1	e	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	e	D	D	D	D	D	D	D	D
	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA												
31-33	Manufacturing	-	1 043	294	62 701	2 066 784	47 989	95 591	1 375 411	7 873 317	8 913 554	16 721 023	386 837
	Norfolk-Virginia Beach-Newport News, VA-NC MSA (VA Part)	-	1 027	292	62 589	2 064 243	47 903	95 463	1 373 749	7 866 784	8 906 696	16 708 787	D
311	Food mfg	-	88	34	8 371	199 405	6 372	12 649	132 393	1 484 007	1 555 991	3 021 157	28 421
3115	Dairy product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	18	9	i	D	D	D	D	D	D	D	9 528
31161	Animal slaughtering & processing	-	18	9	i	D	D	D	D	D	D	D	9 528
311611	Animal (except poultry) slaughtering	-	5	2	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	10	6	1 002	24 246	778	1 761	17 215	85 507	138 477	223 562	D
3117	Seafood product preparation & packaging ..	1	14	5	323	7 332	173	295	3 070	17 924	44 758	62 681	1 167
31171	Seafood product preparation & packaging	1	14	5	323	7 332	173	295	3 070	17 924	44 758	62 681	1 167
311712	Fresh & frozen seafood processing ..	1	12	5	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	33	8	1 133	24 413	646	1 040	10 734	69 270	42 140	111 501	3 571
31181	Bread & bakery product mfg	-	31	7	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	12	7	860	20 108	433	751	7 684	61 260	36 456	97 758	3 153
3119	Other food mfg	-	10	5	g	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	4	2	e	D	D	D	D	D	D	D	D
311911	Roasted nuts & peanut butter mfg	-	4	2	e	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	3	3	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.													
	Manufacturing—Con.													
312	Beverage & tobacco product mfg.....	—	9	4	g	D	D	D	D	D	D	D	D	
3121	Beverage mfg.....	—	9	4	g	D	D	D	D	D	D	D	D	
31211	Soft drink & ice mfg.....	—	5	3	e	D	D	D	D	D	D	D	D	
312111	Soft drink mfg.....	—	2	2	e	D	D	D	D	D	D	D	D	
31212	Breweries.....	—	4	1	f	D	D	D	D	D	D	D	D	
312120	Breweries.....	—	4	1	f	D	D	D	D	D	D	D	D	
313	Textile mills.....	1	10	3		322	6 309	291	548	4 849	10 784	6 509	16 934	D
314	Textile product mills.....	1	41	8		495	9 149	391	636	5 335	16 744	17 277	33 519	D
3149	Other textile product mills..	3	25	6		280	6 043	218	357	3 375	9 071	8 947	18 177	D
315	Apparel mfg.....	1	19	6		377	5 424	322	590	3 569	14 345	9 844	21 803	1 281
321	Wood product mfg.....	—	39	15		976	22 662	767	1 565	15 914	64 087	141 241	204 437	4 552
3211	Sawmills & wood preservation.....	—	7	4		349	8 810	303	713	6 964	32 205	55 356	87 867	2 456
32111	Sawmills & wood preservation.....	—	7	4		349	8 810	303	713	6 964	32 205	55 356	87 867	2 456
321113	Sawmills.....	—	5	4	e	D	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	—	8	4		280	7 506	200	373	4 196	17 812	62 892	79 578	699
32121	Veneer, plywood, & engineered wood product mfg.....	—	8	4		280	7 506	200	373	4 196	17 812	62 892	79 578	699
3219	Other wood product mfg... ..	2	24	7		347	6 346	264	479	4 754	14 070	22 993	36 992	1 397
322	Paper mfg.....	3	11	8		989	29 482	684	1 323	17 353	88 372	100 787	187 104	5 907
3222	Converted paper product mfg.....	3	11	8		989	29 482	684	1 323	17 353	88 372	100 787	187 104	5 907
32221	Paperboard container mfg.....	5	7	5	f	D	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg.....	9	1	1	e	D	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	—	2	2	e	D	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg... ..	—	2	2	e	D	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	152	18		2 113	44 671	1 173	2 163	25 716	96 726	85 937	182 676	16 452
3231	Printing & related support activities.....	4	152	18		2 113	44 671	1 173	2 163	25 716	96 726	85 937	182 676	16 452
32311	Printing.....	4	143	18		2 065	43 863	1 136	2 120	25 138	95 152	85 560	180 725	D
323110	Commercial lithographic printing..	5	73	9		1 311	26 811	625	1 207	14 721	59 625	46 836	106 403	12 128
325	Chemical mfg.....	—	35	9		758	29 387	462	859	16 062	59 891	277 496	332 291	11 577
326	Plastics & rubber products mfg.....	2	38	17		1 290	35 069	988	1 806	20 680	80 356	105 565	185 525	4 767
3261	Plastics product mfg.....	2	28	14		980	26 386	768	1 376	14 708	52 965	69 836	122 880	3 565
32611	Unsupported plastics film, sheet, & bag mfg... ..	2	6	4		315	10 397	236	388	4 903	9 519	15 432	25 009	872
32619	Other plastics product mfg.....	2	16	7		459	12 370	343	646	6 757	32 826	45 631	78 661	1 742
326199	All other plastics product mfg.....	1	13	6		413	11 484	304	582	6 104	30 647	43 844	74 688	1 655
3262	Rubber product mfg.....	—	10	3		310	8 683	220	430	5 972	27 391	35 729	62 645	1 202
32629	Other rubber product mfg.....	—	6	3		290	8 343	203	411	5 702	26 626	34 864	61 009	1 149
326299	All other rubber product mfg.....	—	4	3	e	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	1	58	23		2 105	65 600	1 459	3 119	39 482	191 352	190 145	379 128	19 471
3271	Clay product & refractory mfg.....	5	5	2	e	D	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg.....	—	9	3		536	16 584	417	929	11 137	52 576	45 159	95 681	3 399
32721	Glass & glass product mfg.....	—	9	3		536	16 584	417	929	11 137	52 576	45 159	95 681	3 399
327215	Glass product mfg made of purchased glass.....	—	7	2	e	D	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	2	36	14		738	22 941	552	1 160	14 989	64 191	57 119	121 399	8 249
32732	Ready-mix concrete mfg.....	1	17	7		391	13 539	304	619	9 266	38 614	38 983	77 496	7 349
327320	Ready-mix concrete mfg.....	1	17	7		391	13 539	304	619	9 266	38 614	38 983	77 496	7 349

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3279	Other nonmetallic mineral product mfg	1	7	3	370	11 496	255	512	6 440	32 825	32 216	64 682	1 954
32791	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	13	3	1 435	43 278	1 172	2 088	31 173	133 285	96 862	223 533	5 790
3315	Foundries	—	8	2	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	4	1	g	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	—	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	155	40	2 910	89 922	2 224	4 052	60 087	212 332	219 517	417 714	18 788
3323	Architectural & structural metals mfg	1	53	19	1 315	38 195	975	1 771	22 346	69 236	71 923	138 311	6 394
33231	Plate work & fabricated structural product mfg	1	24	13	822	23 264	597	1 028	13 083	40 722	52 063	90 913	1 516
332312	Fabricated structural metal mfg	1	15	8	439	11 606	308	505	6 296	23 651	34 931	58 363	512 968
332313	Plate work mfg	—	6	4	e	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	1	29	6	493	14 931	378	743	9 263	28 514	19 860	47 398	4 878
332322	Sheet metal work mfg	—	21	6	463	14 284	357	709	8 888	27 229	18 432	44 676	4 819
3324	Boiler, tank, & shipping container mfg	—	6	4	375	18 959	315	663	15 402	64 022	121 689	177 863	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	3	3	e	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	2	2	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	61	11	821	20 275	621	1 023	14 133	50 265	11 026	60 608	3 668
33271	Machine shops	2	56	7	463	13 317	346	620	8 881	26 664	7 835	33 918	1 711
332710	Machine shops	2	56	7	463	13 317	346	620	8 881	26 664	7 835	33 918	1 711
33272	Turned product & screw, nut, & bolt mfg	—	5	4	358	6 958	275	403	5 252	23 601	3 191	26 690	1 957
333	Machinery mfg	—	67	31	4 263	143 146	2 731	5 423	73 880	361 506	642 196	990 931	41 638
3331	Agriculture, construction, & mining machinery mfg	—	7	4	1 153	37 015	765	1 438	21 293	140 601	285 268	427 670	11 066
33311	Agricultural implement mfg	—	5	3	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg	—	6	2	264	9 773	184	380	6 017	15 794	26 546	48 199	D
33329	Other industrial machinery mfg	—	6	2	264	9 773	184	380	6 017	15 794	26 546	48 199	D
3333	Commercial & service industry machinery mfg	—	10	5	578	24 093	442	937	12 333	33 776	113 570	146 420	D
33331	Commercial & service industry machinery mfg	—	10	5	578	24 093	442	937	12 333	33 776	113 570	146 420	D
333315	Photographic & photocopying equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	7	7	2	e	D	D	D	D	D	D	D	634
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	7	7	2	e	D	D	D	D	D	D	D	634
3335	Metalworking machinery mfg	1	13	7	610	22 127	397	889	11 982	48 354	20 849	65 713	5 353
33351	Metalworking machinery mfg	1	13	7	610	22 127	397	889	11 982	48 354	20 849	65 713	5 353
333514	Special die & tool, die set, jig, & fixture mfg	2	6	3	328	11 008	207	449	5 863	20 833	8 203	28 980	3 042

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31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	—	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	20	10	1 027	34 580	619	1 177	15 812	68 326	103 033	171 068	3 916
33391	Pump & compressor mfg	—	7	3	e	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	4	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	2	7	4	359	10 629	227	380	4 999	20 040	16 226	36 744	877
334	Computer & electronic product mfg	—	45	13	4 869	128 393	3 468	6 706	77 337	282 137	973 818	1 254 808	44 027
3341	Computer & peripheral equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	3	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	12	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	1	12	1	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	—	1	1	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	2	17	6	961	23 818	607	1 326	13 520	44 128	27 888	72 747	1 892
33451	Navigational, measuring, medical, & control instruments mfg	2	17	6	961	23 818	607	1 326	13 520	44 128	27 888	72 747	1 892
334511	Search, detection, navigation, & guidance instrument mfg	—	4	3	f	D	D	D	D	D	D	D	348
335	Electrical equipment, appliance, & component mfg	1	18	7	773	23 366	501	985	10 630	59 358	89 713	149 807	4 300
3353	Electrical equipment mfg ..	2	10	3	479	17 082	253	544	6 183	44 982	33 105	78 809	2 739
33531	Electrical equipment mfg	2	10	3	479	17 082	253	544	6 183	44 982	33 105	78 809	2 739
335314	Relay & industrial control mfg	—	6	2	399	14 331	200	399	4 148	37 497	25 864	63 804	2 407
3359	Other electrical equipment & component mfg	—	6	3	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	57	27	26 251	1 036 305	21 753	45 033	741 901	3 868 203	3 551 830	7 426 715	122 383
3361	Motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	—	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	14	5	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	5	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	5	2	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	1	5	3	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	36	20	j	D	D	D	D	D	D	D	43 955
33661	Ship & boat building	—	36	20	j	D	D	D	D	D	D	D	43 955
336611	Ship building & repairing	—	28	17	j	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC MSA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	4	78	7	728	15 875	598	1 038	10 675	28 640	24 877	53 596	1 412
3371	Household & institutional furniture & kitchen cabinet mfg	4	62	5	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	3	43	4	372	8 653	305	604	6 012	14 622	10 783	25 446	D
337110	Wood kitchen cabinet & counter top mfg	3	43	4	372	8 653	305	604	6 012	14 622	10 783	25 446	D
339	Miscellaneous mfg	1	105	20	2 232	54 686	1 706	2 982	31 728	112 877	78 229	189 226	5 269
3391	Medical equipment & supplies mfg	3	44	7	551	16 237	360	667	8 331	22 216	11 194	32 719	3 342
33911	Medical equipment & supplies mfg	3	44	7	551	16 237	360	667	8 331	22 216	11 194	32 719	3 342
3399	Other miscellaneous mfg	—	61	13	1 681	38 449	1 346	2 315	23 397	90 661	67 035	156 507	1 927
33995	Sign mfg	2	28	4	322	8 872	221	432	4 847	15 317	9 900	24 625	322
339950	Sign mfg	2	28	4	322	8 872	221	432	4 847	15 317	9 900	24 625	322
33999	All other miscellaneous mfg	—	11	6	1 108	25 058	946	1 595	15 559	65 415	47 087	111 144	1 362
339991	Gasket, packing, & sealing device mfg	—	5	4	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	—	6	2	f	D	D	D	D	D	D	D	D
	RICHMOND-PETERSBURG, VA MSA												
31-33	Manufacturing	—	1 004	345	54 752	2 122 583	38 786	78 613	1 296 970	12 539 480	7 108 573	19 724 479	1 082 864
311	Food mfg	—	67	23	4 238	132 364	3 294	6 559	94 826	715 853	574 905	1 289 170	45 339
3115	Dairy product mfg	—	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	8	5	1 243	25 614	1 143	2 168	19 836	47 716	169 487	218 518	7 951
31161	Animal slaughtering & processing	—	8	5	1 243	25 614	1 143	2 168	19 836	47 716	169 487	218 518	7 951
311615	Poultry processing	—	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	—	40	8	2 030	77 303	1 391	2 773	53 973	507 727	162 455	667 931	28 192
31181	Bread & bakery product mfg	—	37	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries	—	10	5	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	—	3	2	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	—	2	2	g	D	D	D	D	D	D	D	D
3119	Other food mfg	—	5	5	e	D	D	D	D	D	D	D	3 186
31199	All other food mfg	—	2	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	16	13	i	D	D	D	D	D	D	D	D
3122	Tobacco mfg	—	10	10	i	D	D	D	D	D	D	D	D
31221	Tobacco stemming & redrying	—	3	3	e	D	D	D	D	D	D	D	D
312210	Tobacco stemming & redrying	—	3	3	e	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	—	7	7	i	D	D	D	D	D	D	D	D
312221	Cigarette mfg	—	2	2	i	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	—	5	5	g	D	D	D	D	D	D	D	D
313	Textile mills	4	6	4	e	D	D	D	D	D	D	D	1 183
314	Textile product mills	1	28	7	e	D	D	D	D	D	D	D	D
315	Apparel mfg	3	17	5	f	D	D	D	D	D	D	D	451
3159	Apparel accessories & other apparel mfg	7	7	3	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	7	7	3	e	D	D	D	D	D	D	D	D
315991	Hat, cap, & millinery mfg	7	4	3	e	D	D	D	D	D	D	D	D
321	Wood product mfg	3	55	21	1 311	29 651	1 014	1 855	18 873	77 114	80 449	157 039	5 364
3211	Sawmills & wood preservation	2	16	6	285	7 888	231	465	5 627	19 985	27 820	47 966	2 417
32111	Sawmills & wood preservation	2	16	6	285	7 888	231	465	5 627	19 985	27 820	47 966	2 417
321113	Sawmills	2	15	6	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	3	36	13	945	19 847	735	1 293	12 359	52 454	48 069	99 895	2 740
32191	Millwork	1	18	5	350	8 467	250	473	4 869	30 853	24 606	54 963	1 179
32192	Wood container & pallet mfg	6	11	7	491	8 905	419	687	6 193	17 990	18 186	35 999	1 077
321920	Wood container & pallet mfg	6	11	7	491	8 905	419	687	6 193	17 990	18 186	35 999	1 077

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RICHMOND-PETERSBURG, VA MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	43	35	5 513	213 542	4 300	9 941	148 569	511 842	832 054	1 340 683	63 510
3221	Pulp, paper, & paperboard mills	-	5	5	975	46 838	751	1 715	33 293	131 875	184 819	316 472	D
32212	Paper mills	-	2	2	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	38	30	4 538	166 704	3 549	8 226	115 276	379 967	647 235	1 024 211	D
32221	Paperboard container mfg	-	22	17	2 836	107 795	2 195	5 061	74 289	232 107	408 022	640 558	26 170
322211	Corrugated & solid fiber box mfg	-	12	9	1 144	41 153	820	1 840	24 885	94 401	165 039	259 672	D
322212	Folding paperboard box mfg	-	7	6	1 591	63 639	1 296	3 068	47 075	131 227	230 789	362 285	18 307
32222	Paper bag & coated & treated paper mfg	-	10	8	g	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	2	3	2	359	9 883	326	821	8 670	20 993	40 494	62 566	832
322225	Laminated aluminum foil mfg for flexible packaging uses	-	1	1	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	164	46	4 313	139 810	3 291	6 003	96 282	299 082	231 028	527 017	22 201
3231	Printing & related support activities	-	164	46	4 313	139 810	3 291	6 003	96 282	299 082	231 028	527 017	22 201
32311	Printing	-	140	38	3 909	129 146	2 973	5 362	88 972	278 114	227 180	502 143	D
323110	Commercial lithographic printing ..	1	68	18	2 116	73 687	1 575	2 790	47 567	139 231	79 981	219 015	12 886
323111	Commercial gravure printing	-	5	4	692	25 053	574	1 091	21 579	58 239	102 292	158 546	D
323116	Manifold business form printing	1	6	5	408	11 726	314	551	8 520	46 153	17 120	62 621	1 079
32312	Support activities for printing	2	24	8	404	10 664	318	641	7 310	20 968	3 848	24 874	D
325	Chemical mfg	-	50	28	7 882	362 876	5 075	11 398	206 240	2 041 710	1 200 150	3 247 026	237 890
3251	Basic chemical mfg	-	13	6	1 631	83 388	1 255	2 651	54 177	454 069	412 020	848 781	53 852
32519	Other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	6	4	h	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	3	3	h	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	3	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	2	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	1	3	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	5	19	10	457	16 649	292	621	8 944	44 347	47 623	91 943	2 517
326	Plastics & rubber products mfg	-	28	15	2 481	77 865	1 994	3 873	53 519	429 479	185 997	608 324	27 343
3261	Plastics product mfg	1	24	14	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	1	5	2	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	4	1	f	D	D	D	D	D	D	D	D
32615	Urethane & other foam product (except polystyrene) mfg	-	2	2	e	D	D	D	D	D	D	D	D
326150	Urethane & other foam product (except polystyrene) mfg	-	2	2	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	11	8	510	12 132	408	806	9 031	34 879	31 470	66 649	3 310
326199	All other plastics product mfg	-	8	5	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	RICHMOND-PETERSBURG, VA MSA—Con.													
	Manufacturing—Con.													
326	Plastics & rubber products mfg—Con.													
3262	Rubber product mfg	-	4	1	f	D	D	D	D	D	D	D	D	
32629	Other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
326299	All other rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D	
327	Nonmetallic mineral product mfg	2	44	17	g	D	D	D	D	D	D	D	7 448	
3273	Cement & concrete product mfg	2	32	14	g	D	D	D	D	D	D	D	5 396	
32739	Other concrete product mfg	5	10	6	f	D	D	D	D	D	D	D	2 340	
327390	Other concrete product mfg	5	10	6	f	D	D	D	D	D	D	D	2 340	
331	Primary metal mfg	-	8	6		1 543	59 124	1 260	2 833	45 610	191 428	561 980	761 055	14 148
3313	Alumina & aluminum production & processing ..	-	4	4	g	D	D	D	D	D	D	D	D	
33131	Alumina & aluminum production & processing	-	4	4	g	D	D	D	D	D	D	D	D	
331315	Aluminum sheet, plate, & foil mfg	-	2	2	f	D	D	D	D	D	D	D	D	
331316	Aluminum extruded product mfg	-	1	1	e	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	149	41		3 873	122 755	2 915	5 930	77 288	247 759	213 623	461 247	15 959
3323	Architectural & structural metals mfg	1	35	15		685	19 943	470	868	11 670	38 652	53 637	92 177	2 352
33232	Ornamental & architectural metal products mfg	1	22	11		438	12 357	302	520	7 074	24 748	26 249	50 884	1 725
3324	Boiler, tank, & shipping container mfg	-	5	5		450	17 833	276	483	8 644	30 276	58 041	91 473	3 804
3325	Hardware mfg	-	2	1	e	D	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	2	1	e	D	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	2	1	e	D	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	-	3	1	e	D	D	D	D	D	D	D	D	D
33261	Spring & wire product mfg	-	3	1	e	D	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg	-	3	1	e	D	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	74	12		1 045	37 194	805	1 522	24 945	61 199	24 669	86 494	D
33271	Machine shops	1	71	11		980	35 640	753	1 445	23 814	58 735	22 460	81 869	3 902
332710	Machine shops	1	71	11		980	35 640	753	1 445	23 814	58 735	22 460	81 869	3 902
3329	Other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	78	29		3 001	115 303	2 009	4 193	61 165	203 896	256 674	525 357	13 305
3332	Industrial machinery mfg ..	-	28	15		1 216	51 710	754	1 620	27 445	132 798	131 901	267 977	7 066
33329	Other industrial machinery mfg	-	26	14	g	D	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	13	9		674	27 932	404	848	14 099	91 073	99 972	193 451	3 852
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	7	3		904	31 447	693	1 511	16 275	49 165	69 218	121 091	4 104
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	7	3		904	31 447	693	1 511	16 275	49 165	69 218	121 091	4 104
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	3	3		885	30 924	680	1 489	16 007	47 998	68 290	118 965	D
3339	Other general-purpose machinery mfg	1	23	7		499	19 095	308	624	10 778	S	S	77 976	1 606
33399	All other general-purpose machinery mfg	1	17	5		288	10 831	178	350	5 524	S	S	46 957	863

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RICHMOND-PETERSBURG, VA MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg	-	20	6	2 807	106 864	1 858	3 461	77 876	317 970	99 944	422 065	D
3344	Semiconductor & other electronic component mfg	-	9	6	2 769	105 953	1 842	3 433	77 415	316 016	97 996	418 116	D
33441	Semiconductor & other electronic component mfg	-	9	6	2 769	105 953	1 842	3 433	77 415	316 016	97 996	418 116	D
334412	Bare printed circuit board mfg	-	1	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg	-	5	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	18	7	e	D	D	D	D	D	D	D	809
336	Transportation equipment mfg	2	22	2	e	D	D	D	D	D	D	D	779
337	Furniture & related product mfg	4	88	19	2 328	58 201	1 821	3 841	42 190	138 660	113 001	249 445	15 548
3371	Household & institutional furniture & kitchen cabinet mfg	8	64	7	982	21 617	792	1 476	15 942	44 430	35 092	78 242	1 827
33711	Wood kitchen cabinet & counter top mfg	8	41	3	772	17 280	610	1 150	12 707	36 594	27 119	62 445	1 460
337110	Wood kitchen cabinet & counter top mfg	8	41	3	772	17 280	610	1 150	12 707	36 594	27 119	62 445	1 460
3372	Office furniture (including fixtures) mfg	2	14	8	1 029	29 480	787	1 836	21 055	75 021	57 903	132 202	10 983
33721	Office furniture (including fixtures) mfg	2	14	8	1 029	29 480	787	1 836	21 055	75 021	57 903	132 202	10 983
337214	Office furniture (except wood) mfg	-	2	2	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	6	6	4	325	8 927	251	551	5 389	20 571	15 936	36 231	D
3379	Other furniture related product mfg	7	10	4	317	7 104	242	529	5 193	19 209	20 006	39 001	2 738
339	Miscellaneous mfg	-	93	18	2 707	79 427	1 802	3 589	42 535	153 036	227 865	391 801	8 389
3391	Medical equipment & supplies mfg	-	39	5	1 198	28 988	762	1 513	16 904	61 745	90 553	150 080	3 495
33911	Medical equipment & supplies mfg	-	39	5	1 198	28 988	762	1 513	16 904	61 745	90 553	150 080	3 495
339113	Surgical appliance & supplies mfg	-	7	3	659	15 776	413	895	11 328	33 471	76 461	107 355	1 103
339115	Ophthalmic goods mfg	-	2	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	54	13	1 509	50 439	1 040	2 076	25 631	91 291	137 312	241 721	4 894
33992	Sporting & athletic goods mfg	-	3	2	e	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	3	2	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	15	5	689	24 147	551	1 061	15 026	45 019	60 745	107 007	1 494
339999	All other miscellaneous mfg	-	8	2	f	D	D	D	D	D	D	D	D
	ROANOKE, VA MSA												
31-33	Manufacturing	-	312	120	19 839	592 159	13 582	27 110	351 329	2 166 790	1 865 143	4 001 001	117 145
311	Food mfg	-	13	8	877	22 031	473	1 078	11 520	49 130	129 099	179 524	4 876
3116	Meat product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	5	2	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	5	2	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	3	2	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	3	3	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	3	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	3	3	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROANOKE, VA MSA—Con.												
31-33	Manufacturing—Con.												
313	Textile mills	-	5	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	2	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	3	2	e	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills	-	1	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	13	9	1 719	29 941	1 218	2 461	21 774	119 660	184 961	275 204	3 421
3152	Cut & sew apparel mfg	-	12	9	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	5	4	448	7 590	387	635	4 678	11 686	1 065	12 714	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	5	4	448	7 590	387	635	4 678	11 686	1 065	12 714	D
31523	Women's & girls' cut & sew apparel mfg	-	3	2	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	355	9 345	245	532	5 454	20 991	28 042	48 888	824
322	Paper mfg	-	9	6	591	17 356	423	733	9 353	39 426	29 881	69 271	4 684
3222	Converted paper product mfg	-	9	6	591	17 356	423	733	9 353	39 426	29 881	69 271	4 684
32221	Paperboard container mfg	-	5	4	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	3	2	e	D	D	D	D	D	D	D	D
322232	Envelope mfg	-	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	37	6	673	20 213	449	889	11 541	43 118	20 313	63 511	4 006
3231	Printing & related support activities	1	37	6	673	20 213	449	889	11 541	43 118	20 313	63 511	4 006
32311	Printing	1	35	6	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	13	3	254	5 935	209	365	3 501	15 494	6 912	22 401	716
325	Chemical mfg	-	15	5	1 013	30 328	688	1 088	12 385	657 139	228 397	884 563	3 824
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	2	f	D	D	D	D	D	D	D	2 687
32562	Toilet preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	15	10	1 837	63 712	1 377	2 669	42 028	157 913	115 601	274 451	23 146
3261	Plastics product mfg	-	12	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	10	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	9	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	3	2	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	15	10	958	29 644	700	1 531	19 790	71 829	77 573	154 259	8 382
3273	Cement & concrete product mfg	-	10	7	497	16 411	372	797	10 525	57 099	56 436	113 890	4 585
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	63	19	1 895	60 765	1 312	2 568	35 234	118 624	109 408	231 204	6 468
3323	Architectural & structural metals mfg	-	13	8	720	22 867	550	1 074	15 052	46 184	62 006	110 476	2 382
33231	Plate work & fabricated structural product mfg ..	-	9	6	586	18 938	449	880	12 702	37 159	55 119	94 564	1 945
332312	Fabricated structural metal mfg	-	7	5	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ROANOKE, VA MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	33	7	e	D	D	D	D	D	D	D	D
33271	Machine shops	2	32	6	389	10 738	304	533	7 237	18 897	7 084	25 887	1 407
332710	Machine shops	2	32	6	389	10 738	304	533	7 237	18 897	7 084	25 887	1 407
3329	Other fabricated metal product mfg	—	9	2	274	9 873	195	438	5 890	14 901	24 167	40 097	D
33299	All other fabricated metal product mfg	—	9	2	274	9 873	195	438	5 890	14 901	24 167	40 097	D
333	Machinery mfg	—	19	8	1 847	66 039	1 147	2 529	33 229	122 130	187 574	305 428	16 169
3331	Agriculture, construction, & mining machinery mfg.	—	1	1	e	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
333132	Oil & gas field machinery & equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	—	4	4	408	11 209	281	616	6 704	31 863	19 349	47 885	900
3333	Commercial & service industry machinery mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	3	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	2	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	6	1	316	9 754	205	426	5 953	15 644	10 541	25 873	D
33399	All other general-purpose machinery mfg	—	3	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	15	6	1 384	39 710	1 093	2 121	28 871	189 365	75 665	265 028	D
3344	Semiconductor & other electronic component mfg	—	7	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	7	3	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	—	4	2	e	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	12	4	2 541	85 701	1 203	2 369	38 811	298 317	205 484	500 323	10 353
3353	Electrical equipment mfg ..	—	9	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	9	2	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	3	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	10	6	455	11 591	323	535	6 198	21 073	16 636	38 124	780
3363	Motor vehicle parts mfg ...	5	7	5	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	19	3	1 062	24 318	976	2 033	19 342	49 743	49 447	99 009	1 795
3371	Household & institutional furniture & kitchen cabinet mfg	—	16	3	1 019	23 090	946	1 980	18 584	48 661	47 446	95 924	D
33712	Household & institutional furniture mfg	—	8	2	f	D	D	D	D	D	D	D	1 662
337121	Upholstered household furniture mfg	—	2	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	4	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	3	35	6	474	11 820	352	597	6 963	29 957	47 519	79 799	2 180
3399	Other miscellaneous mfg ..	—	16	4	327	8 407	243	438	4 627	19 941	35 419	57 588	1 359

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31-33	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA												
	Manufacturing	1	4 979	1 397	180 692	6 729 603	118 375	237 123	3 628 537	20 589 409	18 635 215	39 149 042	1 520 154
	Washington-Baltimore, DC-MD-VA-WV CMSA (DC Part)	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington-Baltimore, DC-MD-VA-WV CMSA (MD Part)	1	3 482	1 039	138 522	5 151 313	90 519	181 710	2 812 641	16 384 506	15 133 093	31 458 684	1 141 079
	Washington-Baltimore, DC-MD-VA-WV CMSA (VA Part)	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington-Baltimore, DC-MD-VA-WV CMSA (WV Part)	-	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	1	395	119	14 363	402 297	9 987	20 724	254 886	2 475 385	2 408 898	4 889 204	87 187
312	Beverage & tobacco product mfg	2	45	20	g	D	D	D	D	D	D	D	D
313	Textile mills	5	42	10	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	137	14	g	D	D	D	D	D	D	D	D
315	Apparel mfg	2	127	32	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	11	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	162	53	h	D	D	D	D	D	D	D	D
322	Paper mfg	1	59	35	6 102	179 331	4 877	9 412	120 612	366 779	450 197	813 474	D
323	Printing & related support activities	2	1 198	271	25 327	887 907	19 037	37 200	575 537	1 710 795	1 209 672	2 916 844	318 361
324	Petroleum & coal products mfg	2	41	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	180	77	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	145	67	8 893	241 984	7 183	13 703	165 876	719 656	674 514	1 384 491	77 269
327	Nonmetallic mineral product mfg	-	236	93	7 410	254 629	5 744	12 146	178 450	724 602	547 963	1 268 145	47 167
331	Primary metal mfg	-	40	18	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	568	160	14 428	483 853	10 372	20 649	297 759	1 210 189	1 005 732	2 206 004	94 908
333	Machinery mfg	-	188	63	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	370	161	k	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	61	13	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	111	44	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	314	60	6 113	156 809	4 658	8 691	102 649	437 720	287 174	722 749	10 974
339	Miscellaneous mfg	2	549	75	i	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA												
31-33	Manufacturing	1	2 655	668	77 925	2 986 792	48 768	97 608	1 439 124	8 015 259	6 589 096	14 539 682	746 521
	Washington, DC—MD—VA—WV PMSA (DC Part).....	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington, DC—MD—VA—WV PMSA (MD Part).....	1	1 158	310	35 755	1 408 502	20 912	42 195	623 228	3 810 356	3 086 974	6 849 324	367 446
	Washington, DC—MD—VA—WV PMSA (VA Part).....	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington, DC—MD—VA—WV PMSA (WV Part).....	—	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg.....	2	201	48	5 551	136 527	3 753	7 387	85 600	520 377	660 882	1 179 566	18 084
3114	Fruit & vegetable preserving & specialty food mfg.....	4	10	4	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	6	5	3	e	D	D	D	D	D	D	D	2 016
311412	Frozen specialty food mfg.....	6	5	3	e	D	D	D	D	D	D	D	2 016
3115	Dairy product mfg.....	1	8	7	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg.....	1	7	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	1	6	6	781	30 632	424	991	16 346	109 542	258 954	366 727	4 173
3116	Meat product mfg.....	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
31161	Animal slaughtering & processing.....	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
311612	Meat processed from carcasses.....	2	6	4	600	12 112	508	1 093	8 024	44 966	37 893	82 709	D
3118	Bakeries & tortilla mfg.....	2	145	27	2 937	69 235	1 853	3 478	43 114	282 674	102 099	385 222	7 189
31181	Bread & bakery product mfg.....	2	138	25	h	D	D	D	D	D	D	D	D
311811	Retail bakeries.....	3	98	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries.....	2	37	17	2 018	54 254	1 311	2 656	34 980	239 127	78 442	317 895	5 645
3119	Other food mfg.....	—	15	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
3121	Beverage mfg.....	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
31211	Soft drink & ice mfg.....	3	10	6	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	3	5	4	e	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	62	5	510	10 907	346	638	6 093	17 835	14 512	32 266	D
3141	Textile furnishings mills.....	3	41	2	319	6 193	205	370	3 328	10 884	9 841	20 665	D
31412	Curtain & linen mills.....	2	40	2	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills.....	2	37	2	305	5 866	193	347	3 088	10 007	8 665	18 612	D
315	Apparel mfg.....	—	63	8	927	16 000	818	1 581	13 482	42 492	50 982	93 368	1 030
3151	Apparel knitting mills.....	—	2	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills.....	—	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills.....	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg.....	—	30	7	551	10 328	505	1 040	9 014	14 759	27 512	41 910	D
31522	Men's & boys' cut & sew apparel mfg.....	—	3	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	93	33	2 407	58 850	1 949	3 819	42 816	122 209	245 595	367 315	5 823
3211	Sawmills & wood preservation.....	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
32111	Sawmills & wood preservation.....	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
321113	Sawmills.....	2	20	7	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.....	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
32121	Veneer, plywood, & engineered wood product mfg.....	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
321214	Truss mfg.....	—	8	7	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg.....	1	59	18	1 723	42 645	1 379	2 755	30 883	89 440	165 744	255 169	3 025
32191	Millwork.....	3	35	8	762	21 108	561	1 251	14 782	39 625	51 873	91 621	1 586
321911	Wood window & door mfg.....	—	9	3	404	11 674	305	707	8 661	19 568	22 024	41 468	507
321918	Other millwork (including flooring).....	8	16	4	262	6 849	188	405	4 553	12 826	16 920	30 078	753
32199	All other wood product mfg.....	1	16	7	797	17 991	673	1 201	13 462	42 239	103 626	146 229	1 228
321992	Prefabricated wood building mfg.....	—	8	5	644	15 810	547	1 050	11 911	38 327	100 710	139 270	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	1	17	6	1 243	25 971	1 131	1 985	19 025	80 975	93 082	169 453	4 086
3222	Converted paper product mfg	1	16	5	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg	1	7	2	f	D	D	D	D	D	D	D	2 567
322233	Stationery, tablet, & related product mfg	—	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
3231	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
32311	Printing	2	699	152	15 622	568 435	11 714	23 124	375 945	1 051 650	831 116	1 880 944	266 133
323110	Commercial lithographic printing	2	355	100	9 880	386 318	7 275	14 520	253 698	727 071	532 653	1 258 096	183 776
323113	Commercial screen printing	1	29	8	389	10 570	281	488	6 286	23 169	22 150	45 964	D
323114	Quick printing	1	200	16	1 731	49 482	1 232	2 153	29 819	97 094	47 575	144 901	D
323117	Book printing	1	27	17	2 590	88 001	2 126	4 347	61 661	171 887	137 170	308 453	13 462
323119	Other commercial printing	2	51	4	478	20 299	357	744	14 826	17 555	48 842	66 534	D
32312	Support activities for printing	2	83	17	1 081	41 873	847	1 753	26 788	77 841	19 007	96 718	3 549
323121	Tradebinding & related work	—	21	6	422	13 473	333	726	8 473	25 145	8 371	33 589	D
323122	Prepress services	3	62	11	659	28 400	514	1 027	18 315	52 696	10 636	63 129	D
324	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
3241	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
32412	Asphalt paving, roofing, & saturated materials mfg	5	17	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	67	24	3 431	164 316	1 699	3 574	63 545	636 967	502 431	1 124 729	73 105
3254	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
32541	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
325413	In-vitro diagnostic substance mfg	3	11	7	949	47 149	461	950	15 224	114 295	44 738	154 097	D
325414	Biological product (except diagnostic) mfg	—	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	4	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
325510	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
3259	Other chemical product mfg	1	17	7	535	24 406	319	653	12 810	99 204	67 521	164 377	12 882
32599	All other chemical product & preparation mfg	—	12	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	49	22	2 091	56 794	1 672	3 407	40 217	153 853	163 596	313 605	15 852
3261	Plastics product mfg	2	42	22	2 037	55 500	1 627	3 314	39 250	150 734	159 696	306 589	15 576
32611	Unsupported plastics film, sheet, & bag mfg	5	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	9	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	32	17	1 404	36 975	1 132	2 210	26 090	96 831	85 932	182 727	11 383
326191	Plastics plumbing fixture mfg	—	3	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	29	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	144	56	3 693	126 599	2 806	5 829	85 973	355 291	278 540	630 089	22 639
3272	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
32721	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
327212	Other pressed & blown glass & glassware mfg	—	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	1	102	46	2 814	96 811	2 105	4 532	66 009	263 589	240 559	499 663	20 234
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg.	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
327320	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
32733	Concrete pipe, brick, & block mfg	1	12	8	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
327390	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
331	Primary metal mfg	—	11	5	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	212	48	5 167	167 519	3 924	7 763	105 550	366 119	326 889	692 764	31 167
3323	Architectural & structural metals mfg	1	88	30	2 563	82 064	1 854	3 607	48 245	167 260	181 664	349 123	15 869
33231	Plate work & fabricated structural product mfg ..	—	23	11	906	30 029	697	1 238	17 058	59 872	95 137	155 775	11 013
332312	Fabricated structural metal mfg	—	19	10	813	27 274	634	1 108	15 430	57 105	92 146	150 010	10 729
33232	Ornamental & architectural metal products mfg	1	65	19	1 657	52 035	1 157	2 369	31 187	107 388	86 527	193 348	4 856
332321	Metal window & door mfg	—	7	2	487	14 298	366	761	9 288	33 834	24 988	58 247	D
332322	Sheet metal work mfg.	1	30	9	574	17 523	412	766	10 909	36 843	32 260	68 829	2 378
332323	Ornamental & architectural metal work mfg	2	28	8	596	20 214	379	842	10 990	36 711	29 279	66 272	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	75	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
332710	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
3329	Other fabricated metal product mfg	—	18	6	1 203	39 292	956	2 089	26 623	107 616	72 635	179 288	8 748
33291	Metal valve mfg	—	3	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	15	5	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	8	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	74	26	4 184	143 646	2 793	5 713	76 304	360 500	328 877	696 692	D
3332	Industrial machinery mfg ..	1	13	4	1 022	38 661	444	1 001	13 695	97 939	66 104	166 040	D
33329	Other industrial machinery mfg	1	11	3	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
33331	Commercial & service industry machinery mfg	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
333311	Automatic vending machine mfg	—	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	6	5	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	16	7	698	28 592	430	809	14 484	63 758	34 575	99 019	D
33399	All other general-purpose machinery mfg	—	13	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	4	4	355	14 090	226	375	7 034	27 972	14 239	42 396	D
334	Computer & electronic product mfg	1	249	121	20 014	1 034 554	7 538	15 912	275 117	2 752 116	1 545 173	4 280 482	165 972
3341	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
33411	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
334111	Electronic computer mfg	3	19	10	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	17	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	71	41	8 356	435 364	3 467	7 024	139 955	1 207 276	895 059	2 092 511	84 957
33421	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
33429	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
33441	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
334412	Bare printed circuit board mfg	1	12	7	754	23 933	644	1 434	18 267	52 446	37 115	89 886	D
334413	Semiconductor & related device mfg	—	8	4	896	50 015	516	1 329	18 177	59 645	40 744	94 367	13 725
334418	Printed circuit assembly (electronic assembly) mfg	—	9	8	530	17 442	354	766	8 829	21 193	33 331	57 179	D
334419	Other electronic component mfg	4	10	6	434	13 354	228	501	6 489	27 027	12 771	39 806	973
3345	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
33451	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	4 874	328 227	805	1 717	35 137	887 003	201 730	1 087 819	28 191
334513	Industrial process control instrument mfg	—	9	4	364	14 124	143	302	3 782	31 440	20 653	52 381	1 028
334515	Electricity measuring & testing instrument mfg	—	10	6	714	38 077	197	430	5 566	167 153	49 630	217 270	8 595
334516	Analytical laboratory instrument mfg	4	19	8	513	20 813	146	393	5 090	45 661	16 762	62 283	1 451
334519	Other measuring & controlling device mfg	—	10	4	459	20 644	224	458	9 323	34 219	19 778	55 408	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.													
	Washington, DC—MD—VA—WV PMSA—Con.													
31-33	Manufacturing—Con.													
335	Electrical equipment, appliance, & component mfg	2	29	8	f	D	D	D	D	D	D	D	D	
3359	Other electrical equipment & component mfg	2	12	6	f	D	D	D	D	D	D	D	D	
33592	Communication & energy wire & cable mfg	—	1	1	e	D	D	D	D	D	D	D	D	
335929	Other communication & energy wire mfg	—	1	1	e	D	D	D	D	D	D	D	D	
33599	All other electrical equipment & component mfg	3	10	5										
335999	All other miscellaneous electrical equipment & component mfg	3	10	5		353	8 349	159	186	2 891	42 768	38 380	82 116	D
336	Transportation equipment mfg	2	52	17		2 786	149 654	1 394	2 903	57 794	424 128	656 715	1 066 534	34 707
3361	Motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D	D
336111	Automobile mfg	8	2	2	e	D	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	7	21	6	f	D	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	15	6		1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
33641	Aerospace product & parts mfg	—	15	6		1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
336414	Guided missile & space vehicle mfg	—	2	2	f	D	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	173	26		3 456	92 206	2 628	5 129	63 166	296 505	171 091	464 554	5 722
3371	Household & institutional furniture & kitchen cabinet mfg	1	125	9		1 873	47 118	1 539	3 028	34 683	179 040	94 714	273 134	D
33711	Wood kitchen cabinet & counter top mfg	—	86	5		1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
337110	Wood kitchen cabinet & counter top mfg	—	86	5		1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
33712	Household & institutional furniture mfg	2	39	4		655	15 516	567	1 146	12 013	30 967	22 090	52 957	D
337122	Nonupholstered wood household furniture mfg	2	29	2		378	9 016	337	710	7 435	18 964	10 123	28 800	791
3372	Office furniture (including fixtures) mfg	1	39	13		1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
33721	Office furniture (including fixtures) mfg	1	39	13		1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
337212	Custom architectural woodwork & millwork mfg	—	20	10		629	21 599	448	813	13 002	49 296	17 870	67 485	D
337215	Showcase, partition, shelving, & locker mfg	—	12	1		503	10 519	315	615	7 650	24 698	18 264	40 019	D
3379	Other furniture related product mfg	—	9	4		368	10 826	259	524	6 264	40 259	37 630	78 077	D
33791	Mattress mfg	—	3	3		322	9 767	241	492	5 982	38 379	35 955	74 449	D
337910	Mattress mfg	—	3	3		322	9 767	241	492	5 982	38 379	35 955	74 449	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Washington, DC—MD—VA—WV PMSA—Con. Manufacturing—Con.												
339	Miscellaneous mfg.....	3	310	30	2 541	78 633	1 631	3 015	37 107	208 214	123 821	334 679	9 163
3391	Medical equipment & supplies mfg.....	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
33911	Medical equipment & supplies mfg.....	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
339113	Surgical appliance & supplies mfg.....	—	19	5	552	16 409	310	672	6 827	85 974	59 909	149 391	D
339116	Dental laboratories...	6	113	3	468	12 369	345	565	7 404	28 322	9 795	37 180	822
3399	Other miscellaneous mfg..	3	133	15	1 103	33 130	750	1 380	16 916	58 052	38 584	95 993	2 360
33995	Sign mfg.....	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D
339950	Sign mfg.....	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ACCOMACK COUNTY, VA Manufacturing....	—	32	7	3 209	52 648	2 533	4 767	44 178	105 481	139 038	244 456	7 903
311	Food mfg.....	—	13	4	2 927	47 925	2 299	4 360	40 509	94 934	130 847	225 761	7 201
3116	Meat product mfg.....	—	3	3	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	3	3	h	D	D	D	D	D	D	D	D
311615	Poultry processing....	—	2	2	h	D	D	D	D	D	D	D	D
31-33	ALBEMARLE COUNTY, VA Manufacturing....	—	54	15	g	D	D	D	D	D	D	D	D
311	Food mfg.....	—	4	1	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
31-33	AMHERST COUNTY, VA Manufacturing....	1	44	14	1 678	53 785	1 272	2 614	39 886	209 630	185 538	395 087	20 339
31-33	APPOMATTOX COUNTY, VA Manufacturing....	1	18	4	1 216	28 493	1 027	2 344	24 326	65 517	46 735	112 674	2 940
337	Furniture & related product mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg.....	—	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ARLINGTON COUNTY, VA													
31-33	Manufacturing	1	57	8	509	16 304	373	796	11 247	36 252	23 228	59 507	1 415
AUGUSTA COUNTY, VA													
31-33	Manufacturing	-	66	29	5 372	175 089	4 406	8 764	129 198	709 802	609 136	1 312 385	90 098
311	Food mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate.....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	4	2	f	D	D	D	D	D	D	D	2 260
3261	Plastics product mfg.....	-	4	2	f	D	D	D	D	D	D	D	2 260
32619	Other plastics product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	23	10	1 724	58 352	1 366	2 678	39 279	213 647	133 902	348 434	11 992
3322	Cutlery & handtool mfg....	-	3	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	-	3	3	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	6	3	971	35 083	742	1 599	24 364	81 254	94 857	170 407	4 590
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg.	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
BATH COUNTY, VA													
31-33	Manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
BEDFORD COUNTY, VA													
31-33	Manufacturing	1	45	17	1 489	49 651	984	1 970	22 693	95 946	167 358	261 981	33 441
BLAND COUNTY, VA													
31-33	Manufacturing	-	7	5	656	15 831	493	913	10 009	41 558	43 893	85 499	3 767
BOTETOURT COUNTY, VA													
31-33	Manufacturing	-	23	14	1 422	39 340	1 007	2 080	24 159	110 733	102 623	210 409	10 720
BRUNSWICK COUNTY, VA													
31-33	Manufacturing	-	19	10	937	18 672	795	1 604	13 745	44 488	40 220	84 347	4 863

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMPBELL COUNTY, VA													
31-33	Manufacturing	-	62	21	5 098	123 504	4 272	8 566	88 549	890 648	495 670	1 383 730	41 219
311	Food mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	2	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	2	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
CARROLL COUNTY, VA													
31-33	Manufacturing	-	35	13	2 430	45 288	2 199	4 300	39 091	112 795	173 151	286 323	28 995
315	Apparel mfg	-	7	6	1 388	23 557	1 339	2 562	21 870	44 644	69 319	113 133	2 812
3152	Cut & sew apparel mfg	-	6	5	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
CHARLES CITY COUNTY, VA													
31-33	Manufacturing	7	10	4	680	16 023	522	1 008	11 360	36 356	27 064	62 231	1 749
337	Furniture & related product mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	9	2	1	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	9	2	1	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	9	2	1	f	D	D	D	D	D	D	D	D
CHARLOTTE COUNTY, VA													
31-33	Manufacturing	-	15	9	1 178	25 352	1 055	2 134	21 429	46 379	95 773	143 625	11 495
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESTERFIELD COUNTY, VA													
31-33	Manufacturing	-	164	50	10 166	412 555	7 324	15 716	255 747	1 361 215	1 299 148	2 671 228	134 352
311	Food mfg.....	-	12	5	637	15 039	575	1 177	11 350	54 380	68 962	122 637	3 187
312	Beverage & tobacco product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	2	2	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	5	5	695	24 232	578	1 243	19 088	47 890	86 556	131 174	2 686
3222	Converted paper product mfg.....	-	5	5	695	24 232	578	1 243	19 088	47 890	86 556	131 174	2 686
325	Chemical mfg.....	-	10	3	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	h	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg.....	-	2	2	h	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing..	-	3	3	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing.....	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	2	27	7	551	19 605	399	736	12 353	30 932	16 972	48 185	1 935
333	Machinery mfg.....	1	16	5	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	20	5	614	21 332	492	878	12 866	44 457	57 785	102 775	1 783
3399	Other miscellaneous mfg ..	-	10	5	580	20 463	465	837	12 267	42 160	56 923	99 584	D
CLARKE COUNTY, VA													
31-33	Manufacturing	-	13	3	1 167	33 712	920	1 881	23 392	129 258	61 864	190 310	D
323	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	1	1	f	D	D	D	D	D	D	D	D
32311	Printing.....	-	1	1	f	D	D	D	D	D	D	D	D
323117	Book printing.....	-	1	1	f	D	D	D	D	D	D	D	D
CULPEPER COUNTY, VA													
31-33	Manufacturing	1	28	10	1 484	45 266	1 107	2 227	28 653	127 616	151 026	278 923	12 616
ESSEX COUNTY, VA													
31-33	Manufacturing	-	18	8	1 140	24 814	996	1 883	18 632	45 649	72 191	119 381	7 392

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FAIRFAX COUNTY, VA													
31-33	Manufacturing	1	478	107	13 181	551 941	7 658	14 945	262 236	1 437 064	1 152 199	2 594 494	136 627
323	Printing & related support activities	1	145	23	3 068	112 306	2 247	4 522	74 885	190 876	162 999	354 577	90 325
3231	Printing & related support activities	1	145	23	3 068	112 306	2 247	4 522	74 885	190 876	162 999	354 577	90 325
32311	Printing	1	132	21	2 915	107 740	2 137	4 281	72 290	183 028	161 332	345 048	D
323110	Commercial lithographic printing	1	62	15	2 253	92 015	1 631	3 336	61 978	144 859	143 456	288 798	88 244
333	Machinery mfg	-	13	5	643	26 440	516	891	18 816	41 222	17 846	66 197	D
334	Computer & electronic product mfg	1	62	34	5 307	280 021	2 231	4 288	101 183	597 725	383 125	991 754	25 800
3342	Communications equipment mfg	1	18	10	2 216	120 657	1 314	2 344	65 901	264 511	235 268	510 383	D
33421	Telephone apparatus mfg	-	7	5	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	7	5	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	8	5	g	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	8	5	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	19	13	g	D	D	D	D	D	D	D	10 649
33451	Navigational, measuring, medical, & control instruments mfg	1	19	13	g	D	D	D	D	D	D	D	10 649
334511	Search, detection, navigation, & guidance instrument mfg	-	6	4	g	D	D	D	D	D	D	D	8 233
337	Furniture & related product mfg	-	24	2	707	16 672	453	810	10 889	43 626	24 760	65 540	723
3372	Office furniture (including fixtures) mfg	-	4	2	f	D	D	D	D	D	D	D	559
33721	Office furniture (including fixtures) mfg	-	4	2	f	D	D	D	D	D	D	D	559
339	Miscellaneous mfg	1	68	6	800	23 749	532	1 040	11 760	96 617	62 009	159 962	D
FAUQUIER COUNTY, VA													
31-33	Manufacturing	4	36	9	867	25 693	627	1 308	15 378	50 897	58 073	107 778	3 851
FLOYD COUNTY, VA													
31-33	Manufacturing	2	22	5	547	11 178	455	874	8 636	22 736	25 415	47 977	1 233
FRANKLIN COUNTY, VA													
31-33	Manufacturing	-	66	22	4 677	113 022	3 717	7 832	75 762	255 095	275 734	519 627	15 661
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	734	11 666	693	1 354	10 334	21 504	34 277	55 700	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	24	9	2 026	56 049	1 487	3 520	34 405	108 001	128 386	231 790	8 275
3219	Other wood product mfg	-	13	6	1 800	45 292	1 307	3 137	30 190	86 989	84 444	170 247	5 743
32191	Millwork	-	5	2	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	2	g	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	8	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREDERICK COUNTY, VA													
31-33	Manufacturing	-	69	37	3 416	97 027	2 299	4 423	61 098	362 154	383 798	741 135	36 698
326	Plastics & rubber products mfg	-	10	8	646	16 761	506	1 041	11 039	75 020	41 955	115 129	1 654
3261	Plastics product mfg	-	7	6	509	11 951	415	827	8 393	56 339	32 708	87 100	979
332	Fabricated metal product mfg	-	11	6	747	24 905	604	1 194	19 411	84 623	159 599	244 717	1 881
334	Computer & electronic product mfg	-	3	3	674	17 283	329	476	10 815	39 033	51 754	91 568	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg .	-	1	1	f	D	D	D	D	D	D	D	D
GILES COUNTY, VA													
31-33	Manufacturing	-	15	13	2 731	90 504	2 109	4 466	63 586	304 188	232 718	538 641	27 010
325	Chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325221	Cellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
GRAYSON COUNTY, VA													
31-33	Manufacturing	-	18	11	1 085	25 827	787	1 687	16 743	74 352	50 579	123 380	1 965
GREENSVILLE COUNTY, VA													
31-33	Manufacturing	-	5	3	733	15 014	678	1 382	13 216	36 386	83 915	120 262	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
HALIFAX COUNTY, VA *													
31-33	Manufacturing	-	42	20	4 707	113 842	4 122	7 866	92 233	251 795	403 819	652 862	23 595
313	Textile mills	-	3	3	1 579	37 573	1 450	2 877	32 315	58 682	161 952	220 812	D
3132	Fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	2	2	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	2	2	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	5	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	4	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HANOVER COUNTY, VA													
31-33	Manufacturing	1	150	43	3 803	111 772	3 009	5 644	72 214	257 477	322 437	579 724	D
311	Food mfg	-	7	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
HENRICO COUNTY, VA													
31-33	Manufacturing	1	216	83	10 857	379 002	7 656	15 089	253 920	1 502 149	912 190	2 432 264	380 350
311	Food mfg	-	17	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	13	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	1	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	-	1	1	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	5	4	f	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	2	2	f	D	D	D	D	D	D	D	D
31222	Tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	1	10	9	902	29 412	627	1 414	17 747	78 939	104 898	186 682	7 284
3222	Converted paper product mfg	1	10	9	902	29 412	627	1 414	17 747	78 939	104 898	186 682	7 284
323	Printing & related support activities	1	47	18	g	D	D	D	D	D	D	D	7 880
3231	Printing & related support activities	1	47	18	g	D	D	D	D	D	D	D	7 880
32311	Printing	1	42	15	g	D	D	D	D	D	D	D	7 381
323110	Commercial lithographic printing ..	2	17	8	f	D	D	D	D	D	D	D	2 301
326	Plastics & rubber products mfg	4	7	5	563	14 869	475	989	11 429	55 441	43 700	98 538	D
3261	Plastics product mfg	4	7	5	563	14 869	475	989	11 429	55 441	43 700	98 538	D
332	Fabricated metal product mfg	-	24	9	781	28 240	557	1 079	16 920	60 307	70 815	132 167	D
333	Machinery mfg	-	20	8	881	36 086	523	1 117	18 250	109 847	115 068	226 693	D
3332	Industrial machinery mfg ..	-	11	5	658	29 071	395	865	14 989	95 053	101 249	198 750	D
33329	Other industrial machinery mfg	-	11	5	658	29 071	395	865	14 989	95 053	101 249	198 750	D
334	Computer & electronic product mfg	-	7	3	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	3	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	h	D	D	D	D	D	D	D	D
334412	Bare printed circuit board mfg	-	1	1	g	D	D	D	D	D	D	D	D
HENRY COUNTY, VA													
31-33	Manufacturing	-	70	34	7 970	189 123	7 068	13 838	145 581	447 896	430 474	858 383	22 615
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	2	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	662	28 956	602	1 136	25 195	45 373	65 235	91 924	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	2	2	f	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	4	739	22 992	571	1 033	13 358	84 275	48 606	131 707	6 418
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HENRY COUNTY, VA—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	-	12	8	3 239	63 109	3 001	5 904	49 862	125 892	119 142	245 247	3 683
3371	Household & institutional furniture & kitchen cabinet mfg	-	10	8	h	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	9	8	3 223	62 826	2 988	5 876	49 627	125 407	118 767	244 347	3 659
337122	Nonupholstered wood household furniture mfg	-	5	5	h	D	D	D	D	D	D	D	D
ISLE OF WIGHT COUNTY, VA													
31-33	Manufacturing	-	17	6	4 698	106 596	3 798	7 755	77 433	793 929	772 940	1 546 841	7 451
311	Food mfg	-	5	4	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	5	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	h	D	D	D	D	D	D	D	D
JAMES CITY COUNTY, VA													
31-33	Manufacturing	-	26	10	g	D	D	D	D	D	D	D	8 651
KING WILLIAM COUNTY, VA													
31-33	Manufacturing	-	13	5	1 114	56 524	833	1 797	38 866	164 312	185 460	357 154	D
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
LEE COUNTY, VA													
31-33	Manufacturing	3	17	7	784	10 810	686	1 152	9 090	42 984	27 965	70 763	3 790
LOUDOUN COUNTY, VA													
31-33	Manufacturing	1	128	39	3 459	132 840	2 379	4 961	76 265	265 712	209 369	480 793	26 842
323	Printing & related support activities.....	1	35	9	598	22 555	454	850	15 701	43 751	23 335	66 716	11 240
3231	Printing & related support activities.....	1	35	9	598	22 555	454	850	15 701	43 751	23 335	66 716	11 240
32311	Printing	1	29	8	554	21 647	421	799	15 019	42 223	23 079	64 910	D
334	Computer & electronic product mfg	1	19	12	1 256	55 099	777	1 724	26 050	103 353	87 754	196 285	D
3344	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
LOUISA COUNTY, VA													
31-33	Manufacturing	-	29	8	633	16 366	489	956	10 070	51 077	38 764	89 333	7 580
LUNENBURG COUNTY, VA													
31-33	Manufacturing	2	16	8	900	16 157	758	1 750	12 515	32 183	43 794	76 282	2 797

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MECKLENBURG COUNTY, VA													
31-33	Manufacturing	-	41	23	4 589	102 714	3 845	7 665	75 557	340 178	512 977	859 074	25 856
311	Food mfg	-	2	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	2	2	f	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	-	2	2	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	5	4	g	D	D	D	D	D	D	D	D
3132	Fabric mills	-	5	4	g	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	4	3	g	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	4	3	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	538	12 105	447	852	7 836	30 823	29 112	59 336	D
MONTGOMERY COUNTY, VA													
31-33	Manufacturing	-	68	22	4 836	153 895	3 796	7 307	109 900	481 778	214 634	699 060	20 728
325	Chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	g	D	D	D	D	D	D	D	D
32592	Explosives mfg	-	1	1	g	D	D	D	D	D	D	D	D
325920	Explosives mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
NELSON COUNTY, VA													
31-33	Manufacturing	4	14	3	621	8 725	563	856	7 114	21 209	20 249	41 164	674
NORTHUMBERLAND COUNTY, VA													
31-33	Manufacturing	3	19	7	575	12 947	316	622	6 483	35 567	22 898	59 582	D
NOTTOWAY COUNTY, VA													
31-33	Manufacturing	-	18	9	681	11 277	604	1 165	9 328	40 381	103 073	139 870	1 369

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORANGE COUNTY, VA													
31-33	Manufacturing	-	35	13	2 529	68 760	1 975	3 770	46 063	205 023	243 053	445 643	30 884
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313249	Other knit fabric & lace mills	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
PAGE COUNTY, VA													
31-33	Manufacturing	-	16	9	2 883	47 545	2 352	4 103	33 459	197 885	261 777	461 823	11 168
315	Apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D
PATRICK COUNTY, VA													
31-33	Manufacturing	-	38	18	2 610	55 695	2 342	4 664	43 779	109 336	136 689	249 727	25 167
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	4	527	8 329	508	937	7 698	16 952	29 991	48 014	597
PITTSYLVANIA COUNTY, VA													
31-33	Manufacturing	-	59	23	h	D	D	D	D	D	D	D	30 182
313	Textile mills	-	1	1	g	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	1	1	g	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	-	1	1	g	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
PRINCE EDWARD COUNTY, VA													
31-33	Manufacturing	-	18	5	f	D	D	D	D	D	D	D	3 088
PRINCE WILLIAM COUNTY, VA													
31-33	Manufacturing	1	109	31	2 974	115 882	2 030	4 133	67 879	187 231	195 483	378 100	11 536
334	Computer & electronic product mfg	3	7	4	628	36 718	331	730	13 745	46 403	38 742	81 004	D
336	Transportation equipment mfg	-	5	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PULASKI COUNTY, VA													
31-33	Manufacturing	-	41	25	6 509	169 553	5 444	11 224	131 538	349 160	1 283 904	1 655 829	30 007
313	Textile mills	-	3	3	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	3	515	15 323	321	693	10 498	57 629	62 896	114 320	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	4	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	4	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	7	4	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	5	3	g	D	D	D	D	D	D	D	D
ROANOKE COUNTY, VA													
31-33	Manufacturing	-	64	20	3 450	107 577	2 389	4 967	67 751	287 476	312 933	598 654	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	15	5	949	33 025	607	1 183	17 706	68 653	52 032	122 814	3 035
ROCKBRIDGE COUNTY, VA													
31-33	Manufacturing	-	24	12	2 090	49 976	1 755	3 507	40 561	108 739	223 326	335 438	11 468
314	Textile product mills	-	1	1	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	-	1	1	g	D	D	D	D	D	D	D	D
31411	Carpet & rug mills	-	1	1	g	D	D	D	D	D	D	D	D
314110	Carpet & rug mills	-	1	1	g	D	D	D	D	D	D	D	D
ROCKINGHAM COUNTY, VA													
31-33	Manufacturing	-	74	29	9 272	269 704	7 474	15 548	184 409	2 021 447	2 115 772	4 112 489	126 742
311	Food mfg	-	14	9	4 445	91 434	4 044	8 682	70 585	251 729	736 601	985 470	27 907
3116	Meat product mfg	-	8	6	4 154	81 697	3 814	8 074	65 619	195 736	606 003	798 209	26 422
31161	Animal slaughtering & processing	-	8	6	4 154	81 697	3 814	8 074	65 619	195 736	606 003	798 209	26 422
311615	Poultry processing	-	4	4	4 047	78 908	3 747	7 908	63 946	186 513	592 016	774 830	D
323	Printing & related support activities	-	12	5	1 378	42 610	1 079	2 027	30 757	118 578	59 415	178 990	2 870
3231	Printing & related support activities	-	12	5	1 378	42 610	1 079	2 027	30 757	118 578	59 415	178 990	2 870
32311	Printing	-	12	5	1 378	42 610	1 079	2 027	30 757	118 578	59 415	178 990	2 870
323117	Book printing	-	1	1	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	f	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RUSSELL COUNTY, VA													
31-33	Manufacturing	—	26	8	1 614	28 843	1 379	2 973	22 601	64 835	64 495	129 236	5 203
315	Apparel mfg	—	6	6	857	12 110	766	1 484	10 377	30 832	16 156	46 924	D
3152	Cut & sew apparel mfg	—	6	6	857	12 110	766	1 484	10 377	30 832	16 156	46 924	D
31521	Cut & sew apparel contractors	—	4	4	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	—	3	3	f	D	D	D	D	D	D	D	D
SHENANDOAH COUNTY, VA													
31-33	Manufacturing	1	47	24	5 436	139 439	4 375	9 097	105 164	329 704	513 170	840 476	16 638
311	Food mfg	—	7	6	1 576	34 142	1 155	2 524	22 697	73 650	262 317	336 575	2 271
3116	Meat product mfg	—	4	4	1 410	29 108	1 012	2 172	19 792	62 914	204 829	268 411	1 555
31161	Animal slaughtering & processing	—	4	4	1 410	29 108	1 012	2 172	19 792	62 914	204 829	268 411	1 555
311615	Poultry processing	—	3	3	g	D	D	D	D	D	D	D	D
315	Apparel mfg	5	6	5	735	10 933	698	1 231	9 916	21 131	11 478	32 505	687
3152	Cut & sew apparel mfg	7	5	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	9	5	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	5	2	f	D	D	D	D	D	D	D	D
32311	Printing	9	5	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	9	2	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	1	1	f	D	D	D	D	D	D	D	D
SMYTH COUNTY, VA													
31-33	Manufacturing	1	53	25	4 913	109 170	4 158	8 268	81 779	335 565	372 748	692 628	11 624
315	Apparel mfg	4	8	6	1 323	25 431	1 244	2 655	22 625	59 993	62 983	123 620	1 696
3152	Cut & sew apparel mfg	5	5	4	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	8	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	—	7	4	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ..	—	4	3	f	D	D	D	D	D	D	D	D
32191	Millwork	—	3	3	702	15 487	598	1 219	12 942	35 784	42 436	81 366	D
336	Transportation equipment mfg	—	3	3	1 060	25 884	860	1 634	19 203	115 459	189 867	295 277	3 478
3362	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	5	3	673	11 409	602	1 179	8 884	31 172	21 008	43 022	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	3	2	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	2	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	2	2	f	D	D	D	D	D	D	D	D
SOUTHAMPTON COUNTY, VA													
31-33	Manufacturing	—	16	8	2 874	131 073	2 082	4 427	92 542	393 842	319 640	709 957	D
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
SPOTSYLVANIA COUNTY, VA													
31-33	Manufacturing	3	40	17	1 698	60 382	1 325	2 778	41 735	127 201	180 967	304 886	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STAFFORD COUNTY, VA													
31-33	Manufacturing	1	47	8	711	17 239	568	1 122	13 307	48 782	50 135	99 215	3 767
SUSSEX COUNTY, VA													
31-33	Manufacturing	7	9	7	1 138	26 525	987	1 799	21 362	99 144	184 543	283 506	6 677
311	Food mfg	9	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	9	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	9	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	9	1	1	f	D	D	D	D	D	D	D	D
TAZEWELL COUNTY, VA													
31-33	Manufacturing	1	58	19	1 517	30 583	1 122	1 962	19 880	57 615	90 751	161 232	4 468
WARREN COUNTY, VA													
31-33	Manufacturing	-	27	7	1 540	37 663	1 366	2 486	29 051	227 403	297 408	511 000	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, VA													
31-33	Manufacturing	1	65	20	2 031	53 226	1 503	2 861	31 984	176 038	134 116	315 785	D
333	Machinery mfg	2	8	4	f	D	D	D	D	D	D	D	D
WESTMORELAND COUNTY, VA													
31-33	Manufacturing	7	16	7	694	13 508	612	1 079	8 968	34 693	91 676	124 593	3 213
WISE COUNTY, VA													
31-33	Manufacturing	9	24	2	556	10 099	466	944	8 123	30 377	34 849	64 184	1 369
WYTHE COUNTY, VA													
31-33	Manufacturing	-	45	17	2 129	51 638	1 766	3 449	37 876	159 884	119 435	276 944	9 628
326	Plastics & rubber products mfg	-	4	3	571	15 162	437	938	9 734	53 203	27 913	81 252	2 613
332	Fabricated metal product mfg	-	13	6	841	20 991	702	1 380	15 984	50 060	39 688	89 489	4 620
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	9	4	f	D	D	D	D	D	D	D	D
YORK COUNTY, VA													
31-33	Manufacturing	-	28	3	f	D	D	D	D	D	D	D	D
ALEXANDRIA, VA (IC)													
31-33	Manufacturing	2	114	23	1 907	59 448	1 230	2 441	33 774	194 752	131 827	328 058	9 535
311	Food mfg	3	18	6	608	11 494	366	746	6 437	37 356	30 398	68 175	1 500
323	Printing & related support activities	4	46	9	657	25 013	455	903	15 428	46 995	26 690	73 858	3 596
3231	Printing & related support activities	4	46	9	657	25 013	455	903	15 428	46 995	26 690	73 858	3 596
32311	Printing	4	41	9	635	24 386	435	868	14 955	45 831	26 452	72 455	D
BEDFORD, VA (IC)													
31-33	Manufacturing	-	30	12	2 278	62 216	1 788	3 606	41 856	122 441	132 363	254 317	9 740
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRISTOL, VA (IC)													
31-33	Manufacturing	-	41	22	6 954	184 362	5 554	11 462	132 773	474 903	762 484	1 222 944	33 611
311	Food mfg	-	5	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	2	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg .	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg .	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
BUENA VISTA, VA (IC)													
31-33	Manufacturing	-	10	9	f	D	D	D	D	D	D	D	9 174
CHARLOTTESVILLE, VA (IC)													
31-33	Manufacturing	1	67	19	h	D	D	D	D	D	D	D	17 387
334	Computer & electronic product mfg	-	7	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	2	1	g	D	D	D	D	D	D	D	D
CHESAPEAKE, VA (IC)													
31-33	Manufacturing	-	132	45	4 558	147 008	2 967	6 278	80 858	336 679	767 091	1 085 023	47 124
333	Machinery mfg	-	10	8	g	D	D	D	D	D	D	D	20 833
336	Transportation equipment mfg	-	10	4	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	5	3	f	D	D	D	D	D	D	D	336
33661	Ship & boat building	1	5	3	f	D	D	D	D	D	D	D	336
336611	Ship building & repairing	1	5	3	f	D	D	D	D	D	D	D	336

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
COLONIAL HEIGHTS, VA (IC)													
31-33	Manufacturing	-	14	5	838	20 383	711	1 521	14 914	146 503	69 614	215 440	4 426
326	Plastics & rubber products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
COVINGTON, VA (IC)													
31-33	Manufacturing	-	11	6	2 615	113 429	1 842	3 721	74 022	510 850	507 122	1 004 852	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
DANVILLE, VA (IC)													
31-33	Manufacturing	2	47	23	j	D	D	D	D	D	D	D	60 613
313	Textile mills	9	3	3	i	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	4	4	f	D	D	D	D	D	D	D	3 867
326	Plastics & rubber products mfg	-	2	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
EMPORIA, VA (IC)													
31-33	Manufacturing	1	13	10	1 055	28 976	868	1 914	22 341	72 354	87 353	158 732	D
FREDERICKSBURG, VA (IC)													
31-33	Manufacturing	-	41	11	1 059	28 558	830	1 720	19 547	88 499	152 403	240 718	21 409
GALAX, VA (IC)													
31-33	Manufacturing	-	24	13	4 460	86 840	4 042	8 132	71 815	172 696	205 575	380 240	6 970
315	Apparel mfg	-	6	2	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
33712	Household & institutional furniture mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
337122	Nonupholstered wood household furniture mfg	-	6	5	g	D	D	D	D	D	D	D	D

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HAMPTON, VA (IC)													
31-33	Manufacturing	-	80	23	4 636	123 401	3 636	6 726	81 251	422 730	556 239	970 987	27 152
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	6	565	17 338	382	720	10 241	28 488	20 864	46 501	D
334	Computer & electronic product mfg	-	6	3	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	f	D	D	D	D	D	D	D	D
HARRISONBURG, VA (IC)													
31-33	Manufacturing	1	38	18	3 687	102 638	2 985	6 175	73 871	254 261	472 186	725 828	19 974
311	Food mfg	-	6	5	557	12 190	512	1 048	10 187	43 297	280 946	323 861	2 180
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	9	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
HOPEWELL, VA (IC)													
31-33	Manufacturing	1	19	8	2 907	147 431	2 191	4 718	96 057	743 916	607 369	1 328 058	80 406
325	Chemical mfg	1	7	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	5	1 579	80 842	1 214	2 556	52 103	440 867	402 548	826 178	D
32519	Other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
LYNCHBURG, VA (IC)													
31-33	Manufacturing	-	117	52	12 535	481 093	8 365	16 189	257 097	1 602 612	1 506 207	3 096 355	168 636
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	12	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	12	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	3	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D

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	LYNCHBURG, VA (IC)—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	—	2	2	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	26	8	1 434	61 872	816	1 813	29 309	128 697	67 322	189 196	7 298
333	Machinery mfg	—	12	6	1 289	56 738	674	1 643	25 051	127 636	80 259	211 296	6 461
3339	Other general-purpose machinery mfg	—	5	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	—	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	6	5	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
	MANASSAS, VA (IC)												
31-33	Manufacturing	—	34	11	2 822	188 529	582	1 254	20 223	594 660	199 283	791 561	D
334	Computer & electronic product mfg	—	3	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	2	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	1	1	g	D	D	D	D	D	D	D	D
	MARTINSVILLE, VA (IC)												
31-33	Manufacturing	—	39	24	8 726	203 035	7 241	14 000	146 246	345 425	372 898	724 148	17 535
315	Apparel mfg	—	5	4	4 847	115 564	4 028	7 550	84 929	171 750	165 196	342 070	D
3151	Apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	—	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	4	3	h	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	—	3	2	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	—	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	1	1	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	—	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	—	6	4	581	11 577	401	624	6 628	15 565	29 684	45 443	725
3219	Other wood product mfg	—	5	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	5	2 327	47 096	2 060	4 287	36 277	93 205	93 472	187 266	5 941
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	5	2 327	47 096	2 060	4 287	36 277	93 205	93 472	187 266	5 941
33712	Household & institutional furniture mfg	—	7	5	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	6	4	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEWPORT NEWS, VA (IC)													
31-33	Manufacturing	-	131	44	24 707	898 354	19 157	38 325	574 677	1 653 589	1 646 406	3 300 476	93 324
333	Machinery mfg	1	10	6	f	D	D	D	D	D	D	D	5 134
334	Computer & electronic product mfg	-	8	4	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	6	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	4	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	3	3	j	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	3	j	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	2	j	D	D	D	D	D	D	D	D
NORFOLK, VA (IC)													
31-33	Manufacturing	-	199	68	10 996	402 176	8 838	18 150	303 435	2 789 712	2 959 879	5 737 284	91 185
311	Food mfg	-	16	9	1 301	29 015	836	1 608	12 997	81 846	73 327	154 586	4 825
3118	Bakeries & tortilla mfg	-	8	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	7	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	31	9	f	D	D	D	D	D	D	D	815
336	Transportation equipment mfg	-	21	14	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	17	13	h	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	17	13	h	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	14	11	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	20	6	f	D	D	D	D	D	D	D	3 020
3399	Other miscellaneous mfg ..	-	12	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
PETERSBURG, VA (IC)													
31-33	Manufacturing	-	43	20	2 553	72 398	1 771	3 781	39 076	145 376	257 679	409 643	D
332	Fabricated metal product mfg	-	7	4	760	23 513	582	1 522	15 415	47 890	51 919	100 992	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
PORTSMOUTH, VA (IC)													
31-33	Manufacturing	-	71	15	1 812	51 951	1 341	2 681	33 609	143 648	224 566	368 724	14 213
311	Food mfg	-	13	5	955	23 844	739	1 614	16 388	85 492	152 173	239 157	4 222
3116	Meat product mfg	-	4	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RADFORD, VA (IC)													
31-33	Manufacturing	-	21	11	2 838	84 600	2 111	4 324	57 289	185 421	209 973	393 422	13 445
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D
RICHMOND, VA (IC)													
31-33	Manufacturing	-	325	119	21 879	941 202	14 775	29 738	539 544	8 229 631	3 450 159	11 748 251	429 426
311	Food mfg	1	25	11	g	D	D	D	D	D	D	D	27 768
3118	Bakeries & tortilla mfg	-	15	5	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	14	4	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	6	5	i	D	D	D	D	D	D	D	D
3122	Tobacco mfg	-	4	4	i	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ..	-	2	2	i	D	D	D	D	D	D	D	D
312221	Cigarette mfg	-	1	1	i	D	D	D	D	D	D	D	D
322	Paper mfg	-	22	17	2 959	111 917	2 370	5 632	79 787	256 983	429 436	683 166	35 918
3222	Converted paper product mfg	-	19	14	h	D	D	D	D	D	D	D	20 152
32221	Paperboard container mfg	-	14	10	2 179	85 984	1 729	4 088	60 232	185 367	319 334	503 682	18 894
322211	Corrugated & solid fiber box mfg	-	8	5	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	-	5	4	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	69	19	g	D	D	D	D	D	D	D	12 306
3231	Printing & related support activities	-	69	19	g	D	D	D	D	D	D	D	12 306
32311	Printing	-	56	16	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	30	8	g	D	D	D	D	D	D	D	9 857
325	Chemical mfg	-	16	8	1 334	51 927	689	1 668	19 504	607 149	177 582	799 929	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	45	13	g	D	D	D	D	D	D	D	4 319
333	Machinery mfg	-	21	9	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	7	31	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	28	5	g	D	D	D	D	D	D	D	3 476
3391	Medical equipment & supplies mfg	-	11	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	11	2	f	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROANOKE, VA (IC)													
31-33	Manufacturing	-	152	58	8 489	242 893	5 819	11 449	144 136	1 213 436	967 261	2 156 333	D
311	Food mfg	-	7	6	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	4	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315233	Women's & girls' cut & sew dress mfg	-	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	6	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	21	3	545	16 930	351	730	9 596	36 634	16 819	53 520	D
3231	Printing & related support activities	1	21	3	545	16 930	351	730	9 596	36 634	16 819	53 520	D
32311	Printing	1	20	3	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	3	1 139	45 307	673	1 512	20 633	74 813	158 894	233 099	D
3333	Commercial & service industry machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	2	f	D	D	D	D	D	D	D	D
SALEM, VA (IC)													
31-33	Manufacturing	-	73	28	6 478	202 349	4 367	8 614	115 283	555 145	482 326	1 035 605	35 308
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
SUFFOLK, VA (IC)													
31-33	Manufacturing	-	52	23	2 257	63 796	1 920	3 676	48 586	539 571	562 685	1 103 490	18 520
311	Food mfg	-	10	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	6	4	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	2	2	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA BEACH, VA (IC)													
31-33	Manufacturing	1	236	48	5 806	139 250	3 913	7 339	82 114	380 394	580 765	967 231	27 005
323	Printing & related support activities.....	6	56	7	1 138	19 459	495	936	10 780	42 753	43 970	86 779	7 901
3231	Printing & related support activities.....	6	56	7	1 138	19 459	495	936	10 780	42 753	43 970	86 779	7 901
32311	Printing	6	52	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	7	25	4	844	14 481	288	609	7 345	34 164	32 333	66 485	7 184
327	Nonmetallic mineral product mfg	-	8	2	540	15 621	404	903	8 798	38 344	34 545	72 797	1 771
333	Machinery mfg	-	12	5	1 026	33 199	673	1 154	17 765	131 951	270 266	404 624	9 132
3331	Agriculture, construction, & mining machinery mfg....	-	2	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	16	3	632	13 105	470	1 051	8 832	24 347	19 945	44 575	691
3345	Navigational, measuring, medical, & control instruments mfg	-	6	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	35	8	771	18 645	572	1 025	11 666	42 211	38 540	81 438	1 223
3399	Other miscellaneous mfg ..	-	21	7	691	16 764	521	947	10 729	38 419	36 217	75 240	1 006
WAYNESBORO, VA (IC)													
31-33	Manufacturing	-	31	16	4 558	160 180	2 589	6 037	81 567	452 490	356 945	802 492	50 119
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
WILLIAMSBURG, VA (IC)													
31-33	Manufacturing	-	14	2	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WINCHESTER, VA (IC)												
31-33	Manufacturing	—	43	25	6 047	196 114	4 647	9 423	130 883	791 080	648 810	1 431 331	47 066
311	Food mfg.....	2	5	3	797	22 676	619	1 267	15 723	142 873	107 621	251 241	5 917
3114	Fruit & vegetable preserving & specialty food mfg.....	9	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	9	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	6	5	2 011	63 209	1 362	2 499	32 351	285 839	246 988	524 769	30 991
3261	Plastics product mfg.....	—	5	4	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg....	—	1	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg.....	—	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	ALEXANDRIA, VA (IC)												
31-33	Manufacturing	2	114	23	1 907	59 448	1 230	2 441	33 774	194 752	131 827	328 058	9 535
311	Food mfg.....	3	18	6	608	11 494	366	746	6 437	37 356	30 398	68 175	1 500
323	Printing & related support activities.....	4	46	9	657	25 013	455	903	15 428	46 995	26 690	73 858	3 596
3231	Printing & related support activities.....	4	46	9	657	25 013	455	903	15 428	46 995	26 690	73 858	3 596
32311	Printing.....	4	41	9	635	24 386	435	868	14 955	45 831	26 452	72 455	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ALTAVISTA, VA													
31-33	Manufacturing	-	15	8	3 364	84 580	2 867	5 885	62 893	795 492	339 210	1 133 777	27 228
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	1	1	f	D	D	D	D	D	D	D	D
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	2	1	f	D	D	D	D	D	D	D	D
ASHLAND, VA													
31-33	Manufacturing	1	27	11	836	32 630	630	1 235	21 760	89 299	93 621	183 007	D
BEDFORD, VA (IC)													
31-33	Manufacturing	-	30	12	2 278	62 216	1 788	3 606	41 856	122 441	132 363	254 317	9 740
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
BERRYVILLE, VA													
31-33	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	1	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	1	1	f	D	D	D	D	D	D	D	D
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
BLACKSBURG, VA													
31-33	Manufacturing	-	23	7	1 910	57 822	1 501	3 012	42 572	149 272	75 351	225 330	5 281
334	Computer & electronic product mfg	-	4	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	4	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	4	1	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
BLACKSTONE, VA													
31-33	Manufacturing	-	9	6	508	7 892	457	883	6 867	29 841	37 792	64 408	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BRIDGEWATER, VA													
31-33	Manufacturing	-	10	6	1 207	27 592	1 023	2 061	21 146	90 147	124 611	211 282	2 927
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
BRISTOL, VA (IC)													
31-33	Manufacturing	-	41	22	6 954	184 362	5 554	11 462	132 773	474 903	762 484	1 222 944	33 611
311	Food mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg..	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg..	-	1	1	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	1	1	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335212	Household vacuum cleaner mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
BUENA VISTA, VA (IC)													
31-33	Manufacturing	-	10	9	f	D	D	D	D	D	D	D	9 174
CHARLOTTESVILLE, VA (IC)													
31-33	Manufacturing	1	67	19	h	D	D	D	D	D	D	D	17 387
334	Computer & electronic product mfg.....	-	7	4	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg..	-	2	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg.....	-	2	1	g	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CHESAPEAKE, VA (IC)													
31-33	Manufacturing	-	132	45	4 558	147 008	2 967	6 278	80 858	336 679	767 091	1 085 023	47 124
333	Machinery mfg	-	10	8	g	D	D	D	D	D	D	D	20 833
336	Transportation equipment mfg	-	10	4	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	5	3	f	D	D	D	D	D	D	D	336
33661	Ship & boat building	1	5	3	f	D	D	D	D	D	D	D	336
336611	Ship building & repairing	1	5	3	f	D	D	D	D	D	D	D	336
CHRISTIANSBURG, VA													
31-33	Manufacturing	-	27	9	1 461	43 177	1 053	2 063	25 614	214 651	118 011	334 500	14 835
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3351	Electric lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	f	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
COLONIAL HEIGHTS, VA (IC)													
31-33	Manufacturing	-	14	5	838	20 383	711	1 521	14 914	146 503	69 614	215 440	4 426
326	Plastics & rubber products mfg	-	2	1	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
COVINGTON, VA (IC)													
31-33	Manufacturing	-	11	6	2 615	113 429	1 842	3 721	74 022	510 850	507 122	1 004 852	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
CULPEPER, VA													
31-33	Manufacturing	1	13	7	1 249	38 925	947	1 934	25 152	116 007	123 411	240 278	11 766
DANVILLE, VA (IC)													
31-33	Manufacturing	2	47	23	j	D	D	D	D	D	D	D	60 613
313	Textile mills	9	3	3	i	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	2	2	i	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	3	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	4	4	f	D	D	D	D	D	D	D	3 867
326	Plastics & rubber products mfg	-	2	1	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	2	1	g	D	D	D	D	D	D	D	D
32621	Tire mfg	-	2	1	g	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	g	D	D	D	D	D	D	D	D
EMPORIA, VA (IC)													
31-33	Manufacturing	1	13	10	1 055	28 976	868	1 914	22 341	72 354	87 353	158 732	D
FARMVILLE, VA *													
31-33	Manufacturing	-	13	5	f	D	D	D	D	D	D	D	3 066

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FREDERICKSBURG, VA (IC)													
31-33	Manufacturing	-	41	11	1 059	28 558	830	1 720	19 547	88 499	152 403	240 718	21 409
FRONT ROYAL, VA													
31-33	Manufacturing	-	18	6	1 467	36 305	1 325	2 419	28 231	223 055	293 754	503 036	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
322233	Stationery, tablet, & related product mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
GALAX, VA (IC)													
31-33	Manufacturing	-	24	13	4 460	86 840	4 042	8 132	71 815	172 696	205 575	380 240	6 970
315	Apparel mfg	-	6	2	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
3371	Household & institutional furniture & kitchen cabinet mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
33712	Household & institutional furniture mfg	-	7	5	2 413	46 004	2 238	4 663	38 833	90 589	70 545	160 801	2 587
337122	Nonupholstered wood household furniture mfg	-	6	5	g	D	D	D	D	D	D	D	D
HAMPTON, VA (IC)													
31-33	Manufacturing	-	80	23	4 636	123 401	3 636	6 726	81 251	422 730	556 239	970 987	27 152
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331528	Other nonferrous foundries (except die-casting)	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	6	565	17 338	382	720	10 241	28 488	20 864	46 501	D
334	Computer & electronic product mfg	-	6	3	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HARRISONBURG, VA (IC)													
31-33	Manufacturing	1	38	18	3 687	102 638	2 985	6 175	73 871	254 261	472 186	725 828	19 974
311	Food mfg	-	6	5	557	12 190	512	1 048	10 187	43 297	280 946	323 861	2 180
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	9	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	9	2	2	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	9	1	1	f	D	D	D	D	D	D	D	D
HERNDON, VA													
31-33	Manufacturing	-	34	7	1 301	49 910	679	1 365	19 723	190 754	139 456	336 984	10 494
334	Computer & electronic product mfg	-	7	5	793	35 177	359	677	11 758	108 391	87 119	200 856	6 042
3342	Communications equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	-	2	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	-	2	2	f	D	D	D	D	D	D	D	D
HOPEWELL, VA (IC)													
31-33	Manufacturing	1	19	8	2 907	147 431	2 191	4 718	96 057	743 916	607 369	1 328 058	80 406
325	Chemical mfg	1	7	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	6	5	1 579	80 842	1 214	2 556	52 103	440 867	402 548	826 178	D
32519	Other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	1	1	f	D	D	D	D	D	D	D	D
LEBANON, VA													
31-33	Manufacturing	-	11	5	1 321	24 989	1 128	2 537	19 393	58 811	62 001	120 734	4 639
315	Apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	3	3	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	2	2	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	-	2	2	f	D	D	D	D	D	D	D	D
LURAY, VA													
31-33	Manufacturing	-	7	3	1 534	24 878	1 172	1 856	16 143	138 183	141 998	281 267	5 433
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LYNCHBURG, VA (IC)													
31-33	Manufacturing	-	117	52	12 535	481 093	8 365	16 189	257 097	1 602 612	1 506 207	3 096 355	168 636
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	12	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	12	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	9	3	f	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	7	6	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	2	2	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	26	8	1 434	61 872	816	1 813	29 309	128 697	67 322	189 196	7 298
333	Machinery mfg	-	12	6	1 289	56 738	674	1 643	25 051	127 636	80 259	211 296	6 461
3339	Other general-purpose machinery mfg	-	5	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	5	h	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
MANASSAS, VA (IC)													
31-33	Manufacturing	-	34	11	2 822	188 529	582	1 254	20 223	594 660	199 283	791 561	D
334	Computer & electronic product mfg	-	3	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	g	D	D	D	D	D	D	D	D
MARION, VA													
31-33	Manufacturing	-	8	3	f	D	D	D	D	D	D	D	1 298

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MARTINSVILLE, VA (IC)													
31-33	Manufacturing	-	39	24	8 726	203 035	7 241	14 000	146 246	345 425	372 898	724 148	17 535
315	Apparel mfg	-	5	4	4 847	115 564	4 028	7 550	84 929	171 750	165 196	342 070	D
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	h	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	3	2	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	3	2	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	6	4	581	11 577	401	624	6 628	15 565	29 684	45 443	725
3219	Other wood product mfg ...	-	5	3	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	5	2 327	47 096	2 060	4 287	36 277	93 205	93 472	187 266	5 941
3371	Household & institutional furniture & kitchen cabinet mfg	-	8	5	2 327	47 096	2 060	4 287	36 277	93 205	93 472	187 266	5 941
33712	Household & institutional furniture mfg	-	7	5	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	6	4	g	D	D	D	D	D	D	D	D
NEWPORT NEWS, VA (IC)													
31-33	Manufacturing	-	131	44	24 707	898 354	19 157	38 325	574 677	1 653 589	1 646 406	3 300 476	93 324
333	Machinery mfg	1	10	6	f	D	D	D	D	D	D	D	5 134
334	Computer & electronic product mfg	-	8	4	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	9	6	j	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	4	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	3	3	j	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	3	j	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	2	2	j	D	D	D	D	D	D	D	D
NORFOLK, VA (IC)													
31-33	Manufacturing	-	199	68	10 996	402 176	8 838	18 150	303 435	2 789 712	2 959 879	5 737 284	91 185
311	Food mfg	-	16	9	1 301	29 015	836	1 608	12 997	81 846	73 327	154 586	4 825
3118	Bakeries & tortilla mfg	-	8	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	7	3	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	31	9	f	D	D	D	D	D	D	D	815
336	Transportation equipment mfg	-	21	14	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	17	13	h	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	17	13	h	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	14	11	h	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NORFOLK, VA (IC)— Con.												
	Manufacturing— Con.												
339	Miscellaneous mfg.....	-	20	6	f	D	D	D	D	D	D	D	3 020
3399	Other miscellaneous mfg ..	-	12	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D
	ORANGE, VA												
31-33	Manufacturing	4	13	5	604	12 787	493	820	9 112	24 762	23 581	48 935	3 675
	PETERSBURG, VA (IC)												
31-33	Manufacturing	-	43	20	2 553	72 398	1 771	3 781	39 076	145 376	257 679	409 643	D
332	Fabricated metal product mfg	-	7	4	760	23 513	582	1 522	15 415	47 890	51 919	100 992	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg	-	1	1	f	D	D	D	D	D	D	D	D
	PORTSMOUTH, VA (IC)												
31-33	Manufacturing	-	71	15	1 812	51 951	1 341	2 681	33 609	143 648	224 566	368 724	14 213
311	Food mfg	-	13	5	955	23 844	739	1 614	16 388	85 492	152 173	239 157	4 222
3116	Meat product mfg	-	4	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	4	3	f	D	D	D	D	D	D	D	D
	PULASKI, VA												
31-33	Manufacturing	-	13	9	h	D	D	D	D	D	D	D	12 982
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	1	1	g	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	g	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	g	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	3	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	4	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D
	RADFORD, VA (IC)												
31-33	Manufacturing	-	21	11	2 838	84 600	2 111	4 324	57 289	185 421	209 973	393 422	13 445
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 em- ploy- ees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)	
RICHMOND, VA (IC)														
31-33	Manufacturing	-	325	119	21 879	941 202	14 775	29 738	539 544	8 229 631	3 450 159	11 748 251	429 426	
311	Food mfg	1	25	11	g	D	D	D	D	D	D	D	27 768	
3118	Bakeries & tortilla mfg	-	15	5	f	D	D	D	D	D	D	D	D	
31181	Bread & bakery product mfg	-	14	4	f	D	D	D	D	D	D	D	D	
311812	Commercial bakeries	-	4	3	f	D	D	D	D	D	D	D	D	
312	Beverage & tobacco product mfg	-	6	5	i	D	D	D	D	D	D	D	D	
3122	Tobacco mfg	-	4	4	i	D	D	D	D	D	D	D	D	
31222	Tobacco product mfg	-	2	2	i	D	D	D	D	D	D	D	D	
312221	Cigarette mfg	-	1	1	i	D	D	D	D	D	D	D	D	
322	Paper mfg	-	22	17		2 959	111 917	2 370	5 632	79 787	256 983	429 436	683 166	35 918
3222	Converted paper product mfg	-	19	14	h	D	D	D	D	D	D	D	20 152	
32221	Paperboard container mfg	-	14	10		2 179	85 984	1 729	4 088	60 232	185 367	319 334	503 682	18 894
322211	Corrugated & solid fiber box mfg	-	8	5	f	D	D	D	D	D	D	D	D	
322212	Folding paperboard box mfg	-	5	4	g	D	D	D	D	D	D	D	D	
323	Printing & related support activities	-	69	19	g	D	D	D	D	D	D	D	12 306	
3231	Printing & related support activities	-	69	19	g	D	D	D	D	D	D	D	12 306	
32311	Printing	-	56	16	g	D	D	D	D	D	D	D	D	
323110	Commercial lithographic printing	-	30	8	g	D	D	D	D	D	D	D	9 857	
325	Chemical mfg	-	16	8		1 334	51 927	689	1 668	19 504	607 149	177 582	799 929	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D	
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D	
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D	
326	Plastics & rubber products mfg	-	7	5	f	D	D	D	D	D	D	D	D	
3261	Plastics product mfg	-	7	5	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3313	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D	
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D	
331315	Aluminum sheet, plate, & foil mfg	-	1	1	f	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	-	45	13	g	D	D	D	D	D	D	D	4 319	
333	Machinery mfg	-	21	9	f	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	7	31	8	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	-	28	5	g	D	D	D	D	D	D	D	3 476	
3391	Medical equipment & supplies mfg	-	11	2	f	D	D	D	D	D	D	D	D	
33911	Medical equipment & supplies mfg	-	11	2	f	D	D	D	D	D	D	D	D	
339113	Surgical appliance & supplies mfg	-	4	2	f	D	D	D	D	D	D	D	D	
ROANOKE, VA (IC)														
31-33	Manufacturing	-	152	58	8 489	242 893	5 819	11 449	144 136	1 213 436	967 261	2 156 333	D	
311	Food mfg	-	7	6	f	D	D	D	D	D	D	D	D	
315	Apparel mfg	-	5	4	f	D	D	D	D	D	D	D	D	
3152	Cut & sew apparel mfg	-	4	4	f	D	D	D	D	D	D	D	D	
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D	
315233	Women's & girls' cut & sew dress mfg	-	1	1	f	D	D	D	D	D	D	D	D	
322	Paper mfg	-	8	6	f	D	D	D	D	D	D	D	D	
3222	Converted paper product mfg	-	8	6	f	D	D	D	D	D	D	D	D	
323	Printing & related support activities	1	21	3		545	16 930	351	730	9 596	36 634	16 819	53 520	D
3231	Printing & related support activities	1	21	3		545	16 930	351	730	9 596	36 634	16 819	53 520	D
32311	Printing	1	20	3	f	D	D	D	D	D	D	D	D	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ROANOKE, VA (IC)—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg	-	7	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	10	3	1 139	45 307	673	1 512	20 633	74 813	158 894	233 099	D
3333	Commercial & service industry machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	10	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	4	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	4	2	f	D	D	D	D	D	D	D	D
ROCKY MOUNT, VA													
31-33	Manufacturing	-	26	13	2 986	76 998	2 259	5 066	49 332	168 118	175 522	333 925	11 226
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	12	6	1 446	42 284	1 006	2 675	24 536	73 094	82 937	151 384	D
3219	Other wood product mfg ...	-	7	3	1 245	31 922	848	2 331	20 669	53 168	40 564	92 523	D
32191	Millwork	-	2	1	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	g	D	D	D	D	D	D	D	D
SALEM, VA (IC)													
31-33	Manufacturing	-	73	28	6 478	202 349	4 367	8 614	115 283	555 145	482 326	1 035 605	35 308
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	2	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32621	Tire mfg	-	1	1	f	D	D	D	D	D	D	D	D
326211	Tire mfg (except retreading)	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	1	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	2	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337121	Upholstered household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
SMITHFIELD, VA													
31-33	Manufacturing	-	6	4	h	D	D	D	D	D	D	D	D
311	Food mfg	-	4	4	h	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	4	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	4	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	2	2	h	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SOUTH BOSTON, VA *												
31-33	Manufacturing	-	26	11	2 394	54 090	2 157	4 028	46 614	126 800	180 187	306 895	6 263
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
	SOUTH HILL, VA												
31-33	Manufacturing	1	20	10	989	24 184	856	1 758	18 584	65 436	99 011	164 472	11 609
	STRASBURG, VA												
31-33	Manufacturing	4	7	4	1 982	61 950	1 602	3 521	49 333	155 505	136 985	293 077	10 429
323	Printing & related support activities	9	1	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	1	1	f	D	D	D	D	D	D	D	D
32311	Printing	9	1	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	1	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	1	1	f	D	D	D	D	D	D	D	D
	SUFFOLK, VA (IC)												
31-33	Manufacturing	-	52	23	2 257	63 796	1 920	3 676	48 586	539 571	562 685	1 103 490	18 520
311	Food mfg	-	10	4	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	6	4	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	-	2	2	f	D	D	D	D	D	D	D	D
311920	Coffee & tea mfg	-	2	2	f	D	D	D	D	D	D	D	D
	VINTON, VA												
31-33	Manufacturing	-	12	2	f	D	D	D	D	D	D	D	1 331
313	Textile mills	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
	VIRGINIA BEACH, VA (IC)												
31-33	Manufacturing	1	236	48	5 806	139 250	3 913	7 339	82 114	380 394	580 765	967 231	27 005
323	Printing & related support activities	6	56	7	1 138	19 459	495	936	10 780	42 753	43 970	86 779	7 901
3231	Printing & related support activities	6	56	7	1 138	19 459	495	936	10 780	42 753	43 970	86 779	7 901
32311	Printing	6	52	7	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	7	25	4	844	14 481	288	609	7 345	34 164	32 333	66 485	7 184
327	Nonmetallic mineral product mfg	-	8	2	540	15 621	404	903	8 798	38 344	34 545	72 797	1 771
333	Machinery mfg	-	12	5	1 026	33 199	673	1 154	17 765	131 951	270 266	404 624	9 132
3331	Agriculture, construction, & mining machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	16	3	632	13 105	470	1 051	8 832	24 347	19 945	44 575	691
3345	Navigational, measuring, medical, & control instruments mfg	-	6	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VIRGINIA BEACH, VA (IC)—Con.													
31-33	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	35	8	771	18 645	572	1 025	11 666	42 211	38 540	81 438	1 223
3399	Other miscellaneous mfg ..	-	21	7	691	16 764	521	947	10 729	38 419	36 217	75 240	1 006
WAYNESBORO, VA (IC)													
31-33	Manufacturing	-	31	16	4 558	160 180	2 589	6 037	81 567	452 490	356 945	802 492	50 119
313	Textile mills	-	2	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	2	2	f	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	-	1	1	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	g	D	D	D	D	D	D	D	D
32522	Artificial & synthetic fibers & filaments mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
325222	Noncellulosic organic fiber mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
WEST POINT, VA													
31-33	Manufacturing	-	7	4	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
WILLIAMSBURG, VA (IC)													
31-33	Manufacturing	-	14	2	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
WINCHESTER, VA (IC)													
31-33	Manufacturing	-	43	25	6 047	196 114	4 647	9 423	130 883	791 080	648 810	1 431 331	47 066
311	Food mfg	2	5	3	797	22 676	619	1 267	15 723	142 873	107 621	251 241	5 917
3114	Fruit & vegetable preserving & specialty food mfg	9	1	1	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	9	1	1	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	9	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	6	5	2 011	63 209	1 362	2 499	32 351	285 839	246 988	524 769	30 991
3261	Plastics product mfg	-	5	4	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WYTHEVILLE, VA												
31-33	Manufacturing	-	28	13	1 894	46 592	1 565	3 099	34 015	147 903	109 689	254 905	9 046
326	Plastics & rubber products mfg	-	4	3	571	15 162	437	938	9 734	53 203	27 913	81 252	2 613
332	Fabricated metal product mfg	-	7	4	728	18 071	607	1 205	13 555	43 276	34 807	77 491	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
VIRGINIA		VIRGINIA—Con.	
Companies ¹ number..	5 455	Quantity of electricity purchased for heat and power 1,000 kWh..	18 038 824
All establishments number..	5 986	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	1 690 829
Establishments with 1 to 19 employees number..	3 944	Total value of shipments \$1,000..	83 814 009
Establishments with 20 to 99 employees number..	1 287	Value of resales \$1,000..	2 732 344
Establishments with 100 employees or more number..	755	Value added \$1,000..	43 563 006
All employees number..	370 595	Total inventories, beginning of year \$1,000..	9 913 960
Total compensation ² \$1,000..	14 529 654	Finished goods inventories, beginning of year \$1,000..	2 745 566
Annual payroll \$1,000..	11 557 793	Work-in-process inventories, beginning of year \$1,000..	2 173 257
Total fringe benefits \$1,000..	2 971 861	Materials and supplies inventories, beginning of year \$1,000..	4 995 137
Production workers, average for year number..	279 682	Total inventories, end of year \$1,000..	10 330 372
Production workers on March 12 number..	278 551	Finished goods inventories, end of year \$1,000..	2 904 672
Production workers on May 12 number..	279 339	Work-in-process inventories, end of year \$1,000..	2 140 875
Production workers on August 12 number..	279 663	Materials and supplies inventories, end of year \$1,000..	5 284 825
Production workers on November 12 number..	281 175	Gross book value of total assets at beginning of year \$1,000..	31 173 890
Production-worker hours 1,000..	559 635	Total capital expenditures (new and used) \$1,000..	3 425 293
Production-worker wages \$1,000..	7 412 163	Capital expenditures for buildings and other structures (new and used) \$1,000..	566 696
Total cost of materials \$1,000..	40 367 360	Capital expenditures for machinery and equipment (new and used) \$1,000..	2 858 597
Cost of materials, parts, containers, etc., consumed \$1,000..	35 925 511	Total retirements ² \$1,000..	870 025
Cost of resales \$1,000..	2 233 553	Gross book value of total assets at end of year \$1,000..	33 729 158
Cost of fuels \$1,000..	486 297	Total depreciation during year ² \$1,000..	1 999 074
Cost of purchased electricity \$1,000..	771 281	Total rental payments ² \$1,000..	496 054
Cost of contract work \$1,000..	950 718	Buildings and other structures rental payments ² \$1,000..	219 073
		Machinery and equipment rental payments ² \$1,000..	276 981

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

- 2269 Finishing plants, n.e.c.
- 2282 Yarn throwing and winding mills (pt)
- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)
- 5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

VIRGINIA

Castlewood was incorporated in April 1991, but this change was not submitted to the Census Bureau until June 1994.

Farmville is in Cumberland and Prince Edward Counties.

Halifax County includes South Boston, formerly an independent city, whose area reverted to Halifax County.

South Boston was formerly an independent city; its area reverted to Halifax County in June 1995.

Appendix E. Metropolitan Areas

VIRGINIA

Charlottesville, VA MSA

Albemarle County, VA
Fluvanna County, VA
Greene County, VA
Charlottesville, VA (IC)

Danville, VA MSA

Pittsylvania County, VA
Danville, VA (IC)

Johnson City—Kingsport—Bristol, TN—VA MSA

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol, VA (IC)

Lynchburg, VA MSA

Amherst County, VA
Bedford County, VA
Campbell County, VA
Bedford, VA (IC)
Lynchburg, VA (IC)

Norfolk—Virginia Beach—Newport News, VA—NC MSA

Currituck County, NC
Gloucester County, VA
Isle of Wight County, VA
James City County, VA
Mathews County, VA
York County, VA
Chesapeake, VA (IC)

Norfolk—Virginia Beach—Newport News, VA—NC MSA—Con.

Hampton, VA (IC)
Newport News, VA (IC)
Norfolk, VA (IC)
Poquoson, VA (IC)
Portsmouth, VA (IC)
Suffolk, VA (IC)
Virginia Beach, VA (IC)
Williamsburg, VA (IC)

Richmond—Petersburg, VA MSA

Charles City County, VA
Chesterfield County, VA
Dinwiddie County, VA
Goochland County, VA
Hanover County, VA
Henrico County, VA
New Kent County, VA
Powhatan County, VA
Prince George County, VA
Colonial Heights, VA (IC)
Hopewell, VA (IC)
Petersburg, VA (IC)
Richmond, VA (IC)

Roanoke, VA MSA

Botetourt County, VA
Roanoke County, VA
Roanoke, VA (IC)
Salem, VA (IC)

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC
Calvert County, MD
Charles County, MD

Washington, DC—MD—VA—WV PMSA—Con.

Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA
Fauquier County, VA
King George County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria, VA (IC)
Fairfax, VA (IC)
Falls Church, VA (IC)
Fredericksburg, VA (IC)
Manassas, VA (IC)
Manassas Park, VA (IC)
Berkeley County, WV
Jefferson County, WV

Washington—Baltimore, DC—MD—VA—WV CMSA

Baltimore, MD PMSA
Anne Arundel County, MD
Baltimore County, MD
Carroll County, MD
Harford County, MD
Howard County, MD
Queen Anne's County, MD
Baltimore, MD (IC)

Washington—Baltimore, DC—MD—VA—WV CMSA—Con.

Hagerstown, MD PMSA
Washington County, MD
Washington, DC—MD—VA—WV PMSA
District of Columbia, DC
Calvert County, MD
Charles County, MD
Frederick County, MD
Montgomery County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Culpeper County, VA
Fairfax County, VA
Fauquier County, VA
King George County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria, VA (IC)
Fairfax, VA (IC)
Falls Church, VA (IC)
Fredericksburg, VA (IC)
Manassas, VA (IC)
Manassas Park, VA (IC)
Berkeley County, WV
Jefferson County, WV

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
VERMONT													
31-33	Manufacturing	-	1 226	340	42 533	1 459 605	29 318	57 783	758 021	4 044 564	3 915 893	7 803 041	733 131
311	Food mfg	1	150	40	2 930	78 603	2 090	4 041	51 954	287 646	507 988	798 599	24 063
3111	Animal food mfg	1	7	4	205	6 143	137	268	3 731	23 856	74 226	97 913	D
31111	Animal food mfg	1	7	4	205	6 143	137	268	3 731	23 856	74 226	97 913	D
311119	Other animal food mfg	1	5	4	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	6	10	2	122	2 541	89	154	1 439	8 832	5 344	14 457	598
3115	Dairy product mfg	-	26	19	1 624	50 647	1 217	2 524	35 557	199 306	369 325	570 809	20 255
31151	Dairy product (except frozen) mfg	-	22	15	g	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	2	7	5	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	13	8	639	17 180	488	990	11 676	82 531	195 228	277 997	6 370
311514	Dry, condensed, & evaporated dairy product mfg	-	2	2	e	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	-	4	4	e	D	D	D	D	D	D	D	D
311520	Ice cream & frozen dessert mfg	-	4	4	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	14	2	135	2 673	105	191	1 684	5 250	19 296	25 135	253
31161	Animal slaughtering & processing	3	14	2	135	2 673	105	191	1 684	5 250	19 296	25 135	253
3118	Bakeries & tortilla mfg	2	56	7	556	10 427	333	605	5 988	33 651	20 701	54 420	802
31181	Bread & bakery product mfg	2	49	5	454	8 046	261	446	4 499	28 385	15 499	43 896	D
311811	Retail bakeries	8	26	-	c	D	D	D	D	D	D	D	D
311812	Commercial bakeries	1	22	5	331	6 565	184	359	3 684	24 661	12 983	37 644	458
31182	Cookie, cracker, & pasta mfg	-	6	2	c	D	D	D	D	D	D	D	D
3119	Other food mfg	4	24	3	183	3 917	124	187	2 279	10 354	11 779	22 136	987
312	Beverage & tobacco product mfg	5	15	6	c	D	D	D	D	D	D	D	D
3121	Beverage mfg	5	15	6	c	D	D	D	D	D	D	D	D
31212	Breweries	5	12	6	c	D	D	D	D	D	D	D	D
312120	Breweries	5	12	6	c	D	D	D	D	D	D	D	D
313	Textile mills	1	12	2	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	-	3	1	c	D	D	D	D	D	D	D	D
31332	Fabric coating mills	-	1	1	c	D	D	D	D	D	D	D	D
313320	Fabric coating mills	-	1	1	c	D	D	D	D	D	D	D	D
314	Textile product mills	3	33	4	246	4 613	166	245	2 083	10 543	10 291	20 735	D
3141	Textile furnishings mills	3	12	3	114	2 024	71	102	786	5 535	5 120	10 559	D
3149	Other textile product mills	4	21	1	132	2 589	95	143	1 297	5 008	5 171	10 176	D
315	Apparel mfg	1	38	9	1 031	17 142	729	1 464	11 311	49 880	48 559	94 319	D
3151	Apparel knitting mills	-	4	2	c	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	c	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	c	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	-	3	1	c	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	-	3	1	c	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	1	28	7	790	12 973	513	978	7 887	41 418	43 639	81 141	D
31521	Cut & sew apparel contractors	2	10	2	116	1 655	108	222	1 449	2 908	586	3 484	D
31522	Men's & boys' cut & sew apparel mfg	-	3	2	189	3 022	163	329	2 293	5 998	3 519	9 281	D
315221	Men's & boys' cut & sew underwear & nightwear mfg	-	1	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	10	3	464	7 976	224	396	3 903	31 677	39 241	67 258	D
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	-	1	1	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	5	1	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VERMONT—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	1	140	39	3 290	82 220	2 737	5 605	61 843	183 510	238 773	419 582	13 756
3211	Sawmills & wood preservation	1	46	12	854	25 737	711	1 526	19 190	59 554	72 790	132 378	6 719
32111	Sawmills & wood preservation	1	46	12	854	25 737	711	1 526	19 190	59 554	72 790	132 378	6 719
321113	Sawmills	1	44	12	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	7	4	707	17 794	626	1 358	14 162	40 476	43 941	82 614	2 044
32121	Veneer, plywood, & engineered wood product mfg	—	7	4	707	17 794	626	1 358	14 162	40 476	43 941	82 614	2 044
321211	Hardwood veneer & plywood mfg	—	4	4	698	17 601	620	1 345	14 038	40 089	43 384	81 644	D
3219	Other wood product mfg	1	87	23	1 729	38 689	1 400	2 721	28 491	83 480	122 042	204 590	4 993
32191	Millwork	2	31	6	466	7 670	339	655	5 767	26 227	20 700	46 875	1 917
321911	Wood window & door mfg	—	9	2	128	2 288	106	226	1 674	10 139	14 582	24 656	835
321912	Cut stock, resawing lumber, & planing	4	15	3	255	3 991	166	318	3 042	8 130	7 714	15 826	934
32199	All other wood product mfg	1	48	16	1 185	29 463	988	1 933	21 353	60 326	92 496	152 024	2 533
321991	Manufactured home (mobile home) mfg	—	1	1	c	D	D	D	D	D	D	D	D
321992	Prefabricated wood building mfg	1	10	3	c	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg	1	37	12	926	23 457	787	1 614	17 576	45 154	69 673	114 066	2 335
322	Paper mfg	1	16	11	1 735	58 952	1 371	2 948	41 150	172 017	211 712	382 141	25 068
3221	Pulp, paper, & paperboard mills	1	6	6	g	D	D	D	D	D	D	D	D
32212	Paper mills	2	5	5	1 015	36 955	763	1 628	24 009	91 155	99 332	191 312	18 346
322121	Paper (except newsprint) mills	2	5	5	1 015	36 955	763	1 628	24 009	91 155	99 332	191 312	18 346
32213	Paperboard mills	—	1	1	c	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	1	1	c	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	10	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	4	2	248	6 531	208	451	5 186	17 915	39 891	56 484	D
322215	Nonfolding sanitary food container mfg	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	—	4	2	e	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	135	28	3 231	97 554	2 379	4 755	66 644	229 388	168 561	397 227	15 172
3231	Printing & related support activities	1	135	28	3 231	97 554	2 379	4 755	66 644	229 388	168 561	397 227	15 172
32311	Printing	1	116	25	3 075	92 387	2 258	4 525	63 501	220 876	166 365	386 374	14 617
323110	Commercial lithographic printing	2	50	16	1 703	51 382	1 228	2 596	35 059	95 591	78 981	174 136	6 710
323113	Commercial screen printing	2	13	1	102	1 921	78	133	1 199	4 126	4 147	8 250	404
323114	Quick printing	1	29	1	198	4 920	123	204	2 670	9 002	5 991	14 978	755
323116	Manifold business form printing	—	5	3	447	16 458	361	740	12 577	84 241	52 320	136 252	4 364
323117	Book printing	1	4	3	467	13 136	376	689	9 879	18 205	17 564	35 763	1 143
32312	Support activities for printing	2	19	3	156	5 167	121	230	3 143	8 512	2 196	10 853	555
323122	Prepress services	3	17	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg	2	18	8	475	14 444	293	513	6 230	40 428	44 267	84 813	D
3251	Basic chemical mfg	9	2	1	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	9	1	1	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	9	1	1	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	1	6	3	208	5 711	106	171	1 792	13 519	13 924	27 582	D
32561	Soap & cleaning compound mfg	—	3	1	c	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	—	2	1	c	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg	3	3	2	c	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg	3	3	2	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VERMONT—Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	4	40	21	1 857	53 956	1 440	2 818	34 997	134 428	127 066	262 820	D
3261	Plastics product mfg	5	36	20	g	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	4	2	129	3 596	117	219	3 054	15 037	11 145	26 413	D
32619	Other plastics product mfg	6	26	16	1 523	43 804	1 152	2 249	27 057	95 997	95 513	192 769	D
326199	All other plastics product mfg	6	26	16	1 523	43 804	1 152	2 249	27 057	95 997	95 513	192 769	D
327	Nonmetallic mineral product mfg	2	126	26	1 813	55 456	1 352	2 690	38 083	122 397	86 108	210 485	10 012
3271	Clay product & refractory mfg	—	14	3	208	5 418	152	301	2 954	12 657	9 502	22 141	718
32711	Pottery, ceramics, & plumbing fixture mfg	—	14	3	208	5 418	152	301	2 954	12 657	9 502	22 141	718
327113	Porcelain electrical supply mfg	—	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	4	19	2	c	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	4	19	2	c	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	2	7	1	105	3 754	21	41	577	3 717	2 190	5 912	176
3273	Cement & concrete product mfg	3	24	4	359	13 630	281	594	9 819	33 588	23 359	56 978	2 510
32732	Ready-mix concrete mfg	—	14	1	126	4 282	106	235	4 061	10 917	12 273	23 204	1 393
327320	Ready-mix concrete mfg	—	14	1	126	4 282	106	235	4 061	10 917	12 273	23 204	1 393
32739	Other concrete product mfg	5	8	3	c	D	D	D	D	D	D	D	D
327390	Other concrete product mfg	5	8	3	c	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	67	17	1 075	31 381	850	1 677	23 940	69 812	48 362	120 064	6 399
32799	All other nonmetallic mineral product mfg	1	66	17	g	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	1	61	15	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	3	2	e	D	D	D	D	D	D	D	D
3315	Foundries	—	2	2	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	2	2	e	D	D	D	D	D	D	D	D
331511	Iron foundries	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	113	30	3 207	110 408	2 174	4 542	61 720	272 702	167 865	437 763	12 909
3322	Cutlery & handtool mfg	—	7	3	421	15 211	327	650	10 449	49 110	23 860	73 275	2 258
33221	Cutlery & handtool mfg	—	7	3	421	15 211	327	650	10 449	49 110	23 860	73 275	2 258
332212	Hand & edge tool mfg	—	5	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	2	25	8	670	18 342	522	1 068	12 188	36 077	36 738	72 832	2 049
33232	Ornamental & architectural metal products mfg	2	20	7	596	16 092	471	979	10 892	36 434	25 093	61 543	1 702
332322	Sheet metal work mfg	2	11	6	537	14 633	426	898	9 937	33 796	23 214	56 960	1 608
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	51	8	768	23 822	595	1 261	17 548	48 330	19 059	67 688	4 034
33271	Machine shops	2	41	6	412	12 697	322	669	9 331	25 686	9 672	35 681	2 172
332710	Machine shops	2	41	6	412	12 697	322	669	9 331	25 686	9 672	35 681	2 172
33272	Turned product & screw, nut, & bolt mfg	—	10	2	356	11 125	273	592	8 217	22 644	9 387	32 007	1 862
332721	Precision turned product mfg	—	7	2	316	10 103	243	545	7 586	19 661	7 381	27 032	D
3328	Coating, engraving, heat treating, & allied activities	5	9	3	146	3 619	123	246	2 761	6 781	2 224	9 131	584
33281	Coating, engraving, heat treating, & allied activities	5	9	3	146	3 619	123	246	2 761	6 781	2 224	9 131	584
3329	Other fabricated metal product mfg	—	13	6	1 073	45 985	553	1 218	17 383	125 881	77 607	200 077	3 608
33291	Metal valve mfg	—	1	1	c	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	—	1	1	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	12	5	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	7	2	168	3 263	128	266	2 340	7 565	3 617	11 101	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	VERMONT—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	1	91	36	3 644	125 159	2 488	4 749	73 024	281 488	186 365	464 908	18 141
3332	Industrial machinery mfg ..	-	20	6	437	18 482	222	378	6 613	36 166	41 420	78 255	1 817
33329	Other industrial machinery mfg	-	14	5	373	16 290	185	306	5 681	30 884	38 011	69 746	1 765
333295	Semiconductor machinery mfg	-	1	1	c	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	-	3	1	c	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	10	6	661	26 058	482	805	16 817	58 975	25 211	86 084	1 684
33331	Commercial & service industry machinery mfg	-	10	6	661	26 058	482	805	16 817	58 975	25 211	86 084	1 684
333314	Optical instrument & lens mfg	-	7	5	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	-	2	1	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	7	7	3	230	7 040	150	305	3 593	20 522	16 247	36 769	2 298
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	7	7	3	230	7 040	150	305	3 593	20 522	16 247	36 769	2 298
333414	Heating equipment (except warm air furnaces) mfg	7	6	3	c	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	26	15	1 575	51 010	1 198	2 379	34 277	99 326	51 724	145 684	10 265
33351	Metalworking machinery mfg	-	26	15	1 575	51 010	1 198	2 379	34 277	99 326	51 724	145 684	10 265
333512	Machine tool (metal cutting types) mfg ...	-	5	4	651	23 796	439	845	14 276	50 706	21 067	65 644	D
333514	Special die & tool, die set, jig, & fixture mfg ..	1	6	4	176	6 024	139	264	3 880	9 407	12 982	22 515	D
333515	Cutting tool & machine tool accessory mfg ..	-	11	5	660	18 444	544	1 110	13 989	35 224	14 299	50 580	3 036
3336	Engine, turbine, & power transmission equipment mfg	-	4	1	c	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	4	1	c	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	1	1	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	21	4	538	16 295	289	529	7 529	42 580	25 073	68 627	905
33399	All other general-purpose machinery mfg	-	19	3	e	D	D	D	D	D	D	D	D
333997	Scale & balance (except laboratory) mfg	-	2	1	c	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	14	2	250	7 794	162	286	4 394	19 239	11 847	31 481	461
334	Computer & electronic product mfg	-	52	16	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	22	10	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	22	10	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	4	1	i	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	3	3	291	7 356	229	441	4 785	15 177	10 398	25 534	D
334418	Printed circuit assembly (electronic assembly) mfg	-	4	4	266	6 119	207	402	3 768	12 473	11 830	24 281	D
334419	Other electronic component mfg	9	3	1	c	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	18	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	18	4	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	2	1	c	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	4	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	VERMONT—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg—Con.													
3346	Mfg & reproducing magnetic & optical media	1	6	1	c	D	D	D	D	D	D	D	D	
33461	Mfg & reproducing magnetic & optical media	1	6	1	c	D	D	D	D	D	D	D	D	
334612	Prerecorded CD (except software), tape, & record reproducing	—	3	1	c	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	—	20	10		1 373	48 091	969	1 906	26 980	99 829	113 163	216 637	15 025
3351	Electric lighting equipment mfg	—	5	3		283	8 529	204	371	4 892	12 764	23 398	36 763	D
33512	Lighting fixture mfg	—	5	3		283	8 529	204	371	4 892	12 764	23 398	36 763	D
335121	Residential electric lighting fixture mfg	—	2	2	c		D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	—	2	1	c		D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	12	7		1 075	39 002	755	1 511	21 785	85 661	88 424	177 103	12 321
33591	Battery mfg	—	1	1	e		D	D	D	D	D	D	D	D
335912	Primary battery mfg	—	1	1	e		D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	3	3		445	14 978	312	565	8 649	35 435	49 385	85 850	3 150
335929	Other communication & energy wire mfg	—	3	3		445	14 978	312	565	8 649	35 435	49 385	85 850	3 150
33599	All other electrical equipment & component mfg	—	6	3	e		D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	—	6	3	e		D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	17	9		2 533	102 690	1 911	3 640	74 601	189 487	128 351	311 239	D
3363	Motor vehicle parts mfg	—	4	2	f		D	D	D	D	D	D	D	D
33633	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	e		D	D	D	D	D	D	D	D
336330	Motor vehicle steering & suspension component (except spring) mfg	—	1	1	e		D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	6	4	g		D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	6	4	g		D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	3	3	g		D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	1	1	e		D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	e		D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	e		D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	81	18		2 662	61 824	2 392	4 748	52 303	95 606	86 139	181 123	23 828
3371	Household & institutional furniture & kitchen cabinet mfg	1	67	15		2 491	56 874	2 255	4 493	49 395	85 958	80 486	165 888	23 320
33712	Household & institutional furniture mfg	1	48	14		2 407	55 054	2 191	4 376	48 102	82 562	77 634	159 656	23 218
337122	Nonupholstered wood household furniture mfg	1	39	12		2 229	52 043	2 034	4 138	45 569	71 574	69 617	140 638	D
337127	Institutional furniture mfg	—	4	1	c		D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	1	14	3		171	4 950	137	255	2 908	9 648	5 653	15 235	508
33721	Office furniture (including fixtures) mfg	1	14	3		171	4 950	137	255	2 908	9 648	5 653	15 235	508
337215	Showcase, partition, shelving, & locker mfg	1	6	2		115	3 461	97	209	2 333	6 022	3 685	9 589	326

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	VERMONT—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	-	115	23	2 193	53 381	1 492	2 542	27 048	164 026	152 386	306 875	11 182
3391	Medical equipment & supplies mfg.....	3	27	4	245	6 295	150	231	2 910	9 744	4 936	14 425	2 717
33911	Medical equipment & supplies mfg.....	3	27	4	245	6 295	150	231	2 910	9 744	4 936	14 425	2 717
3399	Other miscellaneous mfg..	-	88	19	1 948	47 086	1 342	2 311	24 138	154 282	147 450	292 450	8 465
33991	Jewelry & silverware mfg.....	1	15	2	c	D	D	D	D	D	D	D	D
339914	Costume jewelry & novelty mfg.....	-	3	1	c	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg.....	-	12	5	567	17 401	315	616	6 474	91 169	111 723	196 746	4 322
339920	Sporting & athletic goods mfg.....	-	12	5	567	17 401	315	616	6 474	91 169	111 723	196 746	4 322
33993	Doll, toy, & game mfg...	-	13	3	447	8 448	327	578	5 202	17 965	10 859	28 015	720
339931	Doll & stuffed toy mfg.	-	3	1	c	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg.....	-	10	2	c	D	D	D	D	D	D	D	D
33995	Sign mfg.....	2	18	4	248	6 963	156	262	3 678	13 517	7 276	19 402	598
339950	Sign mfg.....	2	18	4	248	6 963	156	262	3 678	13 517	7 276	19 402	598
33999	All other miscellaneous mfg.....	1	28	5	449	9 965	381	632	6 958	22 026	14 286	35 555	2 724
339994	Broom, brush, & mop mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg.....	6	17	3	145	2 828	111	146	1 630	5 023	4 516	9 478	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; g–500 to 999 employees; i–1,000 to 2,499 employees; k–2,500 to 4,999 employees; m–5,000 to 9,999 employees; o–10,000 to 24,999 employees; q–25,000 to 49,999 employees; s–50,000 to 99,999 employees; u–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BURLINGTON, VT MSA												
	Manufacturing	-	272	86	16 376	687 511	9 451	18 928	238 405	2 218 327	2 273 284	4 351 111	574 792
311	Food mfg.....	-	46	17	1 263	35 789	857	1 698	23 397	112 939	211 979	327 747	12 289
3115	Dairy product mfg.....	-	9	8	715	24 777	529	1 042	16 982	83 118	162 953	248 435	11 201
31151	Dairy product (except frozen) mfg.....	-	8	7	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	1	19	4	319	5 771	168	347	3 419	12 753	10 201	23 004	378
31181	Bread & bakery product mfg.....	2	17	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	3	41	12	1 292	39 537	947	2 000	26 444	72 507	62 235	134 357	D
3231	Printing & related support activities.....	3	41	12	1 292	39 537	947	2 000	26 444	72 507	62 235	134 357	D
32311	Printing.....	3	34	11	1 228	37 052	906	1 926	25 255	68 275	61 227	129 115	D
323110	Commercial lithographic printing..	3	17	10	1 074	33 601	788	1 723	23 036	61 776	56 475	117 948	D
326	Plastics & rubber products mfg.....	5	6	4	453	10 633	330	558	6 359	22 078	19 272	42 674	D
3261	Plastics product mfg.....	5	6	4	453	10 633	330	558	6 359	22 078	19 272	42 674	D
32619	Other plastics product mfg.....	7	5	3	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	7	5	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	BURLINGTON, VT MSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	1	28	11	1 572	64 699	950	2 015	29 748	166 140	102 561	265 482	6 449
3323	Architectural & structural metals mfg	3	8	3	284	8 966	240	494	6 405	20 384	12 285	32 663	770
33232	Ornamental & architectural metal products mfg	3	5	3	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	2	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	21	9	850	31 819	523	1 010	17 358	76 138	58 143	137 558	D
3333	Commercial & service industry machinery mfg ..	—	3	2	e	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	3	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	16	6	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	7	4	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	7	4	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	3	1	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	6	4	655	23 390	463	940	13 252	43 114	68 617	114 530	D
3359	Other electrical equipment & component mfg	—	4	3	e	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	2	2	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	2	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	34	8	973	23 330	597	1 066	10 547	95 302	109 282	198 501	D
3399	Other miscellaneous mfg ..	—	22	6	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	—	5	2	e	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	—	5	2	e	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	—	5	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ADDISON COUNTY, VT													
31-33	Manufacturing	-	61	17	1 871	59 438	1 227	2 206	33 525	184 665	136 846	321 856	D
334	Computer & electronic product mfg	-	7	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	1	1	f	D	D	D	D	D	D	D	D
BENNINGTON COUNTY, VT													
31-33	Manufacturing	1	88	27	3 090	94 127	2 305	4 688	62 204	249 960	255 635	504 836	D
CALEDONIA COUNTY, VT													
31-33	Manufacturing	2	55	16	1 950	53 963	1 505	3 293	36 732	115 542	80 616	198 008	18 192
CHITTENDEN COUNTY, VT													
31-33	Manufacturing	-	234	63	14 302	624 026	7 867	15 661	196 090	2 056 786	2 026 258	3 942 061	D
311	Food mfg	2	37	9	635	14 006	389	733	8 500	29 190	67 392	98 073	D
323	Printing & related support activities	1	33	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	33	8	f	D	D	D	D	D	D	D	D
32311	Printing	1	27	7	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	13	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	10	1 424	60 684	833	1 783	26 678	158 035	96 610	251 343	D
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	18	7	761	29 716	458	883	16 096	71 815	55 926	131 031	2 697
334	Computer & electronic product mfg	-	16	6	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	7	4	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	7	4	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	3	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	34	6	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	23	5	f	D	D	D	D	D	D	D	D
ESSEX COUNTY, VT													
31-33	Manufacturing	-	11	4	883	25 712	732	1 495	20 995	31 976	53 618	86 042	D
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, VT													
31-33	Manufacturing	1	68	28	2 603	78 824	1 980	4 082	52 974	209 022	337 489	546 554	20 979
311	Food mfg	-	14	10	839	27 496	618	1 260	18 782	99 969	196 931	298 210	D
3115	Dairy product mfg	-	5	5	596	21 058	446	915	14 624	77 682	125 187	203 718	D
LAMOILLE COUNTY, VT													
31-33	Manufacturing	-	51	9	697	18 021	516	1 071	10 238	46 938	39 204	85 242	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ORANGE COUNTY, VT													
31-33	Manufacturing	4	58	15	1 220	29 288	921	1 874	19 200	64 362	64 240	128 480	D
ORLEANS COUNTY, VT													
31-33	Manufacturing	1	45	9	1 565	37 249	1 336	2 579	29 498	78 528	61 562	138 109	4 899
337	Furniture & related product mfg	—	2	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	1	1	f	D	D	D	D	D	D	D	D
RUTLAND COUNTY, VT													
31-33	Manufacturing	1	123	42	4 635	150 547	3 856	7 442	116 443	310 995	238 347	542 177	24 460
321	Wood product mfg	—	15	7	992	27 159	857	1 784	20 554	57 247	82 881	138 820	2 896
3219	Other wood product mfg	—	9	5	662	18 198	561	1 143	13 651	37 076	67 811	104 600	2 370
32199	All other wood product mfg	—	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	2	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
WASHINGTON COUNTY, VT													
31-33	Manufacturing	—	152	32	2 901	84 710	1 937	3 741	47 834	218 402	227 542	446 194	D
311	Food mfg	—	22	6	551	15 545	385	760	9 250	68 870	108 294	176 454	5 678
327	Nonmetallic mineral product mfg	1	53	9	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	1	44	9	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	1	44	9	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	1	44	9	f	D	D	D	D	D	D	D	D
WINDHAM COUNTY, VT													
31-33	Manufacturing	—	120	37	3 473	99 514	2 771	5 068	69 080	240 082	205 735	442 793	32 287
321	Wood product mfg	2	20	7	541	14 181	421	917	10 154	29 041	29 694	59 018	1 863
322	Paper mfg	—	4	3	546	19 394	437	797	13 760	62 810	89 374	150 172	8 784
323	Printing & related support activities	—	17	6	603	17 809	485	938	12 835	26 072	22 852	48 978	1 914
3231	Printing & related support activities	—	17	6	603	17 809	485	938	12 835	26 072	22 852	48 978	1 914
32311	Printing	—	14	4	f	D	D	D	D	D	D	D	D
WINDSOR COUNTY, VT													
31-33	Manufacturing	2	155	40	3 300	103 226	2 330	4 525	62 516	235 564	186 961	417 079	20 316
333	Machinery mfg	—	25	12	1 094	38 665	760	1 461	23 037	77 841	36 022	108 172	D
3335	Metalworking machinery mfg	—	14	9	910	32 217	626	1 219	19 429	66 638	27 033	87 649	7 714
33351	Metalworking machinery mfg	—	14	9	910	32 217	626	1 219	19 429	66 638	27 033	87 649	7 714
333512	Machine tool (metal cutting types) mfg	—	5	4	651	23 796	439	845	14 276	50 706	21 067	65 644	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BARRE, VT												
	Manufacturing	1	50	13	993	30 874	586	1 201	14 349	63 395	45 759	109 388	D
	BELLOWS FALLS, VT												
31-33	Manufacturing	-	15	8	601	13 943	437	633	7 709	32 870	17 430	50 256	14 734
	BENNINGTON TOWN, VT												
31-33	Manufacturing	1	45	20	2 262	66 440	1 661	3 458	44 440	156 465	199 043	354 739	D
	BATTLEBORO TOWN, VT												
31-33	Manufacturing	-	44	20	2 183	69 085	1 811	3 611	49 698	170 182	156 327	324 045	13 225
	BURLINGTON, VT												
31-33	Manufacturing	1	55	14	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	5	3	790	39 942	343	783	13 278	104 235	15 024	116 248	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	-	1	1	f	D	D	D	D	D	D	D	D
	COLCHESTER TOWN, VT												
31-33	Manufacturing	-	22	6	f	D	D	D	D	D	D	D	4 443
	ESSEX JUNCTION, VT												
31-33	Manufacturing	-	6	2	i	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	i	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	i	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	i	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	-	1	1	i	D	D	D	D	D	D	D	D
	NEWPORT, VT												
31-33	Manufacturing	1	16	5	672	16 920	536	1 102	12 056	46 942	33 937	78 480	2 684
	RUTLAND, VT												
31-33	Manufacturing	-	42	15	2 456	93 298	2 085	3 967	76 560	189 099	99 818	282 015	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
	ST. ALBANS, VT												
31-33	Manufacturing	1	19	9	935	29 572	733	1 538	19 723	95 068	131 158	225 286	D
	VERGENNES, VT												
31-33	Manufacturing	-	7	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)				
31-33	WINOOSKI, VT Manufacturing	-	16	9	f	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
VERMONT		VERMONT—Con.	
Companies ¹ number..	1 178	Quantity of electricity purchased for heat and power 1,000 kWh..	1 229 611
All establishments number..	1 226	Quantity of electricity generated less sold for heat and power . . . 1,000 kWh..	D
Establishments with 1 to 19 employees number..	886	Total value of shipments \$1,000..	7 803 041
Establishments with 20 to 99 employees number..	251	Value of resales \$1,000..	577 418
Establishments with 100 employees or more number..	89	Value added \$1,000..	4 044 564
All employees number..	42 533	Total inventories, beginning of year \$1,000..	845 772
Total compensation ² \$1,000..	1 804 788	Finished goods inventories, beginning of year \$1,000..	225 871
Annual payroll \$1,000..	1 459 605	Work-in-process inventories, beginning of year \$1,000..	401 277
Total fringe benefits \$1,000..	345 183	Materials and supplies inventories, beginning of year \$1,000..	218 624
Production workers, average for year number..	29 318	Total inventories, end of year \$1,000..	1 031 363
Production workers on March 12 number..	29 145	Finished goods inventories, end of year \$1,000..	235 528
Production workers on May 12 number..	29 451	Work-in-process inventories, end of year \$1,000..	549 496
Production workers on August 12 number..	29 303	Materials and supplies inventories, end of year \$1,000..	246 339
Production workers on November 12 number..	29 373	Gross book value of total assets at beginning of year \$1,000..	3 873 577
Production-worker hours 1,000..	57 783	Total capital expenditures (new and used) \$1,000..	733 131
Production-worker wages \$1,000..	758 021	Capital expenditures for buildings and other structures (new and used) \$1,000..	79 831
Total cost of materials \$1,000..	3 915 893	Capital expenditures for machinery and equipment (new and used) \$1,000..	653 300
Cost of materials, parts, containers, etc., consumed \$1,000..	2 950 214	Total retirements ² \$1,000..	179 656
Cost of resales \$1,000..	486 285	Gross book value of total assets at end of year \$1,000..	4 427 052
Cost of fuels \$1,000..	28 929	Total depreciation during year ² \$1,000..	381 248
Cost of purchased electricity \$1,000..	86 958	Total rental payments ² \$1,000..	67 963
Cost of contract work \$1,000..	363 507	Buildings and other structures rental payments ² \$1,000..	35 461
		Machinery and equipment rental payments ² \$1,000..	32 502

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the *nsk* categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

VERMONT

There are no geographic notes for the state of Vermont.

Appendix E. Metropolitan Areas

VERMONT

Burlington, VT MSA

- Chittenden County, VT (Part)
- Burlington city, VT
- Colchester town, VT
- Essex Junction village, VT
- South Burlington city, VT
- Winooski city, VT

Burlington, VT MSA—Con.

- Franklin County, VT (Part)
- St. Albans city, VT
- Swanton village, VT
- Grand Isle County, VT (Part)

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Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
WASHINGTON													
31-33	Manufacturing	1	7 801	2 159	328 511	13 004 063	213 330	425 003	7 046 371	30 434 838	49 023 723	78 852 486	2 640 230
311	Food mfg	1	734	283	36 066	947 376	27 977	54 491	649 406	3 391 853	5 307 402	8 692 715	247 081
3111	Animal food mfg	-	31	9	477	15 037	292	567	8 037	142 322	198 241	339 479	6 682
31111	Animal food mfg	-	31	9	477	15 037	292	567	8 037	142 322	198 241	339 479	6 682
311119	Other animal food mfg	1	29	7	e	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	-	23	7	564	22 223	342	718	12 393	75 575	181 941	255 244	22 162
31121	Flour milling & malt mfg	-	12	3	374	15 781	244	515	9 155	45 516	158 501	203 994	13 786
311211	Flour milling	-	10	2	c	D	D	D	D	D	D	D	D
311213	Malt mfg	-	2	1	c	D	D	D	D	D	D	D	D
31122	Starch & vegetable fats & oils mfg	1	9	4	c	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	1	47	8	769	16 593	574	912	9 218	47 631	33 081	81 224	1 555
31133	Confectionery mfg from purchased chocolate	1	29	4	424	10 263	293	550	5 010	29 966	21 192	51 134	879
311330	Confectionery mfg from purchased chocolate	1	29	4	424	10 263	293	550	5 010	29 966	21 192	51 134	879
31134	Nonchocolate confectionery mfg	2	14	2	280	4 667	234	287	3 095	14 281	9 378	24 230	D
311340	Nonchocolate confectionery mfg	2	14	2	280	4 667	234	287	3 095	14 281	9 378	24 230	D
3114	Fruit & vegetable preserving & specialty food mfg	-	90	59	11 797	298 146	10 447	20 270	227 954	1 183 539	1 370 143	2 566 124	94 555
31141	Frozen food mfg	1	41	30	7 269	183 995	6 441	12 311	141 309	708 179	695 817	1 412 977	66 069
311411	Frozen fruit, juice, & vegetable mfg	1	30	26	6 934	175 365	6 169	11 785	135 297	671 962	672 718	1 353 660	65 434
311412	Frozen specialty food mfg	-	11	4	335	8 630	272	526	6 012	36 217	23 099	59 317	635
31142	Fruit & vegetable canning, pickling, & drying	-	49	29	4 528	114 151	4 006	7 959	86 645	475 360	674 326	1 153 147	28 486
311421	Fruit & vegetable canning	-	35	19	3 183	76 495	2 833	5 413	55 721	236 422	399 806	635 258	15 659
311422	Specialty canning	-	1	1	e	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg	-	13	9	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	2	36	22	1 998	64 018	1 276	2 458	43 928	242 569	759 616	999 349	28 800
31151	Dairy product (except frozen) mfg	1	25	17	1 631	51 165	977	1 825	33 453	208 643	671 755	875 897	25 273
311511	Fluid milk mfg	2	13	11	1 049	31 916	516	947	17 723	105 934	251 259	354 643	D
311512	Creamery butter mfg	-	2	1	c	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	6	3	e	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	4	2	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg	7	11	5	367	12 853	299	633	10 475	33 926	87 861	123 452	3 527
311520	Ice cream & frozen dessert mfg	7	11	5	367	12 853	299	633	10 475	33 926	87 861	123 452	3 527
3116	Meat product mfg	1	62	28	4 396	99 581	3 685	7 318	75 487	336 970	1 318 730	1 656 675	22 355
31161	Animal slaughtering & processing	1	62	28	4 396	99 581	3 685	7 318	75 487	336 970	1 318 730	1 656 675	22 355
311611	Animal (except poultry) slaughtering	-	25	9	2 464	51 354	2 168	4 685	43 190	163 279	1 052 151	1 211 485	12 620
311612	Meat processed from carcasses	4	30	12	1 152	29 024	963	1 726	23 099	121 619	176 270	303 564	6 621
311613	Rendering & meat byproduct processing	5	3	3	c	D	D	D	D	D	D	D	D
311615	Poultry processing	5	4	4	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging	1	120	78	7 299	186 226	6 206	12 205	146 137	485 694	686 284	1 170 892	26 100
31171	Seafood product preparation & packaging	1	120	78	7 299	186 226	6 206	12 205	146 137	485 694	686 284	1 170 892	26 100
311711	Seafood canning	3	27	10	593	11 933	446	676	6 982	31 394	40 290	71 593	1 676
311712	Fresh & frozen seafood processing	1	93	68	6 706	174 293	5 760	11 529	139 155	454 300	645 994	1 099 299	24 424
3118	Bakeries & tortilla mfg	1	254	52	6 776	185 047	3 639	7 008	89 899	511 514	411 019	921 078	30 694
31181	Bread & bakery product mfg	2	219	38	5 403	146 032	2 689	5 313	69 568	314 451	234 147	549 458	16 957
311811	Retail bakeries	5	136	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	2	79	31	4 518	131 855	2 081	4 409	61 288	275 659	202 116	477 359	15 136
311813	Frozen cakes, pies, & other pastries mfg	-	4	2	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	32	12	g	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg	3	17	5	f	D	D	D	D	D	D	D	3 294
311822	Flour mixes & dough mfg from purchased flour	-	7	4	475	19 166	314	631	8 870	125 743	121 680	242 172	9 363
311823	Dry pasta mfg	-	8	3	182	4 900	122	249	2 826	38 771	19 117	60 200	D
31183	Tortilla mfg	-	3	2	c	D	D	D	D	D	D	D	D
311830	Tortilla mfg	-	3	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—Con. Manufacturing— Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	71	20	1 990	60 505	1 516	3 035	36 353	366 039	348 347	702 650	14 178
31191	Snack food mfg	—	6	3	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	5	3	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	—	11	3	e	D	D	D	D	D	D	D	429
311920	Coffee & tea mfg	—	11	3	e	D	D	D	D	D	D	D	429
31194	Seasoning & dressing mfg	—	18	5		9 998	233	377	4 892	25 760	38 839	64 712	1 690
311941	Mayonnaise, dressing, & other prepared sauce mfg	1	9	1	146	3 689	112	198	2 175	4 951	17 363	22 314	533
311942	Spice & extract mfg	—	9	4	230	6 309	121	179	2 717	20 809	21 476	42 398	1 157
31199	All other food mfg	2	35	8	464	11 064	363	619	5 766	35 343	33 488	68 975	2 486
311991	Perishable prepared food mfg	—	13	4	260	7 127	202	356	3 110	22 053	16 235	38 404	1 604
311999	All other miscellaneous food mfg	3	22	4	204	3 937	161	263	2 656	13 290	17 253	30 571	882
312	Beverage & tobacco product mfg	1	99	34	3 603	99 496	1 718	3 101	48 762	548 727	646 008	1 161 349	41 611
3121	Beverage mfg	1	99	34	3 603	99 496	1 718	3 101	48 762	548 727	646 008	1 161 349	41 611
31211	Soft drink & ice mfg	2	26	17	1 726	51 684	844	1 530	23 797	265 103	413 645	673 649	D
312111	Soft drink mfg	2	18	15	1 623	49 560	795	1 434	22 966	261 263	411 998	668 156	13 245
312113	Ice mfg	—	8	2	103	2 124	49	96	831	3 840	1 647	5 493	D
31212	Breweries	1	34	13	1 360	32 821	683	1 265	20 518	157 541	147 479	302 580	7 234
312120	Breweries	1	34	13	1 360	32 821	683	1 265	20 518	157 541	147 479	302 580	7 234
31213	Wineries	—	38	4	f	D	D	D	D	D	D	D	20 653
312130	Wineries	—	38	4	f	D	D	D	D	D	D	D	20 653
313	Textile mills	1	48	7	928	26 648	715	1 303	18 362	62 171	121 095	182 328	20 508
3132	Fabric mills	1	30	4	661	18 477	533	961	13 633	34 809	57 560	91 748	D
31321	Broadwoven fabric mills	1	16	2	383	8 621	308	447	6 468	9 874	16 746	26 020	645
313210	Broadwoven fabric mills	1	16	2	383	8 621	308	447	6 468	9 874	16 746	26 020	645
31323	Nonwoven fabric mills	—	5	1	200	8 307	160	379	6 080	22 001	39 663	61 743	D
313230	Nonwoven fabric mills	—	5	1	200	8 307	160	379	6 080	22 001	39 663	61 743	D
3133	Textile & fabric finishing & fabric coating mills	1	17	3	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills	—	3	3	225	6 726	149	288	4 171	20 221	55 451	75 307	D
313320	Fabric coating mills	—	3	3	225	6 726	149	288	4 171	20 221	55 451	75 307	D
314	Textile product mills	1	177	29	2 173	54 031	1 677	3 167	32 500	112 340	94 470	206 308	4 546
3141	Textile furnishings mills	1	38	4	297	9 057	211	472	6 150	13 755	17 743	30 906	332
31412	Curtain & linen mills	1	36	4	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	1	30	2	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	1	6	2	160	6 605	103	276	4 674	8 508	12 419	20 368	166
3149	Other textile product mills	1	139	25	1 876	44 974	1 466	2 695	26 350	98 585	76 727	175 402	4 214
31491	Textile bag & canvas mills	1	77	13	1 005	20 751	831	1 463	13 686	42 600	35 012	77 631	1 784
314911	Textile bag mills	1	22	8	572	9 359	498	872	6 834	24 023	19 623	43 593	426
314912	Canvas & related product mills	3	55	5	433	11 392	333	591	6 852	18 577	15 389	34 038	1 358
31499	All other textile product mills	1	62	12	871	24 223	635	1 232	12 664	55 985	41 715	97 771	2 430
314991	Rope, cordage, & twine mills	—	12	6	430	14 977	296	633	7 290	37 897	27 394	65 401	1 709
314999	All other miscellaneous textile product mills	4	50	6	441	9 246	339	599	5 374	18 088	14 321	32 370	721
315	Apparel mfg	1	170	52	4 918	94 244	4 367	8 559	71 944	177 343	209 803	385 016	4 142
3151	Apparel knitting mills	7	6	2	138	2 976	124	291	2 152	6 030	2 176	8 205	111
31519	Other apparel knitting mills	7	6	2	138	2 976	124	291	2 152	6 030	2 176	8 205	111
315191	Outerwear knitting mills	7	6	2	138	2 976	124	291	2 152	6 030	2 176	8 205	111
3152	Cut & sew apparel mfg	1	128	43	4 385	82 178	3 910	7 560	63 365	155 990	195 086	349 225	3 162
31521	Cut & sew apparel contractors	2	62	21	1 859	29 630	1 770	3 312	26 482	48 751	9 035	57 702	957
315211	Men's & boys' cut & sew apparel contractors	—	17	15	1 219	20 128	1 164	2 259	18 366	32 364	4 464	36 821	462
315212	Women's, girls', & infants' cut & sew apparel contractors	5	45	6	640	9 502	606	1 053	8 116	16 387	4 571	20 881	495
31522	Men's & boys' cut & sew apparel mfg	—	20	9	1 083	26 483	905	1 767	17 887	39 106	85 617	126 585	1 010
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	—	2	1	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	—	16	7	886	23 573	721	1 478	15 453	37 174	79 519	118 347	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg—Con.												
31523	Women's & girls' cut & sew apparel mfg	-	28	10	1 153	22 009	1 002	2 078	16 199	60 778	94 148	151 471	768
315234	Women's & girls' cut & sew suit, coat, skirt mfg	-	5	1	c	D	D	D	D	D	D	D	105
315239	Women's & girls' cut & sew other outerwear mfg	-	11	6	854	16 054	757	1 621	12 484	46 589	62 595	107 590	607
31529	Other cut & sew apparel mfg	6	18	3	290	4 056	233	403	2 797	7 355	6 286	13 467	427
315299	All other cut & sew apparel mfg	6	14	2	239	3 196	193	330	2 119	5 401	2 807	8 077	384
3159	Apparel accessories & other apparel mfg	1	36	7	395	9 090	333	708	6 427	15 323	12 541	27 586	869
31599	Apparel accessories & other apparel mfg	1	36	7	395	9 090	333	708	6 427	15 323	12 541	27 586	869
315992	Glove & mitten mfg	-	4	3	125	2 268	108	210	1 854	2 049	5 125	7 395	28
315999	Other apparel accessories & other apparel mfg	1	26	3	227	6 005	193	420	4 093	11 587	6 641	17 758	816
316	Leather & allied product mfg	-	31	7	775	15 117	556	1 065	9 256	78 350	66 749	140 457	1 072
3162	Footwear mfg	1	4	1	c	D	D	D	D	D	D	D	D
31621	Footwear mfg	1	4	1	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	1	2	1	c	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	23	6	599	11 281	418	803	6 627	69 853	59 300	124 726	770
31699	Other leather & allied product mfg	-	23	6	599	11 281	418	803	6 627	69 853	59 300	124 726	770
316991	Luggage mfg	-	8	4	389	7 022	266	490	4 215	61 507	49 081	105 468	346
321	Wood product mfg	1	589	216	22 196	647 891	18 817	38 246	502 998	1 451 407	2 993 752	4 415 151	165 094
3211	Sawmills & wood preservation	1	201	84	10 271	344 373	8 863	18 762	276 444	830 562	1 877 382	2 681 775	121 171
32111	Sawmills & wood preservation	1	201	84	10 271	344 373	8 863	18 762	276 444	830 562	1 877 382	2 681 775	121 171
321113	Sawmills	1	189	74	9 664	325 194	8 389	17 837	263 857	759 440	1 740 864	2 472 190	119 938
321114	Wood preservation	-	12	10	607	19 179	474	925	12 587	71 122	136 518	209 585	1 233
3212	Veneer, plywood, & engineered wood product mfg	-	82	47	4 214	118 245	3 483	7 202	91 312	221 450	462 887	685 219	16 005
32121	Veneer, plywood, & engineered wood product mfg	-	82	47	4 214	118 245	3 483	7 202	91 312	221 450	462 887	685 219	16 005
321211	Hardwood veneer & plywood mfg	-	5	3	578	14 807	496	1 069	11 188	22 488	50 252	70 488	2 033
321212	Softwood veneer & plywood mfg	-	17	14	1 899	60 239	1 704	3 618	52 256	95 942	282 329	382 361	7 309
321213	Engineered wood member (except truss) mfg	-	3	3	156	3 473	124	268	2 723	8 474	18 340	26 810	537
321214	Truss mfg	2	48	23	1 156	27 555	808	1 518	16 002	57 463	53 975	111 366	1 917
321219	Reconstituted wood product mfg	-	9	4	425	12 171	351	729	9 143	37 083	57 991	94 194	4 209
3219	Other wood product mfg	1	306	85	7 711	185 273	6 471	12 282	135 242	399 395	653 483	1 048 157	27 918
32191	Millwork	1	147	53	4 760	120 795	4 104	8 228	93 900	271 612	462 078	730 571	22 966
321911	Wood window & door mfg	1	65	23	2 164	56 785	1 815	3 506	42 644	122 742	173 001	296 270	3 742
321912	Cut stock, resawing lumber, & planing	-	50	21	1 818	43 854	1 651	3 348	37 211	109 225	228 188	334 470	14 814
321918	Other millwork (including flooring)	2	32	9	778	20 156	638	1 374	14 045	39 645	60 889	99 831	4 410
32192	Wood container & pallet mfg	-	47	14	914	18 122	752	1 307	11 986	31 919	50 906	81 871	1 562
321920	Wood container & pallet mfg	-	47	14	914	18 122	752	1 307	11 986	31 919	50 906	81 871	1 562
32199	All other wood product mfg	1	112	18	2 037	46 356	1 615	2 747	29 356	95 864	140 499	235 715	3 390
321991	Manufactured home (mobile home) mfg	-	6	4	889	23 283	718	1 202	13 679	45 448	62 697	108 781	550
321992	Prefabricated wood building mfg	4	35	4	432	9 006	302	523	5 233	21 140	23 995	45 157	1 346
321999	All other miscellaneous wood product mfg	2	71	10	716	14 067	595	1 022	10 444	29 276	53 807	81 777	1 494

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	-	118	80	14 958	675 477	11 585	23 522	489 160	2 167 824	2 565 769	4 719 501	320 206
3221	Pulp, paper, & paperboard mills	-	19	19	9 941	499 157	7 865	16 148	372 453	1 684 370	1 794 241	3 464 778	266 004
32211	Pulp mills	-	2	2	e	D	D	D	D	D	D	D	D
322110	Pulp mills	-	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	-	12	12	6 229	305 523	5 094	10 462	233 573	1 267 987	1 211 213	2 452 478	D
322121	Paper (except newsprint) mills	-	7	7	4 830	220 534	4 028	8 135	171 442	841 508	763 911	1 578 092	108 021
322122	Newsprint mills	-	5	5	1 399	84 989	1 066	2 327	62 131	426 479	447 302	874 386	D
32213	Paperboard mills	-	5	5	h	D	D	D	D	D	D	D	119 460
322130	Paperboard mills	-	5	5	h	D	D	D	D	D	D	D	119 460
3222	Converted paper product mfg	-	99	61	5 017	176 320	3 720	7 374	116 707	483 454	771 528	1 254 723	54 202
32221	Paperboard container mfg	-	42	36	2 957	111 841	2 207	4 505	75 306	241 773	473 985	713 971	38 748
322211	Corrugated & solid fiber box mfg	-	27	22	2 043	79 886	1 513	3 079	52 611	170 188	364 755	532 852	28 967
322212	Folding paperboard box mfg	-	7	7	540	18 589	395	841	12 593	38 153	50 553	88 897	3 691
322214	Fiber can, tube, drum, & similar products mfg	-	3	3	c	D	D	D	D	D	D	D	D
322215	Nonfolding sanitary food container mfg	-	2	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	19	8	842	28 393	678	1 322	20 210	80 715	164 709	245 993	9 255
322222	Coated & laminated paper mfg	2	11	3	c	D	D	D	D	D	D	D	5 850
322224	Uncoated paper & multiwall bag mfg	-	5	4	587	18 072	491	934	13 199	46 993	46 984	93 084	D
32223	Stationery product mfg ..	1	18	8	656	18 442	414	827	11 161	47 474	57 211	104 397	1 637
322232	Envelope mfg	2	8	6	502	13 878	302	588	8 596	35 463	30 198	64 576	1 229
32229	Other converted paper product mfg	-	20	9	562	17 644	421	720	10 030	113 492	75 623	190 362	4 562
322291	Sanitary paper product mfg	-	1	1	c	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	-	19	8	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	857	135	11 735	357 586	7 935	13 996	208 415	726 131	412 978	1 140 940	53 337
3231	Printing & related support activities	2	857	135	11 735	357 586	7 935	13 996	208 415	726 131	412 978	1 140 940	53 337
32311	Printing	2	780	120	10 544	311 132	7 074	12 296	179 689	630 598	397 353	1 030 185	50 030
323110	Commercial lithographic printing ..	2	362	69	5 834	188 620	3 794	7 069	106 768	359 936	229 161	589 715	34 696
323112	Commercial flexographic printing ..	-	12	7	302	9 738	161	309	4 251	14 639	12 455	27 018	707
323113	Commercial screen printing	3	105	12	907	19 938	636	1 033	10 976	43 433	28 065	71 560	2 792
323114	Quick printing	1	179	8	1 121	26 858	798	1 252	17 399	58 172	29 682	87 725	4 715
323115	Digital printing	4	14	3	152	3 713	111	180	2 187	7 646	3 297	10 827	641
323116	Manifold business form printing	-	19	11	911	29 936	694	1 158	20 127	86 035	43 119	129 824	3 521
323117	Book printing	-	10	4	774	17 890	491	558	9 140	25 686	26 760	54 185	1 147
323119	Other commercial printing	4	71	6	489	12 723	347	639	7 801	30 137	23 578	53 206	1 740
32312	Support activities for printing	-	77	15	1 191	46 454	861	1 700	28 726	95 533	15 625	110 755	3 307
323121	Tradebinding & related work	-	28	7	366	9 702	294	548	6 374	17 439	2 640	20 056	704
323122	Prepress services	-	49	8	825	36 752	567	1 152	22 352	78 094	12 985	90 699	2 603
324	Petroleum & coal products mfg	-	31	16	2 185	115 743	1 320	3 195	64 959	820 860	4 573 547	5 393 828	83 370
3241	Petroleum & coal products mfg	-	31	16	2 185	115 743	1 320	3 195	64 959	820 860	4 573 547	5 393 828	83 370
32411	Petroleum refineries	-	8	7	1 675	99 031	974	2 471	53 638	734 550	4 468 411	5 202 126	79 152
324110	Petroleum refineries ..	-	8	7	1 675	99 031	974	2 471	53 638	734 550	4 468 411	5 202 126	79 152
32412	Asphalt paving, roofing, & saturated materials mfg	1	17	7	434	14 359	285	611	9 720	75 881	81 259	157 410	D
324121	Asphalt paving mixture & block mfg	2	14	5	c	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	-	3	2	c	D	D	D	D	D	D	D	D

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	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	230	70	5 558	256 202	3 154	7 154	115 145	965 184	922 457	1 891 543	93 475
3251	Basic chemical mfg	—	45	17	1 898	104 687	1 092	2 631	51 705	423 807	294 336	733 861	49 669
32512	Industrial gas mfg	1	12	3	169	7 550	64	150	2 501	50 514	15 661	66 156	12 720
325120	Industrial gas mfg	1	12	3	169	7 550	64	150	2 501	50 514	15 661	66 156	12 720
32518	Other basic inorganic chemical mfg	—	19	8	1 365	79 089	815	2 008	39 444	266 054	194 710	476 009	29 481
325181	Alkalies & chlorine mfg	—	2	2	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	17	6	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	14	6	364	18 048	213	473	9 760	107 239	83 965	191 696	7 468
325199	All other basic organic chemical mfg	2	9	6	334	16 596	191	425	8 880	95 320	72 283	167 885	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	1	14	3	179	5 374	141	263	3 451	22 052	18 707	41 222	2 386
32521	Resin & synthetic rubber mfg	1	13	3	c	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	—	7	3	160	4 761	128	243	3 051	19 809	15 056	35 334	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	2	27	8	540	21 265	375	875	12 944	104 165	237 817	330 909	5 434
32531	Fertilizer mfg	1	18	7	472	19 275	338	804	12 050	93 691	230 585	312 900	4 648
325312	Phosphatic fertilizer mfg	—	2	1	c	D	D	D	D	D	D	D	D
325314	Fertilizer (mixing only) mfg	3	13	5	e	D	D	D	D	D	D	D	2 429
3254	Pharmaceutical & medicine mfg	1	30	12	1 243	61 928	741	1 810	21 933	143 745	105 030	243 927	22 935
32541	Pharmaceutical & medicine mfg	1	30	12	1 243	61 928	741	1 810	21 933	143 745	105 030	243 927	22 935
325412	Pharmaceutical preparation mfg	2	8	1	109	5 441	57	105	2 109	18 150	7 422	25 625	2 002
325413	In-vitro diagnostic substance mfg	3	6	2	141	6 239	56	67	1 402	20 492	7 162	26 039	D
325414	Biological product (except diagnostic) mfg	—	9	7	922	47 673	573	1 572	17 329	99 342	83 768	179 869	D
3255	Paint, coating, & adhesive mfg	1	44	15	959	36 529	404	802	12 978	119 168	144 961	266 687	7 050
32551	Paint & coating mfg	—	31	12	663	23 062	240	450	7 678	76 045	98 750	177 685	3 467
325510	Paint & coating mfg	—	31	12	663	23 062	240	450	7 678	76 045	98 750	177 685	3 467
32552	Adhesive mfg	3	13	3	296	13 467	164	352	5 300	43 123	46 211	89 002	3 583
325520	Adhesive mfg	3	13	3	296	13 467	164	352	5 300	43 123	46 211	89 002	3 583
3256	Soap, cleaning compound, & toilet preparation mfg	2	31	6	265	7 894	151	261	3 647	48 821	23 838	72 935	1 121
32561	Soap & cleaning compound mfg	1	21	5	215	7 028	115	219	3 147	45 372	21 364	67 004	896
325611	Soap & other detergent mfg	1	15	4	151	5 306	73	153	2 256	39 404	14 312	53 784	718
3259	Other chemical product mfg	1	39	9	474	18 525	250	512	8 487	103 426	97 768	202 002	4 880
32599	All other chemical product & preparation mfg	1	35	6	395	15 254	210	412	6 501	94 943	87 400	182 816	4 559
325998	All other miscellaneous chemical product & preparation mfg	1	19	6	321	13 092	160	342	5 298	89 139	80 569	170 093	4 052
326	Plastics & rubber products mfg	1	268	120	11 604	322 101	8 799	17 663	210 184	796 329	816 293	1 606 616	111 112
3261	Plastics product mfg	1	236	110	10 999	306 629	8 319	16 759	198 788	755 794	790 431	1 539 626	109 321
32611	Unsupported plastics film, sheet, & bag mfg	—	16	7	1 303	40 298	1 084	2 290	29 838	98 790	179 748	276 201	13 568
326111	Unsupported plastics bag mfg	—	6	3	742	19 826	634	1 247	14 595	44 606	85 190	128 368	7 102
326113	Unsupported plastics film & sheet (except packaging) mfg	—	10	4	561	20 472	450	1 043	15 243	54 184	94 558	147 833	6 466
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	28	11	1 203	34 639	743	1 459	18 500	98 947	109 517	212 265	23 857
326121	Unsupported plastics profile shape mfg	—	18	6	889	24 374	507	1 003	11 439	70 740	55 891	126 981	21 274
326122	Plastics pipe & pipe fitting mfg	1	10	5	314	10 265	236	456	7 061	28 207	53 626	85 284	2 583
32614	Polystyrene foam product mfg	2	10	6	360	10 393	310	673	7 879	34 135	38 695	71 969	1 913
326140	Polystyrene foam product mfg	2	10	6	360	10 393	310	673	7 879	34 135	38 695	71 969	1 913

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	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32615	Urethane & other foam product (except polystyrene) mfg	—	9	4	486	17 909	373	859	11 211	41 956	57 357	99 494	13 862
326150	Urethane & other foam product (except polystyrene) mfg	—	9	4	486	17 909	373	859	11 211	41 956	57 357	99 494	13 862
32616	Plastics bottle mfg	2	11	9	558	15 926	485	962	12 481	63 780	68 111	129 570	18 612
326160	Plastics bottle mfg	2	11	9	558	15 926	485	962	12 481	63 780	68 111	129 570	18 612
32619	Other plastics product mfg	2	153	72	7 018	185 526	5 284	10 456	117 975	414 012	333 318	742 254	37 259
326191	Plastics plumbing fixture mfg	1	13	4	334	8 745	274	516	6 541	23 067	16 876	40 117	696
326199	All other plastics product mfg	2	140	68	6 684	176 781	5 010	9 940	111 434	390 945	316 442	702 137	36 563
3262	Rubber product mfg	4	32	10	605	15 472	480	904	11 396	40 535	25 862	66 990	1 791
32629	Other rubber product mfg	4	24	10	524	13 227	410	768	9 467	34 513	20 312	55 267	1 553
326299	All other rubber product mfg	4	18	9	440	11 226	347	659	8 198	31 221	17 683	49 356	1 445
327	Nonmetallic mineral product mfg	—	334	101	7 776	259 024	6 122	12 306	185 414	726 850	611 020	1 347 073	65 717
3271	Clay product & refractory mfg	4	48	8	574	13 545	455	853	8 987	29 485	19 909	49 952	4 385
32711	Pottery, ceramics, & plumbing fixture mfg ...	4	35	3	224	4 457	180	288	2 833	9 346	3 570	13 154	1 653
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	2	34	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	4	13	5	350	9 088	275	565	6 154	20 139	16 339	36 798	2 732
327121	Brick & structural clay tile mfg	9	3	3	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	—	74	17	2 442	71 764	1 972	3 890	54 064	211 124	140 468	359 077	30 581
32721	Glass & glass product mfg	—	74	17	2 442	71 764	1 972	3 890	54 064	211 124	140 468	359 077	30 581
327211	Flat glass mfg	—	1	1	c	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	1	22	3	c	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	50	12	1 443	37 192	1 122	2 199	25 939	77 224	81 943	158 744	3 349
3273	Cement & concrete product mfg	—	176	68	4 051	147 318	3 198	6 568	105 760	389 100	353 291	743 566	26 403
32731	Cement mfg	—	8	3	239	9 704	178	354	6 481	39 636	50 999	93 273	4 308
327310	Cement mfg	—	8	3	239	9 704	178	354	6 481	39 636	50 999	93 273	4 308
32732	Ready-mix concrete mfg.	—	89	37	2 121	81 814	1 779	3 725	64 521	214 472	195 494	410 687	13 179
327320	Ready-mix concrete mfg	—	89	37	2 121	81 814	1 779	3 725	64 521	214 472	195 494	410 687	13 179
32733	Concrete pipe, brick, & block mfg	4	24	8	347	11 477	252	479	6 447	27 378	21 187	47 449	1 790
327331	Concrete block & brick mfg	5	17	6	213	7 505	158	325	4 614	19 289	15 361	33 567	949
327332	Concrete pipe mfg	1	7	2	134	3 972	94	154	1 833	8 089	5 826	13 882	841
32739	Other concrete product mfg	1	55	20	1 344	44 323	989	2 010	28 311	107 614	85 611	192 157	7 126
327390	Other concrete product mfg	1	55	20	1 344	44 323	989	2 010	28 311	107 614	85 611	192 157	7 126
3274	Lime & gypsum product mfg	—	4	4	e	D	D	D	D	D	D	D	2 317
32742	Gypsum product mfg	—	3	3	299	14 041	215	429	8 545	64 604	67 437	131 803	D
327420	Gypsum product mfg ..	—	3	3	299	14 041	215	429	8 545	64 604	67 437	131 803	D
3279	Other nonmetallic mineral product mfg	3	32	4	e	D	D	D	D	D	D	D	2 031
32791	Abrasive product mfg ...	1	5	2	c	D	D	D	D	D	D	D	D
327910	Abrasive product mfg ...	1	5	2	c	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	5	27	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	87	55	12 125	502 063	9 774	20 551	358 343	1 450 616	2 174 528	3 651 986	162 121
3311	Iron & steel mills & ferroalloy mfg	—	2	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	3	1	c	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel	—	3	1	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	1	c	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	12	12	6 831	315 891	5 588	11 845	230 764	728 116	1 670 745	2 417 357	104 880
33131	Alumina & aluminum production & processing	—	12	12	6 831	315 891	5 588	11 845	230 764	728 116	1 670 745	2 417 357	104 880
331312	Primary aluminum production	—	6	6	h	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	g	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	18	9	1 958	73 706	1 458	2 995	49 412	402 846	246 114	653 979	34 874
33141	Nonferrous metal (except aluminum) smelting & refining	—	5	4	869	35 273	607	1 309	24 394	136 563	118 788	254 757	23 429
331419	Other nonferrous metal primary smelting & refining	—	5	4	869	35 273	607	1 309	24 394	136 563	118 788	254 757	23 429
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	13	5	1 089	38 433	851	1 686	25 018	266 283	127 326	399 222	11 445
331491	Other nonferrous metal rolling, drawing, & extruding	—	7	4	1 025	35 697	803	1 598	23 693	260 896	120 204	386 670	10 720
3315	Foundries	—	52	31	2 711	82 163	2 255	4 618	57 656	189 907	102 466	292 627	15 150
33151	Ferrous metal foundries	—	23	20	1 370	43 266	1 136	2 392	31 993	99 409	52 345	152 108	6 887
331511	Iron foundries	1	7	7	f	D	D	D	D	D	D	D	4 081
331513	Steel foundries (except investment)	—	13	10	773	26 524	665	1 415	20 204	62 343	33 044	95 921	D
33152	Nonferrous metal foundries	—	29	11	1 341	38 897	1 119	2 226	25 663	90 498	50 121	140 519	8 263
331524	Aluminum foundries (except die-casting)	—	12	7	1 095	30 212	926	1 848	20 421	75 274	42 054	117 391	6 875
332	Fabricated metal product mfg	1	1 184	269	22 037	706 731	16 710	31 441	460 221	1 544 085	1 212 399	2 721 826	105 652
3321	Forging & stamping	1	33	14	976	30 283	776	1 477	20 319	59 117	56 549	114 895	3 628
33211	Forging & stamping	1	33	14	976	30 283	776	1 477	20 319	59 117	56 549	114 895	3 628
332111	Iron & steel forging	9	10	2	c	D	D	D	D	D	D	D	D
332114	Custom roll forming	—	9	4	306	9 488	252	516	6 960	16 486	22 212	38 218	690
332116	Metal stamping	—	12	7	527	16 463	410	771	10 337	33 832	27 314	60 826	2 246
3322	Cutlery & handtool mfg	5	33	4	461	12 641	386	781	9 353	27 024	16 057	43 007	1 523
33221	Cutlery & handtool mfg	5	33	4	461	12 641	386	781	9 353	27 024	16 057	43 007	1 523
332212	Hand & edge tool mfg	2	26	3	314	8 119	269	540	6 204	15 374	8 894	24 232	748
332213	Saw blade & handsaw mfg	9	2	1	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	308	97	7 026	217 324	5 250	10 074	140 725	439 242	471 762	909 670	23 131
33231	Plate work & fabricated structural product mfg	1	117	33	2 059	65 946	1 484	2 763	40 852	134 714	133 555	268 534	5 066
332311	Prefabricated metal building & component mfg	—	9	4	294	9 996	172	373	5 028	19 183	20 989	40 243	725
332312	Fabricated structural metal mfg	1	88	24	1 527	48 573	1 127	2 092	30 947	102 793	104 317	207 383	3 966
332313	Plate work mfg	3	20	5	238	7 377	185	298	4 877	12 738	8 249	20 908	375
33232	Ornamental & architectural metal products mfg	1	191	64	4 967	151 378	3 766	7 311	99 873	304 528	338 207	641 136	18 065
332321	Metal window & door mfg	1	28	11	1 269	35 900	953	1 962	22 736	72 180	102 611	175 373	1 870
332322	Sheet metal work mfg	—	113	44	2 938	89 051	2 246	4 231	57 855	193 167	180 555	371 671	11 100
332323	Ornamental & architectural metal work mfg	1	50	9	760	26 427	567	1 118	19 282	39 181	55 041	94 092	5 095

Table 1. Industry Statistics for the State: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	34	19	1 368	53 013	1 073	2 178	40 548	156 772	260 770	403 280	5 423
33241	Power boiler & heat exchanger mfg	1	8	3	138	4 594	109	209	2 734	7 813	6 938	14 788	344
332410	Power boiler & heat exchanger mfg	1	8	3	138	4 594	109	209	2 734	7 813	6 938	14 788	344
33242	Metal tank (heavy gauge) mfg	—	12	6	243	8 349	153	293	4 855	13 824	13 377	26 770	1 238
332420	Metal tank (heavy gauge) mfg	—	12	6	243	8 349	153	293	4 855	13 824	13 377	26 770	1 238
33243	Metal can, box, & other metal container (light gauge) mfg	—	14	10	987	40 070	811	1 676	32 959	135 135	240 455	361 722	3 841
332431	Metal can mfg	—	7	7	871	35 730	729	1 484	30 695	127 319	234 141	347 094	3 403
332439	Other metal container mfg	—	7	3	116	4 340	82	192	2 264	7 816	6 314	14 628	438
3325	Hardware mfg	1	22	6	362	10 394	271	501	6 325	32 062	18 199	49 544	1 858
33251	Hardware mfg	1	22	6	362	10 394	271	501	6 325	32 062	18 199	49 544	1 858
332510	Hardware mfg	1	22	6	362	10 394	271	501	6 325	32 062	18 199	49 544	1 858
3326	Spring & wire product mfg .	2	23	6	384	12 691	284	524	7 654	25 167	14 861	39 199	3 058
33261	Spring & wire product mfg	2	23	6	384	12 691	284	524	7 654	25 167	14 861	39 199	3 058
332618	Other fabricated wire product mfg	3	19	4	278	8 870	202	380	5 198	18 210	11 058	29 000	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	523	68	6 660	214 964	5 296	9 371	146 500	449 076	194 856	629 679	47 273
33271	Machine shops	1	484	58	5 848	182 873	4 629	8 022	123 466	387 930	159 339	533 771	39 184
332710	Machine shops	1	484	58	5 848	182 873	4 629	8 022	123 466	387 930	159 339	533 771	39 184
33272	Turned product & screw, nut, & bolt mfg	—	39	10	812	32 091	667	1 349	23 034	61 146	35 517	95 908	8 089
332721	Precision turned product mfg	—	35	9	717	28 739	589	1 186	20 448	53 936	32 051	85 399	6 592
3328	Coating, engraving, heat treating, & allied activities.	1	81	25	2 304	66 085	1 853	3 696	42 721	142 231	44 220	184 496	10 255
33281	Coating, engraving, heat treating, & allied activities	1	81	25	2 304	66 085	1 853	3 696	42 721	142 231	44 220	184 496	10 255
332811	Metal heat treating	—	8	2	121	3 771	108	199	2 953	8 629	3 567	12 165	1 021
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	33	11	867	24 089	751	1 561	17 729	54 572	14 882	68 721	4 331
332813	Electroplating, plating, polishing, anodizing, & coloring	—	40	12	1 316	38 225	994	1 936	22 039	79 030	25 771	103 610	4 903
3329	Other fabricated metal product mfg	1	127	30	2 496	89 336	1 521	2 839	46 076	213 394	135 125	348 056	9 503
33291	Metal valve mfg	—	14	5	585	23 357	301	574	13 614	48 031	34 670	82 406	2 446
332912	Fluid power valve & hose fitting mfg	—	3	1	e	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	3	2	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	1	113	25	1 911	65 979	1 220	2 265	32 462	165 363	100 455	265 650	7 057
332993	Ammunition (except small arms) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	1	16	7	322	10 166	208	416	5 615	26 670	26 838	52 320	2 134
332999	All other miscellaneous fabricated metal product mfg	2	75	16	1 050	31 049	847	1 549	22 297	67 298	47 288	114 418	3 751
333	Machinery mfg	1	503	131	13 655	475 540	8 994	16 976	260 694	1 059 118	967 888	2 025 631	58 652
3331	Agriculture, construction, & mining machinery mfg	2	72	21	1 341	47 277	872	1 737	25 074	101 695	139 778	238 819	7 393
33311	Agricultural implement mfg	1	38	6	426	11 342	316	608	7 943	29 135	31 934	60 733	3 371
333111	Farm machinery & equipment mfg	1	35	6	418	11 149	309	595	7 805	28 496	30 968	59 111	3 340
33312	Construction machinery mfg	1	28	14	797	31 961	469	948	14 415	60 955	96 587	155 296	3 547
333120	Construction machinery mfg	1	28	14	797	31 961	469	948	14 415	60 955	96 587	155 296	3 547
33313	Mining & oil & gas field machinery mfg	9	6	1	118	3 974	87	181	2 716	11 605	11 257	22 790	475
333131	Mining machinery & equipment mfg	9	5	1	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg ..	2	98	21	2 802	104 356	1 599	2 972	51 295	204 957	171 133	376 656	8 242
33321	Sawmill & woodworking machinery mfg	—	20	3	f	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	20	3	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	9	8	1	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	9	8	1	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	1	70	17	1 794	72 145	1 026	1 968	35 279	128 875	118 908	245 699	5 922
333291	Paper industry machinery mfg	—	11	4	291	11 401	143	298	5 143	24 669	16 161	40 710	846
333294	Food product machinery mfg	2	27	7	604	22 173	373	727	11 359	41 312	32 477	68 754	1 776
333298	All other industrial machinery mfg	—	27	4	811	35 154	459	831	16 778	52 599	65 687	120 383	3 045
3333	Commercial & service industry machinery mfg ..	1	53	17	1 490	51 228	915	1 840	24 130	110 314	64 094	178 234	4 640
33331	Commercial & service industry machinery mfg	1	53	17	1 490	51 228	915	1 840	24 130	110 314	64 094	178 234	4 640
333314	Optical instrument & lens mfg	1	7	3	377	14 857	231	494	6 950	25 056	10 158	37 556	1 553
333315	Photographic & photocopying equipment mfg	2	12	3	226	5 781	116	226	2 129	7 507	8 987	18 603	801
333319	Other commercial & service industry machinery mfg	1	29	9	758	26 230	492	924	12 584	67 668	34 489	101 841	1 964
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	2	34	14	1 439	41 083	1 021	1 719	21 299	128 633	78 612	206 405	6 488
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	2	34	14	1 439	41 083	1 021	1 719	21 299	128 633	78 612	206 405	6 488
333414	Heating equipment (except warm air furnaces) mfg	2	18	9	1 132	30 466	814	1 327	16 288	98 406	48 861	145 792	5 605
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	10	3	190	5 903	145	276	3 433	17 629	14 892	32 568	643
3335	Metalworking machinery mfg	—	87	16	1 667	62 458	1 093	1 965	34 921	136 686	96 643	228 697	11 237
33351	Metalworking machinery mfg	—	87	16	1 667	62 458	1 093	1 965	34 921	136 686	96 643	228 697	11 237
333511	Industrial mold mfg ...	—	29	6	376	14 148	300	513	10 184	22 525	9 353	32 352	3 677
333512	Machine tool (metal cutting types) mfg ...	—	5	3	546	21 379	251	408	6 366	66 601	61 093	121 705	4 866
333513	Machine tool (metal forming types) mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg .	3	27	5	270	9 198	226	396	6 707	16 168	5 128	21 339	1 357
333515	Cutting tool & machine tool accessory mfg ..	7	20	—	116	3 378	73	126	2 110	6 488	2 825	9 297	D
3336	Engine, turbine, & power transmission equipment mfg	1	9	2	180	6 889	133	257	4 271	14 583	8 512	23 314	1 201
33361	Engine, turbine, & power transmission equipment mfg	1	9	2	180	6 889	133	257	4 271	14 583	8 512	23 314	1 201
333612	Speed changer, industrial high-speed drive, & gear mfg	—	1	1	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	150	40	4 736	162 249	3 361	6 486	99 704	362 250	409 116	773 506	19 451
33391	Pump & compressor mfg	1	16	4	351	13 086	135	245	3 555	35 843	18 355	54 276	2 158
333911	Pump & pumping equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	47	18	2 961	98 013	2 298	4 573	68 863	219 811	326 923	546 764	10 702
333922	Conveyor & conveying equipment mfg	—	17	9	1 196	48 892	946	1 898	35 813	74 882	85 226	160 672	3 382
333923	Overhead traveling crane, hoist, & monorail system mfg .	—	13	6	1 444	37 838	1 153	2 304	27 833	129 720	218 011	346 921	6 586
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	13	3	294	10 413	180	332	4 609	12 446	21 526	34 131	693

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—Con. Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	2	87	18	1 424	51 150	928	1 668	27 286	106 596	63 838	172 466	6 591
333993	Packaging machinery mfg	2	23	9	631	21 326	415	727	11 930	44 029	29 966	74 281	1 373
333995	Fluid power cylinder & actuator mfg	—	10	2	214	9 798	176	346	6 118	18 481	7 105	25 909	D
333997	Scale & balance (except laboratory) mfg	—	5	3	220	7 708	97	176	2 776	18 348	7 504	26 867	221
333999	All other miscellaneous general-purpose machinery mfg	4	35	3	253	8 892	170	292	4 531	17 392	12 382	29 808	1 171
334	Computer & electronic product mfg.....	—	438	163	46 235	2 204 559	21 128	40 810	701 316	4 663 158	2 835 134	7 479 752	701 759
3341	Computer & peripheral equipment mfg	1	51	19	7 162	324 977	4 419	8 517	185 490	751 059	582 188	1 304 395	77 419
33411	Computer & peripheral equipment mfg	1	51	19	7 162	324 977	4 419	8 517	185 490	751 059	582 188	1 304 395	77 419
334111	Electronic computer mfg	4	8	5	f	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	3	3	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	39	10	5 955	271 640	4 000	7 688	177 180	645 006	426 740	1 048 254	66 812
3342	Communications equipment mfg	2	62	24	3 172	132 389	1 328	1 992	28 096	319 050	252 562	574 574	17 608
33421	Telephone apparatus mfg	3	18	10	1 769	85 324	697	1 005	15 651	222 343	149 112	368 109	12 984
334210	Telephone apparatus mfg	3	18	10	1 769	85 324	697	1 005	15 651	222 343	149 112	368 109	12 984
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	30	11	1 194	41 093	572	887	11 213	84 159	94 367	184 847	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	30	11	1 194	41 093	572	887	11 213	84 159	94 367	184 847	D
33429	Other communications equipment mfg	2	14	3	209	5 972	59	100	1 232	12 548	9 083	21 618	D
334290	Other communications equipment mfg	2	14	3	209	5 972	59	100	1 232	12 548	9 083	21 618	D
3343	Audio & video equipment mfg	3	18	6	1 097	31 012	794	1 653	16 759	63 574	205 412	270 861	2 985
33431	Audio & video equipment mfg	3	18	6	1 097	31 012	794	1 653	16 759	63 574	205 412	270 861	2 985
334310	Audio & video equipment mfg	3	18	6	1 097	31 012	794	1 653	16 759	63 574	205 412	270 861	2 985
3344	Semiconductor & other electronic component mfg	—	116	53	8 477	288 424	6 189	12 816	167 064	747 801	598 719	1 342 379	408 468
33441	Semiconductor & other electronic component mfg	—	116	53	8 477	288 424	6 189	12 816	167 064	747 801	598 719	1 342 379	408 468
334412	Bare printed circuit board mfg	1	25	12	1 640	48 990	1 322	2 929	34 167	117 263	63 555	182 167	6 261
334413	Semiconductor & related device mfg ...	—	21	9	3 104	127 345	2 334	4 885	81 334	350 348	358 297	703 183	363 492
334414	Electronic capacitor mfg	—	2	2	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	2	7	4	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	3	12	11	864	20 767	679	1 286	11 968	43 998	43 630	89 367	2 944
334419	Other electronic component mfg	1	46	14	1 674	63 460	815	1 600	18 680	135 861	96 021	230 494	27 487
3345	Navigational, measuring, medical, & control instruments mfg	—	164	53	25 692	1 404 931	7 985	15 034	293 248	2 716 724	1 152 297	3 877 928	183 795
33451	Navigational, measuring, medical, & control instruments mfg	—	164	53	25 692	1 404 931	7 985	15 034	293 248	2 716 724	1 152 297	3 877 928	183 795
334510	Electromedical & electrotherapeutic apparatus mfg	—	19	11	4 475	239 450	1 477	3 084	42 764	549 160	419 776	933 332	49 283
334511	Search, detection, navigation, & guidance instrument mfg	—	27	12	15 736	914 908	4 310	7 646	170 885	1 496 388	385 412	1 937 339	D
334513	Industrial process control instrument mfg	1	20	5	229	9 444	117	221	4 298	21 572	8 203	29 525	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg—Con.												
334515	Electricity measuring & testing instrument mfg	—	29	10	3 937	181 019	1 315	2 674	49 041	550 833	285 886	825 377	36 708
334516	Analytical laboratory instrument mfg	1	19	5	403	17 513	139	257	4 804	24 106	11 964	36 453	D
334519	Other measuring & controlling device mfg	1	32	9	789	39 310	535	983	19 387	66 108	35 858	101 981	2 457
3346	Mfg & reproducing magnetic & optical media	3	27	8	635	22 826	413	798	10 659	64 950	43 956	109 615	11 484
33461	Mfg & reproducing magnetic & optical media	3	27	8	635	22 826	413	798	10 659	64 950	43 956	109 615	11 484
334611	Software reproducing	—	5	2	c	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	1	13	2	c	D	D	D	D	D	D	D	5 789
334613	Magnetic & optical recording media mfg	8	9	4	198	6 263	130	246	3 464	15 566	16 515	32 580	D
335	Electrical equipment, appliance, & component mfg	2	116	36	3 639	114 981	2 202	4 116	49 084	343 225	247 660	590 667	19 187
3351	Electric lighting equipment mfg	1	18	3	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	1	18	3	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg	—	5	1	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg	—	4	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	3	1	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg	—	3	1	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	c	D	D	D	D	D	D	D	D
335221	Household cooking appliance mfg	—	1	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	4	61	20	1 214	40 476	669	1 319	16 157	101 800	85 912	185 212	5 866
33531	Electrical equipment mfg	4	61	20	1 214	40 476	669	1 319	16 157	101 800	85 912	185 212	5 866
335312	Motor & generator mfg	9	8	5	c	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	4	16	3	254	8 252	164	332	4 330	17 972	20 643	37 365	1 692
335314	Relay & industrial control mfg	2	35	12	765	25 693	364	694	7 744	67 103	50 748	116 541	3 455
3359	Other electrical equipment & component mfg	2	33	11	1 161	34 358	743	1 222	15 165	105 949	87 238	196 535	5 228
33593	Wiring device mfg	—	7	2	c	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	—	2	1	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	20	7	843	22 490	576	924	10 995	66 281	44 985	112 040	2 836
335999	All other miscellaneous electrical equipment & component mfg	4	20	7	843	22 490	576	924	10 995	66 281	44 985	112 040	2 836
336	Transportation equipment mfg	3	462	153	88 612	4 648 536	46 780	99 391	2 330 730	8 237 079	21 476 827	29 222 900	318 390
3361	Motor vehicle mfg	—	7	1	g	D	D	D	D	D	D	D	1 732
33612	Heavy duty truck mfg	—	2	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	1	40	13	g	D	D	D	D	D	D	D	2 257
33621	Motor vehicle body & trailer mfg	1	40	13	g	D	D	D	D	D	D	D	2 257
336211	Motor vehicle body mfg	2	15	6	e	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	—	7	4	e	D	D	D	D	D	D	D	879
336214	Travel trailer & camper mfg	—	17	3	f	D	D	D	D	D	D	D	784

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)		
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)	
31-33	WASHINGTON—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3363	Motor vehicle parts mfg ...	4	91	28	h	D	D	D	D	D	D	17 978		
33631	Motor vehicle gasoline engine & engine parts mfg	2	30	8	f	D	D	D	D	D	D	2 359		
336312	Gasoline engine & engine parts mfg	2	30	8	f	D	D	D	D	D	D	2 359		
33632	Motor vehicle electrical & electronic equipment mfg	7	23	8	f	D	D	D	D	D	D	2 155		
336322	Other motor vehicle electrical & electronic equipment mfg	7	22	8	f	D	D	D	D	D	D	D		
33639	Other motor vehicle parts mfg	5	20	8	g	D	D	D	D	D	D	10 654		
336391	Motor vehicle air-conditioning mfg	—	1	1	e	D	D	D	D	D	D	D		
336399	All other motor vehicle parts mfg	7	19	7	f	D	D	D	D	D	D	D		
3364	Aerospace product & parts mfg	3	139	56	l	D	D	D	D	D	D	271 132		
33641	Aerospace product & parts mfg	3	139	56	l	D	D	D	D	D	D	271 132		
336411	Aircraft mfg	3	8	5	l	D	D	D	D	D	D	D		
336412	Aircraft engine & engine parts mfg	—	9	3	c	D	D	D	D	D	D	243		
336413	Other aircraft part & auxiliary equipment mfg	—	118	46								D		
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D		
3365	Railroad rolling stock mfg ..	1	5	2		6 776	148	332	4 902	10 696	9 745	21 290	437	
33651	Railroad rolling stock mfg	1	5	2		6 776	148	332	4 902	10 696	9 745	21 290	437	
336510	Railroad rolling stock mfg	1	5	2		6 776	148	332	4 902	10 696	9 745	21 290	437	
3366	Ship & boat building	1	152	48		6 129	214 028	4 629	8 930	133 333	322 200	230 964	558 436	23 246
33661	Ship & boat building	1	152	48		6 129	214 028	4 629	8 930	133 333	322 200	230 964	558 436	23 246
336611	Ship building & repairing	1	62	25		3 597	137 733	2 649	5 689	92 692	235 438	132 257	367 695	5 827
336612	Boat building	1	90	23		2 532	76 295	1 980	3 241	40 641	86 762	98 707	190 741	17 419
3369	Other transportation equipment mfg	1	28	5	f	D	D	D	D	D	D	D	1 608	
33699	Other transportation equipment mfg	1	28	5	f	D	D	D	D	D	D	D	1 608	
336991	Motorcycle, bicycle, & parts mfg	1	22	4	e	D	D	D	D	D	D	D	1 450	
337	Furniture & related product mfg	1	474	90		7 351	188 121	5 846	11 156	125 077	380 677	291 172	675 292	17 221
3371	Household & institutional furniture & kitchen cabinet mfg	2	348	48		4 374	102 995	3 536	6 639	70 871	195 456	151 233	345 962	7 781
33711	Wood kitchen cabinet & counter top mfg	1	216	28		2 805	67 370	2 236	4 360	45 227	125 841	89 932	215 581	4 549
337110	Wood kitchen cabinet & counter top mfg ...	1	216	28		2 805	67 370	2 236	4 360	45 227	125 841	89 932	215 581	4 549
33712	Household & institutional furniture mfg	2	132	20		1 569	35 625	1 300	2 279	25 644	69 615	61 301	130 381	3 232
337121	Upholstered household furniture mfg	2	18	1		110	2 503	98	177	1 928	4 474	5 465	9 920	236
337122	Nonupholstered wood household furniture mfg	3	72	8		587	11 406	526	876	8 793	21 552	21 422	42 932	1 414
337127	Institutional furniture mfg	1	30	8		744	19 703	576	1 053	13 485	38 764	30 834	69 177	1 400
3372	Office furniture (including fixtures) mfg	1	104	36		2 361	68 863	1 854	3 647	43 313	126 414	88 183	218 620	6 744
33721	Office furniture (including fixtures) mfg	1	104	36		2 361	68 863	1 854	3 647	43 313	126 414	88 183	218 620	6 744
337211	Wood office furniture mfg	—	28	11		945	21 516	800	1 496	15 024	46 078	26 451	72 992	2 654
337212	Custom architectural woodwork & millwork mfg	—	29	12		496	17 050	386	758	10 176	28 888	16 444	45 324	1 064
337214	Office furniture (except wood) mfg	1	7	3		267	8 897	183	412	4 611	20 541	16 165	36 784	1 428
337215	Showcase, partition, shelving, & locker mfg	2	40	10		653	21 400	485	981	13 502	30 907	29 123	63 520	1 598
3379	Other furniture related product mfg	1	22	6		616	16 263	456	870	10 893	58 807	51 756	110 710	2 696
33791	Mattress mfg	1	18	6		579	15 647	429	829	10 486	57 432	50 077	107 584	2 638
337910	Mattress mfg	1	18	6		579	15 647	429	829	10 486	57 432	50 077	107 584	2 638

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	2	851	112	10 382	292 596	7 154	12 794	154 401	731 511	476 772	1 201 607	45 977
3391	Medical equipment & supplies mfg.....	3	372	39	3 289	112 659	2 134	3 577	52 445	264 750	135 593	401 962	16 432
33911	Medical equipment & supplies mfg.....	3	372	39	3 289	112 659	2 134	3 577	52 445	264 750	135 593	401 962	16 432
339112	Surgical & medical instrument mfg.....	2	33	10	971	45 668	493	883	16 436	114 381	60 342	174 490	9 428
339113	Surgical appliance & supplies mfg.....	3	32	12	737	22 437	479	801	10 067	56 377	29 799	86 423	3 238
339114	Dental equipment & supplies mfg.....	1	25	4	263	8 814	178	320	4 042	16 516	13 251	29 762	D
339115	Ophthalmic goods mfg.....	5	10	3	c	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	6	268	9	1 152	31 227	874	1 361	19 441	66 257	25 091	92 960	2 359
3399	Other miscellaneous mfg ..	2	479	73	7 093	179 937	5 020	9 217	101 956	466 761	341 179	799 645	29 545
33991	Jewelry & silverware mfg.....	4	67	5	358	8 352	260	431	4 741	17 565	14 141	31 307	268
339911	Jewelry (except costume) mfg.....	4	47	3	264	6 755	190	322	3 706	13 219	12 027	24 894	203
33992	Sporting & athletic goods mfg.....	1	103	27	3 422	87 916	2 495	4 783	50 958	275 288	217 618	483 305	19 634
339920	Sporting & athletic goods mfg.....	1	103	27	3 422	87 916	2 495	4 783	50 958	275 288	217 618	483 305	19 634
33993	Doll, toy, & game mfg ...	4	25	3	240	6 454	159	267	3 357	17 250	12 180	29 362	1 569
339932	Game, toy, & children's vehicle mfg.....	4	20	2	180	5 366	122	202	2 727	15 052	11 343	26 381	1 561
33994	Office supplies (except paper) mfg.....	4	29	7	624	14 167	465	801	8 806	24 838	16 985	45 516	1 320
339943	Marking device mfg ...	1	22	5	337	7 119	231	376	4 076	16 247	8 810	25 095	762
339944	Carbon paper & inked ribbon mfg.....	9	1	1	c	D	D	D	D	D	D	D	D
33995	Sign mfg.....	3	150	13	1 366	37 455	829	1 473	18 605	72 935	41 007	114 171	3 098
339950	Sign mfg.....	3	150	13	1 366	37 455	829	1 473	18 605	72 935	41 007	114 171	3 098
33999	All other miscellaneous mfg.....	3	105	18	1 083	25 593	812	1 462	15 489	58 885	39 248	95 984	3 656
339991	Gasket, packing, & sealing device mfg ...	2	9	1	104	4 099	72	140	1 743	6 720	3 253	9 994	463
339992	Musical instrument mfg.....	2	17	4	244	5 753	191	383	4 215	13 529	6 976	20 650	541
339999	All other miscellaneous mfg.....	4	69	13	664	13 816	496	840	8 378	32 267	25 678	55 628	2 434

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees, h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BELLINGHAM, WA MSA												
	Manufacturing	-	314	84	9 184	281 360	6 856	12 975	183 074	841 770	3 090 001	3 946 981	86 393
311	Food mfg	-	42	19	1 372	31 740	1 107	1 877	22 200	162 162	292 567	465 837	5 544
3117	Seafood product preparation & packaging . .	-	15	9	815	15 744	727	1 211	12 546	45 521	105 226	150 775	2 046
31171	Seafood product preparation & packaging	-	15	9	815	15 744	727	1 211	12 546	45 521	105 226	150 775	2 046
311712	Fresh & frozen seafood processing . .	-	14	9	f	D	D	D	D	D	D	D	D
314	Textile product mills	-	20	4	e	D	D	D	D	D	D	D	436
3149	Other textile product mills . .	-	17	4	e	D	D	D	D	D	D	D	D
31499	All other textile product mills	-	10	4	e	D	D	D	D	D	D	D	380
321	Wood product mfg	1	28	11	1 014	25 476	861	1 654	18 980	59 082	132 270	182 993	3 321
3211	Sawmills & wood preservation	-	9	4	269	8 027	208	407	5 169	22 587	52 028	68 751	1 753
32111	Sawmills & wood preservation	-	9	4	269	8 027	208	407	5 169	22 587	52 028	68 751	1 753
3212	Veneer, plywood, & engineered wood product mfg	-	4	2	e	D	D	D	D	D	D	D	300
32121	Veneer, plywood, & engineered wood product mfg	-	4	2	e	D	D	D	D	D	D	D	300
3219	Other wood product mfg	2	15	5	e	D	D	D	D	D	D	D	1 268
32191	Millwork	2	7	4	367	8 922	325	623	7 168	21 856	48 164	69 301	1 075
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	18	3	343	4 146	134	203	2 850	5 779	4 113	9 865	669
3231	Printing & related support activities	2	18	3	343	4 146	134	203	2 850	5 779	4 113	9 865	669
32311	Printing	2	15	3	327	3 769	119	178	2 558	4 935	3 922	8 829	633
324	Petroleum & coal products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	7	11	4	380	11 760	273	604	7 026	23 423	16 368	39 572	1 758
3261	Plastics product mfg	7	9	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	7	7	4	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	9	6	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	17	5	295	9 663	238	486	7 086	21 610	23 677	45 162	1 487
3273	Cement & concrete product mfg	-	8	5	253	8 855	214	440	6 496	19 313	22 096	41 264	D
331	Primary metal mfg	-	4	1	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing . .	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	35	4	324	8 082	259	409	5 666	17 545	13 801	31 573	1 778
333	Machinery mfg	-	23	5	303	9 791	214	369	6 140	24 436	16 796	40 600	834
335	Electrical equipment, appliance, & component mfg	9	4	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	9	4	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	9	3	1	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	9	3	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	30	8	f	D	D	D	D	D	D	D	1 932
3366	Ship & boat building	-	19	5	e	D	D	D	D	D	D	D	222
33661	Ship & boat building	-	19	5	e	D	D	D	D	D	D	D	222

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BELLINGHAM, WA MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	5	32	7	516	12 197	383	645	7 341	21 738	16 483	42 070	738
3399	Other miscellaneous mfg ..	9	13	3	338	7 554	267	446	4 894	9 319	8 937	21 813	617
31-33	PORTLAND–SALEM, OR–WA CMSA												
	Manufacturing	–	3 828	1 170	149 132	5 101 996	107 876	213 841	3 120 336	20 335 240	15 291 633	35 464 372	2 016 207
	Portland–Salem, OR–WA CMSA (OR Part)	–	3 407	1 039	129 595	4 386 764	92 560	183 708	2 630 978	18 349 799	13 385 498	31 610 060	1 501 888
	Portland–Salem, OR–WA CMSA (WA Part)	–	421	131	19 537	715 232	15 316	30 133	489 358	1 985 441	1 906 135	3 854 312	514 319
311	Food mfg.....	1	244	107	12 295	353 235	9 086	17 599	219 058	1 240 619	1 778 639	3 016 301	92 405
312	Beverage & tobacco product mfg.....	1	55	16	1 562	48 081	763	1 392	22 598	176 277	265 102	439 487	D
313	Textile mills.....	–	19	5	f	D	D	D	D	D	D	D	D
314	Textile product mills.....	3	58	13	964	18 506	757	1 395	11 907	25 660	35 100	61 069	D
315	Apparel mfg.....	–	57	21	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	1	22	5	453	9 997	362	698	6 453	24 391	15 036	39 301	D
321	Wood product mfg.....	–	238	98	8 923	243 127	7 534	14 829	178 779	564 198	1 250 612	1 814 835	38 654
322	Paper mfg.....	–	58	40	i	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	452	80	6 910	225 235	5 072	9 771	145 199	495 891	377 496	868 843	D
324	Petroleum & coal products mfg.....	5	17	9	f	D	D	D	D	D	D	D	D
325	Chemical mfg.....	2	130	45	2 885	116 588	1 585	3 035	47 406	428 890	353 217	780 773	D
326	Plastics & rubber products mfg.....	1	183	70	6 748	177 873	5 099	9 716	109 625	430 174	456 972	885 641	D
327	Nonmetallic mineral product mfg.....	–	144	41	3 472	119 229	2 689	5 597	85 151	342 917	273 094	612 735	D
331	Primary metal mfg.....	–	58	35	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	699	210	17 005	545 931	12 860	25 578	352 473	1 275 386	1 009 001	2 260 083	92 992
333	Machinery mfg.....	–	316	101	11 264	419 441	7 190	14 435	224 568	907 962	868 122	1 783 878	61 377
334	Computer & electronic product mfg.....	–	246	102	34 951	1 412 942	22 292	45 765	737 756	10 469 852	4 278 269	14 645 263	D
335	Electrical equipment, appliance, & component mfg.....	1	58	19	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	–	140	52	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	2	254	44	4 033	103 741	3 061	5 868	70 017	207 590	173 787	383 835	D
339	Miscellaneous mfg.....	1	380	57	6 622	192 011	4 509	8 501	95 521	427 182	300 406	719 649	27 701

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA												
	Portland-Vancouver, OR-WA PMSA (WA Part)												
	Manufacturing	-	3 363	1 025	134 123	4 684 217	96 066	190 898	2 851 556	19 245 780	13 780 856	32 874 201	1 902 986
	Portland-Vancouver, OR-WA PMSA (OR Part)	-	2 942	894	114 586	3 968 985	80 750	160 765	2 362 198	17 260 339	11 874 721	29 019 889	1 388 667
	Portland-Vancouver, OR-WA PMSA (WA Part)	-	421	131	19 537	715 232	15 316	30 133	489 358	1 985 441	1 906 135	3 854 312	514 319
311	Food mfg.	-	201	83	8 563	261 857	6 035	11 786	154 842	994 995	1 241 953	2 234 222	75 331
3112	Grain & oilseed milling	-	8	4	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.	-	28	15	1 456	45 513	1 113	2 249	21 903	144 179	122 812	270 763	4 256
31141	Frozen food mfg.	-	11	8	757	25 534	550	1 169	11 177	86 028	73 830	164 562	2 690
311411	Frozen fruit, juice, & vegetable mfg.	-	9	6	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.	-	2	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	17	7	699	19 979	563	1 080	10 726	58 151	48 982	106 201	1 566
311421	Fruit & vegetable canning	-	15	7	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.	-	13	12	847	26 475	528	1 075	15 170	109 563	278 495	387 310	15 092
31151	Dairy product (except frozen) mfg.	-	12	11	f	D	D	D	D	D	D	D	15 092
311511	Fluid milk mfg.	-	10	9	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.	3	27	10	674	15 717	543	989	10 514	43 752	119 493	162 986	2 589
31161	Animal slaughtering & processing	3	27	10	674	15 717	543	989	10 514	43 752	119 493	162 986	2 589
311612	Meat processed from carcasses	5	18	7	f	D	D	D	D	D	D	D	2 407
3118	Bakeries & tortilla mfg.	-	72	26	3 387	104 060	2 284	4 290	67 580	282 751	244 209	526 805	25 434
31181	Bread & bakery product mfg.	1	58	21	2 436	69 288	1 472	2 689	39 366	174 918	138 127	313 055	D
311811	Retail bakeries	3	22	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	-	33	17	2 024	62 139	1 216	2 240	34 882	156 350	122 456	278 846	12 448
31182	Cookie, cracker, & pasta mfg.	-	12	4	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	-	8	3	683	28 124	587	1 149	22 787	82 623	62 523	144 912	D
3119	Other food mfg.	1	27	12	1 600	48 649	1 170	2 411	27 799	326 769	274 423	596 548	19 691
31191	Snack food mfg.	1	3	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.	1	2	2	f	D	D	D	D	D	D	D	D
31199	All other food mfg.	-	11	5	447	7 732	322	638	5 082	41 440	57 756	97 387	1 493
311991	Perishable prepared food mfg.	-	8	4	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.	-	42	13	1 413	44 019	684	1 264	20 680	158 369	239 319	396 092	10 104
3121	Beverage mfg.	-	42	13	1 413	44 019	684	1 264	20 680	158 369	239 319	396 092	10 104
31211	Soft drink & ice mfg.	-	8	5	658	20 970	320	604	8 652	61 752	171 074	233 340	D
312111	Soft drink mfg.	-	4	4	607	19 864	283	549	8 073	58 396	166 470	225 370	4 944
31212	Breweries	-	11	4	534	18 525	287	561	10 542	80 943	56 624	137 743	D
312120	Breweries	-	11	4	534	18 525	287	561	10 542	80 943	56 624	137 743	D
313	Textile mills	-	17	4	510	15 483	387	642	11 210	30 045	55 825	86 333	D
3132	Fabric mills	-	10	3	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills	-	6	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	6	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	3	50	10	830	15 774	650	1 201	10 109	21 810	31 518	53 674	1 510
3141	Textile furnishings mills	2	19	4	382	7 929	311	635	5 446	9 041	16 457	25 635	805
31412	Curtain & linen mills	2	19	4	382	7 929	311	635	5 446	9 041	16 457	25 635	805
3149	Other textile product mills	4	31	6	448	7 845	339	566	4 663	12 769	15 061	28 039	705
31491	Textile bag & canvas mills	4	18	4	e	D	D	D	D	D	D	D	409
315	Apparel mfg.	-	48	17	1 903	33 693	1 682	3 446	26 742	79 432	83 245	162 069	D
3152	Cut & sew apparel mfg.	-	35	15	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	18	8	f	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors	1	14	6	672	10 227	629	1 145	9 182	13 205	1 298	14 411	D
31522	Men's & boys' cut & sew apparel mfg.	-	7	4	e	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.	-	7	3	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.	-	4	3	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.	-	16	5	413	9 167	328	641	5 868	22 534	13 190	35 590	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND-SALEM, OR-WA CMSA—Con. Portland-Vancouver, OR-WA PMSA—Con. Manufacturing—Con.												
321	Wood product mfg	-	189	72	5 952	161 443	5 015	9 603	119 318	389 887	864 847	1 256 602	26 246
3211	Sawmills & wood preservation	-	40	19	2 272	69 370	1 993	4 076	56 645	189 584	591 209	782 692	15 448
32111	Sawmills & wood preservation	-	40	19	2 272	69 370	1 993	4 076	56 645	189 584	591 209	782 692	15 448
321113	Sawmills	-	35	15	2 062	62 102	1 847	3 772	52 388	166 931	526 525	693 690	14 538
3212	Veneer, plywood, & engineered wood product mfg	2	29	16	940	26 428	747	1 513	17 754	56 485	87 415	144 003	2 400
32121	Veneer, plywood, & engineered wood product mfg	2	29	16	940	26 428	747	1 513	17 754	56 485	87 415	144 003	2 400
321214	Truss mfg	3	16	11	524	15 158	386	755	8 540	32 279	32 539	64 991	1 119
3219	Other wood product mfg ...	1	120	37	2 740	65 645	2 275	4 014	44 919	143 818	186 223	329 907	8 398
32191	Millwork	1	54	22	1 445	39 331	1 216	2 275	26 780	84 790	109 029	193 502	6 145
321911	Wood window & door mfg	1	20	8	612	17 709	509	957	11 579	42 091	41 322	83 708	1 621
321912	Cut stock, resawing lumber, & planing....	-	22	9	517	13 757	452	856	10 272	26 496	39 588	65 308	4 000
321918	Other millwork (including flooring) ...	-	12	5	316	7 865	255	462	4 929	16 203	28 119	44 486	524
32192	Wood container & pallet mfg	-	23	8	418	8 766	353	631	6 066	17 522	32 244	49 680	1 277
321920	Wood container & pallet mfg	-	23	8	418	8 766	353	631	6 066	17 522	32 244	49 680	1 277
32199	All other wood product mfg	1	43	7	877	17 548	706	1 108	12 073	41 506	44 950	86 725	976
321991	Manufactured home (mobile home) mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product mfg ...	6	33	4	337	5 126	277	419	3 830	10 681	8 553	19 476	639
322	Paper mfg	-	55	38	7 466	301 557	6 075	11 968	220 025	1 135 865	1 163 372	2 311 160	D
3221	Pulp, paper, & paperboard mills	-	6	6	4 113	184 440	3 433	6 789	142 605	775 319	748 489	1 535 651	D
32212	Paper mills	-	6	6	4 113	184 440	3 433	6 789	142 605	775 319	748 489	1 535 651	D
322121	Paper (except newsprint) mills	-	4	4	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	49	32	3 353	117 117	2 642	5 179	77 420	360 546	414 883	775 509	D
32221	Paperboard container mfg	-	17	13	1 248	46 454	957	1 834	30 678	110 794	170 660	280 583	D
322211	Corrugated & solid fiber box mfg	-	8	6	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	16	11	1 306	47 442	1 050	2 171	32 995	127 855	171 092	301 201	D
322221	Coated & laminated packaging paper & plastics film mfg	-	1	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	6	6	663	22 045	544	1 052	15 764	53 352	63 989	117 344	D
32223	Stationery product mfg ..	1	9	5	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	1	5	4	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	7	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	417	76	6 502	213 655	4 763	9 138	137 484	464 175	361 950	820 976	34 530
3231	Printing & related support activities	1	417	76	6 502	213 655	4 763	9 138	137 484	464 175	361 950	820 976	34 530
32311	Printing	1	359	63	5 609	180 919	4 064	7 739	114 259	405 234	347 421	746 851	30 365
323110	Commercial lithographic printing ..	-	161	30	2 924	107 327	2 084	4 025	68 460	219 327	229 298	444 843	15 325
323112	Commercial flexographic printing ..	-	9	8	336	10 870	212	407	5 113	31 260	34 400	65 162	D
323113	Commercial screen printing	4	36	4	412	9 470	301	536	5 482	21 125	14 309	35 333	1 448
323114	Quick printing	1	87	4	544	13 355	418	735	9 940	34 658	12 346	46 961	2 351
323116	Manifold business form printing	-	14	8	463	16 414	357	753	10 634	47 152	20 579	67 422	2 799
323118	Blankbook, looseleaf binder, & device mfg ..	9	5	3	e	D	D	D	D	D	D	D	D
323119	Other commercial printing	5	36	4	369	9 742	251	434	5 142	23 322	15 508	38 018	1 194
32312	Support activities for printing	-	58	13	893	32 736	699	1 399	23 225	58 941	14 529	74 125	4 165
323121	Tradebinding & related work	-	24	6	373	11 309	307	642	8 368	18 328	5 653	24 321	796
323122	Prepress services	-	34	7	520	21 427	392	757	14 857	40 613	8 876	49 804	3 369

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	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
324	Petroleum & coal products mfg	4	14	6	429	16 961	290	623	10 558	77 567	143 905	223 382	5 562
3241	Petroleum & coal products mfg	4	14	6	429	16 961	290	623	10 558	77 567	143 905	223 382	5 562
32412	Asphalt paving, roofing, & saturated materials mfg	4	6	4	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	5	3	3	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	118	38	2 578	102 885	1 402	2 643	42 874	380 688	300 148	679 936	47 733
3251	Basic chemical mfg	1	19	5	369	16 741	217	433	8 522	90 324	61 901	152 259	19 195
3254	Pharmaceutical & medicine mfg	5	18	11	703	21 802	396	598	9 145	61 129	33 925	94 678	5 585
32541	Pharmaceutical & medicine mfg	5	18	11	703	21 802	396	598	9 145	61 129	33 925	94 678	5 585
325413	In-vitro diagnostic substance mfg	3	5	5	e	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	19	4	393	17 157	213	451	6 401	62 885	64 628	127 146	D
3259	Other chemical product mfg	2	32	12	616	27 285	292	624	9 880	103 366	86 963	189 245	D
32599	All other chemical product & preparation mfg	3	22	7	374	18 153	183	390	6 372	82 864	58 978	141 763	D
325998	All other miscellaneous chemical product & preparation mfg	3	14	7	313	16 461	142	319	5 461	78 020	53 532	131 335	6 679
326	Plastics & rubber products mfg	1	158	66	6 286	166 815	4 710	8 956	101 507	402 481	428 323	829 259	35 239
3261	Plastics product mfg	1	128	55	5 392	139 662	3 994	7 511	83 518	328 917	366 518	694 458	28 536
32611	Unsupported plastics film, sheet, & bag mfg ..	1	9	3	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	20	8	618	16 825	432	854	10 426	32 550	57 736	93 414	9 481
326121	Unsupported plastics profile shape mfg	1	12	3	278	7 199	190	374	4 041	14 770	12 592	27 962	D
326122	Plastics pipe & pipe fitting mfg	1	8	5	340	9 626	242	480	6 385	17 780	45 144	65 452	D
32619	Other plastics product mfg	1	81	37	4 071	104 437	3 009	5 520	61 745	247 063	242 671	485 969	16 284
326199	All other plastics product mfg	1	79	37	h	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	30	11	894	27 153	716	1 445	17 989	73 564	61 805	134 801	6 703
32621	Tire mfg	—	7	2	371	9 662	313	641	7 256	22 256	24 448	46 595	D
326212	Tire retreading	—	7	2	371	9 662	313	641	7 256	22 256	24 448	46 595	D
32629	Other rubber product mfg	—	20	9	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	124	37	3 254	112 855	2 525	5 295	80 623	324 713	262 642	584 360	D
3272	Glass & glass product mfg ..	—	35	13	1 091	35 640	813	1 556	24 787	101 694	91 599	193 103	D
32721	Glass & glass product mfg	—	35	13	1 091	35 640	813	1 556	24 787	101 694	91 599	193 103	D
327215	Glass product mfg made of purchased glass	—	23	7	552	16 139	382	677	10 594	32 936	50 932	84 640	D
3273	Cement & concrete product mfg	—	47	15	g	D	D	D	D	D	D	D	10 882
32732	Ready-mix concrete mfg ..	—	20	9	778	33 161	658	1 548	25 791	86 039	77 500	163 857	6 673
327320	Ready-mix concrete mfg	—	20	9	778	33 161	658	1 548	25 791	86 039	77 500	163 857	6 673
32733	Concrete pipe, brick, & block mfg	1	12	4	347	10 722	245	520	6 334	29 086	24 467	51 836	2 675
327332	Concrete pipe mfg	—	7	4	e	D	D	D	D	D	D	D	1 402
3279	Other nonmetallic mineral product mfg	1	19	4	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ..	1	16	3	439	15 850	341	814	12 404	61 317	38 399	97 735	D
327993	Mineral wool mfg	1	2	2	e	D	D	D	D	D	D	D	D

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31-33	PORTLAND-SALEM, OR-WA CMSA—Con. Portland-Vancouver, OR-WA PMSA—Con. Manufacturing—Con.												
331	Primary metal mfg	—	50	30	7 697	271 684	6 074	12 487	187 957	650 669	783 726	1 408 067	93 325
3311	Iron & steel mills & ferroalloy mfg	—	3	2	g	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	g	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	g	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	5	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	2	1	e	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	10	9	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	10	9	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	2	2	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg	—	3	3	e	D	D	D	D	D	D	D	D
3315	Foundries	—	29	16	4 746	147 243	3 805	7 757	105 396	395 795	204 436	601 151	D
33151	Ferrous metal foundries	—	13	9	3 737	118 927	3 030	6 312	85 664	309 616	175 036	483 762	D
331512	Steel investment foundries	—	3	3	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	4	4	1 112	41 193	948	1 807	29 172	105 940	106 713	215 390	D
33152	Nonferrous metal foundries	—	16	7	1 009	28 316	775	1 445	19 732	86 179	29 400	117 389	D
331528	Other nonferrous foundries (except die-casting)	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	625	183	15 146	493 384	11 442	22 932	320 248	1 125 746	844 544	1 953 603	83 066
3321	Forging & stamping	3	22	9	609	21 407	448	884	11 726	43 430	36 113	79 452	7 339
33211	Forging & stamping	3	22	9	609	21 407	448	884	11 726	43 430	36 113	79 452	7 339
332116	Metal stamping	3	11	6	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	20	9	2 238	74 615	1 662	3 609	46 301	261 230	179 544	430 659	13 037
33221	Cutlery & handtool mfg	—	20	9	2 238	74 615	1 662	3 609	46 301	261 230	179 544	430 659	13 037
332212	Hand & edge tool mfg	—	12	5	g	D	D	D	D	D	D	D	D
332213	Saw blade & handsaw mfg	—	7	3	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	148	55	4 294	140 773	3 130	6 191	87 846	290 435	287 455	570 258	10 402
33231	Plate work & fabricated structural product mfg	1	57	20	1 197	46 753	870	1 802	29 176	84 197	110 213	187 901	2 988
332312	Fabricated structural metal mfg	1	47	17	1 095	43 900	789	1 674	27 314	79 833	106 827	180 225	2 843
33232	Ornamental & architectural metal products mfg	—	91	35	3 097	94 020	2 260	4 389	58 670	206 238	177 242	382 357	7 414
332321	Metal window & door mfg	—	10	6	1 019	28 648	782	1 568	18 478	72 780	83 309	156 948	1 921
332322	Sheet metal work mfg	—	56	28	1 838	59 136	1 313	2 510	36 795	115 948	83 219	197 933	4 970
3324	Boiler, tank, & shipping container mfg	—	17	10	866	33 721	625	1 311	22 212	62 018	96 882	159 289	7 757
33241	Power boiler & heat exchanger mfg	—	6	4	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	6	4	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	5	3	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg	—	5	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	—	6	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
33251	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
332510	Hardware mfg	—	8	4	401	9 148	332	685	6 374	26 071	16 913	42 716	1 514
3326	Spring & wire product mfg	1	24	11	893	24 629	709	1 411	17 290	49 973	34 189	85 637	3 253
33261	Spring & wire product mfg	1	24	11	893	24 629	709	1 411	17 290	49 973	34 189	85 637	3 253
332618	Other fabricated wire product mfg	1	17	7	678	17 633	552	1 108	12 733	37 193	25 912	64 983	2 626

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	251	43	3 307	109 133	2 528	4 769	73 833	209 264	92 823	300 396	21 340
33271	Machine shops	1	228	35	2 761	90 096	2 095	3 939	61 022	174 053	75 995	248 290	15 771
332710	Machine shops	1	228	35	2 761	90 096	2 095	3 939	61 022	174 053	75 995	248 290	15 771
33272	Turned product & screw, nut, & bolt mfg	2	23	8	546	19 037	433	830	12 811	35 211	16 828	52 106	5 569
332721	Precision turned product mfg	—	18	6	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	2	62	21	1 088	30 287	881	1 720	21 189	77 867	29 467	107 585	11 865
33281	Coating, engraving, heat treating, & allied activities	2	62	21	1 088	30 287	881	1 720	21 189	77 867	29 467	107 585	11 865
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	3	24	9	502	13 172	414	775	9 264	29 841	15 157	44 929	1 757
332813	Electroplating, plating, polishing, anodizing, & coloring	3	29	8	414	11 376	339	655	8 122	22 747	7 573	30 440	D
3329	Other fabricated metal product mfg	—	73	21	1 450	49 671	1 127	2 352	33 477	105 458	71 158	177 611	6 559
33291	Metal valve mfg	—	6	3	333	11 669	251	568	7 493	29 888	22 581	51 596	D
33299	All other fabricated metal product mfg	1	67	18	1 117	38 002	876	1 784	25 984	75 570	48 577	126 015	D
332996	Fabricated pipe & pipe fitting mfg	—	14	4	429	14 954	340	696	10 404	30 192	28 663	59 940	3 093
332999	All other miscellaneous fabricated metal product mfg	1	41	11	543	16 881	419	859	11 010	33 984	17 460	52 197	1 206
333	Machinery mfg	—	270	87	10 376	392 323	6 582	13 242	207 612	858 453	812 880	1 679 119	57 280
3331	Agriculture, construction, & mining machinery mfg	—	18	8	1 292	51 270	870	1 838	30 319	93 312	148 767	240 484	11 293
33312	Construction machinery mfg	—	7	3	503	19 798	325	642	12 160	23 032	44 985	68 075	D
333120	Construction machinery mfg	—	7	3	503	19 798	325	642	12 160	23 032	44 985	68 075	D
33313	Mining & oil & gas field machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg . .	—	64	28	2 693	104 683	1 441	2 800	48 926	271 829	225 915	498 201	16 658
33321	Sawmill & woodworking machinery mfg	—	19	10	f	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	19	10	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	43	18	1 950	79 757	940	1 750	34 797	239 463	175 747	414 837	D
333291	Paper industry machinery mfg	—	13	9	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	—	20	7	1 057	47 328	515	913	19 808	96 483	104 503	199 237	D
3333	Commercial & service industry machinery mfg . .	—	28	9	1 377	48 748	914	1 788	24 756	109 644	85 381	197 197	5 184
33331	Commercial & service industry machinery mfg	—	28	9	1 377	48 748	914	1 788	24 756	109 644	85 381	197 197	5 184
333314	Optical instrument & lens mfg	—	8	2	560	22 068	441	852	12 599	39 490	43 357	82 534	2 549
333319	Other commercial & service industry machinery mfg	—	16	6	731	23 936	456	904	11 726	71 081	38 800	110 297	2 528
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	6	1 658	55 932	1 207	2 740	37 066	91 871	130 122	222 574	7 290
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	17	6	1 658	55 932	1 207	2 740	37 066	91 871	130 122	222 574	7 290
333412	Industrial & commercial fan & blower mfg	—	3	1	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg	—	6	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	3	67	9	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	3	67	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND-SALEM, OR-WA CMSA—Con.												
	Portland-Vancouver, OR-WA PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	1	70	24	2 536	102 217	1 567	2 999	47 273	238 895	194 243	438 886	12 630
33391	Pump & compressor mfg	—	6	5	633	24 569	345	723	11 081	76 880	64 678	147 487	D
333911	Pump & pumping equipment mfg	—	4	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	18	8	960	36 269	624	1 048	16 292	77 097	56 903	130 455	7 418
333922	Conveyor & conveying equipment mfg	—	6	4	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	1	11	4	656	26 833	380	710	11 612	53 846	39 200	92 382	D
33399	All other general-purpose machinery mfg	2	46	11	943	41 379	598	1 228	19 900	84 918	72 662	160 944	D
333991	Power-driven handtool mfg	1	3	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	6	25	2	253	9 947	158	299	4 368	17 906	16 645	37 538	1 361
334	Computer & electronic product mfg	—	230	96	32 924	1 345 018	20 764	42 754	702 616	10 262 041	4 181 252	14 340 382	1 179 208
3341	Computer & peripheral equipment mfg	—	32	14	8 922	397 371	5 980	12 156	227 007	1 373 151	1 799 461	3 097 327	134 556
33411	Computer & peripheral equipment mfg	—	32	14	8 922	397 371	5 980	12 156	227 007	1 373 151	1 799 461	3 097 327	134 556
334111	Electronic computer mfg	1	9	6	g	D	D	D	D	D	D	D	D
334113	Computer terminal mfg	—	4	3	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	16	5	i	D	D	D	D	D	D	D	114 328
3342	Communications equipment mfg	—	21	7	1 712	62 802	807	1 419	20 355	205 161	202 997	410 577	D
33421	Telephone apparatus mfg	—	7	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	7	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	7	4	359	14 884	150	302	4 148	36 985	22 182	58 205	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	7	4	359	14 884	150	302	4 148	36 985	22 182	58 205	D
33429	Other communications equipment mfg	—	7	1	e	D	D	D	D	D	D	D	1 161
334290	Other communications equipment mfg	—	7	1	e	D	D	D	D	D	D	D	1 161
3343	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
33431	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
334310	Audio & video equipment mfg	1	8	4	500	13 232	353	836	6 301	37 853	139 502	179 327	D
3344	Semiconductor & other electronic component mfg	—	94	51	15 208	568 691	10 634	22 291	346 097	7 581 138	1 380 938	8 913 955	940 635
33441	Semiconductor & other electronic component mfg	—	94	51	15 208	568 691	10 634	22 291	346 097	7 581 138	1 380 938	8 913 955	940 635
334412	Bare printed circuit board mfg	—	21	7	g	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	25	18	8 814	371 315	6 190	13 423	246 125	7 155 236	1 057 978	8 168 363	897 566
334414	Electronic capacitor mfg	—	1	1	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	2	9	5	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	—	9	7	1 287	45 310	708	1 408	16 769	91 084	96 449	187 138	4 981
334419	Other electronic component mfg	1	24	10	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	PORTLAND–SALEM, OR–WA CMSA—Con.												
	Portland–Vancouver, OR–WA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	60	18	6 395	296 641	2 842	5 717	98 630	1 046 673	644 140	1 706 615	D
33451	Navigational, measuring, medical, & control instruments mfg	—	60	18	6 395	296 641	2 842	5 717	98 630	1 046 673	644 140	1 706 615	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	6	4	f	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	6	3	f	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	18	7	4 656	222 762	2 154	4 303	78 304	845 212	532 612	1 387 035	67 107
335	Electrical equipment, appliance, & component mfg	1	55	19	1 580	53 172	1 033	2 046	27 113	162 640	131 234	289 591	D
3353	Electrical equipment mfg ..	3	31	9	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	3	31	9	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	1	18	6	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	—	13	7	687	25 376	442	899	12 322	99 948	77 687	173 901	1 892
33599	All other electrical equipment & component mfg	3	8	4	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	3	8	4	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	128	50	10 446	395 182	8 650	16 913	310 376	1 105 248	1 388 819	2 488 502	39 230
3361	Motor vehicle mfg	—	4	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	3	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	3	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	2	24	7	f	D	D	D	D	D	D	D	1 436
33621	Motor vehicle body & trailer mfg	2	24	7	f	D	D	D	D	D	D	D	1 436
336214	Travel trailer & camper mfg	2	10	4	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	39	17	g	D	D	D	D	D	D	D	14 203
33632	Motor vehicle electrical & electronic equipment mfg	—	5	3	320	10 494	213	450	5 782	27 068	14 616	41 852	D
336322	Other motor vehicle electrical & electronic equipment mfg	—	4	3	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	—	7	4	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	—	7	4	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	14	7	g	D	D	D	D	D	D	D	4 989
336399	All other motor vehicle parts mfg	—	14	7	g	D	D	D	D	D	D	D	4 989
3364	Aerospace product & parts mfg	—	21	6	2 261	98 939	1 771	3 427	81 261	245 720	95 864	336 397	13 124
33641	Aerospace product & parts mfg	—	21	6	2 261	98 939	1 771	3 427	81 261	245 720	95 864	336 397	13 124
336413	Other aircraft part & auxiliary equipment mfg	—	17	5	2 214	96 679	1 749	3 377	80 361	244 370	93 294	331 604	13 029
3365	Railroad rolling stock mfg ..	—	1	1	g	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	23	11	1 606	70 405	1 384	3 243	58 039	139 613	69 131	207 303	2 130
33661	Ship & boat building	1	23	11	1 606	70 405	1 384	3 243	58 039	139 613	69 131	207 303	2 130
336611	Ship building & repairing	1	14	9	1 514	68 478	1 302	3 135	56 605	134 668	65 843	200 511	2 046

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	PORTLAND–SALEM, OR—WA CMSA—Con.													
	Portland–Vancouver, OR—WA PMSA—Con.													
31-33	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3369	Other transportation equipment mfg	-	16	7	f	D	D	D	D	D	D	D	D	
33699	Other transportation equipment mfg	-	16	7	f	D	D	D	D	D	D	D	D	
336999	All other transportation equipment mfg	-	10	4	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	217	43		3 752	98 335	2 841	5 509	65 988	197 788	164 695	364 923	7 304
3371	Household & institutional furniture & kitchen cabinet mfg	1	161	28		2 570	59 999	2 106	4 115	43 989	112 878	105 424	221 649	D
33711	Wood kitchen cabinet & counter top mfg	1	97	12		1 378	34 121	1 055	2 023	23 949	61 592	54 715	119 497	1 805
337110	Wood kitchen cabinet & counter top mfg ...	1	97	12		1 378	34 121	1 055	2 023	23 949	61 592	54 715	119 497	1 805
33712	Household & institutional furniture mfg	2	64	16		1 192	25 878	1 051	2 092	20 040	51 286	50 709	102 152	D
337121	Upholstered household furniture mfg	2	21	5		610	13 458	552	1 139	10 727	26 835	25 951	52 796	D
337122	Nonupholstered wood household furniture mfg	2	29	5		380	8 055	339	670	6 328	16 372	18 469	34 886	490
3372	Office furniture (including fixtures) mfg	2	44	11	f	D	D	D	D	D	D	D	D	3 377
33721	Office furniture (including fixtures) mfg	2	44	11	f	D	D	D	D	D	D	D	D	3 377
337215	Showcase, partition, shelving, & locker mfg	3	26	8		628	23 207	360	685	12 945	41 888	29 557	70 768	2 105
3379	Other furniture related product mfg	-	12	4	e	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	339	52		6 103	178 955	4 134	7 809	87 806	400 634	283 469	676 359	23 507
3391	Medical equipment & supplies mfg	2	134	20		2 441	81 754	1 668	3 466	39 729	191 536	99 229	288 832	13 125
33911	Medical equipment & supplies mfg	2	134	20		2 441	81 754	1 668	3 466	39 729	191 536	99 229	288 832	13 125
339114	Dental equipment & supplies mfg	-	26	8		1 277	49 673	875	1 639	22 669	108 143	57 532	163 216	9 974
339116	Dental laboratories ...	4	73	3		385	10 078	291	504	6 687	22 096	7 585	29 905	D
3399	Other miscellaneous mfg ..	1	205	32		3 662	97 201	2 466	4 343	48 077	209 098	184 240	387 527	10 382
33992	Sporting & athletic goods mfg	1	47	9		830	23 041	594	1 088	12 357	67 574	50 218	113 030	3 593
339920	Sporting & athletic goods mfg	1	47	9		830	23 041	594	1 088	12 357	67 574	50 218	113 030	3 593
33993	Doll, toy, & game mfg ...	-	12	3		614	11 593	471	532	6 290	14 749	42 416	57 816	D
339932	Game, toy, & children's vehicle mfg	-	9	2	f	D	D	D	D	D	D	D	D	D
33995	Sign mfg	2	62	6		809	25 305	476	963	11 578	50 956	33 474	83 957	D
339950	Sign mfg	2	62	6		809	25 305	476	963	11 578	50 956	33 474	83 957	D
33999	All other miscellaneous mfg	1	52	12		1 221	31 613	806	1 563	15 620	64 380	43 083	106 610	D
339994	Broom, brush, & mop mfg	-	3	2	e	D	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	4	36	6		385	9 401	259	423	4 752	22 210	15 841	37 865	D
	RICHLAND–KENNEWICK–PASCO, WA MSA													
31-33	Manufacturing	-	168	31		6 764	208 594	5 302	10 984	134 328	646 665	1 408 500	2 045 956	65 247
311	Food mfg	-	26	11		4 178	97 612	3 699	7 523	78 049	341 054	1 037 427	1 364 650	41 820
3114	Fruit & vegetable preserving & specialty food mfg	-	8	8	g	D	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	7	7		2 365	58 876	2 159	4 077	46 727	217 353	261 247	472 514	27 734
311411	Frozen fruit, juice, & vegetable mfg	-	7	7		2 365	58 876	2 159	4 077	46 727	217 353	261 247	472 514	27 734
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	RICHLAND—KENNEWICK—PASCO, WA MSA—Con.												
	Manufacturing—Con.												
325	Chemical mfg	—	11	4	1 043	61 281	567	1 552	26 554	138 991	233 453	376 964	D
3251	Basic chemical mfg	—	2	1	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	1	7	3	e	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	—	5	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	1	1	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	15	6	e	D	D	D	D	D	D	D	1 016
	SEATTLE—TACOMA—BREMERTON, WA CMSA												
31-33	Manufacturing	2	4 858	1 326	219 765	9 460 354	129 167	260 724	4 632 430	20 140 857	32 052 250	51 625 734	1 246 996
311	Food mfg	2	417	150	16 028	463 761	11 160	23 170	302 763	1 609 895	2 112 463	3 718 350	D
312	Beverage & tobacco product mfg	2	48	20	g	D	D	D	D	D	D	D	D
313	Textile mills	2	35	5	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	115	20	g	D	D	D	D	D	D	D	D
315	Apparel mfg	1	142	36	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	24	6	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	235	87	i	D	D	D	D	D	D	D	D
322	Paper mfg	—	69	37	h	D	D	D	D	D	D	D	68 932
323	Printing & related support activities	2	600	109	i	D	D	D	D	D	D	D	45 772
324	Petroleum & coal products mfg	2	19	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	127	36	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	173	74	i	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	187	64	i	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	43	21	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	760	181	j	D	D	D	D	D	D	D	78 183
333	Machinery mfg	1	274	78	i	D	D	D	D	D	D	D	34 108
334	Computer & electronic product mfg	1	330	116	k	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	1	81	25	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	302	105	l	D	D	D	D	D	D	D	298 297
337	Furniture & related product mfg	1	314	74	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	563	75	i	D	D	D	D	D	D	D	D

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	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Bremerton, WA PMSA												
31-33	Manufacturing	2	143	16	1 441	36 809	1 016	1 680	20 851	81 349	59 960	142 740	3 842
339	Miscellaneous mfg.	1	24	3	303	9 053	190	336	4 069	16 435	13 264	30 375	1 062
	Olympia, WA PMSA												
31-33	Manufacturing	—	156	37	3 218	100 654	2 503	4 590	69 868	304 361	465 229	761 028	29 218
312	Beverage & tobacco product mfg.	—	6	3	383	14 320	276	561	10 226	61 708	138 238	201 429	1 734
3121	Beverage mfg.	—	6	3	383	14 320	276	561	10 226	61 708	138 238	201 429	1 734
322	Paper mfg.	—	4	2	e	D	D	D	D	D	D	D	415
3222	Converted paper product mfg.	—	4	2	e	D	D	D	D	D	D	D	415
32221	Paperboard container mfg.	—	3	2	e	D	D	D	D	D	D	D	415
322211	Corrugated & solid fiber box mfg.	—	3	2	e	D	D	D	D	D	D	D	415
326	Plastics & rubber products mfg.	—	8	5	613	16 943	532	1 013	12 407	71 469	49 506	118 112	17 715
3261	Plastics product mfg.	—	8	5	613	16 943	532	1 013	12 407	71 469	49 506	118 112	17 715
32619	Other plastics product mfg.	—	4	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.	—	21	8	527	20 964	432	820	16 101	59 019	107 071	156 877	1 085
3324	Boiler, tank, & shipping container mfg.	—	3	3	e	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.	—	2	2	e	D	D	D	D	D	D	D	D
	Seattle-Bellevue-Everett, WA PMSA												
31-33	Manufacturing	2	3 879	1 065	192 823	8 617 706	108 814	220 221	4 062 188	17 872 900	29 117 907	46 446 056	1 019 101
311	Food mfg.	2	339	125	13 701	401 994	9 487	19 574	260 682	1 296 063	1 687 303	2 975 480	67 766
3113	Sugar & confectionery product mfg.	4	20	5	284	5 084	230	312	3 483	12 931	9 044	22 123	733
3114	Fruit & vegetable preserving & specialty food mfg.	—	19	7	636	21 599	468	847	10 589	52 309	41 414	93 667	2 224
31141	Frozen food mfg.	—	12	6	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.	—	10	4	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.	3	17	10	1 048	39 136	679	1 359	25 948	130 123	390 406	520 038	8 942
31151	Dairy product (except frozen) mfg.	2	11	6	734	27 232	427	821	16 166	99 714	305 800	403 293	5 518
311511	Fluid milk mfg.	3	7	5	f	D	D	D	D	D	D	D	4 697
31152	Ice cream & frozen dessert mfg.	8	6	4	314	11 904	252	538	9 782	30 409	84 606	116 745	3 424
311520	Ice cream & frozen dessert mfg.	8	6	4	314	11 904	252	538	9 782	30 409	84 606	116 745	3 424
3116	Meat product mfg.	4	22	12	1 214	32 108	1 005	1 817	25 097	122 506	200 913	326 855	5 535
31161	Animal slaughtering & processing.	4	22	12	1 214	32 108	1 005	1 817	25 097	122 506	200 913	326 855	5 535
311612	Meat processed from carcasses	3	16	8	801	20 939	669	1 100	16 697	81 444	117 797	203 476	3 318
3117	Seafood product preparation & packaging.	2	62	40	4 027	124 847	3 451	7 941	102 439	336 469	432 501	768 551	18 729
31171	Seafood product preparation & packaging	2	62	40	4 027	124 847	3 451	7 941	102 439	336 469	432 501	768 551	18 729
311711	Seafood canning	3	17	5	326	7 517	262	464	4 349	19 797	28 893	48 611	1 284
311712	Fresh & frozen seafood processing.	2	45	35	3 701	117 330	3 189	7 477	98 090	316 672	403 608	719 940	17 445
3118	Bakeries & tortilla mfg.	2	147	34	5 096	140 605	2 655	5 340	69 961	405 001	322 083	725 655	25 395
31181	Bread & bakery product mfg.	3	123	26	4 238	113 978	2 065	4 296	56 812	233 170	186 308	421 184	14 083
311811	Retail bakeries	7	71	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries	3	50	24	3 732	104 687	1 689	3 715	51 173	206 922	162 871	370 009	12 743
31182	Cookie, cracker, & pasta mfg.	—	22	7	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.	1	13	3	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour	—	4	2	412	17 352	258	521	7 442	121 752	107 456	223 953	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	—	42	14	1 156	30 078	821	1 581	17 209	210 414	210 139	411 476	3 985
31192	Coffee & tea mfg	—	7	3	e	D	D	D	D	D	D	D	381
311920	Coffee & tea mfg	—	7	3	e	D	D	D	D	D	D	D	381
31194	Seasoning & dressing mfg	—	9	3	e	D	D	D	D	D	D	D	D
31199	All other food mfg	2	24	6	386	10 048	295	546	5 041	29 951	27 788	57 824	1 797
312	Beverage & tobacco product mfg	3	36	16	2 031	53 976	712	1 296	21 074	271 962	310 406	551 662	29 116
3121	Beverage mfg	3	36	16	2 031	53 976	712	1 296	21 074	271 962	310 406	551 662	29 116
31211	Soft drink & ice mfg	5	12	8	875	24 959	297	493	8 157	75 063	178 199	250 573	7 075
312111	Soft drink mfg	5	9	7	f	D	D	D	D	D	D	D	D
31212	Breweries	1	17	6	f	D	D	D	D	D	D	D	D
312120	Breweries	1	17	6	f	D	D	D	D	D	D	D	D
31213	Wineries	—	7	2	e	D	D	D	D	D	D	D	D
312130	Wineries	—	7	2	e	D	D	D	D	D	D	D	D
313	Textile mills	6	31	3	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	90	15	g	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	3	72	11	f	D	D	D	D	D	D	D	D
31491	Textile bag & canvas mills	2	39	7	e	D	D	D	D	D	D	D	1 337
31499	All other textile product mills	4	33	4	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills ..	4	32	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg	2	118	26	2 417	48 130	2 072	4 110	34 299	78 555	63 006	142 169	2 661
3152	Cut & sew apparel mfg	2	87	22	2 091	40 004	1 787	3 474	28 635	62 493	54 997	118 568	1 743
31521	Cut & sew apparel contractors	2	37	8	f	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	5	5	384	7 292	369	801	6 900	14 915	1 616	16 548	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	4	32	3	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	14	5	f	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	1	12	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	22	7	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	—	9	5	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	7	14	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	—	19	6	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	15	6	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	15	6	f	D	D	D	D	D	D	D	D
316991	Luggage mfg	—	6	4	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	146	51	4 225	129 325	3 336	6 840	91 047	292 419	530 031	813 756	30 958
3211	Sawmills & wood preservation	1	31	13	1 621	59 137	1 393	2 897	47 528	137 317	292 732	424 366	17 729
32111	Sawmills & wood preservation	1	31	13	1 621	59 137	1 393	2 897	47 528	137 317	292 732	424 366	17 729
321113	Sawmills	1	29	11	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	2	12	7	413	11 808	314	650	7 121	25 750	27 114	52 411	1 170
32121	Veneer, plywood, & engineered wood product mfg	2	12	7	413	11 808	314	650	7 121	25 750	27 114	52 411	1 170

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	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg...	1	103	31	2 191	58 380	1 629	3 293	36 398	129 352	210 185	336 979	12 059
32191	Millwork	1	58	19	1 312	36 592	1 035	2 146	25 024	89 559	160 082	246 864	10 102
321911	Wood window & door mfg	1	33	12	761	20 728	575	1 164	13 260	45 154	65 777	112 095	1 258
321912	Cut stock, resawing lumber, & planing....	—	11	4	322	9 609	289	647	7 966	32 789	78 018	107 007	6 034
32192	Wood container & pallet mfg	—	14	4	304	7 325	224	440	4 242	11 335	17 885	29 030	903
321920	Wood container & pallet mfg	—	14	4	304	7 325	224	440	4 242	11 335	17 885	29 030	903
32199	All other wood product mfg	3	31	8	575	14 463	370	707	7 132	28 458	32 218	61 085	1 054
321999	All other miscellaneous wood product mfg ...	5	20	5	296	5 902	226	420	3 795	11 118	11 473	23 080	570
322	Paper mfg	—	48	24	2 890	125 263	2 135	4 249	86 603	433 284	329 165	739 078	37 027
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	47	23	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	20	15	1 186	46 006	839	1 739	27 253	107 248	164 685	269 942	D
322211	Corrugated & solid fiber box mfg	—	14	10	771	30 921	533	1 076	17 123	79 405	122 042	199 565	13 249
322212	Folding paperboard box mfg	—	3	3	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	2	15	6	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	2	7	5	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	500	94	7 706	260 748	5 330	9 969	155 053	545 058	277 353	824 416	40 011
3231	Printing & related support activities	2	500	94	7 706	260 748	5 330	9 969	155 053	545 058	277 353	824 416	40 011
32311	Printing	2	451	80	6 653	217 337	4 588	8 478	128 555	456 553	263 169	722 159	37 172
323110	Commercial lithographic printing ..	2	208	48	3 896	136 305	2 629	5 048	79 712	264 306	163 040	429 874	26 438
323113	Commercial screen printing	3	59	10	604	14 783	408	712	7 957	32 341	19 536	51 903	1 911
323114	Quick printing	1	104	6	701	18 594	497	838	12 027	40 712	20 628	61 217	3 482
323116	Manifold business form printing	—	12	6	681	23 057	531	882	15 491	72 749	29 919	102 757	2 821
32312	Support activities for printing	—	49	14	1 053	43 411	742	1 491	26 498	88 505	14 184	102 257	2 839
323121	Tradebinding & related work	—	18	6	293	8 286	232	430	5 381	14 316	1 963	16 257	623
323122	Prepress services	—	31	8	760	35 125	510	1 061	21 117	74 189	12 221	86 000	2 216
325	Chemical mfg	1	105	29	1 894	85 815	1 051	2 078	32 301	294 949	245 918	536 062	29 661
3254	Pharmaceutical & medicine mfg	—	16	5	758	44 183	460	846	12 608	104 307	63 169	162 457	18 475
32541	Pharmaceutical & medicine mfg	—	16	5	758	44 183	460	846	12 608	104 307	63 169	162 457	18 475
325414	Biological product (except diagnostic) mfg	—	4	3	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	3	26	9	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	17	8	326	12 292	135	283	4 915	35 028	40 873	74 876	1 233
325510	Paint & coating mfg	—	17	8	326	12 292	135	283	4 915	35 028	40 873	74 876	1 233
3259	Other chemical product mfg	2	19	6	289	11 360	162	360	6 087	46 955	43 288	91 329	3 556
326	Plastics & rubber products mfg	1	124	53	5 039	141 076	3 692	7 331	88 612	340 729	345 867	682 454	35 914
3261	Plastics product mfg	1	109	46	4 681	131 630	3 416	6 816	81 878	317 088	329 757	642 358	34 833
32611	Unsupported plastics film, sheet, & bag mfg ..	—	12	5	f	D	D	D	D	D	D	D	7 925
326111	Unsupported plastics bag mfg	—	5	2	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	—	7	3	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	7	3	598	16 087	288	533	6 182	47 851	36 891	85 140	D
326121	Unsupported plastics profile shape mfg	—	6	3	f	D	D	D	D	D	D	D	D

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	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg—Con.												
3261	Plastics product mfg—Con.												
32615	Urethane & other foam product (except polystyrene) mfg	—	6	3	322	12 301	251	521	7 162	29 012	35 604	64 712	D
326150	Urethane & other foam product (except polystyrene) mfg	—	6	3	322	12 301	251	521	7 162	29 012	35 604	64 712	D
32619	Other plastics product mfg	1	71	30	2 838	72 860	2 136	4 225	46 802	168 049	136 961	301 741	14 765
326199	All other plastics product mfg	1	66	28	2 777	71 476	2 088	4 138	45 891	164 803	133 310	294 820	14 698
3262	Rubber product mfg	5	15	7	358	9 446	276	515	6 734	23 641	16 110	40 096	1 081
32629	Other rubber product mfg	4	14	7	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg	5	10	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	124	38	3 432	120 667	2 700	5 412	86 772	344 356	297 664	652 065	27 327
3272	Glass & glass product mfg	—	47	9	1 666	51 815	1 366	2 684	40 775	152 879	84 270	244 747	15 798
32721	Glass & glass product mfg	—	47	9	1 666	51 815	1 366	2 684	40 775	152 879	84 270	244 747	15 798
327213	Glass container mfg	—	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	31	5	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	50	23	1 219	50 214	931	1 942	34 426	133 159	152 728	287 497	7 668
32732	Ready-mix concrete mfg	—	22	12	630	27 136	515	1 095	20 397	67 636	84 437	151 651	3 129
327320	Ready-mix concrete mfg	—	22	12	630	27 136	515	1 095	20 397	67 636	84 437	151 651	3 129
32739	Other concrete product mfg	2	16	7	320	11 545	216	444	6 558	26 359	17 982	44 640	802
327390	Other concrete product mfg	2	16	7	320	11 545	216	444	6 558	26 359	17 982	44 640	802
331	Primary metal mfg	—	34	18	1 471	61 620	1 153	2 502	41 208	206 245	207 430	417 864	13 234
3311	Iron & steel mills & ferroalloy mfg	—	2	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	2	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	1	22	13	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	10	9	436	14 813	376	815	11 851	34 724	18 295	52 532	3 419
331513	Steel foundries (except investment)	—	6	5	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	3	12	4	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	637	151	12 469	414 928	9 428	18 015	260 440	923 650	630 995	1 536 479	66 756
3321	Forging & stamping	1	21	10	754	23 670	606	1 193	16 079	48 441	46 751	94 377	2 763
33211	Forging & stamping	1	21	10	754	23 670	606	1 193	16 079	48 441	46 751	94 377	2 763
332114	Custom roll forming	—	6	4	280	8 954	237	488	6 632	15 645	21 018	36 137	637
332116	Metal stamping	—	8	5	420	13 089	326	626	8 223	29 626	22 593	51 908	1 843
3323	Architectural & structural metals mfg	1	152	42	2 927	92 508	2 186	4 306	58 661	197 928	181 293	379 710	7 782
33231	Plate work & fabricated structural product mfg	1	49	11	848	29 386	614	1 228	18 348	66 699	64 564	131 688	2 385
332312	Fabricated structural metal mfg	—	36	9	671	23 592	491	973	14 755	55 289	54 933	110 640	1 958
33232	Ornamental & architectural metal products mfg	1	103	31	2 079	63 122	1 572	3 078	40 313	131 229	116 729	248 022	5 397
332321	Metal window & door mfg	3	16	6	481	15 040	336	737	9 240	29 773	35 121	65 003	915
332322	Sheet metal work mfg	—	61	21	1 342	39 967	1 042	1 942	25 913	88 050	65 741	154 183	3 792
332323	Ornamental & architectural metal work mfg	2	26	4	256	8 115	194	399	5 160	13 406	15 867	28 836	690
3324	Boiler, tank, & shipping container mfg	—	14	9	511	21 347	372	797	15 841	51 374	112 675	161 824	2 578
33243	Metal can, box, & other metal container (light gauge) mfg	—	7	4	332	14 978	260	582	12 269	42 242	106 239	146 748	1 501
332431	Metal can mfg	—	3	3	275	13 263	223	483	11 204	39 614	102 655	140 120	D

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	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	291	50	4 547	153 811	3 682	6 533	104 466	326 030	144 149	457 495	36 602
33271	Machine shops	1	259	42	3 878	126 489	3 125	5 411	84 971	273 601	113 987	375 520	30 273
332710	Machine shops	1	259	42	3 878	126 489	3 125	5 411	84 971	273 601	113 987	375 520	30 273
33272	Turned product & screw, nut, & bolt mfg	—	32	8	669	27 322	557	1 122	19 495	52 429	30 162	81 975	6 329
332721	Precision turned product mfg	—	30	8	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	—	60	19	2 005	59 341	1 594	3 245	37 863	127 209	38 648	163 943	9 501
33281	Coating, engraving, heat treating, & allied activities	—	60	19	2 005	59 341	1 594	3 245	37 863	127 209	38 648	163 943	9 501
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	26	9	f	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	—	27	8	1 143	34 605	841	1 673	19 450	72 036	23 039	93 850	4 518
3329	Other fabricated metal product mfg	1	61	14	1 188	46 659	574	1 118	16 233	125 730	79 562	205 687	4 821
33299	All other fabricated metal product mfg	1	53	11	f	D	D	D	D	D	D	D	3 997
332993	Ammunition (except small arms) mfg	—	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	3	34	5	350	10 472	270	539	7 105	20 939	17 487	38 433	1 177
333	Machinery mfg	1	227	72	6 538	239 443	4 300	8 353	125 980	583 699	571 414	1 151 460	31 221
3331	Agriculture, construction, & mining machinery mfg	1	21	11	649	27 272	360	726	11 298	40 767	84 501	125 935	3 011
33312	Construction machinery mfg	1	16	11	637	26 944	351	712	11 063	39 995	83 609	124 260	2 906
333120	Construction machinery mfg	1	16	11	637	26 944	351	712	11 063	39 995	83 609	124 260	2 906
3332	Industrial machinery mfg	2	44	9	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	2	35	9	702	31 049	367	790	14 087	67 094	40 967	109 224	2 251
333298	All other industrial machinery mfg	—	17	3	375	17 489	194	413	7 546	36 425	21 107	58 045	1 115
3333	Commercial & service industry machinery mfg	1	30	12	903	31 640	539	1 032	14 264	79 099	45 375	123 931	2 807
33331	Commercial & service industry machinery mfg	1	30	12	903	31 640	539	1 032	14 264	79 099	45 375	123 931	2 807
333319	Other commercial & service industry machinery mfg	1	18	8	680	24 201	437	841	11 406	58 016	32 862	90 656	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	555	19 158	436	827	11 049	65 591	41 630	105 331	1 919
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	12	6	555	19 158	436	827	11 049	65 591	41 630	105 331	1 919
333414	Heating equipment (except warm air furnaces) mfg	—	7	4	438	14 234	360	663	8 836	49 746	25 106	72 826	1 782
3335	Metalworking machinery mfg	—	40	11	978	38 663	606	1 032	18 697	95 796	72 753	162 857	7 935
33351	Metalworking machinery mfg	—	40	11	978	38 663	606	1 032	18 697	95 796	72 753	162 857	7 935
333512	Machine tool (metal cutting types) mfg	—	4	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	73	21	2 556	84 460	1 851	3 673	52 157	220 586	277 365	500 357	12 100
33392	Material handling equipment mfg	—	28	11	1 787	54 646	1 367	2 745	36 709	155 522	241 286	397 648	7 077
333923	Overhead traveling crane, hoist, & monorail system mfg	—	11	5	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	39	10	748	29 154	472	908	15 121	63 410	34 403	99 365	4 923

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	1	297	112	33 476	1 701 196	12 168	23 241	383 047	3 398 587	1 749 635	5 162 470	250 020
3341	Computer & peripheral equipment mfg.....	1	32	11	2 035	96 835	745	1 466	23 305	260 796	275 520	527 611	D
33411	Computer & peripheral equipment mfg.....	1	32	11	2 035	96 835	745	1 466	23 305	260 796	275 520	527 611	D
334119	Other computer peripheral equipment mfg.....	—	26	6	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	3	42	18	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg.....	4	16	9	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg.....	4	16	9	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	1	19	8	g	D	D	D	D	D	D	D	3 590
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	1	19	8	g	D	D	D	D	D	D	D	3 590
3343	Audio & video equipment mfg.....	9	11	3	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	9	11	3	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	9	11	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg.....	1	79	34	4 037	126 542	2 722	5 665	62 154	304 213	169 202	474 984	34 958
33441	Semiconductor & other electronic component mfg.....	1	79	34	4 037	126 542	2 722	5 665	62 154	304 213	169 202	474 984	34 958
334412	Bare printed circuit board mfg.....	1	19	10	1 393	42 737	1 098	2 481	28 848	102 869	53 832	157 337	5 357
334413	Semiconductor & related device mfg...	—	12	2	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg.....	2	6	4	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.....	3	10	9	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg.....	1	29	8	948	34 029	451	904	11 158	75 463	35 933	110 663	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	109	38	23 850	1 329 107	7 031	13 137	258 064	2 490 561	986 468	3 495 053	173 751
33451	Navigational, measuring, medical, & control instruments mfg.....	—	109	38	23 850	1 329 107	7 031	13 137	258 064	2 490 561	986 468	3 495 053	173 751
334510	Electromedical & electrotherapeutic apparatus mfg.....	—	15	10	4 411	237 204	1 455	3 049	42 236	543 990	416 806	925 014	48 847
334511	Search, detection, navigation, & guidance instrument mfg.....	—	19	9	15 593	910 031	4 259	7 571	169 660	1 485 367	382 039	1 922 795	D
334515	Electricity measuring & testing instrument mfg.....	—	20	8	h	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg.....	—	22	5	620	33 153	435	793	16 492	51 492	27 853	79 182	1 980
3346	Mfg & reproducing magnetic & optical media..	3	24	8	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media.....	3	24	8	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	74	24	2 000	69 001	1 097	2 001	24 344	245 398	149 005	394 108	D
3352	Household appliance mfg..	—	3	2	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	—	2	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg . .	4	36	12	715	24 999	377	716	9 375	68 803	59 157	126 573	D
33531	Electrical equipment mfg	4	36	12	715	24 999	377	716	9 375	68 803	59 157	126 573	D
335314	Relay & industrial control mfg	3	21	8	475	16 848	213	404	4 613	47 217	37 718	84 735	D
3359	Other electrical equipment & component mfg	—	23	8	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	13	5	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	13	5	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	246	88	l	D	D	D	D	D	D	D	292 718
3361	Motor vehicle mfg	—	4	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg	—	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	2	50	13	g	D	D	D	D	D	D	D	6 614
33632	Motor vehicle electrical & electronic equipment mfg	7	14	6	e	D	D	D	D	D	D	D	1 381
336322	Other motor vehicle electrical & electronic equipment mfg	7	13	6	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	10	2	f	D	D	D	D	D	D	D	D
336391	Motor vehicle air-conditioning mfg	—	1	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	3	96	44	l	D	D	D	D	D	D	D	262 550
33641	Aerospace product & parts mfg	3	96	44	l	D	D	D	D	D	D	D	262 550
336411	Aircraft mfg	3	5	4	l	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	83	36	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	67	22	3 883	148 221	2 774	5 506	85 860	215 722	135 191	355 789	19 982
33661	Ship & boat building	—	67	22	3 883	148 221	2 774	5 506	85 860	215 722	135 191	355 789	19 982
336611	Ship building & repairing	—	36	15	2 533	100 678	1 800	4 024	67 170	175 024	99 709	274 733	D
336612	Boat building	1	31	7	1 350	47 543	974	1 482	18 690	40 698	35 482	81 056	D
3369	Other transportation equipment mfg	—	16	3	e	D	D	D	D	D	D	D	872
33699	Other transportation equipment mfg	—	16	3	e	D	D	D	D	D	D	D	872
336991	Motorcycle, bicycle, & parts mfg	—	14	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	230	52	4 030	102 681	3 238	6 261	69 568	220 490	160 595	380 711	11 276
3371	Household & institutional furniture & kitchen cabinet mfg	2	159	25	2 072	49 480	1 681	3 168	35 092	95 662	74 761	169 833	4 214
33711	Wood kitchen cabinet & counter top mfg	1	94	14	1 250	31 300	1 001	1 957	21 603	61 285	42 472	103 236	2 059
337110	Wood kitchen cabinet & counter top mfg	1	94	14	1 250	31 300	1 001	1 957	21 603	61 285	42 472	103 236	2 059
33712	Household & institutional furniture mfg	2	65	11	822	18 180	680	1 211	13 489	34 377	32 289	66 597	2 155
337122	Nonupholstered wood household furniture mfg	4	32	5	296	5 723	267	489	4 660	11 439	9 074	20 625	D
337127	Institutional furniture mfg	1	16	4	392	9 546	307	516	6 630	17 452	16 735	34 021	D

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	Seattle-Bellevue-Everett, WA PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	60	24	1 608	44 563	1 293	2 582	28 533	90 888	56 093	147 260	5 312
33721	Office furniture (including fixtures) mfg	1	60	24	1 608	44 563	1 293	2 582	28 533	90 888	56 093	147 260	5 312
337211	Wood office furniture mfg	—	20	10	847	20 153	722	1 407	14 116	44 088	24 660	69 270	2 555
337212	Custom architectural woodwork & millwork mfg	1	13	6	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	22	6	300	9 127	229	458	5 491	16 811	10 617	27 220	847
3379	Other furniture related product mfg	2	11	3	350	8 638	264	511	5 943	33 940	29 741	63 618	1 750
33791	Mattress mfg	2	9	3	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	2	9	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	442	65	6 409	197 455	4 326	7 852	100 237	511 035	344 863	843 988	35 753
3391	Medical equipment & supplies mfg	3	192	24	2 202	82 587	1 386	2 349	36 862	192 311	99 520	292 972	13 308
33911	Medical equipment & supplies mfg	3	192	24	2 202	82 587	1 386	2 349	36 862	192 311	99 520	292 972	13 308
339112	Surgical & medical instrument mfg	2	22	6	796	40 436	393	706	14 512	101 674	54 270	155 840	8 906
339113	Surgical appliance & supplies mfg	4	21	5	399	12 745	256	438	5 548	33 337	17 543	51 124	1 722
339116	Dental laboratories	4	124	8	708	19 284	538	827	12 094	37 683	14 624	53 330	1 460
3399	Other miscellaneous mfg	2	250	41	4 207	114 868	2 940	5 503	63 375	318 724	245 343	551 016	22 445
33992	Sporting & athletic goods mfg	1	53	17	2 433	66 387	1 722	3 356	37 638	219 756	179 307	388 853	18 015
339920	Sporting & athletic goods mfg	1	53	17	2 433	66 387	1 722	3 356	37 638	219 756	179 307	388 853	18 015
33995	Sign mfg	3	82	9	739	21 457	479	839	10 498	39 479	22 338	61 647	1 396
339950	Sign mfg	3	82	9	739	21 457	479	839	10 498	39 479	22 338	61 647	1 396
33999	All other miscellaneous mfg	4	49	9	562	14 674	406	765	8 421	31 936	23 845	53 512	2 074
339999	All other miscellaneous mfg	4	33	7	386	8 946	286	536	5 520	19 660	18 041	35 382	1 583
	Tacoma, WA PMSA												
31-33	Manufacturing	1	680	208	22 283	705 185	16 834	34 233	479 523	1 882 247	2 409 154	4 275 910	194 835
311	Food mfg	1	52	19	2 002	54 761	1 493	3 254	38 574	296 706	385 234	683 756	16 478
3114	Fruit & vegetable preserving & specialty food mfg	—	4	2	e	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	—	3	2	e	D	D	D	D	D	D	D	D
311422	Specialty canning	—	1	1	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	7	9	3	319	8 114	258	596	6 042	38 569	55 263	95 240	1 689
31161	Animal slaughtering & processing	7	9	3	319	8 114	258	596	6 042	38 569	55 263	95 240	1 689
3117	Seafood product preparation & packaging	—	6	5	397	9 498	260	584	5 600	25 950	24 155	50 106	944
31171	Seafood product preparation & packaging	—	6	5	397	9 498	260	584	5 600	25 950	24 155	50 106	944
311712	Fresh & frozen seafood processing	—	5	4	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	15	5	390	9 545	277	499	5 513	23 306	27 629	50 560	2 604
31182	Cookie, cracker, & pasta mfg	4	3	2	268	6 315	209	355	3 964	12 332	16 228	28 773	D
311821	Cookie & cracker mfg	4	2	2	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	17	9	830	21 575	766	1 560	16 887	43 168	76 684	116 940	D
3152	Cut & sew apparel mfg	—	14	7	f	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	10	5	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	—	4	4	355	6 777	346	683	6 325	8 418	1 558	9 954	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Tacoma, WA PMSA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	—	73	31	3 248	89 647	2 649	5 476	66 395	174 175	412 161	592 002	13 178
3211	Sawmills & wood preservation	—	15	12	1 435	44 649	1 127	2 403	31 672	101 989	269 214	373 421	6 670
32111	Sawmills & wood preservation	—	15	12	1 435	44 649	1 127	2 403	31 672	101 989	269 214	373 421	6 670
321113	Sawmills	—	12	9	1 168	36 758	882	1 910	24 933	65 697	201 545	267 906	6 428
321114	Wood preservation	—	3	3	267	7 891	245	493	6 739	36 292	67 669	105 515	242
3212	Veneer, plywood, & engineered wood product mfg	—	11	8	709	19 975	562	1 231	15 348	24 225	73 772	101 830	3 987
32121	Veneer, plywood, & engineered wood product mfg	—	11	8	709	19 975	562	1 231	15 348	24 225	73 772	101 830	3 987
321219	Reconstituted wood product mfg	—	3	2	266	7 518	215	448	5 754	9 253	40 625	49 220	D
3219	Other wood product mfg	1	47	11	1 104	25 023	960	1 842	19 375	47 961	69 175	116 751	2 521
32191	Millwork	1	26	8	769	18 379	674	1 325	14 910	33 680	50 312	83 977	1 794
321911	Wood window & door mfg	—	12	4	523	11 972	467	920	10 004	21 742	28 369	49 780	927
322	Paper mfg	—	17	11	1 378	60 801	1 046	2 165	43 877	197 888	244 424	444 702	31 490
3221	Pulp, paper, & paperboard mills	—	4	4	918	46 494	706	1 418	33 839	158 354	184 803	345 162	22 588
32212	Paper mills	—	1	1	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	13	7	460	14 307	340	747	10 038	39 534	59 621	99 540	8 902
32221	Paperboard container mfg	—	3	3	251	7 717	185	418	5 872	19 018	26 112	45 649	D
323	Printing & related support activities	1	65	12	1 431	40 575	824	1 247	18 198	67 287	52 009	121 432	4 885
3231	Printing & related support activities	1	65	12	1 431	40 575	824	1 247	18 198	67 287	52 009	121 432	4 885
32311	Printing	1	60	12	1 410	39 942	805	1 214	17 716	65 607	51 688	119 400	4 628
323110	Commercial lithographic printing	—	31	6	462	17 827	238	454	6 399	31 120	16 936	48 464	3 242
323117	Book printing	—	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	1	6	4	428	17 706	222	493	8 846	76 799	344 595	420 141	6 157
3241	Petroleum & coal products mfg	1	6	4	428	17 706	222	493	8 846	76 799	344 595	420 141	6 157
325	Chemical mfg	—	16	7	549	22 087	302	606	11 562	89 568	90 920	180 748	6 395
3251	Basic chemical mfg	—	8	3	259	14 026	175	376	8 332	56 932	43 715	100 876	5 176
326	Plastics & rubber products mfg	3	37	15	1 563	43 201	1 283	2 652	31 930	109 511	129 872	238 453	26 858
3261	Plastics product mfg	3	34	15	1 523	41 845	1 251	2 585	30 888	106 970	128 240	234 212	D
32619	Other plastics product mfg	4	24	9	1 094	28 102	911	1 726	20 619	63 174	57 622	119 594	10 577
326199	All other plastics product mfg	4	21	9	1 068	27 451	894	1 685	20 199	62 478	56 390	117 685	10 551
327	Nonmetallic mineral product mfg	—	40	21	1 474	48 590	1 171	2 455	33 783	138 047	104 470	241 542	9 839
3272	Glass & glass product mfg	—	5	4	438	10 430	347	686	7 214	27 315	23 106	50 336	D
32721	Glass & glass product mfg	—	5	4	438	10 430	347	686	7 214	27 315	23 106	50 336	D
327215	Glass product mfg made of purchased glass	—	5	4	438	10 430	347	686	7 214	27 315	23 106	50 336	D
3273	Cement & concrete product mfg	1	19	11	723	26 328	581	1 281	18 355	65 795	42 541	107 572	5 743
32732	Ready-mix concrete mfg	—	8	5	e	D	D	D	D	D	D	D	D
327320	Ready-mix concrete mfg	—	8	5	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	9	5	393	12 723	292	620	8 328	32 598	21 766	53 711	3 517
327390	Other concrete product mfg	2	9	5	393	12 723	292	620	8 328	32 598	21 766	53 711	3 517

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.												
	Tacoma, WA PMSA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg	—	7	3	968	34 510	866	1 868	27 653	92 079	105 808	196 918	D
3313	Alumina & aluminum production & processing ..	—	1	1	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	e	D	D	D	D	D	D	D	D
331319	Other aluminum rolling & drawing	—	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	—	5	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	2	1	e	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	2	1	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	3	1	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	94	21	2 108	69 896	1 645	3 251	47 173	141 377	135 807	274 698	9 993
3323	Architectural & structural metals mfg	—	31	12	1 156	36 352	894	1 814	23 532	76 794	101 487	177 156	3 872
33232	Ornamental & architectural metal products mfg	—	17	9	1 020	31 781	799	1 641	20 975	66 954	89 264	155 198	3 585
332321	Metal window & door mfg	—	4	2	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg .	1	8	5	387	13 407	319	689	9 247	28 942	32 859	60 393	2 844
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	37	2	315	10 719	260	514	7 799	21 300	9 827	29 765	1 907
33271	Machine shops	2	37	2	315	10 719	260	514	7 799	21 300	9 827	29 765	1 907
332710	Machine shops	2	37	2	315	10 719	260	514	7 799	21 300	9 827	29 765	1 907
3329	Other fabricated metal product mfg	—	12	2	250	9 393	209	390	7 611	19 418	12 607	32 121	559
333	Machinery mfg	1	35	6	819	27 602	594	1 205	17 848	66 525	42 989	107 874	2 732
3332	Industrial machinery mfg ..	—	6	2	439	15 057	306	640	8 696	39 174	22 195	59 080	1 023
334	Computer & electronic product mfg	3	22	4	609	26 692	293	607	12 252	31 399	30 698	68 605	D
3344	Semiconductor & other electronic component mfg	—	3	1	e	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	3	1	e	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	39	15	g	D	D	D	D	D	D	D	5 328
3363	Motor vehicle parts mfg ...	—	9	3	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	14	4	1 582	53 089	1 221	2 637	43 762	176 771	64 066	214 320	1 756
33641	Aerospace product & parts mfg	—	14	4	1 582	53 089	1 221	2 637	43 762	176 771	64 066	214 320	1 756
336413	Other aircraft part & auxiliary equipment mfg	—	10	4	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	13	7	f	D	D	D	D	D	D	D	664
33661	Ship & boat building	2	13	7	f	D	D	D	D	D	D	D	664
336611	Ship building & repairing	4	8	3	e	D	D	D	D	D	D	D	523
337	Furniture & related product mfg	1	54	19	1 414	40 818	1 104	2 241	26 865	77 579	63 791	144 882	2 454
3371	Household & institutional furniture & kitchen cabinet mfg	2	35	9	801	19 256	646	1 320	13 408	38 942	25 165	63 755	D
33711	Wood kitchen cabinet & counter top mfg	1	21	6	443	9 888	362	759	6 759	16 938	10 460	27 398	D
337110	Wood kitchen cabinet & counter top mfg ...	1	21	6	443	9 888	362	759	6 759	16 938	10 460	27 398	D
33712	Household & institutional furniture mfg	2	14	3	358	9 368	284	561	6 649	22 004	14 705	36 357	D
337127	Institutional furniture mfg	2	5	2	258	7 657	193	397	5 248	17 862	9 921	27 570	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	SEATTLE-TACOMA-BREMERTON, WA CMSA—Con.													
	Tacoma, WA PMSA—Con.													
31-33	Manufacturing—Con.													
337	Furniture & related product mfg—Con.													
3372	Office furniture (including fixtures) mfg	-	15	8	e	D	D	D	D	D	D	D	D	
33721	Office furniture (including fixtures) mfg	-	15	8	e	D	D	D	D	D	D	D	D	
337215	Showcase, partition, shelving, & locker mfg	-	7	4		303	10 674	216	448	6 979	11 712	15 929	31 328	610
339	Miscellaneous mfg.....	5	78	6		561	14 558	402	727	8 432	33 559	17 366	50 880	1 525
3399	Other miscellaneous mfg ..	5	43	5		424	10 448	316	591	6 627	24 033	13 203	37 066	1 239
	SPOKANE, WA MSA													
31-33	Manufacturing	-	572	176		20 892	681 396	14 631	28 708	406 848	1 811 208	2 181 124	3 994 582	155 683
311	Food mfg.....	1	48	20		1 585	46 714	829	1 484	20 844	136 006	178 897	314 480	12 137
3115	Dairy product mfg	-	5	3	e		D	D	D	D	D	D	D	57
31151	Dairy product (except frozen) mfg	-	3	3		342	6 675	101	136	3 051	21 814	23 482	45 263	D
311511	Fluid milk mfg	-	3	3		342	6 675	101	136	3 051	21 814	23 482	45 263	D
3118	Bakeries & tortilla mfg	-	18	9		784	27 148	405	731	10 668	65 791	47 395	112 772	1 984
31181	Bread & bakery product mfg	-	14	6		685	24 587	339	593	8 947	59 185	30 088	89 010	1 607
311812	Commercial bakeries ..	-	9	5		636	23 728	300	517	8 395	57 162	27 054	84 208	1 579
315	Apparel mfg	-	9	5		351	4 838	322	576	3 952	7 813	2 412	10 225	D
3152	Cut & sew apparel mfg	-	8	5	e		D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	-	5	3	e		D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	-	3	3		256	3 543	235	413	2 776	5 488	944	6 435	D
321	Wood product mfg	1	27	8		840	16 837	726	1 362	14 331	44 007	86 060	129 444	D
3219	Other wood product mfg ...	-	18	4		610	12 777	569	1 078	11 713	35 572	69 520	104 489	D
32191	Millwork	-	7	3		458	9 498	433	836	8 783	27 404	37 061	65 526	D
321912	Cut stock, resawing lumber, & planing....	-	3	2		407	8 457	390	761	7 995	25 118	33 932	60 093	D
322	Paper mfg	-	7	7		332	12 834	233	500	7 742	37 858	38 910	76 915	D
323	Printing & related support activities.....	2	75	10		756	18 174	515	836	10 718	42 069	19 127	61 130	3 534
3231	Printing & related support activities.....	2	75	10		756	18 174	515	836	10 718	42 069	19 127	61 130	3 534
32311	Printing	2	65	10		719	17 374	484	788	10 108	40 390	18 745	59 071	3 446
323110	Commercial lithographic printing ..	1	33	5		421	11 300	264	445	6 174	26 856	9 213	36 032	2 557
325	Chemical mfg	2	16	9		618	21 414	330	1 099	10 551	52 437	74 602	131 345	4 333
3254	Pharmaceutical & medicine mfg	-	5	4	e		D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	5	4	e		D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) mfg	-	5	4	e		D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	19	9		928	22 513	706	1 450	14 258	51 807	37 806	89 372	2 791
3261	Plastics product mfg	-	15	9		889	21 686	672	1 388	13 567	49 365	35 629	84 631	2 671
32619	Other plastics product mfg	-	12	8		824	20 015	620	1 287	12 329	45 724	32 696	78 063	D
326199	All other plastics product mfg	-	10	8	f		D	D	D	D	D	D	D	2 458
327	Nonmetallic mineral product mfg	1	22	11		711	21 876	529	1 110	13 785	63 376	51 779	114 302	5 164
3273	Cement & concrete product mfg	1	15	8		492	16 511	360	777	10 467	51 204	41 426	91 957	3 268
32739	Other concrete product mfg	-	6	3		305	10 637	237	502	7 014	25 973	22 215	47 622	2 060
327390	Other concrete product mfg	-	6	3		305	10 637	237	502	7 014	25 973	22 215	47 622	2 060

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPOKANE, WA MSA— Con. Manufacturing— Con.												
331	Primary metal mfg	—	12	10	3 948	173 930	3 155	6 708	121 818	610 865	895 159	1 516 154	68 854
3313	Alumina & aluminum production & processing	—	2	2	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	h	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	—	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	8	7	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	1	5	5	291	8 260	192	372	4 451	15 910	9 033	24 822	D
331511	Iron foundries	1	4	4	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	3	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	111	29	1 839	52 876	1 403	2 540	33 551	112 299	101 364	212 779	8 473
3323	Architectural & structural metals mfg	1	43	16	1 077	31 045	790	1 445	18 375	69 157	79 240	147 997	3 817
33231	Plate work & fabricated structural product mfg	—	18	6	388	12 420	266	489	6 685	23 339	22 120	45 362	857
33232	Ornamental & architectural metal products mfg	1	25	10	689	18 625	524	956	11 690	45 818	57 120	102 635	2 960
332322	Sheet metal work mfg	—	17	9	616	16 709	474	859	10 555	41 938	53 060	94 671	2 830
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	41	5	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	38	4	287	8 985	211	337	5 635	16 256	8 386	24 527	1 809
332710	Machine shops	1	38	4	287	8 985	211	337	5 635	16 256	8 386	24 527	1 809
333	Machinery mfg	1	41	9	1 287	42 893	897	1 646	25 244	79 695	51 384	132 825	2 958
3335	Metalworking machinery mfg	1	11	4	407	13 017	278	553	7 801	21 162	13 027	34 834	1 053
33351	Metalworking machinery mfg	1	11	4	407	13 017	278	553	7 801	21 162	13 027	34 834	1 053
333513	Machine tool (metal forming types) mfg	—	1	1	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	11	3	644	23 534	443	794	13 320	39 561	24 482	64 900	995
33392	Material handling equipment mfg	—	4	2	e	D	D	D	D	D	D	D	727
333922	Conveyor & conveying equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	27	14	3 632	128 442	1 997	3 692	57 161	360 522	380 315	728 524	D
3341	Computer & peripheral equipment mfg	1	8	4	1 753	55 828	852	1 740	23 656	130 315	180 764	307 885	D
33411	Computer & peripheral equipment mfg	1	8	4	1 753	55 828	852	1 740	23 656	130 315	180 764	307 885	D
334111	Electronic computer mfg	—	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	6	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	6	3	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	10	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	10	4	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	3	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SPOKANE, WA MSA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	2	8	4	722	21 145	511	1 044	12 413	43 455	39 936	83 275	D
3351	Electric lighting equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	1	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	40	15	g	D	D	D	D	D	D	D	4 549
3362	Motor vehicle body & trailer mfg	—	8	3	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	8	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	6	17	9	f	D	D	D	D	D	D	D	2 792
3364	Aerospace product & parts mfg	1	7	2	617	27 124	478	885	19 557	25 566	26 966	52 277	560
33641	Aerospace product & parts mfg	1	7	2	617	27 124	478	885	19 557	25 566	26 966	52 277	560
336413	Other aircraft part & auxiliary equipment mfg	1	6	2	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	5	1	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	5	1	e	D	D	D	D	D	D	D	D
336612	Boat building	—	4	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	31	4	620	12 781	474	881	7 909	24 053	21 772	46 003	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	22	3	516	10 365	415	770	6 478	17 906	16 710	34 722	D
33711	Wood kitchen cabinet & counter top mfg	—	13	1	393	7 696	318	591	4 765	13 120	11 970	25 308	D
337110	Wood kitchen cabinet & counter top mfg ...	—	13	1	393	7 696	318	591	4 765	13 120	11 970	25 308	D
339	Miscellaneous mfg	3	60	8	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	37	6	e	D	D	D	D	D	D	D	641
YAKIMA, WA MSA													
31-33	Manufacturing	—	239	89	10 163	264 561	8 183	15 635	186 897	761 968	1 332 210	2 090 544	89 956
311	Food mfg	—	36	22	3 281	76 005	2 911	5 425	58 753	297 921	678 328	977 631	36 770
3114	Fruit & vegetable preserving & specialty food mfg	—	22	16	2 394	55 496	2 162	3 981	43 111	186 931	329 377	518 145	D
31142	Fruit & vegetable canning, pickling, & drying	—	20	14	g	D	D	D	D	D	D	D	12 584
311421	Fruit & vegetable canning	—	17	12	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	—	3	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	—	3	3	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	—	3	3	f	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	—	11	5	268	6 549	134	246	2 990	44 165	52 135	94 616	2 998
3121	Beverage mfg	—	11	5	268	6 549	134	246	2 990	44 165	52 135	94 616	2 998
321	Wood product mfg	—	25	13	1 525	39 503	1 351	2 636	30 912	88 581	196 592	282 878	11 870
3212	Veneer, plywood, & engineered wood product mfg	—	5	3	298	9 838	261	519	7 937	30 357	47 479	76 345	D
32121	Veneer, plywood, & engineered wood product mfg	—	5	3	298	9 838	261	519	7 937	30 357	47 479	76 345	D
3219	Other wood product mfg ...	—	16	8	f	D	D	D	D	D	D	D	D
32191	Millwork	—	6	4	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) ...	—	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	—	5	4	351	13 929	273	601	10 176	34 900	84 220	120 260	9 201
3222	Converted paper product mfg	—	5	4	351	13 929	273	601	10 176	34 900	84 220	120 260	9 201
32221	Paperboard container mfg	—	3	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	YAKIMA, WA MSA— Con. Manufacturing— Con.												
326	Plastics & rubber products mfg	1	15	10	1 403	41 794	1 118	2 271	26 986	100 003	146 788	246 770	16 248
3261	Plastics product mfg	1	15	10	1 403	41 794	1 118	2 271	26 986	100 003	146 788	246 770	16 248
32611	Unsupported plastics film, sheet, & bag mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	—	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	3	7	5	589	17 890	445	880	9 953	37 901	37 384	75 594	3 211
326199	All other plastics product mfg	3	7	5	589	17 890	445	880	9 953	37 901	37 384	75 594	3 211
332	Fabricated metal product mfg	—	33	9	909	26 979	605	1 102	18 619	60 187	51 924	109 747	3 199
3323	Architectural & structural metals mfg	—	9	4	301	6 461	228	348	4 482	14 069	13 432	27 300	528
3329	Other fabricated metal product mfg	—	6	2	348	13 016	176	347	8 557	27 455	11 632	38 128	D
33291	Metal valve mfg	—	1	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	6	33	6	779	19 645	483	727	10 310	44 186	41 492	87 116	3 949
3332	Industrial machinery mfg ..	9	4	1	e	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg	9	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	6	3	f	D	D	D	D	D	D	D	801
3362	Motor vehicle body & trailer mfg	—	4	3	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	3	e	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	27	6	516	10 363	341	608	6 377	27 942	17 951	46 211	2 376
3399	Other miscellaneous mfg ..	1	16	5	463	9 171	296	531	5 551	25 542	15 975	41 816	2 305

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ADAMS COUNTY, WA Manufacturing	5	13	2	1 088	25 924	967	2 057	20 521	127 582	147 070	274 743	D
311	Food mfg	5	6	2	1 065	25 500	947	2 031	20 145	126 113	146 082	272 264	D
3114	Fruit & vegetable preserving & specialty food mfg	5	3	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	5	3	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	5	3	2	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BENTON COUNTY, WA													
31-33	Manufacturing	-	121	24	3 672	139 525	2 634	5 504	78 890	425 151	462 665	885 455	49 398
311	Food mfg	-	16	7	g	D	D	D	D	D	D	D	27 279
3114	Fruit & vegetable preserving & specialty food mfg	-	5	5	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	4	4	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	4	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	6	3	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
CHELAN COUNTY, WA													
31-33	Manufacturing	-	88	23	2 535	76 215	2 066	3 850	55 046	195 073	345 824	552 162	25 606
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
CLALLAM COUNTY, WA													
31-33	Manufacturing	1	75	15	1 481	48 991	1 184	2 330	37 807	150 950	195 781	359 236	9 266
321	Wood product mfg	3	24	4	507	11 802	450	906	10 165	35 924	78 451	112 932	4 474
CLARK COUNTY, WA													
31-33	Manufacturing	-	421	131	19 537	715 232	15 316	30 133	489 358	1 985 441	1 906 135	3 854 312	514 319
311	Food mfg	-	20	6	1 022	40 927	830	1 834	23 245	162 503	191 591	353 193	15 968
3119	Other food mfg	-	2	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	36	14	839	22 791	644	1 260	14 169	52 052	109 223	163 543	2 022
322	Paper mfg	-	12	10	2 499	88 468	2 149	4 056	67 831	385 829	354 509	734 924	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	11	9	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	22	15	1 064	30 108	698	1 400	18 238	62 829	65 646	130 884	7 592
3261	Plastics product mfg	1	21	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	9	766	21 872	479	965	12 320	47 111	31 766	78 276	D
326199	All other plastics product mfg	-	12	9	766	21 872	479	965	12 320	47 111	31 766	78 276	D
331	Primary metal mfg	-	6	5	776	31 817	660	1 361	22 514	101 703	131 421	228 268	D
3313	Alumina & aluminum production & processing ..	-	3	3	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	3	3	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	78	19	1 512	44 944	1 152	2 140	30 659	85 688	65 878	150 500	5 398
3323	Architectural & structural metals mfg	1	25	10	546	17 779	405	748	11 875	33 441	27 324	59 930	1 451
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	42	4	f	D	D	D	D	D	D	D	D
33271	Machine shops	-	40	3	509	13 576	379	626	9 067	25 586	9 652	35 236	2 380
332710	Machine shops	-	40	3	509	13 576	379	626	9 067	25 586	9 652	35 236	2 380

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARK COUNTY, WA—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	-	45	12	1 312	48 341	738	1 320	21 740	86 246	86 247	176 391	7 205
3332	Industrial machinery mfg ..	-	10	4	606	24 542	322	549	11 677	30 018	52 568	84 247	D
33329	Other industrial machinery mfg	-	7	4	595	24 223	316	540	11 512	29 315	51 993	82 965	D
334	Computer & electronic product mfg	-	29	13	7 013	302 509	5 855	11 784	228 406	759 249	613 046	1 344 308	378 258
3341	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	12	8	3 426	125 310	2 794	5 832	85 854	377 223	374 419	739 642	D
33441	Semiconductor & other electronic component mfg	-	12	8	3 426	125 310	2 794	5 832	85 854	377 223	374 419	739 642	D
334413	Semiconductor & related device mfg ...	-	6	5	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	-	1	1	f	D	D	D	D	D	D	D	D
COWLITZ COUNTY, WA													
31-33	Manufacturing	-	125	46	8 309	364 426	6 330	12 779	263 394	1 051 539	1 442 009	2 496 527	180 335
321	Wood product mfg	-	25	12	1 858	62 178	1 646	3 240	50 719	114 920	273 027	381 521	23 334
3211	Sawmills & wood preservation	-	14	8	1 335	50 234	1 198	2 540	42 593	89 648	242 351	325 185	22 952
32111	Sawmills & wood preservation	-	14	8	1 335	50 234	1 198	2 540	42 593	89 648	242 351	325 185	22 952
321113	Sawmills	-	14	8	1 335	50 234	1 198	2 540	42 593	89 648	242 351	325 185	22 952
3219	Other wood product mfg ...	-	10	4	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	9	9	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	4	4	h	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	h	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
FRANKLIN COUNTY, WA													
31-33	Manufacturing	-	47	7	3 092	69 069	2 668	5 480	55 438	221 514	945 835	1 160 501	15 849
311	Food mfg	-	10	4	h	D	D	D	D	D	D	D	14 541
3114	Fruit & vegetable preserving & specialty food mfg	-	3	3	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	3	3	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	3	3	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	-	1	1	g	D	D	D	D	D	D	D	D
GRANT COUNTY, WA													
31-33	Manufacturing	1	56	22	4 090	111 290	3 276	6 408	78 230	438 256	370 000	806 938	44 347
311	Food mfg	-	18	10	2 648	65 814	2 311	4 397	50 756	251 450	241 816	495 852	14 652
3114	Fruit & vegetable preserving & specialty food mfg	-	7	7	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	5	5	2 036	49 103	1 805	3 299	38 885	203 026	167 074	373 544	11 687
311411	Frozen fruit, juice, & vegetable mfg	-	5	5	2 036	49 103	1 805	3 299	38 885	203 026	167 074	373 544	11 687
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAYS HARBOR COUNTY, WA													
31-33	Manufacturing	-	97	27	3 792	125 741	3 164	5 911	96 722	337 800	492 226	822 851	22 419
321	Wood product mfg	1	45	12	1 420	44 832	1 266	2 514	36 836	104 862	225 970	325 554	7 490
3211	Sawmills & wood preservation	1	28	5	545	18 581	476	920	14 793	51 254	111 307	158 357	4 256
32111	Sawmills & wood preservation	1	28	5	545	18 581	476	920	14 793	51 254	111 307	158 357	4 256
321113	Sawmills	1	28	5	545	18 581	476	920	14 793	51 254	111 307	158 357	4 256
3219	Other wood product mfg ...	1	14	4	567	16 663	517	997	14 114	36 104	59 334	95 426	D
32191	Millwork	1	8	3	526	16 007	480	924	13 537	34 708	58 617	93 423	D
322	Paper mfg	-	3	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	6	3	553	21 875	401	757	16 339	25 407	45 545	69 224	D
3339	Other general-purpose machinery mfg	1	4	3	f	D	D	D	D	D	D	D	D
ISLAND COUNTY, WA													
31-33	Manufacturing	1	49	5	625	16 961	494	943	12 136	32 673	30 091	62 524	1 960
JEFFERSON COUNTY, WA													
31-33	Manufacturing	-	56	9	f	D	D	D	D	D	D	D	12 203
KING COUNTY, WA													
31-33	Manufacturing	4	2 993	826	134 028	5 682 613	75 310	143 453	2 515 485	10 459 875	16 073 824	26 480 337	725 700
311	Food mfg	2	294	110	j	D	D	D	D	D	D	D	D
3115	Dairy product mfg	3	16	10	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	2	10	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	3	7	5	f	D	D	D	D	D	D	D	4 697
3116	Meat product mfg	5	16	9	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	5	16	9	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	3	14	7	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation & packaging ..	2	54	35	h	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging ..	2	54	35	h	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing ..	2	44	34	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	126	30	4 708	133 308	2 353	4 753	64 288	390 638	313 460	702 486	D
31181	Bread & bakery product mfg	2	104	22	h	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	3	43	20	h	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	20	7	f	D	D	D	D	D	D	D	D
3119	Other food mfg	-	38	14	g	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	2	30	16	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	2	30	16	g	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	5	12	8	875	24 959	297	493	8 157	75 063	178 199	250 573	7 075
312111	Soft drink mfg	5	9	7	f	D	D	D	D	D	D	D	D
31212	Breweries	1	13	6	f	D	D	D	D	D	D	D	D
312120	Breweries	1	13	6	f	D	D	D	D	D	D	D	D
314	Textile product mills	2	76	14	f	D	D	D	D	D	D	D	D
3149	Other textile product mills ..	3	63	10	f	D	D	D	D	D	D	D	D
315	Apparel mfg	2	112	23	g	D	D	D	D	D	D	D	2 462
3152	Cut & sew apparel mfg	2	83	20	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	2	36	8	f	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	12	4	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	1	21	6	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	79	27	g	D	D	D	D	D	D	D	9 568
3219	Other wood product mfg ...	3	63	19	g	D	D	D	D	D	D	D	3 721
32191	Millwork	3	34	9	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	KING COUNTY, WA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	42	21	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	42	21	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	19	14	g	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	13	9	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	432	86	i	D	D	D	D	D	D	D	D
3231	Printing & related support activities	1	432	86	i	D	D	D	D	D	D	D	D
32311	Printing	2	385	72	i	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	2	176	43	h	D	D	D	D	D	D	D	D
323113	Commercial screen printing	3	51	10	f	D	D	D	D	D	D	D	1 866
323114	Quick printing	1	88	6	f	D	D	D	D	D	D	D	D
323116	Manifold business form printing	-	10	5	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	-	47	14	g	D	D	D	D	D	D	D	D
323122	Prepress services	-	30	8	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	82	26	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	11	4	f	D	D	D	D	D	D	D	18 414
32541	Pharmaceutical & medicine mfg	-	11	4	f	D	D	D	D	D	D	D	18 414
326	Plastics & rubber products mfg	1	103	43	h	D	D	D	D	D	D	D	D
3261	Plastics product mfg	1	90	37	h	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	7	3		598	16 087	288	533	6 182	47 851	36 891	85 140
326121	Unsupported plastics profile shape mfg	-	6	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	55	23	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	1	50	21	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	87	27	h	D	D	D	D	D	D	D	19 054
3272	Glass & glass product mfg ..	-	34	7	g	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	34	7	g	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	21	4	f	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	-	29	15	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	24	13	g	D	D	D	D	D	D	D	10 170
332	Fabricated metal product mfg	1	421	99	i	D	D	D	D	D	D	D	42 491
3321	Forging & stamping	-	15	7	f	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	15	7	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	93	24	g	D	D	D	D	D	D	D	4 439
33231	Plate work & fabricated structural product mfg ..	-	34	8	f	D	D	D	D	D	D	D	1 936
332312	Fabricated structural metal mfg	-	24	7	f	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	2	59	16		1 074	34 323	809	1 623	21 822	70 928	63 559	134 611
332322	Sheet metal work mfg ..	-	33	11		644	21 077	494	931	13 636	46 798	30 517	77 757
3324	Boiler, tank, & shipping container mfg	-	14	9		511	21 347	372	797	15 841	51 374	112 675	161 824
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	179	29	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	159	24	g	D	D	D	D	D	D	D	D
332710	Machine shops	1	159	24	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KING COUNTY, WA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3328	Coating, engraving, heat treating, & allied activities.		45	15	g	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities.....	-	45	15	g	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	-	45	15	g	D	D	D	D	D	D	D	D
332813	Electroplating, plating, polishing, anodizing, & coloring	1	22	8	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	-	16	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	1	45	9	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	178	58	i	D	D	D	D	D	D	D	23 892
3332	Industrial machinery mfg ..	1	34	8	f	D	D	D	D	D	D	D	2 074
33329	Other industrial machinery mfg	1	28	8	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	11	6	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	11	6	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	29	7	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	29	7	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	63	21	g	D	D	D	D	D	D	D	11 859
33392	Material handling equipment mfg	-	27	11	g	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	11	5	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	1	32	10	f	D	D	D	D	D	D	D	4 699
334	Computer & electronic product mfg.....	1	237	87	k	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	1	26	10	f	D	D	D	D	D	D	D	6 483
33411	Computer & peripheral equipment mfg	1	26	10	f	D	D	D	D	D	D	D	6 483
334119	Other computer peripheral equipment mfg	-	20	5	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	3	33	12	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	4	12	6	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	4	12	6	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	14	5	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	14	5	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	1	58	26	h	D	D	D	D	D	D	D	31 709
33441	Semiconductor & other electronic component mfg	1	58	26	h	D	D	D	D	D	D	D	31 709
334412	Bare printed circuit board mfg	1	16	8	1 292	40 501	1 006	2 342	27 301	100 114	49 818	150 646	D
334413	Semiconductor & related device mfg...	-	10	2	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	1	19	6	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KING COUNTY, WA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg	—	91	30	j	D	D	D	D	D	D	D	142 045
33451	Navigational, measuring, medical, & control instruments mfg	—	91	30	j	D	D	D	D	D	D	D	142 045
334510	Electromedical & electrotherapeutic apparatus mfg	—	13	8	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	—	17	9	j	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	—	18	4	f	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	2	23	8	f	D	D	D	D	D	D	D	11 393
33461	Mfg & reproducing magnetic & optical media	2	23	8	f	D	D	D	D	D	D	D	11 393
335	Electrical equipment, appliance, & component mfg	2	51	14	g	D	D	D	D	D	D	D	7 717
3352	Household appliance mfg ..	—	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	7	180	66	k	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	3	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	2	41	12	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	8	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	8	64	31	k	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	8	64	31	k	D	D	D	D	D	D	D	D
336411	Aircraft mfg	9	3	2	j	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	57	27	j	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	51	17	g	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	51	17	g	D	D	D	D	D	D	D	D
336611	Ship building & repairing	—	31	13	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	158	35	h	D	D	D	D	D	D	D	7 797
3371	Household & institutional furniture & kitchen cabinet mfg	3	102	16	g	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	2	54	10	f	D	D	D	D	D	D	D	1 317
337110	Wood kitchen cabinet & counter top mfg ...	2	54	10	f	D	D	D	D	D	D	D	1 317
3372	Office furniture (including fixtures) mfg	1	47	16	g	D	D	D	D	D	D	D	4 189
33721	Office furniture (including fixtures) mfg	1	47	16	g	D	D	D	D	D	D	D	4 189
337211	Wood office furniture mfg	—	17	7	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	361	53	i	D	D	D	D	D	D	D	33 147
3391	Medical equipment & supplies mfg	3	149	20	g	D	D	D	D	D	D	D	12 184
33911	Medical equipment & supplies mfg	3	149	20	g	D	D	D	D	D	D	D	12 184
339112	Surgical & medical instrument mfg	2	20	6	f	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	4	99	8	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	2	212	33	h	D	D	D	D	D	D	D	20 963
33992	Sporting & athletic goods mfg	1	41	14	g	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	1	41	14	g	D	D	D	D	D	D	D	D
33995	Sign mfg	3	70	7	f	D	D	D	D	D	D	D	D
339950	Sign mfg	3	70	7	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KITSAP COUNTY, WA													
31-33	Manufacturing	2	143	16	1 441	36 809	1 016	1 680	20 851	81 349	59 960	142 740	3 842
KITTITAS COUNTY, WA													
31-33	Manufacturing	-	32	5	662	15 573	577	1 048	12 004	59 721	44 097	102 356	1 641
KLICKITAT COUNTY, WA													
31-33	Manufacturing	-	25	4	g	D	D	D	D	D	D	D	7 251
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
LEWIS COUNTY, WA													
31-33	Manufacturing	3	115	41	3 630	97 136	3 036	6 096	74 978	262 151	387 348	648 046	24 124
321	Wood product mfg	3	28	19	2 005	59 533	1 717	3 736	48 736	150 289	241 873	389 060	17 741
3211	Sawmills & wood preservation	4	12	7	1 271	41 943	1 125	2 590	35 346	113 980	182 107	293 852	15 089
32111	Sawmills & wood preservation	4	12	7	1 271	41 943	1 125	2 590	35 346	113 980	182 107	293 852	15 089
321113	Sawmills	4	12	7	1 271	41 943	1 125	2 590	35 346	113 980	182 107	293 852	15 089
3219	Other wood product mfg ...	-	12	8	536	13 354	453	895	10 376	24 853	44 347	68 493	2 285
MASON COUNTY, WA													
31-33	Manufacturing	-	52	11	1 664	51 707	1 452	2 873	39 681	128 006	219 924	343 911	15 541
321	Wood product mfg	-	14	6	g	D	D	D	D	D	D	D	D
3211	Sawmills & wood preservation	-	6	4	557	20 145	507	1 061	15 172	65 456	135 718	197 458	12 003
32111	Sawmills & wood preservation	-	6	4	557	20 145	507	1 061	15 172	65 456	135 718	197 458	12 003
321113	Sawmills	-	6	4	557	20 145	507	1 061	15 172	65 456	135 718	197 458	12 003
OKANOGAN COUNTY, WA													
31-33	Manufacturing	-	28	4	794	20 903	697	1 433	17 351	36 029	84 617	123 566	2 840
321	Wood product mfg	-	8	4	714	19 198	633	1 347	16 089	31 390	80 245	114 541	2 469
PACIFIC COUNTY, WA													
31-33	Manufacturing	-	36	10	848	18 986	756	1 256	16 082	46 417	69 124	112 757	9 886

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PIERCE COUNTY, WA													
31-33	Manufacturing	1	680	208	22 283	705 185	16 834	34 233	479 523	1 882 247	2 409 154	4 275 910	194 835
311	Food mfg	1	52	19	2 002	54 761	1 493	3 254	38 574	296 706	385 234	683 756	16 478
315	Apparel mfg	-	17	9	830	21 575	766	1 560	16 887	43 168	76 684	116 940	D
3152	Cut & sew apparel mfg	-	14	7	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	73	31	3 248	89 647	2 649	5 476	66 395	174 175	412 161	592 002	13 178
3211	Sawmills & wood preservation	-	15	12	1 435	44 649	1 127	2 403	31 672	101 989	269 214	373 421	6 670
32111	Sawmills & wood preservation	-	15	12	1 435	44 649	1 127	2 403	31 672	101 989	269 214	373 421	6 670
321113	Sawmills	-	12	9	1 168	36 758	882	1 910	24 933	65 697	201 545	267 906	6 428
3212	Veneer, plywood, & engineered wood product mfg	-	11	8	709	19 975	562	1 231	15 348	24 225	73 772	101 830	3 987
32121	Veneer, plywood, & engineered wood product mfg	-	11	8	709	19 975	562	1 231	15 348	24 225	73 772	101 830	3 987
3219	Other wood product mfg ...	1	47	11	1 104	25 023	960	1 842	19 375	47 961	69 175	116 751	2 521
32191	Millwork	1	26	8	769	18 379	674	1 325	14 910	33 680	50 312	83 977	1 794
321911	Wood window & door mfg	-	12	4	523	11 972	467	920	10 004	21 742	28 369	49 780	927
322	Paper mfg	-	17	11	1 378	60 801	1 046	2 165	43 877	197 888	244 424	444 702	31 490
3221	Pulp, paper, & paperboard mills	-	4	4	918	46 494	706	1 418	33 839	158 354	184 803	345 162	22 588
32213	Paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	3	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	65	12	1 431	40 575	824	1 247	18 198	67 287	52 009	121 432	4 885
3231	Printing & related support activities	1	65	12	1 431	40 575	824	1 247	18 198	67 287	52 009	121 432	4 885
32311	Printing	1	60	12	1 410	39 942	805	1 214	17 716	65 607	51 688	119 400	4 628
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	16	7	549	22 087	302	606	11 562	89 568	90 920	180 748	6 395
326	Plastics & rubber products mfg	3	37	15	1 563	43 201	1 283	2 652	31 930	109 511	129 872	238 453	26 858
3261	Plastics product mfg	3	34	15	1 523	41 845	1 251	2 585	30 888	106 970	128 240	234 212	D
32619	Other plastics product mfg	4	24	9	1 094	28 102	911	1 726	20 619	63 174	57 622	119 594	10 577
326199	All other plastics product mfg	4	21	9	1 068	27 451	894	1 685	20 199	62 478	56 390	117 685	10 551
327	Nonmetallic mineral product mfg	-	40	21	1 474	48 590	1 171	2 455	33 783	138 047	104 470	241 542	9 839
3273	Cement & concrete product mfg	1	19	11	723	26 328	581	1 281	18 355	65 795	42 541	107 572	5 743
331	Primary metal mfg	-	7	3	968	34 510	866	1 868	27 653	92 079	105 808	196 918	D
3315	Foundries	-	5	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	94	21	2 108	69 896	1 645	3 251	47 173	141 377	135 807	274 698	9 993
3323	Architectural & structural metals mfg	-	31	12	1 156	36 352	894	1 814	23 532	76 794	101 487	177 156	3 872
33232	Ornamental & architectural metal products mfg	-	17	9	1 020	31 781	799	1 641	20 975	66 954	89 264	155 198	3 585
332321	Metal window & door mfg	-	4	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	35	6	819	27 602	594	1 205	17 848	66 525	42 989	107 874	2 732
334	Computer & electronic product mfg	3	22	4	609	26 692	293	607	12 252	31 399	30 698	68 605	D
336	Transportation equipment mfg	-	39	15	g	D	D	D	D	D	D	D	5 328
3364	Aerospace product & parts mfg	-	14	4	1 582	53 089	1 221	2 637	43 762	176 771	64 066	214 320	1 756
33641	Aerospace product & parts mfg	-	14	4	1 582	53 089	1 221	2 637	43 762	176 771	64 066	214 320	1 756
336413	Other aircraft part & auxiliary equipment mfg	-	10	4	g	D	D	D	D	D	D	D	D
3366	Ship & boat building	2	13	7	f	D	D	D	D	D	D	D	664
33661	Ship & boat building	2	13	7	f	D	D	D	D	D	D	D	664
337	Furniture & related product mfg	1	54	19	1 414	40 818	1 104	2 241	26 865	77 579	63 791	144 882	2 454
3371	Household & institutional furniture & kitchen cabinet mfg	2	35	9	801	19 256	646	1 320	13 408	38 942	25 165	63 755	D
339	Miscellaneous mfg	5	78	6	561	14 558	402	727	8 432	33 559	17 366	50 880	1 525

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SKAGIT COUNTY, WA													
31-33	Manufacturing	—	185	55	5 026	148 893	3 737	6 513	92 139	691 534	2 234 017	2 917 703	54 569
311	Food mfg	—	26	13	1 428	30 263	1 116	1 488	17 406	70 844	108 593	179 439	3 896
3117	Seafood product preparation & packaging..	1	11	9	759	15 840	602	808	10 216	39 291	57 600	96 936	1 273
31171	Seafood product preparation & packaging	1	11	9	759	15 840	602	808	10 216	39 291	57 600	96 936	1 273
311712	Fresh & frozen seafood processing ..	—	7	6	600	13 257	473	681	8 379	35 140	51 454	86 641	D
324	Petroleum & coal products mfg	—	4	4	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	—	4	4	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	—	3	3	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	3	3	f	D	D	D	D	D	D	D	D
SNOHOMISH COUNTY, WA													
31-33	Manufacturing	—	837	234	58 170	2 918 132	33 010	75 825	1 534 567	7 380 352	13 013 992	19 903 195	291 441
311	Food mfg	3	42	15	g	D	D	D	D	D	D	D	D
321	Wood product mfg	1	66	24	g	D	D	D	D	D	D	D	21 390
3211	Sawmills & wood preservation	2	22	9	g	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	2	22	9	g	D	D	D	D	D	D	D	D
321113	Sawmills	2	21	8	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . .	—	39	12	f	D	D	D	D	D	D	D	8 338
32191	Millwork	—	24	10	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	6	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	5	63	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	5	63	8	f	D	D	D	D	D	D	D	D
32311	Printing	5	61	8	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	6	31	5	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	20	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	18	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	16	7	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	16	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	29	11	f	D	D	D	D	D	D	D	8 078
332	Fabricated metal product mfg	1	210	51	h	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	58	18	g	D	D	D	D	D	D	D	3 343
33232	Ornamental & architectural metal products mfg	1	44	15	1 005	28 799	763	1 455	18 491	60 301	53 170	113 411	2 894
332322	Sheet metal work mfg	—	28	10	698	18 890	548	1 011	12 277	41 252	35 224	76 426	2 321
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	110	21	g	D	D	D	D	D	D	D	D
33271	Machine shops	1	98	18	g	D	D	D	D	D	D	D	D
332710	Machine shops	1	98	18	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	14	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	14	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	45	13	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	SNOHOMISH COUNTY, WA—Con.													
31-33	Manufacturing—Con.													
334	Computer & electronic product mfg	1	59	24	i	D	D	D	D	D	D	D	D	
3341	Computer & peripheral equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D	
33411	Computer & peripheral equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D	
334119	Other computer peripheral equipment mfg	—	6	1	g	D	D	D	D	D	D	D	D	
3344	Semiconductor & other electronic component mfg	7	20	7	f	D	D	D	D	D	D	D	D	
33441	Semiconductor & other electronic component mfg	7	20	7	f	D	D	D	D	D	D	D	D	
3345	Navigational, measuring, medical, & control instruments mfg	—	18	8	h	D	D	D	D	D	D	D	31 706	
33451	Navigational, measuring, medical, & control instruments mfg	—	18	8	h	D	D	D	D	D	D	D	31 706	
334510	Electromedical & electrotherapeutic apparatus mfg	—	2	2	f	D	D	D	D	D	D	D	D	
334515	Electricity measuring & testing instrument mfg	—	6	4	g	D	D	D	D	D	D	D	D	
335	Electrical equipment, appliance, & component mfg	1	22	10	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	—	62	21	k	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	—	31	13	k	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	31	13	k	D	D	D	D	D	D	D	D	
336411	Aircraft mfg	—	2	2	k	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	—	25	9	g	D	D	D	D	D	D	D	D	
3366	Ship & boat building	1	14	4	g	D	D	D	D	D	D	D	D	
33661	Ship & boat building	1	14	4	g	D	D	D	D	D	D	D	D	
336612	Boat building	—	10	3	g	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	64	16	g	D	D	D	D	D	D	D	3 447	
3371	Household & institutional furniture & kitchen cabinet mfg	—	50	9	f	D	D	D	D	D	D	D	2 321	
33711	Wood kitchen cabinet & counter top mfg	1	35	4	f	D	D	D	D	D	D	D	D	
337110	Wood kitchen cabinet & counter top mfg	1	35	4	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	3	77	12	f	D	D	D	D	D	D	D	2 590	
	SPOKANE COUNTY, WA													
31-33	Manufacturing	—	572	176		20 892	681 396	14 631	28 708	406 848	1 811 208	2 181 124	3 994 582	155 683
311	Food mfg	1	48	20		1 585	46 714	829	1 484	20 844	136 006	178 897	314 480	12 137
3118	Bakeries & tortilla mfg	—	18	9		784	27 148	405	731	10 668	65 791	47 395	112 772	1 984
31181	Bread & bakery product mfg	—	14	6		685	24 587	339	593	8 947	59 185	30 088	89 010	1 607
311812	Commercial bakeries	—	9	5		636	23 728	300	517	8 395	57 162	27 054	84 208	1 579
321	Wood product mfg	1	27	8		840	16 837	726	1 362	14 331	44 007	86 060	129 444	D
3219	Other wood product mfg	—	18	4		610	12 777	569	1 078	11 713	35 572	69 520	104 489	D
323	Printing & related support activities	2	75	10		756	18 174	515	836	10 718	42 069	19 127	61 130	3 534
3231	Printing & related support activities	2	75	10		756	18 174	515	836	10 718	42 069	19 127	61 130	3 534
32311	Printing	2	65	10		719	17 374	484	788	10 108	40 390	18 745	59 071	3 446
325	Chemical mfg	2	16	9		618	21 414	330	1 099	10 551	52 437	74 602	131 345	4 333
326	Plastics & rubber products mfg	—	19	9		928	22 513	706	1 450	14 258	51 807	37 806	89 372	2 791
3261	Plastics product mfg	—	15	9		889	21 686	672	1 388	13 567	49 365	35 629	84 631	2 671
32619	Other plastics product mfg	—	12	8		824	20 015	620	1 287	12 329	45 724	32 696	78 063	D
326199	All other plastics product mfg	—	10	8	f			D	D	D	D	D	D	2 458

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPOKANE COUNTY, WA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	22	11	711	21 876	529	1 110	13 785	63 376	51 779	114 302	5 164
331	Primary metal mfg	—	12	10	3 948	173 930	3 155	6 708	121 818	610 865	895 159	1 516 154	68 854
3313	Alumina & aluminum production & processing ..	—	2	2	h	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	h	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	g	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	—	1	1	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	2	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	2	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	—	8	7	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	3	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	111	29	1 839	52 876	1 403	2 540	33 551	112 299	101 364	212 779	8 473
3323	Architectural & structural metals mfg	1	43	16	1 077	31 045	790	1 445	18 375	69 157	79 240	147 997	3 817
33232	Ornamental & architectural metal products mfg	1	25	10	689	18 625	524	956	11 690	45 818	57 120	102 635	2 960
332322	Sheet metal work mfg ..	—	17	9	616	16 709	474	859	10 555	41 938	53 060	94 671	2 830
333	Machinery mfg	1	41	9	1 287	42 893	897	1 646	25 244	79 695	51 384	132 825	2 958
3339	Other general-purpose machinery mfg	—	11	3	644	23 534	443	794	13 320	39 561	24 482	64 900	995
334	Computer & electronic product mfg	—	27	14	3 632	128 442	1 997	3 692	57 161	360 522	380 315	728 524	D
3341	Computer & peripheral equipment mfg	1	8	4	1 753	55 828	852	1 740	23 656	130 315	180 764	307 885	D
33411	Computer & peripheral equipment mfg	1	8	4	1 753	55 828	852	1 740	23 656	130 315	180 764	307 885	D
334111	Electronic computer mfg	—	2	1	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	2	6	3	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	6	3	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	—	10	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	—	10	4	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	—	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	8	4	722	21 145	511	1 044	12 413	43 455	39 936	83 275	D
3351	Electric lighting equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	1	1	f	D	D	D	D	D	D	D	D
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	40	15	g	D	D	D	D	D	D	D	4 549
3363	Motor vehicle parts mfg ...	6	17	9	f	D	D	D	D	D	D	D	2 792
3364	Aerospace product & parts mfg	1	7	2	617	27 124	478	885	19 557	25 566	26 966	52 277	560
33641	Aerospace product & parts mfg	1	7	2	617	27 124	478	885	19 557	25 566	26 966	52 277	560
336413	Other aircraft part & auxiliary equipment mfg	1	6	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SPOKANE COUNTY, WA—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	1	31	4	620	12 781	474	881	7 909	24 053	21 772	46 003	D
3371	Household & institutional furniture & kitchen cabinet mfg	1	22	3	516	10 365	415	770	6 478	17 906	16 710	34 722	D
339	Miscellaneous mfg	3	60	8	f	D	D	D	D	D	D	D	D
	STEVENS COUNTY, WA												
31-33	Manufacturing	-	40	12	1 546	53 574	1 293	2 662	41 166	126 566	237 176	363 594	10 354
321	Wood product mfg	-	13	5	f	D	D	D	D	D	D	D	D
3211	Sawmills & wood preservation	-	11	4	541	17 628	472	995	14 599	45 962	113 065	158 162	D
32111	Sawmills & wood preservation	-	11	4	541	17 628	472	995	14 599	45 962	113 065	158 162	D
321113	Sawmills	-	9	4	f	D	D	D	D	D	D	D	D
	THURSTON COUNTY, WA												
31-33	Manufacturing	-	156	37	3 218	100 654	2 503	4 590	69 868	304 361	465 229	761 028	29 218
326	Plastics & rubber products mfg	-	8	5	613	16 943	532	1 013	12 407	71 469	49 506	118 112	17 715
3261	Plastics product mfg	-	8	5	613	16 943	532	1 013	12 407	71 469	49 506	118 112	17 715
332	Fabricated metal product mfg	-	21	8	527	20 964	432	820	16 101	59 019	107 071	156 877	1 085
	WALLA WALLA COUNTY, WA												
31-33	Manufacturing	-	66	15	2 400	89 376	1 907	3 770	64 800	245 481	307 974	544 683	21 901
322	Paper mfg	-	4	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	3	f	D	D	D	D	D	D	D	D
	WHATCOM COUNTY, WA												
31-33	Manufacturing	-	314	84	9 184	281 360	6 856	12 975	183 074	841 770	3 090 001	3 946 981	86 393
311	Food mfg	-	42	19	1 372	31 740	1 107	1 877	22 200	162 162	292 567	465 837	5 544
3117	Seafood product preparation & packaging ..	-	15	9	815	15 744	727	1 211	12 546	45 521	105 226	150 775	2 046
31171	Seafood product preparation & packaging	-	15	9	815	15 744	727	1 211	12 546	45 521	105 226	150 775	2 046
311712	Fresh & frozen seafood processing ..	-	14	9	f	D	D	D	D	D	D	D	D
321	Wood product mfg	1	28	11	1 014	25 476	861	1 654	18 980	59 082	132 270	182 993	3 321
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	3	3	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	3	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	2	2	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	4	1	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	30	8	f	D	D	D	D	D	D	D	1 932

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WHATCOM COUNTY, WA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	5	32	7	516	12 197	383	645	7 341	21 738	16 483	42 070	738
	YAKIMA COUNTY, WA												
31-33	Manufacturing	—	239	89	10 163	264 561	8 183	15 635	186 897	761 968	1 332 210	2 090 544	89 956
311	Food mfg.....	—	36	22	3 281	76 005	2 911	5 425	58 753	297 921	678 328	977 631	36 770
3114	Fruit & vegetable preserving & specialty food mfg.....	—	22	16	2 394	55 496	2 162	3 981	43 111	186 931	329 377	518 145	D
31142	Fruit & vegetable canning, pickling, & drying.....	—	20	14	g	D	D	D	D	D	D	D	12 584
311421	Fruit & vegetable canning.....	—	17	12	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	—	3	3	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	—	3	3	f	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering.....	—	3	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	—	25	13	1 525	39 503	1 351	2 636	30 912	88 581	196 592	282 878	11 870
3219	Other wood product mfg...	—	16	8	f	D	D	D	D	D	D	D	D
32191	Millwork.....	—	6	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	1	15	10	1 403	41 794	1 118	2 271	26 986	100 003	146 788	246 770	16 248
3261	Plastics product mfg.....	1	15	10	1 403	41 794	1 118	2 271	26 986	100 003	146 788	246 770	16 248
32619	Other plastics product mfg.....	3	7	5	589	17 890	445	880	9 953	37 901	37 384	75 594	3 211
326199	All other plastics product mfg.....	3	7	5	589	17 890	445	880	9 953	37 901	37 384	75 594	3 211
332	Fabricated metal product mfg.....	—	33	9	909	26 979	605	1 102	18 619	60 187	51 924	109 747	3 199
333	Machinery mfg.....	6	33	6	779	19 645	483	727	10 310	44 186	41 492	87 116	3 949
336	Transportation equipment mfg.....	—	6	3	f	D	D	D	D	D	D	D	801
339	Miscellaneous mfg.....	1	27	6	516	10 363	341	608	6 377	27 942	17 951	46 211	2 376

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ANACORTES, WA												
	Manufacturing	—	37	16	1 374	48 842	933	1 754	28 511	235 551	1 226 800	1 464 014	27 762
	ARLINGTON, WA												
31-33	Manufacturing	1	75	30	3 152	96 744	2 382	4 049	53 504	181 143	205 165	386 125	33 029
332	Fabricated metal product mfg.....	1	20	10	675	19 199	541	861	13 440	48 277	25 527	72 200	7 776
336	Transportation equipment mfg.....	1	10	4	1 130	40 465	778	1 115	14 119	26 317	24 623	56 110	D
3366	Ship & boat building.....	—	2	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	—	2	2	f	D	D	D	D	D	D	D	D
336612	Boat building.....	—	2	2	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
AUBURN, WA													
31-33	Manufacturing	-	167	39	13 946	605 221	9 598	22 707	438 110	1 205 661	676 413	1 875 825	80 393
326	Plastics & rubber products mfg	2	12	7	f	D	D	D	D	D	D	D	3 147
3261	Plastics product mfg	2	12	7	f	D	D	D	D	D	D	D	3 147
332	Fabricated metal product mfg	3	52	7	f	D	D	D	D	D	D	D	3 394
336	Transportation equipment mfg	-	20	9	j	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	14	7	j	D	D	D	D	D	D	D	67 566
33641	Aerospace product & parts mfg	-	14	7	j	D	D	D	D	D	D	D	67 566
336413	Other aircraft part & auxiliary equipment mfg	-	14	7	j	D	D	D	D	D	D	D	67 566
BELLEVUE, WA													
31-33	Manufacturing	4	163	29	2 740	93 342	1 754	3 196	48 435	281 164	400 764	681 840	22 465
BELLINGHAM, WA													
31-33	Manufacturing	-	130	32	3 457	91 500	2 562	4 777	61 877	235 158	340 067	583 859	20 443
311	Food mfg	1	19	9	f	D	D	D	D	D	D	D	3 310
3117	Seafood product preparation & packaging	-	9	7	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging	-	9	7	f	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing	-	8	7	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
BLAINE, WA													
31-33	Manufacturing	-	13	7	f	D	D	D	D	D	D	D	D
BOTHELL, WA *													
31-33	Manufacturing	-	50	20	4 260	217 140	1 863	3 693	46 598	383 068	336 645	707 031	30 382
334	Computer & electronic product mfg	-	13	9	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	7	5	h	D	D	D	D	D	D	D	20 176
33451	Navigational, measuring, medical, & control instruments mfg	-	7	5	h	D	D	D	D	D	D	D	20 176
334510	Electromedical & electrotherapeutic apparatus mfg	-	4	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	4	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	5	3	f	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	2	2	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	2	2	f	D	D	D	D	D	D	D	D
BURLINGTON, WA													
31-33	Manufacturing	-	28	14	1 298	30 404	1 051	1 755	21 659	80 459	74 441	154 654	6 255

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CAMAS, WA													
31-33	Manufacturing	-	16	6	2 464	97 851	1 782	3 536	55 965	356 949	296 743	649 008	D
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	4	3	657	31 815	298	643	6 775	82 312	46 738	127 789	D
3344	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	3	f	D	D	D	D	D	D	D	D
CHEHALIS, WA													
31-33	Manufacturing	-	35	14	1 322	35 919	1 054	2 060	25 965	111 512	162 724	270 866	9 873
321	Wood product mfg	-	8	7	635	16 601	510	975	12 483	40 282	60 298	97 682	5 792
COLVILLE, WA													
31-33	Manufacturing	1	15	6	536	16 408	411	861	11 503	35 882	55 517	91 683	1 692
EVERETT, WA													
31-33	Manufacturing	-	130	48	k	D	D	D	D	D	D	D	177 301
321	Wood product mfg	2	10	7	f	D	D	D	D	D	D	D	5 913
322	Paper mfg	-	2	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	28	11	f	D	D	D	D	D	D	D	1 438
334	Computer & electronic product mfg	-	7	2	h	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	1	g	D	D	D	D	D	D	D	D
334515	Electricity measuring & testing instrument mfg	-	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	4	k	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	5	3	k	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	5	3	k	D	D	D	D	D	D	D	D
336411	Aircraft mfg	-	1	1	k	D	D	D	D	D	D	D	D
FEDERAL WAY, WA													
31-33	Manufacturing	3	32	5	556	15 725	428	779	10 073	46 205	20 290	66 776	2 015
FERNDALE, WA													
31-33	Manufacturing	-	23	7	794	33 005	563	1 299	18 788	121 072	676 735	799 603	10 907
FIFE, WA													
31-33	Manufacturing	1	32	16	1 897	55 830	1 267	2 303	34 151	127 094	120 309	246 407	7 556
323	Printing & related support activities	-	5	2	605	12 665	344	328	5 515	14 611	19 699	36 001	86
3231	Printing & related support activities	-	5	2	605	12 665	344	328	5 515	14 611	19 699	36 001	86
32311	Printing	-	5	2	605	12 665	344	328	5 515	14 611	19 699	36 001	86
323117	Book printing	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HOQUIAM, WA													
31-33	Manufacturing	-	14	5	925	34 686	805	1 639	29 201	57 050	128 730	183 115	D
ISSAQUAH, WA													
31-33	Manufacturing	-	40	11	1 505	73 006	789	1 554	28 727	137 111	198 034	313 151	7 128
334	Computer & electronic product mfg	-	18	6	1 116	60 211	492	989	19 327	98 397	73 555	149 438	5 853
3345	Navigational, measuring, medical, & control instruments mfg	-	9	4	1 002	55 869	397	791	16 267	88 457	67 646	133 479	4 746
33451	Navigational, measuring, medical, & control instruments mfg	-	9	4	1 002	55 869	397	791	16 267	88 457	67 646	133 479	4 746
KENNEWICK, WA													
31-33	Manufacturing	-	46	4	f	D	D	D	D	D	D	D	D
KENT, WA													
31-33	Manufacturing	-	295	127	26 894	1 274 764	12 515	23 951	396 202	2 503 653	1 439 184	3 997 375	160 404
311	Food mfg	-	21	17	1 868	51 598	1 420	2 565	33 739	314 989	292 411	603 109	7 620
3118	Bakeries & tortilla mfg	-	8	6	599	16 559	456	929	9 841	109 514	98 089	206 238	3 834
3119	Other food mfg	-	6	5	523	13 702	340	682	8 233	110 631	125 015	228 592	1 468
323	Printing & related support activities	3	33	15	1 169	41 077	838	1 547	25 004	90 402	58 166	147 893	4 206
3231	Printing & related support activities	3	33	15	1 169	41 077	838	1 547	25 004	90 402	58 166	147 893	4 206
32311	Printing	3	31	14	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	5	12	5	628	24 942	422	834	14 524	48 567	33 863	81 653	1 586
326	Plastics & rubber products mfg	1	19	13	1 354	40 199	879	1 952	23 963	104 344	110 863	214 582	14 705
3261	Plastics product mfg	1	16	11	1 285	38 850	824	1 890	23 061	101 841	108 631	209 820	14 490
332	Fabricated metal product mfg	-	78	24	2 003	69 522	1 604	3 342	51 080	187 522	161 014	345 024	13 273
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	38	9	639	24 448	521	1 096	17 426	71 498	25 478	95 037	7 050
33271	Machine shops	-	32	8	501	17 595	404	826	12 331	53 794	19 452	72 281	6 833
332710	Machine shops	-	32	8	501	17 595	404	826	12 331	53 794	19 452	72 281	6 833
3328	Coating, engraving, heat treating, & allied activities ..	-	8	4	552	16 023	444	976	11 614	39 648	8 350	47 241	2 893
33281	Coating, engraving, heat treating, & allied activities	-	8	4	552	16 023	444	976	11 614	39 648	8 350	47 241	2 893
333	Machinery mfg	-	27	11	f	D	D	D	D	D	D	D	2 870
334	Computer & electronic product mfg	-	15	9	15 467	889 328	4 315	7 370	167 918	1 351 501	414 914	1 831 357	D
3345	Navigational, measuring, medical, & control instruments mfg	-	5	4	j	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	4	j	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg	-	1	1	j	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	25	12	g	D	D	D	D	D	D	D	15 339
3364	Aerospace product & parts mfg	-	15	8	g	D	D	D	D	D	D	D	13 704
33641	Aerospace product & parts mfg	-	15	8	g	D	D	D	D	D	D	D	13 704
336413	Other aircraft part & auxiliary equipment mfg	-	14	8	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	15	8	820	22 839	664	1 386	14 256	50 561	34 622	85 334	2 163
3372	Office furniture (including fixtures) mfg	-	6	3	f	D	D	D	D	D	D	D	1 798
33721	Office furniture (including fixtures) mfg	-	6	3	f	D	D	D	D	D	D	D	1 798
KIRKLAND, WA													
31-33	Manufacturing	1	93	21	1 941	63 249	1 366	2 512	34 830	194 142	124 178	315 839	15 391
334	Computer & electronic product mfg	-	10	6	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LAKEWOOD, WA *													
31-33	Manufacturing	1	44	9	624	14 518	452	806	8 487	33 679	37 342	71 367	2 936
LONGVIEW, WA													
31-33	Manufacturing	-	46	17	2 556	115 160	1 908	3 868	80 307	336 920	479 126	824 265	27 932
322	Paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
LYNNWOOD, WA													
31-33	Manufacturing	6	61	14	1 526	40 796	1 084	2 119	23 446	75 004	66 591	145 928	5 297
323	Printing & related support activities	9	8	1	520	11 956	359	683	6 351	22 882	10 751	37 038	D
3231	Printing & related support activities	9	8	1	520	11 956	359	683	6 351	22 882	10 751	37 038	D
32311	Printing	9	8	1	520	11 956	359	683	6 351	22 882	10 751	37 038	D
323110	Commercial lithographic printing ..	9	6	1	f	D	D	D	D	D	D	D	D
MARYSVILLE, WA													
31-33	Manufacturing	1	53	13	1 374	47 431	1 079	2 396	32 576	91 262	113 958	199 828	6 283
MONROE, WA													
31-33	Manufacturing	2	41	8	542	13 186	436	669	9 033	29 181	23 131	51 874	3 215
MOUNT VERNON, WA													
31-33	Manufacturing	1	27	2	527	13 230	381	501	5 722	32 585	43 363	75 761	1 694
MUKILTEO, WA													
31-33	Manufacturing	-	66	25	1 970	71 143	1 147	2 225	30 012	177 627	101 688	271 792	10 899
332	Fabricated metal product mfg	-	22	8	849	35 623	398	786	10 730	93 909	37 670	130 734	3 167
OLYMPIA, WA													
31-33	Manufacturing	-	47	15	1 368	47 287	1 118	2 034	36 583	155 664	239 660	387 034	4 009
OTHELLO, WA													
31-33	Manufacturing	5	11	2	g	D	D	D	D	D	D	D	D
311	Food mfg	5	6	2	1 065	25 500	947	2 031	20 145	126 113	146 082	272 264	D
3114	Fruit & vegetable preserving & specialty food mfg	5	3	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	5	3	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	5	3	2	g	D	D	D	D	D	D	D	D
PASCO, WA													
31-33	Manufacturing	1	34	4	f	D	D	D	D	D	D	D	8 158
PORT ANGELES, WA													
31-33	Manufacturing	1	20	5	796	33 583	613	1 303	25 824	108 889	132 292	253 980	5 125

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PROSSER, WA													
31-33	Manufacturing	-	15	5	f	D	D	D	D	D	D	D	3 133
311	Food mfg	-	5	4	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	2	2	f	D	D	D	D	D	D	D	D
PUYALLUP, WA													
31-33	Manufacturing	-	38	15	2 482	83 054	1 823	3 728	59 137	223 122	114 982	320 511	D
336	Transportation equipment mfg	-	3	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	3	2	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
QUINCY, WA													
31-33	Manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	2	2	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	2	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	-	2	2	g	D	D	D	D	D	D	D	D
REDMOND, WA													
31-33	Manufacturing	1	227	87	11 807	448 498	6 686	13 089	173 229	1 297 879	891 212	2 183 742	84 145
323	Printing & related support activities	-	34	6	697	28 671	418	818	16 320	63 437	14 977	78 249	1 520
3231	Printing & related support activities	-	34	6	697	28 671	418	818	16 320	63 437	14 977	78 249	1 520
333	Machinery mfg	-	18	11	1 488	41 361	1 195	2 376	29 385	126 940	211 623	339 219	8 556
3339	Other general-purpose machinery mfg	-	6	3	g	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	47	30	5 309	222 722	2 453	5 181	63 480	733 821	383 816	1 112 063	43 498
3342	Communications equipment mfg	5	9	5	971	56 220	301	588	8 817	115 650	53 734	168 864	6 973
33421	Telephone apparatus mfg	7	4	3	643	42 895	169	329	5 372	86 548	40 875	126 503	D
334210	Telephone apparatus mfg	7	4	3	643	42 895	169	329	5 372	86 548	40 875	126 503	D
3344	Semiconductor & other electronic component mfg	1	15	10	1 459	49 329	1 017	2 295	25 741	120 964	68 459	191 271	4 740
33441	Semiconductor & other electronic component mfg	1	15	10	1 459	49 329	1 017	2 295	25 741	120 964	68 459	191 271	4 740
334412	Bare printed circuit board mfg	2	6	4	754	24 098	638	1 590	18 512	61 389	33 068	95 927	D
3345	Navigational, measuring, medical, & control instruments mfg	-	18	11	2 488	99 997	916	1 921	24 233	441 948	194 050	630 719	27 590
33451	Navigational, measuring, medical, & control instruments mfg	-	18	11	2 488	99 997	916	1 921	24 233	441 948	194 050	630 719	27 590
334510	Electromedical & electrotherapeutic apparatus mfg	-	5	4	g	D	D	D	D	D	D	D	23 430
334511	Search, detection, navigation, & guidance instrument mfg	-	4	3	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
REDMOND, WA—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	1	7	3	g	D	D	D	D	D	D	D	D	
3364	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	1	30	11		1 299	50 491	771	1 414	21 202	125 331	82 703	210 158	9 558
3391	Medical equipment & supplies mfg	1	11	4		667	33 859	303	556	11 203	86 104	47 485	133 332	7 894
33911	Medical equipment & supplies mfg	1	11	4		667	33 859	303	556	11 203	86 104	47 485	133 332	7 894
339112	Surgical & medical instrument mfg	1	7	4		655	33 523	295	543	11 037	85 246	47 050	132 024	7 856
3399	Other miscellaneous mfg ..	1	19	7		632	16 632	468	858	9 999	39 227	35 218	76 826	1 664
RENTON, WA														
31-33	Manufacturing	8	70	24	k	D	D	D	D	D	D	D	D	59 989
336	Transportation equipment mfg	9	8	5	k	D	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	—	1	1	g	D	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	—	1	1	g	D	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	—	1	1	g	D	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	9	4	3	j	D	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	9	4	3	j	D	D	D	D	D	D	D	D	D
336411	Aircraft mfg	9	2	1	j	D	D	D	D	D	D	D	D	D
RICHLAND, WA														
31-33	Manufacturing	—	28	5	1 449	65 615	980	2 260	32 250	138 617	141 353	294 230	23 292	
311	Food mfg	—	4	1	f	D	D	D	D	D	D	D	D	
325	Chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	
3251	Basic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	
32518	Other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	
325188	All other basic inorganic chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D	
SEATTLE, WA														
31-33	Manufacturing	1	1 213	348	33 935	1 132 711	22 619	46 290	651 039	2 722 952	2 300 010	5 021 058	186 762	
311	Food mfg	1	171	69		8 670	268 247	5 634	12 456	173 624	748 039	873 428	1 618 281	44 890
3115	Dairy product mfg	1	8	5		621	24 220	365	731	14 640	66 103	147 614	212 704	4 584
3117	Seafood product preparation & packaging..	1	42	30	h	D	D	D	D	D	D	D	D	16 771
31171	Seafood product preparation & packaging	1	42	30	h	D	D	D	D	D	D	D	D	16 771
311712	Fresh & frozen seafood processing ..	1	37	30	h	D	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	2	69	17		3 556	105 395	1 495	3 165	46 193	262 116	180 573	442 481	18 795
31181	Bread & bakery product mfg	2	55	13		3 060	88 857	1 181	2 680	39 089	181 793	124 806	306 669	10 397
311812	Commercial bakeries ..	2	24	13		2 955	87 560	1 109	2 606	38 452	178 769	122 935	301 774	10 217
312	Beverage & tobacco product mfg	3	13	9		1 352	32 316	394	773	11 114	109 422	100 439	209 458	6 866
3121	Beverage mfg	3	13	9		1 352	32 316	394	773	11 114	109 422	100 439	209 458	6 866
31211	Soft drink & ice mfg	6	5	4	f	D	D	D	D	D	D	D	D	D
312111	Soft drink mfg	6	4	3	f	D	D	D	D	D	D	D	D	D
31212	Breweries	—	8	5	f	D	D	D	D	D	D	D	D	D
312120	Breweries	—	8	5	f	D	D	D	D	D	D	D	D	D
314	Textile product mills	2	49	10	f	D	D	D	D	D	D	D	D	D
315	Apparel mfg	2	74	21		1 980	40 465	1 698	3 437	28 696	65 417	56 515	122 536	2 151
3152	Cut & sew apparel mfg	1	54	18	g	D	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	1	10	4	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	—	12	6		564	20 490	362	728	11 015	42 276	49 945	91 154	2 995
3222	Converted paper product mfg	—	12	6		564	20 490	362	728	11 015	42 276	49 945	91 154	2 995

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SEATTLE, WA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	205	46	2 945	108 934	2 051	4 040	63 761	206 413	112 265	317 981	25 046
3231	Printing & related support activities.....	1	205	46	2 945	108 934	2 051	4 040	63 761	206 413	112 265	317 981	25 046
32311	Printing.....	1	180	39	2 517	91 282	1 712	3 393	52 237	175 720	106 270	281 584	23 453
323110	Commercial lithographic printing ..	1	86	24	1 582	61 504	1 077	2 205	36 318	117 543	73 400	190 758	18 794
325	Chemical mfg.....	1	31	10	774	44 554	436	909	13 090	116 248	91 511	207 009	D
326	Plastics & rubber products mfg.....	1	25	8	1 151	30 570	897	1 695	20 337	77 484	51 157	127 373	4 692
3261	Plastics product mfg.....	-	22	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	12	5	822	19 710	650	1 213	13 721	51 428	31 226	80 640	2 999
326199	All other plastics product mfg.....	-	11	5	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	43	14	1 609	60 584	1 276	2 603	44 243	194 546	159 067	365 338	14 388
3272	Glass & glass product mfg.....	-	22	4	1 016	34 481	843	1 684	27 035	114 632	59 971	183 982	8 385
32721	Glass & glass product mfg.....	-	22	4	1 016	34 481	843	1 684	27 035	114 632	59 971	183 982	8 385
327213	Glass container mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	13	7	664	27 133	534	1 204	19 767	108 292	121 848	234 137	6 621
332	Fabricated metal product mfg.....	-	131	37	3 028	101 855	2 241	4 305	59 952	185 258	115 380	299 818	12 367
3323	Architectural & structural metals mfg.....	1	37	8	508	17 843	363	721	10 921	29 442	29 822	58 650	988
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	39	9	f	D	D	D	D	D	D	D	5 235
33271	Machine shops.....	-	33	7	697	24 085	533	943	13 753	42 176	10 899	52 778	3 557
332710	Machine shops.....	-	33	7	697	24 085	533	943	13 753	42 176	10 899	52 778	3 557
3328	Coating, engraving, heat treating, & allied activities.....	-	17	8	955	29 662	742	1 508	17 375	58 627	20 065	77 628	2 954
33281	Coating, engraving, heat treating, & allied activities.....	-	17	8	955	29 662	742	1 508	17 375	58 627	20 065	77 628	2 954
332813	Electroplating, plating, polishing, anodizing, & coloring.....	-	8	4	751	23 624	556	1 094	12 715	47 601	16 769	63 275	2 515
333	Machinery mfg.....	1	50	19	1 564	66 991	992	2 099	36 811	151 751	97 533	251 257	5 262
3339	Other general-purpose machinery mfg.....	1	18	8	572	26 549	355	764	15 705	58 032	40 721	99 322	1 633
334	Computer & electronic product mfg.....	3	70	17	2 029	83 599	934	1 814	25 375	217 271	111 801	323 380	26 470
3344	Semiconductor & other electronic component mfg.....	-	19	6	994	34 359	501	1 027	12 717	83 461	23 711	105 464	D
33441	Semiconductor & other electronic component mfg.....	-	19	6	994	34 359	501	1 027	12 717	83 461	23 711	105 464	D
334419	Other electronic component mfg.....	-	9	3	588	21 364	260	548	7 208	48 900	11 383	59 811	D
336	Transportation equipment mfg.....	1	68	25	3 862	142 036	2 376	5 002	80 167	273 663	183 440	452 934	11 136
3364	Aerospace product & parts mfg.....	2	11	6	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	2	11	6	g	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	-	9	5	g	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	-	36	15	2 042	88 500	1 358	3 287	54 853	161 912	85 067	246 760	D
33661	Ship & boat building.....	-	36	15	2 042	88 500	1 358	3 287	54 853	161 912	85 067	246 760	D
336611	Ship building & repairing.....	-	23	12	1 858	81 615	1 219	3 027	51 034	147 529	77 572	225 101	D
337	Furniture & related product mfg.....	4	73	14	f	D	D	D	D	D	D	D	2 617
339	Miscellaneous mfg.....	3	124	19	1 321	41 527	936	1 622	23 083	97 011	47 495	144 782	3 211
3399	Other miscellaneous mfg ..	3	86	13	979	29 039	682	1 219	16 724	68 368	34 360	102 700	1 414

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SELAH, WA													
31-33	Manufacturing	-	6	4	f	D	D	D	D	D	D	D	8 281
311	Food mfg	-	3	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	3	3	f	D	D	D	D	D	D	D	D
SHELTON, WA													
31-33	Manufacturing	-	13	5	1 137	36 925	999	2 031	28 457	94 510	168 157	259 943	D
321	Wood product mfg	-	4	3	f	D	D	D	D	D	D	D	D
SPOKANE, WA													
31-33	Manufacturing	2	315	89	6 862	210 024	4 435	8 495	121 023	447 426	470 427	927 544	30 099
311	Food mfg	-	28	16	1 320	40 021	631	1 114	17 055	110 787	128 872	239 662	8 858
3118	Bakeries & tortilla mfg	-	13	9	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	9	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	48	8	587	14 552	375	643	8 334	34 068	13 806	47 811	2 844
3231	Printing & related support activities	2	48	8	587	14 552	375	643	8 334	34 068	13 806	47 811	2 844
32311	Printing	2	42	8	562	13 906	355	607	7 849	32 749	13 502	46 190	2 790
332	Fabricated metal product mfg	2	65	16	811	22 365	626	1 112	14 513	44 400	41 669	86 178	2 668
333	Machinery mfg	1	21	2	526	17 717	354	587	9 984	27 350	20 000	47 269	914
336	Transportation equipment mfg	3	32	12	g	D	D	D	D	D	D	D	3 133
3364	Aerospace product & parts mfg	1	6	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	1	6	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	1	6	2	f	D	D	D	D	D	D	D	D
SUMNER, WA													
31-33	Manufacturing	-	26	15	1 504	37 193	1 293	2 555	29 492	97 435	170 026	265 876	5 362
321	Wood product mfg	-	8	6	519	11 243	442	867	9 241	30 492	42 901	74 991	426
SUNNYSIDE, WA													
31-33	Manufacturing	-	16	6	543	14 117	445	761	9 536	64 920	147 511	210 957	14 434
TACOMA, WA													
31-33	Manufacturing	1	276	104	10 894	363 498	8 320	17 358	250 449	1 037 083	1 585 468	2 625 635	87 482
311	Food mfg	2	21	9	1 182	33 388	914	2 064	24 839	236 164	267 465	505 488	12 297
321	Wood product mfg	-	28	13	1 859	53 809	1 494	3 088	38 628	103 112	284 921	388 296	9 419
3211	Sawmills & wood preservation	-	10	7	1 106	35 506	829	1 777	23 956	74 786	217 901	293 907	6 056
32111	Sawmills & wood preservation	-	10	7	1 106	35 506	829	1 777	23 956	74 786	217 901	293 907	6 056
321113	Sawmills	-	9	6	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	16	5	f	D	D	D	D	D	D	D	D
32191	Millwork	-	12	5	561	13 178	511	1 000	11 175	23 406	32 368	55 568	D
322	Paper mfg	-	11	6	870	39 444	646	1 286	28 331	94 251	173 230	269 972	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	3	17	10	738	22 850	605	1 228	16 332	59 262	73 966	133 619	11 437
3261	Plastics product mfg	3	16	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	15	8	755	26 008	594	1 257	17 828	76 445	69 336	144 879	5 183
331	Primary metal mfg	-	6	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	TACOMA, WA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	1	39	11	648	22 673	501	1 008	15 569	40 488	35 003	75 142	2 290
336	Transportation equipment mfg	1	23	12	g	D	D	D	D	D	D	D	4 982
	TOPPENISH, WA												
31-33	Manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
	TUKWILA, WA												
31-33	Manufacturing	3	93	37	2 645	91 702	1 829	3 494	52 052	200 283	209 626	406 090	8 726
	TUMWATER, WA												
31-33	Manufacturing	—	31	13	958	28 452	728	1 384	18 500	97 705	157 846	252 313	18 148
	UNION GAP, WA												
31-33	Manufacturing	1	20	12	885	23 996	716	1 242	16 225	50 889	92 956	146 047	6 425
	VANCOUVER, WA												
31-33	Manufacturing	—	193	74	13 073	494 024	10 504	20 872	355 323	1 316 796	1 229 854	2 515 908	D
311	Food mfg	—	11	4	931	39 205	750	1 686	21 836	155 875	178 285	333 201	D
3119	Other food mfg	—	2	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	10	9	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	10	9	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	10	7	632	18 635	364	741	9 647	36 612	31 688	69 296	D
3261	Plastics product mfg	—	10	7	632	18 635	364	741	9 647	36 612	31 688	69 296	D
32619	Other plastics product mfg	—	6	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	6	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	33	14	1 140	34 546	892	1 654	24 294	66 178	53 237	118 901	D
333	Machinery mfg	—	22	5	831	31 827	468	824	14 194	52 400	59 655	115 519	D
334	Computer & electronic product mfg	—	12	7	i	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	h	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	4	3	h	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	4	3	h	D	D	D	D	D	D	D	D
334413	Semiconductor & related device mfg ...	—	1	1	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor mfg	—	1	1	f	D	D	D	D	D	D	D	D
	WALLA WALLA, WA												
31-33	Manufacturing	1	43	9	1 137	31 234	928	1 829	21 799	95 598	57 016	154 668	4 536
	WASHOUGAL, WA												
31-33	Manufacturing	1	25	14	929	27 243	691	1 169	17 908	59 568	106 220	168 164	3 574
	WENATCHEE, WA												
31-33	Manufacturing	1	32	7	621	13 496	520	954	10 041	42 191	29 282	71 571	1 170
	WOODINVILLE, WA *												
31-33	Manufacturing	—	86	28	1 832	56 356	1 223	2 237	27 677	227 282	161 853	363 842	31 479

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WOODLAND, WA *												
31-33	Manufacturing	-	17	9	810	26 285	561	1 216	15 517	77 762	102 061	181 174	3 174
	YAKIMA, WA												
31-33	Manufacturing	-	102	34	4 624	123 996	3 513	6 815	85 724	320 084	430 304	747 679	38 129
311	Food mfg.....	-	6	4	625	14 394	596	1 167	11 430	51 725	53 743	105 594	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	3	3	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	-	2	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	10	5	566	17 198	501	984	14 715	28 777	107 716	134 869	D
326	Plastics & rubber products mfg.....	-	6	4	861	23 927	703	1 530	16 543	62 376	86 244	147 774	D
3261	Plastics product mfg.....	-	6	4	861	23 927	703	1 530	16 543	62 376	86 244	147 774	D
332	Fabricated metal product mfg.....	-	13	3	518	16 401	302	534	10 683	32 786	17 664	49 509	1 843
333	Machinery mfg.....	8	12	3	594	14 701	346	463	7 018	32 315	27 672	60 122	2 166

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
WASHINGTON		WASHINGTON—Con.	
Companies ¹	7 396	Quantity of electricity purchased for heat and power	1,000 kWh.. 35 770 643
All establishments	7 801	Quantity of electricity generated less sold for heat and power	1,000 kWh.. 1 032 478
Establishments with 1 to 19 employees	5 642	Total value of shipments	\$1,000.. 78 852 486
Establishments with 20 to 99 employees	1 586	Value of resales	\$1,000.. 2 910 220
Establishments with 100 employees or more	573	Value added	\$1,000.. 30 434 838
All employees	328 511	Total inventories, beginning of year	\$1,000.. 17 679 809
Total compensation ²	\$1,000.. 16 068 448	Finished goods inventories, beginning of year	\$1,000.. 2 558 362
Annual payroll	\$1,000.. 13 004 063	Work-in-process inventories, beginning of year	\$1,000.. 12 243 713
Total fringe benefits	\$1,000.. 3 064 385	Materials and supplies inventories, beginning of year	\$1,000.. 2 877 734
Production workers, average for year	213 330	Total inventories, end of year	\$1,000.. 18 978 031
Production workers on March 12	207 630	Finished goods inventories, end of year	\$1,000.. 2 764 436
Production workers on May 12	211 130	Work-in-process inventories, end of year	\$1,000.. 12 666 104
Production workers on August 12	215 548	Materials and supplies inventories, end of year	\$1,000.. 3 547 491
Production workers on November 12	219 012	Gross book value of total assets at beginning of year	\$1,000.. 34 258 096
Production-worker hours	1,000.. 425 003	Total capital expenditures (new and used)	\$1,000.. 2 640 230
Production-worker wages	\$1,000.. 7 046 371	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 694 020
Total cost of materials	\$1,000.. 49 023 723	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 1 946 210
Cost of materials, parts, containers, etc., consumed	\$1,000.. 44 006 071	Total retirements ²	\$1,000.. 935 405
Cost of resales	\$1,000.. 2 476 282	Gross book value of total assets at end of year	\$1,000.. 35 962 921
Cost of fuels	\$1,000.. 346 903	Total depreciation during year ²	\$1,000.. 2 230 595
Cost of purchased electricity	\$1,000.. 984 399	Total rental payments ²	\$1,000.. 545 475
Cost of contract work	\$1,000.. 1 210 068	Buildings and other structures rental payments ²	\$1,000.. 300 584
		Machinery and equipment rental payments ²	\$1,000.. 244 891

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

- 2421 Sawmills and planing mills, general (pt)
- 2429 Special product sawmills, n.e.c. (pt)
- 2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

- 2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

- 2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

- 2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

- 2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

WASHINGTON

Bothell is in King and Snohomish Counties.

Burien was incorporated in February 1993.

Edgewood was incorporated in February 1996.

Enumclaw is in King and Pierce Counties.

Lakewood was incorporated in February 1996.

Milton is in King and Pierce Counties.

Newcastle was incorporated in September 1994.

Pacific is in King and Pierce Counties.

Shoreline was incorporated in August 1995.

University Place was incorporated in August 1995.

Woodinville was incorporated in March 1993.

Woodland is in Clark and Cowlitz Counties.

Appendix E. Metropolitan Areas

WASHINGTON

Bellingham, WA MSA

Whatcom County, WA

Bremerton, WA PMSA

Kitsap County, WA

Olympia, WA PMSA

Thurston County, WA

Portland—Vancouver, OR—WA PMSA

Clackamas County, OR

Columbia County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Clark County, WA

Portland—Salem, OR—WA CMSA

Portland—Vancouver, OR—WA PMSA

Clackamas County, OR

Columbia County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Clark County, WA

Salem, OR PMSA

Marion County, OR

Polk County, OR

Richland—Kennewick—Pasco, WA MSA

Benton County, WA

Franklin County, WA

Seattle—Bellevue—Everett, WA PMSA

Island County, WA

King County, WA

Snohomish County, WA

Seattle—Tacoma—Bremerton, WA CMSA

Bremerton, WA PMSA

Kitsap County, WA

Olympia, WA PMSA

Thurston County, WA

Seattle—Bellevue—Everett, WA PMSA

Island County, WA

King County, WA

Snohomish County, WA

Tacoma, WA PMSA

Pierce County, WA

Spokane, WA MSA

Spokane County, WA

Tacoma, WA PMSA

Pierce County, WA

Yakima, WA MSA

Yakima County, WA

Wisconsin

1997

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WISCONSIN													
31-33	Manufacturing	-	9 936	3 905	562 479	18 766 395	416 254	837 444	11 952 570	54 947 083	62 446 845	117 382 992	4 092 922
311	Food mfg.....	1	994	424	62 249	1 679 045	48 445	96 755	1 161 102	6 708 729	13 872 022	20 596 744	515 406
3111	Animal food mfg.....	1	81	22	2 031	66 214	1 154	2 342	30 564	226 093	508 161	737 234	17 753
31111	Animal food mfg.....	1	81	22	2 031	66 214	1 154	2 342	30 564	226 093	508 161	737 234	17 753
311111	Dog & cat food mfg....	-	9	2	352	11 481	269	613	8 221	37 152	108 415	145 629	4 389
311119	Other animal food mfg.....	1	72	20	1 679	54 733	885	1 729	22 343	188 941	399 746	591 605	13 364
3112	Grain & oilseed milling	-	20	10	1 055	37 275	846	1 821	26 635	146 564	395 286	544 943	34 795
31121	Flour milling & malt mfg .	-	16	9	624	26 364	458	1 055	17 109	100 840	309 772	416 973	D
311211	Flour milling	-	7	2	125	4 403	97	256	3 170	21 938	114 844	137 419	D
311213	Malt mfg	1	9	7	499	21 961	361	799	13 939	78 902	194 928	279 554	22 464
31123	Breakfast cereal mfg....	-	1	1	e	D	D	D	D	D	D	D	D
311230	Breakfast cereal mfg..	-	1	1	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg.....	-	58	16	2 331	61 873	1 723	3 080	34 224	429 380	314 384	761 919	12 542
31132	Chocolate & confectionery mfg from cacao beans.....	-	9	5	1 194	38 180	819	1 472	18 142	351 563	269 307	638 356	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	9	5	1 194	38 180	819	1 472	18 142	351 563	269 307	638 356	D
31133	Confectionery mfg from purchased chocolate...	1	32	9	670	14 775	520	892	9 796	47 417	28 162	76 411	D
311330	Confectionery mfg from purchased chocolate.....	1	32	9	670	14 775	520	892	9 796	47 417	28 162	76 411	D
31134	Nonchocolate confectionery mfg.....	-	17	2	467	8 918	384	716	6 286	30 400	16 915	47 152	1 803
311340	Nonchocolate confectionery mfg ...	-	17	2	467	8 918	384	716	6 286	30 400	16 915	47 152	1 803
3114	Fruit & vegetable preserving & specialty food mfg.....	3	105	76	12 763	308 374	10 847	21 368	231 543	1 273 978	1 306 866	2 579 411	97 597
31141	Frozen food mfg.....	3	37	25	7 380	171 862	6 219	11 520	126 073	776 666	735 503	1 510 593	58 424
311411	Frozen fruit, juice, & vegetable mfg.....	9	12	10	2 946	69 393	2 609	5 099	57 206	322 389	232 855	552 862	26 780
311412	Frozen specialty food mfg.....	-	25	15	4 434	102 469	3 610	6 421	68 867	454 277	502 648	957 731	31 644
31142	Fruit & vegetable canning, pickling, & drying.....	2	68	51	5 383	136 512	4 628	9 848	105 470	497 312	571 363	1 068 818	39 173
311421	Fruit & vegetable canning.....	2	59	45	4 767	117 060	4 128	8 907	91 616	414 794	489 120	905 192	28 953
311422	Specialty canning.....	-	2	2	c	D	D	D	D	D	D	D	D
311423	Dried & dehydrated food mfg.....	-	7	4	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	240	148	16 104	464 199	12 057	24 567	325 576	1 692 920	6 864 868	8 561 181	187 013
31151	Dairy product (except frozen) mfg.....	-	228	144	15 816	457 122	11 849	24 221	321 739	1 665 541	6 815 095	8 483 710	185 166
311511	Fluid milk mfg.....	-	15	10	942	29 865	675	1 542	21 706	172 264	451 017	624 328	5 107
311512	Creamery butter mfg..	-	10	8	663	19 724	361	722	9 666	81 789	495 276	572 640	3 246
311513	Cheese mfg.....	-	176	110	12 463	348 980	9 476	19 225	251 094	1 185 204	5 374 464	6 566 837	150 787
311514	Dry, condensed, & evaporated dairy product mfg.....	-	27	16	1 748	58 553	1 337	2 732	39 273	226 284	494 338	719 905	26 026
31152	Ice cream & frozen dessert mfg.....	2	12	4	288	7 077	208	346	3 837	27 379	49 773	77 471	1 847
311520	Ice cream & frozen dessert mfg.....	2	12	4	288	7 077	208	346	3 837	27 379	49 773	77 471	1 847
3116	Meat product mfg.....	2	123	54	17 470	467 132	14 354	29 214	342 514	1 834 639	3 608 401	5 437 135	91 212
31161	Animal slaughtering & processing.....	2	123	54	17 470	467 132	14 354	29 214	342 514	1 834 639	3 608 401	5 437 135	91 212
311611	Animal (except poultry) slaughtering	4	60	19	4 728	106 122	3 923	8 239	84 686	411 180	1 639 575	2 042 612	13 516
311612	Meat processed from carcasses	-	53	27	10 000	291 529	8 247	16 793	217 061	1 220 072	1 727 625	2 951 126	58 670
311613	Rendering & meat byproduct processing.....	-	5	4	161	4 467	98	196	1 821	20 812	10 355	31 485	570
311615	Poultry processing.....	-	5	4	2 581	65 014	2 086	3 986	38 946	182 575	230 846	411 912	18 456
3118	Bakeries & tortilla mfg.....	-	259	53	6 155	134 220	4 151	7 572	88 431	395 248	260 865	656 509	19 442
31181	Bread & bakery product mfg.....	1	243	44	4 519	84 915	2 796	4 750	52 418	281 557	135 982	417 706	D
311811	Retail bakeries.....	3	178	14	1 414	17 209	827	1 141	10 461	32 035	19 697	51 618	2 150
311812	Commercial bakeries ..	-	60	29	3 050	66 597	1 932	3 534	41 255	246 731	113 672	360 686	6 948
31182	Cookie, cracker, & pasta mfg.....	-	15	9	g	D	D	D	D	D	D	D	10 094
311821	Cookie & cracker mfg ..	-	7	5	934	24 809	763	1 451	17 191	79 946	58 721	138 944	D
311822	Flour mixes & dough mfg from purchased flour.....	-	6	4	677	23 953	573	1 342	18 457	31 081	63 927	94 954	5 163

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WISCONSIN—Con.													
31-33	Manufacturing—Con.												
311	Food mfg—Con.												
3119	Other food mfg	1	98	44	4 248	137 548	3 247	6 677	80 253	700 987	589 005	1 285 319	53 798
31191	Snack food mfg	—	19	10	1 260	43 734	1 011	2 220	25 392	260 082	207 035	465 822	9 102
311919	Other snack food mfg	—	18	9	g	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg	6	8	3	139	3 082	61	81	1 070	16 773	18 676	35 282	472
311920	Coffee & tea mfg	6	8	3	139	3 082	61	81	1 070	16 773	18 676	35 282	472
31193	Flavoring syrup & concentrate mfg	—	6	2	132	4 468	76	112	1 632	34 422	9 679	43 693	2 520
311930	Flavoring syrup & concentrate mfg	—	6	2	132	4 468	76	112	1 632	34 422	9 679	43 693	2 520
31194	Seasoning & dressing mfg	1	23	12	1 209	46 520	891	1 749	27 865	235 857	226 176	460 158	25 939
311941	Mayonnaise, dressing, & other prepared sauce mfg	2	11	6	805	29 535	617	1 185	18 595	171 977	141 195	312 687	19 850
311942	Spice & extract mfg	—	12	6	404	16 985	274	564	9 270	63 880	84 981	147 471	6 089
31199	All other food mfg	—	42	17	1 508	39 744	1 208	2 515	24 294	153 853	127 439	280 364	15 765
311991	Perishable prepared food mfg	—	13	5	484	11 843	420	769	7 266	32 054	26 825	57 896	4 615
311999	All other miscellaneous food mfg	—	29	12	1 024	27 901	788	1 746	17 028	121 799	100 614	222 468	11 150
312	Beverage & tobacco product mfg	—	53	16	2 845	127 361	2 100	4 354	97 516	557 570	696 143	1 258 956	28 679
3121	Beverage mfg	—	53	16	2 845	127 361	2 100	4 354	97 516	557 570	696 143	1 258 956	28 679
31211	Soft drink & ice mfg	—	21	7	939	30 113	665	1 490	22 515	134 379	356 167	497 460	7 822
312111	Soft drink mfg	—	12	7	888	28 911	634	1 427	21 761	131 460	353 082	491 455	7 526
31212	Breweries	—	22	7	1 849	95 572	1 409	2 827	74 409	417 693	335 424	751 740	20 461
312120	Breweries	—	22	7	1 849	95 572	1 409	2 827	74 409	417 693	335 424	751 740	20 461
313	Textile mills	—	46	19	2 355	81 982	1 888	4 046	53 689	181 599	199 394	376 091	35 171
3132	Fabric mills	—	29	13	1 732	59 840	1 363	2 894	37 732	123 553	160 395	278 776	33 823
31321	Broadwoven fabric mills	—	8	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	—	8	1	e	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery	1	5	1	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	—	11	7	827	32 459	603	1 329	19 581	54 654	124 618	175 195	22 290
313230	Nonwoven fabric mills	—	11	7	827	32 459	603	1 329	19 581	54 654	124 618	175 195	22 290
31324	Knit fabric mills	—	5	4	f	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills	—	5	4	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills	—	14	5	535	20 123	445	997	14 373	55 700	34 415	90 169	1 047
31332	Fabric coating mills	—	8	4	485	18 673	405	906	13 344	52 472	31 444	83 972	793
313320	Fabric coating mills	—	8	4	485	18 673	405	906	13 344	52 472	31 444	83 972	793
314	Textile product mills	1	132	20	2 049	47 653	1 693	3 197	29 144	111 468	88 280	197 021	12 135
3141	Textile furnishings mills	1	48	7	638	13 686	517	937	8 409	46 638	34 906	79 251	7 538
31412	Curtain & linen mills	1	46	7	f	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	4	37	2	c	D	D	D	D	D	D	D	D
314129	Other household textile product mills	—	9	5	399	9 809	316	618	6 276	39 155	22 335	59 210	7 327
3149	Other textile product mills	1	84	13	1 411	33 967	1 176	2 260	20 735	64 830	53 374	117 770	4 597
31491	Textile bag & canvas mills	1	50	7	895	22 436	787	1 531	13 829	39 771	28 595	68 059	2 054
314911	Textile bag mills	—	8	2	462	12 518	450	933	8 710	22 551	10 393	33 050	D
314912	Canvas & related product mills	1	42	5	433	9 918	337	598	5 119	17 220	18 202	35 009	D
31499	All other textile product mills	1	34	6	516	11 531	389	729	6 906	25 059	24 779	49 711	2 543
314999	All other miscellaneous textile product mills	1	33	6	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	113	49	3 987	75 972	3 142	5 865	46 742	126 829	130 799	257 318	5 791
3151	Apparel knitting mills	1	9	5	566	14 012	454	979	10 136	25 689	21 338	46 394	1 304
31511	Hosiery & sock mills	—	2	2	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	2	2	e	D	D	D	D	D	D	D	D
31519	Other apparel knitting mills	4	7	3	c	D	D	D	D	D	D	D	D
315191	Outerwear knitting mills	4	6	3	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WISCONSIN—Con.													
31-33	Manufacturing—Con.												
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	—	65	26	1 887	34 174	1 545	2 768	21 691	49 202	53 098	103 782	1 178
31521	Cut & sew apparel contractors	4	20	4	159	2 015	150	239	1 704	3 207	946	4 309	198
31522	Men's & boys' cut & sew apparel mfg	1	24	12	757	14 011	609	1 107	8 682	15 900	21 925	39 789	399
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	3	2	c	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg	1	18	8	420	6 986	365	658	4 986	10 679	14 628	25 481	349
31523	Women's & girls' cut & sew apparel mfg	—	11	7	723	13 186	591	1 052	8 241	20 571	24 456	44 257	359
315231	Women's & girls' cut/ sew lingerie & nightwear mfg	—	1	1	c	D	D	D	D	D	D	D	D
315232	Women's & girls' cut & sew blouse & shirt mfg	—	2	2	e	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg	—	2	2	c	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	10	3	248	4 962	195	370	3 064	9 524	5 771	15 427	222
315299	All other cut & sew apparel mfg	—	5	2	205	4 264	159	314	2 612	8 335	4 731	13 063	D
3159	Apparel accessories & other apparel mfg	1	39	18	1 534	27 786	1 143	2 118	14 915	51 938	56 363	107 142	3 309
31599	Apparel accessories & other apparel mfg	1	39	18	1 534	27 786	1 143	2 118	14 915	51 938	56 363	107 142	3 309
315991	Hat, cap, & millinery mfg	—	6	3	c	D	D	D	D	D	D	D	D
315992	Glove & mitten mfg	2	14	9	439	7 058	366	733	5 176	13 519	18 886	32 364	339
315993	Men's & boys' neckwear mfg	—	2	2	c	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	—	17	4	712	12 257	563	1 053	7 109	15 016	23 042	38 278	2 605
316	Leather & allied product mfg	—	73	35	5 539	133 745	4 138	7 991	82 762	366 077	395 545	772 133	14 273
3161	Leather & hide tanning & finishing	—	21	14	1 668	43 303	1 386	2 797	30 613	109 881	193 316	315 129	4 766
31611	Leather & hide tanning & finishing	—	21	14	1 668	43 303	1 386	2 797	30 613	109 881	193 316	315 129	4 766
316110	Leather & hide tanning & finishing	—	21	14	1 668	43 303	1 386	2 797	30 613	109 881	193 316	315 129	4 766
3162	Footwear mfg	—	21	12	2 784	66 459	2 055	3 742	41 010	210 470	169 192	377 708	8 665
31621	Footwear mfg	—	21	12	2 784	66 459	2 055	3 742	41 010	210 470	169 192	377 708	8 665
316211	Rubber & plastics footwear mfg	—	5	3	g	D	D	D	D	D	D	D	D
316212	House slipper mfg	—	2	2	c	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	7	4	1 370	34 970	907	1 753	19 522	129 657	103 782	228 690	D
316219	Other footwear mfg	—	6	2	129	2 434	105	193	2 083	6 723	2 588	9 118	65
3169	Other leather & allied product mfg	—	31	9	1 087	23 983	697	1 452	11 139	45 726	33 037	79 296	842
31699	Other leather & allied product mfg	—	31	9	1 087	23 983	697	1 452	11 139	45 726	33 037	79 296	842
316991	Luggage mfg	4	11	3	c	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	5	3	682	16 745	359	789	6 354	30 285	20 856	51 460	D
316999	All other leather good mfg	—	13	3	225	3 946	196	410	2 727	8 150	7 702	16 162	204
321	Wood product mfg	—	683	239	28 030	680 035	23 100	45 159	490 103	1 529 500	2 235 222	3 747 972	103 238
3211	Sawmills & wood preservation	1	171	45	3 393	76 559	2 726	5 080	52 238	174 368	320 751	494 952	15 862
32111	Sawmills & wood preservation	1	171	45	3 393	76 559	2 726	5 080	52 238	174 368	320 751	494 952	15 862
321113	Sawmills	2	162	39	3 115	68 473	2 497	4 639	47 428	155 865	218 659	376 130	14 689
321114	Wood preservation	—	9	6	278	8 086	229	441	4 810	18 503	102 092	118 822	1 173
3212	Veneer, plywood, & engineered wood product mfg	—	58	35	4 188	103 818	3 512	7 135	76 307	228 634	312 015	537 309	17 349
32121	Veneer, plywood, & engineered wood product mfg	—	58	35	4 188	103 818	3 512	7 135	76 307	228 634	312 015	537 309	17 349
321211	Hardwood veneer & plywood mfg	—	23	14	1 949	41 253	1 737	3 466	31 050	83 933	104 939	184 615	5 919
321214	Truss mfg	1	21	11	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	—	12	9	1 120	35 043	920	1 892	26 552	88 769	124 571	214 085	9 185

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WISCONSIN—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg ...	-	454	159	20 449	499 658	16 862	32 944	361 558	1 126 498	1 602 456	2 715 711	70 027
32191	Millwork	-	156	67	12 593	320 269	10 640	21 213	242 604	741 351	1 116 888	1 843 593	47 734
321911	Wood window & door mfg	-	50	30	10 017	263 365	8 475	17 044	201 906	598 688	884 444	1 478 853	35 087
321912	Cut stock, resawing lumber, & planing....	-	57	21	1 159	24 945	961	1 747	17 413	70 849	145 095	207 141	4 881
321918	Other millwork (including flooring) ...	2	49	16	1 417	31 959	1 204	2 422	23 285	71 814	87 349	157 599	7 766
32192	Wood container & pallet mfg	2	160	45	2 746	53 947	2 309	4 242	37 938	101 804	123 113	224 757	7 366
321920	Wood container & pallet mfg	2	160	45	2 746	53 947	2 309	4 242	37 938	101 804	123 113	224 757	7 366
32199	All other wood product mfg	-	138	47	5 110	125 442	3 913	7 489	81 016	283 343	362 455	647 361	14 927
321991	Manufactured home (mobile home) mfg ..	-	5	4	858	22 559	705	1 182	16 672	53 889	68 042	122 152	370
321992	Prefabricated wood building mfg	-	27	15	1 774	51 031	1 174	2 524	26 346	121 391	182 525	304 864	6 693
321999	All other miscellaneous wood product mfg ...	-	106	28	2 478	51 852	2 034	3 783	37 998	108 063	111 888	220 345	7 864
322	Paper mfg	-	254	187	42 828	1 885 193	32 810	69 021	1 267 300	5 813 159	6 873 054	12 651 514	624 559
3221	Pulp, paper, & paperboard mills	-	51	49	23 612	1 168 494	18 238	38 175	783 181	3 525 572	3 599 169	7 102 844	404 838
32211	Pulp mills	-	6	5	625	30 326	493	948	21 582	127 830	170 436	300 296	D
322110	Pulp mills	-	6	5	625	30 326	493	948	21 582	127 830	170 436	300 296	D
32212	Paper mills	-	38	38	21 937	1 092 211	16 915	35 397	729 942	3 225 272	3 274 367	6 476 594	369 890
322121	Paper (except newsprint) mills	-	38	38	21 937	1 092 211	16 915	35 397	729 942	3 225 272	3 274 367	6 476 594	369 890
32213	Paperboard mills	-	7	6	1 050	45 957	830	1 830	31 657	172 470	154 366	325 954	D
322130	Paperboard mills	-	7	6	1 050	45 957	830	1 830	31 657	172 470	154 366	325 954	D
3222	Converted paper product mfg	-	203	138	19 216	716 699	14 572	30 846	484 119	2 287 587	3 273 885	5 548 670	219 721
32221	Paperboard container mfg	-	85	65	7 078	254 695	5 244	11 129	162 927	579 284	861 893	1 435 347	67 346
322211	Corrugated & solid fiber box mfg	-	54	40	4 593	167 877	3 225	6 818	101 385	355 657	578 365	930 370	50 781
322212	Folding paperboard box mfg	-	13	11	1 454	49 802	1 181	2 586	37 020	134 859	153 061	288 240	12 831
322213	Setup paperboard box mfg	-	2	2	c	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg	-	15	11	773	29 338	655	1 294	20 453	63 295	89 998	152 666	3 516
322215	Nonfolding sanitary food container mfg ...	-	1	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	39	28	4 340	162 813	3 129	6 789	104 937	634 778	899 035	1 526 346	32 992
322221	Coated & laminated packaging paper & plastics film mfg	-	4	4	518	18 547	386	743	10 620	50 032	85 141	135 362	2 278
322222	Coated & laminated paper mfg	-	22	15	2 889	108 838	2 052	4 430	71 276	482 674	664 448	1 140 111	24 796
322223	Plastics, foil, & coated paper bag mfg	-	2	2	c	D	D	D	D	D	D	D	D
322224	Uncoated paper & multiwall bag mfg	-	6	3	234	6 087	194	488	4 486	19 507	30 130	49 788	1 008
322225	Laminated aluminum foil mfg for flexible packaging uses	-	2	2	e	D	D	D	D	D	D	D	D
322226	Surface-coated paperboard mfg	-	3	2	123	4 992	76	145	1 928	15 858	32 032	48 056	D
32223	Stationery product mfg ..	1	27	14	1 787	59 977	1 324	2 765	39 286	147 073	185 447	326 761	21 786
322231	Die-cut paper & paperboard office supplies mfg	5	12	6	520	14 829	401	880	9 968	47 171	49 728	96 963	1 865
322232	Envelope mfg	-	7	5	950	33 513	675	1 341	20 367	61 971	78 881	140 899	15 588
322233	Stationery, tablet, & related product mfg ..	-	8	3	317	11 635	248	544	8 951	37 931	56 838	88 899	4 333
32229	Other converted paper product mfg	-	52	31	6 011	239 214	4 875	10 163	176 969	926 452	1 327 510	2 260 216	97 597
322291	Sanitary paper product mfg	-	21	15	4 400	188 442	3 555	7 433	145 529	796 302	1 183 153	1 984 146	88 837
322299	All other converted paper product mfg ...	-	31	16	1 611	50 772	1 320	2 730	31 440	130 150	144 357	276 070	8 760

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WISCONSIN—Con.													
31-33	Manufacturing—Con.												
323	Printing & related support activities.....	1	1 046	281	38 082	1 153 906	28 838	54 730	770 564	2 523 744	1 791 444	4 294 837	190 797
3231	Printing & related support activities.....	1	1 046	281	38 082	1 153 906	28 838	54 730	770 564	2 523 744	1 791 444	4 294 837	190 797
32311	Printing.....	1	927	238	35 290	1 052 190	26 762	50 579	704 348	2 333 562	1 735 095	4 048 571	174 956
323110	Commercial lithographic printing ..	-	445	132	20 146	590 746	15 404	28 681	402 163	1 280 064	792 468	2 059 418	81 630
323111	Commercial gravure printing.....	-	9	3	1 978	56 270	1 855	3 971	54 524	94 992	191 849	284 209	D
323112	Commercial flexographic printing ..	3	36	20	2 457	94 312	1 646	3 344	55 652	289 395	192 933	482 426	22 091
323113	Commercial screen printing.....	1	132	35	4 424	116 140	3 276	6 165	70 294	235 419	174 632	408 091	13 872
323114	Quick printing.....	1	182	16	1 483	34 887	1 005	1 721	21 755	73 228	31 793	105 014	4 867
323116	Manifold business form printing.....	7	24	15	1 231	41 937	966	1 900	29 642	127 764	112 412	239 513	4 502
323117	Book printing.....	-	23	9	2 308	86 462	1 717	3 543	55 950	171 686	187 866	357 939	18 001
323118	Blankbook, looseleaf binder, & device mfg.	-	3	2	c	D	D	D	D	D	D	D	D
323119	Other commercial printing.....	1	65	5	963	23 416	658	839	9 713	47 466	40 634	88 024	5 262
32312	Support activities for printing.....	1	119	43	2 792	101 716	2 076	4 151	66 216	190 182	56 349	246 266	15 841
323121	Tradebinding & related work.....	1	29	12	696	18 802	571	1 126	13 380	35 252	9 873	45 430	1 327
323122	Prepress services.....	1	90	31	2 096	82 914	1 505	3 025	52 836	154 930	46 476	200 836	14 514
324	Petroleum & coal products mfg.....	1	18	5	418	18 220	237	446	10 197	71 119	323 639	402 337	6 834
3241	Petroleum & coal products mfg.....	1	18	5	418	18 220	237	446	10 197	71 119	323 639	402 337	6 834
32411	Petroleum refineries ..	-	2	1	c	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	2	1	c	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg.....	1	8	1	c	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg.....	1	8	1	c	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg.....	6	8	3	160	5 909	72	127	1 857	20 383	31 774	52 688	1 266
324191	Petroleum lubricating oil & grease mfg.....	6	5	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg.....	-	307	133	12 425	496 549	6 913	13 774	227 099	2 888 523	1 990 495	4 896 475	129 481
3251	Basic chemical mfg.....	-	38	16	2 019	78 091	1 051	2 112	36 499	279 635	184 064	462 301	30 704
32518	Other basic inorganic chemical mfg.....	-	12	2	291	11 468	217	445	7 716	60 855	50 019	112 409	4 201
325188	All other basic inorganic chemical mfg.....	-	11	1	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg.....	-	14	9	1 534	58 132	726	1 450	25 198	178 486	87 859	252 382	18 329
325199	All other basic organic chemical mfg.....	-	13	8	g	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg.....	-	10	7	728	24 199	512	1 034	15 742	79 087	109 706	188 303	10 110
32521	Resin & synthetic rubber mfg.....	-	10	7	728	24 199	512	1 034	15 742	79 087	109 706	188 303	10 110
325211	Plastics material & resin mfg.....	-	7	6	f	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg..	3	3	1	c	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg.	2	23	8	536	15 129	314	560	6 371	62 422	67 645	130 187	2 569
32531	Fertilizer mfg.....	4	17	4	194	4 868	131	254	2 879	27 431	40 163	67 565	1 172
325314	Fertilizer (mixing only) mfg.....	4	14	4	176	4 433	117	227	2 575	26 103	38 969	65 019	1 088
32532	Pesticide & other agricultural chemical mfg.....	-	6	4	342	10 261	183	306	3 492	34 991	27 482	62 622	1 397
325320	Pesticide & other agricultural chemical mfg.....	-	6	4	342	10 261	183	306	3 492	34 991	27 482	62 622	1 397
3254	Pharmaceutical & medicine mfg.....	-	35	21	1 908	85 044	830	1 673	25 838	306 895	131 414	449 768	18 819
32541	Pharmaceutical & medicine mfg.....	-	35	21	1 908	85 044	830	1 673	25 838	306 895	131 414	449 768	18 819
325412	Pharmaceutical preparation mfg.....	-	11	6	804	42 192	239	455	8 350	194 890	66 616	274 460	8 666
325413	In-vitro diagnostic substance mfg.....	1	6	5	241	8 313	115	198	3 450	30 326	27 210	58 025	1 961
325414	Biological product (except diagnostic) mfg.....	-	13	9	798	32 274	433	922	12 955	74 778	24 680	97 680	6 568

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WISCONSIN—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3255	Paint, coating, & adhesive mfg	1	61	25	2 426	95 111	1 303	2 759	41 259	442 732	428 549	862 642	18 237
32551	Paint & coating mfg	—	42	18	2 002	79 247	1 066	2 271	34 077	377 550	327 753	696 849	14 851
325510	Paint & coating mfg	—	42	18	2 002	79 247	1 066	2 271	34 077	377 550	327 753	696 849	14 851
32552	Adhesive mfg	2	19	7	424	15 864	237	488	7 182	65 182	100 796	165 793	3 386
325520	Adhesive mfg	2	19	7	424	15 864	237	488	7 182	65 182	100 796	165 793	3 386
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	62	29	3 399	146 743	2 140	4 172	77 510	1 492 498	779 981	2 291 126	39 928
32561	Soap & cleaning compound mfg	—	54	25	3 166	142 202	1 950	3 750	75 335	1 479 729	771 064	2 270 504	39 388
325611	Soap & other detergent mfg	3	26	9	621	19 758	334	562	8 893	62 636	59 921	121 964	3 865
325612	Polish & other sanitation good mfg ..	—	23	12	2 389	115 410	1 554	3 052	63 919	1 388 674	670 011	2 078 967	32 657
325613	Surface active agent mfg	6	5	4	156	7 034	62	136	2 523	28 419	41 132	69 573	2 866
32562	Toilet preparation mfg ..	1	8	4	233	4 541	190	422	2 175	12 769	8 917	20 622	540
325620	Toilet preparation mfg ..	1	8	4	233	4 541	190	422	2 175	12 769	8 917	20 622	540
3259	Other chemical product mfg	2	78	27	1 409	52 232	763	1 464	23 880	225 254	289 136	512 148	9 114
32591	Printing ink mfg	4	21	8	433	17 021	248	519	9 494	78 460	117 524	195 384	2 930
325910	Printing ink mfg	4	21	8	433	17 021	248	519	9 494	78 460	117 524	195 384	2 930
32599	All other chemical product & preparation mfg	1	57	19	976	35 211	515	945	14 386	146 794	171 612	316 764	6 184
325991	Custom compounding of purchased resin ...	1	27	6	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, & chemical mfg	—	4	1	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	1	26	12	528	19 828	268	504	8 105	97 838	113 688	210 130	3 446
326	Plastics & rubber products mfg	—	463	270	31 609	933 438	24 993	49 991	639 051	2 523 104	2 390 842	4 922 484	258 215
3261	Plastics product mfg	—	415	240	28 252	826 941	22 286	44 525	563 000	2 213 584	2 168 193	4 389 071	241 650
32611	Unsupported plastics film, sheet, & bag mfg ..	—	70	49	6 852	235 941	5 426	12 014	168 778	702 021	946 209	1 648 931	99 175
326111	Unsupported plastics bag mfg	—	17	12	1 941	63 782	1 507	2 956	41 134	146 118	173 287	319 143	8 886
326112	Unsupported plastics packaging film & sheet mfg	—	20	18	3 361	122 742	2 740	6 587	95 515	418 930	571 332	992 691	68 927
326113	Unsupported plastics film & sheet (except packaging) mfg	1	33	19	1 550	49 417	1 179	2 471	32 129	136 973	201 590	337 097	21 362
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	1	33	14	1 139	32 389	898	1 802	20 467	72 327	82 248	153 182	7 324
326121	Unsupported plastics profile shape mfg	1	26	12	875	24 225	692	1 381	14 917	50 069	36 784	86 478	4 616
326122	Plastics pipe & pipe fitting mfg	—	7	2	264	8 164	206	421	5 550	22 258	45 464	66 704	2 708
32614	Polystyrene foam product mfg	—	8	6	491	14 326	392	794	10 347	56 326	32 821	91 071	3 319
326140	Polystyrene foam product mfg	—	8	6	491	14 326	392	794	10 347	56 326	32 821	91 071	3 319
32615	Urethane & other foam product (except polystyrene) mfg	1	11	7	670	17 108	526	863	11 442	43 914	58 933	102 930	2 660
326150	Urethane & other foam product (except polystyrene) mfg	1	11	7	670	17 108	526	863	11 442	43 914	58 933	102 930	2 660
32616	Plastics bottle mfg	—	5	4	280	8 208	227	464	5 022	15 571	22 684	38 761	4 941
326160	Plastics bottle mfg	—	5	4	280	8 208	227	464	5 022	15 571	22 684	38 761	4 941
32619	Other plastics product mfg	—	278	160	18 773	517 918	14 780	28 531	346 171	1 320 384	1 022 610	2 348 454	124 045
326191	Plastics plumbing fixture mfg	1	8	1	136	4 152	112	234	3 040	7 968	3 934	12 013	210
326199	All other plastics product mfg	—	270	159	18 637	513 766	14 668	28 297	343 131	1 312 416	1 018 676	2 336 441	123 835
3262	Rubber product mfg	2	48	30	3 357	106 497	2 707	5 466	76 051	309 520	222 649	533 413	16 565
32622	Rubber & plastics hoses & belting mfg	—	2	2	e	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	—	2	2	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg	3	38	28	2 831	85 931	2 247	4 539	58 621	264 489	162 378	427 332	13 412
326291	Rubber product mfg for mechanical use	3	13	10	1 023	32 001	802	1 697	21 468	69 070	38 192	107 687	3 686
326299	All other rubber product mfg	3	25	18	1 808	53 930	1 445	2 842	37 153	195 419	124 186	319 645	9 726

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WISCONSIN—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg	1	386	106	10 524	348 880	8 302	16 544	247 975	1 211 600	815 635	2 034 946	125 076
3271	Clay product & refractory mfg	1	32	7	1 063	31 689	885	1 732	25 180	84 533	18 140	108 402	1 807
32711	Pottery, ceramics, & plumbing fixture mfg	—	29	6	g	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	f	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	2	24	4	c	D	D	D	D	D	D	D	359
327113	Porcelain electrical supply mfg	—	4	1	224	5 853	184	391	4 013	11 382	2 970	14 358	D
3272	Glass & glass product mfg	—	52	15	3 142	96 859	2 668	5 238	74 946	263 189	283 972	544 435	66 236
32721	Glass & glass product mfg	—	52	15	3 142	96 859	2 668	5 238	74 946	263 189	283 972	544 435	66 236
327211	Flat glass mfg	—	3	2	f	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	—	42	12	2 207	64 827	1 857	3 640	49 893	122 882	242 921	364 027	D
3273	Cement & concrete product mfg	2	235	64	4 102	150 228	2 943	6 247	97 361	373 638	336 980	712 584	37 018
32732	Ready-mix concrete mfg	2	139	38	2 165	78 180	1 628	3 505	54 621	182 873	211 136	395 230	22 617
327320	Ready-mix concrete mfg	2	139	38	2 165	78 180	1 628	3 505	54 621	182 873	211 136	395 230	22 617
32733	Concrete pipe, brick, & block mfg	1	35	12	664	25 159	367	790	12 239	74 606	61 529	136 907	D
327331	Concrete block & brick mfg	—	23	7	404	14 322	187	406	5 569	40 975	39 574	81 636	4 306
327332	Concrete pipe mfg	1	12	5	260	10 837	180	384	6 670	33 631	21 955	55 271	D
32739	Other concrete product mfg	2	58	13	1 243	45 994	933	1 920	29 890	112 687	61 717	174 332	7 177
327390	Other concrete product mfg	2	58	13	1 243	45 994	933	1 920	29 890	112 687	61 717	174 332	7 177
3274	Lime & gypsum product mfg	1	9	5	199	6 633	169	362	5 156	23 376	21 766	45 529	2 580
32741	Lime mfg	—	5	4	156	5 361	134	286	4 247	19 870	17 049	37 189	2 340
327410	Lime mfg	—	5	4	156	5 361	134	286	4 247	19 870	17 049	37 189	2 340
3279	Other nonmetallic mineral product mfg	—	58	15	2 018	63 471	1 637	2 965	45 332	466 864	154 777	623 996	17 435
32791	Abrasive product mfg	—	6	4	g	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	—	6	4	g	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg	1	52	11	f	D	D	D	D	D	D	D	D
327991	Cut stone & stone product mfg	1	21	7	372	10 152	299	606	6 692	23 419	10 867	33 412	4 340
327993	Mineral wool mfg	1	10	2	292	10 298	235	539	7 518	16 186	33 443	49 901	1 505
327999	All other miscellaneous nonmetallic mineral product mfg	3	14	2	181	6 314	126	275	3 989	19 351	15 325	34 767	1 219
331	Primary metal mfg	—	196	135	26 396	912 589	21 307	45 268	665 875	2 320 724	1 973 888	4 297 960	173 679
3311	Iron & steel mills & ferroalloy mfg	—	6	3	e	D	D	D	D	D	D	D	5 508
33111	Iron & steel mills & ferroalloy mfg	—	6	3	e	D	D	D	D	D	D	D	5 508
331111	Iron & steel mills	—	5	2	c	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	—	1	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	19	11	1 649	63 124	1 165	2 489	37 509	145 762	244 621	389 359	13 253
33121	Iron & steel pipes & tubes mfg from purchased steel	—	5	4	888	36 123	647	1 516	21 960	86 427	109 950	194 130	7 034
331210	Iron & steel pipes & tubes mfg from purchased steel	—	5	4	888	36 123	647	1 516	21 960	86 427	109 950	194 130	7 034
33122	Rolling & drawing of purchased steel	—	14	7	761	27 001	518	973	15 549	59 335	134 671	195 229	6 219
331221	Cold-rolled steel shape mfg	—	9	3	323	13 187	240	487	8 044	35 857	107 472	143 521	1 822
331222	Steel wire drawing	—	5	4	438	13 814	278	486	7 505	23 478	27 199	51 708	4 397
3313	Alumina & aluminum production & processing	—	6	6	562	17 917	400	877	10 872	58 069	179 715	235 351	3 792
33131	Alumina & aluminum production & processing	—	6	6	562	17 917	400	877	10 872	58 069	179 715	235 351	3 792
331314	Secondary smelting & alloying of aluminum	—	3	3	161	7 231	115	300	4 415	30 520	125 877	155 012	1 760
331316	Aluminum extruded product mfg	—	2	2	e	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	WISCONSIN—Con.													
	Manufacturing—Con.													
331	Primary metal mfg—Con.													
3314	Nonferrous metal (except aluminum) production & processing.....	-	16	6	f	D	D	D	D	D	D	D	5 198	
33141	Nonferrous metal (except aluminum) smelting & refining.....	1	2	1	c	D	D	D	D	D	D	D	D	
331419	Other nonferrous metal primary smelting & refining.....	1	2	1	c	D	D	D	D	D	D	D	D	
33142	Copper rolling, drawing, extruding, & alloying ...	-	5	3	f	D	D	D	D	D	D	D	D	
331421	Copper rolling, drawing, & extruding .	-	5	3	f	D	D	D	D	D	D	D	D	
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	1	9	2		186	7 041	107	216	2 662	17 307	27 126	44 716	999
331491	Other nonferrous metal rolling, drawing, & extruding	-	5	2		164	6 288	92	185	2 169	15 802	20 774	36 726	D
3315	Foundries	-	149	109		22 917	779 172	18 830	40 020	584 815	1 882 728	1 324 313	3 210 263	145 928
33151	Ferrous metal foundries .	-	74	65		14 852	511 259	12 104	25 321	383 012	1 283 079	798 645	2 076 830	71 287
331511	Iron foundries	-	46	41		10 398	369 295	8 594	18 454	286 937	955 243	628 373	1 577 104	42 992
331512	Steel investment foundries	-	10	9		1 452	42 072	1 198	2 315	31 244	95 148	44 556	139 727	7 323
331513	Steel foundries (except investment)	-	18	15		3 002	99 892	2 312	4 552	64 831	232 688	125 716	359 999	20 972
33152	Nonferrous metal foundries	1	75	44		8 065	267 913	6 726	14 699	201 803	599 649	525 668	1 133 433	74 641
331521	Aluminum die-casting foundries	2	19	15		3 063	106 761	2 480	5 775	81 344	239 584	235 632	484 033	23 146
331522	Nonferrous (except aluminum) die-casting foundries	-	10	5		208	6 114	169	335	4 192	17 173	11 847	28 746	760
331524	Aluminum foundries (except die-casting) ..	-	32	16		3 627	118 090	3 101	6 509	88 214	258 658	229 203	487 870	43 082
331525	Copper foundries (except die-casting) ..	1	11	8		1 162	36 776	973	2 073	27 942	83 880	48 795	132 236	7 641
332	Fabricated metal product mfg	-	1 968	727		73 682	2 354 762	56 155	110 909	1 538 382	5 830 191	4 190 495	10 008 478	418 114
3321	Forging & stamping	-	142	84		9 391	326 310	7 069	14 163	215 473	722 527	624 228	1 338 686	73 921
33211	Forging & stamping	-	142	84		9 391	326 310	7 069	14 163	215 473	722 527	624 228	1 338 686	73 921
332111	Iron & steel forging	-	12	7		2 180	96 596	1 684	3 102	69 150	201 320	195 881	393 817	15 118
332112	Nonferrous forging	-	2	1	c	D	D	D	D	D	D	D	D	D
332114	Custom roll forming	-	12	4	e	D	D	D	D	D	D	D	D	D
332116	Metal stamping	-	109	68		5 906	189 754	4 493	9 229	122 752	405 830	352 628	754 720	40 084
332117	Powder metallurgy part mfg	-	6	4		803	22 403	542	995	11 365	63 728	29 312	92 628	8 784
3322	Cutlery & handtool mfg	-	60	27		6 079	187 635	4 777	8 760	123 844	583 136	341 408	928 584	21 034
33221	Cutlery & handtool mfg ..	-	60	27		6 079	187 635	4 777	8 760	123 844	583 136	341 408	928 584	21 034
332211	Cutlery & flatware (except precious) mfg	-	9	3	g	D	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	1	41	15	g	D	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	9	9		3 050	99 874	2 372	4 867	65 902	354 714	197 301	563 907	8 103
3323	Architectural & structural metals mfg	-	307	137		13 226	429 613	9 535	19 465	266 412	944 855	867 966	1 801 615	57 583
33231	Plate work & fabricated structural product mfg ..	-	138	61		4 616	150 139	3 415	6 924	94 611	347 419	361 077	698 591	13 838
332311	Prefabricated metal building & component mfg	-	15	6		650	25 152	437	933	13 513	61 498	77 416	139 223	1 340
332312	Fabricated structural metal mfg	-	71	33		2 404	78 990	1 710	3 541	48 485	191 720	217 978	400 792	6 855
332313	Plate work mfg	-	52	22		1 562	45 997	1 268	2 450	32 613	94 201	65 683	158 576	5 643
33232	Ornamental & architectural metal products mfg	-	169	76		8 610	279 474	6 120	12 541	171 801	597 436	506 889	1 103 024	43 745
332321	Metal window & door mfg	-	37	20		2 724	81 041	1 927	3 912	49 344	188 088	211 881	398 437	4 493
332322	Sheet metal work mfg .	-	90	46		4 942	171 323	3 557	7 386	107 426	363 523	249 747	614 215	36 309
332323	Ornamental & architectural metal work mfg	1	42	10		944	27 110	636	1 243	15 031	45 825	45 261	90 372	2 943
3324	Boiler, tank, & shipping container mfg	-	74	52		4 915	171 975	3 779	8 124	122 814	399 027	644 518	1 042 478	33 202
33241	Power boiler & heat exchanger mfg	-	19	12		1 362	48 888	1 004	2 279	32 270	105 334	67 017	172 421	8 610
332410	Power boiler & heat exchanger mfg	-	19	12		1 362	48 888	1 004	2 279	32 270	105 334	67 017	172 421	8 610
33242	Metal tank (heavy gauge) mfg	-	26	22		1 835	55 292	1 372	2 830	37 071	104 794	88 507	191 962	6 170
332420	Metal tank (heavy gauge) mfg	-	26	22		1 835	55 292	1 372	2 830	37 071	104 794	88 507	191 962	6 170

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WISCONSIN—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg—Con.												
33243	Metal can, box, & other metal container (light gauge) mfg	—	29	18	1 718	67 795	1 403	3 015	53 473	188 899	488 994	678 095	18 422
332431	Metal can mfg	—	14	14	1 474	61 237	1 196	2 583	48 852	173 052	478 175	651 643	17 994
332439	Other metal container mfg	1	15	4	244	6 558	207	432	4 621	15 847	10 819	26 452	428
3325	Hardware mfg	3	30	15	3 447	110 160	2 736	4 764	73 314	285 519	163 971	445 889	16 341
33251	Hardware mfg	3	30	15	3 447	110 160	2 736	4 764	73 314	285 519	163 971	445 889	16 341
332510	Hardware mfg	3	30	15	3 447	110 160	2 736	4 764	73 314	285 519	163 971	445 889	16 341
3326	Spring & wire product mfg .	1	40	23	1 725	52 684	1 367	2 641	33 172	104 717	60 204	164 270	8 344
33261	Spring & wire product mfg	1	40	23	1 725	52 684	1 367	2 641	33 172	104 717	60 204	164 270	8 344
332612	Spring (light gauge) mfg	1	9	7	669	25 673	531	1 118	15 691	54 875	28 911	83 700	4 974
332618	Other fabricated wire product mfg	—	31	16	1 056	27 011	836	1 523	17 481	49 842	31 293	80 570	3 370
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	859	216	16 959	529 987	13 302	25 837	355 642	1 156 266	610 439	1 759 061	112 685
33271	Machine shops	1	724	159	12 336	383 955	9 542	18 134	256 121	804 791	422 815	1 222 144	79 254
332710	Machine shops	1	724	159	12 336	383 955	9 542	18 134	256 121	804 791	422 815	1 222 144	79 254
33272	Turned product & screw, nut, & bolt mfg	—	135	57	4 623	146 032	3 760	7 703	99 521	351 475	187 624	536 917	33 431
332721	Precision turned product mfg	—	110	47	3 535	112 667	2 885	5 973	77 485	227 016	104 928	331 529	24 628
332722	Bolt, nut, screw, rivet, & washer mfg	—	25	10	1 088	33 365	875	1 730	22 036	124 459	82 696	205 388	8 803
3328	Coating, engraving, heat treating, & allied activities .	2	218	79	5 785	150 827	4 595	9 218	100 305	356 959	155 292	511 744	25 831
33281	Coating, engraving, heat treating, & allied activities	2	218	79	5 785	150 827	4 595	9 218	100 305	356 959	155 292	511 744	25 831
332811	Metal heat treating	5	34	18	995	34 226	718	1 583	21 407	116 867	62 589	179 331	10 627
332812	Metal coating/engraving (exc jewelry/silverware)/ allied services	1	77	32	2 308	53 880	1 892	3 823	37 608	121 711	51 592	172 637	6 947
332813	Electroplating, plating, polishing, anodizing, & coloring	—	107	29	2 482	62 721	1 985	3 812	41 290	118 381	41 111	159 776	8 257
3329	Other fabricated metal product mfg	—	238	94	12 155	395 571	8 995	17 937	247 406	1 277 185	722 469	2 016 151	69 173
33291	Metal valve mfg	—	26	21	4 585	158 566	3 264	6 637	96 258	472 870	309 597	801 518	33 897
332911	Industrial valve mfg	—	7	7	1 325	46 668	941	2 114	27 432	165 427	83 800	262 492	7 329
332912	Fluid power valve & hose fitting mfg	—	13	8	2 303	79 122	1 709	3 382	48 913	219 169	147 737	367 906	21 813
332919	Other metal valve & pipe fitting mfg	—	5	5	f	D	D	D	D	D	D	D	4 755
33299	All other fabricated metal product mfg	—	212	73	7 570	237 005	5 731	11 300	151 148	804 315	412 872	1 214 633	35 276
332991	Ball & roller bearing mfg	—	3	2	162	9 529	116	258	4 463	15 489	6 616	21 675	1 018
332992	Small arms ammunition mfg	—	4	1	c	D	D	D	D	D	D	D	20
332993	Ammunition (except small arms) mfg	—	3	2	e	D	D	D	D	D	D	D	D
332994	Small arms mfg	1	7	2	238	5 687	191	373	3 728	22 033	8 577	30 228	454
332995	Other ordnance & accessories mfg	5	5	3	177	5 412	111	206	2 472	15 446	8 900	23 021	D
332996	Fabricated pipe & pipe fitting mfg	—	24	10	793	25 150	531	1 056	14 750	62 268	37 145	99 736	2 000
332997	Industrial pattern mfg . .	—	59	13	993	42 271	830	1 702	32 882	75 521	19 690	94 981	5 980
332998	Enameled iron & metal sanitary ware mfg	—	2	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	105	38	2 764	81 004	2 040	3 939	51 123	177 140	187 185	364 283	12 682
333	Machinery mfg	—	1 258	551	86 043	3 380 320	55 652	112 021	1 907 290	8 413 890	7 838 299	16 232 674	544 925
3331	Agriculture, construction, & mining machinery mfg	—	141	84	17 188	673 290	11 230	22 906	394 930	2 005 139	2 564 149	4 562 277	157 983
33311	Agricultural implement mfg	—	78	42	9 052	333 071	6 322	12 691	203 161	1 139 711	1 552 624	2 679 189	110 039
333111	Farm machinery & equipment mfg	—	66	33	5 697	173 591	4 027	7 836	104 191	514 758	690 824	1 194 651	57 188
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	12	9	3 355	159 480	2 295	4 855	98 970	624 953	861 800	1 484 538	52 851
33312	Construction machinery mfg	—	58	39	7 539	314 014	4 603	9 547	179 807	761 462	918 210	1 691 328	41 589
333120	Construction machinery mfg	—	58	39	7 539	314 014	4 603	9 547	179 807	761 462	918 210	1 691 328	41 589

Table 1. Industry Statistics for the State: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WISCONSIN—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3331	Agriculture, construction, & mining machinery mfg—Con.												
33313	Mining & oil & gas field machinery mfg	-	5	3	597	26 205	305	668	11 962	103 966	93 315	191 760	6 355
333131	Mining machinery & equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	198	91	12 623	516 460	7 568	15 847	267 908	1 195 054	966 030	2 117 992	59 392
33321	Sawmill & woodworking machinery mfg	-	10	4	261	9 728	138	269	4 847	18 946	18 258	38 755	545
333210	Sawmill & woodworking machinery mfg	-	10	4	261	9 728	138	269	4 847	18 946	18 258	38 755	545
33322	Plastics & rubber industry machinery mfg	-	14	8	659	23 979	396	886	11 227	48 922	45 347	93 549	1 440
333220	Plastics & rubber industry machinery mfg	-	14	8	659	23 979	396	886	11 227	48 922	45 347	93 549	1 440
33329	Other industrial machinery mfg	-	174	79	11 703	482 753	7 034	14 692	251 834	1 127 186	902 425	1 985 688	57 407
333291	Paper industry machinery mfg	-	48	32	6 317	261 952	3 681	7 497	130 844	634 165	531 540	1 143 612	28 294
333293	Printing machinery & equipment mfg	-	25	10	2 250	101 703	1 373	2 803	54 839	227 581	163 536	375 011	10 681
333294	Food product machinery mfg	1	42	19	1 792	71 336	1 153	2 553	41 171	154 742	102 547	246 689	D
333295	Semiconductor machinery mfg	-	2	1	c	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	1	56	17	g	D	D	D	D	D	D	D	10 621
3333	Commercial & service industry machinery mfg ..	1	66	34	3 651	121 978	2 292	4 668	56 065	543 865	285 134	825 512	24 563
33331	Commercial & service industry machinery mfg	1	66	34	3 651	121 978	2 292	4 668	56 065	543 865	285 134	825 512	24 563
333313	Office machinery mfg ..	-	3	3	302	8 083	226	455	4 877	45 095	36 106	81 483	D
333314	Optical instrument & lens mfg	-	8	4	f	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	7	12	3	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	2	41	24	2 282	72 830	1 301	2 664	29 494	220 760	167 605	383 392	5 048
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	52	29	6 495	232 194	3 954	7 568	115 975	383 293	580 653	969 036	27 254
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	52	29	6 495	232 194	3 954	7 568	115 975	383 293	580 653	969 036	27 254
333411	Air purification equipment mfg	-	10	6	726	21 681	624	1 266	17 456	93 848	47 534	140 744	3 727
333412	Industrial & commercial fan & blower mfg	4	4	2	163	5 620	73	183	2 261	10 075	7 909	18 260	297
333414	Heating equipment (except warm air furnaces) mfg	1	13	6	701	20 539	481	960	13 034	47 614	57 691	104 151	2 286
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	25	15	4 905	184 354	2 776	5 159	83 224	231 756	467 519	705 881	20 944
3335	Metalworking machinery mfg	1	450	137	11 487	468 151	8 546	18 008	311 419	837 724	469 334	1 340 984	65 993
33351	Metalworking machinery mfg	1	450	137	11 487	468 151	8 546	18 008	311 419	837 724	469 334	1 340 984	65 993
333511	Industrial mold mfg ...	-	129	42	2 993	130 613	2 464	5 164	99 259	225 666	80 119	304 266	22 331
333512	Machine tool (metal cutting types) mfg ...	-	23	18	1 707	72 703	1 013	2 072	34 738	135 247	113 349	258 673	4 534
333513	Machine tool (metal forming types) mfg ...	1	8	5	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	1	201	45	3 222	133 468	2 493	5 265	96 499	261 842	90 287	350 869	27 652
333515	Cutting tool & machine tool accessory mfg ..	-	68	18	2 291	74 956	1 806	4 099	53 626	130 136	89 701	225 676	8 122
333516	Rolling mill machinery & equipment mfg	-	3	2	c	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg	1	18	7	959	42 424	581	1 003	19 292	56 384	77 468	154 628	2 287

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WISCONSIN—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3336	Engine, turbine, & power transmission equipment mfg	—	69	45	17 688	727 317	12 247	23 694	453 993	1 959 964	1 463 321	3 422 476	132 559
33361	Engine, turbine, & power transmission equipment mfg	—	69	45	17 688	727 317	12 247	23 694	453 993	1 959 964	1 463 321	3 422 476	132 559
333611	Turbine & turbine generator set unit mfg	—	3	3	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	—	20	11	g	D	D	D	D	D	D	D	26 001
333613	Mechanical power transmission equipment mfg	—	22	14	2 438	99 967	1 794	3 549	69 192	275 084	167 000	439 037	D
333618	Other engine equipment mfg	—	24	17	11 623	478 528	8 399	16 480	314 232	1 374 651	1 009 039	2 378 274	80 438
3339	Other general-purpose machinery mfg	—	282	131	16 911	640 930	9 815	19 330	307 000	1 488 851	1 509 678	2 994 397	77 181
33391	Pump & compressor mfg	1	24	13	2 412	91 075	1 257	2 432	36 636	235 372	282 914	514 207	20 392
333911	Pump & pumping equipment mfg	—	16	8	1 494	59 056	856	1 745	25 871	140 281	190 966	327 656	D
333912	Air & gas compressor mfg	4	7	4	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	—	86	43	4 090	145 908	2 449	4 961	72 174	350 710	287 190	623 091	14 798
333922	Conveyor & conveying equipment mfg	—	33	15	1 573	51 746	915	1 905	24 853	130 767	77 454	208 896	3 904
333923	Overhead traveling crane, hoist, & monorail system mfg	—	20	12	1 434	60 452	791	1 695	29 420	134 448	102 876	222 529	4 882
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	29	14	993	31 600	676	1 259	16 605	79 978	102 614	181 746	5 919
33399	All other general-purpose machinery mfg	—	172	75	10 409	403 947	6 109	11 937	198 190	902 769	939 574	1 857 099	41 991
333991	Power-driven handtool mfg	—	5	2	359	15 659	317	644	11 674	49 025	55 036	103 728	701
333992	Welding & soldering equipment mfg	—	12	7	2 002	82 542	1 147	2 286	41 223	228 202	262 746	495 042	9 379
333993	Packaging machinery mfg	—	47	22	3 242	128 238	1 807	3 506	58 660	254 698	272 349	529 006	12 444
333994	Industrial process furnace & oven mfg	—	15	10	1 143	51 008	653	1 295	21 878	87 175	86 858	179 619	4 417
333995	Fluid power cylinder & actuator mfg	—	14	10	1 124	33 479	733	1 552	20 251	81 732	141 308	225 262	6 097
333996	Fluid power pump & motor mfg	—	7	3	772	28 534	391	778	13 953	38 821	26 670	65 897	3 700
333997	Scale & balance (except laboratory) mfg	—	4	2	127	2 916	94	118	1 574	7 392	6 499	14 086	162
333999	All other miscellaneous general-purpose machinery mfg	—	68	19	1 640	61 571	967	1 758	28 977	155 724	88 108	244 459	5 091
334	Computer & electronic product mfg	—	293	143	23 401	803 724	14 387	27 074	371 857	2 469 108	2 132 966	4 620 594	158 180
3341	Computer & peripheral equipment mfg	—	33	9	3 648	115 506	2 808	4 629	89 530	192 296	232 133	422 326	65 141
33411	Computer & peripheral equipment mfg	—	33	9	3 648	115 506	2 808	4 629	89 530	192 296	232 133	422 326	65 141
334111	Electronic computer mfg	—	11	4	2 418	92 362	1 795	2 145	71 451	76 517	200 062	271 585	D
334112	Computer storage device mfg	—	4	1	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	5	14	3	c	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	3	21	12	735	22 041	378	738	7 667	45 295	36 963	83 512	2 021
33421	Telephone apparatus mfg	4	5	4	300	8 650	133	225	2 576	16 389	19 675	37 810	D
334210	Telephone apparatus mfg	4	5	4	300	8 650	133	225	2 576	16 389	19 675	37 810	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	2	9	4	308	8 905	179	380	3 314	19 439	11 082	30 337	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	2	9	4	308	8 905	179	380	3 314	19 439	11 082	30 337	D
33429	Other communications equipment mfg	5	7	4	127	4 486	66	133	1 777	9 467	6 206	15 365	298
334290	Other communications equipment mfg	5	7	4	127	4 486	66	133	1 777	9 467	6 206	15 365	298

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WISCONSIN—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3343	Audio & video equipment mfg	6	6	4	516	9 798	307	445	4 263	16 908	23 727	39 880	985
33431	Audio & video equipment mfg	6	6	4	516	9 798	307	445	4 263	16 908	23 727	39 880	985
334310	Audio & video equipment mfg	6	6	4	516	9 798	307	445	4 263	16 908	23 727	39 880	985
3344	Semiconductor & other electronic component mfg	—	108	63	8 955	242 439	6 020	11 520	118 993	508 363	637 744	1 171 019	32 983
33441	Semiconductor & other electronic component mfg	—	108	63	8 955	242 439	6 020	11 520	118 993	508 363	637 744	1 171 019	32 983
334412	Bare printed circuit board mfg	1	19	7	599	21 037	433	924	9 816	32 099	19 992	52 048	2 394
334413	Semiconductor & related device mfg ...	2	9	4	606	19 913	396	816	10 705	41 857	34 230	75 475	2 108
334414	Electronic capacitor mfg	—	5	4	e	D	D	D	D	D	D	D	D
334415	Electronic resistor mfg	—	2	2	c	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg	—	11	6	584	14 499	433	890	7 508	26 379	20 536	46 461	1 282
334418	Printed circuit assembly (electronic assembly) mfg	—	17	15	3 620	90 737	2 499	4 815	49 455	202 713	361 552	563 421	13 231
334419	Other electronic component mfg	—	42	23	3 011	80 978	1 827	3 185	32 260	174 370	182 817	384 836	9 673
3345	Navigational, measuring, medical, & control instruments mfg	—	115	53	9 445	410 994	4 787	9 572	149 335	1 698 824	1 196 214	2 890 166	55 563
33451	Navigational, measuring, medical, & control instruments mfg	—	115	53	9 445	410 994	4 787	9 572	149 335	1 698 824	1 196 214	2 890 166	55 563
334510	Electromedical & electrotherapeutic apparatus mfg	—	19	13	3 265	161 683	1 114	2 318	34 025	671 765	373 723	1 054 487	15 512
334511	Search, detection, navigation, & guidance instrument mfg	—	6	3	e	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	1	15	7	962	29 785	709	1 296	17 176	43 469	54 467	100 089	8 608
334513	Industrial process control instrument mfg	—	21	6	1 048	35 810	639	1 189	16 741	76 221	65 378	145 959	3 919
334514	Totalizing fluid meter & counting device mfg .	—	4	3	560	27 083	287	602	8 840	66 295	52 922	117 502	D
334515	Electricity measuring & testing instrument mfg	4	12	3	264	9 005	112	211	2 372	22 243	11 518	33 650	1 284
334516	Analytical laboratory instrument mfg	—	13	5	791	36 421	249	568	7 670	95 748	53 030	147 492	4 053
334517	Irradiation apparatus mfg	—	8	7	g	D	D	D	D	D	D	D	14 899
334519	Other measuring & controlling device mfg	—	14	5	460	12 673	332	690	5 434	33 721	28 846	62 061	1 536
3346	Mfg & reproducing magnetic & optical media .	6	10	2	102	2 946	87	170	2 069	7 422	6 185	13 691	1 487
33461	Mfg & reproducing magnetic & optical media	6	10	2	102	2 946	87	170	2 069	7 422	6 185	13 691	1 487
335	Electrical equipment, appliance, & component mfg	—	216	123	33 276	1 088 057	24 087	45 262	634 368	3 677 101	3 438 103	7 102 853	176 008
3351	Electric lighting equipment mfg	—	22	13	1 703	51 235	983	1 887	20 875	128 060	130 670	259 760	6 512
33512	Lighting fixture mfg	—	22	13	1 703	51 235	983	1 887	20 875	128 060	130 670	259 760	6 512
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	—	9	7	457	14 769	259	529	7 048	50 835	25 830	76 764	1 859
335129	Other lighting equipment mfg	—	8	4	1 181	35 102	674	1 253	12 968	77 814	100 563	179 164	4 474
3352	Household appliance mfg..	—	13	9	4 744	149 886	3 355	6 776	86 191	737 649	481 340	1 220 000	27 682
33521	Small electrical appliance mfg	—	6	3	2 048	71 829	1 455	2 982	42 242	226 013	218 686	445 694	8 840
335211	Electric housewares & household fan mfg ...	—	6	3	2 048	71 829	1 455	2 982	42 242	226 013	218 686	445 694	8 840
33522	Major appliance mfg	—	7	6	2 696	78 057	1 900	3 794	43 949	511 636	262 654	774 306	18 842
335222	Household refrigerator & home freezer mfg..	—	2	2	f	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	3	3	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WISCONSIN—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	132	76	23 002	780 155	16 785	30 808	459 586	2 263 965	2 507 811	4 759 705	122 077
33531	Electrical equipment mfg	-	132	76	23 002	780 155	16 785	30 808	459 586	2 263 965	2 507 811	4 759 705	122 077
335311	Power, distribution, & specialty transformer mfg	-	17	13	h	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	43	31	7 547	221 301	5 800	11 211	136 201	564 666	762 311	1 336 995	33 300
335313	Switchgear & switchboard apparatus mfg	-	12	4	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	60	28	9 848	366 320	6 713	11 184	191 910	887 437	1 175 077	2 039 330	65 297
3359	Other electrical equipment & component mfg	-	49	25	3 827	106 781	2 964	5 791	67 716	547 427	318 282	863 388	19 737
33591	Battery mfg	-	9	6	g	D	D	D	D	D	D	D	D
335911	Storage battery mfg ...	-	3	1	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg ...	-	6	5	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	-	1	1	c	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	c	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	10	5	1 010	26 787	758	1 574	15 891	116 802	80 292	195 122	9 717
335931	Current-carrying wiring device mfg	-	7	3	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	-	29	13	f	D	D	D	D	D	D	D	4 057
335991	Carbon & graphite product mfg	1	4	3	e	D	D	D	D	D	D	D	3 101
335999	All other miscellaneous electrical equipment & component mfg	-	25	10	574	15 813	412	780	6 912	34 606	46 360	78 851	956
336	Transportation equipment mfg	-	275	143	39 865	1 499 676	31 370	63 681	1 102 377	5 308 142	9 012 389	14 347 734	441 731
3361	Motor vehicle mfg	-	9	3	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	7	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	2	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg .	-	2	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	59	28	5 031	149 596	4 096	8 141	110 167	307 500	521 316	844 918	10 844
33621	Motor vehicle body & trailer mfg	-	59	28	5 031	149 596	4 096	8 141	110 167	307 500	521 316	844 918	10 844
336211	Motor vehicle body mfg	-	18	11	2 434	86 705	1 871	3 833	62 697	180 039	240 386	427 950	6 893
336212	Truck trailer mfg	-	19	6	1 963	46 526	1 727	3 388	37 129	91 986	226 223	325 667	1 797
336213	Motor home mfg	3	2	2	c	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	1	20	9	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	129	72	19 087	682 071	15 352	30 732	517 562	1 824 897	2 497 526	4 339 251	250 508
33631	Motor vehicle gasoline engine & engine parts mfg	-	24	8	4 534	227 243	3 740	7 638	178 192	338 910	529 672	870 184	121 152
336311	Carburetor, piston, piston ring, & valve mfg	-	5	3	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	19	5	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	22	8	2 284	88 741	1 656	3 296	62 374	461 216	393 146	851 905	16 879
336321	Vehicular lighting equipment mfg	-	2	1	c	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	20	7	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	6	3	g	D	D	D	D	D	D	D	3 403
336340	Motor vehicle brake system mfg	-	6	3	g	D	D	D	D	D	D	D	3 403
33635	Motor vehicle transmission & power train parts mfg	-	11	6	1 428	39 654	1 200	2 157	30 056	128 262	232 640	355 351	8 197
336350	Motor vehicle transmission & power train parts mfg	-	11	6	1 428	39 654	1 200	2 157	30 056	128 262	232 640	355 351	8 197

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WISCONSIN—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg—Con.												
3363	Motor vehicle parts mfg—Con.												
33636	Motor vehicle seating & interior trim mfg	—	9	6	1 766	52 737	1 450	3 209	41 524	144 070	252 088	396 209	D
336360	Motor vehicle seating & interior trim mfg ...	—	9	6	1 766	52 737	1 450	3 209	41 524	144 070	252 088	396 209	D
33637	Motor vehicle metal stamping	—	18	13	2 089	57 171	1 506	3 192	36 224	152 849	115 287	266 282	11 180
336370	Motor vehicle metal stamping	—	18	13	2 089	57 171	1 506	3 192	36 224	152 849	115 287	266 282	11 180
33639	Other motor vehicle parts mfg	—	38	28	5 805	188 486	4 882	9 598	153 722	539 869	940 535	1 505 481	87 145
336399	All other motor vehicle parts mfg	—	38	28	5 805	188 486	4 882	9 598	153 722	539 869	940 535	1 505 481	87 145
3364	Aerospace product & parts mfg	9	16	7	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	9	16	7	e	D	D	D	D	D	D	D	D
336411	Aircraft mfg	9	3	2	c	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	8	9	4	c	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg ..	—	7	5	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	7	5	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	7	5	e	D	D	D	D	D	D	D	D
3366	Ship & boat building	1	28	10	h	D	D	D	D	D	D	D	D
33661	Ship & boat building	1	28	10	h	D	D	D	D	D	D	D	D
336611	Ship building & repairing	1	10	4	g	D	D	D	D	D	D	D	D
336612	Boat building	—	18	6	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	27	18	5 026	212 563	3 064	6 365	121 105	505 790	785 228	1 298 818	47 586
33699	Other transportation equipment mfg	—	27	18	5 026	212 563	3 064	6 365	121 105	505 790	785 228	1 298 818	47 586
336991	Motorcycle, bicycle, & parts mfg	—	13	11	4 388	195 789	2 589	5 427	111 067	458 928	723 443	1 189 390	44 468
336999	All other transportation equipment mfg	3	13	7	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	504	131	17 305	487 075	13 076	27 382	285 494	999 369	991 184	1 977 738	48 143
3371	Household & institutional furniture & kitchen cabinet mfg	—	368	73	9 832	245 583	7 723	16 325	152 034	496 006	528 076	1 010 420	18 061
33711	Wood kitchen cabinet & counter top mfg	1	199	32	2 690	70 527	2 056	3 965	47 829	124 223	90 905	214 453	5 278
337110	Wood kitchen cabinet & counter top mfg ...	1	199	32	2 690	70 527	2 056	3 965	47 829	124 223	90 905	214 453	5 278
33712	Household & institutional furniture mfg	—	169	41	7 142	175 056	5 667	12 360	104 205	371 783	437 171	795 967	12 783
337121	Upholstered household furniture mfg	—	24	6	794	17 525	648	1 366	10 530	48 935	24 763	73 913	913
337122	Nonupholstered wood household furniture mfg	—	109	25	5 106	125 184	4 126	9 292	74 456	254 379	342 385	583 070	8 836
337124	Metal household furniture mfg	2	7	1	129	2 511	96	179	1 509	6 724	9 289	15 413	138
337127	Institutional furniture mfg	—	21	9	1 026	28 058	727	1 405	16 515	58 166	57 772	116 962	2 809
3372	Office furniture (including fixtures) mfg	2	111	48	5 380	175 678	3 720	7 861	89 379	379 317	277 257	657 294	21 991
33721	Office furniture (including fixtures) mfg	2	111	48	5 380	175 678	3 720	7 861	89 379	379 317	277 257	657 294	21 991
337211	Wood office furniture mfg	2	18	10	615	16 606	493	1 004	11 221	38 193	22 597	61 029	1 312
337212	Custom architectural woodwork & millwork mfg	—	31	10	553	16 243	414	863	10 108	36 151	23 116	59 349	1 172
337214	Office furniture (except wood) mfg	1	10	8	2 252	87 148	1 377	3 177	35 072	199 222	146 705	345 030	14 700
337215	Showcase, partition, shelving, & locker mfg	3	52	20	1 960	55 681	1 436	2 817	32 978	105 751	84 839	191 886	4 807
3379	Other furniture related product mfg	—	25	10	2 093	65 814	1 633	3 196	44 081	124 046	185 851	310 024	8 091
33791	Mattress mfg	—	16	5	f	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	16	5	f	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	9	5	g	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	9	5	g	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WISCONSIN—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg.....	1	658	168	19 571	578 213	13 621	33 974	323 683	1 315 537	1 067 007	2 386 133	82 487
3391	Medical equipment & supplies mfg.....	1	233	44	6 472	212 537	4 302	8 364	114 394	398 397	272 864	686 912	22 052
33911	Medical equipment & supplies mfg.....	1	233	44	6 472	212 537	4 302	8 364	114 394	398 397	272 864	686 912	22 052
339111	Laboratory apparatus & furniture mfg.....	—	12	5	1 156	39 273	765	1 479	22 968	74 501	60 000	134 744	1 871
339112	Surgical & medical instrument mfg.....	—	34	14	2 349	92 872	1 430	2 996	44 494	120 919	126 386	262 361	14 534
339113	Surgical appliance & supplies mfg.....	1	34	12	1 438	40 677	972	1 780	21 908	99 099	61 756	160 748	3 004
339114	Dental equipment & supplies mfg.....	1	13	1	336	11 279	258	509	5 681	42 615	6 511	48 617	718
339116	Dental laboratories...	4	135	12	1 158	27 721	844	1 550	18 822	60 203	17 031	78 109	1 813
3399	Other miscellaneous mfg..	—	425	124	13 099	365 676	9 319	25 610	209 289	917 140	794 143	1 699 221	60 435
33991	Jewelry & silverware mfg.....	2	32	3	305	7 682	218	351	4 775	14 131	7 698	22 118	412
339914	Costume jewelry & novelty mfg.....	1	15	1	141	4 206	119	173	3 063	6 700	2 698	9 528	120
33992	Sporting & athletic goods mfg.....	—	97	29	2 465	61 094	1 854	3 323	36 109	203 309	184 748	381 091	10 004
339920	Sporting & athletic goods mfg.....	—	97	29	2 465	61 094	1 854	3 323	36 109	203 309	184 748	381 091	10 004
33993	Doll, toy, & game mfg...	4	21	6	238	5 387	193	349	3 385	15 210	9 439	25 162	1 121
339932	Game, toy, & children's vehicle mfg.....	4	17	6	234	5 357	189	343	3 362	15 139	9 400	25 048	1 121
33994	Office supplies (except paper) mfg.....	—	22	8	1 183	35 289	682	1 265	16 991	72 284	87 169	151 311	5 756
339941	Pen & mechanical pencil mfg.....	—	4	3	704	19 625	510	903	11 679	48 155	79 780	119 791	5 014
339943	Marking device mfg...	—	13	3	422	14 695	126	306	4 683	21 015	4 681	25 677	549
33995	Sign mfg.....	1	131	38	3 429	106 723	2 274	4 170	55 133	222 596	188 529	414 345	20 265
339950	Sign mfg.....	1	131	38	3 429	106 723	2 274	4 170	55 133	222 596	188 529	414 345	20 265
33999	All other miscellaneous mfg.....	—	122	40	5 479	149 501	4 098	16 152	92 896	389 610	316 560	705 194	22 877
339991	Gasket, packing, & sealing device mfg...	—	20	10	1 600	48 941	1 265	2 520	32 738	100 474	103 952	205 477	3 319
339992	Musical instrument mfg.....	3	15	3	462	12 228	387	910	8 946	27 468	13 618	41 940	D
339993	Fastener, button, needle, & pin mfg....	—	5	3	277	8 660	237	528	5 572	15 339	6 954	22 138	D
339994	Broom, brush, & mop mfg.....	1	13	8	1 164	31 464	831	1 574	20 019	93 846	75 185	167 381	5 287
339999	All other miscellaneous mfg.....	—	65	16	1 952	47 512	1 365	10 598	25 316	150 728	114 917	264 554	12 494

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c—100 to 249 employees; e—250 to 499 employees; f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	APPLETON-OSHKOSH-NEENAH, WI MSA												
31-33	Manufacturing	-	683	324	54 679	1 918 138	40 023	82 394	1 264 864	5 681 077	6 695 931	12 360 905	439 719
311	Food mfg.....	-	67	36	6 347	167 933	4 982	9 469	118 850	560 960	1 026 574	1 595 896	37 042
3111	Animal food mfg.....	1	8	3	456	19 067	237	442	6 446	46 765	97 971	145 281	D
31111	Animal food mfg.....	1	8	3	456	19 067	237	442	6 446	46 765	97 971	145 281	D
311119	Other animal food mfg.....	1	8	3	456	19 067	237	442	6 446	46 765	97 971	145 281	D
3114	Fruit & vegetable preserving & specialty food mfg.....	-	11	9	2 775	56 491	2 338	3 952	40 502	205 028	283 562	489 628	16 216
31141	Frozen food mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.....	-	4	3	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	6	7	6	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	6	6	6	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	14	11	945	30 209	707	1 539	20 539	87 465	341 928	439 670	10 447
31151	Dairy product (except frozen) mfg.....	-	14	11	945	30 209	707	1 539	20 539	87 465	341 928	439 670	10 447
311513	Cheese mfg.....	-	11	9	842	26 262	637	1 372	18 202	76 401	302 849	387 168	9 812
3116	Meat product mfg.....	-	5	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	5	3	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	-	4	2	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	-	18	7	707	18 614	529	1 043	15 295	16 223	36 283	52 508	2 413
31181	Bread & bakery product mfg.....	2	17	6	e	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
311822	Flour mixes & dough mfg from purchased flour.....	-	1	1	e	D	D	D	D	D	D	D	D
313	Textile mills.....	-	7	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills.....	-	6	3	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills.....	-	3	2	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills.....	-	3	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	35	14	1 465	39 275	1 181	2 543	29 081	73 993	138 359	213 685	8 935
3219	Other wood product mfg.....	-	30	13	1 254	32 902	1 031	2 245	25 446	66 344	100 672	168 135	7 048
32191	Millwork.....	-	9	4	850	24 391	714	1 614	19 442	45 516	73 131	119 875	5 450
321911	Wood window & door mfg.....	-	3	3	755	22 105	644	1 475	17 900	40 555	68 171	110 081	D
32192	Wood container & pallet mfg.....	2	15	8	335	7 097	281	557	4 953	15 274	22 773	38 046	1 365
321920	Wood container & pallet mfg.....	2	15	8	335	7 097	281	557	4 953	15 274	22 773	38 046	1 365
322	Paper mfg.....	-	70	54	13 130	563 301	10 064	21 600	400 409	2 170 848	2 226 051	4 388 472	172 776
3221	Pulp, paper, & paperboard mills.....	-	15	15	6 130	293 339	4 623	10 149	208 699	1 193 732	1 048 201	2 248 168	94 153
32212	Paper mills.....	-	12	12	5 943	285 984	4 475	9 864	203 028	1 160 161	1 010 617	2 177 366	92 042
322121	Paper (except newsprint) mills.....	-	12	12	5 943	285 984	4 475	9 864	203 028	1 160 161	1 010 617	2 177 366	92 042
3222	Converted paper product mfg.....	-	55	39	7 000	269 962	5 441	11 451	191 710	977 116	1 177 850	2 140 304	78 623
32221	Paperboard container mfg.....	-	13	11	1 280	53 332	962	1 935	33 000	114 843	168 245	283 190	9 624
322211	Corrugated & solid fiber box mfg.....	1	8	6	697	29 674	469	971	16 435	62 226	88 454	150 822	7 988
322212	Folding paperboard box mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
322214	Fiber can, tube, drum, & similar products mfg.....	-	4	4	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	-	8	8	2 081	79 043	1 606	3 465	58 561	366 323	515 887	875 129	12 433
322221	Coated & laminated packaging paper & plastics film mfg.....	-	2	2	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg.....	-	5	5	1 501	56 686	1 181	2 516	43 577	304 140	415 309	713 854	D
322225	Laminated aluminum foil mfg for flexible packaging uses.....	-	1	1	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg.....	-	9	4	536	17 048	385	831	11 932	51 479	83 329	128 435	5 552
322233	Stationery, tablet, & related product mfg.....	-	5	3	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	25	16	3 103	120 539	2 488	5 220	88 217	444 471	410 389	853 550	51 014
322291	Sanitary paper product mfg.....	-	9	6	2 110	90 693	1 671	3 442	68 066	371 852	320 833	690 289	45 003
322299	All other converted paper product mfg.....	-	16	10	993	29 846	817	1 778	20 151	72 619	89 556	163 261	6 011

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	APPLETON-OSHKOSH-NEENAH, WI MSA—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	-	85	37	5 103	174 890	3 053	6 192	90 772	362 122	301 324	657 925	31 949
3231	Printing & related support activities.....	-	85	37	5 103	174 890	3 053	6 192	90 772	362 122	301 324	657 925	31 949
32311	Printing.....	-	74	28	4 451	149 723	2 586	5 181	74 253	314 655	281 816	591 175	26 729
323110	Commercial lithographic printing ..	-	34	14	2 460	77 055	1 380	2 575	35 771	158 976	83 915	241 007	9 641
323112	Commercial flexographic printing .	-	7	4	491	18 875	277	647	8 560	37 057	39 049	75 815	2 970
323113	Commercial screen printing.....	3	10	3	420	16 083	219	420	6 431	26 319	33 827	59 994	1 252
323117	Book printing.....	-	3	3	f	D	D	D	D	D	D	D	D
32312	Support activities for printing.....	-	11	9	652	25 167	467	1 011	16 519	47 467	19 508	66 750	5 220
323122	Prepress services	-	8	7	571	23 375	400	879	15 107	43 764	18 682	62 215	5 073
325	Chemical mfg.....	2	21	4	278	10 525	157	314	5 386	47 806	41 465	88 936	1 980
326	Plastics & rubber products mfg.....	-	32	25	4 371	148 502	3 545	8 077	111 030	469 302	575 059	1 048 957	60 485
3261	Plastics product mfg.....	-	25	20	4 074	137 609	3 323	7 590	103 664	432 492	558 940	996 081	58 749
32611	Unsupported plastics film, sheet, & bag mfg..	-	13	13	3 301	119 804	2 632	6 125	88 259	356 677	498 288	860 020	51 024
326111	Unsupported plastics bag mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg.....	-	8	8	2 357	88 525	1 980	4 908	70 865	296 975	407 643	709 034	45 615
32619	Other plastics product mfg.....	-	8	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	8	6	f	D	D	D	D	D	D	D	D
3262	Rubber product mfg.....	4	7	5	297	10 893	222	487	7 366	36 810	16 119	52 876	1 736
32629	Other rubber product mfg.....	4	5	5	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg.....	4	5	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	-	24	6	344	11 550	278	574	8 514	34 709	35 022	70 064	2 974
3273	Cement & concrete product mfg.....	-	16	6	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	9	6	2 262	87 726	1 765	3 758	65 129	245 850	176 522	420 027	6 949
3315	Foundries.....	-	7	4	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	3	3	g	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	3	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	125	54	3 215	102 620	2 433	4 941	70 830	225 944	176 417	404 656	24 443
3323	Architectural & structural metals mfg.....	-	18	7	364	11 501	273	560	6 939	26 902	32 484	59 747	1 457
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	54	21	1 121	39 196	832	1 725	27 566	83 864	33 643	117 706	11 589
33271	Machine shops.....	-	49	18	1 012	35 955	744	1 549	25 167	78 785	30 157	109 359	10 219
332710	Machine shops.....	-	49	18	1 012	35 955	744	1 549	25 167	78 785	30 157	109 359	10 219
3328	Coating, engraving, heat treating, & allied activities.	1	13	4	293	6 977	222	441	4 025	14 953	3 717	18 673	790
33281	Coating, engraving, heat treating, & allied activities.....	1	13	4	293	6 977	222	441	4 025	14 953	3 717	18 673	790
3329	Other fabricated metal product mfg.....	-	23	11	696	24 424	538	1 130	17 780	47 480	37 409	85 668	3 278
33299	All other fabricated metal product mfg.....	-	23	11	696	24 424	538	1 130	17 780	47 480	37 409	85 668	3 278
332996	Fabricated pipe & pipe fitting mfg.....	-	4	3	266	8 895	185	364	6 128	16 675	14 651	31 871	675
332999	All other miscellaneous fabricated metal product mfg.....	1	10	5	255	6 527	202	403	4 596	15 593	18 861	34 873	458
333	Machinery mfg.....	-	74	39	7 799	283 969	5 084	9 998	158 348	777 564	769 137	1 546 636	37 787
3331	Agriculture, construction, & mining machinery mfg....	-	11	7	1 595	53 880	1 060	2 159	29 172	106 009	174 950	277 378	6 486
33311	Agricultural implement mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	4	4	3	e	D	D	D	D	D	D	D	2 062
333120	Construction machinery mfg.....	4	4	3	e	D	D	D	D	D	D	D	2 062

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	APPLETON-OSHKOSH-NEENAH, WI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3331	Agriculture, construction, & mining machinery mfg—Con.												
33313	Mining & oil & gas field machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	25	13	1 505	65 550	866	1 777	32 312	208 533	109 581	313 413	6 073
33329	Other industrial machinery mfg	-	22	12	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	16	10	1 218	55 138	684	1 374	26 870	179 352	95 875	272 932	4 634
3336	Engine, turbine, & power transmission equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	4	3	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	21	14	2 501	94 431	1 366	2 577	43 606	278 396	287 408	567 650	13 987
33391	Pump & compressor mfg	-	1	1	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	-	1	1	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	12	10	f	D	D	D	D	D	D	D	D
333922	Conveyor & conveying equipment mfg	-	9	8	609	19 184	367	742	9 203	32 321	23 678	55 463	974
33399	All other general-purpose machinery mfg	-	8	3	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	3	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	13	4	h	D	D	D	D	D	D	D	8 482
3344	Semiconductor & other electronic component mfg	-	6	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	6	3	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	3	2	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	14	9	1 181	33 221	862	1 556	21 341	115 626	71 506	189 076	4 933
3353	Electrical equipment mfg ..	-	10	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	10	7	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	17	5	h	D	D	D	D	D	D	D	11 262
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	4	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	4	2	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	8	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	28	10	919	22 688	738	1 515	14 423	62 965	41 813	101 832	2 046
3371	Household & institutional furniture & kitchen cabinet mfg	-	20	6	674	16 111	559	1 140	10 761	43 636	30 528	71 357	1 098
33712	Household & institutional furniture mfg	-	9	4	583	14 119	491	1 025	9 447	40 113	28 471	65 660	1 033
337122	Nonupholstered wood household furniture mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	APPLETON-OSHKOSH-NEENAH, WI MSA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg	3	36	11	857	22 102	693	1 299	16 187	48 509	22 510	71 182	1 249
3391	Medical equipment & supplies mfg	4	14	5	544	14 337	461	916	11 657	27 960	11 967	40 209	460
33911	Medical equipment & supplies mfg	4	14	5	544	14 337	461	916	11 657	27 960	11 967	40 209	460
339113	Surgical appliance & supplies mfg	4	3	3	410	10 281	337	716	8 130	17 494	10 081	27 698	D
3399	Other miscellaneous mfg . . .	3	22	6	313	7 765	232	383	4 530	20 549	10 543	30 973	789
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA												
31-33	Manufacturing	1	14 080	5 205	660 689	24 785 382	457 284	943 383	14 112 493	72 622 192	73 308 763	145 631 728	6 094 310
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IL Part)	1	13 307	4 906	601 701	22 016 416	412 652	848 543	12 106 543	64 048 310	61 153 748	124 949 232	5 039 928
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (IN Part)	—	569	217	49 462	2 372 725	37 307	79 659	1 724 496	7 692 325	11 002 978	18 651 480	907 596
	Chicago-Gary-Kenosha, IL-IN-WI CMSA (WI Part)	—	204	82	9 526	396 241	7 325	15 181	281 454	881 557	1 152 037	2 031 016	146 786
311	Food mfg	2	968	356	60 673	1 891 456	43 954	91 804	1 197 751	8 586 698	8 444 266	17 013 983	494 798
312	Beverage & tobacco product mfg	1	42	19	h	D	D	D	D	D	D	D	D
313	Textile mills	3	64	12	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	223	50	h	D	D	D	D	D	D	D	D
315	Apparel mfg	2	219	63	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	1	40	15	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	253	67	h	D	D	D	D	D	D	D	D
322	Paper mfg	—	307	218	j	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	1 982	463	k	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	74	29	h	D	D	D	D	D	D	D	D
325	Chemical mfg	1	626	311	46 729	2 279 814	23 792	49 365	924 324	10 176 023	7 759 952	17 861 640	933 446
326	Plastics & rubber products mfg	1	794	455	k	D	D	D	D	D	D	D	378 704
327	Nonmetallic mineral product mfg	2	395	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	262	166	l	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	2 942	1 094	97 993	3 437 556	74 316	154 633	2 216 814	7 877 522	6 120 662	13 976 945	551 562
333	Machinery mfg	—	1 726	609	67 472	2 722 311	43 811	90 715	1 508 124	6 405 822	5 481 511	11 960 300	353 618
334	Computer & electronic product mfg	—	678	316	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	395	204	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	309	162	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	632	136	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	1 149	284	k	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	CHICAGO-GARY-KENOSHA, IL-IN-WI CMSA—Con.												
	Kenosha, WI PMSA												
31-33	Manufacturing	-	204	82	9 526	396 241	7 325	15 181	281 454	881 557	1 152 037	2 031 016	146 786
311	Food mfg	-	17	9	738	18 193	514	1 144	11 021	64 219	220 449	283 949	6 491
3116	Meat product mfg	-	5	4	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	5	4	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	-	1	1	e	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	1	1	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg	-	1	1	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	-	1	1	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	2	6	4	390	15 965	255	561	8 698	104 636	60 531	156 971	2 440
3255	Paint, coating, & adhesive mfg	2	4	3	e	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	2	3	3	344	14 413	230	506	7 937	96 187	57 976	146 304	D
325510	Paint & coating mfg	2	3	3	344	14 413	230	506	7 937	96 187	57 976	146 304	D
326	Plastics & rubber products mfg	1	12	6	e	D	D	D	D	D	D	D	3 312
331	Primary metal mfg	-	6	4	732	27 915	532	1 151	17 004	59 328	78 653	140 856	2 862
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying	-	1	1	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	47	20	1 881	64 039	1 461	2 592	43 718	157 427	84 287	246 340	6 870
3322	Cutlery & handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	22	7	368	11 249	297	548	7 951	45 727	15 128	61 243	1 764
3329	Other fabricated metal product mfg	-	6	3	f	D	D	D	D	D	D	D	2 284
33291	Metal valve mfg	-	3	3	f	D	D	D	D	D	D	D	2 187
332919	Other metal valve & pipe fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	30	8	645	19 989	468	757	11 575	43 063	31 974	74 769	1 443
3335	Metalworking machinery mfg	-	13	3	268	7 899	204	291	4 754	19 155	6 130	25 038	237
33351	Metalworking machinery mfg	-	13	3	268	7 899	204	291	4 754	19 155	6 130	25 038	237
334	Computer & electronic product mfg	-	12	7	859	25 104	674	1 405	14 716	54 081	59 205	112 314	5 805
3344	Semiconductor & other electronic component mfg	-	4	4	752	20 584	616	1 284	13 105	41 222	49 601	89 750	D
33441	Semiconductor & other electronic component mfg	-	4	4	752	20 584	616	1 284	13 105	41 222	49 601	89 750	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	12	3	316	10 227	213	463	5 455	13 192	18 209	31 247	617
339	Miscellaneous mfg	1	13	7	512	15 586	405	925	10 095	34 994	21 271	56 435	1 254
3399	Other miscellaneous mfg	1	7	5	404	12 024	336	790	8 380	28 268	15 780	44 633	1 079
33999	All other miscellaneous mfg	1	4	3	e	D	D	D	D	D	D	D	D
339992	Musical instrument mfg	2	3	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	DULUTH-SUPERIOR, MN-WI MSA												
	Manufacturing	1	284	71	6 989	201 235	5 067	9 658	127 852	590 225	778 230	1 379 544	152 109
	Duluth-Superior, MN-WI MSA (MN Part)	1	228	57	5 446	155 830	3 851	7 377	95 958	462 154	413 036	879 373	142 396
	Duluth-Superior, MN-WI MSA (WI Part)	-	56	14	1 543	45 405	1 216	2 281	31 894	128 071	365 194	500 171	9 713
311	Food mfg.	1	27	7	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg.	-	3	1	e	D	D	D	D	D	D	D	D
31141	Frozen food mfg.	-	2	1	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg.	-	2	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg.	1	25	7	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg.	-	5	3	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, & engineered wood product mfg.	-	5	3	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg.	-	2	2	e	D	D	D	D	D	D	D	D
322	Paper mfg.	-	5	3	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	e	D	D	D	D	D	D	D	D
322122	Newsprint mills	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.	2	30	4	298	8 151	217	428	5 221	14 835	10 156	24 992	4 524
3231	Printing & related support activities.	2	30	4	298	8 151	217	428	5 221	14 835	10 156	24 992	4 524
32311	Printing	2	28	4	e	D	D	D	D	D	D	D	D
325	Chemical mfg.	2	11	6	274	10 414	152	317	5 681	40 389	36 070	76 320	2 612
326	Plastics & rubber products mfg.	2	13	3	275	6 862	216	425	4 777	24 603	10 872	36 537	D
327	Nonmetallic mineral product mfg.	4	19	5	263	8 233	205	391	6 083	25 394	19 558	45 421	D
331	Primary metal mfg.	-	7	4	411	14 251	327	691	10 397	42 849	53 500	97 862	D
3315	Foundries	-	5	3	e	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.	-	46	11	1 029	32 051	781	1 567	20 143	62 133	69 291	131 729	4 557
3329	Other fabricated metal product mfg.	-	6	2	338	10 922	268	489	7 378	22 052	36 214	58 507	1 253
33299	All other fabricated metal product mfg.	-	5	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.	1	24	7	687	25 527	468	1 050	15 094	50 862	51 450	102 300	3 056
3331	Agriculture, construction, & mining machinery mfg.	-	5	2	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.	-	8	3	631	11 049	418	798	4 835	27 337	47 927	74 640	1 471
3344	Semiconductor & other electronic component mfg.	-	3	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.	-	3	3	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg.	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.	2	27	1	312	5 387	227	268	3 244	19 048	13 087	32 342	1 529
3399	Other miscellaneous mfg.	1	15	1	279	4 440	203	238	2 825	16 392	12 075	28 640	1 445

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	EAU CLAIRE, WI MSA												
31-33	Manufacturing	-	219	76	10 624	314 605	8 042	15 087	216 360	810 134	829 071	1 641 106	105 016
311	Food mfg.....	-	23	7	937	27 214	681	1 281	16 694	87 501	237 852	324 683	9 787
3114	Fruit & vegetable preserving & specialty food mfg.....	-	5	4	399	11 964	292	622	7 716	52 187	55 943	108 326	2 728
31142	Fruit & vegetable canning, pickling, & drying.....	-	3	3	e	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	6	2	435	13 071	308	530	7 243	31 852	175 266	206 261	D
31151	Dairy product (except frozen) mfg.....	-	5	2	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg.	-	3	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg.	-	1	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	-	12	5	399	9 119	347	638	5 915	17 082	32 421	48 910	1 441
322	Paper mfg.....	-	7	5	739	26 432	546	1 069	18 628	87 374	55 567	142 288	2 801
3221	Pulp, paper, & paperboard mills.....	-	2	2	e	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	2	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	2	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	17	10	1 189	37 650	963	2 066	27 945	133 403	109 835	244 772	10 132
3261	Plastics product mfg.....	-	16	9	g	D	D	D	D	D	D	D	D
32614	Polystyrene foam product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
326140	Polystyrene foam product mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	10	4	507	14 107	395	798	10 450	46 327	32 403	80 478	4 948
326199	All other plastics product mfg.....	-	10	4	507	14 107	395	798	10 450	46 327	32 403	80 478	4 948
332	Fabricated metal product mfg.....	-	32	5	574	15 843	465	926	10 904	42 140	22 211	64 218	1 500
3323	Architectural & structural metals mfg.....	-	7	3	334	9 084	265	548	6 303	28 096	18 184	45 949	560
333	Machinery mfg.....	-	22	13	1 106	36 004	813	1 753	23 470	78 425	62 268	144 318	5 079
3335	Metalworking machinery mfg.....	-	8	2	336	14 015	265	597	9 889	36 375	10 597	48 101	1 340
33351	Metalworking machinery mfg.....	-	8	2	336	14 015	265	597	9 889	36 375	10 597	48 101	1 340
333514	Special die & tool, die set, jig, & fixture mfg.	-	6	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	7	6	328	10 351	195	415	5 227	13 138	29 960	44 771	1 398
334	Computer & electronic product mfg.....	-	12	5	3 213	99 999	2 592	4 416	78 737	150 582	146 056	297 251	D
3341	Computer & peripheral equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
334111	Electronic computer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	1	17	6	516	12 952	374	629	6 385	29 091	18 684	48 331	2 422
3371	Household & institutional furniture & kitchen cabinet mfg.....	2	15	4	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg.....	1	10	3	360	7 424	267	440	4 144	19 453	9 476	29 378	D
339	Miscellaneous mfg.....	1	18	5	261	5 859	190	346	3 380	16 786	9 728	26 779	606

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREEN BAY, WI MSA													
31-33	Manufacturing	1	396	168	25 825	1 015 651	18 473	38 396	602 579	2 588 409	3 885 894	6 457 440	224 977
311	Food mfg	2	47	20	4 985	127 841	3 909	8 549	97 167	444 244	1 439 824	1 881 094	35 948
3114	Fruit & vegetable preserving & specialty food mfg	8	6	4	778	19 778	610	1 453	13 801	56 852	84 086	141 027	D
31142	Fruit & vegetable canning, pickling, & drying	9	4	3	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	9	4	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	12	6	1 015	33 661	613	1 563	26 869	97 543	443 751	542 223	18 094
31151	Dairy product (except frozen) mfg	-	9	6	977	32 010	585	1 505	26 030	91 708	434 358	526 642	D
311513	Cheese mfg	-	7	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	2	9	6	2 585	60 555	2 169	4 505	47 843	252 907	884 246	1 134 024	5 965
31161	Animal slaughtering & processing	2	9	6	2 585	60 555	2 169	4 505	47 843	252 907	884 246	1 134 024	5 965
311611	Animal (except poultry) slaughtering	2	8	5	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	14	2	278	5 995	215	439	3 408	15 840	10 626	26 423	3 334
3119	Other food mfg	-	2	1	e	D	D	D	D	D	D	D	D
31199	All other food mfg	-	2	1	e	D	D	D	D	D	D	D	D
311991	Perishable prepared food mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	23	10	508	11 500	371	704	7 268	26 485	43 032	69 084	990
3219	Other wood product mfg ...	4	17	7	e	D	D	D	D	D	D	D	601
322	Paper mfg	-	30	24	8 676	455 682	6 464	13 540	260 462	1 136 784	1 606 051	2 737 232	126 974
3221	Pulp, paper, & paperboard mills	-	8	8	5 508	325 060	3 979	8 362	164 774	631 129	571 237	1 189 890	D
32212	Paper mills	-	4	4	5 189	311 183	3 745	7 796	156 308	580 801	499 859	1 068 324	68 449
322121	Paper (except newsprint) mills	-	4	4	5 189	311 183	3 745	7 796	156 308	580 801	499 859	1 068 324	68 449
3222	Converted paper product mfg	-	22	16	3 168	130 622	2 485	5 178	95 688	505 655	1 034 814	1 547 342	D
32221	Paperboard container mfg	-	4	4	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	2	2	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	7	4	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	4	2	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	11	8	2 109	91 361	1 747	3 567	71 966	405 829	831 658	1 244 774	36 940
322291	Sanitary paper product mfg	-	7	6	2 003	88 448	1 664	3 432	70 509	394 065	824 938	1 226 800	35 710
323	Printing & related support activities	5	48	14	2 012	60 253	1 455	2 585	44 359	177 691	97 862	275 420	12 259
3231	Printing & related support activities	5	48	14	2 012	60 253	1 455	2 585	44 359	177 691	97 862	275 420	12 259
32311	Printing	5	43	13	1 962	58 587	1 419	2 519	43 157	173 826	96 265	269 942	D
323110	Commercial lithographic printing ..	-	19	7	817	16 595	519	796	10 160	31 490	21 881	53 195	1 889
323112	Commercial flexographic printing ..	7	4	3	852	35 662	691	1 312	28 973	128 749	63 167	191 921	9 283
326	Plastics & rubber products mfg	1	15	6	e	D	D	D	D	D	D	D	10 707
3261	Plastics product mfg	1	13	6	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	2	19	8	319	11 601	264	545	8 495	37 170	29 437	66 760	3 138
331	Primary metal mfg	-	4	3	300	10 983	222	461	6 141	27 148	60 303	87 016	802
332	Fabricated metal product mfg	-	70	27	1 719	61 710	1 296	2 687	40 604	130 194	91 738	220 382	7 092
3321	Forging & stamping	-	4	3	301	9 156	203	407	4 733	18 090	14 459	32 987	1 028
33211	Forging & stamping	-	4	3	301	9 156	203	407	4 733	18 090	14 459	32 987	1 028
3323	Architectural & structural metals mfg	-	14	7	371	13 024	298	664	9 723	30 126	18 512	48 292	1 713
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	33	8	f	D	D	D	D	D	D	D	2 443
33271	Machine shops	1	32	8	591	21 931	458	898	14 580	40 249	25 387	64 321	2 443
332710	Machine shops	1	32	8	591	21 931	458	898	14 580	40 249	25 387	64 321	2 443

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	GREEN BAY, WI MSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	57	27	3 337	149 428	1 914	3 782	76 674	307 262	252 838	557 995	15 685
3332	Industrial machinery mfg ..	-	26	15	2 300	110 568	1 228	2 402	54 991	226 455	171 968	392 918	11 092
33329	Other industrial machinery mfg	-	24	14	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	13	9	621	26 175	368	734	14 133	72 242	51 652	124 191	5 030
333293	Printing machinery & equipment mfg	-	5	3	1 458	75 947	730	1 410	36 709	136 033	107 507	237 891	D
3339	Other general-purpose machinery mfg	1	15	8	714	27 200	466	912	16 107	45 796	47 564	96 551	2 988
33399	All other general-purpose machinery mfg	1	14	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	1	6	5	601	23 538	378	742	13 465	38 552	42 337	83 982	2 558
336	Transportation equipment mfg	-	6	3	f	D	D	D	D	D	D	D	2 520
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	21	9	1 596	63 463	918	2 130	23 257	104 635	58 946	163 267	4 922
3371	Household & institutional furniture & kitchen cabinet mfg	-	18	7	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	-	18	7	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	-	18	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	-	2	2	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	2	22	4	322	7 654	223	480	4 988	17 201	8 293	25 161	1 058
	JANESVILLE-BELOIT, WI MSA												
31-33	Manufacturing	-	234	81	19 547	785 294	15 128	32 406	553 483	3 905 863	6 220 648	10 105 609	210 195
311	Food mfg	-	13	8	1 334	47 594	1 101	2 527	31 471	355 527	296 037	649 612	D
3119	Other food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
313	Textile mills	-	4	3	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	4	3	e	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	2	2	e	D	D	D	D	D	D	D	D
313241	Weft knit fabric mills ..	-	2	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	1	14	7	433	19 979	219	448	9 104	101 297	122 100	223 395	10 027
326	Plastics & rubber products mfg	-	10	4	f	D	D	D	D	D	D	D	3 742
3261	Plastics product mfg	-	10	4	f	D	D	D	D	D	D	D	3 742
32619	Other plastics product mfg	-	6	2	f	D	D	D	D	D	D	D	884
326199	All other plastics product mfg	-	6	2	f	D	D	D	D	D	D	D	884
327	Nonmetallic mineral product mfg	1	11	5	e	D	D	D	D	D	D	D	1 664
331	Primary metal mfg	-	6	6	1 074	40 556	770	1 914	26 314	98 179	102 982	196 245	6 667
3312	Steel product mfg from purchased steel	-	2	2	e	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	e	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	-	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries	-	4	4	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	e	D	D	D	D	D	D	D	D
331511	Iron foundries	-	2	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	e	D	D	D	D	D	D	D	D
331525	Copper foundries (except die-casting) ..	-	1	1	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	JANESVILLE-BELOIT, WI MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	-	50	14	1 499	54 642	1 109	2 214	34 385	126 436	126 876	252 754	11 997
3323	Architectural & structural metals mfg	-	7	2	402	17 423	253	508	8 784	47 224	54 945	102 043	290
33231	Plate work & fabricated structural product mfg	-	1	1	e	D	D	D	D	D	D	D	D
332311	Prefabricated metal building & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	11	3	e	D	D	D	D	D	D	D	1 061
33299	All other fabricated metal product mfg	-	11	3	e	D	D	D	D	D	D	D	1 061
332993	Ammunition (except small arms) mfg	-	1	1	e	D	D	D	D	D	D	D	D
333	Machinery mfg	-	29	13	3 123	139 642	1 850	3 491	70 136	235 879	338 331	577 317	20 537
3332	Industrial machinery mfg	-	7	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	9	4	584	29 424	350	660	13 696	27 928	50 424	100 004	2 293
33351	Metalworking machinery mfg	-	9	4	584	29 424	350	660	13 696	27 928	50 424	100 004	2 293
333518	Other metalworking machinery mfg	-	1	1	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	1	1	e	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	6	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	6	4	2 215	65 064	1 837	4 034	47 798	193 971	264 653	455 091	9 647
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	4	744	24 940	572	1 256	16 451	80 870	60 282	141 063	2 618
3372	Office furniture (including fixtures) mfg	-	2	1	e	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	-	2	1	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	3	2	e	D	D	D	D	D	D	D	D
33791	Mattress mfg	-	3	2	e	D	D	D	D	D	D	D	D
337910	Mattress mfg	-	3	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	20	2	1 126	33 145	760	1 505	19 844	106 013	106 658	200 896	6 026
3399	Other miscellaneous mfg	-	10	2	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	4	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	4	1	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	2	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	LA CROSSE, WI-MN MSA												
31-33	Manufacturing	-	184	62	10 668	324 155	7 568	15 121	189 153	528 541	900 097	1 432 797	52 876
	La Crosse, WI-MN MSA (MN Part)	-	23	6	497	10 459	338	693	6 452	28 870	21 356	50 147	3 062
	La Crosse, WI-MN MSA (WI Part)	-	161	56	10 171	313 696	7 230	14 428	182 701	499 671	878 741	1 382 650	49 814
311	Food mfg	-	13	4	354	8 735	283	537	6 282	32 499	119 048	150 169	6 372
312	Beverage & tobacco product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	3	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	-	3	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	14	6	943	19 317	711	1 272	11 471	39 253	56 259	95 663	2 385
3211	Sawmills & wood preservation	-	3	1	e	D	D	D	D	D	D	D	D
32111	Sawmills & wood preservation	-	3	1	e	D	D	D	D	D	D	D	D
321113	Sawmills	-	3	1	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	9	4	412	9 830	324	733	6 354	21 603	25 998	45 458	1 405
32191	Millwork	-	3	3	299	7 717	266	605	5 163	17 118	21 598	36 749	D
323	Printing & related support activities	-	30	11	1 221	31 789	950	1 842	21 783	60 135	43 079	103 896	5 783
3231	Printing & related support activities	-	30	11	1 221	31 789	950	1 842	21 783	60 135	43 079	103 896	5 783
32311	Printing	-	25	11	1 189	30 995	926	1 801	21 207	58 401	42 676	101 762	5 673
323113	Commercial screen printing	-	9	6	764	18 507	584	1 155	12 406	33 561	17 451	50 748	2 725
332	Fabricated metal product mfg	-	25	12	1 449	41 622	1 198	2 541	30 295	109 480	106 122	215 002	7 006
3324	Boiler, tank, & shipping container mfg	-	3	2	e	D	D	D	D	D	D	D	D
33241	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	-	2	1	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	3	2	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	3	2	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	20	8	3 076	121 241	1 591	3 154	48 904	42 587	308 309	355 519	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	9	4	685	14 262	568	1 220	11 610	42 504	38 186	79 877	D
3363	Motor vehicle parts mfg	-	4	3	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	3	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MADISON, WI MSA													
31-33	Manufacturing	-	564	187	26 568	864 440	18 841	37 854	507 789	2 484 947	2 334 302	4 840 470	132 277
311	Food mfg	-	53	24	4 748	145 792	3 803	7 992	113 367	664 195	780 156	1 446 065	20 506
3115	Dairy product mfg	-	6	5	560	16 958	350	720	9 824	68 006	296 955	362 221	2 770
31151	Dairy product (except frozen) mfg	-	4	3	e	D	D	D	D	D	D	D	D
311512	Creamery butter mfg ..	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	9	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	9	4	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	6	3	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	16	7	f	D	D	D	D	D	D	D	2 765
31181	Bread & bakery product mfg	-	14	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	9	5	687	16 299	344	569	10 065	63 493	24 025	87 902	1 741
321	Wood product mfg	2	29	9	570	14 732	430	869	9 260	32 007	38 950	71 840	2 749
3219	Other wood product mfg ..	2	25	8	e	D	D	D	D	D	D	D	2 690
322	Paper mfg	-	6	3	456	15 295	344	697	9 671	50 758	57 703	108 399	3 621
3222	Converted paper product mfg	-	6	3	456	15 295	344	697	9 671	50 758	57 703	108 399	3 621
323	Printing & related support activities	-	109	24	2 651	87 129	2 035	3 969	57 444	177 593	95 067	275 162	12 434
3231	Printing & related support activities	-	109	24	2 651	87 129	2 035	3 969	57 444	177 593	95 067	275 162	12 434
32311	Printing	-	91	20	2 329	73 919	1 783	3 498	48 666	153 660	89 032	245 468	10 506
323110	Commercial lithographic printing ..	-	40	7	869	26 182	641	1 232	16 049	52 098	28 117	81 159	4 870
323117	Book printing	-	7	4	832	30 193	683	1 345	21 702	51 331	36 851	89 664	1 311
32312	Support activities for printing	-	18	4	322	13 210	252	471	8 778	23 933	6 035	29 694	1 928
323122	Prepress services	-	14	4	296	12 612	231	432	8 316	22 991	5 865	28 581	1 898
325	Chemical mfg	-	28	14	1 189	40 843	686	1 366	17 553	147 653	98 574	243 090	13 578
3254	Pharmaceutical & medicine mfg	-	10	7	722	28 555	351	711	10 064	84 362	38 948	120 391	10 304
32541	Pharmaceutical & medicine mfg	-	10	7	722	28 555	351	711	10 064	84 362	38 948	120 391	10 304
325414	Biological product (except diagnostic) mfg	-	5	4	495	20 091	226	472	6 143	59 422	11 656	69 757	D
326	Plastics & rubber products mfg	2	36	16	2 566	81 520	1 971	3 968	51 209	225 683	168 143	392 752	17 569
3261	Plastics product mfg	2	31	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	25	12	2 015	60 152	1 507	3 006	34 206	171 710	118 553	289 113	14 219
326199	All other plastics product mfg	2	24	12	g	D	D	D	D	D	D	D	14 219
3262	Rubber product mfg	-	5	1	e	D	D	D	D	D	D	D	D
32622	Rubber & plastics hoses & belting mfg	-	1	1	e	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	23	7	617	18 388	476	1 015	12 185	37 102	32 308	69 298	3 386
3271	Clay product & refractory mfg	-	4	2	e	D	D	D	D	D	D	D	388
32711	Pottery, ceramics, & plumbing fixture mfg ..	-	4	2	e	D	D	D	D	D	D	D	388
331	Primary metal mfg	-	6	3	719	24 710	591	1 188	17 704	49 012	34 126	83 394	D
3315	Foundries	-	5	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	69	20	1 711	53 769	1 188	2 450	31 740	118 803	123 095	245 029	8 784
3323	Architectural & structural metals mfg	-	23	9	755	25 246	527	1 108	14 831	54 164	64 474	118 416	2 596
33231	Plate work & fabricated structural product mfg ..	-	9	4	279	11 133	180	405	6 425	35 372	38 205	73 470	798
33232	Ornamental & architectural metal products mfg	-	14	5	476	14 113	347	703	8 406	18 792	26 269	44 946	1 798
332323	Ornamental & architectural metal work mfg	-	8	2	369	10 648	265	517	6 085	11 523	18 592	29 944	1 153
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	27	4	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	23	4	293	8 819	224	418	5 635	19 968	8 853	29 057	3 671
332710	Machine shops	1	23	4	293	8 819	224	418	5 635	19 968	8 853	29 057	3 671

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MADISON, WI MSA— Con. Manufacturing— Con.												
333	Machinery mfg	-	38	21	2 161	67 488	1 340	2 446	31 954	181 242	183 548	359 166	9 728
3331	Agriculture, construction, & mining machinery mfg	1	6	2	e	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	1	5	2	e	D	D	D	D	D	D	D	2 694
333111	Farm machinery & equipment mfg	1	5	2	e	D	D	D	D	D	D	D	2 694
3332	Industrial machinery mfg	-	5	4	747	18 628	490	872	9 276	50 518	55 755	105 304	1 825
33329	Other industrial machinery mfg	-	5	4	747	18 628	490	872	9 276	50 518	55 755	105 304	1 825
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	9	5	441	16 535	224	388	6 089	52 259	55 639	103 083	2 707
33391	Pump & compressor mfg	-	3	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	35	17	2 028	91 986	616	1 241	15 627	267 125	138 647	407 564	9 607
3345	Navigational, measuring, medical, & control instruments mfg	-	20	12	1 537	72 798	393	797	10 057	220 717	110 854	332 386	7 210
33451	Navigational, measuring, medical, & control instruments mfg	-	20	12	1 537	72 798	393	797	10 057	220 717	110 854	332 386	7 210
334510	Electromedical & electrotherapeutic apparatus mfg	-	2	2	e	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	6	4	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	3	3	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	5	1 211	43 248	737	1 531	23 992	271 765	144 266	416 348	5 595
3351	Electric lighting equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	1	1	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	1	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg	-	2	2	e	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	2	2	e	D	D	D	D	D	D	D	D
335222	Household refrigerator & home freezer mfg	-	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	4	1	e	D	D	D	D	D	D	D	D
33591	Battery mfg	-	2	1	e	D	D	D	D	D	D	D	D
335912	Primary battery mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	12	6	1 609	36 814	1 429	2 942	30 096	96 782	204 555	308 327	2 810
3362	Motor vehicle body & trailer mfg	-	6	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	6	2	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	5	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	38	9	2 283	61 305	1 813	3 187	42 203	72 737	144 027	215 596	5 446
3371	Household & institutional furniture & kitchen cabinet mfg	-	26	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	14	1	592	11 134	491	728	7 648	9 258	34 928	42 506	622
337122	Nonupholstered wood household furniture mfg	-	9	1	f	D	D	D	D	D	D	D	577
3372	Office furniture (including fixtures) mfg	5	10	4	434	10 255	322	492	6 359	17 189	11 828	30 148	1 013
33721	Office furniture (including fixtures) mfg	5	10	4	434	10 255	322	492	6 359	17 189	11 828	30 148	1 013
337215	Showcase, partition, shelving, & locker mfg	5	6	3	373	9 432	274	437	5 751	16 076	11 129	27 946	D
3379	Other furniture related product mfg	-	2	1	g	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	2	1	g	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	2	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	55	7	1 809	71 796	1 166	2 431	35 902	71 705	67 299	153 116	8 414
3391	Medical equipment & supplies mfg	-	26	4	1 492	63 750	955	2 053	31 929	55 211	56 157	125 319	D
33911	Medical equipment & supplies mfg	-	26	4	1 492	63 750	955	2 053	31 929	55 211	56 157	125 319	D
339112	Surgical & medical instrument mfg	-	5	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	3	29	3	317	8 046	211	378	3 973	16 494	11 142	27 797	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA												
31-33	Manufacturing	-	3 553	1 387	184 012	6 622 541	128 689	253 946	3 940 002	19 262 854	17 044 147	36 323 066	1 288 541
311	Food mfg	2	197	79	12 475	339 237	9 179	18 280	213 426	1 548 589	2 426 429	3 998 607	92 301
312	Beverage & tobacco product mfg	-	15	3	g	D	D	D	D	D	D	D	D
313	Textile mills	1	16	5	476	15 609	375	690	9 171	38 918	15 315	53 647	2 027
314	Textile product mills	2	39	7	f	D	D	D	D	D	D	D	2 900
315	Apparel mfg	-	28	15	g	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	31	17	h	D	D	D	D	D	D	D	D
321	Wood product mfg	1	63	12	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	56	40	4 254	159 640	3 025	6 468	94 508	370 866	434 485	805 776	40 698
323	Printing & related support activities	1	434	130	16 810	507 377	13 246	24 269	353 028	1 092 670	643 443	1 722 493	69 938
325	Chemical mfg	-	146	71	i	D	D	D	D	D	D	D	77 995
326	Plastics & rubber products mfg	1	145	81	8 268	246 089	6 274	12 657	152 879	610 557	487 044	1 093 995	61 232
327	Nonmetallic mineral product mfg	2	85	27	2 240	87 459	1 726	3 481	60 221	240 655	167 626	410 255	D
331	Primary metal mfg	-	94	66	10 985	375 697	8 764	18 777	267 947	958 919	812 515	1 768 065	70 892
332	Fabricated metal product mfg	-	877	322	31 749	1 090 282	23 679	47 103	695 866	2 519 874	1 780 287	4 283 752	195 357
333	Machinery mfg	-	585	244	35 409	1 485 388	22 334	45 875	833 209	3 528 527	2 858 772	6 379 976	254 677
334	Computer & electronic product mfg	-	132	62	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	122	70	20 222	736 012	14 182	25 792	415 200	2 227 693	2 212 141	4 427 304	125 891
336	Transportation equipment mfg	-	77	39	i	D	D	D	D	D	D	D	118 832
337	Furniture & related product mfg	2	154	20	g	D	D	D	D	D	D	D	7 186
339	Miscellaneous mfg	-	252	75	7 451	228 616	4 820	8 871	116 007	546 167	467 617	1 014 121	43 519
	Milwaukee-Waukesha, WI PMSA												
31-33	Manufacturing	-	3 174	1 246	165 143	5 958 444	115 244	227 576	3 546 969	16 025 978	15 054 976	31 093 528	1 095 973
311	Food mfg	2	181	72	11 443	313 165	8 327	16 680	197 100	1 237 727	2 230 890	3 492 932	82 625
3113	Sugar & confectionery product mfg	-	17	7	1 090	30 888	752	1 433	16 289	96 992	143 502	258 411	D
31132	Chocolate & confectionery mfg from cacao beans	-	3	3	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	3	3	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	-	6	1	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ...	-	6	1	e	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	12	8	1 242	34 640	1 007	2 147	23 176	228 835	160 666	389 461	13 211
31141	Frozen food mfg	1	4	4	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	1	8	4	e	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	3	6	3	263	5 983	223	437	4 525	15 918	18 210	34 424	2 538
3115	Dairy product mfg	-	11	8	1 044	36 643	702	1 544	22 080	157 520	432 828	588 797	6 802
31151	Dairy product (except frozen) mfg	-	10	8	g	D	D	D	D	D	D	D	6 802
311511	Fluid milk mfg	-	2	2	e	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	5	4	539	20 161	350	754	12 059	45 429	192 949	237 681	2 127

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MILWAUKEE-RACINE, WI CMSA—Con. Milwaukee-Waukesha, WI PMSA—Con. Manufacturing—Con.												
311	Food mfg—Con.												
3116	Meat product mfg.....	4	19	10	3 965	99 388	3 104	6 142	68 396	310 254	1 016 471	1 331 090	28 717
31161	Animal slaughtering & processing.....	4	19	10	3 965	99 388	3 104	6 142	68 396	310 254	1 016 471	1 331 090	28 717
311611	Animal (except poultry) slaughtering	9	6	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	2	12	6	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg.....	—	84	21	2 296	48 431	1 467	2 851	30 224	175 310	106 925	282 379	4 182
31181	Bread & bakery product mfg.....	—	79	19	g	D	D	D	D	D	D	D	3 345
311811	Retail bakeries.....	3	56	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	—	22	14	1 586	34 622	1 042	2 108	22 566	142 719	70 411	213 194	2 694
3119	Other food mfg.....	—	31	15	1 528	51 760	1 094	2 106	29 521	232 361	261 082	491 573	19 902
31191	Snack food mfg.....	—	7	3	e	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	—	6	2	e	D	D	D	D	D	D	D	D
31194	Seasoning & dressing mfg.....	—	10	5	661	24 268	492	907	14 454	78 155	137 797	214 486	7 408
311941	Mayonnaise, dressing, & other prepared sauce mfg.....	—	4	2	367	12 733	291	491	7 890	43 596	79 698	123 295	D
311942	Spice & extract mfg... ..	—	6	3	294	11 535	201	416	6 564	34 559	58 099	91 191	D
31199	All other food mfg.....	1	11	6	426	12 785	318	643	8 400	67 451	36 757	104 296	7 319
311999	All other miscellaneous food mfg.....	2	5	3	268	9 192	183	410	6 065	59 014	28 378	87 617	D
312	Beverage & tobacco product mfg.....	—	14	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg.....	—	14	3	g	D	D	D	D	D	D	D	D
31212	Breweries.....	—	8	2	f	D	D	D	D	D	D	D	D
312120	Breweries.....	—	8	2	f	D	D	D	D	D	D	D	D
313	Textile mills.....	1	16	5	476	15 609	375	690	9 171	38 918	15 315	53 647	2 027
3133	Textile & fabric finishing & fabric coating mills.....	1	7	3	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills.....	—	3	2	263	9 842	199	371	5 897	28 185	8 866	36 559	D
313320	Fabric coating mills... ..	—	3	2	263	9 842	199	371	5 897	28 185	8 866	36 559	D
314	Textile product mills.....	2	35	7	579	13 780	449	845	8 137	28 539	30 184	58 475	2 859
3149	Other textile product mills..	2	20	5	373	9 164	276	522	5 033	20 349	21 185	41 383	D
31499	All other textile product mills	1	12	3	293	7 225	213	415	4 209	17 382	18 546	35 788	1 485
314999	All other miscellaneous textile product mills ..	1	11	3	e	D	D	D	D	D	D	D	D
315	Apparel mfg.....	—	25	12	769	16 909	535	996	8 419	33 251	24 119	56 614	898
3152	Cut & sew apparel mfg.....	—	14	7	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	—	29	17	2 614	70 056	1 869	3 867	40 742	157 304	218 432	384 646	7 193
3161	Leather & hide tanning & finishing.....	—	11	11	1 333	35 984	1 105	2 263	25 422	87 451	160 291	257 960	D
31611	Leather & hide tanning & finishing.....	—	11	11	1 333	35 984	1 105	2 263	25 422	87 451	160 291	257 960	D
316110	Leather & hide tanning & finishing.....	—	11	11	1 333	35 984	1 105	2 263	25 422	87 451	160 291	257 960	D
3162	Footwear mfg.....	—	5	1	e	D	D	D	D	D	D	D	D
31621	Footwear mfg.....	—	5	1	e	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg ..	—	3	1	e	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg.....	—	13	5	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg.....	—	13	5	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg.....	—	4	3	f	D	D	D	D	D	D	D	D
321	Wood product mfg.....	1	49	10	826	20 759	627	1 247	13 328	36 443	47 267	83 884	1 843
3219	Other wood product mfg... ..	2	42	9	612	14 139	440	863	8 190	21 024	33 239	54 348	1 054
32192	Wood container & pallet mfg.....	1	21	6	390	8 729	299	608	5 145	13 018	15 641	28 637	494
321920	Wood container & pallet mfg.....	1	21	6	390	8 729	299	608	5 145	13 018	15 641	28 637	494

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
322	Paper mfg	—	50	36	3 810	139 648	2 734	5 801	84 120	322 531	376 470	699 690	35 530
3222	Converted paper product mfg	—	49	35	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	24	19	1 824	63 835	1 343	2 915	39 637	133 429	196 011	330 190	18 725
322211	Corrugated & solid fiber box mfg	—	17	14	1 469	51 162	1 069	2 293	31 199	105 939	169 871	274 915	13 420
322212	Folding paperboard box mfg	—	4	3	291	10 177	221	530	7 072	22 806	22 671	47 129	D
32222	Paper bag & coated & treated paper mfg	—	8	7	727	27 707	433	903	13 605	68 231	75 778	144 567	8 057
322222	Coated & laminated paper mfg	—	6	5	f	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	8	5	709	27 187	524	980	16 024	46 570	40 981	87 417	D
322232	Envelope mfg	—	3	3	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	1	9	4	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	405	123	15 928	483 259	12 577	22 996	337 679	1 047 046	613 841	1 649 284	67 459
3231	Printing & related support activities	1	405	123	15 928	483 259	12 577	22 996	337 679	1 047 046	613 841	1 649 284	67 459
32311	Printing	1	343	98	14 449	428 382	11 476	20 756	302 523	945 307	588 420	1 522 095	59 895
323110	Commercial lithographic printing ..	1	163	61	10 172	304 231	8 364	15 095	228 126	660 626	417 694	1 065 771	44 088
323112	Commercial flexographic printing ..	—	10	8	763	29 629	432	922	11 958	90 730	53 605	144 545	3 434
323113	Commercial screen printing	1	50	12	1 930	48 808	1 524	2 671	31 715	110 971	65 933	177 050	6 890
323114	Quick printing	1	75	7	623	14 637	400	693	9 041	27 631	14 637	42 178	1 695
323116	Manifold business form printing	3	7	5	401	15 298	317	683	12 054	29 408	16 985	46 878	746
32312	Support activities for printing	1	62	25	1 479	54 877	1 101	2 240	35 156	101 739	25 421	127 189	7 564
323121	Tradebinding & related work	—	15	7	429	13 351	356	751	9 310	25 149	7 792	33 210	968
323122	Prepress services	2	47	18	1 050	41 526	745	1 489	25 846	76 590	17 629	93 979	6 596
325	Chemical mfg	1	139	66	5 654	226 178	2 741	5 666	85 413	856 062	734 895	1 601 389	44 547
3251	Basic chemical mfg	—	20	10	1 398	51 334	588	1 157	18 612	163 977	85 513	246 696	D
32519	Other basic organic chemical mfg	—	7	4	1 044	38 087	373	718	12 372	117 801	32 757	136 546	10 100
325199	All other basic organic chemical mfg	—	7	4	1 044	38 087	373	718	12 372	117 801	32 757	136 546	10 100
3254	Pharmaceutical & medicine mfg	—	14	9	915	48 140	297	617	10 677	182 807	76 251	273 095	6 336
32541	Pharmaceutical & medicine mfg	—	14	9	915	48 140	297	617	10 677	182 807	76 251	273 095	6 336
325412	Pharmaceutical preparation mfg	—	3	2	f	D	D	D	D	D	D	D	2 278
325414	Biological product (except diagnostic) mfg	1	5	4	e	D	D	D	D	D	D	D	1 778
3255	Paint, coating, & adhesive mfg	—	29	12	1 418	59 814	680	1 502	23 247	254 676	249 077	503 106	13 532
32551	Paint & coating mfg	—	15	6	1 090	47 414	516	1 164	18 447	217 810	192 464	409 278	10 686
325510	Paint & coating mfg	—	15	6	1 090	47 414	516	1 164	18 447	217 810	192 464	409 278	10 686
32552	Adhesive mfg	4	14	6	328	12 400	164	338	4 800	36 866	56 613	93 828	2 846
325520	Adhesive mfg	4	14	6	328	12 400	164	338	4 800	36 866	56 613	93 828	2 846
3256	Soap, cleaning compound, & toilet preparation mfg ..	3	32	17	883	28 455	596	1 291	14 185	109 346	87 400	197 209	3 702
32561	Soap & cleaning compound mfg	4	27	13	675	24 302	425	905	12 235	98 124	79 591	179 245	3 263
325612	Polish & other sanitation good mfg ..	2	17	8	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	3	35	13	706	26 608	377	740	12 114	103 787	179 457	282 031	3 949
32591	Printing ink mfg	5	13	5	277	11 214	163	362	6 368	45 253	105 268	150 326	1 717
325910	Printing ink mfg	5	13	5	277	11 214	163	362	6 368	45 253	105 268	150 326	1 717
32599	All other chemical product & preparation mfg	1	22	8	429	15 394	214	378	5 746	58 534	74 189	131 705	2 232
325998	All other miscellaneous chemical product & preparation mfg	1	13	6	282	10 388	146	265	4 262	46 930	45 613	91 583	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	129	69	7 274	215 058	5 504	11 110	131 487	534 561	432 658	963 795	57 099
3261	Plastics product mfg	1	122	64	6 703	197 626	5 048	10 231	120 518	494 185	412 679	902 954	55 508
32611	Unsupported plastics film, sheet, & bag mfg ..	1	16	8	908	33 050	660	1 264	20 125	78 062	88 233	164 676	6 426
326111	Unsupported plastics bag mfg	—	5	3	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	2	9	3	374	12 116	282	462	7 761	30 262	25 336	55 045	1 443
32619	Other plastics product mfg	—	91	51	5 419	155 171	4 109	8 496	94 662	393 104	301 971	692 414	45 591
326199	All other plastics product mfg	—	88	50	5 306	151 594	4 017	8 297	91 988	386 265	298 582	682 079	45 408
3262	Rubber product mfg	2	7	5	571	17 432	456	879	10 969	40 376	19 979	60 841	1 591
32629	Other rubber product mfg	2	6	5	f	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	—	4	3	363	11 207	284	612	6 671	23 948	11 495	35 894	D
327	Nonmetallic mineral product mfg	3	72	24	1 598	62 524	1 195	2 463	41 406	159 255	131 980	291 912	11 875
3272	Glass & glass product mfg .	—	15	2	331	12 753	289	530	10 279	33 296	21 363	54 634	1 016
32721	Glass & glass product mfg	—	15	2	331	12 753	289	530	10 279	33 296	21 363	54 634	1 016
327215	Glass product mfg made of purchased glass	—	12	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	4	36	17	931	39 354	660	1 466	24 586	100 659	89 874	191 222	9 302
32732	Ready-mix concrete mfg.	5	17	8	411	17 278	318	693	12 265	38 446	51 781	90 550	4 139
327320	Ready-mix concrete mfg	5	17	8	411	17 278	318	693	12 265	38 446	51 781	90 550	4 139
32733	Concrete pipe, brick, & block mfg	—	9	5	274	10 926	152	341	4 801	35 412	20 067	55 296	3 645
331	Primary metal mfg	—	79	57	9 364	323 301	7 517	15 713	232 255	839 753	691 874	1 529 378	57 997
3311	Iron & steel mills & ferroalloy mfg	—	4	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	4	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	1	10	2	e	D	D	D	D	D	D	D	D
3315	Foundries	—	59	48	8 378	283 415	6 819	14 182	207 243	619 712	406 495	1 023 372	48 751
33151	Ferrous metal foundries .	—	30	28	5 694	195 727	4 584	9 290	142 283	430 698	272 706	704 517	34 460
331511	Iron foundries	—	15	14	2 353	85 331	1 971	4 121	67 582	166 086	132 970	297 704	11 283
331512	Steel investment foundries	—	4	4	905	26 157	738	1 393	19 223	61 378	30 344	92 008	5 327
331513	Steel foundries (except investment)	—	11	10	2 436	84 239	1 875	3 776	55 478	203 234	109 392	314 805	17 850
33152	Nonferrous metal foundries	—	29	20	2 684	87 688	2 235	4 892	64 960	189 014	133 789	318 855	14 291
331521	Aluminum die-casting foundries	—	9	8	1 085	39 460	890	1 956	31 859	77 230	57 991	132 722	4 645
331524	Aluminum foundries (except die-casting) ..	—	9	5	925	27 663	767	1 654	18 583	57 315	47 943	104 701	6 665
331525	Copper foundries (except die-casting) ..	1	5	4	538	16 155	466	1 055	11 439	42 366	19 203	60 908	2 581
332	Fabricated metal product mfg	—	774	280	28 181	974 533	21 112	42 008	626 966	2 248 891	1 573 008	3 805 901	176 640
3321	Forging & stamping	—	75	45	4 975	183 054	3 654	6 878	120 135	412 545	346 268	751 932	37 537
33211	Forging & stamping	—	75	45	4 975	183 054	3 654	6 878	120 135	412 545	346 268	751 932	37 537
332111	Iron & steel forging ..	—	7	4	1 770	83 384	1 390	2 534	60 978	165 051	163 912	325 104	12 674
332116	Metal stamping	—	60	36	2 602	82 478	1 928	3 721	51 663	202 924	153 812	354 400	17 386
332117	Powder metallurgy part mfg	—	2	2	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	21	9	1 228	37 394	994	2 024	26 326	85 224	68 950	154 801	2 778
33221	Cutlery & handtool mfg ..	—	21	9	1 228	37 394	994	2 024	26 326	85 224	68 950	154 801	2 778
332212	Hand & edge tool mfg .	—	19	7	f	D	D	D	D	D	D	D	2 778
332214	Kitchen utensil, pot, & pan mfg	—	1	1	f	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg	—	105	47	4 200	143 151	2 969	6 062	87 854	303 431	258 186	554 112	23 947
33231	Plate work & fabricated structural product mfg	—	53	21	1 739	56 307	1 318	2 637	35 868	131 286	135 155	259 102	6 330
332312	Fabricated structural metal mfg	—	28	9	723	25 218	518	1 021	14 518	57 370	76 670	126 982	2 392
332313	Plate work mfg	—	20	10	f	D	D	D	D	D	D	D	3 431
33232	Ornamental & architectural metal products mfg	—	52	26	2 461	86 844	1 651	3 425	51 986	172 145	123 031	295 010	17 617
332321	Metal window & door mfg	—	9	6	450	13 891	184	396	5 313	34 069	28 064	62 385	702
332322	Sheet metal work mfg	—	29	17	1 687	62 595	1 282	2 668	42 016	118 140	80 673	198 873	15 955
332323	Ornamental & architectural metal work mfg	2	14	3	324	10 358	185	361	4 657	19 936	14 294	33 752	960
3324	Boiler, tank, & shipping container mfg	—	24	14	1 191	42 791	905	1 998	30 626	106 281	138 431	245 693	7 578
33242	Metal tank (heavy gauge) mfg	—	6	6	455	14 678	348	741	10 438	34 384	26 436	59 963	2 163
332420	Metal tank (heavy gauge) mfg	—	6	6	455	14 678	348	741	10 438	34 384	26 436	59 963	2 163
33243	Metal can, box, & other metal container (light gauge) mfg	—	10	5	516	19 904	413	955	15 713	55 603	105 066	161 911	4 048
332431	Metal can mfg	—	3	3	e	D	D	D	D	D	D	D	D
3325	Hardware mfg	2	12	5	2 267	78 386	1 790	2 851	51 639	195 274	103 536	295 302	12 371
33251	Hardware mfg	2	12	5	2 267	78 386	1 790	2 851	51 639	195 274	103 536	295 302	12 371
332510	Hardware mfg	2	12	5	2 267	78 386	1 790	2 851	51 639	195 274	103 536	295 302	12 371
3326	Spring & wire product mfg	—	17	7	619	24 784	487	1 033	15 052	51 073	23 012	73 349	2 976
33261	Spring & wire product mfg	—	17	7	619	24 784	487	1 033	15 052	51 073	23 012	73 349	2 976
332612	Spring (light gauge) mfg	—	4	3	356	16 287	279	584	9 439	33 282	11 245	44 269	2 788
332618	Other fabricated wire product mfg	1	13	4	263	8 497	208	449	5 613	17 791	11 767	29 080	188
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	329	84	6 805	225 051	5 351	10 875	151 638	465 230	238 186	701 841	44 117
33271	Machine shops	1	271	61	4 865	159 729	3 800	7 570	107 688	332 066	159 297	491 028	28 688
332710	Machine shops	1	271	61	4 865	159 729	3 800	7 570	107 688	332 066	159 297	491 028	28 688
33272	Turned product & screw, nut, & bolt mfg	—	58	23	1 940	65 322	1 551	3 305	43 950	133 164	78 889	210 813	15 429
332721	Precision turned product mfg	—	51	22	1 793	60 253	1 431	3 060	40 208	120 521	59 612	179 088	14 210
3328	Coating, engraving, heat treating, & allied activities	3	109	34	2 590	75 455	2 020	4 192	49 899	195 541	96 736	291 699	16 504
33281	Coating, engraving, heat treating, & allied activities	3	109	34	2 590	75 455	2 020	4 192	49 899	195 541	96 736	291 699	16 504
332811	Metal heat treating	6	21	11	620	22 041	461	1 056	15 062	87 856	58 396	145 952	9 093
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	30	11	718	19 080	565	1 124	12 361	43 588	13 738	56 888	2 708
332813	Electroplating, plating, polishing, anodizing, & coloring	—	58	12	1 252	34 334	994	2 012	22 476	64 097	24 602	88 859	4 703
3329	Other fabricated metal product mfg	—	82	35	4 306	164 467	2 942	6 095	93 797	434 292	299 703	737 172	28 832
33291	Metal valve mfg	—	11	8	1 690	67 078	1 019	2 292	34 118	206 715	143 496	357 183	15 628
332911	Industrial valve mfg	—	4	4	746	31 220	457	1 022	16 512	100 547	48 583	155 857	D
332912	Fluid power valve & hose fitting mfg	—	6	3	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	—	1	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	71	27	2 616	97 389	1 923	3 803	59 679	227 577	156 207	379 989	13 204
332996	Fabricated pipe & pipe fitting mfg	—	11	5	355	11 428	256	518	6 559	31 551	18 363	49 531	D
332997	Industrial pattern mfg	—	24	4	e	D	D	D	D	D	D	D	1 226
332998	Enameled iron & metal sanitary ware mfg	—	1	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	28	13	1 140	36 071	859	1 745	23 317	87 876	95 292	181 652	7 509

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg	-	514	224	32 096	1 351 692	20 081	41 452	749 681	3 110 374	2 401 377	5 518 258	208 574
3331	Agriculture, construction, & mining machinery mfg	-	31	22	6 144	269 901	3 473	7 210	143 233	765 813	705 874	1 488 616	45 673
33311	Agricultural implement mfg	-	9	5	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	5	3	533	18 301	301	618	6 871	27 114	31 930	60 879	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	4	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	20	16	4 570	209 207	2 500	5 169	111 372	525 656	536 774	1 083 904	30 853
333120	Construction machinery mfg	-	20	16	4 570	209 207	2 500	5 169	111 372	525 656	536 774	1 083 904	30 853
3332	Industrial machinery mfg	-	69	24	2 101	83 458	1 393	2 997	45 625	194 689	181 617	369 386	10 387
33329	Other industrial machinery mfg	-	62	21	1 893	75 053	1 308	2 823	42 607	180 764	152 322	325 784	10 151
333291	Paper industry machinery mfg	-	11	6	537	26 844	301	627	12 039	60 705	46 480	102 972	1 779
333293	Printing machinery & equipment mfg	-	13	3	516	15 042	472	1 022	12 947	50 325	35 038	77 068	3 585
333298	All other industrial machinery mfg	1	31	10	566	21 505	345	659	10 407	44 172	52 120	104 333	3 717
3333	Commercial & service industry machinery mfg	4	26	13	1 459	48 446	733	1 450	16 135	130 252	86 248	211 012	4 584
33331	Commercial & service industry machinery mfg	4	26	13	1 459	48 446	733	1 450	16 135	130 252	86 248	211 012	4 584
333319	Other commercial & service industry machinery mfg	4	20	11	1 263	43 349	619	1 233	14 081	118 844	78 327	191 894	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	16	7	953	36 481	508	1 045	17 353	78 459	61 701	138 954	1 670
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	16	7	953	36 481	508	1 045	17 353	78 459	61 701	138 954	1 670
333415	AC & warm air heating & commercial/ industrial refig equip mfg	-	10	5	828	32 095	470	968	16 267	70 555	55 514	124 730	1 456
3335	Metalworking machinery mfg	1	225	82	5 951	257 588	4 483	9 692	178 869	486 161	225 921	716 120	44 184
33351	Metalworking machinery mfg	1	225	82	5 951	257 588	4 483	9 692	178 869	486 161	225 921	716 120	44 184
333511	Industrial mold mfg	-	68	25	1 934	92 441	1 571	3 570	70 870	156 953	55 697	211 151	16 327
333512	Machine tool (metal cutting types) mfg	1	12	9	497	21 239	338	746	11 601	45 565	33 973	81 052	1 971
333514	Special die & tool, die set, jig, & fixture mfg	1	101	30	2 011	85 012	1 545	3 281	62 317	167 379	59 611	225 908	19 664
333515	Cutting tool & machine tool accessory mfg	-	32	11	1 039	39 495	689	1 491	23 225	77 557	41 417	125 468	4 929
333518	Other metalworking machinery mfg	4	7	4	336	12 172	248	403	6 115	25 682	26 933	51 359	837
3336	Engine, turbine, & power transmission equipment mfg	-	37	24	9 369	397 134	6 021	12 065	227 527	891 238	615 837	1 515 137	80 071
33361	Engine, turbine, & power transmission equipment mfg	-	37	24	9 369	397 134	6 021	12 065	227 527	891 238	615 837	1 515 137	80 071
333611	Turbine & turbine generator set unit mfg	-	1	1	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg	-	11	7	1 704	74 389	1 084	1 922	40 982	179 564	83 425	261 383	23 012
333613	Mechanical power transmission equipment mfg	-	13	8	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	12	8	5 241	223 392	3 592	7 454	138 712	514 970	297 288	813 839	38 095
3339	Other general-purpose machinery mfg	-	110	52	6 119	258 684	3 470	6 993	120 939	563 762	524 179	1 079 033	22 005
33392	Material handling equipment mfg	-	31	13	1 645	71 490	892	1 834	31 569	189 999	163 076	339 984	5 687
333922	Conveyor & conveying equipment mfg	-	10	3	434	17 830	251	517	7 251	51 262	34 427	87 274	1 997
333923	Overhead traveling crane, hoist, & monorail system mfg	-	12	8	1 036	47 219	528	1 092	21 279	108 581	85 261	179 392	3 069

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	-	70	36	4 298	181 674	2 474	4 982	86 835	367 313	347 982	718 792	15 538
333991	Power-driven handtool mfg	-	3	1	e	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	2	8	6	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	-	16	8	1 260	51 823	684	1 274	22 978	99 553	128 861	226 401	5 652
333994	Industrial process furnace & oven mfg ..	-	10	6	636	29 784	343	766	12 698	47 003	50 829	101 278	D
333995	Fluid power cylinder & actuator mfg	-	7	6	e	D	D	D	D	D	D	D	1 398
333996	Fluid power pump & motor mfg	-	3	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	-	21	7	525	27 797	245	424	9 619	74 598	38 409	112 304	765
334	Computer & electronic product mfg	-	125	60	8 803	373 522	4 951	9 596	155 879	1 533 852	1 152 266	2 673 291	49 335
3341	Computer & peripheral equipment mfg	1	11	4	263	13 467	188	241	10 097	34 512	77 883	109 461	D
33411	Computer & peripheral equipment mfg	1	11	4	263	13 467	188	241	10 097	34 512	77 883	109 461	D
3344	Semiconductor & other electronic component mfg	1	46	26	2 530	80 526	1 641	3 204	35 420	152 325	117 240	268 985	D
33441	Semiconductor & other electronic component mfg	1	46	26	2 530	80 526	1 641	3 204	35 420	152 325	117 240	268 985	D
334412	Bare printed circuit board mfg	-	6	3	297	13 789	214	430	5 302	19 424	12 058	31 308	1 136
334413	Semiconductor & related device mfg ...	-	4	2	e	D	D	D	D	D	D	D	1 504
334416	Electronic coil, transformer, & other inductor mfg	-	6	3	306	8 396	216	441	3 998	15 613	12 945	28 181	1 050
334418	Printed circuit assembly (electronic assembly) mfg	5	8	7	504	11 950	289	546	4 707	28 640	25 509	53 852	1 489
334419	Other electronic component mfg	-	16	7	692	22 744	439	789	8 744	45 411	35 315	81 867	2 759
3345	Navigational, measuring, medical, & control instruments mfg	-	51	25	5 747	271 397	2 967	5 849	106 741	1 328 391	940 342	2 258 949	35 700
33451	Navigational, measuring, medical, & control instruments mfg	-	51	25	5 747	271 397	2 967	5 849	106 741	1 328 391	940 342	2 258 949	35 700
334510	Electromedical & electrotherapeutic apparatus mfg	-	12	7	2 461	129 970	755	1 535	26 061	596 139	318 269	922 390	14 243
334512	Automatic environmental control mfg	2	5	3	411	14 335	300	537	8 258	13 036	18 148	32 182	D
334513	Industrial process control instrument mfg	-	11	4	504	16 705	274	427	6 063	29 664	23 284	54 158	1 798
334514	Totalizing fluid meter & counting device mfg .	-	3	2	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	4	3	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	99	60	17 512	646 919	12 220	22 317	368 007	1 749 906	2 014 879	3 749 957	108 713
3351	Electric lighting equipment mfg	-	9	6	634	18 257	409	806	9 554	66 792	50 764	118 163	1 768
33512	Lighting fixture mfg	-	9	6	634	18 257	409	806	9 554	66 792	50 764	118 163	1 768
335122	Commercial/industrial/institutional electric lighting fixture mfg ...	-	5	4	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	3	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	4	3	2 084	73 108	1 505	3 110	43 275	230 146	222 148	453 300	8 142
33521	Small electrical appliance mfg	-	2	2	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	2	2	g	D	D	D	D	D	D	D	D

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	MILWAUKEE—RACINE, WI CMSA—Con.												
	Milwaukee—Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3353	Electrical equipment mfg ..	-	57	36	12 858	499 367	8 898	15 506	284 020	1 272 560	1 595 876	2 855 795	85 236
33531	Electrical equipment mfg	-	57	36	12 858	499 367	8 898	15 506	284 020	1 272 560	1 595 876	2 855 795	85 236
335311	Power, distribution, & specialty transformer mfg	-	8	5	g	D	D	D	D	D	D	D	13 213
335312	Motor & generator mfg	-	12	10	2 383	80 560	1 574	3 140	41 449	223 844	252 876	482 441	D
335313	Switchgear & switchboard apparatus mfg	-	6	3	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	31	18	7 561	285 190	5 357	8 005	155 544	692 661	974 925	1 648 723	55 116
3359	Other electrical equipment & component mfg	-	29	15	1 936	56 187	1 408	2 895	31 158	180 408	146 091	322 699	13 567
33591	Battery mfg	-	3	1	e	D	D	D	D	D	D	D	D
335911	Storage battery mfg	-	2	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	7	3	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg	-	5	2	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	2	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	1	18	10	825	24 353	598	1 203	13 040	50 811	47 127	97 216	3 691
335991	Carbon & graphite product mfg	-	3	3	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	1	15	7	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	68	33	8 643	380 963	5 946	11 894	261 303	1 169 087	1 562 448	2 753 636	118 312
3362	Motor vehicle body & trailer mfg	3	8	3	e	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	3	8	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	43	23	i	D	D	D	D	D	D	D	77 627
33632	Motor vehicle electrical & electronic equipment mfg	-	11	3	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	10	2	g	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	6	4	267	10 790	193	475	6 015	27 695	25 243	52 894	D
336370	Motor vehicle metal stamping	-	6	4	267	10 790	193	475	6 015	27 695	25 243	52 894	D
33639	Other motor vehicle parts mfg	-	14	10	2 909	119 924	2 220	4 138	95 870	314 923	732 320	1 076 000	59 165
336399	All other motor vehicle parts mfg	-	14	10	2 909	119 924	2 220	4 138	95 870	314 923	732 320	1 076 000	59 165
3365	Railroad rolling stock mfg ..	-	4	3	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	-	4	3	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	-	4	3	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	4	3	h	D	D	D	D	D	D	D	37 864
33699	Other transportation equipment mfg	-	4	3	h	D	D	D	D	D	D	D	37 864
336991	Motorcycle, bicycle, & parts mfg	-	3	3	2 711	143 875	1 432	3 249	83 983	372 178	387 780	752 066	D
337	Furniture & related product mfg	2	136	19	1 696	52 366	1 294	2 519	34 349	99 323	74 025	173 893	6 852
3371	Household & institutional furniture & kitchen cabinet mfg	2	99	9	922	27 565	715	1 418	18 971	47 211	36 230	84 035	D
33711	Wood kitchen cabinet & counter top mfg	2	61	5	548	16 561	418	832	11 694	26 439	22 060	48 767	1 607
337110	Wood kitchen cabinet & counter top mfg ...	2	61	5	548	16 561	418	832	11 694	26 439	22 060	48 767	1 607
33712	Household & institutional furniture mfg	2	38	4	374	11 004	297	586	7 277	20 772	14 170	35 268	D

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	MILWAUKEE-RACINE, WI CMSA—Con.												
	Milwaukee-Waukesha, WI PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	1	33	9	723	23 718	535	1 033	14 665	49 870	35 743	85 497	4 430
33721	Office furniture (including fixtures) mfg	1	33	9	723	23 718	535	1 033	14 665	49 870	35 743	85 497	4 430
337214	Office furniture (except wood) mfg	—	3	2	285	7 983	228	438	5 762	18 582	10 130	28 268	D
337215	Showcase, partition, shelving, & locker mfg	2	17	3	257	9 995	182	366	5 660	17 117	17 459	34 939	864
339	Miscellaneous mfg.....	—	230	67	6 708	206 823	4 337	7 975	106 280	503 835	434 901	939 819	36 239
3391	Medical equipment & supplies mfg	1	80	16	1 482	46 698	823	1 391	19 253	112 755	68 603	182 426	5 701
33911	Medical equipment & supplies mfg	1	80	16	1 482	46 698	823	1 391	19 253	112 755	68 603	182 426	5 701
339112	Surgical & medical instrument mfg	1	16	7	451	16 507	220	423	5 428	37 503	21 795	59 995	2 965
339113	Surgical appliance & supplies mfg	—	11	4	625	20 645	329	475	7 946	54 316	38 786	93 222	2 165
339116	Dental laboratories ..	5	44	4	318	7 681	216	391	4 865	17 192	6 058	23 490	408
3399	Other miscellaneous mfg ..	—	150	51	5 226	160 125	3 514	6 584	87 027	391 080	366 298	757 393	30 538
33992	Sporting & athletic goods mfg	1	28	7	573	15 312	398	724	8 125	67 384	75 875	142 400	5 521
339920	Sporting & athletic goods mfg	1	28	7	573	15 312	398	724	8 125	67 384	75 875	142 400	5 521
33994	Office supplies (except paper) mfg	—	9	4	482	14 975	208	355	4 513	24 559	10 294	34 511	D
339943	Marking device mfg ...	—	5	1	e	D	D	D	D	D	D	D	51
33995	Sign mfg	—	59	19	2 048	71 426	1 318	2 431	35 717	146 230	140 544	289 679	16 667
339950	Sign mfg	—	59	19	2 048	71 426	1 318	2 431	35 717	146 230	140 544	289 679	16 667
33999	All other miscellaneous mfg	—	35	17	1 929	53 826	1 445	2 813	36 021	143 565	131 011	272 249	6 794
339991	Gasket, packing, & sealing device mfg ...	—	12	6	674	19 388	547	1 061	13 810	38 242	47 542	85 581	1 460
339994	Broom, brush, & mop mfg	1	6	6	997	27 416	718	1 378	18 152	84 424	66 305	149 240	4 568
339999	All other miscellaneous mfg	—	12	5	251	6 908	174	364	3 969	20 569	16 975	36 905	742
	Racine, WI PMSA												
31-33	Manufacturing	—	379	141	18 869	664 097	13 445	26 370	393 033	3 236 876	1 989 171	5 229 538	192 568
311	Food mfg	—	16	7	1 032	26 072	852	1 600	16 326	310 862	195 539	505 675	9 676
3113	Sugar & confectionery product mfg	—	3	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	—	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	—	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	—	3	3	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	3	3	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	—	3	3	e	D	D	D	D	D	D	D	D
322	Paper mfg	1	6	4	444	19 992	291	667	10 388	48 335	58 015	106 086	5 168
3222	Converted paper product mfg	1	6	4	444	19 992	291	667	10 388	48 335	58 015	106 086	5 168
32221	Paperboard container mfg	1	5	3	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	1	5	3	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	29	7	882	24 118	669	1 273	15 349	45 624	29 602	73 209	2 479
3231	Printing & related support activities	—	29	7	882	24 118	669	1 273	15 349	45 624	29 602	73 209	2 479
32311	Printing	—	28	7	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	14	5	475	12 685	368	623	8 426	23 685	14 593	37 744	1 347
323113	Commercial screen printing	—	6	2	349	10 260	257	592	6 162	19 657	13 757	31 922	848
325	Chemical mfg	—	7	5	g	D	D	D	D	D	D	D	33 448
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	3	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	3	3	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	—	2	2	g	D	D	D	D	D	D	D	D

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	MILWAUKEE-RACINE, WI CMSA—Con.												
	Racine, WI PMSA—Con.												
31-33	Manufacturing—Con.												
326	Plastics & rubber products mfg	1	16	12	994	31 031	770	1 547	21 392	75 996	54 386	130 200	4 133
3261	Plastics product mfg	1	11	7	368	10 139	297	565	6 420	27 870	14 881	42 628	1 569
32619	Other plastics product mfg	—	8	6	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	8	6	e	D	D	D	D	D	D	D	D
3262	Rubber product mfg	2	5	5	626	20 892	473	982	14 972	48 126	39 505	87 572	2 564
32629	Other rubber product mfg	2	5	5	626	20 892	473	982	14 972	48 126	39 505	87 572	2 564
326291	Rubber product mfg for mechanical use	3	3	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	—	13	3	642	24 935	531	1 018	18 815	81 400	35 646	118 343	D
3272	Glass & glass product mfg	—	1	1	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	—	1	1	e	D	D	D	D	D	D	D	D
327213	Glass container mfg	—	1	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	—	9	2	e	D	D	D	D	D	D	D	2 891
331	Primary metal mfg	4	15	9	1 621	52 396	1 247	3 064	35 692	119 166	120 641	238 687	12 895
3315	Foundries	5	12	7	1 545	48 533	1 188	2 935	33 366	105 042	74 080	179 387	11 241
33151	Ferrous metal foundries	—	3	2	421	13 746	337	652	10 206	29 111	18 819	47 584	D
33152	Nonferrous metal foundries	7	9	5	1 124	34 787	851	2 283	23 160	75 931	55 261	131 803	D
331521	Aluminum die-casting foundries	8	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	103	42	3 568	115 749	2 567	5 095	68 900	270 983	207 279	477 851	18 717
3321	Forging & stamping	—	10	7	507	19 177	351	689	11 004	50 189	46 152	95 450	3 180
33211	Forging & stamping	—	10	7	507	19 177	351	689	11 004	50 189	46 152	95 450	3 180
332111	Iron & steel forging	—	1	1	e	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg	—	3	3	368	12 558	293	601	9 449	25 818	42 032	67 528	D
33241	Power boiler & heat exchanger mfg	—	1	1	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	1	1	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	48	16	1 379	40 085	1 056	2 142	25 914	93 473	53 440	145 282	7 226
33271	Machine shops	—	37	12	1 104	32 115	823	1 697	20 633	75 574	47 512	121 310	4 797
332710	Machine shops	—	37	12	1 104	32 115	823	1 697	20 633	75 574	47 512	121 310	4 797
33272	Turned product & screw, nut, & bolt mfg	2	11	4	275	7 970	233	445	5 281	17 899	5 928	23 972	2 429
332721	Precision turned product mfg	2	9	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	1	17	6	367	10 272	255	501	5 870	24 141	5 507	29 658	1 297
33281	Coating, engraving, heat treating, & allied activities	1	17	6	367	10 272	255	501	5 870	24 141	5 507	29 658	1 297
3329	Other fabricated metal product mfg	—	11	6	608	22 940	368	752	11 447	53 872	46 867	103 634	4 267
33291	Metal valve mfg	—	3	3	375	14 347	204	431	5 658	36 536	39 597	78 519	3 050
332912	Fluid power valve & hose fitting mfg	1	2	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg	—	71	20	3 313	133 696	2 253	4 423	83 528	418 153	457 395	861 718	46 103
3331	Agriculture, construction, & mining machinery mfg	—	11	6	1 279	48 481	872	1 755	28 807	230 281	324 859	543 893	D
33311	Agricultural implement mfg	—	5	4	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	39	5	456	18 317	324	667	11 682	31 621	11 319	42 474	3 780
33351	Metalworking machinery mfg	1	39	5	456	18 317	324	667	11 682	31 621	11 319	42 474	3 780
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	1 025	48 742	715	1 299	32 302	126 059	86 520	209 491	4 707
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	1 025	48 742	715	1 299	32 302	126 059	86 520	209 491	4 707
333612	Speed changer, industrial high-speed drive, & gear mfg	—	1	1	e	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D

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	MILWAUKEE-RACINE, WI CMSA—Con.												
	Racine, WI PMSA—Con.												
31-33	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg	—	11	4	481	16 436	299	617	9 871	26 737	29 054	56 758	D
33399	All other general-purpose machinery mfg	—	7	3	423	14 161	262	538	8 561	22 020	23 802	46 919	D
333996	Fluid power pump & motor mfg	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	23	10	2 710	89 093	1 962	3 475	47 193	477 787	197 262	677 347	17 178
3351	Electric lighting equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	—	2	2	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	2	20	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	20	7	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	10	6	939	29 240	783	1 648	21 988	67 528	68 400	137 384	4 376
335314	Relay & industrial control mfg	9	9	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	9	6	e	D	D	D	D	D	D	D	520
339	Miscellaneous mfg	—	22	8	743	21 793	483	896	9 727	42 332	32 716	74 302	7 280
3391	Medical equipment & supplies mfg	1	11	4	415	12 806	258	435	5 276	23 586	8 399	32 156	D
33911	Medical equipment & supplies mfg	1	11	4	415	12 806	258	435	5 276	23 586	8 399	32 156	D
3399	Other miscellaneous mfg ..	—	11	4	328	8 987	225	461	4 451	18 746	24 317	42 146	D
33999	All other miscellaneous mfg	—	3	2	e	D	D	D	D	D	D	D	D
	MINNEAPOLIS-ST. PAUL, MN-WI MSA												
31-33	Manufacturing	—	5 348	1 832	234 192	8 760 753	149 754	301 937	4 517 611	22 995 873	21 548 557	44 599 702	1 982 886
	Minneapolis—St. Paul, MN—WI MSA (MN Part)	—	5 158	1 769	227 383	8 561 712	144 652	292 281	4 394 330	22 503 689	20 999 159	43 556 025	1 937 605
	Minneapolis—St. Paul, MN—WI MSA (WI Part)	—	190	63	6 809	199 041	5 102	9 656	123 281	492 184	549 398	1 043 677	45 281
311	Food mfg	1	291	119	14 388	436 039	9 255	18 694	236 016	1 385 688	2 256 152	3 664 125	113 973
3111	Animal food mfg	3	25	12	600	23 809	327	682	11 919	85 356	169 432	257 330	12 443
31111	Animal food mfg	3	25	12	600	23 809	327	682	11 919	85 356	169 432	257 330	12 443
311119	Other animal food mfg	3	21	11	f	D	D	D	D	D	D	D	D
3112	Grain & oilseed milling	—	18	9	575	23 703	463	1 013	18 192	175 689	365 560	543 757	10 758
31121	Flour milling & malt mfg ..	—	14	8	e	D	D	D	D	D	D	D	D
311211	Flour milling	—	9	7	331	13 096	265	630	10 507	45 603	253 244	299 654	D
3113	Sugar & confectionery product mfg	—	14	6	1 110	32 036	739	1 507	16 841	71 865	132 090	207 863	D
31133	Confectionery mfg from purchased chocolate ..	—	7	3	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate	—	7	3	e	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg	—	6	3	f	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg ..	—	6	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	19	11	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	—	9	6	1 145	33 215	535	990	11 294	33 559	72 543	106 112	D
311412	Frozen specialty food mfg	—	8	6	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	4	10	5	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MINNEAPOLIS—ST. PAUL, MN—WI MSA—Con.													
	Manufacturing—Con.													
311	Food mfg—Con.													
3115	Dairy product mfg	-	22	15	2 221	92 339	1 183	2 682	40 837	279 867	650 151	929 376	21 321	
31151	Dairy product (except frozen) mfg	-	20	15	g	D	D	D	D	D	D	D	D	
311511	Fluid milk mfg	-	6	6	f	D	D	D	D	D	D	D	D	
311513	Cheese mfg	-	7	4	e	D	D	D	D	D	D	D	D	
311514	Dry, condensed, & evaporated dairy product mfg	-	7	5		1 028	48 157	421	863	13 389	155 207	192 486	346 621	7 487
3116	Meat product mfg	4	21	10	1 606	43 477	1 170	2 403	25 275	78 681	285 126	364 604	7 891	
31161	Animal slaughtering & processing	4	21	10	1 606	43 477	1 170	2 403	25 275	78 681	285 126	364 604	7 891	
311612	Meat processed from carcasses	6	13	7	1 305	34 865	923	1 842	18 704	57 856	181 515	239 392	D	
3118	Bakeries & tortilla mfg	1	126	36	4 328	104 946	2 870	5 593	65 671	290 757	293 278	592 143	17 028	
31181	Bread & bakery product mfg	1	110	26	2 849	58 522	1 685	3 092	36 788	149 855	135 300	289 231	9 122	
311811	Retail bakeries	1	68	7	560	7 854	249	346	3 707	19 832	11 586	31 693	485	
311812	Commercial bakeries	1	35	15	1 787	39 559	1 009	1 915	24 483	98 084	80 254	178 279	6 084	
311813	Frozen cakes, pies, & other pastries mfg	2	7	4	502	11 109	427	831	8 598	31 939	43 460	79 259	2 553	
31182	Cookie, cracker, & pasta mfg	1	15	9	g	D	D	D	D	D	D	D	D	
311822	Flour mixes & dough mfg from purchased flour	2	10	6	g	D	D	D	D	D	D	D	D	
311823	Dry pasta mfg	-	3	1	e	D	D	D	D	D	D	D	D	
3119	Other food mfg	1	45	20	2 479	73 965	1 702	3 179	40 049	338 214	253 830	597 440	24 088	
31191	Snack food mfg	-	7	3	f	D	D	D	D	D	D	D	D	
311919	Other snack food mfg	-	5	2	e	D	D	D	D	D	D	D	D	
31199	All other food mfg	2	28	15	1 717	51 885	1 377	2 553	31 180	137 825	166 123	309 461	20 337	
311991	Perishable prepared food mfg	-	11	8	655	16 476	577	1 054	12 506	42 539	37 951	85 696	12 118	
311999	All other miscellaneous food mfg	2	17	7	1 062	35 409	800	1 499	18 674	95 286	128 172	223 765	8 219	
312	Beverage & tobacco product mfg	1	18	8	1 735	61 453	1 069	1 816	29 561	234 876	450 517	688 797	9 682	
3121	Beverage mfg	1	18	8	1 735	61 453	1 069	1 816	29 561	234 876	450 517	688 797	9 682	
31211	Soft drink & ice mfg	-	7	3	f	D	D	D	D	D	D	D	D	
312111	Soft drink mfg	-	3	2	f	D	D	D	D	D	D	D	D	
31212	Breweries	3	6	3	f	D	D	D	D	D	D	D	D	
312120	Breweries	3	6	3	f	D	D	D	D	D	D	D	D	
313	Textile mills	1	25	6	e	D	D	D	D	D	D	D	D	
3132	Fabric mills	-	10	4	e	D	D	D	D	D	D	D	D	
314	Textile product mills	2	82	9	799	16 706	609	1 162	9 950	37 160	34 955	71 722	1 385	
3141	Textile furnishings mills	4	31	3	311	5 375	252	466	3 740	10 788	12 546	23 384	474	
31412	Curtain & linen mills	3	28	3	e	D	D	D	D	D	D	D	D	
3149	Other textile product mills	1	51	6	488	11 331	357	696	6 210	26 372	22 409	48 338	911	
31499	All other textile product mills	1	31	4	348	7 852	263	516	4 752	15 948	14 959	30 861	554	
314999	All other miscellaneous textile product mills	1	31	4	348	7 852	263	516	4 752	15 948	14 959	30 861	554	
315	Apparel mfg	3	77	10	727	14 028	578	1 042	8 204	30 313	29 754	58 774	835	
3152	Cut & sew apparel mfg	3	48	6	408	7 101	316	503	4 125	13 148	10 495	23 362	298	
3159	Apparel accessories & other apparel mfg	2	26	4	293	6 406	237	493	3 633	15 825	17 839	32 655	487	
31599	Apparel accessories & other apparel mfg	2	26	4	293	6 406	237	493	3 633	15 825	17 839	32 655	487	
316	Leather & allied product mfg	1	16	5	e	D	D	D	D	D	D	D	838	
321	Wood product mfg	-	132	36	5 187	234 239	4 033	8 312	164 164	473 047	779 613	1 260 300	19 605	
3212	Veneer, plywood, & engineered wood product mfg	2	13	7	499	14 348	396	862	9 134	28 368	33 813	62 658	1 583	
32121	Veneer, plywood, & engineered wood product mfg	2	13	7	499	14 348	396	862	9 134	28 368	33 813	62 658	1 583	
321214	Truss mfg	1	7	6	427	12 136	338	711	7 399	23 487	27 273	51 121	1 203	

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
321	Wood product mfg—Con.												
3219	Other wood product mfg ...	—	107	27	4 542	215 596	3 528	7 266	152 735	435 311	700 081	1 142 030	16 676
32191	Millwork	—	41	10	h	D	D	D	D	D	D	D	14 605
321911	Wood window & door mfg	—	23	6	h	D	D	D	D	D	D	D	D
32192	Wood container & pallet mfg	3	30	11	553	7 738	449	665	5 458	15 989	18 089	34 267	1 094
321920	Wood container & pallet mfg	3	30	11	553	7 738	449	665	5 458	15 989	18 089	34 267	1 094
32199	All other wood product mfg	3	36	6	e	D	D	D	D	D	D	D	977
321999	All other miscellaneous wood product mfg ...	3	31	4	e	D	D	D	D	D	D	D	867
322	Paper mfg	—	97	62	i	D	D	D	D	D	D	D	72 067
3221	Pulp, paper, & paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	95	60	i	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	—	48	36	3 917	134 287	2 908	5 695	84 246	320 716	460 399	781 498	33 382
322211	Corrugated & solid fiber box mfg	—	28	23	h	D	D	D	D	D	D	D	D
322212	Folding paperboard box mfg	—	13	11	g	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	22	11	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	—	16	6	527	19 737	349	689	10 272	54 658	66 459	120 960	D
322224	Uncoated paper & multiwall bag mfg	—	2	2	e	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	—	15	10	g	D	D	D	D	D	D	D	D
322231	Die-cut paper & paperboard office supplies mfg	—	6	4	g	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	8	6	672	25 851	533	1 116	15 228	51 882	55 119	106 431	D
323	Printing & related support activities.....	1	769	206	24 393	866 411	16 304	32 736	500 858	1 892 044	1 300 376	3 192 946	154 878
3231	Printing & related support activities.....	1	769	206	24 393	866 411	16 304	32 736	500 858	1 892 044	1 300 376	3 192 946	154 878
32311	Printing	1	659	177	21 194	742 032	14 127	28 125	427 800	1 619 576	1 246 840	2 865 954	137 983
323110	Commercial lithographic printing ..	1	295	98	13 305	500 620	9 118	18 680	298 324	1 001 729	836 905	1 841 287	98 912
323112	Commercial flexographic printing ..	2	23	11	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	—	85	20	2 371	63 267	1 523	2 785	33 868	180 726	90 670	267 495	12 822
323114	Quick printing	2	156	16	1 291	35 660	884	1 546	19 203	77 229	42 990	120 356	4 560
323116	Manifold business form printing	—	20	13	1 781	53 215	1 015	1 907	27 477	174 035	101 524	277 645	3 419
323117	Book printing.....	2	11	7	e	D	D	D	D	D	D	D	D
323119	Other commercial printing.....	3	46	6	757	28 066	471	985	14 413	44 330	47 688	91 532	2 493
32312	Support activities for printing	—	110	29	3 199	124 379	2 177	4 611	73 058	272 468	53 536	326 992	16 895
323121	Tradebinding & related work	—	42	9	678	18 754	585	1 136	13 543	33 312	7 071	40 665	1 161
323122	Prepress services	—	68	20	2 521	105 625	1 592	3 475	59 515	239 156	46 465	286 327	15 734
324	Petroleum & coal products mfg	—	20	11	g	D	D	D	D	D	D	D	40 085
3241	Petroleum & coal products mfg	—	20	11	g	D	D	D	D	D	D	D	40 085
32411	Petroleum refineries	—	2	2	g	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	—	2	2	g	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, & saturated materials mfg	—	14	7	f	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture & block mfg	—	8	3	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle & coating materials mfg	—	6	4	620	25 117	527	1 172	20 532	96 494	149 783	240 760	6 260

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	2	168	61	6 800	284 107	3 822	7 468	126 687	1 129 766	847 201	1 975 124	114 972
3254	Pharmaceutical & medicine mfg	2	32	10	1 429	60 564	618	936	16 874	188 889	109 074	296 392	18 089
32541	Pharmaceutical & medicine mfg	2	32	10	1 429	60 564	618	936	16 874	188 889	109 074	296 392	18 089
325411	Medicinal & botanical mfg	2	7	2	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	1	11	4	406	16 957	162	195	3 048	94 956	40 975	133 894	3 519
325413	In-vitro diagnostic substance mfg	2	8	4	538	21 040	223	256	7 107	46 367	21 362	67 019	4 845
3255	Paint, coating, & adhesive mfg	1	24	9	633	25 032	272	516	7 949	72 221	94 140	169 307	D
32551	Paint & coating mfg	2	16	6	483	18 417	169	323	4 724	41 518	49 063	93 679	3 686
325510	Paint & coating mfg ...	2	16	6	483	18 417	169	323	4 724	41 518	49 063	93 679	3 686
3256	Soap, cleaning compound, & toilet preparation mfg ..	2	46	19	3 437	143 433	2 222	4 579	77 854	678 913	459 364	1 132 020	54 727
32561	Soap & cleaning compound mfg	4	34	11	1 797	83 131	1 110	2 557	44 244	358 847	275 692	635 531	D
325611	Soap & other detergent mfg	8	12	4	e	D	D	D	D	D	D	D	5 070
325612	Polish & other sanitation good mfg ..	7	18	6	f	D	D	D	D	D	D	D	D
325613	Surface active agent mfg	-	4	1	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	12	8	1 640	60 302	1 112	2 022	33 610	320 066	183 672	496 489	D
325620	Toilet preparation mfg .	-	12	8	1 640	60 302	1 112	2 022	33 610	320 066	183 672	496 489	D
3259	Other chemical product mfg	1	42	16	938	39 355	509	1 033	17 149	105 883	107 920	212 675	7 138
32591	Printing ink mfg	-	12	6	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg	-	12	6	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	3	28	9	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	297	134	15 352	489 806	11 103	22 545	284 516	1 167 112	958 064	2 114 733	115 360
3261	Plastics product mfg	1	265	122	14 014	448 101	10 172	20 632	260 080	1 062 037	892 145	1 943 481	110 473
32611	Unsupported plastics film, sheet, & bag mfg ..	-	30	18	2 091	67 483	1 497	3 252	39 678	187 363	231 882	417 086	16 244
326111	Unsupported plastics bag mfg	1	9	5	e	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	4	4	e	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg	-	17	9	1 224	38 504	939	2 101	24 008	120 144	129 812	247 204	8 949
32614	Polystyrene foam product mfg	7	9	5	e	D	D	D	D	D	D	D	2 730
326140	Polystyrene foam product mfg	7	9	5	e	D	D	D	D	D	D	D	2 730
32619	Other plastics product mfg	1	184	87	11 017	352 301	8 027	16 199	204 264	803 835	579 956	1 375 056	88 779
326199	All other plastics product mfg	1	177	85	10 902	349 085	7 938	16 029	202 370	789 678	572 760	1 353 713	88 334
3262	Rubber product mfg	1	32	12	1 338	41 705	931	1 913	24 436	105 075	65 919	171 252	4 887
32629	Other rubber product mfg	1	26	12	g	D	D	D	D	D	D	D	D
326291	Rubber product mfg for mechanical use	2	9	7	e	D	D	D	D	D	D	D	2 020
326299	All other rubber product mfg	1	17	5	893	26 619	622	1 265	15 664	73 718	46 615	120 683	D
327	Nonmetallic mineral product mfg	1	128	44	6 153	229 005	3 943	7 174	115 870	737 988	469 676	1 194 846	D
3272	Glass & glass product mfg .	-	20	5	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	20	5	f	D	D	D	D	D	D	D	D
327213	Glass container mfg ..	-	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	1	17	4	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
327	Nonmetallic mineral product mfg—Con.												
3273	Cement & concrete product mfg	2	71	32	2 522	97 692	1 565	3 078	49 562	228 316	184 617	411 707	20 483
32732	Ready-mix concrete mfg	3	34	16	957	33 101	536	1 020	17 845	92 919	91 796	184 937	7 704
327320	Ready-mix concrete mfg	3	34	16	957	33 101	536	1 020	17 845	92 919	91 796	184 937	7 704
32733	Concrete pipe, brick, & block mfg	1	16	9	f	D	D	D	D	D	D	D	D
327331	Concrete block & brick mfg	—	11	5	e	D	D	D	D	D	D	D	3 596
327332	Concrete pipe mfg	3	5	4	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	2	20	7	980	43 029	541	1 142	16 648	67 674	47 772	113 790	D
327390	Other concrete product mfg	2	20	7	980	43 029	541	1 142	16 648	67 674	47 772	113 790	D
3279	Other nonmetallic mineral product mfg	—	19	6	2 773	101 912	1 711	2 784	44 848	435 329	223 261	648 218	D
32791	Abrasive product mfg ...	—	4	1	h	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	—	4	1	h	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	55	35	4 476	176 310	3 455	7 628	118 994	387 795	426 967	817 423	41 104
3311	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	2	e	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	2	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	—	7	3	f	D	D	D	D	D	D	D	D
33121	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
331210	Iron & steel pipes & tubes mfg from purchased steel	—	4	3	f	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	—	2	2	e	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	2	2	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	3	10	5	e	D	D	D	D	D	D	D	D
3315	Foundries	—	33	23	2 849	105 727	2 140	4 771	70 715	221 949	129 994	352 203	D
33151	Ferrous metal foundries .	—	11	8	659	21 104	551	1 149	16 607	53 958	20 963	74 974	D
331511	Iron foundries	1	7	5	506	16 368	425	899	12 680	43 490	16 669	60 330	2 736
33152	Nonferrous metal foundries	—	22	15	2 190	84 623	1 589	3 622	54 108	167 991	109 031	277 229	15 156
331521	Aluminum die-casting foundries	—	5	4	f	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	2	2	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	—	12	7	1 301	49 877	890	2 155	30 222	92 223	53 902	145 833	7 471
332	Fabricated metal product mfg	1	1 137	395	37 868	1 380 093	26 956	55 084	836 671	2 983 601	2 171 992	5 197 902	231 464
3321	Forging & stamping	2	83	53	6 719	234 542	5 149	10 681	147 763	408 871	354 831	768 433	41 885
33211	Forging & stamping	2	83	53	6 719	234 542	5 149	10 681	147 763	408 871	354 831	768 433	41 885
332114	Custom roll forming ...	—	5	4	e	D	D	D	D	D	D	D	D
332116	Metal stamping	2	74	48	i	D	D	D	D	D	D	D	41 567
3322	Cutlery & handtool mfg	—	35	17	1 272	49 673	819	1 723	23 782	104 036	89 145	187 812	7 835
33221	Cutlery & handtool mfg ..	—	35	17	1 272	49 673	819	1 723	23 782	104 036	89 145	187 812	7 835
332212	Hand & edge tool mfg .	—	29	15	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	174	69	5 373	179 654	3 705	7 581	106 800	407 017	356 057	757 484	26 979
33231	Plate work & fabricated structural product mfg ..	1	54	14	916	34 385	603	1 238	19 119	71 302	101 974	172 405	4 488
332312	Fabricated structural metal mfg	1	33	10	615	23 250	391	809	12 374	56 125	76 835	132 365	3 492
33232	Ornamental & architectural metal products mfg	—	120	55	4 457	145 269	3 102	6 343	87 681	335 715	254 083	585 079	22 491
332321	Metal window & door mfg	—	19	10	1 266	34 803	848	1 687	19 437	81 630	105 483	184 544	2 867
332322	Sheet metal work mfg .	—	80	40	2 859	99 343	2 036	4 191	61 946	225 707	124 508	347 892	17 066
332323	Ornamental & architectural metal work mfg	4	21	5	332	11 123	218	465	6 298	28 378	24 092	52 643	2 558

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3324	Boiler, tank, & shipping container mfg	—	24	13	1 988	77 461	1 577	3 265	60 101	179 837	319 645	503 314	12 601
33241	Power boiler & heat exchanger mfg	1	10	5	e	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	1	10	5	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg	—	9	4	1 063	37 480	890	1 836	29 500	62 948	109 657	173 520	9 633
332420	Metal tank (heavy gauge) mfg	—	9	4	1 063	37 480	890	1 836	29 500	62 948	109 657	173 520	9 633
33243	Metal can, box, & other metal container (light gauge) mfg	—	5	4	f	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	5	4	f	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	—	34	13	676	18 167	480	886	11 265	41 636	40 450	81 849	6 866
33261	Spring & wire product mfg	—	34	13	676	18 167	480	886	11 265	41 636	40 450	81 849	6 866
332618	Other fabricated wire product mfg	—	27	10	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	514	138	10 305	392 088	7 995	16 681	264 748	818 206	368 480	1 186 670	80 048
33271	Machine shops	1	434	92	7 105	266 932	5 389	10 743	175 497	566 140	247 638	817 280	53 221
332710	Machine shops	1	434	92	7 105	266 932	5 389	10 743	175 497	566 140	247 638	817 280	53 221
33272	Turned product & screw, nut, & bolt mfg	—	80	46	3 200	125 156	2 606	5 938	89 251	252 066	120 842	369 390	26 827
332721	Precision turned product mfg	—	73	42	h	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, & washer mfg	—	7	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	2	143	55	3 957	117 499	3 074	6 196	75 398	237 735	120 563	358 274	22 283
33281	Coating, engraving, heat treating, & allied activities	2	143	55	3 957	117 499	3 074	6 196	75 398	237 735	120 563	358 274	22 283
332811	Metal heat treating	—	11	8	e	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	1	64	25	g	D	D	D	D	D	D	D	8 069
332813	Electroplating, plating, polishing, anodizing, & coloring	4	68	22	2 004	59 297	1 559	3 162	37 489	111 423	63 724	175 696	D
3329	Other fabricated metal product mfg	—	120	34	7 395	304 891	4 044	7 882	144 341	773 115	512 969	1 331 117	31 871
33291	Metal valve mfg	—	26	15	2 172	81 474	1 349	2 872	45 782	220 457	119 793	344 978	9 225
332911	Industrial valve mfg	—	7	6	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	17	9	1 368	51 462	887	2 028	30 873	143 982	66 286	212 163	D
33299	All other fabricated metal product mfg	—	94	19	5 223	223 417	2 695	5 010	98 559	552 658	393 176	986 139	22 646
332992	Small arms ammunition mfg	—	3	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) mfg	—	2	1	g	D	D	D	D	D	D	D	D
332995	Other ordnance & accessories mfg	—	1	1	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	1	58	12	726	23 741	518	993	14 200	63 925	29 398	96 646	2 717
333	Machinery mfg	—	593	205	26 451	1 073 842	15 488	31 737	503 940	2 793 148	2 329 123	5 119 372	171 830
3331	Agriculture, construction, & mining machinery mfg	1	35	14	1 936	66 086	1 305	2 627	39 121	188 165	283 511	474 208	25 294
33311	Agricultural implement mfg	3	22	6	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	5	18	5	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	11	7	f	D	D	D	D	D	D	D	D

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3332	Industrial machinery mfg . . .	—	84	30	3 328	141 624	1 564	3 333	50 282	395 177	319 742	702 647	17 137
33321	Sawmill & woodworking machinery mfg	—	6	3	e	D	D	D	D	D	D	D	D
333210	Sawmill & woodworking machinery mfg	—	6	3	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	71	26	h	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	1	15	4	e	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	—	14	8	612	24 122	356	764	11 582	50 056	44 361	92 934	D
333295	Semiconductor machinery mfg	—	5	4	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg	4	31	7	612	20 827	359	822	10 692	45 377	34 194	75 240	8 056
3333	Commercial & service industry machinery mfg . .	—	62	26	3 709	158 073	2 033	4 153	66 558	473 424	352 109	823 249	23 385
33331	Commercial & service industry machinery mfg	—	62	26	3 709	158 073	2 033	4 153	66 558	473 424	352 109	823 249	23 385
333311	Automatic vending machine mfg	—	6	2	e	D	D	D	D	D	D	D	D
333313	Office machinery mfg	1	6	3	352	14 873	128	218	3 985	39 993	32 482	72 554	719
333314	Optical instrument & lens mfg	4	8	5	e	D	D	D	D	D	D	D	D
333315	Photographic & photocopying equipment mfg	—	10	5	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	30	11	2 326	100 457	1 310	2 719	43 702	337 586	262 656	595 704	18 654
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	45	20	4 140	164 956	2 454	4 515	69 096	377 045	393 159	776 363	12 525
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . .	—	45	20	4 140	164 956	2 454	4 515	69 096	377 045	393 159	776 363	12 525
333411	Air purification equipment mfg	—	11	3	e	D	D	D	D	D	D	D	D
333412	Industrial & commercial fan & blower mfg	2	7	4	392	12 401	255	444	6 337	24 367	23 048	46 598	816
333414	Heating equipment (except warm air furnaces) mfg	—	12	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	—	15	9	2 750	112 733	1 571	2 722	43 505	253 260	315 995	575 211	8 774
3335	Metalworking machinery mfg	1	210	56	5 015	206 548	3 633	7 418	133 772	419 376	173 458	594 830	36 891
33351	Metalworking machinery mfg	1	210	56	5 015	206 548	3 633	7 418	133 772	419 376	173 458	594 830	36 891
333511	Industrial mold mfg	—	86	24	1 345	61 248	1 074	2 241	44 864	103 717	34 534	141 254	13 043
333512	Machine tool (metal cutting types) mfg	1	6	4	667	25 744	468	923	16 196	46 471	45 461	98 358	D
333514	Special die & tool, die set, jig, & fixture mfg	—	75	17	2 044	85 257	1 391	2 944	51 365	203 593	54 974	254 729	16 724
333515	Cutting tool & machine tool accessory mfg	1	34	5	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	2	16	8	573	21 411	372	726	11 446	51 623	50 147	104 058	5 348
33361	Engine, turbine, & power transmission equipment mfg	2	16	8	573	21 411	372	726	11 446	51 623	50 147	104 058	5 348
3339	Other general-purpose machinery mfg	1	141	51	7 750	315 144	4 127	8 965	133 665	888 338	756 997	1 644 017	51 250
33391	Pump & compressor mfg	—	19	8	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	—	9	4	g	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	1	8	3	e	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	1	35	13	g	D	D	D	D	D	D	D	2 710
333922	Conveyor & conveying equipment mfg	1	17	8	455	15 635	243	476	5 654	36 644	28 997	65 467	1 636
333923	Overhead traveling crane, hoist, & monorail system mfg .	1	8	2	350	10 151	191	394	4 588	21 311	16 090	38 119	447
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg—Con.												
33399	All other general-purpose machinery mfg	1	87	30	h	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	22	8	1 402	60 581	642	1 320	22 863	109 667	114 830	228 237	7 091
333994	Industrial process furnace & oven mfg . .	5	6	5	598	25 332	308	680	11 087	76 927	34 008	112 619	1 800
333995	Fluid power cylinder & actuator mfg	—	5	2	269	11 121	171	396	5 180	24 251	23 060	48 596	321
333996	Fluid power pump & motor mfg	—	4	2	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	40	11	1 592	59 378	873	1 826	27 192	163 122	108 418	272 538	15 337
334	Computer & electronic product mfg	—	372	189	39 577	1 694 648	19 867	40 970	608 961	4 081 901	2 508 904	6 585 696	575 369
3341	Computer & peripheral equipment mfg	—	52	23	i	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	52	23	i	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	1	13	5	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	—	9	6	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	27	11	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	31	19	3 532	162 015	1 326	2 390	39 467	456 852	272 004	725 001	D
33421	Telephone apparatus mfg	—	13	8	g	D	D	D	D	D	D	D	14 295
334210	Telephone apparatus mfg	—	13	8	g	D	D	D	D	D	D	D	14 295
33422	Radio & TV broadcasting & wireless communications equipment mfg	1	9	6	f	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg	1	9	6	f	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg	—	9	5	1 191	44 947	642	1 211	18 039	140 897	83 038	220 780	4 745
334290	Other communications equipment mfg	—	9	5	1 191	44 947	642	1 211	18 039	140 897	83 038	220 780	4 745
3344	Semiconductor & other electronic component mfg	—	124	68	10 687	372 470	6 897	13 244	188 269	924 356	613 265	1 519 856	D
33441	Semiconductor & other electronic component mfg	—	124	68	10 687	372 470	6 897	13 244	188 269	924 356	613 265	1 519 856	D
334412	Bare printed circuit board mfg	—	50	27	4 591	136 419	3 690	6 974	89 084	299 705	199 169	496 241	30 191
334413	Semiconductor & related device mfg	—	15	10	2 036	91 484	1 085	2 438	42 681	264 744	118 073	372 096	106 089
334415	Electronic resistor mfg	—	2	2	e	D	D	D	D	D	D	D	D
334417	Electronic connector mfg	1	10	7	279	9 611	171	343	4 180	19 279	11 238	30 407	D
334418	Printed circuit assembly (electronic assembly) mfg	—	13	11	1 823	73 972	789	1 416	19 127	223 209	213 422	432 738	15 719
334419	Other electronic component mfg	—	26	7	1 460	44 806	835	1 471	25 414	86 720	59 313	145 605	7 747
3345	Navigational, measuring, medical, & control instruments mfg	—	132	63	17 119	790 948	7 992	16 823	282 121	2 082 359	872 633	2 939 480	D
33451	Navigational, measuring, medical, & control instruments mfg	—	132	63	17 119	790 948	7 992	16 823	282 121	2 082 359	872 633	2 939 480	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	38	21	5 835	284 847	2 352	5 469	65 619	960 401	210 072	1 156 000	D
334511	Search, detection, navigation, & guidance instrument mfg	—	7	4	h	D	D	D	D	D	D	D	D
334512	Automatic environmental control mfg	—	9	3	g	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	26	12	h	D	D	D	D	D	D	D	24 182

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31-33	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.												
	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg—Con.												
33451	Navigational, measuring, medical, & control instruments mfg—Con.												
334515	Electricity measuring & testing instrument mfg	-	17	8	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg	-	9	5	f	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg	-	23	10	g	D	D	D	D	D	D	D	D
3346	Mfg & reproducing magnetic & optical media .	3	22	11	f	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media	3	22	11	f	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing	-	9	5	390	10 371	262	487	6 329	32 305	17 993	50 439	4 596
334613	Magnetic & optical recording media mfg .	-	6	4	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	114	53	8 163	308 499	4 970	9 244	157 924	648 551	762 076	1 430 177	52 028
3351	Electric lighting equipment mfg	-	7	3	e	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg	-	7	3	e	D	D	D	D	D	D	D	D
335129	Other lighting equipment mfg	-	2	2	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	69	27	4 717	173 696	2 657	4 381	80 209	215 386	519 411	759 286	25 576
33531	Electrical equipment mfg	-	69	27	4 717	173 696	2 657	4 381	80 209	215 386	519 411	759 286	25 576
335312	Motor & generator mfg	-	13	7	2 568	108 490	1 714	2 708	55 813	93 711	366 216	460 290	8 488
335314	Relay & industrial control mfg	-	35	14	1 841	55 363	743	1 292	19 224	100 658	136 745	260 733	15 876
3359	Other electrical equipment & component mfg	-	35	21	2 990	120 369	2 044	4 324	70 917	400 638	215 752	611 346	19 619
33593	Wiring device mfg	-	9	6	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	3	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	4	22	12	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg	4	21	12	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	105	39	5 443	217 226	4 262	8 442	157 912	1 417 117	1 605 609	3 006 003	82 046
3361	Motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	20	6	549	14 861	393	801	8 909	35 405	49 487	85 211	D
33621	Motor vehicle body & trailer mfg	-	20	6	549	14 861	393	801	8 909	35 405	49 487	85 211	D
336211	Motor vehicle body mfg	-	13	4	421	11 856	295	607	6 992	31 164	42 247	73 617	D
3363	Motor vehicle parts mfg ...	1	42	17	2 013	61 872	1 439	2 717	35 092	186 866	198 740	375 572	11 172
33631	Motor vehicle gasoline engine & engine parts mfg	-	14	3	399	9 838	305	599	6 451	45 319	43 616	86 054	929
336312	Gasoline engine & engine parts mfg	-	12	2	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	2	10	6	1 032	27 221	742	1 206	14 191	57 657	64 759	122 852	4 684
336322	Other motor vehicle electrical & electronic equipment mfg	2	10	6	1 032	27 221	742	1 206	14 191	57 657	64 759	122 852	4 684
33635	Motor vehicle transmission & power train parts mfg	-	4	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	4	2	e	D	D	D	D	D	D	D	D

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31-33	MINNEAPOLIS—ST. PAUL, MN—WI MSA—Con.													
	Manufacturing—Con.													
336	Transportation equipment mfg—Con.													
3364	Aerospace product & parts mfg	2	11	6	e	D	D	D	D	D	D	D	D	
33641	Aerospace product & parts mfg	2	11	6	e	D	D	D	D	D	D	D	D	
336413	Other aircraft part & auxiliary equipment mfg	1	9	4	e	D	D	D	D	D	D	D	D	
3366	Ship & boat building	1	9	4	e	D	D	D	D	D	D	D	D	
33661	Ship & boat building	1	9	4	e	D	D	D	D	D	D	D	D	
336612	Boat building	1	8	4	e	D	D	D	D	D	D	D	D	
337	Furniture & related product mfg	1	348	67		6 831	195 952	5 203	10 181	125 368	417 679	385 936	806 450	27 899
3371	Household & institutional furniture & kitchen cabinet mfg	—	229	25		3 677	93 030	2 942	5 469	66 265	219 362	160 520	380 212	D
33711	Wood kitchen cabinet & counter top mfg	—	155	14		2 633	63 611	2 140	3 987	47 784	164 364	114 154	278 750	4 413
337110	Wood kitchen cabinet & counter top mfg ...	—	155	14		2 633	63 611	2 140	3 987	47 784	164 364	114 154	278 750	4 413
33712	Household & institutional furniture mfg	1	74	11		1 044	29 419	802	1 482	18 481	54 998	46 366	101 462	D
337122	Nonupholstered wood household furniture mfg	6	44	4		252	5 226	218	381	3 918	8 935	7 158	16 112	725
337127	Institutional furniture mfg	—	10	6		651	21 540	471	922	12 884	40 293	32 949	73 326	1 457
3372	Office furniture (including fixtures) mfg	1	101	36		2 279	79 423	1 576	3 357	43 944	160 934	116 025	278 760	5 750
33721	Office furniture (including fixtures) mfg	1	101	36		2 279	79 423	1 576	3 357	43 944	160 934	116 025	278 760	5 750
337211	Wood office furniture mfg	1	18	5		276	7 559	209	413	4 949	19 407	12 547	32 042	699
337212	Custom architectural woodwork & millwork mfg	2	26	10		537	17 074	396	873	11 264	31 178	20 816	52 070	990
337214	Office furniture (except wood) mfg	—	6	3		269	9 437	166	389	4 657	16 910	15 295	32 202	623
337215	Showcase, partition, shelving, & locker mfg	1	51	18		1 197	45 353	805	1 682	23 074	93 439	67 367	162 446	3 438
3379	Other furniture related product mfg	1	18	6		875	23 499	685	1 355	15 159	37 383	109 391	147 478	D
33791	Mattress mfg	2	13	4	f	D	D	D	D	D	D	D	D	14 789
337910	Mattress mfg	2	13	4	f	D	D	D	D	D	D	D	D	14 789
339	Miscellaneous mfg	1	504	138		19 673	701 659	11 272	21 959	287 313	1 685 927	778 949	2 467 128	93 005
3391	Medical equipment & supplies mfg	1	238	79		13 119	522 025	7 295	14 608	200 171	1 240 141	501 830	1 750 516	73 150
33911	Medical equipment & supplies mfg	1	238	79		13 119	522 025	7 295	14 608	200 171	1 240 141	501 830	1 750 516	73 150
339111	Laboratory apparatus & furniture mfg	—	6	3	e	D	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg	1	74	32		9 012	381 457	4 710	9 740	138 078	878 388	340 419	1 226 251	56 125
339113	Surgical appliance & supplies mfg	1	51	23		2 021	73 282	1 226	2 162	28 187	211 242	91 128	304 858	13 274
339115	Ophthalmic goods mfg	—	6	5	f	D	D	D	D	D	D	D	D	D
339116	Dental laboratories ...	3	89	15		954	26 675	702	1 326	17 832	49 001	14 557	64 222	1 801
3399	Other miscellaneous mfg ..	1	266	59		6 554	179 634	3 977	7 351	87 142	445 786	277 119	716 612	19 855
33991	Jewelry & silverware mfg	6	26	5	e	D	D	D	D	D	D	D	D	707
339911	Jewelry (except costume) mfg	6	17	3	e	D	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	—	38	8		787	27 361	501	1 062	12 607	100 036	65 153	164 087	3 187
339920	Sporting & athletic goods mfg	—	38	8		787	27 361	501	1 062	12 607	100 036	65 153	164 087	3 187
33995	Sign mfg	—	96	24		2 139	66 656	1 408	2 713	32 145	136 517	97 000	230 347	6 401
339950	Sign mfg	—	96	24		2 139	66 656	1 408	2 713	32 145	136 517	97 000	230 347	6 401
33999	All other miscellaneous mfg	1	79	20		2 929	66 172	1 668	2 870	34 642	152 465	82 083	233 688	D
339991	Gasket, packing, & sealing device mfg ...	1	16	8	g	D	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	—	3	3	e	D	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	1	48	8		1 574	25 674	815	1 046	11 788	68 467	33 984	101 420	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHEBOYGAN, WI MSA													
31-33	Manufacturing	1	239	117	20 047	628 324	14 618	28 148	383 824	2 034 961	2 203 789	4 252 678	146 005
311	Food mfg.....	3	31	16	3 017	92 756	1 944	3 753	45 994	381 960	705 114	1 086 904	25 490
3115	Dairy product mfg	3	12	8	1 823	59 887	1 099	2 150	28 639	273 334	526 869	800 266	14 871
31151	Dairy product (except frozen) mfg	3	11	8	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	4	10	7	g	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	1	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	1	4	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	2	2	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	3	2	e	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	12	8	432	10 226	273	517	5 315	25 625	22 758	48 586	590
3219	Other wood product mfg ...	2	11	7	e	D	D	D	D	D	D	D	D
322	Paper mfg	-	10	5	625	22 404	499	1 009	12 488	50 390	62 846	113 181	4 523
3222	Converted paper product mfg	-	9	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	6	4	e	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	2	1	e	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	20	7	811	23 198	635	1 245	15 617	43 591	41 937	84 848	2 639
3231	Printing & related support activities.....	1	20	7	811	23 198	635	1 245	15 617	43 591	41 937	84 848	2 639
32311	Printing	1	17	7	796	22 767	622	1 224	15 337	42 585	41 676	83 582	2 587
323110	Commercial lithographic printing ..	-	8	3	527	15 777	416	805	10 731	27 914	31 338	58 916	1 884
325	Chemical mfg	-	7	5	655	22 495	436	861	13 504	71 809	93 408	166 816	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	3	e	D	D	D	D	D	D	D	7 436
32521	Resin & synthetic rubber mfg	-	3	3	e	D	D	D	D	D	D	D	7 436
325211	Plastics material & resin mfg	-	3	3	e	D	D	D	D	D	D	D	7 436
326	Plastics & rubber products mfg	-	19	15	2 427	88 285	1 890	3 278	61 437	222 269	161 882	390 170	24 114
3261	Plastics product mfg	-	19	15	2 427	88 285	1 890	3 278	61 437	222 269	161 882	390 170	24 114
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	-	5	4	e	D	D	D	D	D	D	D	D
326121	Unsupported plastics profile shape mfg	-	5	4	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	12	9	1 957	73 432	1 506	2 459	51 820	190 829	126 225	323 729	20 905
326199	All other plastics product mfg	-	12	9	1 957	73 432	1 506	2 459	51 820	190 829	126 225	323 729	20 905
327	Nonmetallic mineral product mfg	-	12	7	853	29 468	695	1 462	23 337	78 740	34 947	120 708	2 342
3271	Clay product & refractory mfg	-	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	9	7	1 421	45 548	1 219	2 387	34 292	111 321	189 243	311 846	31 503
3315	Foundries	-	8	7	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	6	5	g	D	D	D	D	D	D	D	29 860
331521	Aluminum die-casting foundries	-	2	2	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	3	2	f	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SHEBOYGAN, WI MSA —Con.												
31-33	Manufacturing— Con.												
332	Fabricated metal product mfg	—	47	12	3 221	91 671	2 508	5 117	56 899	496 194	191 855	691 634	18 484
3321	Forging & stamping	—	3	2	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	—	3	2	e	D	D	D	D	D	D	D	D
332116	Metal stamping	—	3	2	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	9	4	267	6 955	204	404	5 098	14 527	12 795	27 616	309
33232	Ornamental & architectural metal products mfg	—	9	4	267	6 955	204	404	5 098	14 527	12 795	27 616	309
3329	Other fabricated metal product mfg	—	8	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	8	3	g	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg ...	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	33	12	2 938	90 825	1 785	3 515	47 562	287 486	314 823	595 839	18 501
3332	Industrial machinery mfg ..	—	8	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	6	1	e	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	1	1	e	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	9	4	1 291	43 887	685	1 234	18 704	104 834	100 419	206 903	6 089
33391	Pump & compressor mfg	9	2	1	e	D	D	D	D	D	D	D	D
333912	Air & gas compressor mfg	9	1	1	e	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	4	1	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general-purpose machinery mfg	—	2	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	3	3	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	—	1	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	13	10	1 332	39 783	1 076	2 221	22 996	86 484	60 199	142 070	2 897
3371	Household & institutional furniture & kitchen cabinet mfg	—	6	4	892	23 948	763	1 564	15 339	55 755	39 622	90 517	2 124
33712	Household & institutional furniture mfg	—	5	4	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	—	2	2	e	D	D	D	D	D	D	D	D
337127	Institutional furniture mfg	—	2	2	e	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	7	6	440	15 835	313	657	7 657	30 729	20 577	51 553	773
33721	Office furniture (including fixtures) mfg	—	7	6	440	15 835	313	657	7 657	30 729	20 577	51 553	773

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SHEBOYGAN, WI MSA —Con.												
31-33	Manufacturing— Con.												
339	Miscellaneous mfg.....	1	12	5	550	16 351	396	754	8 193	49 083	13 790	62 544	1 068
3391	Medical equipment & supplies mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
339114	Dental equipment & supplies mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg..	5	10	4	e	D	D	D	D	D	D	D	D
33995	Sign mfg.....	5	6	4	e	D	D	D	D	D	D	D	D
339950	Sign mfg.....	5	6	4	e	D	D	D	D	D	D	D	D
	WAUSAU, WI MSA												
31-33	Manufacturing....	—	232	98	16 839	502 563	13 422	26 519	354 835	1 295 226	1 896 838	3 181 899	121 883
311	Food mfg.....	—	28	11	1 501	42 748	1 235	2 700	33 072	132 880	798 375	928 839	15 674
3115	Dairy product mfg.....	—	16	10	1 278	38 114	1 034	2 256	29 703	120 705	745 502	862 822	D
31151	Dairy product (except frozen) mfg.....	—	16	10	1 278	38 114	1 034	2 256	29 703	120 705	745 502	862 822	D
311513	Cheese mfg.....	—	13	8	g	D	D	D	D	D	D	D	13 459
321	Wood product mfg.....	—	34	14	4 027	106 281	3 532	7 270	84 626	267 311	306 421	571 339	18 403
3219	Other wood product mfg...	—	22	13	3 875	103 302	3 395	7 001	81 987	260 931	299 496	558 475	18 070
32191	Millwork.....	—	9	4	3 018	78 671	2 767	5 718	68 348	191 910	192 910	381 478	12 453
321911	Wood window & door mfg.....	—	4	2	h	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	—	4	4	612	19 675	422	924	10 274	61 474	98 034	160 110	D
321992	Prefabricated wood building mfg.....	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	9	8	2 731	113 957	2 069	4 289	81 343	332 755	347 754	681 456	44 128
3221	Pulp, paper, & paperboard mills.....	—	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	—	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	—	3	3	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	—	6	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	—	4	4	646	21 190	522	1 062	15 679	68 262	71 522	139 607	3 031
322212	Folding paperboard box mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	15	5	306	7 715	221	384	4 570	13 846	9 120	22 880	1 401
3231	Printing & related support activities.....	1	15	5	306	7 715	221	384	4 570	13 846	9 120	22 880	1 401
32311	Printing.....	1	15	5	306	7 715	221	384	4 570	13 846	9 120	22 880	1 401
327	Nonmetallic mineral product mfg.....	—	13	6	773	19 390	573	1 174	12 967	42 372	38 980	80 831	4 130
3272	Glass & glass product mfg.	—	2	2	e	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass.....	—	2	2	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg.....	—	8	2	351	10 021	253	540	6 622	19 151	19 364	38 854	2 946
32739	Other concrete product mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
327390	Other concrete product mfg.....	—	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	52	25	4 299	126 686	3 235	5 768	80 000	322 510	210 628	525 500	20 878
3322	Cutlery & handtool mfg....	1	3	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	1	3	2	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg.....	—	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	—	14	9	2 375	79 761	1 649	3 285	46 778	184 316	130 271	312 098	13 306
33232	Ornamental & architectural metal products mfg.....	—	9	5	2 176	73 563	1 494	2 914	42 199	167 197	121 295	286 692	12 978
332321	Metal window & door mfg.....	—	3	2	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg..	—	5	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	—	16	5	523	18 083	398	807	12 967	38 225	21 494	59 504	2 593

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WAUSAU, WI MSA— Con. Manufacturing— Con.												
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	e	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	8	4	688	20 243	563	1 096	14 750	54 762	39 084	93 026	3 993
3363	Motor vehicle parts mfg ...	-	4	2	e	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	2	1	e	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	16	7	631	12 653	495	921	10 331	14 990	26 569	41 684	925
3371	Household & institutional furniture & kitchen cabinet mfg	-	13	4	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	-	2	2	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	2	2	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	2	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ASHLAND COUNTY, WI Manufacturing	-	28	15	1 661	44 776	1 341	2 664	32 201	73 662	78 867	150 728	7 376
321	Wood product mfg	-	12	10	827	15 159	739	1 408	12 459	28 945	43 968	71 004	3 146
31-33	BARRON COUNTY, WI Manufacturing	1	96	32	5 430	133 897	4 488	8 664	94 194	403 400	490 563	891 541	28 070
311	Food mfg	1	13	7	2 242	53 374	1 800	3 569	33 830	171 474	319 436	492 779	17 120
3114	Fruit & vegetable preserving & specialty food mfg	5	2	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	4	525	12 593	439	564	8 933	26 129	31 002	57 473	1 440
3261	Plastics product mfg	-	7	4	525	12 593	439	564	8 933	26 129	31 002	57 473	1 440
332	Fabricated metal product mfg	5	13	6	1 034	27 940	893	1 877	20 970	61 668	59 833	120 608	3 517
3325	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWN COUNTY, WI													
31-33	Manufacturing	1	396	168	25 825	1 015 651	18 473	38 396	602 579	2 588 409	3 885 894	6 457 440	224 977
311	Food mfg.....	2	47	20	4 985	127 841	3 909	8 549	97 167	444 244	1 439 824	1 881 094	35 948
3114	Fruit & vegetable preserving & specialty food mfg.....	8	6	4	778	19 778	610	1 453	13 801	56 852	84 086	141 027	D
31142	Fruit & vegetable canning, pickling, & drying.....	9	4	3	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	9	4	3	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	-	12	6	1 015	33 661	613	1 563	26 869	97 543	443 751	542 223	18 094
31151	Dairy product (except frozen) mfg.....	-	9	6	977	32 010	585	1 505	26 030	91 708	434 358	526 642	D
311513	Cheese mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	2	9	6	2 585	60 555	2 169	4 505	47 843	252 907	884 246	1 134 024	5 965
31161	Animal slaughtering & processing.....	2	9	6	2 585	60 555	2 169	4 505	47 843	252 907	884 246	1 134 024	5 965
311611	Animal (except poultry) slaughtering.....	2	8	5	h	D	D	D	D	D	D	D	D
321	Wood product mfg.....	2	23	10	508	11 500	371	704	7 268	26 485	43 032	69 084	990
322	Paper mfg.....	-	30	24	8 676	455 682	6 464	13 540	260 462	1 136 784	1 606 051	2 737 232	126 974
3221	Pulp, paper, & paperboard mills.....	-	8	8	5 508	325 060	3 979	8 362	164 774	631 129	571 237	1 189 890	D
32212	Paper mills.....	-	4	4	5 189	311 183	3 745	7 796	156 308	580 801	499 859	1 068 324	68 449
322121	Paper (except newsprint) mills.....	-	4	4	5 189	311 183	3 745	7 796	156 308	580 801	499 859	1 068 324	68 449
3222	Converted paper product mfg.....	-	22	16	3 168	130 622	2 485	5 178	95 688	505 655	1 034 814	1 547 342	D
32221	Paperboard container mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg.....	-	11	8	2 109	91 361	1 747	3 567	71 966	405 829	831 658	1 244 774	36 940
322291	Sanitary paper product mfg.....	-	7	6	2 003	88 448	1 664	3 432	70 509	394 065	824 938	1 226 800	35 710
323	Printing & related support activities.....	5	48	14	2 012	60 253	1 455	2 585	44 359	177 691	97 862	275 420	12 259
3231	Printing & related support activities.....	5	48	14	2 012	60 253	1 455	2 585	44 359	177 691	97 862	275 420	12 259
32311	Printing.....	5	43	13	1 962	58 587	1 419	2 519	43 157	173 826	96 265	269 942	D
323110	Commercial lithographic printing..	-	19	7	817	16 595	519	796	10 160	31 490	21 881	53 195	1 889
323112	Commercial flexographic printing..	7	4	3	852	35 662	691	1 312	28 973	128 749	63 167	191 921	9 283
332	Fabricated metal product mfg.....	-	70	27	1 719	61 710	1 296	2 687	40 604	130 194	91 738	220 382	7 092
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	33	8	f	D	D	D	D	D	D	D	2 443
33271	Machine shops.....	1	32	8	591	21 931	458	898	14 580	40 249	25 387	64 321	2 443
332710	Machine shops.....	1	32	8	591	21 931	458	898	14 580	40 249	25 387	64 321	2 443
333	Machinery mfg.....	-	57	27	3 337	149 428	1 914	3 782	76 674	307 262	252 838	557 995	15 685
3332	Industrial machinery mfg ..	-	26	15	2 300	110 568	1 228	2 402	54 991	226 455	171 968	392 918	11 092
33329	Other industrial machinery mfg.....	-	24	14	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg.....	-	13	9	621	26 175	368	734	14 133	72 242	51 652	124 191	5 030
333293	Printing machinery & equipment mfg.....	-	5	3	1 458	75 947	730	1 410	36 709	136 033	107 507	237 891	D
3339	Other general-purpose machinery mfg.....	1	15	8	714	27 200	466	912	16 107	45 796	47 564	96 551	2 988
33399	All other general-purpose machinery mfg.....	1	14	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	1	6	5	601	23 538	378	742	13 465	38 552	42 337	83 982	2 558
336	Transportation equipment mfg.....	-	6	3	f	D	D	D	D	D	D	D	2 520
3366	Ship & boat building.....	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	-	1	1	f	D	D	D	D	D	D	D	D
336612	Boat building.....	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWN COUNTY, WI—Con.													
31-33	Manufacturing—Con.												
337	Furniture & related product mfg	—	21	9	1 596	63 463	918	2 130	23 257	104 635	58 946	163 267	4 922
3371	Household & institutional furniture & kitchen cabinet mfg	—	18	7	f	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	—	18	7	f	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	—	18	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) mfg	—	2	2	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	—	2	2	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	—	1	1	f	D	D	D	D	D	D	D	D
BURNETT COUNTY, WI													
31-33	Manufacturing	1	32	12	1 106	30 327	882	1 983	23 063	100 225	77 308	176 738	9 827
332	Fabricated metal product mfg	2	7	4	f	D	D	D	D	D	D	D	D
CALUMET COUNTY, WI													
31-33	Manufacturing	—	64	31	6 078	190 881	4 730	9 470	131 505	487 921	529 297	1 018 924	32 779
311	Food mfg	1	12	10	744	26 115	458	946	11 521	74 611	126 855	200 418	7 848
331	Primary metal mfg	—	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	—	2	2	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	10	7	3 022	92 276	2 356	4 590	65 401	231 893	266 069	501 197	14 615
3331	Agriculture, construction, & mining machinery mfg	—	5	4	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	—	3	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
CHIPPEWA COUNTY, WI													
31-33	Manufacturing	—	112	39	6 442	203 739	4 731	8 280	140 638	440 235	549 353	989 799	37 427
316	Leather & allied product mfg	—	2	2	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	—	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	8	5	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	15	9	804	28 145	624	1 386	19 256	59 635	45 732	109 334	D
334	Computer & electronic product mfg	—	7	3	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	—	1	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CLARK COUNTY, WI													
31-33	Manufacturing	-	87	36	2 863	70 706	2 371	4 487	50 126	199 771	607 157	799 630	13 695
311	Food mfg	-	24	13	921	22 950	690	1 217	14 419	89 828	455 085	540 445	4 024
3115	Dairy product mfg	-	15	10	675	16 918	529	883	11 687	74 937	410 597	481 108	3 709
31151	Dairy product (except frozen) mfg	-	15	10	675	16 918	529	883	11 687	74 937	410 597	481 108	3 709
321	Wood product mfg	-	15	6	570	13 340	470	900	9 829	34 315	42 604	75 658	2 564
3219	Other wood product mfg ...	-	11	5	527	12 480	432	841	9 107	32 611	40 152	71 513	2 395
COLUMBIA COUNTY, WI													
31-33	Manufacturing	1	108	44	5 311	159 129	4 059	8 242	104 334	508 974	758 613	1 262 426	31 363
311	Food mfg	1	25	11	1 131	28 948	967	2 042	22 555	98 818	331 346	426 415	4 987
3114	Fruit & vegetable preserving & specialty food mfg	4	9	8	573	14 886	504	1 110	11 318	58 152	67 774	125 800	2 877
326	Plastics & rubber products mfg	4	11	8	941	29 670	727	1 447	18 365	65 974	96 745	161 845	7 565
3261	Plastics product mfg	1	8	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	14	7	996	32 352	614	1 235	17 034	102 584	150 776	253 200	5 230
CRAWFORD COUNTY, WI													
31-33	Manufacturing	-	20	11	2 252	50 802	1 802	2 946	35 663	366 904	138 199	509 068	7 714
327	Nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
DANE COUNTY, WI													
31-33	Manufacturing	-	564	187	26 568	864 440	18 841	37 854	507 789	2 484 947	2 334 302	4 840 470	132 277
311	Food mfg	-	53	24	4 748	145 792	3 803	7 992	113 367	664 195	780 156	1 446 065	20 506
3115	Dairy product mfg	-	6	5	560	16 958	350	720	9 824	68 006	296 955	362 221	2 770
3116	Meat product mfg	-	9	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	9	4	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	6	3	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	16	7	f	D	D	D	D	D	D	D	2 765
31181	Bread & bakery product mfg	-	14	6	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	-	9	5	687	16 299	344	569	10 065	63 493	24 025	87 902	1 741
321	Wood product mfg	2	29	9	570	14 732	430	869	9 260	32 007	38 950	71 840	2 749
323	Printing & related support activities	-	109	24	2 651	87 129	2 035	3 969	57 444	177 593	95 067	275 162	12 434
3231	Printing & related support activities	-	109	24	2 651	87 129	2 035	3 969	57 444	177 593	95 067	275 162	12 434
32311	Printing	-	91	20	2 329	73 919	1 783	3 498	48 666	153 660	89 032	245 468	10 506
323110	Commercial lithographic printing ..	-	40	7	869	26 182	641	1 232	16 049	52 098	28 117	81 159	4 870
323117	Book printing	-	7	4	832	30 193	683	1 345	21 702	51 331	36 851	89 664	1 311
325	Chemical mfg	-	28	14	1 189	40 843	686	1 366	17 553	147 653	98 574	243 090	13 578
3254	Pharmaceutical & medicine mfg	-	10	7	722	28 555	351	711	10 064	84 362	38 948	120 391	10 304
32541	Pharmaceutical & medicine mfg	-	10	7	722	28 555	351	711	10 064	84 362	38 948	120 391	10 304
326	Plastics & rubber products mfg	2	36	16	2 566	81 520	1 971	3 968	51 209	225 683	168 143	392 752	17 569
3261	Plastics product mfg	2	31	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	25	12	2 015	60 152	1 507	3 006	34 206	171 710	118 553	289 113	14 219
326199	All other plastics product mfg	2	24	12	g	D	D	D	D	D	D	D	14 219
327	Nonmetallic mineral product mfg	-	23	7	617	18 388	476	1 015	12 185	37 102	32 308	69 298	3 386
331	Primary metal mfg	-	6	3	719	24 710	591	1 188	17 704	49 012	34 126	83 394	D
3315	Foundries	-	5	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
DANE COUNTY, WI—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	69	20	1 711	53 769	1 188	2 450	31 740	118 803	123 095	245 029	8 784
3323	Architectural & structural metals mfg	-	23	9	755	25 246	527	1 108	14 831	54 164	64 474	118 416	2 596
333	Machinery mfg	-	38	21	2 161	67 488	1 340	2 446	31 954	181 242	183 548	359 166	9 728
3332	Industrial machinery mfg ..	-	5	4	747	18 628	490	872	9 276	50 518	55 755	105 304	1 825
33329	Other industrial machinery mfg	-	5	4	747	18 628	490	872	9 276	50 518	55 755	105 304	1 825
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	1	35	17	2 028	91 986	616	1 241	15 627	267 125	138 647	407 564	9 607
3345	Navigational, measuring, medical, & control instruments mfg	-	20	12	1 537	72 798	393	797	10 057	220 717	110 854	332 386	7 210
33451	Navigational, measuring, medical, & control instruments mfg	-	20	12	1 537	72 798	393	797	10 057	220 717	110 854	332 386	7 210
334516	Analytical laboratory instrument mfg	-	6	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	5	1 211	43 248	737	1 531	23 992	271 765	144 266	416 348	5 595
336	Transportation equipment mfg	-	12	6	1 609	36 814	1 429	2 942	30 096	96 782	204 555	308 327	2 810
3362	Motor vehicle body & trailer mfg	-	6	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	6	2	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg	-	5	2	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	38	9	2 283	61 305	1 813	3 187	42 203	72 737	144 027	215 596	5 446
3371	Household & institutional furniture & kitchen cabinet mfg	-	26	4	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	14	1	592	11 134	491	728	7 648	9 258	34 928	42 506	622
337122	Nonupholstered wood household furniture mfg	-	9	1	f	D	D	D	D	D	D	D	577
3379	Other furniture related product mfg	-	2	1	g	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	-	2	1	g	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	-	2	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	55	7	1 809	71 796	1 166	2 431	35 902	71 705	67 299	153 116	8 414
3391	Medical equipment & supplies mfg	-	26	4	1 492	63 750	955	2 053	31 929	55 211	56 157	125 319	D
33911	Medical equipment & supplies mfg	-	26	4	1 492	63 750	955	2 053	31 929	55 211	56 157	125 319	D
339112	Surgical & medical instrument mfg	-	5	2	g	D	D	D	D	D	D	D	D
DODGE COUNTY, WI													
31-33	Manufacturing	-	164	81	12 667	413 773	9 898	20 563	293 842	1 111 654	2 050 029	3 159 894	120 834
311	Food mfg	-	24	15	2 196	59 691	1 738	3 457	45 691	197 686	780 290	981 379	22 397
3114	Fruit & vegetable preserving & specialty food mfg	-	4	4	612	16 044	483	794	11 191	39 315	50 786	90 646	1 772
3115	Dairy product mfg	-	12	8	1 342	36 696	1 055	2 158	30 146	127 527	638 387	767 833	18 557
31151	Dairy product (except frozen) mfg	-	12	8	1 342	36 696	1 055	2 158	30 146	127 527	638 387	767 833	18 557
311513	Cheese mfg	-	11	8	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	6	2	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	2	g	D	D	D	D	D	D	D	D
32311	Printing	-	5	1	g	D	D	D	D	D	D	D	D
323111	Commercial gravure printing	-	1	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	DODGE COUNTY, WI—Con.												
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	48	29	3 695	115 526	2 879	6 044	77 316	245 521	227 951	472 299	21 952
3321	Forging & stamping	-	8	6	1 428	45 894	1 179	2 548	32 891	95 765	107 384	201 368	12 787
33211	Forging & stamping	-	8	6	1 428	45 894	1 179	2 548	32 891	95 765	107 384	201 368	12 787
332116	Metal stamping	-	5	4	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	9	9	991	30 976	714	1 522	20 466	65 537	39 460	107 081	D
33232	Ornamental & architectural metal products mfg	-	8	8	f	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg	-	7	7	f	D	D	D	D	D	D	D	3 948
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	19	7	748	21 957	583	1 061	12 723	45 647	25 790	70 065	3 056
33272	Turned product & screw, nut, & bolt mfg	1	6	4	531	16 118	407	791	8 796	36 336	19 525	55 184	2 128
332722	Bolt, nut, screw, rivet, & washer mfg	1	4	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	23	13	2 791	137 293	1 935	4 083	87 897	468 375	736 188	1 202 764	48 970
3331	Agriculture, construction, & mining machinery mfg.	-	6	5	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	6	5	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
	DOOR COUNTY, WI												
31-33	Manufacturing	-	63	17	2 222	59 679	1 803	3 501	40 797	136 096	127 406	267 470	10 094
333	Machinery mfg	-	6	4	544	18 747	372	772	9 627	46 938	51 572	100 910	5 145
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	3	2	f	D	D	D	D	D	D	D	D
33661	Ship & boat building	-	3	2	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	3	2	f	D	D	D	D	D	D	D	D
	DOUGLAS COUNTY, WI												
31-33	Manufacturing	-	56	14	1 543	45 405	1 216	2 281	31 894	128 071	365 194	500 171	9 713
	DUNN COUNTY, WI												
31-33	Manufacturing	-	60	14	2 910	92 019	2 356	4 817	62 469	518 049	362 795	875 383	36 515
311	Food mfg	-	7	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	3	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	3	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	-	3	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	10	3	f	D	D	D	D	D	D	D	3 298
3219	Other wood product mfg ...	-	5	2	f	D	D	D	D	D	D	D	D
32191	Millwork	-	3	2	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
EAU CLAIRE COUNTY, WI													
31-33	Manufacturing	-	107	37	4 182	110 866	3 311	6 807	75 722	369 899	279 718	651 307	67 589
311	Food mfg.....	-	11	5	f	D	D	D	D	D	D	D	7 654
326	Plastics & rubber products mfg.....	-	9	5	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
FOND DU LAC COUNTY, WI													
31-33	Manufacturing	-	158	59	11 150	393 225	8 065	16 231	249 144	1 135 105	977 338	2 115 694	68 758
311	Food mfg.....	1	21	13	1 654	44 393	1 330	2 727	31 898	148 849	228 631	376 029	15 033
3118	Bakeries & tortilla mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	16	2	555	14 429	421	942	10 054	31 256	22 671	53 589	2 534
3231	Printing & related support activities.....	-	16	2	555	14 429	421	942	10 054	31 256	22 671	53 589	2 534
32311	Printing.....	-	16	2	555	14 429	421	942	10 054	31 256	22 671	53 589	2 534
331	Primary metal mfg.....	-	5	4	820	28 379	656	1 367	21 997	76 616	52 251	130 368	D
3315	Foundries.....	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	32	11	688	18 667	477	866	11 303	35 288	23 575	59 223	3 284
333	Machinery mfg.....	-	17	7	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	6	1	f	D	D	D	D	D	D	D	1 710
33351	Metalworking machinery mfg.....	-	6	1	f	D	D	D	D	D	D	D	1 710
333512	Machine tool (metal cutting types) mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
GRANT COUNTY, WI													
31-33	Manufacturing	-	57	21	2 996	68 470	2 499	4 612	52 153	405 917	312 285	718 099	16 707
335	Electrical equipment, appliance, & component mfg.....	-	2	2	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg.....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GREEN COUNTY, WI													
31-33	Manufacturing	2	77	29	3 667	93 545	2 936	5 262	64 842	380 165	463 072	840 224	12 516
311	Food mfg	1	24	11	713	16 915	551	1 102	11 394	55 620	202 453	259 995	5 626
333	Machinery mfg	-	9	4	565	16 687	391	726	9 192	39 702	28 303	66 783	531
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
GREEN LAKE COUNTY, WI													
31-33	Manufacturing	-	61	24	2 383	55 834	1 884	3 592	38 084	153 152	105 513	262 009	7 260
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
IOWA COUNTY, WI													
31-33	Manufacturing	1	34	7	815	18 350	647	1 181	12 859	53 626	100 680	156 738	2 520
IRON COUNTY, WI													
31-33	Manufacturing	4	12	6	534	10 457	462	789	7 308	28 180	36 936	64 175	1 356
JACKSON COUNTY, WI													
31-33	Manufacturing	-	20	8	810	17 768	608	1 266	12 849	72 486	58 910	134 226	5 778
JEFFERSON COUNTY, WI													
31-33	Manufacturing	1	165	82	12 201	371 799	8 988	18 733	234 104	912 425	1 503 062	2 431 479	70 445
311	Food mfg	1	19	14	2 312	66 245	1 847	3 765	47 793	194 703	418 889	619 285	20 483
3114	Fruit & vegetable preserving & specialty food mfg	9	4	3	532	12 432	451	915	9 506	25 134	47 703	72 935	D
3116	Meat product mfg	-	4	4	1 116	33 933	914	1 893	25 029	102 654	181 993	290 718	8 071
31161	Animal slaughtering & processing	-	4	4	1 116	33 933	914	1 893	25 029	102 654	181 993	290 718	8 071
311612	Meat processed from carcasses	-	3	3	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	15	6	983	29 312	824	1 822	22 827	66 574	38 337	105 116	3 531
3231	Printing & related support activities	-	15	6	983	29 312	824	1 822	22 827	66 574	38 337	105 116	3 531
32311	Printing	-	15	6	983	29 312	824	1 822	22 827	66 574	38 337	105 116	3 531
323110	Commercial lithographic printing ..	-	10	5	878	26 885	726	1 640	20 658	60 765	32 184	93 172	D
326	Plastics & rubber products mfg	-	10	6	568	14 950	448	1 058	11 873	25 773	38 135	64 709	2 093
3261	Plastics product mfg	-	10	6	568	14 950	448	1 058	11 873	25 773	38 135	64 709	2 093
332	Fabricated metal product mfg	-	33	14	1 134	34 763	939	1 859	25 211	78 991	139 035	218 474	12 370
333	Machinery mfg	-	24	16	2 553	83 211	1 843	3 979	55 305	179 519	192 294	366 099	9 194
3331	Agriculture, construction, & mining machinery mfg	-	4	4	699	19 719	510	1 039	11 570	35 908	68 173	107 339	2 615
33311	Agricultural implement mfg	-	4	4	699	19 719	510	1 039	11 570	35 908	68 173	107 339	2 615
333111	Farm machinery & equipment mfg	-	3	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	6	5	798	32 039	555	1 435	23 239	68 105	55 368	113 434	3 689
33329	Other industrial machinery mfg	-	5	4	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	7	5	1 150	35 732	805	1 660	19 708	72 702	83 894	159 163	D
3345	Navigational, measuring, medical, & control instruments mfg	-	6	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	6	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	JEFFERSON COUNTY, WI—Con.												
31-33	Manufacturing—Con.												
336	Transportation equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	—	2	2	f	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	—	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	4	11	5	1 009	29 994	706	1 691	15 237	86 372	51 188	137 930	3 486
3371	Household & institutional furniture & kitchen cabinet mfg	1	6	2	f	D	D	D	D	D	D	D	887
33712	Household & institutional furniture mfg	1	5	2	f	D	D	D	D	D	D	D	D
	JUNEAU COUNTY, WI												
31-33	Manufacturing	—	47	21	3 503	103 038	2 431	4 849	62 048	247 839	249 491	522 654	15 712
332	Fabricated metal product mfg	—	12	8	1 343	42 292	1 078	2 401	30 330	91 193	62 272	152 738	8 677
3324	Boiler, tank, & shipping container mfg	—	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component mfg	—	1	1	f	D	D	D	D	D	D	D	D
	KENOSHA COUNTY, WI												
31-33	Manufacturing	—	204	82	9 526	396 241	7 325	15 181	281 454	881 557	1 152 037	2 031 016	146 786
311	Food mfg	—	17	9	738	18 193	514	1 144	11 021	64 219	220 449	283 949	6 491
331	Primary metal mfg	—	6	4	732	27 915	532	1 151	17 004	59 328	78 653	140 856	2 862
332	Fabricated metal product mfg	—	47	20	1 881	64 039	1 461	2 592	43 718	157 427	84 287	246 340	6 870
3329	Other fabricated metal product mfg	—	6	3	f	D	D	D	D	D	D	D	2 284
33291	Metal valve mfg	—	3	3	f	D	D	D	D	D	D	D	2 187
332919	Other metal valve & pipe fitting mfg	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	2	30	8	645	19 989	468	757	11 575	43 063	31 974	74 769	1 443
334	Computer & electronic product mfg	—	12	7	859	25 104	674	1 405	14 716	54 081	59 205	112 314	5 805
3344	Semiconductor & other electronic component mfg	—	4	4	752	20 584	616	1 284	13 105	41 222	49 601	89 750	D
33441	Semiconductor & other electronic component mfg	—	4	4	752	20 584	616	1 284	13 105	41 222	49 601	89 750	D
336	Transportation equipment mfg	—	5	4	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	—	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	13	7	512	15 586	405	925	10 095	34 994	21 271	56 435	1 254

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KEWAUNEE COUNTY, WI													
31-33	Manufacturing	-	45	18	2 359	67 068	1 803	3 241	40 156	148 485	168 957	314 007	11 849
321	Wood product mfg	-	6	3	682	17 976	550	1 012	12 337	38 561	22 022	59 075	2 797
3219	Other wood product mfg ...	-	4	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	3	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	3	f	D	D	D	D	D	D	D	D
323119	Other commercial printing	-	1	1	f	D	D	D	D	D	D	D	D
LA CROSSE COUNTY, WI													
31-33	Manufacturing	-	161	56	10 171	313 696	7 230	14 428	182 701	499 671	878 741	1 382 650	49 814
312	Beverage & tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
315	Apparel mfg	-	4	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	11	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	29	11	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	29	11	g	D	D	D	D	D	D	D	D
32311	Printing	-	24	11	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	8	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	23	11	g	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	-	3	2	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	3	2	f	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	19	8	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	3	3	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	3	3	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/industrial refrig equip mfg	-	2	2	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	2	8	3	f	D	D	D	D	D	D	D	1 831
LAFAYETTE COUNTY, WI													
31-33	Manufacturing	1	21	10	661	14 470	603	1 192	11 808	54 087	80 758	134 450	2 261
LANGLADE COUNTY, WI													
31-33	Manufacturing	1	39	16	1 493	35 936	1 232	2 316	25 017	89 530	95 778	184 038	6 185

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LINCOLN COUNTY, WI													
31-33	Manufacturing	-	63	23	3 637	101 175	2 922	5 542	71 861	261 942	270 668	532 381	13 913
321	Wood product mfg	-	18	5	1 354	33 703	1 140	2 219	26 313	85 551	105 454	191 596	2 571
3219	Other wood product mfg ...	-	13	4	g	D	D	D	D	D	D	D	D
32191	Millwork	-	10	4	g	D	D	D	D	D	D	D	2 490
321911	Wood window & door mfg	-	6	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	13	9	904	23 335	660	1 264	14 404	50 794	38 275	89 047	1 899
MANITOWOC COUNTY, WI													
31-33	Manufacturing	-	180	91	13 474	407 244	10 278	19 826	269 073	1 111 156	1 009 433	2 134 067	70 872
311	Food mfg	-	27	11	1 274	36 279	975	1 705	21 735	111 151	260 718	378 486	19 228
326	Plastics & rubber products mfg	1	13	8	567	14 211	464	827	10 430	27 714	41 874	70 734	3 751
331	Primary metal mfg	-	5	3	887	32 074	788	1 814	27 411	55 766	42 128	96 422	1 979
3315	Foundries	-	5	3	887	32 074	788	1 814	27 411	55 766	42 128	96 422	1 979
33152	Nonferrous metal foundries	-	3	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	37	19	3 600	106 601	2 867	5 262	72 272	368 293	162 057	536 772	12 465
3322	Cutlery & handtool mfg	-	3	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	2	2	g	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	16	5	502	14 689	404	679	9 950	39 049	20 540	59 258	4 915
3329	Other fabricated metal product mfg	-	6	4	g	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	3	3	g	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	22	14	2 043	70 180	1 212	2 276	39 582	186 919	171 141	359 439	8 216
3331	Agriculture, construction, & mining machinery mfg	-	6	4	1 021	33 186	595	1 159	19 797	87 760	92 801	177 114	2 992
33312	Construction machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	4	972	29 122	820	1 576	20 365	68 257	53 828	121 851	D
3363	Motor vehicle parts mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	5	648	15 515	540	1 163	11 363	64 039	66 375	129 708	D
3372	Office furniture (including fixtures) mfg	-	4	4	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	4	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	10	5	1 339	41 660	1 018	2 084	27 508	82 911	62 448	145 266	1 729
3391	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	2	2	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MARATHON COUNTY, WI													
31-33	Manufacturing	-	232	98	16 839	502 563	13 422	26 519	354 835	1 295 226	1 896 838	3 181 899	121 883
311	Food mfg.....	-	28	11	1 501	42 748	1 235	2 700	33 072	132 880	798 375	928 839	15 674
3115	Dairy product mfg.....	-	16	10	1 278	38 114	1 034	2 256	29 703	120 705	745 502	862 822	D
31151	Dairy product (except frozen) mfg.....	-	16	10	1 278	38 114	1 034	2 256	29 703	120 705	745 502	862 822	D
311513	Cheese mfg.....	-	13	8	g	D	D	D	D	D	D	D	13 459
321	Wood product mfg.....	-	34	14	4 027	106 281	3 532	7 270	84 626	267 311	306 421	571 339	18 403
3219	Other wood product mfg....	-	22	13	3 875	103 302	3 395	7 001	81 987	260 931	299 496	558 475	18 070
32191	Millwork.....	-	9	4	3 018	78 671	2 767	5 718	68 348	191 294	192 910	381 478	12 453
321911	Wood window & door mfg.....	-	4	2	h	D	D	D	D	D	D	D	D
32199	All other wood product mfg.....	-	4	4	612	19 675	422	924	10 274	61 474	98 034	160 110	D
321992	Prefabricated wood building mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	-	9	8	2 731	113 957	2 069	4 289	81 343	332 755	347 754	681 456	44 128
3221	Pulp, paper, & paperboard mills.....	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills.....	-	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills.....	-	3	3	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	-	4	4	646	21 190	522	1 062	15 679	68 262	71 522	139 607	3 031
327	Nonmetallic mineral product mfg.....	-	13	6	773	19 390	573	1 174	12 967	42 372	38 980	80 831	4 130
332	Fabricated metal product mfg.....	-	52	25	4 299	126 686	3 235	5 768	80 000	322 510	210 628	525 500	20 878
3322	Cutlery & handtool mfg....	1	3	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg..	1	3	2	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg.....	-	14	9	2 375	79 761	1 649	3 285	46 778	184 316	130 271	312 098	13 306
33232	Ornamental & architectural metal products mfg.....	-	9	5	2 176	73 563	1 494	2 914	42 199	167 197	121 295	286 692	12 978
332321	Metal window & door mfg.....	-	3	2	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg....	-	5	3	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	16	5	523	18 083	398	807	12 967	38 225	21 494	59 504	2 593
335	Electrical equipment, appliance, & component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	8	4	688	20 243	563	1 096	14 750	54 762	39 084	93 026	3 993
337	Furniture & related product mfg.....	-	16	7	631	12 653	495	921	10 331	14 990	26 569	41 684	925
MARINETTE COUNTY, WI													
31-33	Manufacturing	-	82	31	6 766	217 907	5 215	10 791	152 589	489 591	650 702	1 139 092	74 179
321	Wood product mfg.....	-	16	7	611	13 790	523	1 008	10 174	27 335	33 029	58 906	525
322	Paper mfg.....	-	3	3	1 389	63 122	1 011	2 206	45 089	151 289	328 812	481 003	43 695
3221	Pulp, paper, & paperboard mills.....	-	3	3	1 389	63 122	1 011	2 206	45 089	151 289	328 812	481 003	43 695
32212	Paper mills.....	-	3	3	1 389	63 122	1 011	2 206	45 089	151 289	328 812	481 003	43 695
322121	Paper (except newsprint) mills.....	-	3	3	1 389	63 122	1 011	2 206	45 089	151 289	328 812	481 003	43 695
331	Primary metal mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries.....	-	2	2	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries.....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	13	5	501	14 909	372	719	9 612	19 509	27 370	46 383	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MARINETTE COUNTY, WI—Con.												
	Manufacturing—Con.												
336	Transportation equipment mfg	-	5	4	1 801	50 651	1 431	2 831	36 624	72 763	72 372	145 581	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D
33661	Ship & boat building ...	-	1	1	f	D	D	D	D	D	D	D	D
336611	Ship building & repairing	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
	MARQUETTE COUNTY, WI												
31-33	Manufacturing	-	24	12	996	27 318	815	1 533	16 069	69 423	67 633	135 843	8 593
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
	MENOMINEE COUNTY, WI												
31-33	Manufacturing	3	6	4	705	16 601	463	1 081	9 095	23 627	28 880	51 016	2 902
	MILWAUKEE COUNTY, WI												
31-33	Manufacturing	-	1 463	556	86 933	3 213 222	60 161	116 114	1 920 798	8 383 164	8 169 378	16 535 524	608 750
311	Food mfg	2	115	43	6 926	178 846	5 038	10 164	116 096	629 910	1 260 354	1 898 765	53 548
3116	Meat product mfg	4	17	9	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	4	17	9	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	9	6	3	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	10	5	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	58	17	1 842	38 891	1 173	2 374	24 547	117 801	74 439	192 380	D
31181	Bread & bakery product mfg	-	54	15	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	14	10	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	21	9	959	31 584	713	1 357	19 027	164 638	179 791	344 148	15 391
312	Beverage & tobacco product mfg	-	9	3	g	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	9	3	g	D	D	D	D	D	D	D	D
31212	Breweries	-	5	2	f	D	D	D	D	D	D	D	D
312120	Breweries	-	5	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	-	19	12	1 380	35 948	1 138	2 359	25 475	89 981	162 457	262 709	D
3161	Leather & hide tanning & finishing	-	10	10	g	D	D	D	D	D	D	D	D
31611	Leather & hide tanning & finishing	-	10	10	g	D	D	D	D	D	D	D	D
316110	Leather & hide tanning & finishing	-	10	10	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	24	16	1 955	72 284	1 361	2 948	42 607	177 451	211 505	390 295	19 293
3222	Converted paper product mfg	-	23	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	8	903	31 596	675	1 491	20 585	61 777	102 932	165 784	10 972
322211	Corrugated & solid fiber box mfg	-	7	5	612	21 419	454	961	13 513	38 971	80 261	118 655	D
32222	Paper bag & coated & treated paper mfg	-	6	5	f	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	4	3	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MILWAUKEE COUNTY, WI—Con.												
	Manufacturing—Con.												
323	Printing & related support activities.....	1	217	52	6 449	169 540	4 879	7 375	101 474	358 800	201 329	559 232	24 871
3231	Printing & related support activities.....	1	217	52	6 449	169 540	4 879	7 375	101 474	358 800	201 329	559 232	24 871
32311	Printing	1	186	42	5 854	149 513	4 437	6 494	89 111	324 392	192 220	515 623	23 069
323110	Commercial lithographic printing ..	1	92	31	4 478	108 005	3 546	4 858	68 840	211 809	126 097	336 447	18 234
32312	Support activities for printing.....	3	31	10	595	20 027	442	881	12 363	34 408	9 109	43 609	1 802
325	Chemical mfg	1	76	40	3 734	147 096	1 777	3 718	59 153	526 696	433 304	957 982	33 684
3251	Basic chemical mfg	—	13	7	g	D	D	D	D	D	D	D	12 555
32519	Other basic organic chemical mfg	—	4	3	973	34 119	354	683	11 317	105 139	24 392	117 150	D
325199	All other basic organic chemical mfg	—	4	3	973	34 119	354	683	11 317	105 139	24 392	117 150	D
3255	Paint, coating, & adhesive mfg	—	15	8	1 144	49 749	511	1 161	18 845	229 388	220 971	448 958	D
32551	Paint & coating mfg	—	7	3	875	39 505	374	867	14 639	198 646	172 943	369 883	D
325510	Paint & coating mfg	—	7	3	875	39 505	374	867	14 639	198 646	172 943	369 883	D
326	Plastics & rubber products mfg	2	45	23	2 198	65 636	1 598	3 258	37 624	157 081	119 014	275 488	16 457
3261	Plastics product mfg	2	42	21	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	32	18	1 670	49 376	1 167	2 433	26 655	116 314	80 906	196 479	D
326199	All other plastics product mfg	2	31	18	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	26	11	646	25 021	523	981	18 898	67 185	61 104	128 438	3 219
331	Primary metal mfg	—	41	32	5 653	178 176	4 705	9 616	134 283	391 210	342 354	734 767	29 952
3315	Foundries	—	30	27	5 036	156 260	4 248	8 634	119 663	334 532	212 353	547 461	26 285
33151	Ferrous metal foundries ..	—	18	18	3 683	115 957	3 118	6 221	92 065	244 134	159 440	405 634	19 873
331511	Iron foundries	—	11	11	g	D	D	D	D	D	D	D	D
331512	Steel investment foundries	—	2	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	5	5	1 292	36 661	1 135	2 228	29 918	74 718	40 811	117 165	D
33152	Nonferrous metal foundries	—	12	9	1 353	40 303	1 130	2 413	27 598	90 398	52 913	141 827	6 412
332	Fabricated metal product mfg	—	318	106	13 235	462 553	9 955	19 285	306 268	1 039 497	732 433	1 766 759	77 159
3321	Forging & stamping	—	23	18	2 975	118 543	2 252	4 191	84 193	243 134	225 008	463 128	20 082
33211	Forging & stamping	—	23	18	2 975	118 543	2 252	4 191	84 193	243 134	225 008	463 128	20 082
332111	Iron & steel forging	—	5	4	g	D	D	D	D	D	D	D	D
332116	Metal stamping	—	17	13	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	—	12	4	500	17 567	409	774	12 746	41 197	19 163	59 866	2 476
33221	Cutlery & handtool mfg	—	12	4	500	17 567	409	774	12 746	41 197	19 163	59 866	2 476
332212	Hand & edge tool mfg	—	12	4	500	17 567	409	774	12 746	41 197	19 163	59 866	2 476
3323	Architectural & structural metals mfg	—	43	14	1 666	56 516	1 230	2 610	37 346	111 787	108 305	219 873	9 699
33231	Plate work & fabricated structural product mfg ..	—	20	7	665	20 516	507	1 017	14 278	49 812	69 340	119 074	2 452
33232	Ornamental & architectural metal products mfg	—	23	7	1 001	36 000	723	1 593	23 068	61 975	38 965	100 799	7 247
332322	Sheet metal work mfg	—	13	3	744	27 067	555	1 253	18 474	44 696	28 001	72 101	D
3325	Hardware mfg	2	7	4	2 087	72 031	1 685	2 686	48 592	191 022	93 648	281 494	D
33251	Hardware mfg	2	7	4	2 087	72 031	1 685	2 686	48 592	191 022	93 648	281 494	D
332510	Hardware mfg	2	7	4	2 087	72 031	1 685	2 686	48 592	191 022	93 648	281 494	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	116	23	2 404	78 096	1 783	3 651	49 535	156 951	88 116	243 355	16 313
33271	Machine shops	—	95	17	1 655	52 926	1 204	2 421	33 787	103 048	51 789	153 498	7 967
332710	Machine shops	—	95	17	1 655	52 926	1 204	2 421	33 787	103 048	51 789	153 498	7 967
33272	Turned product & screw, nut, & bolt mfg	—	21	6	749	25 170	579	1 230	15 748	53 903	36 327	89 857	8 346
332721	Precision turned product mfg	—	17	5	645	21 282	494	1 061	12 894	45 977	20 272	65 986	D
3328	Coating, engraving, heat treating, & allied activities ..	—	67	23	1 563	42 201	1 196	2 332	26 895	89 339	29 260	118 540	7 172
33281	Coating, engraving, heat treating, & allied activities	—	67	23	1 563	42 201	1 196	2 332	26 895	89 339	29 260	118 540	7 172
332813	Electroplating, plating, polishing, anodizing, & coloring	—	37	11	943	24 044	739	1 418	15 120	45 354	19 135	64 499	3 179

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31-33	MILWAUKEE COUNTY, WI—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	-	33	13	1 461	54 476	961	2 057	30 882	151 644	95 130	254 324	5 937
33291	Metal valve mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg...	-	4	4	746	31 220	457	1 022	16 512	100 547	48 583	155 857	D
33299	All other fabricated metal product mfg.....	-	27	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	185	87	16 648	737 739	10 107	20 830	408 141	1 688 616	1 257 857	2 911 701	98 940
3331	Agriculture, construction, & mining machinery mfg....	-	13	10	h	D	D	D	D	D	D	D	D
33312	Construction machinery mfg.....	-	9	8	2 732	131 680	1 466	2 978	75 558	336 375	284 673	645 196	16 108
333120	Construction machinery mfg.....	-	9	8	2 732	131 680	1 466	2 978	75 558	336 375	284 673	645 196	16 108
3332	Industrial machinery mfg ..	-	19	7	522	23 328	331	702	13 295	54 450	37 342	86 603	1 795
33329	Other industrial machinery mfg.....	-	19	7	522	23 328	331	702	13 295	54 450	37 342	86 603	1 795
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg.....	-	7	4	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	-	7	4	f	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	1	68	24	1 805	77 037	1 315	2 881	53 781	142 622	77 579	221 427	9 824
33351	Metalworking machinery mfg.....	1	68	24	1 805	77 037	1 315	2 881	53 781	142 622	77 579	221 427	9 824
333511	Industrial mold mfg....	-	19	7	511	23 972	411	972	18 320	44 458	14 966	60 069	4 355
333514	Special die & tool, die set, jig, & fixture mfg ..	-	30	8	785	31 157	575	1 206	23 305	64 111	29 115	92 922	3 540
3336	Engine, turbine, & power transmission equipment mfg.....	-	18	11	6 856	305 776	4 374	8 862	172 577	721 554	445 156	1 126 179	50 726
33361	Engine, turbine, & power transmission equipment mfg.....	-	18	11	6 856	305 776	4 374	8 862	172 577	721 554	445 156	1 126 179	50 726
333611	Turbine & turbine generator set unit mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
333612	Speed changer, industrial high-speed drive, & gear mfg....	-	7	3	1 536	68 207	964	1 668	37 096	165 702	78 011	241 752	D
333613	Mechanical power transmission equipment mfg.....	-	6	4	736	27 561	570	1 077	20 475	71 831	33 890	104 792	D
333618	Other engine equipment mfg.....	-	4	3	h	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg.....	-	49	26	3 377	147 081	1 811	3 697	65 482	296 115	303 034	589 298	13 932
33392	Material handling equipment mfg.....	-	12	7	1 058	49 411	540	1 103	21 430	136 711	130 651	254 433	D
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	6	5	915	43 145	455	928	18 686	99 858	78 412	164 710	D
33399	All other general-purpose machinery mfg.....	-	32	17	2 241	95 487	1 223	2 517	43 058	156 484	167 544	326 897	10 341
333993	Packaging machinery mfg.....	-	8	3	809	35 350	449	906	15 900	51 490	87 473	138 750	D
334	Computer & electronic product mfg.....	-	56	23	4 927	229 572	2 451	4 901	80 059	592 718	370 441	957 415	33 290
3344	Semiconductor & other electronic component mfg.....	-	19	12	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	19	12	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	23	9	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	23	9	h	D	D	D	D	D	D	D	D
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	3	1	g	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg.....	-	2	1	f	D	D	D	D	D	D	D	D

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31-33	MILWAUKEE COUNTY, WI—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	40	23	8 805	323 480	6 732	11 116	197 888	909 063	946 404	1 844 706	61 673
3353	Electrical equipment mfg ..	-	23	14	7 128	272 944	5 543	8 619	169 337	716 318	820 560	1 528 362	50 261
33531	Electrical equipment mfg	-	23	14	7 128	272 944	5 543	8 619	169 337	716 318	820 560	1 528 362	50 261
335312	Motor & generator mfg	-	4	3	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	3	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	12	8	5 653	211 617	4 502	6 394	129 725	568 232	718 351	1 270 921	45 404
3359	Other electrical equipment & component mfg	-	11	6	g	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	34	18	7 013	332 335	4 708	9 645	232 080	1 054 194	1 460 430	2 535 512	107 030
3363	Motor vehicle parts mfg ...	-	22	12	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	6	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	6	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	6	4	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	6	4	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	3	2	h	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	2	2	h	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	71	12	1 007	31 778	764	1 455	20 521	60 939	47 322	108 544	3 700
3371	Household & institutional furniture & kitchen cabinet mfg	1	55	7	623	19 539	480	910	12 919	33 125	27 028	60 640	D
339	Miscellaneous mfg	-	120	35	3 969	122 362	2 600	4 818	67 730	265 624	220 774	488 099	19 176
3399	Other miscellaneous mfg ..	-	77	28	3 518	108 199	2 386	4 415	62 735	235 269	207 743	443 672	18 389
33995	Sign mfg	-	35	12	1 442	49 661	983	1 772	27 523	88 882	89 055	180 868	11 745
339950	Sign mfg	-	35	12	1 442	49 661	983	1 772	27 523	88 882	89 055	180 868	11 745
33999	All other miscellaneous mfg	-	17	7	1 339	38 125	1 010	1 970	27 203	104 282	100 877	203 401	5 152
339991	Gasket, packing, & sealing device mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	-	3	3	f	D	D	D	D	D	D	D	D
31-33	MONROE COUNTY, WI												
	Manufacturing	1	58	20	3 397	79 905	2 601	4 912	54 292	291 852	469 797	745 019	8 326
311	Food mfg	4	7	5	505	11 624	402	860	8 821	68 960	172 197	231 141	2 497
333	Machinery mfg	-	9	3	f	D	D	D	D	D	D	D	1 394
3331	Agriculture, construction, & mining machinery mfg	-	3	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	3	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
31-33	OCONTO COUNTY, WI												
	Manufacturing	-	61	26	2 445	56 624	2 048	4 163	36 810	135 450	163 740	297 680	27 246
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ONEIDA COUNTY, WI													
31-33	Manufacturing	-	68	15	2 526	78 338	2 163	4 763	62 490	182 764	216 338	395 334	16 060
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	6	3	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg	-	1	1	f	D	D	D	D	D	D	D	D
OUTAGAMIE COUNTY, WI													
31-33	Manufacturing	-	303	127	21 410	750 742	15 718	32 049	490 768	2 319 323	2 980 563	5 315 387	172 084
311	Food mfg	-	33	20	5 258	135 117	4 258	8 056	103 000	466 614	855 130	1 330 936	28 281
3114	Fruit & vegetable preserving & specialty food mfg	-	8	7	h	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	3	3	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	3	3	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	8	7	767	24 830	570	1 288	17 234	64 255	271 274	345 787	D
31151	Dairy product (except frozen) mfg	-	8	7	767	24 830	570	1 288	17 234	64 255	271 274	345 787	D
311513	Cheese mfg	-	6	6	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	2	2	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	10	4	f	D	D	D	D	D	D	D	D
313	Textile mills	-	4	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills	-	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	26	22	i	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	6	6	h	D	D	D	D	D	D	D	D
32212	Paper mills	-	5	5	3 295	153 959	2 537	5 757	110 838	561 714	631 251	1 206 159	D
322121	Paper (except newsprint) mills	-	5	5	3 295	153 959	2 537	5 757	110 838	561 714	631 251	1 206 159	D
3222	Converted paper product mfg	-	20	16	h	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	11	7	f	D	D	D	D	D	D	D	D
322299	All other converted paper product mfg	-	9	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	39	8	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	2	39	8	f	D	D	D	D	D	D	D	D
32311	Printing	2	36	7	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	11	7	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	9	6	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	4	4	g	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	50	20	1 360	48 229	1 016	2 102	34 084	108 805	76 248	187 822	8 967
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	23	8	509	19 223	361	806	13 800	46 284	16 699	64 366	4 443
33271	Machine shops	-	23	8	509	19 223	361	806	13 800	46 284	16 699	64 366	4 443
332710	Machine shops	-	23	8	509	19 223	361	806	13 800	46 284	16 699	64 366	4 443

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
OUTAGAMIE COUNTY, WI—Con.													
31-33	Manufacturing—Con.												
333	Machinery mfg	—	36	16	3 278	135 851	1 672	3 201	58 243	400 618	416 966	816 562	18 757
3332	Industrial machinery mfg ..	—	18	7	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	—	16	6	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	—	12	6	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	6	5	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	—	3	2	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	—	2	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	5	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	10	3	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	—	8	2	f	D	D	D	D	D	D	D	D
OZAUKEE COUNTY, WI													
31-33	Manufacturing	—	242	100	13 420	485 765	9 040	18 372	267 203	1 463 770	1 296 248	2 763 146	87 389
325	Chemical mfg	—	11	6	817	38 582	320	693	8 687	190 810	81 505	286 665	4 061
326	Plastics & rubber products mfg	—	11	7	1 100	29 623	868	1 825	18 652	75 705	80 745	153 847	7 214
3261	Plastics product mfg	—	10	7	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	9	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	9	6	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	10	8	1 335	54 723	1 055	2 456	41 646	225 697	157 053	380 484	11 905
3315	Foundries	—	8	6	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	5	4	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	53	23	1 757	67 916	1 316	2 641	39 613	182 742	129 290	310 354	13 455
3321	Forging & stamping	—	12	8	528	19 224	372	749	9 981	49 219	41 300	90 585	3 547
33211	Forging & stamping	—	12	8	528	19 224	372	749	9 981	49 219	41 300	90 585	3 547
332116	Metal stamping	—	11	8	f	D	D	D	D	D	D	D	D
333	Machinery mfg	1	42	19	3 338	127 082	2 233	4 674	73 124	370 540	340 755	703 226	20 197
3331	Agriculture, construction, & mining machinery mfg	1	6	5	1 797	70 538	1 154	2 440	39 687	246 309	255 085	495 371	13 646
33311	Agricultural implement mfg	—	3	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	—	3	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	2	3	3	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	2	3	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	19	7	681	30 434	510	1 179	20 040	62 508	18 909	81 286	4 437
33351	Metalworking machinery mfg	1	19	7	681	30 434	510	1 179	20 040	62 508	18 909	81 286	4 437
334	Computer & electronic product mfg	—	15	7	f	D	D	D	D	D	D	D	1 735
335	Electrical equipment, appliance, & component mfg	—	14	7	2 038	74 024	1 156	1 897	33 397	160 858	229 705	397 514	9 900
3353	Electrical equipment mfg ..	—	6	3	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	6	3	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	3	1	g	D	D	D	D	D	D	D	D
PIERCE COUNTY, WI													
31-33	Manufacturing	—	40	12	942	24 703	715	1 411	16 444	92 522	124 050	216 678	10 281

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
POLK COUNTY, WI													
31-33	Manufacturing	1	95	40	3 912	90 664	3 010	5 366	59 203	270 467	361 085	628 141	23 425
326	Plastics & rubber products mfg	-	13	9	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	12	9	f	D	D	D	D	D	D	D	2 277
32619	Other plastics product mfg	-	11	8	808	16 599	607	1 003	12 115	48 072	26 204	74 269	2 277
326199	All other plastics product mfg	-	11	8	808	16 599	607	1 003	12 115	48 072	26 204	74 269	2 277
332	Fabricated metal product mfg	1	21	8	600	15 022	449	832	8 975	36 318	14 944	50 092	3 162
336	Transportation equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
PORTAGE COUNTY, WI													
31-33	Manufacturing	2	83	30	5 534	178 274	4 609	8 898	133 462	683 604	584 248	1 265 822	95 666
311	Food mfg	6	12	7	1 932	47 412	1 725	3 082	38 856	252 122	171 621	423 486	25 194
3114	Fruit & vegetable preserving & specialty food mfg	7	7	6	1 838	45 081	1 657	2 946	37 167	246 787	162 259	407 954	D
31141	Frozen food mfg	9	3	3	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	2	2	g	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	-	4	3	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	3	3	g	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	-	9	5	595	23 243	473	1 015	14 826	42 093	32 387	73 971	5 513
3231	Printing & related support activities.....	-	9	5	595	23 243	473	1 015	14 826	42 093	32 387	73 971	5 513
32311	Printing	-	7	4	f	D	D	D	D	D	D	D	D
PRICE COUNTY, WI													
31-33	Manufacturing	-	46	18	2 957	91 675	2 168	12 175	59 466	232 835	218 716	449 617	13 252
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	8	3	1 308	46 021	826	1 763	25 909	101 248	108 939	207 757	3 650
3332	Industrial machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RACINE COUNTY, WI													
31-33	Manufacturing	—	379	141	18 869	664 097	13 445	26 370	393 033	3 236 876	1 989 171	5 229 538	192 568
311	Food mfg	—	16	7	1 032	26 072	852	1 600	16 326	310 862	195 539	505 675	9 676
3113	Sugar & confectionery product mfg	—	3	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	—	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans	—	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	—	29	7	882	24 118	669	1 273	15 349	45 624	29 602	73 209	2 479
3231	Printing & related support activities	—	29	7	882	24 118	669	1 273	15 349	45 624	29 602	73 209	2 479
32311	Printing	—	28	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg	—	7	5	g	D	D	D	D	D	D	D	33 448
3256	Soap, cleaning compound, & toilet preparation mfg	—	3	3	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	—	3	3	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg	—	2	2	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	16	12	994	31 031	770	1 547	21 392	75 996	54 386	130 200	4 133
3262	Rubber product mfg	2	5	5	626	20 892	473	982	14 972	48 126	39 505	87 572	2 564
32629	Other rubber product mfg	2	5	5	626	20 892	473	982	14 972	48 126	39 505	87 572	2 564
327	Nonmetallic mineral product mfg	—	13	3	642	24 935	531	1 018	18 815	81 400	35 646	118 343	D
331	Primary metal mfg	4	15	9	1 621	52 396	1 247	3 064	35 692	119 166	120 641	238 687	12 895
3315	Foundries	5	12	7	1 545	48 533	1 188	2 935	33 366	105 042	74 080	179 387	11 241
33152	Nonferrous metal foundries	7	9	5	1 124	34 787	851	2 283	23 160	75 931	55 261	131 803	D
331521	Aluminum die-casting foundries	8	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	103	42	3 568	115 749	2 567	5 095	68 900	270 983	207 279	477 851	18 717
3321	Forging & stamping	—	10	7	507	19 177	351	689	11 004	50 189	46 152	95 450	3 180
33211	Forging & stamping	—	10	7	507	19 177	351	689	11 004	50 189	46 152	95 450	3 180
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	48	16	1 379	40 085	1 056	2 142	25 914	93 473	53 440	145 282	7 226
33271	Machine shops	—	37	12	1 104	32 115	823	1 697	20 633	75 574	47 512	121 310	4 797
332710	Machine shops	—	37	12	1 104	32 115	823	1 697	20 633	75 574	47 512	121 310	4 797
3329	Other fabricated metal product mfg	—	11	6	608	22 940	368	752	11 447	53 872	46 867	103 634	4 267
333	Machinery mfg	—	71	20	3 313	133 696	2 253	4 423	83 528	418 153	457 395	861 718	46 103
3331	Agriculture, construction, & mining machinery mfg	—	11	6	1 279	48 481	872	1 755	28 807	230 281	324 859	543 893	D
33311	Agricultural implement mfg	—	5	4	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	—	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	—	5	3	1 025	48 742	715	1 299	32 302	126 059	86 520	209 491	4 707
33361	Engine, turbine, & power transmission equipment mfg	—	5	3	1 025	48 742	715	1 299	32 302	126 059	86 520	209 491	4 707
333613	Mechanical power transmission equipment mfg	—	4	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	23	10	2 710	89 093	1 962	3 475	47 193	477 787	197 262	677 347	17 178
3352	Household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	—	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	2	20	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	2	20	7	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	10	6	939	29 240	783	1 648	21 988	67 528	68 400	137 384	4 376
339	Miscellaneous mfg	—	22	8	743	21 793	483	896	9 727	42 332	32 716	74 302	7 280

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RICHLAND COUNTY, WI													
31-33	Manufacturing	-	26	9	1 851	52 689	1 464	3 228	32 849	140 126	234 596	373 336	7 110
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
ROCK COUNTY, WI													
31-33	Manufacturing	-	234	81	19 547	785 294	15 128	32 406	553 483	3 905 863	6 220 648	10 105 609	210 195
311	Food mfg	-	13	8	1 334	47 594	1 101	2 527	31 471	355 527	296 037	649 612	D
3119	Other food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	10	4	f	D	D	D	D	D	D	D	3 742
3261	Plastics product mfg	-	10	4	f	D	D	D	D	D	D	D	3 742
32619	Other plastics product mfg	-	6	2	f	D	D	D	D	D	D	D	884
326199	All other plastics product mfg	-	6	2	f	D	D	D	D	D	D	D	884
331	Primary metal mfg	-	6	6	1 074	40 556	770	1 914	26 314	98 179	102 982	196 245	6 667
3315	Foundries	-	4	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	50	14	1 499	54 642	1 109	2 214	34 385	126 436	126 876	252 754	11 997
333	Machinery mfg	-	29	13	3 123	139 642	1 850	3 491	70 136	235 879	338 331	577 317	20 537
3332	Industrial machinery mfg	-	7	3	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	9	4	584	29 424	350	660	13 696	27 928	50 424	100 004	2 293
33351	Metalworking machinery mfg	-	9	4	584	29 424	350	660	13 696	27 928	50 424	100 004	2 293
3336	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	13	6	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	6	4	2 215	65 064	1 837	4 034	47 798	193 971	264 653	455 091	9 647
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	8	4	744	24 940	572	1 256	16 451	80 870	60 282	141 063	2 618
339	Miscellaneous mfg	-	20	2	1 126	33 145	760	1 505	19 844	106 013	106 658	200 896	6 026
3399	Other miscellaneous mfg	-	10	2	g	D	D	D	D	D	D	D	D
33992	Sporting & athletic goods mfg	-	4	1	f	D	D	D	D	D	D	D	D
339920	Sporting & athletic goods mfg	-	4	1	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	2	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RUSK COUNTY, WI													
31-33	Manufacturing	-	30	13	1 722	40 962	1 392	2 703	30 865	84 226	118 665	203 085	9 720
321	Wood product mfg	-	4	3	1 013	24 727	896	1 766	20 516	43 706	57 018	100 399	6 340
3219	Other wood product mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
32191	Millwork	-	3	2	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	2	f	D	D	D	D	D	D	D	D
ST. CROIX COUNTY, WI													
31-33	Manufacturing	-	150	51	5 867	174 338	4 387	8 245	106 837	399 662	425 348	826 999	35 000
326	Plastics & rubber products mfg	-	9	5	679	16 451	553	873	10 249	31 793	35 683	67 582	3 479
3261	Plastics product mfg	-	8	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	5	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	35	11	1 137	35 673	822	1 517	21 379	72 187	76 061	146 262	6 901
333	Machinery mfg	-	25	11	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	768	24 796	603	1 093	16 246	86 810	51 745	138 116	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	4	3	768	24 796	603	1 093	16 246	86 810	51 745	138 116	D
3339	Other general-purpose machinery mfg	1	6	1	f	D	D	D	D	D	D	D	1 571
33399	All other general-purpose machinery mfg	1	5	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	4	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	2	2	f	D	D	D	D	D	D	D	D
SAUK COUNTY, WI													
31-33	Manufacturing	-	114	50	6 570	180 827	5 245	10 618	130 040	511 318	603 512	1 121 234	58 547
326	Plastics & rubber products mfg	-	12	9	1 384	33 394	1 118	2 543	24 501	127 384	67 014	196 171	15 671
3261	Plastics product mfg	-	9	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	8	4	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	2	2	f	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	21	9	1 225	33 878	929	1 822	22 882	86 327	116 176	206 292	4 781
SAWYER COUNTY, WI													
31-33	Manufacturing	-	39	11	859	22 427	695	1 345	16 159	60 715	75 922	137 307	7 892
321	Wood product mfg	-	8	5	500	13 975	439	907	11 022	33 015	55 065	88 297	D
SHAWANO COUNTY, WI													
31-33	Manufacturing	1	67	23	1 985	51 044	1 539	2 935	33 842	131 118	200 115	330 261	12 725

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	SHEBOYGAN COUNTY, WI												
31-33	Manufacturing	1	239	117	20 047	628 324	14 618	28 148	383 824	2 034 961	2 203 789	4 252 678	146 005
311	Food mfg	3	31	16	3 017	92 756	1 944	3 753	45 994	381 960	705 114	1 086 904	25 490
3115	Dairy product mfg	3	12	8	1 823	59 887	1 099	2 150	28 639	273 334	526 869	800 266	14 871
31151	Dairy product (except frozen) mfg	3	11	8	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	4	10	7	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	1	4	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	1	4	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	10	5	625	22 404	499	1 009	12 488	50 390	62 846	113 181	4 523
3222	Converted paper product mfg	—	9	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	20	7	811	23 198	635	1 245	15 617	43 591	41 937	84 848	2 639
3231	Printing & related support activities	1	20	7	811	23 198	635	1 245	15 617	43 591	41 937	84 848	2 639
32311	Printing	1	17	7	796	22 767	622	1 224	15 337	42 585	41 676	83 582	2 587
323110	Commercial lithographic printing	—	8	3	527	15 777	416	805	10 731	27 914	31 338	58 916	1 884
325	Chemical mfg	—	7	5	655	22 495	436	861	13 504	71 809	93 408	166 816	D
326	Plastics & rubber products mfg	—	19	15	2 427	88 285	1 890	3 278	61 437	222 269	161 882	390 170	24 114
3261	Plastics product mfg	—	19	15	2 427	88 285	1 890	3 278	61 437	222 269	161 882	390 170	24 114
32619	Other plastics product mfg	—	12	9	1 957	73 432	1 506	2 459	51 820	190 829	126 225	323 729	20 905
326199	All other plastics product mfg	—	12	9	1 957	73 432	1 506	2 459	51 820	190 829	126 225	323 729	20 905
327	Nonmetallic mineral product mfg	—	12	7	853	29 468	695	1 462	23 337	78 740	34 947	120 708	2 342
3271	Clay product & refractory mfg	—	1	1	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg	—	1	1	f	D	D	D	D	D	D	D	D
327111	Vitreous china plumbing fixture & bathroom accessories mfg	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	—	9	7	1 421	45 548	1 219	2 387	34 292	111 321	189 243	311 846	31 503
3315	Foundries	—	8	7	g	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	6	5	g	D	D	D	D	D	D	D	29 860
331524	Aluminum foundries (except die-casting)	—	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	47	12	3 221	91 671	2 508	5 117	56 899	496 194	191 855	691 634	18 484
3322	Cutlery & handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	—	1	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	8	3	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	8	3	g	D	D	D	D	D	D	D	D
332998	Enameled iron & metal sanitary ware mfg	—	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	33	12	2 938	90 825	1 785	3 515	47 562	287 486	314 823	595 839	18 501
3336	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	3	9	4	1 291	43 887	685	1 234	18 704	104 834	100 419	206 903	6 089
33399	All other general-purpose machinery mfg	—	7	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	—	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	SHEBOYGAN COUNTY, WI—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	13	10	1 332	39 783	1 076	2 221	22 996	86 484	60 199	142 070	2 897
3371	Household & institutional furniture & kitchen cabinet mfg	-	6	4	892	23 948	763	1 564	15 339	55 755	39 622	90 517	2 124
33712	Household & institutional furniture mfg	-	5	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	1	12	5	550	16 351	396	754	8 193	49 083	13 790	62 544	1 068
	TAYLOR COUNTY, WI												
31-33	Manufacturing	-	43	16	2 987	83 762	2 383	4 511	59 433	178 327	413 523	592 711	7 238
311	Food mfg	-	9	3	562	16 743	477	976	12 470	34 830	125 058	160 076	4 500
321	Wood product mfg	-	11	5	1 680	46 467	1 246	2 262	29 701	103 341	258 753	362 891	1 116
3219	Other wood product mfg ...	-	9	5	g	D	D	D	D	D	D	D	D
32191	Millwork	-	7	5	g	D	D	D	D	D	D	D	856
321911	Wood window & door mfg	-	5	3	g	D	D	D	D	D	D	D	D
	TREMPEALEAU COUNTY, WI												
31-33	Manufacturing	-	62	24	4 678	121 788	3 782	8 533	76 000	258 343	545 742	799 919	22 657
311	Food mfg	-	15	5	1 175	20 434	1 003	1 491	15 554	48 462	220 742	269 305	11 438
3115	Dairy product mfg	-	4	3	520	6 995	438	468	5 050	24 964	156 863	181 886	D
31151	Dairy product (except frozen) mfg	-	4	3	520	6 995	438	468	5 050	24 964	156 863	181 886	D
311513	Cheese mfg	-	4	3	520	6 995	438	468	5 050	24 964	156 863	181 886	D
3116	Meat product mfg	-	7	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	7	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	4	1	g	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	3	1	g	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	3	1	g	D	D	D	D	D	D	D	D
	VERNON COUNTY, WI												
31-33	Manufacturing	1	37	12	970	20 727	823	1 439	15 424	86 723	81 395	168 127	6 716
	WALWORTH COUNTY, WI												
31-33	Manufacturing	1	218	91	10 377	311 668	7 685	15 392	185 538	770 969	725 783	1 496 166	57 677
311	Food mfg	2	13	5	779	22 399	623	1 259	16 667	125 013	70 336	193 048	D
326	Plastics & rubber products mfg	2	18	12	817	21 830	698	1 331	15 121	55 850	49 230	105 428	4 745
3261	Plastics product mfg	1	16	11	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	9	7	f	D	D	D	D	D	D	D	2 234
326199	All other plastics product mfg	2	9	7	f	D	D	D	D	D	D	D	2 234
331	Primary metal mfg	-	7	4	559	19 272	436	1 006	13 406	39 465	25 401	66 347	3 765
332	Fabricated metal product mfg	-	47	16	1 442	43 905	1 170	2 434	30 359	94 031	57 638	151 467	7 521
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	25	8	735	20 853	624	1 246	16 048	50 501	28 551	79 065	4 088
33272	Turned product & screw, nut, & bolt mfg	-	10	5	515	15 186	446	915	11 916	35 071	12 072	47 375	2 761
333	Machinery mfg	-	21	10	1 700	61 908	962	1 960	27 295	200 806	178 489	375 143	10 572
3339	Other general-purpose machinery mfg	-	7	6	1 334	49 251	718	1 541	21 418	143 638	136 593	277 547	8 686
33391	Pump & compressor mfg	-	2	2	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	7	4	547	13 294	384	767	6 693	28 964	28 415	58 132	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WALWORTH COUNTY, WI—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	3	5	4	694	14 926	516	1 065	8 296	14 060	25 364	38 929	1 192
3353	Electrical equipment mfg ..	4	3	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	4	3	2	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	6	1 089	32 945	750	1 283	15 493	64 322	126 127	193 817	5 306
339	Miscellaneous mfg	1	14	6	970	29 776	766	1 528	18 977	56 348	62 542	119 356	1 971
3399	Other miscellaneous mfg ..	1	11	6	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	1	5	4	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	—	3	3	f	D	D	D	D	D	D	D	D
31-33	WASHBURN COUNTY, WI		35	7	793	17 136	676	1 160	11 828	39 705	57 018	94 662	2 072
31-33	Manufacturing												
31-33	WASHINGTON COUNTY, WI												
31-33	Manufacturing		321	126	15 660	499 184	11 444	22 610	307 886	1 234 272	1 138 466	2 360 235	94 701
311	Food mfg	—	10	5	618	22 072	430	865	11 520	96 267	190 556	283 854	7 846
316	Leather & allied product mfg .	—	5	3	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	—	4	2	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	—	4	2	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	—	3	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	—	7	6	512	17 920	381	890	10 718	40 797	55 458	96 963	2 672
3222	Converted paper product mfg	—	7	6	512	17 920	381	890	10 718	40 797	55 458	96 963	2 672
323	Printing & related support activities	—	22	6	g	D	D	D	D	D	D	D	7 256
3231	Printing & related support activities	—	22	6	g	D	D	D	D	D	D	D	7 256
32311	Printing	—	20	6	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	8	2	f	D	D	D	D	D	D	D	D
323113	Commercial screen printing	—	5	3	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	90	34	3 793	109 768	2 886	5 634	71 932	252 228	191 313	434 498	23 853
3322	Cutlery & handtool mfg	—	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	—	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	—	11	8	834	25 564	533	1 038	13 809	68 320	53 282	114 309	2 627
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	43	12	857	24 420	726	1 298	18 037	47 571	13 504	60 589	6 018
33271	Machine shops	1	38	10	686	19 057	589	1 012	14 120	39 086	8 827	47 609	4 710
332710	Machine shops	1	38	10	686	19 057	589	1 012	14 120	39 086	8 827	47 609	4 710
3329	Other fabricated metal product mfg	—	10	4	674	20 438	555	1 140	15 167	55 396	55 332	109 085	6 461
33299	All other fabricated metal product mfg	—	9	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	6	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	79	28	2 639	105 026	1 720	3 549	59 996	203 553	129 122	331 977	26 926
3331	Agriculture, construction, & mining machinery mfg	—	3	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	—	44	15	946	44 749	777	1 733	34 071	93 204	37 280	130 297	14 652
33351	Metalworking machinery mfg	—	44	15	946	44 749	777	1 733	34 071	93 204	37 280	130 297	14 652

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON COUNTY, WI—Con.												
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	—	6	5	2 053	71 121	1 472	2 942	41 852	219 215	213 226	433 204	8 122
3352	Household appliance mfg . . .	—	2	2	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	—	2	2	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ...	—	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	10	5	703	21 720	563	1 063	15 220	49 238	53 057	103 359	5 421
3363	Motor vehicle parts mfg ...	—	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	22	3	541	16 340	332	591	7 928	45 912	35 132	80 357	2 071
	WAUKESHA COUNTY, WI												
31-33	Manufacturing	1	1 148	464	49 130	1 760 273	34 599	70 480	1 051 082	4 944 772	4 450 884	9 434 623	305 133
311	Food mfg	1	43	20	3 506	102 835	2 558	5 021	62 380	452 533	681 513	1 152 125	19 956
3113	Sugar & confectionery product mfg	—	4	3	f	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	1	5	4	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	1	3	3	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	—	2	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	4	3	536	18 930	347	777	11 930	42 352	195 364	237 274	2 296
31151	Dairy product (except frozen) mfg	—	3	3	f	D	D	D	D	D	D	D	2 296
322	Paper mfg	1	14	10	952	36 371	713	1 426	22 535	69 791	68 474	137 854	8 520
3222	Converted paper product mfg	1	14	10	952	36 371	713	1 426	22 535	69 791	68 474	137 854	8 520
32223	Stationery product mfg ..	—	4	3	f	D	D	D	D	D	D	D	D
322232	Envelope mfg	—	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	144	60	6 886	240 112	5 478	11 329	178 048	516 855	294 178	801 942	34 102
3231	Printing & related support activities	1	144	60	6 886	240 112	5 478	11 329	178 048	516 855	294 178	801 942	34 102
32311	Printing	1	117	45	6 016	205 655	4 830	9 984	155 508	450 304	278 063	719 337	28 390
323110	Commercial lithographic printing ...	1	55	25	4 679	164 356	3 901	8 263	130 484	366 297	220 990	577 969	23 673
32312	Support activities for printing	—	27	15	870	34 457	648	1 345	22 540	66 551	16 115	82 605	5 712
323122	Prepress services	1	21	12	611	25 316	440	896	16 280	48 527	9 532	57 767	5 182
325	Chemical mfg	4	43	14	847	31 932	500	999	13 630	97 626	173 141	268 868	5 992
326	Plastics & rubber products mfg	—	63	32	3 660	112 586	2 788	5 630	70 759	283 062	220 699	503 707	32 390
3261	Plastics product mfg	—	60	29	3 325	102 787	2 530	5 147	64 933	262 220	211 130	473 108	31 699
32611	Unsupported plastics film, sheet, & bag mfg ..	1	10	4	554	19 725	393	739	11 318	46 293	51 744	97 563	D
32619	Other plastics product mfg	—	41	21	2 486	75 297	1 939	4 054	49 108	198 692	140 389	338 934	25 449
326199	All other plastics product mfg	—	39	20	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	3	31	10	650	25 608	490	1 062	16 364	64 518	53 008	117 158	5 281
331	Primary metal mfg	—	22	12	2 016	78 340	1 467	3 047	48 103	187 914	148 612	336 271	13 982
3315	Foundries	—	17	11	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	—	7	6	g	D	D	D	D	D	D	D	D
331511	Iron foundries	—	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	6	5	1 144	47 578	740	1 548	25 560	128 516	68 581	197 640	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAUKESHA COUNTY, WI—Con.													
31-33	Manufacturing—Con.												
332	Fabricated metal product mfg	-	313	117	9 396	334 296	6 955	14 448	209 153	774 424	519 972	1 294 290	62 173
3321	Forging & stamping	-	31	15	1 045	32 761	778	1 486	20 456	89 509	60 886	148 902	7 923
33211	Forging & stamping	-	31	15	1 045	32 761	778	1 486	20 456	89 509	60 886	148 902	7 923
332116	Metal stamping	-	24	12	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	41	20	1 436	50 908	1 021	2 039	29 744	100 148	81 454	182 390	11 366
33231	Plate work & fabricated structural product mfg ..	2	24	9	506	18 500	364	734	9 811	33 289	27 168	60 801	2 333
33232	Ornamental & architectural metal products mfg	-	17	11	930	32 408	657	1 305	19 933	66 859	54 286	121 589	9 033
332322	Sheet metal work mfg ..	-	9	8	647	23 029	504	975	15 756	45 269	35 848	82 205	8 121
3324	Boiler, tank, & shipping container mfg	-	12	7	679	22 509	505	1 107	16 374	59 837	68 988	131 770	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	152	45	3 285	115 231	2 633	5 555	79 292	247 665	131 599	379 715	20 447
33271	Machine shops	1	126	32	2 389	84 353	1 902	3 978	57 506	183 625	96 414	281 361	15 451
332710	Machine shops	1	126	32	2 389	84 353	1 902	3 978	57 506	183 625	96 414	281 361	15 451
33272	Turned product & screw, nut, & bolt mfg	-	26	13	896	30 878	731	1 577	21 786	64 040	35 185	98 354	4 996
332721	Precision turned product mfg	-	23	13	853	29 697	696	1 501	20 898	59 323	31 963	90 500	D
3328	Coating, engraving, heat treating, & allied activities ..	-	28	6	552	19 081	418	979	11 859	41 076	11 897	52 680	2 374
33281	Coating, engraving, heat treating, & allied activities	-	28	6	552	19 081	418	979	11 859	41 076	11 897	52 680	2 374
3329	Other fabricated metal product mfg	-	32	15	1 908	76 951	1 248	2 558	41 827	202 894	137 424	338 517	15 194
33291	Metal valve mfg	-	3	3	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	-	29	12	g	D	D	D	D	D	D	D	D
333	Machinery mfg	1	208	90	9 471	381 845	6 021	12 399	208 420	847 665	673 643	1 571 354	62 511
3331	Agriculture, construction, & mining machinery mfg ..	-	9	5	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	7	4	760	33 449	376	774	13 084	91 145	92 544	185 219	D
333120	Construction machinery mfg	-	7	4	760	33 449	376	774	13 084	91 145	92 544	185 219	D
3332	Industrial machinery mfg ..	-	36	14	1 283	45 803	933	2 060	28 337	114 873	117 464	230 191	7 418
33329	Other industrial machinery mfg	-	31	11	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	6	9	5	989	36 176	411	889	10 001	100 886	57 916	155 590	3 070
33331	Commercial & service industry machinery mfg	6	9	5	989	36 176	411	889	10 001	100 886	57 916	155 590	3 070
333319	Other commercial & service industry machinery mfg	5	7	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	1	94	36	2 519	105 368	1 881	3 899	70 977	187 827	92 153	283 110	15 271
33351	Metalworking machinery mfg	1	94	36	2 519	105 368	1 881	3 899	70 977	187 827	92 153	283 110	15 271
333511	Industrial mold mfg ..	-	26	9	649	31 623	515	1 128	23 907	42 502	23 211	64 088	3 320
333514	Special die & tool, die set, jig, & fixture mfg ..	2	46	14	762	33 949	598	1 239	24 500	58 793	17 999	76 682	7 609
333515	Cutting tool & machine tool accessory mfg ..	-	13	7	683	25 513	452	979	14 720	62 559	29 622	95 956	3 281
3336	Engine, turbine, & power transmission equipment mfg	-	15	10	g	D	D	D	D	D	D	D	21 724
33361	Engine, turbine, & power transmission equipment mfg	-	15	10	g	D	D	D	D	D	D	D	21 724
333618	Other engine equipment mfg	-	5	3	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	40	19	2 213	93 037	1 329	2 626	45 437	231 560	191 459	423 259	6 784
33399	All other general-purpose machinery mfg	-	28	15	1 832	78 028	1 115	2 183	39 039	193 878	170 218	364 636	D

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	WAUKESHA COUNTY, WI—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg.....	-	48	27	3 203	122 684	2 077	3 816	66 676	897 392	739 335	1 630 601	13 425
3344	Semiconductor & other electronic component mfg.....	3	17	8	915	24 111	655	1 215	13 369	48 953	40 156	87 926	D
33441	Semiconductor & other electronic component mfg.....	3	17	8	915	24 111	655	1 215	13 369	48 953	40 156	87 926	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	22	14	2 012	87 003	1 222	2 347	44 432	816 869	630 803	1 444 975	7 996
33451	Navigational, measuring, medical, & control instruments mfg.....	-	22	14	2 012	87 003	1 222	2 347	44 432	816 869	630 803	1 444 975	7 996
334510	Electromedical & electrotherapeutic apparatus mfg.....	-	6	5	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	-	39	25	4 616	178 294	2 860	6 362	94 870	460 770	625 544	1 074 533	29 018
3353	Electrical equipment mfg ..	-	28	19	h	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg.....	-	28	19	h	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg.....	-	4	4	g	D	D	D	D	D	D	D	D
335312	Motor & generator mfg.....	-	6	5	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg.....	-	16	9	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	1	20	8	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	15	7	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	75	24	1 822	56 632	1 158	2 120	25 494	161 548	150 367	312 145	11 423
3391	Medical equipment & supplies mfg.....	2	28	7	f	D	D	D	D	D	D	D	2 715
33911	Medical equipment & supplies mfg.....	2	28	7	f	D	D	D	D	D	D	D	2 715
3399	Other miscellaneous mfg ..	1	47	17	g	D	D	D	D	D	D	D	8 708
	WAUPACA COUNTY, WI												
31-33	Manufacturing	-	105	40	5 995	176 031	4 999	9 530	130 800	586 686	656 677	1 235 325	29 121
311	Food mfg.....	-	21	8	1 065	26 676	912	1 690	21 181	112 319	321 475	428 061	8 851
321	Wood product mfg.....	-	15	6	515	11 680	425	813	8 052	31 399	44 491	72 259	2 296
323	Printing & related support activities.....	-	11	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	11	2	f	D	D	D	D	D	D	D	D
32311	Printing.....	-	11	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	6	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	-	2	1	g	D	D	D	D	D	D	D	D
3315	Foundries ..	-	2	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	g	D	D	D	D	D	D	D	D
331511	Iron foundries ..	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	7	5	717	19 934	535	811	10 989	33 883	34 799	70 271	798
	WAUSHARA COUNTY, WI												
31-33	Manufacturing	-	32	9	746	14 949	658	1 103	11 142	38 808	40 663	79 192	6 008

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WINNEBAGO COUNTY, WI													
31-33	Manufacturing	-	316	166	27 191	976 515	19 575	40 875	642 591	2 873 833	3 186 071	6 026 594	234 856
321	Wood product mfg	-	11	6	g	D	D	D	D	D	D	D	5 767
3219	Other wood product mfg	-	10	5	f	D	D	D	D	D	D	D	D
32191	Millwork	-	5	4	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	3	3	755	22 105	644	1 475	17 900	40 555	68 171	110 081	D
322	Paper mfg	-	43	31	i	D	D	D	D	D	D	D	94 252
3221	Pulp, paper, & paperboard mills	-	9	9	h	D	D	D	D	D	D	D	D
32212	Paper mills	-	7	7	2 648	132 025	1 938	4 107	92 190	598 447	379 366	971 207	D
322121	Paper (except newsprint) mills	-	7	7	2 648	132 025	1 938	4 107	92 190	598 447	379 366	971 207	D
3222	Converted paper product mfg	-	34	22	h	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	11	9	f	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	13	8	2 469	102 663	1 931	3 921	74 220	400 350	360 901	758 511	D
322291	Sanitary paper product mfg	-	7	5	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	45	29	4 284	148 783	2 548	5 269	77 726	315 558	252 265	562 433	28 846
3231	Printing & related support activities	-	45	29	4 284	148 783	2 548	5 269	77 726	315 558	252 265	562 433	28 846
32311	Printing	-	37	21	3 694	125 485	2 126	4 336	62 462	271 223	233 528	499 579	23 814
323110	Commercial lithographic printing	-	18	12	2 255	72 039	1 221	2 316	32 413	150 040	78 691	226 822	8 683
323117	Book printing	-	3	3	f	D	D	D	D	D	D	D	D
32312	Support activities for printing	-	8	8	590	23 298	422	933	15 264	44 335	18 737	62 854	5 032
323122	Prepress services	-	6	6	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	20	17	2 510	86 365	2 103	4 931	68 248	311 977	392 171	704 277	47 117
3261	Plastics product mfg	-	15	13	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	9	9	g	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	6	6	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	59	28	1 384	42 727	1 046	2 140	29 042	91 348	85 418	175 143	11 497
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	23	11	508	17 258	395	781	12 003	33 070	14 182	46 057	6 840
333	Machinery mfg	-	28	16	1 499	55 842	1 056	2 207	34 704	145 053	86 102	228 877	4 415
3332	Industrial machinery mfg	-	6	6	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	6	6	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	4	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	12	7	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	9	7	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	3	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	3	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	9	7	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	9	7	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	9	7	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
WINNEBAGO COUNTY, WI—Con.														
31-33	Manufacturing—Con.													
336	Transportation equipment mfg	-	8	5	h	D	D	D	D	D	D	D	D	
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D	
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D	
336120	Heavy duty truck mfg .	-	1	1	g	D	D	D	D	D	D	D	D	
3362	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D	
33621	Motor vehicle body & trailer mfg	-	2	2	g	D	D	D	D	D	D	D	D	
336211	Motor vehicle body mfg	-	2	2	g	D	D	D	D	D	D	D	D	
WOOD COUNTY, WI														
31-33	Manufacturing	-	117	45		9 421	363 262	7 764	15 453	268 190	996 665	1 547 577	2 535 553	91 566
311	Food mfg	-	19	10		1 036	24 289	883	1 901	20 749	45 904	436 695	486 068	6 249
3115	Dairy product mfg	-	10	8		961	23 058	832	1 822	19 941	41 764	426 680	471 964	6 061
31151	Dairy product (except frozen) mfg	-	9	7	f	D	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	8	6	f	D	D	D	D	D	D	D	D	D
321	Wood product mfg	-	12	8		1 859	51 482	1 525	2 906	36 686	110 286	115 775	225 798	5 696
3219	Other wood product mfg ...	-	9	5		1 574	44 088	1 289	2 385	31 473	89 169	96 274	185 109	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	5	3	f	D	D	D	D	D	D	D	D	D
322	Paper mfg	-	8	8	h	D	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	5	5	h	D	D	D	D	D	D	D	D	D
32212	Paper mills	-	4	4	h	D	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	4	4	h	D	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
ALGOMA, WI														
31-33	Manufacturing	-	16	8		1 373	35 290	992	1 531	17 530	78 785	62 533	138 979	5 190
321	Wood product mfg	-	5	3	f	D	D	D	D	D	D	D	D	2 797
3219	Other wood product mfg ...	-	3	2	f	D	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	3	2	f	D	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	3	2	f	D	D	D	D	D	D	D	D	D
32311	Printing	-	3	2	f	D	D	D	D	D	D	D	D	D
323119	Other commercial printing	-	1	1	f	D	D	D	D	D	D	D	D	D
ANTIGO, WI														
31-33	Manufacturing	-	24	13		1 198	30 402	990	1 843	20 814	73 861	78 340	151 483	5 318

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
APPLETON, WI *													
31-33	Manufacturing	-	120	51	8 235	314 719	5 399	11 100	178 057	949 942	1 209 437	2 168 082	58 482
322	Paper mfg	-	15	12	2 453	99 895	1 932	4 280	72 019	382 996	525 159	910 903	21 128
3221	Pulp, paper, & paperboard mills	-	3	3	593	25 874	386	901	15 808	58 194	81 211	143 944	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	12	9	1 860	74 021	1 546	3 379	56 211	324 802	443 948	766 959	D
32222	Paper bag & coated & treated paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	4	4	g	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	22	6	591	20 741	339	636	9 677	33 899	37 199	70 944	1 942
3231	Printing & related support activities	2	22	6	591	20 741	339	636	9 677	33 899	37 199	70 944	1 942
32311	Printing	2	21	5	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	8	2 730	117 170	1 357	2 593	49 160	352 649	383 212	736 554	16 243
3332	Industrial machinery mfg ..	-	5	3	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	3	g	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg	-	2	2	g	D	D	D	D	D	D	D	D
333992	Welding & soldering equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
ASHLAND, WI													
31-33	Manufacturing	-	14	7	986	32 676	749	1 564	22 357	51 588	44 432	95 694	5 420
ASHWAUBENON, WI													
31-33	Manufacturing	2	71	37	3 723	152 771	2 535	4 899	95 036	402 754	418 627	817 129	23 700
322	Paper mfg	-	4	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	9	10	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	9	10	2	f	D	D	D	D	D	D	D	D
32311	Printing	9	10	2	f	D	D	D	D	D	D	D	D
323112	Commercial flexographic printing ..	9	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	10	558	21 897	424	887	14 350	47 195	44 990	90 929	1 808
333	Machinery mfg	-	12	6	g	D	D	D	D	D	D	D	7 077
3332	Industrial machinery mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
BARABOO, WI													
31-33	Manufacturing	-	28	13	2 021	55 946	1 616	3 515	41 403	125 429	138 516	262 472	5 057
326	Plastics & rubber products mfg	1	5	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
BARRON, WI													
31-33	Manufacturing	-	8	3	g	D	D	D	D	D	D	D	D
311	Food mfg	-	4	1	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	g	D	D	D	D	D	D	D	D
BEAVER DAM, WI													
31-33	Manufacturing	1	27	16	1 514	41 382	1 195	2 387	28 598	108 005	233 984	343 365	8 132

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BELOIT, WI													
31-33	Manufacturing	-	52	22	4 896	198 947	3 398	7 216	114 973	666 913	616 935	1 257 453	35 439
311	Food mfg	-	6	5	g	D	D	D	D	D	D	D	D
3119	Other food mfg	-	3	3	f	D	D	D	D	D	D	D	D
31191	Snack food mfg	-	2	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	7	5	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	3	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
BERLIN, WI *													
31-33	Manufacturing	-	29	15	1 338	30 998	1 072	1 905	19 973	75 573	49 494	128 175	2 813
BLACK RIVER FALLS, WI													
31-33	Manufacturing	-	16	7	f	D	D	D	D	D	D	D	D
BOSCOBEL, WI													
31-33	Manufacturing	-	9	2	f	D	D	D	D	D	D	D	858
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRILLION, WI													
31-33	Manufacturing	-	6	4	1 868	67 522	1 436	2 999	47 123	159 782	156 500	312 617	6 177
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
BRODHEAD, WI													
31-33	Manufacturing	-	8	3	554	14 898	442	700	9 402	41 398	48 999	87 456	689
BROOKFIELD, WI													
31-33	Manufacturing	1	90	29	2 873	102 491	2 058	4 295	64 756	244 100	211 686	456 599	17 053
323	Printing & related support activities	5	16	6	748	26 644	568	1 245	18 865	49 305	44 290	93 779	4 868
3231	Printing & related support activities	5	16	6	748	26 644	568	1 245	18 865	49 305	44 290	93 779	4 868
32311	Printing	5	13	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	5	7	5	650	23 955	486	1 094	17 070	43 929	42 575	86 730	4 611
332	Fabricated metal product mfg	-	17	7	639	22 115	393	788	11 797	62 751	50 688	113 796	5 908
333	Machinery mfg	-	15	4	765	34 045	629	1 389	24 627	86 407	74 150	160 780	4 515

Table 4. Industry Statistics for Places: 1997—Con.

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BROWN DEER, WI													
31-33	Manufacturing	-	21	10	1 746	67 984	1 112	2 258	33 122	171 297	117 825	287 598	10 793
334	Computer & electronic product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
BURLINGTON, WI *													
31-33	Manufacturing	-	39	13	2 260	69 673	1 790	3 283	45 099	433 902	251 218	684 540	47 273
311	Food mfg	-	3	2	f	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31132	Chocolate & confectionery mfg from cacao beans	-	1	1	f	D	D	D	D	D	D	D	D
311320	Chocolate & confectionery mfg from cacao beans ...	-	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	2	f	D	D	D	D	D	D	D	D
CALEDONIA TOWN, WI													
31-33	Manufacturing	-	26	10	614	19 175	474	900	12 411	48 960	25 712	75 955	3 084
CEDARBURG, WI													
31-33	Manufacturing	-	44	17	1 663	59 215	1 193	2 488	38 397	165 718	154 550	318 752	9 898
CHILTON, WI													
31-33	Manufacturing	-	19	10	1 246	40 449	915	1 985	22 891	131 925	145 808	277 869	10 998
CHIPPEWA FALLS, WI													
31-33	Manufacturing	-	57	20	4 582	157 827	3 316	5 529	110 665	315 839	343 713	660 269	30 431
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	3	539	18 562	417	980	13 701	80 933	71 956	153 358	5 346
3261	Plastics product mfg	-	3	3	539	18 562	417	980	13 701	80 933	71 956	153 358	5 346
334	Computer & electronic product mfg	-	5	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334111	Electronic computer mfg	-	1	1	g	D	D	D	D	D	D	D	D
CLINTONVILLE, WI													
31-33	Manufacturing	-	15	8	965	26 207	746	1 230	15 538	66 288	49 870	116 675	7 158
COLUMBUS, WI *													
31-33	Manufacturing	-	24	11	1 239	38 412	827	1 704	22 891	114 380	212 374	328 774	8 968
333	Machinery mfg	-	7	5	632	17 452	375	795	9 781	47 013	114 023	163 026	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CUDAHY, WI													
31-33	Manufacturing	-	47	21	3 637	131 330	2 630	5 294	84 165	293 121	353 673	644 869	28 056
311	Food mfg	-	3	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	16	7	1 669	69 846	1 275	2 514	48 426	149 245	143 038	290 126	9 911
3321	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	1	1	g	D	D	D	D	D	D	D	D
332111	Iron & steel forging ...	-	1	1	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	8	887	33 855	548	1 153	18 586	81 545	79 365	160 748	2 360
DELAVAN, WI													
31-33	Manufacturing	-	35	16	2 414	80 646	1 759	3 574	46 176	195 851	208 237	404 192	12 570
333	Machinery mfg	-	5	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	-	3	2	g	D	D	D	D	D	D	D	D
33391	Pump & compressor mfg	-	2	2	g	D	D	D	D	D	D	D	D
333911	Pump & pumping equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
DE PERE, WI													
31-33	Manufacturing	-	48	22	2 725	100 805	1 862	4 047	57 927	240 359	261 270	497 758	15 769
322	Paper mfg	-	7	6	f	D	D	D	D	D	D	D	8 471
3221	Pulp, paper, & paperboard mills	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	7	5	519	16 266	370	816	9 656	35 648	27 736	63 239	3 613
3231	Printing & related support activities	1	7	5	519	16 266	370	816	9 656	35 648	27 736	63 239	3 613
333	Machinery mfg	1	8	4	752	33 325	379	806	13 435	59 796	41 929	100 120	D
3332	Industrial machinery mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	5	2	f	D	D	D	D	D	D	D	D
333293	Printing machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
EAST TROY, WI													
31-33	Manufacturing	1	22	10	1 100	30 080	822	1 596	18 828	72 127	79 400	152 239	7 153
EAU CLAIRE, WI *													
31-33	Manufacturing	-	93	35	4 353	115 566	3 358	7 082	76 528	369 935	251 037	623 511	66 382
311	Food mfg	-	8	5	621	17 818	422	785	9 149	39 030	89 105	128 389	7 033
326	Plastics & rubber products mfg	-	9	4	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	6	2	g	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg	-	1	1	g	D	D	D	D	D	D	D	D
ELKHORN, WI													
31-33	Manufacturing	1	40	19	1 779	46 581	1 367	2 692	28 335	104 431	99 991	204 292	3 916
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
EVANSVILLE, WI													
31-33	Manufacturing	-	6	3	707	28 023	458	1 156	14 499	55 519	55 035	109 873	1 834

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
FITCHBURG, WI													
31-33	Manufacturing	1	27	10	1 737	74 298	745	1 628	20 597	206 313	113 993	319 667	9 160
334	Computer & electronic product mfg.....	-	5	4	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
FOND DU LAC, WI													
31-33	Manufacturing	-	93	37	7 301	297 392	5 015	9 523	183 031	888 756	717 061	1 609 489	44 546
311	Food mfg.....	-	8	6	501	14 032	356	645	8 554	58 531	140 275	197 886	D
331	Primary metal mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	20	9	563	15 369	386	705	9 286	28 522	19 435	48 245	1 807
333	Machinery mfg.....	-	13	6	h	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	-	6	1	f	D	D	D	D	D	D	D	1 710
33351	Metalworking machinery mfg.....	-	6	1	f	D	D	D	D	D	D	D	1 710
333512	Machine tool (metal cutting types) mfg....	-	1	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg.....	1	4	4	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
FORT ATKINSON, WI													
31-33	Manufacturing	2	27	18	2 553	78 079	1 894	3 781	48 478	207 709	369 501	584 026	22 732
311	Food mfg.....	2	5	5	1 143	31 900	926	1 871	21 968	100 982	157 904	264 064	8 809
3116	Meat product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	2	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses.....	-	2	2	f	D	D	D	D	D	D	D	D
FRANKLIN, WI													
31-33	Manufacturing	-	37	21	2 479	95 774	1 662	3 449	51 208	179 206	189 691	367 194	16 186
332	Fabricated metal product mfg.....	-	12	6	632	19 223	481	1 004	11 528	43 449	20 456	63 642	7 397
333	Machinery mfg.....	-	9	5	993	42 932	589	1 229	19 830	57 673	99 758	156 533	6 196
3339	Other general-purpose machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33399	All other general-purpose machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
GERMANTOWN, WI													
31-33	Manufacturing	-	100	45	3 558	128 131	2 356	4 569	67 302	316 829	311 725	621 601	28 671
332	Fabricated metal product mfg.....	-	32	13	1 063	35 614	703	1 273	19 071	75 367	46 597	114 542	10 819
333	Machinery mfg.....	-	28	10	703	31 811	421	861	16 593	57 660	48 121	107 432	4 490
GLENDALE, WI													
31-33	Manufacturing	2	58	26	2 951	108 620	1 935	3 958	58 142	302 716	252 749	562 686	23 895
335	Electrical equipment, appliance, & component mfg.....	-	5	3	f	D	D	D	D	D	D	D	7 618

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
GRAFTON, WI													
31-33	Manufacturing	-	55	26	3 523	128 802	2 620	5 152	77 888	298 335	262 249	565 754	18 252
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	4	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	14	6	620	27 278	480	975	14 442	52 284	25 786	77 474	3 068
333	Machinery mfg	-	13	6	833	28 051	596	1 138	16 241	65 230	60 502	123 554	3 418
335	Electrical equipment, appliance, & component mfg	-	3	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
GRAND CHUTE TOWN, WI													
31-33	Manufacturing	-	44	15	3 697	97 635	2 869	4 868	67 132	255 955	312 253	566 521	21 265
311	Food mfg	-	4	2	g	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	3	1	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	2	1	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	-	1	1	f	D	D	D	D	D	D	D	D
GREEN BAY, WI													
31-33	Manufacturing	1	200	83	16 692	695 300	12 174	25 769	406 439	1 768 420	2 871 263	4 634 492	163 512
311	Food mfg	2	25	10	4 137	105 489	3 245	7 247	81 517	355 766	1 156 543	1 512 032	26 141
3114	Fruit & vegetable preserving & specialty food mfg	9	2	2	f	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying	9	2	2	f	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning	9	2	2	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	-	5	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	-	2	2	f	D	D	D	D	D	D	D	D
311513	Cheese mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	3	4	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	3	4	3	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	3	3	2	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	18	14	7 464	407 616	5 584	11 611	230 795	980 919	1 373 398	2 351 170	113 033
3221	Pulp, paper, & paperboard mills	-	4	4	h	D	D	D	D	D	D	D	D
32212	Paper mills	-	3	3	h	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	3	3	h	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	14	10	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	10	7	g	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	7	6	2 003	88 448	1 664	3 432	70 509	394 065	824 938	1 226 800	35 710
332	Fabricated metal product mfg	-	29	12	829	28 649	621	1 304	17 931	62 410	37 322	99 721	3 993
333	Machinery mfg	-	30	16	1 341	52 382	857	1 740	28 996	118 812	96 511	215 724	7 493
3332	Industrial machinery mfg	-	16	11	789	31 219	470	941	16 947	75 536	50 360	124 695	4 679
33329	Other industrial machinery mfg	-	15	10	f	D	D	D	D	D	D	D	D

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31-33	GREEN BAY, WI—Con.												
	Manufacturing—Con.												
337	Furniture & related product mfg	-	12	4	1 200	53 793	614	1 493	16 589	88 059	48 145	136 159	D
3372	Office furniture (including fixtures) mfg	-	2	2	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) mfg	-	2	2	g	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) mfg	-	1	1	f	D	D	D	D	D	D	D	D
	GREENDALE, WI												
31-33	Manufacturing	-	23	8	524	15 437	383	777	9 490	40 895	19 202	60 372	922
	HARTFORD, WI *												
31-33	Manufacturing	-	30	18	3 315	105 793	2 689	5 619	79 222	273 468	244 701	517 159	14 417
323	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	2	1	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	1	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	9	5	625	17 491	538	1 107	13 428	43 150	23 802	65 996	3 037
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3352	Household appliance mfg. .	-	1	1	f	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	f	D	D	D	D	D	D	D	D
	HARTLAND, WI												
31-33	Manufacturing	1	54	17	1 522	52 250	899	1 607	21 193	120 089	99 218	219 779	8 299
	HORICON, WI												
31-33	Manufacturing	-	10	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg.	-	1	1	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	g	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
	HUDSON, WI												
31-33	Manufacturing	-	32	14	1 224	38 547	920	1 832	23 354	89 552	109 669	202 078	7 115

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
JANESVILLE, WI													
31-33	Manufacturing	-	104	40	12 380	504 194	10 247	22 129	395 119	3 016 117	5 371 407	8 390 634	158 178
326	Plastics & rubber products mfg	-	6	4	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	6	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	6	f	D	D	D	D	D	D	D	2 274
3335	Metalworking machinery mfg	-	7	3	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	7	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	10	5	i	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	-	3	1	i	D	D	D	D	D	D	D	D
336112	Light truck & utility vehicle mfg	-	2	1	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	4	3	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	-	1	1	f	D	D	D	D	D	D	D	D
33636	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	5	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	11	2	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	6	2	g	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) mfg	-	1	1	f	D	D	D	D	D	D	D	D
339941	Pen & mechanical pencil mfg	-	1	1	f	D	D	D	D	D	D	D	D
JEFFERSON, WI													
31-33	Manufacturing	-	18	7	1 497	45 765	1 173	2 609	30 367	127 400	254 614	381 948	13 494
311	Food mfg	-	4	3	831	27 400	681	1 452	21 557	71 173	211 119	284 219	9 613
KAUKAUNA, WI													
31-33	Manufacturing	-	23	7	1 385	53 801	1 030	2 122	36 892	215 565	113 058	328 728	8 704
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
KENOSHA, WI													
31-33	Manufacturing	-	126	48	5 949	280 648	4 661	9 905	210 998	533 449	752 418	1 287 655	128 285
331	Primary metal mfg	-	4	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	27	12	1 015	33 392	807	1 455	22 044	71 848	33 892	105 452	2 992
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
KEWASKUM, WI *													
31-33	Manufacturing	-	5	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	2	1	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	KIEL, WI *												
31-33	Manufacturing	2	17	6	832	23 417	583	1 151	14 630	39 057	129 188	169 966	1 850
	KIMBERLY, WI												
31-33	Manufacturing	-	11	5	1 403	66 358	1 096	2 500	48 715	214 652	316 227	543 665	7 049
322	Paper mfg	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D
	LA CROSSE, WI												
31-33	Manufacturing	-	91	33	7 001	246 235	4 728	9 515	137 476	367 439	737 427	1 110 262	40 262
312	Beverage & tobacco product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	2	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	1	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	2	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
316211	Rubber & plastics footwear mfg	-	2	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	23	7	787	20 153	593	1 117	13 630	42 257	29 353	72 429	4 787
3231	Printing & related support activities	-	23	7	787	20 153	593	1 117	13 630	42 257	29 353	72 429	4 787
32311	Printing	-	18	7	755	19 359	569	1 076	13 054	40 523	28 950	70 295	4 677
332	Fabricated metal product mfg	-	17	7	692	25 763	549	1 100	18 201	71 274	89 943	160 993	5 487
333	Machinery mfg	-	8	3	h	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	-	1	1	h	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg .	-	1	1	h	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	-	1	1	h	D	D	D	D	D	D	D	D
	LADYSMITH, WI												
31-33	Manufacturing	-	12	5	825	19 897	721	1 346	16 296	30 230	50 451	80 619	7 535
321	Wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	f	D	D	D	D	D	D	D	D
	LAKE GENEVA, WI												
31-33	Manufacturing	1	30	15	1 750	52 332	1 326	2 859	31 951	103 759	91 532	196 816	6 442
339	Miscellaneous mfg	-	3	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
	LAKE MILLS, WI												
31-33	Manufacturing	2	14	10	1 686	58 087	1 139	2 748	35 991	123 526	80 139	193 073	6 396
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
LITTLE CHUTE, WI													
31-33	Manufacturing	-	26	10	1 307	37 261	980	1 974	22 931	77 416	160 183	237 920	8 749
311	Food mfg	-	5	3	882	24 595	661	1 323	14 245	49 418	146 196	196 026	6 363
3114	Fruit & vegetable preserving & specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	-	1	1	f	D	D	D	D	D	D	D	D
311412	Frozen specialty food mfg	-	1	1	f	D	D	D	D	D	D	D	D
MADISON, WI													
31-33	Manufacturing	-	228	79	11 464	370 360	8 407	16 681	240 704	1 344 489	1 229 209	2 573 874	55 379
311	Food mfg	-	29	15	4 088	127 905	3 276	6 849	101 102	571 835	670 244	1 244 196	16 823
3115	Dairy product mfg	-	4	4	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	h	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	3	3	h	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	-	13	5	686	15 875	352	554	9 890	63 675	24 557	88 617	D
31181	Bread & bakery product mfg	-	12	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	4	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	61	15	1 608	53 552	1 231	2 442	36 070	107 143	65 148	173 921	7 271
3231	Printing & related support activities	-	61	15	1 608	53 552	1 231	2 442	36 070	107 143	65 148	173 921	7 271
32311	Printing	-	52	13	1 488	49 022	1 133	2 269	33 293	99 880	60 973	162 343	D
323117	Book printing	-	4	4	816	29 721	671	1 322	21 388	50 033	36 250	87 766	D
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	12	9	1 537	46 027	978	1 765	21 971	133 094	121 726	249 622	6 671
3332	Industrial machinery mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	4	16	5	515	20 480	227	463	6 012	50 720	39 065	91 147	2 719
335	Electrical equipment, appliance, & component mfg	-	4	4	f	D	D	D	D	D	D	D	D
MANITOWOC, WI													
31-33	Manufacturing	-	88	50	9 202	280 103	7 213	13 651	189 320	819 379	650 084	1 478 908	53 899
311	Food mfg	-	16	9	f	D	D	D	D	D	D	D	17 990
326	Plastics & rubber products mfg	1	11	8	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	3	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	3	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	2	2	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	9	2 910	88 998	2 341	4 189	61 099	321 245	133 299	461 701	10 520
3322	Cutlery & handtool mfg	-	2	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	2	2	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	11	7	1 325	49 066	816	1 433	29 142	146 470	133 439	279 866	5 464
3331	Agriculture, construction, & mining machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
31-33	MANITOWOC, WI—Con. Manufacturing—Con.													
336	Transportation equipment mfg	-	4	3	f	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	2	2	f	D	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	MARINETTE, WI													
31-33	Manufacturing	-	31	13		3 948	131 413	2 974	6 375	90 338	332 748	413 821	747 416	32 310
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D	
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D	
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D	
331	Primary metal mfg	-	2	2	f	D	D	D	D	D	D	D	D	
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D	
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D	
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D	
336	Transportation equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D	
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D	
33631	Motor vehicle gasoline engine & engine parts mfg	-	1	1	f	D	D	D	D	D	D	D	D	
336311	Carburetor, piston, piston ring, & valve mfg	-	1	1	f	D	D	D	D	D	D	D	D	
3366	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D	
33661	Ship & boat building	-	1	1	f	D	D	D	D	D	D	D	D	
336611	Ship building & repairing	-	1	1	f	D	D	D	D	D	D	D	D	
339	Miscellaneous mfg	-	2	1	f	D	D	D	D	D	D	D	D	
3399	Other miscellaneous mfg ..	-	1	1	f	D	D	D	D	D	D	D	D	
33999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D	
339999	All other miscellaneous mfg	-	1	1	f	D	D	D	D	D	D	D	D	
	MARSHFIELD, WI *													
31-33	Manufacturing	-	53	20		3 053	87 631	2 443	4 781	59 247	199 746	334 143	536 200	12 885
321	Wood product mfg	-	6	5	g	1 698	47 505	1 381	2 634	33 677	103 431	105 557	208 763	D
3219	Other wood product mfg ...	-	4	3	g	D	D	D	D	D	D	D	D	D
32191	Millwork	-	2	1	f	D	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	1	f	D	D	D	D	D	D	D	D	D
32199	All other wood product mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
	MAUSTON, WI													
31-33	Manufacturing	-	14	7		680	19 350	552	1 040	14 021	55 661	44 328	100 597	5 124
	MAYVILLE, WI													
31-33	Manufacturing	1	24	14		3 206	96 902	2 571	5 456	72 858	220 274	332 744	548 291	21 195
311	Food mfg	-	4	3	f	D	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	7	5	1 592	52 153	1 264	2 746	37 996	95 201	112 594	207 897	12 879	
3321	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	2	2	f	D	D	D	D	D	D	D	D	D
332116	Metal stamping	-	2	2	f	D	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg	-	2	2	f	D	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	-	2	2	f	D	D	D	D	D	D	D	D	D
333	Machinery mfg	-	5	4	f	D	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	1	1	f	D	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MEDFORD, WI													
31-33	Manufacturing	-	29	11	2 765	79 550	2 196	4 229	56 398	169 989	397 744	568 712	6 602
311	Food mfg	-	7	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg	-	8	4	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	8	4	g	D	D	D	D	D	D	D	D
32191	Millwork	-	6	4	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	5	3	g	D	D	D	D	D	D	D	D
MENASHA, WI *													
31-33	Manufacturing	-	36	22	4 412	183 017	3 080	6 454	118 008	433 753	537 474	968 871	64 869
322	Paper mfg	-	13	10	2 901	125 769	2 056	4 302	81 687	266 143	395 814	664 823	46 345
3221	Pulp, paper, & paperboard mills	-	4	4	992	55 427	583	1 330	29 541	192 287	117 652	314 278	D
32212	Paper mills	-	3	3	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	3	3	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	9	6	1 909	70 342	1 473	2 972	52 146	73 856	278 162	350 545	D
32222	Paper bag & coated & treated paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	4	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product mfg	-	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	9	5	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	9	5	f	D	D	D	D	D	D	D	D
32311	Printing	-	7	3	f	D	D	D	D	D	D	D	D
323117	Book printing	-	2	2	f	D	D	D	D	D	D	D	D
MENASHA TOWN, WI													
31-33	Manufacturing	-	45	21	3 851	154 434	3 067	6 285	117 306	619 118	408 638	1 019 647	29 413
322	Paper mfg	-	7	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	6	6	698	18 390	575	1 166	13 090	38 165	19 214	56 864	2 388
3231	Printing & related support activities	2	6	6	698	18 390	575	1 166	13 090	38 165	19 214	56 864	2 388
32311	Printing	2	5	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	-	1	1	g	D	D	D	D	D	D	D	D
336211	Motor vehicle body mfg	-	1	1	g	D	D	D	D	D	D	D	D
MENOMONEE FALLS, WI													
31-33	Manufacturing	1	211	100	9 784	354 145	6 613	13 533	199 020	745 816	678 843	1 476 302	71 000
323	Printing & related support activities	-	23	8	1 134	41 943	784	1 479	24 780	91 839	61 503	152 216	16 102
3231	Printing & related support activities	-	23	8	1 134	41 943	784	1 479	24 780	91 839	61 503	152 216	16 102
32311	Printing	-	20	6	1 006	36 929	688	1 299	21 519	82 506	58 784	140 140	D
323110	Commercial lithographic printing ..	-	5	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	16	8	656	22 201	505	960	13 789	51 452	52 232	105 113	2 771
3261	Plastics product mfg	-	16	8	656	22 201	505	960	13 789	51 452	52 232	105 113	2 771
332	Fabricated metal product mfg	-	60	26	2 775	101 804	2 045	4 307	64 853	236 599	142 382	380 693	17 950
3323	Architectural & structural metals mfg	-	12	6	537	19 429	410	852	11 735	37 557	31 197	69 308	4 016
3327	Machine shops, turned product, & screw, nut, & bolt mfg	-	25	9	972	36 546	755	1 731	25 911	69 502	38 356	108 288	4 060
33271	Machine shops	1	18	6	645	24 558	483	1 108	16 985	44 147	25 845	71 472	1 506
332710	Machine shops	1	18	6	645	24 558	483	1 108	16 985	44 147	25 845	71 472	1 506

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MENOMONEE FALLS, WI—Con.												
	Manufacturing—Con.												
333	Machinery mfg	1	53	29	2 720	107 767	1 624	3 390	54 807	165 608	197 999	417 494	15 703
3331	Agriculture, construction, & mining machinery mfg....	—	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	2	29	14	713	31 806	542	1 159	22 412	43 557	31 102	73 799	5 067
33351	Metalworking machinery mfg	2	29	14	713	31 806	542	1 159	22 412	43 557	31 102	73 799	5 067
3339	Other general-purpose machinery mfg	2	14	8	815	29 319	452	972	13 456	57 207	50 945	110 708	2 555
33399	All other general-purpose machinery mfg	2	11	7	765	27 271	420	904	12 334	52 949	47 456	102 983	D
334	Computer & electronic product mfg	4	13	6	561	15 118	346	674	6 911	35 506	27 979	62 420	2 539
335	Electrical equipment, appliance, & component mfg	—	6	6	632	18 847	449	834	9 043	46 415	70 772	116 612	4 092
	MENOMONIE, WI												
31-33	Manufacturing	—	25	8	1 785	67 902	1 443	3 013	46 075	436 438	201 680	634 839	30 728
311	Food mfg	—	2	1	f	D	D	D	D	D	D	D	D
3115	Dairy product mfg	—	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	—	1	1	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, & evaporated dairy product mfg	—	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
333314	Optical instrument & lens mfg	—	1	1	f	D	D	D	D	D	D	D	D
	MEQUON, WI												
31-33	Manufacturing	—	48	20	3 370	132 365	1 704	3 200	50 090	359 031	306 825	670 715	21 185
325	Chemical mfg	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	5	3	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	—	2	1	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	—	2	1	g	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	1	1	g	D	D	D	D	D	D	D	D
	MERRILL, WI												
31-33	Manufacturing	—	33	17	2 637	64 933	2 088	3 888	44 743	150 327	155 680	305 600	6 489
321	Wood product mfg	—	9	4	g	D	D	D	D	D	D	D	2 499
3219	Other wood product mfg ...	—	6	4	g	D	D	D	D	D	D	D	D
32191	Millwork	—	6	4	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	—	6	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	9	7	f	D	D	D	D	D	D	D	D
	MIDDLETON, WI												
31-33	Manufacturing	—	61	19	2 709	92 886	1 732	3 438	45 907	193 008	199 422	392 705	13 249
337	Furniture & related product mfg	—	7	2	g	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	1	1	g	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	1	1	g	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	1	1	g	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
	MILWAUKEE, WI *												
31-33	Manufacturing	1	848	321	46 467	1 643 485	32 625	61 631	967 236	4 168 514	4 205 032	8 392 367	320 953
311	Food mfg	3	68	23	4 735	122 751	3 300	6 376	75 369	490 682	1 023 635	1 537 486	26 310
3113	Sugar & confectionery product mfg	-	5	2	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	5	13	6	2 680	65 188	2 085	4 136	45 080	232 123	740 750	977 421	11 096
31161	Animal slaughtering & processing	5	13	6	2 680	65 188	2 085	4 136	45 080	232 123	740 750	977 421	11 096
311611	Animal (except poultry) slaughtering	9	5	2	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	7	3	g	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg	1	32	8	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	30	8	736	12 884	332	533	6 407	61 148	23 237	84 439	D
311812	Commercial bakeries ..	-	8	5	514	10 223	205	372	4 957	56 380	20 287	76 717	D
3119	Other food mfg	-	15	6	735	25 588	542	1 067	15 609	147 626	153 115	300 300	13 400
312	Beverage & tobacco product mfg	-	4	2	f	D	D	D	D	D	D	D	D
3121	Beverage mfg	-	4	2	f	D	D	D	D	D	D	D	D
31212	Breweries	-	3	1	f	D	D	D	D	D	D	D	D
312120	Breweries	-	3	1	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	-	12	9	g	D	D	D	D	D	D	D	D
3161	Leather & hide tanning & finishing	-	8	8	1 048	27 620	883	1 828	20 321	71 226	128 496	209 705	D
31611	Leather & hide tanning & finishing	-	8	8	1 048	27 620	883	1 828	20 321	71 226	128 496	209 705	D
316110	Leather & hide tanning & finishing	-	8	8	1 048	27 620	883	1 828	20 321	71 226	128 496	209 705	D
322	Paper mfg	-	17	13	g	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	16	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	9	8	f	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	-	6	5	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	128	32	3 084	101 629	2 088	3 992	53 961	221 785	130 866	351 713	14 802
3231	Printing & related support activities	1	128	32	3 084	101 629	2 088	3 992	53 961	221 785	130 866	351 713	14 802
32311	Printing	1	107	26	2 763	92 352	1 866	3 579	48 528	207 025	126 435	332 407	14 072
323110	Commercial lithographic printing ..	1	55	20	1 795	61 382	1 245	2 430	34 534	118 255	78 692	195 476	10 704
325	Chemical mfg	1	47	27	2 105	77 433	1 110	2 265	35 096	233 290	159 620	378 117	11 956
3251	Basic chemical mfg	-	9	5	972	32 604	475	942	14 595	107 833	29 250	123 950	5 672
32519	Other basic organic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	25	14	1 366	41 321	944	1 991	22 544	103 726	74 690	178 524	13 432
3261	Plastics product mfg	1	24	13	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	2	18	12	1 136	34 725	749	1 645	17 778	84 054	55 952	139 935	D
326199	All other plastics product mfg	2	17	12	g	D	D	D	D	D	D	D	10 224
331	Primary metal mfg	-	25	20	3 481	102 844	2 893	5 840	74 595	217 607	168 620	388 049	21 283
3315	Foundries	-	17	17	h	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	9	9	g	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	5	5	1 292	36 661	1 135	2 228	29 918	74 718	40 811	117 165	D
33152	Nonferrous metal foundries	-	8	8	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	187	57	7 471	264 726	5 594	10 497	172 327	574 043	410 061	983 554	48 035
3321	Forging & stamping	-	14	10	1 032	41 095	716	1 192	27 297	72 758	74 732	146 217	9 068
33211	Forging & stamping	-	14	10	1 032	41 095	716	1 192	27 297	72 758	74 732	146 217	9 068
332111	Iron & steel forging	-	3	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	33	11	1 518	51 801	1 111	2 393	33 807	103 599	101 307	204 766	8 317
33231	Plate work & fabricated structural product mfg ..	-	13	5	571	17 880	430	875	12 548	46 004	63 741	109 701	1 336
33232	Ornamental & architectural metal products mfg	-	20	6	947	33 921	681	1 518	21 259	57 595	37 566	95 065	6 981
332322	Sheet metal work mfg ..	-	10	2	690	24 988	513	1 178	16 665	40 316	26 602	66 367	D
3325	Hardware mfg	-	4	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg	-	4	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg	-	4	2	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	MILWAUKEE, WI *— Con. Manufacturing— Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	58	10	f	D	D	D	D	D	D	D	5 368
33271	Machine shops	—	50	8	752	25 118	541	1 124	16 173	53 462	25 543	77 656	4 334
332710	Machine shops	—	50	8	752	25 118	541	1 124	16 173	53 462	25 543	77 656	4 334
3328	Coating, engraving, heat treating, & allied activities.	—	46	15	997	27 505	798	1 543	18 245	57 987	17 176	75 244	5 029
33281	Coating, engraving, heat treating, & allied activities	—	46	15	997	27 505	798	1 543	18 245	57 987	17 176	75 244	5 029
332813	Electroplating, plating, polishing, anodizing, & coloring	—	25	8	587	15 590	482	912	10 240	29 039	11 189	40 317	2 732
3329	Other fabricated metal product mfg	—	14	4	503	21 326	294	653	9 896	82 726	43 152	132 378	4 057
333	Machinery mfg	—	97	44	5 509	232 953	3 530	7 003	134 812	554 107	365 054	907 698	43 144
3331	Agriculture, construction, & mining machinery mfg	—	6	5	744	33 978	443	945	17 310	117 438	104 497	222 749	6 473
3335	Metalworking machinery mfg	1	31	12	813	37 038	583	1 350	26 526	76 024	39 026	113 652	4 196
33351	Metalworking machinery mfg	1	31	12	813	37 038	583	1 350	26 526	76 024	39 026	113 652	4 196
3336	Engine, turbine, & power transmission equipment mfg	—	10	5	2 156	89 048	1 482	2 679	55 239	198 697	109 415	302 858	25 584
33361	Engine, turbine, & power transmission equipment mfg	—	10	5	2 156	89 048	1 482	2 679	55 239	198 697	109 415	302 858	25 584
333612	Speed changer, industrial high-speed drive, & gear mfg	—	4	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	28	12	930	37 898	480	944	16 831	78 630	53 669	132 986	4 479
33399	All other general-purpose machinery mfg	—	18	8	704	26 265	354	669	11 518	56 052	27 624	84 530	D
334	Computer & electronic product mfg	—	36	14	3 071	139 369	1 332	2 561	35 777	300 756	189 471	494 065	15 194
3344	Semiconductor & other electronic component mfg	—	13	7	632	21 034	394	794	8 960	44 710	40 709	85 376	2 794
33441	Semiconductor & other electronic component mfg	—	13	7	632	21 034	394	794	8 960	44 710	40 709	85 376	2 794
3345	Navigational, measuring, medical, & control instruments mfg	—	13	6	2 377	116 524	899	1 700	26 016	252 083	145 693	401 636	D
33451	Navigational, measuring, medical, & control instruments mfg	—	13	6	2 377	116 524	899	1 700	26 016	252 083	145 693	401 636	D
334510	Electromedical & electrotherapeutic apparatus mfg	—	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	—	24	14	7 121	260 382	5 544	8 521	159 162	706 090	814 611	1 510 245	50 833
3353	Electrical equipment mfg ..	—	13	8	6 006	226 998	4 741	6 886	138 678	586 934	738 429	1 315 250	D
33531	Electrical equipment mfg	—	13	8	6 006	226 998	4 741	6 886	138 678	586 934	738 429	1 315 250	D
335312	Motor & generator mfg	—	3	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	—	8	6	5 422	205 325	4 374	6 148	127 109	560 418	708 333	1 252 654	D
3359	Other electrical equipment & component mfg	—	6	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	1	17	9	1 711	58 822	1 119	2 345	40 282	80 386	119 106	214 627	22 031
3363	Motor vehicle parts mfg ...	—	11	6	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	—	3	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	—	3	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	38	8	511	17 288	364	739	10 216	31 100	24 398	56 087	D
339	Miscellaneous mfg	1	60	15	1 502	42 887	1 080	1 823	25 479	85 870	84 128	170 464	12 769
3399	Other miscellaneous mfg ..	—	41	14	1 320	36 529	1 008	1 715	23 912	74 255	76 937	151 072	12 406
33999	All other miscellaneous mfg	—	8	3	f	D	D	D	D	D	D	D	D
339991	Gasket, packing, & sealing device mfg ...	—	2	2	f	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
MONROE, WI													
31-33	Manufacturing	2	39	16	1 948	50 024	1 570	2 750	35 105	269 383	266 129	532 980	5 975
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	1	1	f	D	D	D	D	D	D	D	D
MOSINEE, WI													
31-33	Manufacturing	-	10	6	2 270	68 813	2 074	4 250	58 644	211 576	190 323	398 285	21 539
321	Wood product mfg	-	1	1	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
32191	Millwork	-	1	1	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
MOUNT PLEASANT TOWN, WI													
31-33	Manufacturing	-	28	11	2 888	133 163	1 946	4 004	78 498	1 400 834	736 685	2 148 270	36 722
325	Chemical mfg	-	2	2	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	g	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	2	2	g	D	D	D	D	D	D	D	D
325612	Polish & other sanitation good mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg	-	1	1	f	D	D	D	D	D	D	D	D
MUKWONAGO, WI *													
31-33	Manufacturing	1	25	5	642	23 468	445	1 006	12 727	83 578	43 086	125 737	15 047
MUSKEGO, WI													
31-33	Manufacturing	-	51	17	1 241	38 277	922	1 901	23 809	92 561	90 736	182 552	5 684
332	Fabricated metal product mfg	-	21	8	557	18 049	426	860	11 998	47 691	29 894	77 312	2 878

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEENAH, WI													
31-33	Manufacturing	-	71	42	8 481	290 425	6 204	13 002	195 294	966 968	964 661	1 918 879	62 766
322	Paper mfg	-	12	11	2 207	91 780	1 694	3 506	64 866	451 097	352 737	796 752	22 643
3221	Pulp, paper, & paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	10	9	g	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg	-	5	5	674	26 856	520	992	17 726	222 178	119 261	338 777	D
323	Printing & related support activities	-	14	11	1 423	50 069	942	1 932	30 107	94 159	69 193	162 855	5 430
3231	Printing & related support activities	-	14	11	1 423	50 069	942	1 932	30 107	94 159	69 193	162 855	5 430
32311	Printing	-	10	7	1 118	38 812	704	1 391	21 763	75 473	60 173	135 087	D
323110	Commercial lithographic printing ..	-	4	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	4	4	731	24 881	612	1 410	18 868	91 857	95 958	188 091	8 235
3261	Plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	3	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	1	1	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	-	1	1	g	D	D	D	D	D	D	D	D
NEILLSVILLE, WI													
31-33	Manufacturing	-	9	5	f	D	D	D	D	D	D	D	D
NEKOOSA, WI													
31-33	Manufacturing	-	7	3	879	41 617	703	1 408	32 604	103 867	129 109	227 483	D
322	Paper mfg	-	2	2	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
NEW BERLIN, WI													
31-33	Manufacturing	-	150	78	6 647	259 033	4 721	9 633	149 011	732 623	566 298	1 299 782	35 327
323	Printing & related support activities	3	25	12	736	29 586	557	1 097	20 128	55 201	22 627	78 445	1 892
3231	Printing & related support activities	3	25	12	736	29 586	557	1 097	20 128	55 201	22 627	78 445	1 892
332	Fabricated metal product mfg	-	41	21	1 341	49 969	1 077	2 341	33 325	114 339	57 318	169 247	7 563
333	Machinery mfg	-	36	22	1 831	78 404	1 250	2 557	43 182	175 554	128 458	311 548	11 227
3332	Industrial machinery mfg ..	-	10	7	527	20 956	354	817	11 791	48 651	47 676	102 562	2 578
33329	Other industrial machinery mfg	-	10	7	527	20 956	354	817	11 791	48 651	47 676	102 562	2 578
3335	Metalworking machinery mfg	2	15	8	653	25 748	511	979	17 007	45 418	23 842	70 955	2 524
33351	Metalworking machinery mfg	2	15	8	653	25 748	511	979	17 007	45 418	23 842	70 955	2 524
334	Computer & electronic product mfg	-	9	6	978	36 925	707	1 395	23 180	228 536	167 858	388 001	4 391
3345	Navigational, measuring, medical, & control instruments mfg	-	5	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	5	4	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NEW BERLIN, WI—Con.												
	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg	-	6	4	f	D	D	D	D	D	D	D	2 381
3353	Electrical equipment mfg ..	-	5	4	606	25 618	295	663	8 235	54 840	99 734	155 494	D
33531	Electrical equipment mfg	-	5	4	606	25 618	295	663	8 235	54 840	99 734	155 494	D
335314	Relay & industrial control mfg	-	5	4	606	25 618	295	663	8 235	54 840	99 734	155 494	D
	NEW HOLSTEIN, WI												
31-33	Manufacturing	-	10	7	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	4	4	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
	NEW LONDON, WI *												
31-33	Manufacturing	-	24	11	2 505	77 156	2 074	4 514	62 746	286 015	387 899	668 327	12 332
311	Food mfg	-	3	2	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	g	D	D	D	D	D	D	D	D
	NEW RICHMOND, WI												
31-33	Manufacturing	-	18	8	1 268	45 074	797	1 585	23 666	83 857	80 304	164 146	8 615
	OAK CREEK, WI												
31-33	Manufacturing	-	65	43	7 192	300 163	5 108	10 228	198 045	1 105 457	1 431 656	2 537 013	74 473
325	Chemical mfg	-	9	5	977	42 025	413	961	15 893	213 099	189 462	403 613	11 218
3255	Paint, coating, & adhesive mfg	-	4	4	909	39 643	379	887	14 833	199 543	179 488	379 135	D
32551	Paint & coating mfg	-	2	2	f	D	D	D	D	D	D	D	D
325510	Paint & coating mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	17	10	802	24 476	625	1 196	16 819	48 360	32 320	79 755	2 770
333	Machinery mfg	-	5	4	1 035	44 118	599	1 185	22 479	105 963	69 029	162 251	3 539
3339	Other general-purpose machinery mfg	-	3	3	f	D	D	D	D	D	D	D	D
33392	Material handling equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, & monorail system mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	6	5	h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	4	4	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg	-	2	2	g	D	D	D	D	D	D	D	D
	OCONOMOWOC, WI												
31-33	Manufacturing	-	54	24	2 079	65 706	1 492	3 039	40 631	182 766	173 914	358 280	9 807
332	Fabricated metal product mfg	-	16	8	682	21 977	551	1 250	16 374	50 646	68 018	120 138	2 595
	OCONTO, WI												
31-33	Manufacturing	-	14	8	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
ONALASKA, WI													
31-33	Manufacturing	-	23	10	1 091	26 598	854	1 731	18 342	61 422	48 273	106 747	3 529
OSHKOSH, WI													
31-33	Manufacturing	-	114	65	8 692	291 786	6 352	13 434	189 530	718 814	1 150 777	1 860 490	67 575
321	Wood product mfg	-	4	3	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	3	2	f	D	D	D	D	D	D	D	D
32191	Millwork	-	2	2	f	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper mfg	-	9	5	f	D	D	D	D	D	D	D	3 233
3222	Converted paper product mfg	-	8	4	644	24 249	429	971	13 439	57 978	63 301	122 565	D
326	Plastics & rubber products mfg	-	10	10	g	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	9	9	g	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	7	7	g	D	D	D	D	D	D	D	D
326112	Unsupported plastics packaging film & sheet mfg	-	5	5	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	26	15	726	19 795	540	1 096	13 292	42 577	27 628	70 385	6 452
335	Electrical equipment, appliance, & component mfg	-	5	5	890	26 540	651	1 215	16 995	87 883	42 899	132 706	D
3353	Electrical equipment mfg ..	-	5	5	890	26 540	651	1 215	16 995	87 883	42 899	132 706	D
33531	Electrical equipment mfg	-	5	5	890	26 540	651	1 215	16 995	87 883	42 899	132 706	D
335311	Power, distribution, & specialty transformer mfg	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	5	4	g	D	D	D	D	D	D	D	D
3361	Motor vehicle mfg	-	1	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
PARK FALLS, WI													
31-33	Manufacturing	-	14	6	891	26 580	706	1 302	18 979	92 075	75 465	167 950	6 384
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
PESHIGO, WI													
31-33	Manufacturing	1	14	8	1 060	30 858	837	1 620	21 808	61 151	63 951	125 536	5 198
PEWAUKEE TOWN, WI													
31-33	Manufacturing	-	54	23	2 656	104 696	1 894	3 846	66 083	239 819	241 057	476 332	17 951
323	Printing & related support activities	-	13	9	1 066	39 640	872	1 800	31 226	67 471	58 936	125 853	3 139
3231	Printing & related support activities	-	13	9	1 066	39 640	872	1 800	31 226	67 471	58 936	125 853	3 139
32311	Printing	-	8	5	872	30 318	751	1 498	26 233	48 866	54 043	102 500	2 141
323110	Commercial lithographic printing ..	-	5	3	f	D	D	D	D	D	D	D	1 830
332	Fabricated metal product mfg	-	17	5	780	34 206	509	1 138	17 898	85 887	61 057	146 443	10 829
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
PEWAUKEE, WI													
31-33	Manufacturing	1	35	11	1 366	47 244	966	2 055	28 124	158 265	95 570	253 330	7 073

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
PLEASANT PRAIRIE, WI													
31-33	Manufacturing	-	19	16	2 165	75 592	1 592	3 170	45 931	271 600	226 261	493 777	13 242
332	Fabricated metal product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	-	2	2	f	D	D	D	D	D	D	D	D
PLOVER, WI													
31-33	Manufacturing	6	22	12	2 223	57 502	1 955	3 648	46 544	279 598	201 144	478 736	29 304
311	Food mfg	6	5	5	1 835	46 264	1 651	3 008	38 137	248 584	167 976	416 289	24 918
3114	Fruit & vegetable preserving & specialty food mfg	7	4	4	g	D	D	D	D	D	D	D	D
31141	Frozen food mfg	9	2	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, & vegetable mfg	9	2	2	g	D	D	D	D	D	D	D	D
PLYMOUTH, WI													
31-33	Manufacturing	4	22	9	1 869	59 718	1 138	2 286	28 651	268 690	454 229	721 919	D
311	Food mfg	4	4	3	g	D	D	D	D	D	D	D	D
3115	Dairy product mfg	4	3	3	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	4	3	3	g	D	D	D	D	D	D	D	D
311513	Cheese mfg	4	3	3	g	D	D	D	D	D	D	D	D
PORTAGE, WI													
31-33	Manufacturing	-	28	10	1 654	47 235	1 366	2 703	33 070	180 932	307 226	484 088	7 675
PORT WASHINGTON, WI													
31-33	Manufacturing	1	26	11	2 540	94 961	1 647	3 561	52 142	325 132	308 063	626 952	16 337
333	Machinery mfg	1	7	5	1 606	63 896	1 021	2 219	35 696	228 251	239 280	463 222	12 004
3331	Agriculture, construction, & mining machinery mfg	1	4	4	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	2	2	f	D	D	D	D	D	D	D	D
333112	Lawn & garden tractor & home lawn & garden equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	3	2	2	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	3	2	2	f	D	D	D	D	D	D	D	D
PRAIRIE DU CHIEN, WI													
31-33	Manufacturing	-	14	9	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	3	3	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg	-	1	1	f	D	D	D	D	D	D	D	D
32791	Abrasive product mfg	-	1	1	f	D	D	D	D	D	D	D	D
327910	Abrasive product mfg	-	1	1	f	D	D	D	D	D	D	D	D

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RACINE, WI													
31-33	Manufacturing	-	219	79	9 065	322 313	6 388	12 207	187 605	1 118 610	731 239	1 845 040	81 906
331	Primary metal mfg	-	10	6	f	D	D	D	D	D	D	D	D
3315	Foundries	-	8	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	68	29	2 530	85 075	1 801	3 636	50 097	190 038	132 059	323 750	15 085
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	31	10	757	23 231	599	1 266	15 861	47 769	20 096	67 962	D
33271	Machine shops	1	25	8	607	18 618	471	1 013	13 018	38 289	17 335	55 618	3 063
332710	Machine shops	1	25	8	607	18 618	471	1 013	13 018	38 289	17 335	55 618	3 063
3329	Other fabricated metal product mfg	-	8	6	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	42	12	2 343	98 121	1 585	3 186	61 046	329 098	344 492	663 569	41 125
3331	Agriculture, construction, & mining machinery mfg.	-	7	4	g	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg	-	4	3	g	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
333613	Mechanical power transmission equipment mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	16	6	1 364	44 962	1 046	1 547	22 376	391 913	91 714	484 999	10 852
3352	Household appliance mfg.	-	1	1	f	D	D	D	D	D	D	D	D
33522	Major appliance mfg.	-	1	1	f	D	D	D	D	D	D	D	D
335228	Other major household appliance mfg	-	1	1	f	D	D	D	D	D	D	D	D
REEDSBURG, WI													
31-33	Manufacturing	-	31	20	2 456	68 853	1 997	3 936	49 520	235 906	222 567	461 684	21 992
326	Plastics & rubber products mfg	-	4	4	521	12 005	449	949	9 559	81 083	41 327	123 945	D
331	Primary metal mfg	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
RHINELANDER, WI													
31-33	Manufacturing	-	20	8	2 080	68 386	1 843	4 183	56 250	151 695	195 646	343 813	14 809
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	-	3	2	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery mfg	-	2	1	f	D	D	D	D	D	D	D	D
333515	Cutting tool & machine tool accessory mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
RICE LAKE, WI													
31-33	Manufacturing	5	24	9	2 071	52 345	1 785	3 517	40 719	121 212	111 976	230 890	7 388
332	Fabricated metal product mfg	5	3	2	f	D	D	D	D	D	D	D	D
3325	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
33251	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D
332510	Hardware mfg	9	2	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
RICHLAND CENTER, WI													
31-33	Manufacturing	-	19	7	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	2	2	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	-	1	1	f	D	D	D	D	D	D	D	D
RIPON, WI													
31-33	Manufacturing	-	21	9	2 937	74 500	2 313	5 211	50 876	181 066	199 452	379 545	12 147
311	Food mfg	2	5	4	892	23 867	752	1 497	18 255	57 290	61 987	119 814	D
3118	Bakeries & tortilla mfg	-	3	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, & pasta mfg	-	2	2	f	D	D	D	D	D	D	D	D
311821	Cookie & cracker mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33522	Major appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335224	Household laundry equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
RIVER FALLS, WI *													
31-33	Manufacturing	-	18	7	628	14 668	508	824	9 585	29 930	35 465	65 943	3 730
ROTHSCHILD, WI													
31-33	Manufacturing	-	7	5	1 102	44 828	788	1 710	30 208	152 271	176 011	328 684	13 342
322	Paper mfg	-	1	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
ST. FRANCIS, WI													
31-33	Manufacturing	-	22	8	993	30 908	705	1 363	20 439	91 623	68 918	159 303	5 746
339	Miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	-	2	2	f	D	D	D	D	D	D	D	D
339994	Broom, brush, & mop mfg	-	2	2	f	D	D	D	D	D	D	D	D
SAUK CITY, WI													
31-33	Manufacturing	-	11	4	538	15 036	360	692	9 113	53 803	82 699	134 530	2 670
SAUKVILLE, WI													
31-33	Manufacturing	2	20	12	1 090	42 595	852	1 963	29 149	258 424	193 234	451 379	15 412
SHAWANO, WI													
31-33	Manufacturing	1	24	13	1 144	27 909	896	1 708	17 846	71 230	102 789	174 479	6 745

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
SHEBOYGAN, WI													
31-33	Manufacturing	-	99	55	7 887	260 619	5 595	11 298	149 271	664 045	743 999	1 415 555	69 948
322	Paper mfg	-	8	4	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	8	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	8	577	19 109	447	970	12 626	42 186	33 377	77 646	3 669
3261	Plastics product mfg	-	9	8	577	19 109	447	970	12 626	42 186	33 377	77 646	3 669
331	Primary metal mfg	-	4	4	f	D	D	D	D	D	D	D	29 233
3315	Foundries	-	4	4	f	D	D	D	D	D	D	D	29 233
33152	Nonferrous metal foundries	-	3	3	f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting) ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	7	g	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg	3	9	5	1 321	44 811	705	1 293	19 320	106 087	97 898	205 234	6 727
3339	Other general-purpose machinery mfg	3	3	3	g	D	D	D	D	D	D	D	5 945
33399	All other general-purpose machinery mfg	-	2	2	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	6	5	f	D	D	D	D	D	D	D	D
SHEBOYGAN FALLS, WI													
31-33	Manufacturing	-	36	14	3 990	135 195	3 001	5 434	88 038	367 966	349 264	726 190	29 930
311	Food mfg	-	2	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	7	5	1 638	63 133	1 261	1 952	44 229	168 837	118 799	291 677	D
3261	Plastics product mfg	-	7	5	1 638	63 133	1 261	1 952	44 229	168 837	118 799	291 677	D
32619	Other plastics product mfg	-	4	2	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	4	2	g	D	D	D	D	D	D	D	D
SLINGER, WI													
31-33	Manufacturing	1	22	10	676	19 155	534	984	12 402	69 121	45 962	109 524	3 983
SOUTH MILWAUKEE, WI													
31-33	Manufacturing	-	26	7	2 077	90 543	1 321	2 825	54 622	204 825	214 770	429 931	7 669
333	Machinery mfg	-	4	1	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	1	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D
SPARTA, WI													
31-33	Manufacturing	-	23	8	1 451	33 382	948	1 858	17 911	88 950	88 372	175 384	3 182
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
STEVENS POINT, WI													
31-33	Manufacturing	-	37	12	2 252	78 923	1 771	3 576	55 186	192 516	231 190	422 403	56 451
323	Printing & related support activities.....	-	4	3	509	21 379	409	908	13 586	39 048	31 004	69 492	D
3231	Printing & related support activities.....	-	4	3	509	21 379	409	908	13 586	39 048	31 004	69 492	D
32311	Printing	-	4	3	509	21 379	409	908	13 586	39 048	31 004	69 492	D
STOUGHTON, WI													
31-33	Manufacturing	-	20	5	1 720	42 882	1 479	3 124	33 872	131 995	230 009	371 068	3 933
336	Transportation equipment mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body & trailer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336212	Truck trailer mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
STURGEON BAY, WI													
31-33	Manufacturing	-	26	14	2 017	55 258	1 642	3 255	37 857	122 825	115 264	242 267	9 471
333	Machinery mfg.....	-	4	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
STURTEVANT, WI													
31-33	Manufacturing	4	16	9	1 634	47 986	1 091	2 661	25 911	85 849	101 411	186 114	16 043
331	Primary metal mfg.....	9	2	2	f	D	D	D	D	D	D	D	D
3315	Foundries	9	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	9	2	2	f	D	D	D	D	D	D	D	D
331521	Aluminum die-casting foundries	9	2	2	f	D	D	D	D	D	D	D	D
SUN PRAIRIE, WI													
31-33	Manufacturing	1	24	8	1 053	34 096	810	1 608	24 287	95 504	93 170	188 772	5 150
SUPERIOR, WI													
31-33	Manufacturing	-	45	11	g	D	D	D	D	D	D	D	9 113
SUSSEX, WI													
31-33	Manufacturing	1	33	15	3 575	106 151	3 083	6 467	85 282	484 962	343 813	813 378	24 479
323	Printing & related support activities.....	-	5	3	g	D	D	D	D	D	D	D	2 408
3231	Printing & related support activities.....	-	5	3	g	D	D	D	D	D	D	D	2 408
32311	Printing	-	4	3	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	2	g	D	D	D	D	D	D	D	D
TOMAH, WI													
31-33	Manufacturing	-	18	9	1 572	38 208	1 354	2 406	29 796	165 212	263 427	425 451	4 027
333	Machinery mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3331	Agriculture, construction, & mining machinery mfg....	-	1	1	f	D	D	D	D	D	D	D	D
33311	Agricultural implement mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333111	Farm machinery & equipment mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
TWO RIVERS, WI													
31-33	Manufacturing	-	30	18	2 293	70 009	1 664	3 423	43 702	156 646	107 945	264 634	7 650
335	Electrical equipment, appliance, & component mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg.....	-	2	2	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	UNION GROVE, WI												
	Manufacturing	-	7	5	624	18 323	492	911	13 728	45 233	37 242	81 358	2 200
	VERONA, WI												
31-33	Manufacturing	-	18	10	889	23 221	655	1 305	14 710	39 880	22 751	62 233	3 887
	WATERFORD, WI												
31-33	Manufacturing	-	7	4	622	17 818	408	789	8 898	42 364	34 511	75 466	895
	WATERLOO, WI												
31-33	Manufacturing	1	9	8	1 072	31 995	904	1 969	24 848	73 651	49 730	122 165	2 246
323	Printing & related support activities.....	-	2	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	2	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	2	2	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	2	2	f	D	D	D	D	D	D	D	D
	WATERTOWN, WI *												
31-33	Manufacturing	-	61	25	3 471	99 116	2 627	5 351	63 893	240 119	459 520	706 103	17 618
333	Machinery mfg	-	8	6	1 089	31 733	819	1 669	21 195	71 115	73 871	145 638	2 718
334	Computer & electronic product mfg	-	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	2	2	f	D	D	D	D	D	D	D	D
	WAUKESHA, WI												
31-33	Manufacturing	-	195	79	9 902	394 154	6 539	13 208	230 941	1 361 225	1 218 230	2 578 397	63 260
311	Food mfg	-	7	4	f	D	D	D	D	D	D	D	2 530
323	Printing & related support activities.....	4	26	8	623	22 373	490	1 007	15 187	39 109	24 688	63 405	2 661
3231	Printing & related support activities.....	4	26	8	623	22 373	490	1 007	15 187	39 109	24 688	63 405	2 661
32311	Printing	5	22	6	526	19 215	407	835	12 503	32 681	24 084	56 481	2 352
331	Primary metal mfg	-	10	7	g	D	D	D	D	D	D	D	13 271
3315	Foundries	-	10	7	g	D	D	D	D	D	D	D	13 271
33151	Ferrous metal foundries ..	-	6	5	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	5	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	51	18	1 181	41 450	813	1 652	23 855	87 571	49 142	137 213	3 549
333	Machinery mfg	2	20	12	2 063	88 328	1 057	2 019	42 448	243 577	158 986	398 125	20 694
3336	Engine, turbine, & power transmission equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	3	3	g	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	8	6	f	D	D	D	D	D	D	D	2 571
3345	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	-	11	4	g	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	8	4	g	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg	-	8	4	g	D	D	D	D	D	D	D	D
335311	Power, distribution, & specialty transformer mfg	-	4	4	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WAUNAKEE, WI													
31-33	Manufacturing	-	23	13	1 438	40 142	1 132	2 243	25 845	82 187	113 962	191 969	13 728
337	Furniture & related product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	-	1	1	f	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture mfg	-	1	1	f	D	D	D	D	D	D	D	D
WAUPACA, WI													
31-33	Manufacturing	-	25	10	2 462	84 018	2 164	4 346	70 223	305 572	248 245	551 147	9 764
331	Primary metal mfg	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	1	1	g	D	D	D	D	D	D	D	D
331511	Iron foundries	-	1	1	g	D	D	D	D	D	D	D	D
WAUPUN, WI *													
31-33	Manufacturing	-	15	7	1 087	32 615	787	1 678	22 675	76 471	255 235	333 833	11 984
332	Fabricated metal product mfg	-	6	5	f	D	D	D	D	D	D	D	D
WAUSAU, WI													
31-33	Manufacturing	-	83	38	8 190	228 838	6 401	12 082	150 772	564 657	631 959	1 192 076	37 425
321	Wood product mfg	-	7	6	1 681	43 034	1 426	2 937	32 373	69 351	74 291	143 806	D
3219	Other wood product mfg	-	6	6	g	D	D	D	D	D	D	D	D
32191	Millwork	-	2	2	g	D	D	D	D	D	D	D	D
321911	Wood window & door mfg	-	1	1	g	D	D	D	D	D	D	D	D
322	Paper mfg	-	5	5	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	5	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg	-	4	4	646	21 190	522	1 062	15 679	68 262	71 522	139 607	3 031
332	Fabricated metal product mfg	-	17	11	3 472	103 829	2 579	4 401	63 776	274 660	177 996	446 538	18 044
3322	Cutlery & handtool mfg	1	3	2	g	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	1	3	2	g	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg	-	2	1	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	-	8	6	2 181	73 388	1 497	2 920	42 208	166 717	121 876	286 701	13 007
33232	Ornamental & architectural metal products mfg	-	7	5	g	D	D	D	D	D	D	D	D
332321	Metal window & door mfg	-	3	2	g	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg ..	-	4	3	g	D	D	D	D	D	D	D	D
WAUWATOSA, WI													
31-33	Manufacturing	-	81	24	7 766	342 765	4 912	10 612	204 560	877 711	561 087	1 388 761	59 195
332	Fabricated metal product mfg	-	9	6	952	27 446	745	1 530	20 872	68 642	36 065	105 825	1 460
333	Machinery mfg	-	5	2	h	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	2	2	g	D	D	D	D	D	D	D	D
3369	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
33699	Other transportation equipment mfg	-	1	1	g	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, & parts mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	19	6	574	21 163	195	413	5 783	39 975	11 350	51 483	703

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WEST ALLIS, WI													
31-33	Manufacturing	1	145	44	7 537	226 375	5 315	8 738	129 976	422 228	430 013	864 709	25 155
311	Food mfg	-	13	4	652	14 706	531	1 236	11 925	29 356	18 230	47 629	D
3118	Bakeries & tortilla mfg	-	9	4	638	14 306	520	1 223	11 708	28 643	17 211	45 847	D
31181	Bread & bakery product mfg	-	9	4	638	14 306	520	1 223	11 708	28 643	17 211	45 847	D
311812	Commercial bakeries	-	3	3	583	13 503	489	1 181	11 309	26 849	16 235	43 075	D
323	Printing & related support activities	2	36	7	2 281	34 475	2 019	1 872	26 464	69 689	29 162	98 760	2 818
3231	Printing & related support activities	2	36	7	2 281	34 475	2 019	1 872	26 464	69 689	29 162	98 760	2 818
32311	Printing	2	34	6	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	15	4	2 084	27 100	1 881	1 604	22 009	53 283	19 283	72 547	1 803
331	Primary metal mfg	-	5	4	1 009	37 521	859	1 781	31 634	80 602	75 623	155 266	4 625
3315	Foundries	-	5	4	1 009	37 521	859	1 781	31 634	80 602	75 623	155 266	4 625
33151	Ferrous metal foundries	-	4	4	f	D	D	D	D	D	D	D	4 625
331511	Iron foundries	-	4	4	f	D	D	D	D	D	D	D	4 625
332	Fabricated metal product mfg	-	30	8	685	24 873	486	996	15 773	46 266	35 277	80 801	2 919
333	Machinery mfg	-	21	7	1 595	70 993	648	1 385	24 872	95 778	193 580	301 519	5 694
3336	Engine, turbine, & power transmission equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg	-	2	1	g	D	D	D	D	D	D	D	D
333611	Turbine & turbine generator set unit mfg	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	6	618	16 384	466	901	9 013	32 867	17 678	50 386	531
3399	Other miscellaneous mfg ..	-	11	5	f	D	D	D	D	D	D	D	D
WEST BEND, WI													
31-33	Manufacturing	-	65	24	4 972	150 856	3 583	6 856	89 068	327 249	255 590	586 545	23 670
316	Leather & allied product mfg ..	-	4	2	f	D	D	D	D	D	D	D	D
3169	Other leather & allied product mfg	-	4	2	f	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg	-	4	2	f	D	D	D	D	D	D	D	D
316993	Personal leather good (except women's handbag & purse) mfg	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	-	11	4	g	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	11	4	g	D	D	D	D	D	D	D	D
32311	Printing	-	10	4	g	D	D	D	D	D	D	D	D
323113	Commercial screen printing	-	3	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg	-	20	7	1 143	40 468	757	1 516	22 024	72 012	51 618	126 050	8 793
335	Electrical equipment, appliance, & component mfg	-	1	1	g	D	D	D	D	D	D	D	D
3352	Household appliance mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg	-	1	1	g	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
WEST MILWAUKEE, WI													
31-33	Manufacturing	-	33	20	3 558	163 855	2 360	4 844	108 534	539 422	404 246	952 885	34 280
333	Machinery mfg	-	7	6	2 006	98 343	1 208	2 461	64 152	286 610	169 905	469 851	16 197
3331	Agriculture, construction, & mining machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
33312	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	-	1	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	-	1	1	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WESTON TOWN, WI													
31-33	Manufacturing	-	19	10	840	20 490	601	1 194	13 934	43 618	32 673	75 600	5 212
WEST SALEM, WI													
31-33	Manufacturing	-	13	6	1 036	21 127	812	1 673	13 332	35 217	51 678	86 233	4 104
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
WHITEWATER, WI *													
31-33	Manufacturing	-	10	6	869	24 205	561	1 174	13 856	67 792	68 301	134 894	2 068
WISCONSIN RAPIDS, WI													
31-33	Manufacturing	-	26	10	2 881	129 609	2 455	4 869	94 462	395 393	526 475	912 496	D
322	Paper mfg	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	g	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
WISCONSIN		WISCONSIN—Con.	
Companies ¹	8 933	Quantity of electricity purchased for heat and power	1,000 kWh.. 22 597 679
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 1 972 370
All establishments	9 936	Total value of shipments	\$1,000.. 117 382 992
Establishments with 1 to 19 employees	6 031	Value of resales	\$1,000.. 5 336 259
Establishments with 20 to 99 employees	2 654	Value added	\$1,000.. 54 947 083
Establishments with 100 employees or more	1 251	Total inventories, beginning of year	\$1,000.. 12 718 950
All employees	562 479	Finished goods inventories, beginning of year	\$1,000.. 4 849 598
Total compensation ²	\$1,000.. 23 557 212	Work-in-process inventories, beginning of year	\$1,000.. 3 181 982
Annual payroll	\$1,000.. 18 766 395	Materials and supplies inventories, beginning of year	\$1,000.. 4 687 370
Total fringe benefits	\$1,000.. 4 790 817	Total inventories, end of year	\$1,000.. 12 666 451
Production workers, average for year	416 254	Finished goods inventories, end of year	\$1,000.. 4 906 632
Production workers on March 12	410 066	Work-in-process inventories, end of year	\$1,000.. 3 178 072
Production workers on May 12	414 233	Materials and supplies inventories, end of year	\$1,000.. 4 581 747
Production workers on August 12	423 811	Gross book value of total assets at beginning of year	\$1,000.. 41 021 015
Production workers on November 12	416 906	Total capital expenditures (new and used)	\$1,000.. 4 092 922
Production-worker hours	1,000.. 837 444	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 673 048
Production-worker wages	\$1,000.. 11 952 570	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 3 419 874
Total cost of materials	\$1,000.. 62 446 845	Total retirements ²	\$1,000.. 1 143 206
Cost of materials, parts, containers, etc., consumed	\$1,000.. 55 632 722	Gross book value of total assets at end of year	\$1,000.. 43 970 731
Cost of resales	\$1,000.. 3 974 028	Total depreciation during year ²	\$1,000.. 2 777 149
Cost of fuels	\$1,000.. 690 715	Total rental payments ²	\$1,000.. 768 393
Cost of purchased electricity	\$1,000.. 907 260	Buildings and other structures rental payments ²	\$1,000.. 364 500
Cost of contract work	\$1,000.. 1 242 120	Machinery and equipment rental payments ²	\$1,000.. 403 891

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323110 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323111 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323112 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 323113 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 323114 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 323115 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 323116 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 323117 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semfinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semfinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillet) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D.

Geographic Notes

WISCONSIN

Appleton is in Calumet, Outagamie, and Winnebago Counties.

Bayside is in Milwaukee and Ozaukee Counties.

Berlin is in Green Lake and Waushara Counties.

Burlington is in Racine and Walworth Counties.

Columbus is in Columbia and Dodge Counties.

Eau Claire is in Chippewa and Eau Claire Counties.

Hartford is in Dodge and Washington Counties.

Kewaskum is in Fond du Lac and Washington Counties.

Kiel is in Calumet and Manitowoc Counties.

Marshfield is in Marathon and Wood Counties.

Menasha is in Calumet and Winnebago Counties.

Milwaukee is in Milwaukee, Washington, and Waukesha Counties.

Mukwonago is in Walworth and Waukesha Counties.

New London is in Outagamie and Waupaca Counties.

River Falls is in Pierce and St. Croix Counties.

Watertown is in Dodge and Jefferson Counties.

Waupun is in Dodge and Fond du Lac Counties.

Whitewater is in Jefferson and Walworth Counties.

Appendix E. Metropolitan Areas

WISCONSIN

Appleton—Oshkosh—Neenah, WI MSA

Calumet County, WI
Outagamie County, WI
Winnebago County, WI

Chicago—Gary—Kenosha, IL—IN—WI CMSA

Chicago, IL PMSA
Cook County, IL
DeKalb County, IL
DuPage County, IL
Grundy County, IL
Kane County, IL
Kendall County, IL
Lake County, IL
McHenry County, IL
Will County, IL

Gary, IN PMSA
Lake County, IN
Porter County, IN

Kankakee, IL PMSA
Kankakee County, IL

Kenosha, WI PMSA
Kenosha County, WI

Duluth—Superior, MN—WI MSA

St. Louis County, MN
Douglas County, WI

Eau Claire, WI MSA

Chippewa County, WI
Eau Claire County, WI

Green Bay, WI MSA

Brown County, WI

Janesville—Beloit, WI MSA

Rock County, WI

Kenosha, WI PMSA

Kenosha County, WI

La Crosse, WI—MN MSA

Houston County, MN
La Crosse County, WI

Madison, WI MSA

Dane County, WI

Milwaukee—Waukesha, WI PMSA

Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI

Milwaukee—Racine, WI CMSA

Milwaukee—Waukesha, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI
Racine, WI PMSA
Racine County, WI

Minneapolis—St. Paul, MN—WI MSA

Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Sherburne County, MN

Minneapolis—St. Paul, MN—WI MSA—Con.

Washington County, MN

Wright County, MN

Pierce County, WI

St. Croix County, WI

Racine, WI PMSA

Racine County, WI

Sheboygan, WI MSA

Sheboygan County, WI

Wausau, WI MSA

Marathon County, WI

West Virginia

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1997 Economic Census

Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST VIRGINIA													
31-33	Manufacturing	-	1 505	517	72 813	2 460 697	55 643	112 554	1 658 905	9 310 976	8 961 850	18 293 309	915 267
311	Food mfg.....	1	84	21	4 955	118 538	3 729	7 591	66 313	297 836	515 925	813 419	9 266
3114	Fruit & vegetable preserving & specialty food mfg.....	-	6	2	c	D	D	D	D	D	D	D	D
31142	Fruit & vegetable canning, pickling, & drying.....	-	6	2	c	D	D	D	D	D	D	D	D
311421	Fruit & vegetable canning.....	-	5	1	c	D	D	D	D	D	D	D	D
3115	Dairy product mfg.....	5	4	3	388	11 292	222	523	6 055	24 278	63 094	86 771	1 216
31151	Dairy product (except frozen) mfg.....	5	3	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg.....	5	3	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg.....	-	21	7	2 935	56 141	2 613	5 480	41 054	138 715	281 693	420 507	4 537
31161	Animal slaughtering & processing.....	-	21	7	2 935	56 141	2 613	5 480	41 054	138 715	281 693	420 507	4 537
311611	Animal (except poultry) slaughtering.....	9	14	2	100	1 167	88	96	920	3 097	12 462	15 559	D
311615	Poultry processing.....	-	3	3	2 706	51 667	2 447	5 190	38 728	128 081	246 269	374 474	4 033
3118	Bakeries & tortilla mfg.....	2	41	6	1 258	43 889	626	1 176	15 039	111 819	67 129	178 967	2 395
31181	Bread & bakery product mfg.....	2	39	6	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	2	16	6	1 147	42 528	545	1 088	14 247	108 868	65 177	174 056	2 203
312	Beverage & tobacco product mfg.....	4	16	8	625	18 354	357	667	9 691	147 581	121 391	266 519	5 414
3121	Beverage mfg.....	7	14	6	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg.....	7	10	6	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg.....	7	5	4	e	D	D	D	D	D	D	D	D
3122	Tobacco mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
31222	Tobacco product mfg ...	-	2	2	c	D	D	D	D	D	D	D	D
312229	Other tobacco product mfg.....	-	2	2	c	D	D	D	D	D	D	D	D
313	Textile mills.....	4	9	4	423	11 149	334	699	7 345	21 595	22 176	44 042	1 932
3132	Fabric mills.....	9	1	1	c	D	D	D	D	D	D	D	D
31322	Narrow fabric mills & schiffli machine embroidery.....	9	1	1	c	D	D	D	D	D	D	D	D
313221	Narrow fabric mills....	9	1	1	c	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills.....	1	7	3	e	D	D	D	D	D	D	D	D
31332	Fabric coating mills.....	-	3	2	214	5 284	161	298	3 069	9 034	12 307	21 523	D
313320	Fabric coating mills ...	-	3	2	214	5 284	161	298	3 069	9 034	12 307	21 523	D
314	Textile product mills.....	1	16	4	167	2 744	131	204	2 002	8 965	16 684	25 594	482
3149	Other textile product mills..	1	10	3	122	2 109	102	152	1 505	7 686	15 140	22 773	D
315	Apparel mfg.....	-	26	16	1 911	25 013	1 724	2 850	21 124	121 962	111 534	223 918	D
3151	Apparel knitting mills.....	-	2	2	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills....	-	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills.....	-	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg....	-	21	14	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors.....	5	12	7	e	D	D	D	D	D	D	D	D
315212	Women's, girls', & infants' cut & sew apparel contractors ..	6	10	6	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	-	3	3	573	7 848	486	702	6 202	21 059	11 438	32 490	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg.....	-	1	1	e	D	D	D	D	D	D	D	D
315228	Men's & boys' cut & sew other outerwear mfg.....	-	1	1	c	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	1	4	4	717	11 261	649	1 202	9 545	19 817	26 290	46 319	D
3162	Footwear mfg.....	1	4	4	717	11 261	649	1 202	9 545	19 817	26 290	46 319	D
31621	Footwear mfg.....	1	4	4	717	11 261	649	1 202	9 545	19 817	26 290	46 319	D
316213	Men's footwear (except athletic) mfg ..	1	2	2	f	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEST VIRGINIA—Con.												
31-33	Manufacturing—Con.												
321	Wood product mfg	1	289	99	7 752	159 023	6 854	13 290	126 872	408 856	668 166	1 074 260	40 675
3211	Sawmills & wood preservation	2	167	54	3 106	63 159	2 821	5 300	53 158	182 597	323 388	503 684	14 427
32111	Sawmills & wood preservation	2	167	54	3 106	63 159	2 821	5 300	53 158	182 597	323 388	503 684	14 427
321113	Sawmills	2	154	47	2 798	56 102	2 562	4 783	47 630	168 784	255 149	422 082	13 091
321114	Wood preservation	—	13	7	308	7 057	259	517	5 528	13 813	68 239	81 602	1 336
3212	Veneer, plywood, & engineered wood product mfg	—	15	6	1 076	30 989	882	2 024	21 767	74 281	135 075	207 192	14 460
32121	Veneer, plywood, & engineered wood product mfg	—	15	6	1 076	30 989	882	2 024	21 767	74 281	135 075	207 192	14 460
321211	Hardwood veneer & plywood mfg	—	4	2	347	9 147	294	634	6 292	23 257	39 925	63 654	D
321213	Engineered wood member (except truss) mfg	—	1	1	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product mfg	—	3	2	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	—	107	39	3 570	64 875	3 151	5 966	51 947	151 978	209 703	363 384	11 788
32191	Millwork	—	48	19	2 183	40 881	1 968	3 859	34 798	91 536	153 893	247 555	6 895
321912	Cut stock, resawing lumber, & planing	1	33	13	1 277	21 787	1 170	2 198	18 301	43 244	80 361	128 479	2 773
321918	Other millwork (including flooring)	—	15	6	906	19 094	798	1 661	16 497	48 292	73 532	119 076	4 122
32192	Wood container & pallet mfg	—	19	7	640	10 245	547	991	7 080	22 465	24 941	47 171	1 291
321920	Wood container & pallet mfg	—	19	7	640	10 245	547	991	7 080	22 465	24 941	47 171	1 291
32199	All other wood product mfg	2	40	13	747	13 749	636	1 116	10 069	37 977	30 869	68 658	3 602
321992	Prefabricated wood building mfg	3	7	5	228	5 083	191	387	3 591	10 878	13 393	24 424	378
321999	All other miscellaneous wood product mfg	1	33	8	519	8 666	445	729	6 478	27 099	17 476	44 234	3 224
322	Paper mfg	—	15	10	777	23 737	616	1 234	16 264	61 483	68 874	129 747	1 550
3221	Pulp, paper, & paperboard mills	—	3	3	274	8 661	226	434	6 109	23 092	25 103	48 171	D
32213	Paperboard mills	—	2	2	c	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	2	2	c	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	—	12	7	503	15 076	390	800	10 155	38 391	43 771	81 576	D
32221	Paperboard container mfg	—	5	3	c	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg	—	3	2	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	—	3	3	198	6 039	159	327	4 266	14 825	25 607	39 723	D
322224	Uncoated paper & multiwall bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	130	15	2 277	53 753	1 802	3 233	38 369	97 206	108 464	204 203	66 779
3231	Printing & related support activities	1	130	15	2 277	53 753	1 802	3 233	38 369	97 206	108 464	204 203	66 779
32311	Printing	1	123	14	2 211	52 789	1 747	3 133	37 582	95 801	108 198	202 531	66 750
323110	Commercial lithographic printing	1	61	9	990	25 363	772	1 305	17 754	46 940	29 319	76 081	4 332
323111	Commercial gravure printing	—	1	1	c	D	D	D	D	D	D	D	D
323113	Commercial screen printing	—	12	2	352	7 393	267	499	5 046	23 746	30 002	53 335	D
323114	Quick printing	4	24	—	100	1 814	63	81	1 157	4 255	2 732	6 969	D
323117	Book printing	—	4	1	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	—	14	7	465	16 882	318	489	11 456	58 897	295 241	370 939	3 095
3241	Petroleum & coal products mfg	—	14	7	465	16 882	318	489	11 456	58 897	295 241	370 939	3 095
32411	Petroleum refineries	—	2	2	c	D	D	D	D	D	D	D	D
324110	Petroleum refineries	—	2	2	c	D	D	D	D	D	D	D	D
32419	Other petroleum & coal products mfg	—	4	3	169	7 379	110	210	4 242	43 294	201 109	249 469	D
325	Chemical mfg	—	73	43	13 364	690 763	8 820	18 742	426 025	4 401 085	2 881 173	7 318 836	461 429

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST VIRGINIA—Con.													
31-33	Manufacturing—Con.												
325	Chemical mfg—Con.												
3251	Basic chemical mfg	—	38	23	6 611	345 566	4 195	8 764	208 558	1 761 101	1 389 600	3 154 174	178 073
32512	Industrial gas mfg	—	13	3	c	D	D	D	D	D	D	D	D
325120	Industrial gas mfg	—	13	3	c	D	D	D	D	D	D	D	D
32513	Dye & pigment mfg	—	1	1	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	—	1	1	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	—	6	5	1 016	55 305	681	1 418	35 539	286 425	134 841	419 941	D
325181	Alkalies & chlorine mfg	—	1	1	f	D	D	D	D	D	D	D	D
325182	Carbon black mfg	—	2	2	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg	1	3	2	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	1	18	14	5 205	273 791	3 316	6 909	164 937	1 381 317	1 214 997	2 600 141	138 021
325191	Gum & wood chemical mfg	—	1	1	c	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	—	2	2	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	1	15	11	3 953	200 563	2 633	5 453	125 495	906 931	909 019	1 824 715	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	—	6	5	3 793	208 722	2 668	5 999	137 551	1 447 222	986 440	2 438 528	229 428
32521	Resin & synthetic rubber mfg	—	6	5	3 793	208 722	2 668	5 999	137 551	1 447 222	986 440	2 438 528	229 428
325211	Plastics material & resin mfg	—	5	5	h	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	—	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	—	5	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	—	3	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	3	7	4	321	9 821	225	424	6 205	26 547	35 300	61 819	D
32551	Paint & coating mfg	2	4	2	134	2 902	93	175	1 583	16 419	18 208	34 466	282
325510	Paint & coating mfg	2	4	2	134	2 902	93	175	1 583	16 419	18 208	34 466	282
32552	Adhesive mfg	5	3	2	187	6 919	132	249	4 622	10 128	17 092	27 353	D
325520	Adhesive mfg	5	3	2	187	6 919	132	249	4 622	10 128	17 092	27 353	D
3259	Other chemical product mfg	—	12	6	719	32 775	527	1 163	21 800	154 115	133 465	288 477	22 709
32599	All other chemical product & preparation mfg	—	12	6	719	32 775	527	1 163	21 800	154 115	133 465	288 477	22 709
325991	Custom compounding of purchased resin	—	5	5	473	19 541	361	819	13 804	76 842	94 901	173 761	D
325992	Photographic film, paper, plate, & chemical mfg	—	1	1	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	54	27	2 869	72 606	2 211	4 486	46 287	226 182	221 509	448 081	39 694
3261	Plastics product mfg	—	38	21	2 276	57 876	1 732	3 494	36 383	182 127	172 066	354 891	36 578
32611	Unsupported plastics film, sheet, & bag mfg	—	3	3	207	5 217	175	354	3 836	23 782	14 748	38 491	D
326111	Unsupported plastics bag mfg	—	2	2	c	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	—	5	3	172	3 811	109	183	1 966	14 464	24 222	38 900	1 846
326122	Plastics pipe & pipe fitting mfg	1	4	3	c	D	D	D	D	D	D	D	D
32616	Plastics bottle mfg	—	2	2	c	D	D	D	D	D	D	D	D
326160	Plastics bottle mfg	—	2	2	c	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	—	27	12	1 695	42 345	1 303	2 581	25 823	131 878	105 272	236 840	30 913
326191	Plastics plumbing fixture mfg	—	4	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	—	23	11	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg	—	16	6	593	14 730	479	992	9 904	44 055	49 443	93 190	3 116
32629	Other rubber product mfg	—	10	5	510	12 522	417	860	8 459	38 144	44 732	82 633	2 534
326299	All other rubber product mfg	—	8	4	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WEST VIRGINIA—Con. Manufacturing— Con.												
327	Nonmetallic mineral product mfg	1	141	45	5 725	160 392	4 730	9 013	116 710	449 996	232 217	680 396	30 714
3271	Clay product & refractory mfg	-	12	6	1 457	39 019	1 233	2 369	29 058	96 033	42 816	141 790	4 085
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	9	3	1 187	29 695	1 032	1 946	23 198	64 110	27 656	90 822	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	7	1	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply mfg	-	2	2	c	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	3	3	270	9 324	201	423	5 860	31 923	15 160	50 968	D
327125	Nonclay refractory mfg	-	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg	-	35	18	2 694	76 105	2 250	4 358	56 405	219 125	70 424	286 121	16 727
32721	Glass & glass product mfg	-	35	18	2 694	76 105	2 250	4 358	56 405	219 125	70 424	286 121	16 727
327211	Flat glass mfg	-	2	2	e	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	17	12	2 114	58 714	1 767	3 485	42 986	162 234	46 069	205 151	14 170
327215	Glass product mfg made of purchased glass	3	16	4	c	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	2	80	15	1 154	32 475	911	1 637	22 051	92 932	86 927	178 106	7 104
32731	Cement mfg	-	1	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	-	1	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	3	52	9	555	13 229	459	799	9 773	37 166	47 076	84 041	3 187
327320	Ready-mix concrete mfg	3	52	9	555	13 229	459	799	9 773	37 166	47 076	84 041	3 187
32733	Concrete pipe, brick, & block mfg	5	16	4	280	6 762	186	355	3 840	16 741	17 647	34 152	D
327331	Concrete block & brick mfg	6	15	3	c	D	D	D	D	D	D	D	1 036
3279	Other nonmetallic mineral product mfg	3	13	6	e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product mfg ...	3	12	6	e	D	D	D	D	D	D	D	D
327992	Ground or treated mineral & earth mfg ..	2	5	3	158	5 649	126	272	4 143	24 270	17 966	42 526	1 464
327999	All other miscellaneous nonmetallic mineral product mfg	8	3	2	158	3 314	122	190	2 124	7 864	6 594	14 464	D
331	Primary metal mfg	-	36	24	11 109	486 538	8 509	18 581	359 041	1 396 811	2 041 187	3 430 387	166 074
3311	Iron & steel mills & ferroalloy mfg	-	4	4	6 042	292 146	4 517	10 465	216 846	780 709	892 313	1 658 289	128 800
33111	Iron & steel mills & ferroalloy mfg	-	4	4	6 042	292 146	4 517	10 465	216 846	780 709	892 313	1 658 289	128 800
331111	Iron & steel mills	-	3	3	i	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	-	1	1	e	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel	-	8	3	166	5 285	127	234	4 281	15 040	26 431	42 168	D
33121	Iron & steel pipes & tubes mfg from purchased steel	-	5	2	c	D	D	D	D	D	D	D	355
331210	Iron & steel pipes & tubes mfg from purchased steel	-	5	2	c	D	D	D	D	D	D	D	355
3313	Alumina & aluminum production & processing ..	-	5	5	2 574	103 432	1 997	4 004	73 017	290 726	833 872	1 128 015	D
33131	Alumina & aluminum production & processing	-	5	5	2 574	103 432	1 997	4 004	73 017	290 726	833 872	1 128 015	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	4	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	6	4	1 803	71 634	1 422	2 973	54 605	283 499	270 685	557 422	D
33141	Nonferrous metal (except aluminum) smelting & refining	-	1	1	e	D	D	D	D	D	D	D	D
331419	Other nonferrous metal primary smelting & refining	-	1	1	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	3	2	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	2	1	g	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WEST VIRGINIA—Con.												
31-33	Manufacturing—Con.												
331	Primary metal mfg—Con.												
3315	Foundries	2	13	8	524	14 041	446	905	10 292	26 837	17 886	44 493	1 153
33151	Ferrous metal foundries ..	2	8	4	258	5 744	213	309	4 207	12 392	10 411	22 733	613
331511	Iron foundries	2	6	3	c	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	1	5	4	266	8 297	233	596	6 085	14 445	7 475	21 760	540
331525	Copper foundries (except die-casting) ..	1	3	3	c	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	274	89	7 267	214 393	5 465	11 002	142 712	581 433	791 524	1 369 374	27 804
3321	Forging & stamping	2	10	5	299	9 099	242	547	6 862	25 874	54 154	79 732	1 688
33211	Forging & stamping	2	10	5	299	9 099	242	547	6 862	25 874	54 154	79 732	1 688
332115	Crown & closure mfg ..	—	2	2	c	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg . . .	—	5	3	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	—	5	3	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	—	5	3	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	49	22	1 334	35 748	919	1 894	23 448	73 688	70 610	144 005	3 242
33231	Plate work & fabricated structural product mfg ..	1	29	15	873	23 660	598	1 239	15 249	46 173	58 168	104 757	2 137
332312	Fabricated structural metal mfg	1	23	13	735	20 135	497	1 043	13 018	38 476	49 905	88 690	1 720
33232	Ornamental & architectural metal products mfg	2	20	7	461	12 088	321	655	8 199	27 515	12 442	39 248	1 105
332322	Sheet metal work mfg .	2	13	6	385	10 005	264	538	6 968	23 153	8 013	30 475	928
3324	Boiler, tank, & shipping container mfg	1	11	7	488	14 136	385	880	9 899	29 225	64 689	95 139	2 107
33241	Power boiler & heat exchanger mfg	—	4	2	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg	—	4	2	c	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg	2	5	4	311	8 602	258	590	6 747	19 008	54 750	74 732	940
332431	Metal can mfg	—	2	2	c	D	D	D	D	D	D	D	D
332439	Other metal container mfg	9	3	2	c	D	D	D	D	D	D	D	D
3326	Spring & wire product mfg .	2	7	5	349	9 651	286	535	6 064	22 685	22 495	43 293	2 021
33261	Spring & wire product mfg	2	7	5	349	9 651	286	535	6 064	22 685	22 495	43 293	2 021
332618	Other fabricated wire product mfg	2	7	5	349	9 651	286	535	6 064	22 685	22 495	43 293	2 021
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	150	32	2 013	51 265	1 586	2 586	34 992	98 176	43 687	141 655	5 866
33271	Machine shops	3	142	30	1 780	44 115	1 424	2 250	30 459	82 753	39 138	121 880	5 338
332710	Machine shops	3	142	30	1 780	44 115	1 424	2 250	30 459	82 753	39 138	121 880	5 338
33272	Turned product & screw, nut, & bolt mfg	—	8	2	233	7 150	162	336	4 533	15 423	4 549	19 775	528
332721	Precision turned product mfg	—	6	1	c	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities .	—	15	5	e	D	D	D	D	D	D	D	6 355
33281	Coating, engraving, heat treating, & allied activities	—	15	5	e	D	D	D	D	D	D	D	6 355
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	—	5	3	e	D	D	D	D	D	D	D	5 835
332813	Electroplating, plating, polishing, anodizing, & coloring	5	9	2	c	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	—	25	9	1 305	31 725	968	2 106	20 019	82 995	62 018	137 778	4 233
33291	Metal valve mfg	—	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ..	—	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	24	8	f	D	D	D	D	D	D	D	D
332996	Fabricated pipe & pipe fitting mfg	—	5	2	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	10	5	524	16 154	418	866	10 235	49 557	35 292	80 842	2 117

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WEST VIRGINIA—Con. Manufacturing—Con.												
333	Machinery mfg	2	98	37	3 665	119 660	2 895	5 915	75 980	282 685	312 218	599 749	17 507
3331	Agriculture, construction, & mining machinery mfg	4	43	20	1 375	53 055	1 011	2 140	31 371	124 695	123 069	243 644	5 533
33312	Construction machinery mfg	—	1	1	c	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	1	1	c	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	4	42	19	g	D	D	D	D	D	D	D	D
333131	Mining machinery & equipment mfg	4	38	19	1 235	49 113	916	1 941	28 593	112 822	114 204	223 394	5 082
3333	Commercial & service industry machinery mfg ..	—	8	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	8	1	g	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	—	2	1	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	—	5	2	c	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	—	5	2	c	D	D	D	D	D	D	D	D
333411	Air purification equipment mfg	—	2	1	c	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	1	23	9	752	21 696	573	1 093	14 443	44 437	20 044	63 135	1 620
33391	Pump & compressor mfg	—	3	3	182	6 699	113	225	3 587	15 460	5 151	19 647	D
333911	Pump & pumping equipment mfg	—	3	3	182	6 699	113	225	3 587	15 460	5 151	19 647	D
33399	All other general-purpose machinery mfg	1	16	4	487	12 675	404	785	9 633	24 299	11 241	35 223	1 154
333996	Fluid power pump & motor mfg	1	4	2	305	7 722	263	532	6 241	15 701	5 562	21 059	887
334	Computer & electronic product mfg	2	25	12	1 033	27 280	614	1 272	14 315	46 726	33 609	79 625	D
3341	Computer & peripheral equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	1	1	c	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg	9	8	4	c	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg	9	8	4	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) mfg	8	2	1	c	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg	1	13	7	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg	1	13	7	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg	—	5	4	444	16 406	216	641	8 076	23 947	17 514	40 715	763
334519	Other measuring & controlling device mfg	—	1	1	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	26	11	1 828	64 811	1 301	2 818	40 537	160 924	103 888	260 320	20 958
3351	Electric lighting equipment mfg	—	3	1	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg	—	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	5	18	8	809	24 178	529	968	12 353	46 964	49 152	96 772	3 722
33531	Electrical equipment mfg	5	18	8	809	24 178	529	968	12 353	46 964	49 152	96 772	3 722
335312	Motor & generator mfg	5	8	5	231	5 956	193	371	4 471	13 629	10 763	24 478	1 370
335313	Switchgear & switchboard apparatus mfg	—	2	2	c	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg	9	6	1	328	9 757	180	266	3 645	20 240	16 728	37 506	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WEST VIRGINIA—Con.													
31-33	Manufacturing—Con.												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg	—	5	2	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg	—	3	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	—	2	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	—	2	1	e	D	D	D	D	D	D	D	D
335991	Carbon & graphite product mfg	—	2	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	27	16		3 425	128 106	2 702	5 916	92 559	313 184	297 837	609 214
3362	Motor vehicle body & trailer mfg	—	7	5	e	D	D	D	D	D	D	D	1 199
33621	Motor vehicle body & trailer mfg	—	7	5	e	D	D	D	D	D	D	D	1 199
336211	Motor vehicle body mfg	—	5	4	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg	1	12	6		1 290	46 594	1 122	2 575	37 738	122 023	130 705	253 164
33632	Motor vehicle electrical & electronic equipment mfg	8	5	2	e	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg	8	5	2	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	2	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	2	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	5	4		1 355	56 389	928	2 018	35 583	138 728	88 758	226 578
33641	Aerospace product & parts mfg	—	5	4		1 355	56 389	928	2 018	35 583	138 728	88 758	226 578
336412	Aircraft engine & engine parts mfg	—	1	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	2	66	14		1 161	24 403	914	1 644	16 143	50 058	55 309	104 993
3371	Household & institutional furniture & kitchen cabinet mfg	1	50	6		627	11 021	519	864	8 252	20 494	19 026	39 348
33711	Wood kitchen cabinet & counter top mfg	2	26	3		267	4 681	218	354	3 608	7 533	5 792	13 103
337110	Wood kitchen cabinet & counter top mfg	2	26	3		267	4 681	218	354	3 608	7 533	5 792	13 103
33712	Household & institutional furniture mfg	1	24	3		360	6 340	301	510	4 644	12 961	13 234	26 245
337122	Nonupholstered wood household furniture mfg	1	16	3		318	5 743	266	460	4 179	11 746	12 144	23 929
3372	Office furniture (including fixtures) mfg	4	11	5		327	8 357	235	455	4 706	17 999	16 762	34 687
33721	Office furniture (including fixtures) mfg	4	11	5		327	8 357	235	455	4 706	17 999	16 762	34 687
337212	Custom architectural woodwork & millwork mfg	6	4	3		183	5 381	120	211	2 815	12 500	9 637	22 147
337215	Showcase, partition, shelving, & locker mfg	—	4	2		134	2 864	107	238	1 813	5 274	6 936	12 126
3379	Other furniture related product mfg	—	5	3		207	5 025	160	325	3 185	11 565	19 521	30 958
33791	Mattress mfg	—	4	3	c	D	D	D	D	D	D	D	D
337910	Mattress mfg	—	4	3	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WEST VIRGINIA—Con.												
	Manufacturing—Con.												
339	Miscellaneous mfg	—	82	11	1 298	31 291	968	1 706	19 615	157 694	36 634	193 374	4 403
3391	Medical equipment & supplies mfg	—	36	4	517	14 551	433	837	10 941	114 130	6 108	120 594	988
33911	Medical equipment & supplies mfg	—	36	4	517	14 551	433	837	10 941	114 130	6 108	120 594	988
339113	Surgical appliance & supplies mfg	—	6	1	e	D	D	D	D	D	D	D	D
339116	Dental laboratories	3	23	3	c	D	D	D	D	D	D	D	359
3399	Other miscellaneous mfg	1	46	7	781	16 740	535	869	8 674	43 564	30 526	72 780	3 415
33995	Sign mfg	6	21	1	203	4 294	132	191	2 128	7 559	5 068	12 622	1 192
339950	Sign mfg	6	21	1	203	4 294	132	191	2 128	7 559	5 068	12 622	1 192
33999	All other miscellaneous mfg	—	16	4	440	9 607	300	490	4 824	27 586	18 420	44 855	D
339991	Gasket, packing, & sealing device mfg	—	1	1	c	D	D	D	D	D	D	D	D
339995	Burial casket mfg	1	3	1	c	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg	—	9	2	165	3 241	121	194	1 499	12 061	8 161	19 091	668

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLESTON, WV MSA												
	Manufacturing	—	176	51	7 681	311 820	5 434	11 055	204 352	2 041 576	1 254 989	3 305 325	95 151
311	Food mfg	5	11	4	465	12 809	278	625	7 292	25 200	69 604	94 719	1 472
3115	Dairy product mfg	5	2	2	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	5	2	2	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	5	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities	1	27	2	432	8 954	284	491	5 169	24 426	28 371	52 115	D
3231	Printing & related support activities	1	27	2	432	8 954	284	491	5 169	24 426	28 371	52 115	D
32311	Printing	1	27	2	432	8 954	284	491	5 169	24 426	28 371	52 115	D
325	Chemical mfg	—	22	12	3 674	192 941	2 492	5 115	124 209	1 736 091	860 432	2 606 269	80 760
3251	Basic chemical mfg	—	13	9	2 749	141 187	1 812	3 708	86 534	645 983	650 643	1 304 615	D
32519	Other basic organic chemical mfg	—	7	7	2 615	133 579	1 762	3 564	83 872	595 210	635 730	1 238 964	59 719
325199	All other basic organic chemical mfg	—	7	7	2 615	133 579	1 762	3 564	83 872	595 210	635 730	1 238 964	59 719
3253	Pesticide, fertilizer, & other agricultural chemical mfg	—	2	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	—	1	1	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	4	18	4	266	7 064	199	352	4 209	17 622	21 360	38 798	1 274

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	CHARLESTON, WV MSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg	3	36	14	896	22 934	677	1 252	14 937	48 760	60 589	110 599	2 960
3323	Architectural & structural metals mfg	1	9	5	343	8 859	226	479	5 111	18 013	27 382	45 882	847
33231	Plate work & fabricated structural product mfg ..	—	6	5	332	8 591	217	466	4 950	17 470	26 943	44 900	816
332312	Fabricated structural metal mfg	1	5	4	e	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	—	17	5	268	7 904	200	340	5 245	17 101	4 860	22 132	1 240
33271	Machine shops	—	17	5	268	7 904	200	340	5 245	17 101	4 860	22 132	1 240
332710	Machine shops	—	17	5	268	7 904	200	340	5 245	17 101	4 860	22 132	1 240
336	Transportation equipment mfg	1	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	—	1	1	f	D	D	D	D	D	D	D	D
31-33	CUMBERLAND, MD—WV MSA												
	Manufacturing	—	83	29	5 307	179 632	4 034	7 342	120 354	498 219	409 274	922 229	191 987
	Cumberland, MD—WV MSA (MD Part)	—	67	21	4 169	139 197	3 206	5 708	95 607	396 422	374 661	785 922	D
	Cumberland, MD—WV MSA (WV Part)	—	16	8	1 138	40 435	828	1 634	24 747	101 797	34 613	136 307	D
313	Textile mills	9	2	1	e	D	D	D	D	D	D	D	D
3132	Fabric mills	9	2	1	e	D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills .	9	2	1	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	9	2	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	—	6	2	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	5	2	e	D	D	D	D	D	D	D	D
31529	Other cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
315291	Infants' cut & sew apparel mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	11	5	332	6 329	276	495	4 405	15 660	20 596	36 024	D
322	Paper mfg	—	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	—	3	2	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	—	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	9	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	4	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building	—	1	1	e	D	D	D	D	D	D	D	D
33661	Ship & boat building	—	1	1	e	D	D	D	D	D	D	D	D
336612	Boat building	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	—	8	1	e	D	D	D	D	D	D	D	D
3379	Other furniture related product mfg	—	1	1	e	D	D	D	D	D	D	D	D
33792	Blind & shade mfg	—	1	1	e	D	D	D	D	D	D	D	D
337920	Blind & shade mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUNTINGTON-ASHLAND, WV-KY-OH MSA												
	Manufacturing	-	262	103	15 112	547 992	11 609	23 857	401 065	2 119 937	3 493 069	5 601 987	236 997
	Huntington-Ashland, WV-KY-OH MSA (KY Part)	-	73	32	5 607	235 714	4 529	9 458	183 294	746 147	2 348 730	3 079 435	144 185
	Huntington-Ashland, WV-KY-OH MSA (OH Part)	1	44	12	1 969	65 020	1 462	3 100	46 790	530 855	459 192	998 054	33 568
	Huntington-Ashland, WV-KY-OH MSA (WV Part)	1	145	59	7 536	247 258	5 618	11 299	170 981	842 935	685 147	1 524 498	59 244
311	Food mfg	3	11	5	540	15 440	173	347	3 341	43 235	30 967	74 395	1 790
3118	Bakeries & tortilla mfg	-	5	1	e	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg	-	5	1	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	3	1	e	D	D	D	D	D	D	D	D
315	Apparel mfg	-	5	4	g	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	4	4	g	D	D	D	D	D	D	D	D
31521	Cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
315211	Men's & boys' cut & sew apparel contractors	1	2	2	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg	-	2	2	f	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	-	1	1	e	D	D	D	D	D	D	D	D
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	-	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	2	26	6	320	5 443	294	511	4 531	12 102	19 912	31 246	1 282
323	Printing & related support activities	-	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
3231	Printing & related support activities	-	19	3	358	8 216	273	390	5 032	12 301	10 578	22 620	D
32311	Printing	1	18	2	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	12	2	285	7 325	208	324	4 296	10 947	9 960	20 648	D
324	Petroleum & coal products mfg	-	7	2	f	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	7	2	f	D	D	D	D	D	D	D	D
32411	Petroleum refineries	-	1	1	f	D	D	D	D	D	D	D	D
324110	Petroleum refineries ..	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical mfg	1	20	13	1 677	74 499	1 121	2 489	50 478	364 321	553 175	922 853	47 626
3251	Basic chemical mfg	-	12	6	786	36 347	496	1 130	21 527	187 437	298 852	491 470	30 781
32513	Dye & pigment mfg	-	2	2	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye & pigment mfg	-	2	2	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	3	e	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	2	2	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	5	2	2	e	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	5	2	2	e	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	5	2	2	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg	-	1	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	12	5	533	15 550	398	873	9 862	33 733	32 846	66 229	D
3261	Plastics product mfg	-	8	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	8	731	22 103	566	1 176	16 044	39 769	51 262	90 987	2 485
3271	Clay product & refractory mfg	-	5	4	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg	-	5	4	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg	-	2	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	HUNTINGTON—ASHLAND, WV—KY—OH MSA—Con.												
	Manufacturing—Con.												
331	Primary metal mfg	—	9	7	4 724	219 486	3 933	8 483	177 997	518 960	753 004	1 263 140	108 009
3311	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	—	3	3	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	—	3	3	h	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	—	3	3	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	—	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	—	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	—	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	3	1	f	D	D	D	D	D	D	D	D
331511	Iron foundries	—	2	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	59	23	1 312	37 028	981	1 836	24 455	74 776	60 021	135 271	4 623
3323	Architectural & structural metals mfg	2	13	7	e	D	D	D	D	D	D	D	689
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	34	12	765	21 628	590	1 009	14 714	41 507	29 149	70 437	3 143
33271	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
332710	Machine shops	4	29	8	e	D	D	D	D	D	D	D	2 860
33272	Turned product & screw, nut, & bolt mfg	—	5	4	e	D	D	D	D	D	D	D	283
333	Machinery mfg	7	17	8	654	23 372	474	943	14 841	53 345	50 628	103 614	D
3331	Agriculture, construction, & mining machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
33313	Mining & oil & gas field machinery mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
333131	Mining machinery & equipment mfg	9	6	4	410	14 871	316	634	10 072	40 048	42 032	81 778	D
334	Computer & electronic product mfg	—	3	2	e	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	—	1	1	e	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	7	4	541	19 604	436	920	15 068	40 798	58 098	99 757	1 634
3365	Railroad rolling stock mfg ..	—	2	1	e	D	D	D	D	D	D	D	D
33651	Railroad rolling stock mfg	—	2	1	e	D	D	D	D	D	D	D	D
336510	Railroad rolling stock mfg	—	2	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	—	23	2	f	D	D	D	D	D	D	D	1 237
3391	Medical equipment & supplies mfg	—	13	1	e	D	D	D	D	D	D	D	561
33911	Medical equipment & supplies mfg	—	13	1	e	D	D	D	D	D	D	D	561
339113	Surgical appliance & supplies mfg	—	2	1	e	D	D	D	D	D	D	D	D
31-33	PARKERSBURG—MARIETTA, WV—OH MSA												
	Manufacturing	—	182	70	12 252	481 108	8 728	18 316	309 094	2 418 397	1 778 482	4 202 789	309 623
	Parkersburg—Marietta, WV—OH MSA (OH Part)	—	104	43	5 242	187 834	3 591	7 496	113 645	932 472	962 418	1 900 923	106 014
	Parkersburg—Marietta, WV—OH MSA (WV Part)	—	78	27	7 010	293 274	5 137	10 820	195 449	1 485 925	816 064	2 301 866	203 609
311	Food mfg	1	14	6	e	D	D	D	D	D	D	D	D
321	Wood product mfg	4	22	6	f	D	D	D	D	D	D	D	1 355
3219	Other wood product mfg ...	1	11	2	e	D	D	D	D	D	D	D	185
32192	Wood container & pallet mfg	—	8	2	e	D	D	D	D	D	D	D	D
321920	Wood container & pallet mfg	—	8	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	PARKERSBURG—MARIETTA, WV—OH MSA—Con.												
	Manufacturing—Con.												
322	Paper mfg	-	2	1	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	2	1	e	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg	-	1	1	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	14	11	4 241	230 649	2 776	6 188	143 922	1 665 480	1 130 072	2 804 512	250 879
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	7	6	4 011	221 256	2 665	5 955	139 862	1 634 789	1 108 753	2 752 151	D
32521	Resin & synthetic rubber mfg	-	7	6	4 011	221 256	2 665	5 955	139 862	1 634 789	1 108 753	2 752 151	D
325211	Plastics material & resin mfg	-	5	5	h	D	D	D	D	D	D	D	D
325212	Synthetic rubber mfg	-	2	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	20	9	1 297	36 510	1 038	2 057	25 784	91 996	45 803	135 273	D
3272	Glass & glass product mfg	-	7	4	930	26 152	745	1 495	18 392	63 851	19 000	80 269	D
32721	Glass & glass product mfg	-	7	4	930	26 152	745	1 495	18 392	63 851	19 000	80 269	D
327212	Other pressed & blown glass & glassware mfg	-	5	3	f	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	5	5	876	35 680	677	1 626	25 789	136 844	184 069	313 097	D
3311	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	3	3	f	D	D	D	D	D	D	D	D
331112	Electrometallurgical ferroalloy product mfg	-	3	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	39	14	1 750	58 900	1 268	2 636	39 003	220 495	109 429	329 677	6 031
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg	-	1	1	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg	1	15	8	480	13 083	329	666	9 080	37 294	20 842	57 316	1 167
33232	Ornamental & architectural metal products mfg	3	6	4	298	8 572	188	387	6 141	15 463	7 654	22 918	D
332322	Sheet metal work mfg	2	4	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg	2	13	4	419	16 107	328	635	12 109	40 806	22 912	64 276	982
335	Electrical equipment, appliance, & component mfg	-	2	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	-	1	1	e	D	D	D	D	D	D	D	D
33593	Wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	-	7	2	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	-	14	5	846	28 268	522	1 063	14 039	73 920	55 008	128 259	4 914
3391	Medical equipment & supplies mfg	-	4	1	e	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	-	4	1	e	D	D	D	D	D	D	D	D
339111	Laboratory apparatus & furniture mfg	-	2	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	-	10	4	e	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	STUEBENVILLE-WEIRTON, OH-WV MSA												
	Manufacturing	-	104	47	11 530	458 573	8 589	18 744	324 587	1 219 112	2 001 511	3 206 200	156 324
	Stuebenville-Weirton, OH-WV MSA (OH Part)	-	45	12	2 244	78 694	1 579	3 301	49 589	187 550	301 370	463 283	18 024
	Stuebenville-Weirton, OH-WV MSA (WV Part)	-	59	35	9 286	379 879	7 010	15 443	274 998	1 031 562	1 700 141	2 742 917	138 300
322	Paper mfg	-	5	5	e	D	D	D	D	D	D	D	D
3222	Converted paper product mfg	-	3	3	e	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg	-	5	2	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	5	2	e	D	D	D	D	D	D	D	D
325	Chemical mfg	-	10	4	e	D	D	D	D	D	D	D	17 397
3251	Basic chemical mfg	-	6	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	17	11	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	6	4	1 233	31 279	1 068	2 038	24 424	67 855	29 524	96 210	2 622
32711	Pottery, ceramics, & plumbing fixture mfg	-	4	3	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	6	5	6 628	307 894	4 817	10 923	218 002	787 135	1 004 455	1 756 039	D
3311	Iron & steel mills & ferroalloy mfg	-	4	4	i	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	4	4	i	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	4	4	i	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	-	1	1	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	19	12	1 649	53 028	1 255	2 872	36 332	184 302	561 859	742 732	10 279
3321	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	D
33211	Forging & stamping	-	3	2	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities	-	5	5	e	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, & allied activities	-	5	5	e	D	D	D	D	D	D	D	D
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	-	2	2	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	3	2	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	WASHINGTON-BALTIMORE, DC-MD-VA-WV CMSA												
	Manufacturing	1	4 979	1 397	180 692	6 729 603	118 375	237 123	3 628 537	20 589 409	18 635 215	39 149 042	1 520 154
	Washington-Baltimore, DC-MD-VA-WV CMSA (DC Part)	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington-Baltimore, DC-MD-VA-WV CMSA (MD Part)	1	3 482	1 039	138 522	5 151 313	90 519	181 710	2 812 641	16 384 506	15 133 093	31 458 684	1 141 079
	Washington-Baltimore, DC-MD-VA-WV CMSA (VA Part)	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington-Baltimore, DC-MD-VA-WV CMSA (WV Part)	-	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	1	395	119	14 363	402 297	9 987	20 724	254 886	2 475 385	2 408 898	4 889 204	87 187
312	Beverage & tobacco product mfg	2	45	20	g	D	D	D	D	D	D	D	D
313	Textile mills	5	42	10	g	D	D	D	D	D	D	D	D
314	Textile product mills	3	137	14	g	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con. Manufacturing—Con.												
315	Apparel mfg	2	127	32	h	D	D	D	D	D	D	D	D
316	Leather & allied product mfg	—	11	4	g	D	D	D	D	D	D	D	D
321	Wood product mfg	2	162	53	h	D	D	D	D	D	D	D	D
322	Paper mfg	1	59	35	6 102	179 331	4 877	9 412	120 612	366 779	450 197	813 474	D
323	Printing & related support activities	2	1 198	271	25 327	887 907	19 037	37 200	575 537	1 710 795	1 209 672	2 916 844	318 361
324	Petroleum & coal products mfg	2	41	8	g	D	D	D	D	D	D	D	D
325	Chemical mfg	1	180	77	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	1	145	67	8 893	241 984	7 183	13 703	165 876	719 656	674 514	1 384 491	77 269
327	Nonmetallic mineral product mfg	—	236	93	7 410	254 629	5 744	12 146	178 450	724 602	547 963	1 268 145	47 167
331	Primary metal mfg	—	40	18	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	1	568	160	14 428	483 853	10 372	20 649	297 759	1 210 189	1 005 732	2 206 004	94 908
333	Machinery mfg	—	188	63	j	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	—	370	161	k	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg	2	61	13	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	—	111	44	i	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	1	314	60	6 113	156 809	4 658	8 691	102 649	437 720	287 174	722 749	10 974
339	Miscellaneous mfg	2	549	75	i	D	D	D	D	D	D	D	D
	Washington, DC—MD—VA—WV PMSA												
31-33	Manufacturing	1	2 655	668	77 925	2 986 792	48 768	97 608	1 439 124	8 015 259	6 589 096	14 539 682	746 521
	Washington, DC—MD—VA—WV PMSA (DC Part)	2	200	35	2 858	101 108	1 926	3 727	60 863	170 849	149 315	320 234	9 832
	Washington, DC—MD—VA—WV PMSA (MD Part)	1	1 158	310	35 755	1 408 502	20 912	42 195	623 228	3 810 356	3 086 974	6 849 324	367 446
	Washington, DC—MD—VA—WV PMSA (VA Part)	1	1 233	290	34 047	1 331 917	21 509	43 023	653 950	3 572 191	2 896 360	6 455 589	271 267
	Washington, DC—MD—VA—WV PMSA (WV Part)	—	64	33	5 265	145 265	4 421	8 663	101 083	461 863	456 447	914 535	97 976
311	Food mfg	2	201	48	5 551	136 527	3 753	7 387	85 600	520 377	660 882	1 179 566	18 084
3114	Fruit & vegetable preserving & specialty food mfg	4	10	4	f	D	D	D	D	D	D	D	D
31141	Frozen food mfg	6	5	3	e	D	D	D	D	D	D	D	2 016
311412	Frozen specialty food mfg	6	5	3	e	D	D	D	D	D	D	D	2 016
3115	Dairy product mfg	1	8	7	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) mfg	1	7	6	f	D	D	D	D	D	D	D	D
311511	Fluid milk mfg	1	6	6	781	30 632	424	991	16 346	109 542	258 954	366 727	4 173
3116	Meat product mfg	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
31161	Animal slaughtering & processing	3	11	5	708	14 290	604	1 291	9 828	50 038	49 734	99 629	1 181
311612	Meat processed from carcasses	2	6	4	600	12 112	508	1 093	8 024	44 966	37 893	82 709	D
3118	Bakeries & tortilla mfg	2	145	27	2 937	69 235	1 853	3 478	43 114	282 674	102 099	385 222	7 189
31181	Bread & bakery product mfg	2	138	25	h	D	D	D	D	D	D	D	D
311811	Retail bakeries	3	98	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	2	37	17	2 018	54 254	1 311	2 656	34 980	239 127	78 442	317 895	5 645
3119	Other food mfg	—	15	3	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
312	Beverage & tobacco product mfg	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
3121	Beverage mfg	3	25	10	743	22 825	394	786	8 849	189 214	257 509	446 266	17 608
31211	Soft drink & ice mfg	3	10	6	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	3	5	4	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	62	5	510	10 907	346	638	6 093	17 835	14 512	32 266	D
3141	Textile furnishings mills	3	41	2	319	6 193	205	370	3 328	10 884	9 841	20 665	D
31412	Curtain & linen mills	2	40	2	e	D	D	D	D	D	D	D	D
314121	Curtain & drapery mills	2	37	2	305	5 866	193	347	3 088	10 007	8 665	18 612	D
315	Apparel mfg	—	63	8	927	16 000	818	1 581	13 482	42 492	50 982	93 368	1 030
3151	Apparel knitting mills	—	2	1	e	D	D	D	D	D	D	D	D
31511	Hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
315119	Other hosiery & sock mills	—	1	1	e	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	—	30	7	551	10 328	505	1 040	9 014	14 759	27 512	41 910	D
31522	Men's & boys' cut & sew apparel mfg	—	3	1	e	D	D	D	D	D	D	D	D
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product mfg	1	93	33	2 407	58 850	1 949	3 819	42 816	122 209	245 595	367 315	5 823
3211	Sawmills & wood preservation	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
32111	Sawmills & wood preservation	1	22	8	321	6 522	286	470	5 439	17 793	55 326	72 386	2 176
321113	Sawmills	2	20	7	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, & engineered wood product mfg	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
32121	Veneer, plywood, & engineered wood product mfg	—	12	7	363	9 683	284	594	6 494	14 976	24 525	39 760	622
321214	Truss mfg	—	8	7	e	D	D	D	D	D	D	D	D
3219	Other wood product mfg	1	59	18	1 723	42 645	1 379	2 755	30 883	89 440	165 744	255 169	3 025
32191	Millwork	3	35	8	762	21 108	561	1 251	14 782	39 625	51 873	91 621	1 586
321911	Wood window & door mfg	—	9	3	404	11 674	305	707	8 661	19 568	22 024	41 468	507
321918	Other millwork (including flooring)	8	16	4	262	6 849	188	405	4 553	12 826	16 920	30 078	753
32199	All other wood product mfg	1	16	7	797	17 991	673	1 201	13 462	42 239	103 626	146 229	1 228
321992	Prefabricated wood building mfg	—	8	5	644	15 810	547	1 050	11 911	38 327	100 710	139 270	D
322	Paper mfg	1	17	6	1 243	25 971	1 131	1 985	19 025	80 975	93 082	169 453	4 086
3222	Converted paper product mfg	1	16	5	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg ..	1	7	2	f	D	D	D	D	D	D	D	2 567
322233	Stationery, tablet, & related product mfg ..	—	3	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
3231	Printing & related support activities	2	782	169	16 703	610 308	12 561	24 877	402 733	1 129 491	850 123	1 977 662	269 682
32311	Printing	2	699	152	15 622	568 435	11 714	23 124	375 945	1 051 650	831 116	1 880 944	266 133
323110	Commercial lithographic printing ..	2	355	100	9 880	386 318	7 275	14 520	253 698	727 071	532 653	1 258 096	183 776
323113	Commercial screen printing	1	29	8	389	10 570	281	488	6 286	23 169	22 150	45 964	D
323114	Quick printing	1	200	16	1 731	49 482	1 232	2 153	29 819	97 094	47 575	144 901	D
323117	Book printing	1	27	17	2 590	88 001	2 126	4 347	61 661	171 887	137 170	308 453	13 462
323119	Other commercial printing	2	51	4	478	20 299	357	744	14 826	17 555	48 842	66 534	D
32312	Support activities for printing	2	83	17	1 081	41 873	847	1 753	26 788	77 841	19 007	96 718	3 549
323121	Tradebinding & related work	—	21	6	422	13 473	333	726	8 473	25 145	8 371	33 589	D
323122	Prepress services	3	62	11	659	28 400	514	1 027	18 315	52 696	10 636	63 129	D
324	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
3241	Petroleum & coal products mfg	5	19	3	379	13 109	267	575	8 548	41 182	87 793	128 965	3 863
32412	Asphalt paving, roofing, & saturated materials mfg	5	17	3	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
325	Chemical mfg	1	67	24	3 431	164 316	1 699	3 574	63 545	636 967	502 431	1 124 729	73 105
3254	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
32541	Pharmaceutical & medicine mfg	2	25	10	1 750	90 703	803	1 753	29 012	234 076	81 288	308 412	48 573
325413	In-vitro diagnostic substance mfg	3	11	7	949	47 149	461	950	15 224	114 295	44 738	154 097	D
325414	Biological product (except diagnostic) mfg	—	4	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg	—	9	4	f	D	D	D	D	D	D	D	D
32551	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
325510	Paint & coating mfg	—	8	3	f	D	D	D	D	D	D	D	9 819
3259	Other chemical product mfg	1	17	7	535	24 406	319	653	12 810	99 204	67 521	164 377	12 882
32599	All other chemical product & preparation mfg	—	12	4	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	2	49	22	2 091	56 794	1 672	3 407	40 217	153 853	163 596	313 605	15 852
3261	Plastics product mfg	2	42	22	2 037	55 500	1 627	3 314	39 250	150 734	159 696	306 589	15 576
32611	Unsupported plastics film, sheet, & bag mfg	5	2	2	e	D	D	D	D	D	D	D	D
326111	Unsupported plastics bag mfg	9	1	1	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	1	32	17	1 404	36 975	1 132	2 210	26 090	96 831	85 932	182 727	11 383
326191	Plastics plumbing fixture mfg	—	3	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	2	29	16	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	1	144	56	3 693	126 599	2 806	5 829	85 973	355 291	278 540	630 089	22 639
3272	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
32721	Glass & glass product mfg	—	17	3	478	18 810	376	694	11 953	65 023	23 589	89 237	1 058
327212	Other pressed & blown glass & glassware mfg	—	2	1	e	D	D	D	D	D	D	D	D
3273	Cement & concrete product mfg	1	102	46	2 814	96 811	2 105	4 532	66 009	263 589	240 559	499 663	20 234
32731	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
327310	Cement mfg	—	2	2	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
327320	Ready-mix concrete mfg	1	59	25	1 268	46 290	942	2 108	33 638	120 048	150 444	270 693	9 951
32733	Concrete pipe, brick, & block mfg	1	12	8	e	D	D	D	D	D	D	D	D
32739	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
327390	Other concrete product mfg	—	29	11	946	27 248	706	1 472	17 397	57 598	35 062	90 826	3 835
331	Primary metal mfg	—	11	5	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	—	1	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	—	212	48	5 167	167 519	3 924	7 763	105 550	366 119	326 889	692 764	31 167
3323	Architectural & structural metals mfg	1	88	30	2 563	82 064	1 854	3 607	48 245	167 260	181 664	349 123	15 869
33231	Plate work & fabricated structural product mfg	—	23	11	906	30 029	697	1 238	17 058	59 872	95 137	155 775	11 013
332312	Fabricated structural metal mfg	—	19	10	813	27 274	634	1 108	15 430	57 105	92 146	150 010	10 729
33232	Ornamental & architectural metal products mfg	1	65	19	1 657	52 035	1 157	2 369	31 187	107 388	86 527	193 348	4 856
332321	Metal window & door mfg	—	7	2	487	14 298	366	761	9 288	33 834	24 988	58 247	D
332322	Sheet metal work mfg	1	30	9	574	17 523	412	766	10 909	36 843	32 260	68 829	2 378
332323	Ornamental & architectural metal work mfg	2	28	8	596	20 214	379	842	10 990	36 711	29 279	66 272	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
	Manufacturing—Con.												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg	1	75	5	f	D	D	D	D	D	D	D	D
33271	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
332710	Machine shops	1	71	5	708	23 739	555	974	16 101	44 367	14 593	58 611	3 306
3329	Other fabricated metal product mfg	—	18	6	1 203	39 292	956	2 089	26 623	107 616	72 635	179 288	8 748
33291	Metal valve mfg	—	3	1	e	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg	—	2	1	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg	—	15	5	f	D	D	D	D	D	D	D	D
332994	Small arms mfg	—	2	1	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg	—	8	4	e	D	D	D	D	D	D	D	D
333	Machinery mfg	1	74	26	4 184	143 646	2 793	5 713	76 304	360 500	328 877	696 692	D
3332	Industrial machinery mfg	1	13	4	1 022	38 661	444	1 001	13 695	97 939	66 104	166 040	D
33329	Other industrial machinery mfg	1	11	3	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg	—	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
33331	Commercial & service industry machinery mfg	—	25	8	1 593	48 241	1 379	2 818	33 350	107 484	170 345	282 989	D
333311	Automatic vending machine mfg	—	2	1	g	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	6	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	6	8	4	657	18 971	424	847	11 172	46 000	33 710	77 289	1 683
333415	AC & warm air heating & commercial/ industrial refrig equip mfg	6	5	4	f	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg	—	16	7	698	28 592	430	809	14 484	63 758	34 575	99 019	D
33399	All other general-purpose machinery mfg	—	13	7	f	D	D	D	D	D	D	D	D
333993	Packaging machinery mfg	—	4	4	355	14 090	226	375	7 034	27 972	14 239	42 396	D
334	Computer & electronic product mfg	1	249	121	20 014	1 034 554	7 538	15 912	275 117	2 752 116	1 545 173	4 280 482	165 972
3341	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
33411	Computer & peripheral equipment mfg	2	38	17	1 481	55 827	396	787	15 956	169 145	193 263	356 268	D
334111	Electronic computer mfg	3	19	10	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	1	17	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg	1	71	41	8 356	435 364	3 467	7 024	139 955	1 207 276	895 059	2 092 511	84 957
33421	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg	1	18	13	g	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
334220	Radio & TV broadcasting & wireless communications equipment mfg	—	40	26	5 886	326 562	2 383	5 001	110 295	952 675	636 915	1 581 643	63 826
33429	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg	1	13	2	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
33441	Semiconductor & other electronic component mfg	1	46	26	2 696	106 588	1 772	4 096	52 436	163 091	127 964	287 865	D
334412	Bare printed circuit board mfg	1	12	7	754	23 933	644	1 434	18 267	52 446	37 115	89 886	D
334413	Semiconductor & related device mfg ...	—	8	4	896	50 015	516	1 329	18 177	59 645	40 744	94 367	13 725
334418	Printed circuit assembly (electronic assembly) mfg	—	9	8	530	17 442	354	766	8 829	21 193	33 331	57 179	D
334419	Other electronic component mfg	4	10	6	434	13 354	228	501	6 489	27 027	12 771	39 806	973
3345	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
33451	Navigational, measuring, medical, & control instruments mfg	—	71	31	7 202	428 834	1 717	3 658	62 669	1 185 263	315 780	1 503 042	40 783
334511	Search, detection, navigation, & guidance instrument mfg	—	14	8	4 874	328 227	805	1 717	35 137	887 003	201 730	1 087 819	28 191
334513	Industrial process control instrument mfg	—	9	4	364	14 124	143	302	3 782	31 440	20 653	52 381	1 028
334515	Electricity measuring & testing instrument mfg	—	10	6	714	38 077	197	430	5 566	167 153	49 630	217 270	8 595
334516	Analytical laboratory instrument mfg	4	19	8	513	20 813	146	393	5 090	45 661	16 762	62 283	1 451
334519	Other measuring & controlling device mfg	—	10	4	459	20 644	224	458	9 323	34 219	19 778	55 408	D
335	Electrical equipment, appliance, & component mfg	2	29	8	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg	2	12	6	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg	—	1	1	e	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
335999	All other miscellaneous electrical equipment & component mfg	3	10	5	353	8 349	159	186	2 891	42 768	38 380	82 116	D
336	Transportation equipment mfg	2	52	17	2 786	149 654	1 394	2 903	57 794	424 128	656 715	1 066 534	34 707
3361	Motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
33611	Automobile & light duty motor vehicle mfg	8	3	2	e	D	D	D	D	D	D	D	D
336111	Automobile mfg	8	2	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	7	21	6	f	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg	2	2	2	e	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission & power train parts mfg	9	2	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
33641	Aerospace product & parts mfg	—	15	6	1 463	97 702	414	834	19 344	349 783	469 485	803 247	D
336414	Guided missile & space vehicle mfg ...	—	2	2	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	—	1	1	e	D	D	D	D	D	D	D	D

Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	WASHINGTON—BALTIMORE, DC—MD—VA—WV CMSA—Con.												
	Washington, DC—MD—VA—WV PMSA—Con.												
31-33	Manufacturing—Con.												
337	Furniture & related product mfg.....	-	173	26	3 456	92 206	2 628	5 129	63 166	296 505	171 091	464 554	5 722
3371	Household & institutional furniture & kitchen cabinet mfg.....	1	125	9	1 873	47 118	1 539	3 028	34 683	179 040	94 714	273 134	D
33711	Wood kitchen cabinet & counter top mfg.....	-	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
337110	Wood kitchen cabinet & counter top mfg....	-	86	5	1 218	31 602	972	1 882	22 670	148 073	72 624	220 177	1 248
33712	Household & institutional furniture mfg.....	2	39	4	655	15 516	567	1 146	12 013	30 967	22 090	52 957	D
337122	Nonupholstered wood household furniture mfg.....	2	29	2	378	9 016	337	710	7 435	18 964	10 123	28 800	791
3372	Office furniture (including fixtures) mfg.....	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
33721	Office furniture (including fixtures) mfg.....	1	39	13	1 215	34 262	830	1 577	22 219	77 206	38 747	113 343	2 689
337212	Custom architectural woodwork & millwork mfg.....	-	20	10	629	21 599	448	813	13 002	49 296	17 870	67 485	D
337215	Showcase, partition, shelving, & locker mfg.....	-	12	1	503	10 519	315	615	7 650	24 698	18 264	40 019	D
3379	Other furniture related product mfg.....	-	9	4	368	10 826	259	524	6 264	40 259	37 630	78 077	D
33791	Mattress mfg.....	-	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
337910	Mattress mfg.....	-	3	3	322	9 767	241	492	5 982	38 379	35 955	74 449	D
339	Miscellaneous mfg.....	3	310	30	2 541	78 633	1 631	3 015	37 107	208 214	123 821	334 679	9 163
3391	Medical equipment & supplies mfg.....	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
33911	Medical equipment & supplies mfg.....	2	177	15	1 438	45 503	881	1 635	20 191	150 162	85 237	238 686	6 803
339113	Surgical appliance & supplies mfg.....	-	19	5	552	16 409	310	672	6 827	85 974	59 909	149 391	D
339116	Dental laboratories ...	6	113	3	468	12 369	345	565	7 404	28 322	9 795	37 180	822
3399	Other miscellaneous mfg ...	3	133	15	1 103	33 130	750	1 380	16 916	58 052	38 584	95 993	2 360
33995	Sign mfg.....	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D
339950	Sign mfg.....	2	71	9	691	22 861	449	850	10 939	36 378	22 465	58 513	D
	WHEELING, WV—OH MSA												
31-33	Manufacturing	-	137	42	3 511	90 020	2 737	5 094	62 990	314 948	335 739	648 600	31 996
	Wheeling, WV—OH MSA (OH Part).....	-	55	13	1 523	36 909	1 190	2 221	26 412	111 446	162 993	272 475	19 800
	Wheeling, WV—OH MSA (WV Part).....	-	82	29	1 988	53 111	1 547	2 873	36 578	203 502	172 746	376 125	12 196
311	Food mfg.....	-	12	3	e	D	D	D	D	D	D	D	1 632
332	Fabricated metal product mfg.....	1	32	11	713	18 773	579	1 135	13 670	47 234	87 645	130 678	4 734
3329	Other fabricated metal product mfg.....	-	3	3	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	3	3	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
BERKELEY COUNTY, WV													
31-33	Manufacturing	1	38	20	3 093	85 144	2 582	5 028	62 330	267 345	203 462	470 419	74 983
323	Printing & related support activities.....	-	7	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities.....	-	7	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	7	2	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	5	4	f	D	D	D	D	D	D	D	D
BROOKE COUNTY, WV													
31-33	Manufacturing	-	22	13	1 275	49 615	897	2 580	32 354	138 448	510 691	637 646	D
CABELL COUNTY, WV													
31-33	Manufacturing	1	112	45	5 766	199 914	4 435	9 165	145 483	690 339	509 744	1 199 468	D
331	Primary metal mfg	-	5	3	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	2	2	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	2	27	14	f	D	D	D	D	D	D	D	D
FAYETTE COUNTY, WV													
31-33	Manufacturing	-	34	7	807	27 513	618	1 348	19 050	76 181	94 770	169 353	D
GRANT COUNTY, WV													
31-33	Manufacturing	-	18	7	929	15 567	806	1 673	12 751	37 508	69 275	106 170	1 423
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing.....	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing....	-	1	1	f	D	D	D	D	D	D	D	D
GREENBRIER COUNTY, WV													
31-33	Manufacturing	3	38	10	923	26 232	615	1 355	14 878	47 863	54 327	99 727	2 984

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
HANCOCK COUNTY, WV													
31-33	Manufacturing	-	37	22	8 011	330 264	6 113	12 863	242 644	893 114	1 189 450	2 105 271	D
327	Nonmetallic mineral product mfg	-	8	7	g	D	D	D	D	D	D	D	D
3271	Clay product & refractory mfg	-	5	4	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, & plumbing fixture mfg ...	-	4	3	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, & other pottery product mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal mfg	-	1	1	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	6	6	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve mfg	-	1	1	f	D	D	D	D	D	D	D	D
332911	Industrial valve mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
HARDY COUNTY, WV													
31-33	Manufacturing	-	20	10	2 940	57 676	2 685	5 416	43 156	142 710	293 167	435 555	5 494
311	Food mfg	-	4	4	g	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	3	3	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	3	3	g	D	D	D	D	D	D	D	D
311615	Poultry processing	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product mfg	-	7	2	f	D	D	D	D	D	D	D	D
3219	Other wood product mfg ...	-	4	2	f	D	D	D	D	D	D	D	D
HARRISON COUNTY, WV													
31-33	Manufacturing	-	68	13	2 022	72 695	1 524	3 099	49 206	185 394	212 684	393 976	20 826
327	Nonmetallic mineral product mfg	-	8	4	526	17 157	444	895	13 352	55 786	27 888	83 266	D
JACKSON COUNTY, WV													
31-33	Manufacturing	-	16	6	h	D	D	D	D	D	D	D	16 525
331	Primary metal mfg	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina & aluminum production & processing ..	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina & aluminum production & processing	-	2	2	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, & foil mfg	-	1	1	g	D	D	D	D	D	D	D	D
JEFFERSON COUNTY, WV													
31-33	Manufacturing	-	26	13	2 172	60 121	1 839	3 635	38 753	194 518	252 985	444 116	22 993
333	Machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	-	2	1	g	D	D	D	D	D	D	D	D
333311	Automatic vending machine mfg	-	2	1	g	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
KANAWHA COUNTY, WV													
31-33	Manufacturing	-	141	42	6 590	273 322	4 697	9 657	181 978	1 945 812	1 121 890	3 071 306	78 014
325	Chemical mfg	-	18	10	h	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	11	7	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	5	5	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	5	5	g	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg .	-	2	2	f	D	D	D	D	D	D	D	D
32532	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325320	Pesticide & other agricultural chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	3	29	12	751	17 910	566	1 014	11 739	38 822	52 613	92 487	D
336	Transportation equipment mfg	1	2	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	1	2	2	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
LEWIS COUNTY, WV													
31-33	Manufacturing	3	18	4	538	13 524	473	933	11 062	33 267	19 507	52 632	D
LOGAN COUNTY, WV													
31-33	Manufacturing	5	39	9	853	20 164	592	947	11 152	42 153	39 352	82 590	3 346
MARION COUNTY, WV													
31-33	Manufacturing	1	62	22	1 501	41 952	1 175	2 163	30 052	151 671	197 514	347 036	7 376
MASON COUNTY, WV													
31-33	Manufacturing	2	16	6	1 173	47 100	829	1 755	30 104	110 384	353 234	466 291	D
325	Chemical mfg	2	3	2	f	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	1	1	f	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	1	1	f	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	1	1	f	D	D	D	D	D	D	D	D
MERCER COUNTY, WV													
31-33	Manufacturing	1	56	25	1 908	61 782	1 300	2 432	29 717	147 821	154 832	298 521	8 725
MINERAL COUNTY, WV													
31-33	Manufacturing	-	16	8	1 138	40 435	828	1 634	24 747	101 797	34 613	136 307	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
MONONGALIA COUNTY, WV													
31-33	Manufacturing	-	58	16	2 055	77 783	1 395	2 778	39 297	287 435	283 283	598 038	40 192
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	NICHOLAS COUNTY, WV												
	Manufacturing	1	27	10	768	18 183	620	1 252	12 173	67 420	57 707	123 063	4 960
31-33	OHIO COUNTY, WV												
	Manufacturing	-	58	21	g	D	D	D	D	D	D	D	D
31-33	PENDLETON COUNTY, WV												
	Manufacturing	-	7	2	595	10 433	545	1 135	9 085	20 223	27 089	47 315	D
316	Leather & allied product mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3162	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31621	Footwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
316213	Men's footwear (except athletic) mfg .	-	1	1	f	D	D	D	D	D	D	D	D
31-33	PLEASANTS COUNTY, WV												
	Manufacturing	6	6	3	f	D	D	D	D	D	D	D	D
31-33	PRESTON COUNTY, WV												
	Manufacturing	1	28	8	664	14 068	590	1 257	11 486	32 164	37 079	68 996	2 921
31-33	PUTNAM COUNTY, WV												
	Manufacturing	2	35	9	1 091	38 498	737	1 398	22 374	95 764	133 099	234 019	17 137
31-33	RALEIGH COUNTY, WV												
	Manufacturing	2	56	11	999	32 641	701	1 394	19 766	57 245	108 832	164 863	4 663
31-33	RANDOLPH COUNTY, WV												
	Manufacturing	1	29	14	1 397	27 278	1 257	2 514	23 217	60 809	104 427	169 383	4 560
321	Wood product mfg	-	19	12	g	D	D	D	D	D	D	D	D
3219	Other wood product mfg	-	10	6	1 052	20 234	942	1 930	17 520	44 932	82 467	131 678	3 275
32191	Millwork	-	9	6	g	D	D	D	D	D	D	D	3 275
321918	Other millwork (including flooring)	-	5	3	f	D	D	D	D	D	D	D	D
31-33	RITCHIE COUNTY, WV												
	Manufacturing	-	21	8	1 035	27 197	751	1 489	14 757	67 002	49 676	116 551	D
326	Plastics & rubber products mfg	-	5	2	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	4	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg	-	3	2	f	D	D	D	D	D	D	D	D
31-33	ROANE COUNTY, WV												
	Manufacturing	-	18	4	790	12 852	737	1 376	10 910	83 170	96 891	170 356	1 127
315	Apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
3152	Cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg	-	1	1	f	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg	-	1	1	f	D	D	D	D	D	D	D	D
31-33	TYLER COUNTY, WV												
	Manufacturing	-	12	8	f	D	D	D	D	D	D	D	3 000
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
UPSHUR COUNTY, WV													
31-33	Manufacturing	1	26	12	947	22 515	792	1 589	15 777	73 137	75 435	152 489	6 850
321	Wood product mfg	2	13	8	599	12 516	518	1 058	9 566	37 917	44 073	81 980	D
WAYNE COUNTY, WV													
31-33	Manufacturing	1	33	14	1 770	47 344	1 183	2 134	25 498	152 596	175 403	325 030	D
WETZEL COUNTY, WV													
31-33	Manufacturing	-	18	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	3	2	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325192	Cyclic crude & intermediate mfg	-	1	1	g	D	D	D	D	D	D	D	D
WOOD COUNTY, WV													
31-33	Manufacturing	-	78	27	7 010	293 274	5 137	10 820	195 449	1 485 925	816 064	2 301 866	203 609
325	Chemical mfg	-	5	3	h	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	-	3	2	h	D	D	D	D	D	D	D	D
32521	Resin & synthetic rubber mfg	-	3	2	h	D	D	D	D	D	D	D	D
325211	Plastics material & resin mfg	-	2	2	h	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	10	4	959	27 488	761	1 513	19 172	66 020	23 293	86 865	D
3272	Glass & glass product mfg .	-	4	3	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	4	3	f	D	D	D	D	D	D	D	D
327212	Other pressed & blown glass & glassware mfg	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg	-	20	8	1 269	45 542	917	1 977	30 850	175 992	64 974	242 246	2 830
3322	Cutlery & handtool mfg	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	BUCKHANNON, WV												
	Manufacturing	-	12	6	528	12 024	458	1 027	9 018	38 792	53 653	92 583	D
	CHARLESTON, WV												
31-33	Manufacturing	1	44	14	2 152	85 502	1 427	2 938	53 445	113 803	164 241	278 157	D
325	Chemical mfg	-	2	1	g	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	1	1	g	D	D	D	D	D	D	D	D
	FAIRMONT, WV												
31-33	Manufacturing	-	36	14	1 109	33 475	879	1 674	24 457	129 865	180 882	309 483	6 478
	FOLLANSBEE, WV												
31-33	Manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
	HUNTINGTON, WV *												
31-33	Manufacturing	1	72	32	5 111	176 326	3 781	7 546	123 978	569 709	466 281	1 034 821	D
331	Primary metal mfg	-	3	2	g	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing	-	1	1	g	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	1	1	g	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding	-	1	1	g	D	D	D	D	D	D	D	D
	KEYSER, WV												
31-33	Manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
336415	Guided missile & space vehicle propulsion unit & parts mfg	-	1	1	f	D	D	D	D	D	D	D	D
	MARTINSBURG, WV												
31-33	Manufacturing	1	22	15	2 504	68 396	2 088	4 106	49 784	212 791	141 026	352 941	69 928
323	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
3231	Printing & related support activities	-	6	2	f	D	D	D	D	D	D	D	D
32311	Printing	-	6	2	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg	-	4	4	f	D	D	D	D	D	D	D	D
	MORGANTOWN, WV												
31-33	Manufacturing	-	20	6	g	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg	-	1	1	f	D	D	D	D	D	D	D	D

Table 4. Industry Statistics for Places: 1997—Con.

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NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
NEW MARTINSVILLE, WV													
31-33	Manufacturing	-	9	2	f	D	D	D	D	D	D	D	D
325	Chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical mfg	-	2	1	f	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	1	1	f	D	D	D	D	D	D	D	D
325181	Alkalies & chlorine mfg	-	1	1	f	D	D	D	D	D	D	D	D
PARKERSBURG, WV													
31-33	Manufacturing	1	30	8	1 103	31 613	872	1 709	22 815	67 949	48 124	113 624	D
PETERSBURG, WV													
31-33	Manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
311	Food mfg	-	1	1	f	D	D	D	D	D	D	D	D
3116	Meat product mfg	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering & processing	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing	-	1	1	f	D	D	D	D	D	D	D	D
PRINCETON, WV													
31-33	Manufacturing	1	23	13	777	22 369	618	1 209	14 408	66 969	76 072	141 212	4 206
SOUTH CHARLESTON, WV													
31-33	Manufacturing	-	20	9	2 169	95 599	1 626	3 570	65 652	584 612	421 894	1 008 442	59 417
325	Chemical mfg	-	6	5	1 182	57 799	801	1 544	34 994	477 295	308 712	788 210	57 992
3251	Basic chemical mfg	-	5	4	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	-	1	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
WEIRTON, WV *													
31-33	Manufacturing	-	21	13	5 898	276 826	4 464	9 631	204 765	760 589	921 513	1 689 884	D
331	Primary metal mfg	-	1	1	h	D	D	D	D	D	D	D	D
3311	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg	-	1	1	h	D	D	D	D	D	D	D	D
331111	Iron & steel mills	-	1	1	h	D	D	D	D	D	D	D	D
WHEELING, WV *													
31-33	Manufacturing	1	53	19	g	D	D	D	D	D	D	D	D
WILLIAMSTOWN, WV													
31-33	Manufacturing	-	5	3	f	D	D	D	D	D	D	D	1 335
327	Nonmetallic mineral product mfg	-	3	2	f	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	3	2	f	D	D	D	D	D	D	D	D
32721	Glass & glass product mfg	-	3	2	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
WEST VIRGINIA		WEST VIRGINIA—Con.	
Companies ¹	number.. 1 414	Quantity of electricity purchased for heat and power	1,000 kWh.. 9 745 945
		Quantity of electricity generated less sold for heat and power	1,000 kWh.. 1 884 058
All establishments	number.. 1 505	Total value of shipments	\$1,000.. 18 293 309
Establishments with 1 to 19 employees	number.. 988	Value of resales	\$1,000.. 632 929
Establishments with 20 to 99 employees	number.. 371	Value added	\$1,000.. 9 310 976
Establishments with 100 employees or more	number.. 146	Total inventories, beginning of year	\$1,000.. 2 284 381
All employees	number.. 72 813	Finished goods inventories, beginning of year	\$1,000.. 964 279
Total compensation ²	\$1,000.. 3 243 359	Work-in-process inventories, beginning of year	\$1,000.. 626 242
Annual payroll	\$1,000.. 2 460 697	Materials and supplies inventories, beginning of year	\$1,000.. 693 860
Total fringe benefits	\$1,000.. 782 662	Total inventories, end of year	\$1,000.. 2 317 030
Production workers, average for year	number.. 55 643	Finished goods inventories, end of year	\$1,000.. 944 560
Production workers on March 12	number.. 55 058	Work-in-process inventories, end of year	\$1,000.. 625 541
Production workers on May 12	number.. 55 568	Materials and supplies inventories, end of year	\$1,000.. 746 929
Production workers on August 12	number.. 55 582	Gross book value of total assets at beginning of year	\$1,000.. 9 672 851
Production workers on November 12	number.. 56 364	Total capital expenditures (new and used)	\$1,000.. 915 267
Production-worker hours	1,000.. 112 554	Capital expenditures for buildings and other structures (new and used)	\$1,000.. 135 539
Production-worker wages	\$1,000.. 1 658 905	Capital expenditures for machinery and equipment (new and used)	\$1,000.. 779 728
Total cost of materials	\$1,000.. 8 961 850	Total retirements ²	\$1,000.. 229 682
Cost of materials, parts, containers, etc., consumed	\$1,000.. 7 652 256	Gross book value of total assets at end of year	\$1,000.. 10 358 436
Cost of resales	\$1,000.. 495 370	Total depreciation during year ²	\$1,000.. 574 558
Cost of fuels	\$1,000.. 291 110	Total rental payments ²	\$1,000.. 82 770
Cost of purchased electricity	\$1,000.. 327 336	Buildings and other structures rental payments ²	\$1,000.. 29 700
Cost of contract work	\$1,000.. 195 778	Machinery and equipment rental payments ²	\$1,000.. 53 070

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

- 2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men's and Boys' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men's and boys' suits and coats (pt)

2321 Shirts, men's and boys' (pt)

2322 Men's and boys' underwear and nightwear (pt)

2325 Men's and boys' trousers and slacks (pt)

2326 Men's and boys' work clothing (pt)

2329 Men's and boys' clothing, n.e.c. (pt)

2341 Women's and children's underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men's and boy's neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census–Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

WEST VIRGINIA

Huntington is in Cabell and Wayne Counties.

Nitro is in Kanawha and Putnam Counties.

Paden City is in Tyler and Wetzel Counties.

Weirton is in Brooke and Hancock Counties.

Wheeling is in Marshall and Ohio Counties.

Appendix E. Metropolitan Areas

WEST VIRGINIA

Charleston, WV MSA

Kanawha County, WV

Putnam County, WV

Cumberland, MD—WV MSA

Allegany County, MD

Mineral County, WV

Huntington—Ashland, WV—KY—OH MSA

Boyd County, KY

Carter County, KY

Greenup County, KY

Lawrence County, OH

Cabell County, WV

Wayne County, WV

Parkersburg—Marietta, WV—OH MSA

Washington County, OH

Wood County, WV

Steubenville—Weirton, OH—WV MSA

Jefferson County, OH

Brooke County, WV

Hancock County, WV

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC

Calvert County, MD

Charles County, MD

Frederick County, MD

Montgomery County, MD

Prince George's County, MD

Arlington County, VA

Clarke County, VA

Culpeper County, VA

Fairfax County, VA

Washington, DC—MD—VA—WV PMSA—Con.

Fauquier County, VA

King George County, VA

Loudoun County, VA

Prince William County, VA

Spotsylvania County, VA

Stafford County, VA

Warren County, VA

Alexandria, VA (IC)

Fairfax, VA (IC)

Falls Church, VA (IC)

Fredericksburg, VA (IC)

Manassas, VA (IC)

Manassas Park, VA (IC)

Berkeley County, WV

Jefferson County, WV

Washington—Baltimore, DC—MD—VA—WV CMSA

Baltimore, MD PMSA

Anne Arundel County, MD

Baltimore County, MD

Carroll County, MD

Harford County, MD

Howard County, MD

Queen Anne's County, MD

Baltimore, MD (IC)

Hagerstown, MD PMSA

Washington County, MD

Washington, DC—MD—VA—WV PMSA

District of Columbia, DC

Calvert County, MD

Charles County, MD

Frederick County, MD

**Washington—Baltimore, DC—MD—VA—WV
CMSA—Con.**

Washington, DC—MD—VA—WV PMSA—Con.

Montgomery County, MD

Prince George's County, MD

Arlington County, VA

Clarke County, VA

Culpeper County, VA

Fairfax County, VA

Fauquier County, VA

King George County, VA

Loudoun County, VA

Prince William County, VA

Spotsylvania County, VA

Stafford County, VA

Warren County, VA

**Washington—Baltimore, DC—MD—VA—WV
CMSA—Con.**

Washington, DC—MD—VA—WV PMSA—Con.

Alexandria, VA (IC)

Fairfax, VA (IC)

Falls Church, VA (IC)

Fredericksburg, VA (IC)

Manassas, VA (IC)

Manassas Park, VA (IC)

Berkeley County, WV

Jefferson County, WV

Wheeling, WV—OH MSA

Belmont County, OH

Marshall County, WV

Ohio County, WV

Wyoming

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Manufacturing

Geographic Area Series



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

Special Tabulations

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673
Service Sector Statistics Division 301-457-2668

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at www.census.gov/econguide. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at www.census.gov/econ/www/history.html.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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Manufacturing

SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

DISCLOSURE

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

Table 1. Industry Statistics for the State: 1997

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments			All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
WYOMING													
31-33	Manufacturing	1	503	90	8 448	256 382	6 426	12 209	174 810	1 031 057	1 910 250	2 955 070	76 990
311	Food mfg	-	39	6	553	13 792	479	882	11 882	42 587	89 615	143 924	2 424
3113	Sugar & confectionery product mfg	-	6	3	e	D	D	D	D	D	D	D	D
31131	Sugar mfg	-	3	3	e	D	D	D	D	D	D	D	D
311313	Beet sugar mfg	-	3	3	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg	5	8	4	259	4 164	99	187	2 140	63 020	52 388	114 954	1 237
3121	Beverage mfg	5	8	4	259	4 164	99	187	2 140	63 020	52 388	114 954	1 237
31211	Soft drink & ice mfg	5	6	4	e	D	D	D	D	D	D	D	D
312111	Soft drink mfg	4	3	3	c	D	D	D	D	D	D	D	D
315	Apparel mfg	2	12	1	c	D	D	D	D	D	D	D	D
321	Wood product mfg	2	48	14	1 025	22 895	906	1 781	18 875	49 283	80 205	128 100	2 611
3211	Sawmills & wood preservation	3	20	10	714	17 424	631	1 293	14 310	36 991	57 160	93 175	2 169
32111	Sawmills & wood preservation	3	20	10	714	17 424	631	1 293	14 310	36 991	57 160	93 175	2 169
321113	Sawmills	2	16	9	670	16 420	594	1 224	13 545	33 969	52 376	85 431	D
3219	Other wood product mfg	-	23	3	249	4 355	223	394	3 712	9 844	19 940	29 424	313
32191	Millwork	-	7	3	184	3 408	169	318	2 966	7 985	17 530	25 138	136
321918	Other millwork (including flooring)	-	3	2	c	D	D	D	D	D	D	D	D
323	Printing & related support activities	2	58	6	431	8 967	301	481	5 623	17 048	12 157	29 418	3 182
3231	Printing & related support activities	2	58	6	431	8 967	301	481	5 623	17 048	12 157	29 418	3 182
32311	Printing	2	58	6	431	8 967	301	481	5 623	17 048	12 157	29 418	3 182
323110	Commercial lithographic printing	2	30	5	282	6 064	192	338	3 701	10 134	7 469	17 673	752
324	Petroleum & coal products mfg	1	13	8	871	42 632	621	1 439	29 161	157 220	1 121 574	1 281 146	20 136
3241	Petroleum & coal products mfg	1	13	8	871	42 632	621	1 439	29 161	157 220	1 121 574	1 281 146	20 136
32411	Petroleum refineries	1	5	5	704	35 059	511	1 206	24 417	133 619	1 079 974	1 212 946	16 874
324110	Petroleum refineries	1	5	5	704	35 059	511	1 206	24 417	133 619	1 079 974	1 212 946	16 874
32419	Other petroleum & coal products mfg	-	5	2	111	5 462	67	148	3 236	14 980	16 839	34 701	D
324199	All other petroleum & coal products mfg	-	3	2	c	D	D	D	D	D	D	D	D
325	Chemical mfg	-	23	6	992	52 499	694	1 663	35 124	414 785	292 750	708 132	26 294
3251	Basic chemical mfg	-	11	3	363	18 659	237	533	11 207	202 424	117 039	316 407	8 885
32511	Petrochemical mfg	-	1	1	c	D	D	D	D	D	D	D	D
325110	Petrochemical mfg	-	1	1	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg	-	4	2	194	10 304	103	219	4 950	79 878	81 192	158 422	D
325188	All other basic inorganic chemical mfg	-	3	2	c	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, & other agricultural chemical mfg	-	2	2	e	D	D	D	D	D	D	D	D
32531	Fertilizer mfg	-	2	2	e	D	D	D	D	D	D	D	D
325311	Nitrogenous fertilizer mfg	-	1	1	c	D	D	D	D	D	D	D	D
325312	Phosphatic fertilizer mfg	-	1	1	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg	-	3	1	c	D	D	D	D	D	D	D	D
32561	Soap & cleaning compound mfg	-	2	1	c	D	D	D	D	D	D	D	D
325611	Soap & other detergent mfg	-	1	1	c	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg	-	9	3	e	D	D	D	D	D	D	D	D
3261	Plastics product mfg	-	8	3	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg	-	5	3	273	5 567	186	333	2 113	17 716	7 341	25 409	D
326199	All other plastics product mfg	-	5	3	273	5 567	186	333	2 113	17 716	7 341	25 409	D
327	Nonmetallic mineral product mfg	-	38	9	668	22 877	536	1 196	17 434	85 227	65 093	149 926	6 818
3273	Cement & concrete product mfg	-	30	7	486	15 950	394	861	12 378	52 881	37 952	90 381	5 041
32731	Cement mfg	-	2	1	c	D	D	D	D	D	D	D	D
327310	Cement mfg	-	2	1	c	D	D	D	D	D	D	D	D
32732	Ready-mix concrete mfg	-	20	5	289	8 637	247	507	7 252	18 044	17 711	35 850	2 411
327320	Ready-mix concrete mfg	-	20	5	289	8 637	247	507	7 252	18 044	17 711	35 850	2 411
3274	Lime & gypsum product mfg	-	3	2	c	D	D	D	D	D	D	D	D
32742	Gypsum product mfg	-	3	2	c	D	D	D	D	D	D	D	D
327420	Gypsum product mfg	-	3	2	c	D	D	D	D	D	D	D	D

Table 1. Industry Statistics for the State: 1997—Con.

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)					
	WYOMING—Con.													
31-33	Manufacturing—Con.													
331	Primary metal mfg	4	8	2	c	D	D	D	D	D	D	D	544	
3315	Foundries	2	5	2	c	D	D	D	D	D	D	D	D	
33152	Nonferrous metal foundries	—	3	2	c	D	D	D	D	D	D	D	D	
331525	Copper foundries (except die-casting)	—	2	2	c	D	D	D	D	D	D	D	D	
332	Fabricated metal product mfg	1	82	11		824	23 586	632	1 096	16 619	52 370	70 513	122 283	5 631
3323	Architectural & structural metals mfg	2	12	3	c	D	D	D	D	D	D	D	D	391
3324	Boiler, tank, & shipping container mfg	—	5	2		188	7 760	160	335	6 755	17 085	39 846	56 467	3 939
33243	Metal can, box, & other metal container (light gauge) mfg	—	4	1	c	D	D	D	D	D	D	D	D	D
332431	Metal can mfg	—	1	1	c	D	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg	2	41	2	e	D	D	D	D	D	D	D	D	D
33271	Machine shops	2	39	2		249	5 597	197	264	3 820	11 271	6 019	17 252	395
332710	Machine shops	2	39	2		249	5 597	197	264	3 820	11 271	6 019	17 252	395
3329	Other fabricated metal product mfg	1	13	4		199	5 209	134	264	3 303	13 400	9 213	22 525	720
33299	All other fabricated metal product mfg	1	12	4	c	D	D	D	D	D	D	D	D	D
333	Machinery mfg	2	33	6		609	17 700	474	942	11 310	40 021	34 605	74 934	1 752
3331	Agriculture, construction, & mining machinery mfg	1	23	3		402	11 306	339	676	8 017	26 385	20 783	47 084	1 018
33312	Construction machinery mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
333120	Construction machinery mfg	—	4	1	e	D	D	D	D	D	D	D	D	D
33313	Mining & oil & gas field machinery mfg	3	12	2		111	3 668	83	157	2 325	8 486	6 688	15 180	261
333132	Oil & gas field machinery & equipment mfg	3	8	2		104	3 475	77	148	2 191	7 929	6 077	14 017	238
3333	Commercial & service industry machinery mfg	—	3	1	c	D	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg	—	3	1	c	D	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg	—	1	1	c	D	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg	2	15	4	f	D	D	D	D	D	D	D	D	D
3341	Computer & peripheral equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg	—	3	2	e	D	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment mfg	—	2	2	e	D	D	D	D	D	D	D	D	D
336	Transportation equipment mfg	3	19	3		316	6 809	251	394	4 177	15 084	14 752	30 498	661
3362	Motor vehicle body & trailer mfg	—	4	1	c	D	D	D	D	D	D	D	D	D
33621	Motor vehicle body & trailer mfg	—	4	1	c	D	D	D	D	D	D	D	D	D
336214	Travel trailer & camper mfg	—	3	1	c	D	D	D	D	D	D	D	D	D
337	Furniture & related product mfg	5	27	2	c	D	D	D	D	D	D	D	D	D
3371	Household & institutional furniture & kitchen cabinet mfg	7	24	2	c	D	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet & counter top mfg	7	12	1	c	D	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg	7	12	1	c	D	D	D	D	D	D	D	D	D
339	Miscellaneous mfg	5	41	5		395	9 307	290	468	5 351	17 854	13 174	30 988	1 238
3391	Medical equipment & supplies mfg	2	16	1	c	D	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg	2	16	1	c	D	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg	—	4	1	c	D	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg	8	25	4	c	D	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg	9	5	3	c	D	D	D	D	D	D	D	D	469
339999	All other miscellaneous mfg	9	4	3	c	D	D	D	D	D	D	D	D	469

Table 1. Industry Statistics for the State: 1997—Con.

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 2. Industry Statistics for Metropolitan Areas: 1997

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by *, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
CASPER, WY MSA													
31-33	Manufacturing	-	91	16	1 440	40 730	1 165	2 193	28 693	92 173	237 359	328 274	4 920
332	Fabricated metal product mfg	1	27	6	356	9 608	268	535	6 869	25 642	22 896	48 834	878
333	Machinery mfg	-	8	2	313	8 866	276	568	6 502	20 392	16 739	37 091	D
3331	Agriculture, construction, & mining machinery mfg	-	8	2	313	8 866	276	568	6 502	20 392	16 739	37 091	D
CHEYENNE, WY MSA													
31-33	Manufacturing	-	48	17	1 349	45 224	985	1 861	28 399	173 805	429 223	606 289	15 817
324	Petroleum & coal products mfg	-	3	2	e	D	D	D	D	D	D	D	D
3241	Petroleum & coal products mfg	-	3	2	e	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees, h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

Table 3. Industry Statistics for Counties: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
31-33	ALBANY COUNTY, WY Manufacturing	1	33	6	531	13 535	412	790	9 414	46 576	41 830	89 063	2 761
31-33	FREMONT COUNTY, WY Manufacturing	1	41	3	f	D	D	D	D	D	D	D	D
31-33	LARAMIE COUNTY, WY Manufacturing	-	48	17	1 349	45 224	985	1 861	28 399	173 805	429 223	606 289	15 817
31-33	LINCOLN COUNTY, WY Manufacturing	-	20	7	579	17 380	424	795	12 081	139 267	61 930	200 757	2 655
31-33	NATRONA COUNTY, WY Manufacturing	-	91	16	1 440	40 730	1 165	2 193	28 693	92 173	237 359	328 274	4 920
31-33	PARK COUNTY, WY Manufacturing	2	41	7	524	13 939	388	619	7 615	37 894	28 277	66 072	1 701

Table 3. Industry Statistics for Counties: 1997—Con.

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
31-33	SWEETWATER COUNTY, WY												
	Manufacturing	1	29	6	696	36 108	471	1 078	23 933	290 282	170 629	458 160	22 112
325	Chemical mfg	-	7	4	f	D	D	D	D	D	D	D	20 459

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 4. Industry Statistics for Places: 1997

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by * and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ²	Payroll (\$1,000)	Number	Hours (1,000)				
31-33	CHEYENNE, WY											
	Manufacturing	-	35	14	g	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c-100 to 249 employees; e-250 to 499 employees; f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

Table 5. Detailed Statistics for the State: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Value	Item	Value
WYOMING		WYOMING—Con.	
Companies ¹	489	Quantity of electricity purchased for heat and power	1 906 795
		Quantity of electricity generated less sold for heat and power	92 185
All establishments	503	Total value of shipments	2 955 070
Establishments with 1 to 19 employees	413	Value of resales	55 662
Establishments with 20 to 99 employees	67	Value added	1 031 057
Establishments with 100 employees or more	23	Total inventories, beginning of year	287 465
All employees	8 448	Finished goods inventories, beginning of year	125 810
Total compensation ²	319 288	Work-in-process inventories, beginning of year	67 786
Annual payroll	256 382	Materials and supplies inventories, beginning of year	93 869
Total fringe benefits	62 906	Total inventories, end of year	285 593
Production workers, average for year	6 426	Finished goods inventories, end of year	136 739
Production workers on March 12	6 313	Work-in-process inventories, end of year	43 130
Production workers on May 12	6 312	Materials and supplies inventories, end of year	105 724
Production workers on August 12	6 457	Gross book value of total assets at beginning of year	1 421 757
Production workers on November 12	6 622	Total capital expenditures (new and used)	76 990
Production-worker hours	12 209	Capital expenditures for buildings and other structures (new and used)	7 562
Production-worker wages	174 810	Capital expenditures for machinery and equipment (new and used)	69 428
Total cost of materials	1 910 250	Total retirements ²	16 855
Cost of materials, parts, containers, etc., consumed	1 727 808	Gross book value of total assets at end of year	1 481 892
Cost of resales	39 549	Total depreciation during year ²	77 347
Cost of fuels	39 435	Total rental payments ²	11 598
Cost of purchased electricity	59 540	Buildings and other structures rental payments ²	3 788
Cost of contract work	43 918	Machinery and equipment rental payments ²	7 810

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²These items are collected in the ASM and estimated for the remaining establishments.

Appendix A.

Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory Data by Stage of Fabrication

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for “all industries” and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

1. Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.

3. Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term “Contract Work” refers to the fee a company pays to another company to perform a service.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production Workers

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

“Value added” avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

VALUE OF SHIPMENTS

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment’s value of product shipments:

1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working

machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting, is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;

3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and
5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 Dog and Cat Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

311119 Other Animal Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3112 Grain and Oilseed Milling

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

311211 Flour Milling

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

311212 Rice Milling

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311213 Malt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

311221 Wet Corn Milling

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

311222 Soybean Processing

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311223 Other Oilseed Processing

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311225 Fats and Oils Refining and Blending

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31123 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 Breakfast Cereal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 Sugarcane Mills

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

311312 Cane Sugar Refining

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

311313 Beet Sugar Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

31132 Chocolate and Confectionery Manufacturing From Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 Chocolate and Confectionery Manufacturing From Cacao Beans

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

31133 Confectionery Manufacturing From Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 Confectionery Manufacturing From Purchased Chocolate

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

3113302 Chocolate and Chocolate-type Confectionery – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced elsewhere.

31134 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 Nonchocolate Confectionery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

3113402 Nonchocolate-Type Confectionery Products – Manufacturer

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, –ades, drinks, cocktail mixes and concentrates.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

311412 Frozen Specialty Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 Fruit and Vegetable Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

311422 Specialty Canning

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

311423 Dried and Dehydrated Food Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (Except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 Fluid Milk Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

311512 Creamery Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

311513 Cheese Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31152 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 Ice Cream and Frozen Dessert Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

3116 Meat Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 Animal (Except Poultry) Slaughtering

This U.S. industry comprises establishments primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311612 Meat Processed From Carcasses

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

311613 Rendering and Meat Byproduct Processing

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

311615 Poultry Processing

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

3117 Seafood Product Preparation and Packaging

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

311712 Fresh and Frozen Seafood Processing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and

entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

3118 Bakeries and Tortilla Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, Tortilla Manufacturing.

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 Retail Bakeries

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

311812 Commercial Bakeries

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and

dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 Cookie and Cracker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

311822 Flour Mixes and Dough Manufacturing From Purchased Flour

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

311823 Dry Pasta Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31183 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 Tortilla Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 Roasted Nuts and Peanut Butter Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

311919 Other Snack Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

31192 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

311920 Coffee and Tea Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31193 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 Flavoring Syrup and Concentrate Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

311942 Spice and Extract Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 Perishable Prepared Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

311999 All Other Miscellaneous Food Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed

under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

312111 Soft Drink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

312112 Bottled Water Manufacturing

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

312113 Ice Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured ice

31212 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 Breweries

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

31213 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

312130 Wineries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31214 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

312140 Distilleries

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

3122 Tobacco Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

31221 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 Tobacco Stemming and Redrying

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 Cigarette Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

312229 Other Tobacco Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets and towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fibers.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

This NAICS industry group includes establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

313111 Yarn Spinning Mills

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

313112 Yarn Texturizing, Throwing, and Twisting Mills

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

313113 Thread Mills

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

The data published with NAICS code 313113 include the following SIC industries:

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

3132 Fabric Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, Knit Fabric Mills.

31321 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 Broadwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

The data published with NAICS code 313210 include the following SIC industries:

2211 Weaving mills, cotton

2221 Weaving mills, synthetics

2231 Weaving and finishing mills, wool (pt)

2299 Textile goods, n.e.c. (pt)

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products

The data published with NAICS code 313221 include the following SIC industries:

2241 Narrow fabric mills

2299 Textile goods, n.e.c. (pt)

313222 Schiffli Machine Embroidery

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

The data published with NAICS code 313222 include the following SIC industry:

2397 Schiffli machine embroideries

31323 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 Nonwoven Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

The data published with NAICS code 313230 include the following SIC industries:

2297 Nonwoven fabrics

2299 Textile goods, n.e.c. (pt)

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing

weft and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 Weft Knit Fabric Mills

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3132411 Weft Knit Fabric Mills – Manufacturer

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

3132412 Weft Knit Fabric Mills – Jobber

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

3132413 Weft Knit Fabric Mills – Contractor

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

313249 Other Knit Fabric and Lace Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

3132491 Other Knit Fabric and Lace Mills – Manufacturer

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

3132492 Other Knit Fabric and Lace Mills – Jobber

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

3132493 Other Knit Fabric and Lace Mills – Contractor

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

3133 Textile and Fabric Finishing and Fabric Coating Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

313311 Broadwoven Fabric Finishing Mills

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3133111 Broadwoven Fabric Finishing Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

3133112 Broadwoven Fabric Finishing Mills – Converter

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

3133113 Broadwoven Fabric Finishing Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

313312 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

31332 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 Fabric Coating Mills

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

This NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.

31411 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

314110 Carpet and Rug Mills

This U.S. industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

The data published with NAICS code 314110 include the following SIC industry:

2273 Carpets and rugs

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 Curtain and Drapery Mills

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

314129 Other Household Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 Textile Bag Mills

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

314912 Canvas and Related Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 Rope, Cordage, and Twine Mills

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

314992 Tire Cord and Tire Fabric Mills

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

314999 All Other Miscellaneous Textile Product Mills

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the

Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 Sheer Hosiery Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

315119 Other Hosiery and Sock Mills

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 Outerwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

3151911 Outerwear Knitting Mills – Manufacturer

Establishments primarily engaged in knitting outerwear clothing.

3151912 Outerwear Knitting Mills – Jobber

Establishments engaged as knit outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

3151913 Outerwear Knitting Mills – Contractor

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

315192 Underwear and Nightwear Knitting Mills

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel

manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors

This industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

315211 Men’s and Boys’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men’s and boys’ apparel and/or (2) sewing materials owned by others for men’s and boys’ apparel.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

315212 Women’s, Girls’, and Infants’ Cut and Sew Apparel Contractors

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women’s, girls’, and infants’ apparel and accessories and/or (2) sewing materials owned by others for women’s, girls’, and infants’ apparel and accessories.

The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric.

3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber

Establishments engaged as men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315223 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except

work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber

Establishments engaged as men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers

Establishments engaged as men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric.

3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers

Establishments engaged as men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples,

arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweat-pants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and working clothing).

3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their

materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers

Establishments engaged as women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers

Establishments engaged as women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315233 Women's and Girls' Cut and Sew Dress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers

Establishments engaged as women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial

functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric.

3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers

Establishments engaged as women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts).

3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers

Establishments engaged as women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel.

31529 Other Cut and Sew Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 Infants' Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 Fur and Leather Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

315299 All Other Cut and Sew Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer

Establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers

Establishments engaged as clothing jobbers (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel), who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel. Examples of these products are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for

apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 Hat, Cap, and Millinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

315992 Glove and Mitten Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

315993 Men's and Boys' Neckwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

315999 Other Apparel Accessories and Other Apparel Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and

gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

This NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

31611 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

316110 Leather and Hide Tanning and Finishing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

3162 Footwear Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 Rubber and Plastics Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

316212 House Slipper Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

316213 Men's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

316214 Women's Footwear (Except Athletic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

316219 Other Footwear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

3169 Other Leather and Allied Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 Luggage Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

316992 Women's Handbag and Purse Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

316993 Personal Leather Goods (Except Women's Handbag and Purse) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

316999 All Other Leather Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 Sawmills

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321114 Wood Preservation

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives,

such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 Hardwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

321212 Softwood Veneer and Plywood Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and plywood

321213 Engineered Wood Member (Except Truss) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321214 Truss Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

321219 Reconstituted Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 Wood Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

321912 Cut Stock, Resawing Lumber, and Planing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

321918 Other Millwork (Including Flooring)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

32192 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 Wood Container and Pallet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 Manufactured Home (Mobile Home) Manufacturing

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

321992 Prefabricated Wood Building Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

The data published with NAICS code 321992 include the following SIC industry:

2452 Prefabricated wood buildings

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 Pulp Mills

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 Paper (Except Newsprint) Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221211 Paper (Except Newsprint) Mills – Integrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

322122 Newsprint Mills

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

3221221 Newsprint Mills – Integrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

3221222 Newsprint Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

32213 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 Paperboard Mills

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3221301 Paperboard Mills – Integrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

3221302 Paperboard Mills – Nonintegrated Producer

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 Corrugated and Solid Fiber Box Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

322212 Folding Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

322213 Setup Paperboard Box Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

322215 Nonfolding Sanitary Food Container Manufacturing

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased foils; and (5) surface coating paper or paperboard.

322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

322222 Coated and Laminated Paper Manufacturing

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

322223 Plastics, Foil, and Coated Paper Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

322224 Uncoated Paper and Multiwall Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

322226 Surface-Coated Paperboard Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

322232 Envelope Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

322233 Stationery, Tablet, and Related Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., loose-leaf fillers, notebooks, pads, stationery, tablets).

The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

322291 Sanitary Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

322299 All Other Converted Paper Product Manufacturing

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

This NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

323110 Commercial Lithographic Printing

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323111 Commercial Gravure Printing

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323112 Commercial Flexographic Printing

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323113 Commercial Screen Printing

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

323114 Quick Printing

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

323115 Digital Printing

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

323116 Manifold Business Form Printing

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

323117 Book Printing

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

323119 Other Commercial Printing

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 Tradebinding and Related Work

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

323122 Prepress Services

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is

petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, Other Petroleum and Coal Products Manufacturing.

32411 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

324110 Petroleum Refineries

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 Asphalt Paving Mixture and Block Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

324122 Asphalt Shingle and Coating Materials Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 Petroleum Lubricating Oil and Grease Manufacturing

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

324199 All Other Petroleum and Coal Products Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 Petrochemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32512 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 Industrial Gas Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 Inorganic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

325132 Synthetic Organic Dye and Pigment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 Alkalies and Chlorine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

325182 Carbon Black Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon black

325188 All Other Basic Inorganic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 Gum and Wood Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

325192 Cyclic Crude and Intermediate Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

325211 Plastics Material and Resin Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

325212 Synthetic Rubber Manufacturing

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

32522 Artificial and Synthetic Fibers and Filaments Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 Cellulosic Organic Fiber Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

325222 Noncellulosic Organic Fiber Manufacturing

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, Pesticide and Other Agricultural Chemical Manufacturing.

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients

into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous fertilizers

325312 Phosphatic Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

325314 Fertilizer (Mixing Only) Manufacturing

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

32532 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 Pesticide and Other Agricultural Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

3254 Pharmaceutical and Medicine Manufacturing

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical

products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and botanicals

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

325414 Biological Product (Except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

3255 Paint, Coating, and Adhesive Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.

32551 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 Paint and Coating Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

32552 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 Adhesive Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, Toilet Preparation Manufacturing.

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 Soap and Other Detergent Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

325612 Polish and Other Sanitation Good Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

325613 Surface Active Agent Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

32562 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 Toilet Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

3259 Other Chemical Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 Printing Ink Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

32592 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 Explosives Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

The data published with NAICS code 325920 include the following SIC industry:

2892 Explosives

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 Custom Compounding of Purchased Resins

This U.S. industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however, the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products

involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating, or laminating plastics film and sheet into plastics bags.

326111 Unsupported Plastics Bag Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 Unsupported Plastics Profile Shapes Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

326122 Plastics Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

32614 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 Polystyrene Foam Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

32615 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 Urethane and Other Foam Product (Except Polystyrene) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

32616 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 Plastics Bottle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

The data published with NAICS code 326160 include the following SIC industry:

3085 Plastics bottles

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 Plastics Plumbing Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

326192 Resilient Floor Covering Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

326199 All Other Plastics Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 Tire Manufacturing (Except Retreading)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

326212 Tire Retreading

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

32622 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 Rubber Product Manufacturing for Mechanical Use

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

326299 All Other Rubber Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further

process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily benefit mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

327113 Porcelain Electrical Supply Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 Brick and Structural Clay Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327122 Ceramic Wall and Floor Tile Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

327123 Other Structural Clay Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

327124 Clay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

327125 Nonclay Refractory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

3272 Glass and Glass Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 Flat Glass Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

327212 Other Pressed and Blown Glass and Glassware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

327213 Glass Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

327215 Glass Product Manufacturing Made of Purchased Glass

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

3273 Cement and Concrete Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, Other Concrete Product Manufacturing.

32731 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 Cement Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

32732 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 Ready-Mix Concrete Manufacturing

This U.S. industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block

327331 Concrete Block and Brick Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

327332 Concrete Pipe Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

32739 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 Other Concrete Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

3274 Lime and Gypsum Product Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

32741 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 Lime Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

32742 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 Gypsum Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products, such as wall-board, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products

327910 Abrasive Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 Cut Stone and Stone Product Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

327992 Ground or Treated Mineral and Earth Manufacturing

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

327993 Mineral Wool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

331111 Iron and Steel Mills

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3311111 Iron and Steel Mills – Fully Integrated

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

3311114 Iron and Steel Mills – Nonintegrated

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

331112 Electrometallurgical Ferroalloy Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

3312 Steel Product Manufacturing From Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 Iron and Steel Pipes and Tubes Manufacturing From Purchased Steel

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 Rolled Steel Shape Manufacturing

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

331222 Steel Wire Drawing

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

3313 Alumina and Aluminum Production and Processing

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

331311 Alumina Refining

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

331312 Primary Aluminum Production

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

331314 Secondary Smelting and Alloying of Aluminum

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

331315 Aluminum Sheet, Plate, and Foil Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

331316 Aluminum Extruded Product Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products

331319 Other Aluminum Rolling and Drawing

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

3314 Nonferrous Metal (Except Aluminum) Production and Processing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

33141 Nonferrous Metal (Except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 Primary Smelting and Refining of Copper

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

331421 Copper Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire)) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

331422 Copper Wire (Except Mechanical) Drawing

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

331423 Secondary Smelting, Refining, and Alloying of Copper

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

33149 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased

nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (Except Copper and Aluminum)

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping,

threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 Iron Foundries

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

331512 Steel Investment Foundries

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

331513 Steel Foundries (Except Investment)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 Aluminum Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

331522 Nonferrous (Except Aluminum) Die-Casting Foundries

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

331524 Aluminum Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

331525 Copper Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

331528 Other Nonferrous Foundries (Except Die-Casting)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous

(except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 Forging and Stamping

This NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 Iron and Steel Forging

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

332112 Nonferrous Forging

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

332114 Custom Roll Forming

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

332115 Crown and Closure Manufacturing

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

332116 Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

332117 Powder Metallurgy Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

3322 Cutlery and Handtool Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools; (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 Cutlery and Flatware (Except Precious) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332212 Hand and Edge Tool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332213 Saw Blade and Handsaw Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

332214 Kitchen Utensil, Pot, and Pan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

3323 Architectural and Structural Metals Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, Ornamental and Architectural Metal Products Manufacturing.

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels, and sections; (2) structural metal products; and (3) metal plate work products.

332311 Prefabricated Metal Building and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

332312 Fabricated Structural Metal Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

332313 Plate Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

332321 Metal Window and Door Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332322 Sheet Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

332323 Ornamental and Architectural Metal Work Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

3324 Boiler, Tank, and Shipping Container Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing.

33241 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 Power Boiler and Heat Exchanger Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33242 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 Metal Tank (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 Metal Can Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

332439 Other Metal Container Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

3325 Hardware Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

33251 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

332510 Hardware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

3326 Spring and Wire Product Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 Spring (Heavy Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

332612 Spring (Light Gauge) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

332618 Other Fabricated Wire Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

33271 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 Machine Shops

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

- 3599 Industrial machinery, n.e.c. (pt)

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

332721 Precision Turned Product Manufacturing

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3328 Coating, Engraving, Heat Treating, and Allied Activities

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or

etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 Metal Heat Treating

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

332812 Metal Coating, Engraving (Except Jewelry and Silverware), and Allied Services to Manufacturers

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

332911 Industrial Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

332913 Plumbing Fixture Fitting and Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332919 Other Metal Valve and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 Ball and Roller Bearing Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

332992 Small Arms Ammunition Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 Small arms ammunition

332993 Ammunition (Except Small Arms) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

332994 Small Arms Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

332995 Other Ordnance and Accessories Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

332996 Fabricated Pipe and Pipe Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

332997 Industrial Pattern Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 Industrial patterns

332998 Enameled Iron and Metal Sanitary Ware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

The data published with NAICS code 332998 include the following SIC industry:

3431 Metal sanitary ware

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts, and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

3599 Industrial machinery, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it

typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general-purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special-purpose machinery). Three industry groups consist of special-purpose machinery—Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General-Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, Mining and Oil and Gas Field Machinery Manufacturing.

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 Farm Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

33312 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 Construction Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 Mining Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

333132 Oil and Gas Field Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

3332 Industrial Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

33321 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 Sawmill and Woodworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking machinery

33322 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 Plastics and Rubber Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 Paper Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

333292 Textile Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333293 Printing Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

333294 Food Product Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

333295 Semiconductor Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

333298 All Other Industrial Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

3333 Commercial and Service Industry Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 Automatic Vending Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency, or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

333313 Office Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

333315 Photographic and Photocopying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

333319 Other Commercial and Service Industry Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 Air Purification Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

333412 Industrial and Commercial Fan and Blower Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

333414 Heating Equipment (Except Warm Air Furnaces) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3335 Metalworking Machinery Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 Industrial Mold Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333512 Machine Tool (Metal Cutting Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

333513 Machine Tool (Metal Forming Types) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

333515 Cutting Tool and Machine Tool Accessory Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

333516 Rolling Mill Machinery and Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

333518 Other Metalworking Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

333611 Turbine and Turbine Generator Set Units Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

333613 Mechanical Power Transmission Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

333618 Other Engine Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

3339 Other General-Purpose Machinery Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, All Other General-Purpose Machinery Manufacturing.

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general-purpose air and gas compressors, nonagricultural spraying and dusting equipment, general-purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 Pump and Pumping Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

333912 Air and Gas Compressor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

333913 Measuring and Dispensing Pump Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

The data published with NAICS code 333913 include the following SIC industry:

3586 Measuring and dispensing pumps

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 Elevator and Moving Stairway Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 Elevators and moving stairways

333922 Conveyor and Conveying Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33399 All Other General-Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 Power-Driven Handtool Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

333992 Welding and Soldering Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

333993 Packaging Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging machinery

333994 Industrial Process Furnace and Oven Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

333995 Fluid Power Cylinder and Actuator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333996 Fluid Power Pump and Motor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

333997 Scale and Balance (Except Laboratory) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 Scales and balances, except laboratory

333999 All Other Miscellaneous General-Purpose Machinery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing general-purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery;

engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

3599 Industrial machinery, n.e.c. (pt)

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely, therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

334112 Computer Storage Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

334113 Computer Terminal Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

334119 Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

3342 Communications Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, Other Communications Equipment Manufacturing.

33421 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

334210 Telephone Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

33429 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 Other Communications Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

3343 Audio and Video Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

33431 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 Audio and Video Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3344 Semiconductor and Other Electronic Component Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products

made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 Electron Tube Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron tubes

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

334413 Semiconductor and Related Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells, and other optoelectronic devices.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

334414 Electronic Capacitor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

334415 Electronic Resistor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334417 Electronic Connector Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

33451 Navigational, Measuring, Medical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

334514 Totalizing Fluid Meter and Counting Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made

by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

334516 Analytical Laboratory Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

334517 Irradiation Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

334518 Watch, Clock, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

334519 Other Measuring and Controlling Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

3346 Manufacturing and Reproducing Magnetic and Optical Media

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 Software Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software; they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

334612 Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

334613 Magnetic and Optical Recording Media Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric lighting equipment manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household appliance manufacturing establishments make both small and major electrical appliances and parts. Electrical equipment manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other electrical equipment and component manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

33511 Electric Lamp Bulb and Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 Electric Lamp Bulb and Part Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

335121 Residential Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

The data published with NAICS code 335121 include the following SIC industries:

- 3089 Plastics products, n.e.c. (pt)
- 3645 Residential lighting fixtures
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

The data published with NAICS code 335122 include the following SIC industry:

- 3646 Commercial lighting fixtures

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

- 3648 Lighting equipment, n.e.c.
- 3699 Electrical equipment and supplies, n.e.c. (pt)

3352 Household Appliance Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, Major Appliance Manufacturing.

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 Electric Housewares and Household Fan Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

The data published with NAICS code 335211 include the following SIC industry:

- 3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

335212 Household Vacuum Cleaner Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

The data published with NAICS code 335212 include the following SIC industries:

- 3635 Household vacuum cleaners
- 3639 Household appliances, n.e.c. (pt)

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 Household Cooking Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

The data published with NAICS code 335221 include the following SIC industry:

- 3631 Household cooking equipment

335222 Household Refrigerator and Home Freezer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

335224 Household Laundry Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

335228 Other Major Household Appliance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

3353 Electrical Equipment Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 Power, Distribution, and Specialty Transformer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

335312 Motor and Generator Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

335313 Switchgear and Switchboard Apparatus Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 Switchgear and switchboard apparatus

335314 Relay and Industrial Control Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

335912 Primary Battery Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 Fiber Optic Cable Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

335929 Other Communication and Energy Wire Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

335932 Noncurrent-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 Noncurrent-carrying wiring devices

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 Carbon and Graphite Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and graphite products

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air, and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 Motor Vehicle Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

336112 Light Truck and Utility Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

33612 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

336120 Heavy Duty Truck Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special-purpose, heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

3362 Motor Vehicle Body and Trailer Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

336212 Truck Trailer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

336213 Motor Home Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

336214 Travel Trailer and Camper Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility, and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

3363 Motor Vehicle Parts Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, Other Motor Vehicle Parts Manufacturing.

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts, whether or not for vehicular use.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and valves

336312 Gasoline Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, ships).

336321 Vehicular Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33633 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33634 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 Motor Vehicle Brake System Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

33636 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33637 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 Motor Vehicle Metal Stamping

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 Motor Vehicle Air-Conditioning Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

336399 All Other Motor Vehicle Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3364 Aerospace Product and Parts Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and parts

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

3365 Railroad Rolling Stock Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

33651 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 Railroad Rolling Stock Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames, and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

3366 Ship and Boat Building

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 Ship Building and Repairing

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

336612 Boat Building

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 Motorcycle, Bicycle, and Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the

equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair, a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knock-down). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen, and bedroom furniture, and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 Upholstered Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337122 Nonupholstered Wood Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337124 Metal Household Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337125 Household Furniture (Except Wood and Metal) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed,

rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

337127 Institutional Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

3372 Office Furniture (Including Fixtures) Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

33721 Office Furniture (Including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 Wood Office Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

337212 Custom Architectural Woodwork and Millwork Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

337214 Office Furniture (Except Wood) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

337215 Showcase, Partition, Shelving, and Locker Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 Mattress Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

33792 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 Blind and Shade Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

This NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 Laboratory Apparatus and Furniture Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

339116 Dental Laboratories

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

3399 Other Miscellaneous Manufacturing

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, All Other Miscellaneous Manufacturing.

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

339911 Jewelry (Except Costume) Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

339912 Silverware and Holloware Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

339913 Jewelers' Material and Lapidary Work Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

339914 Costume Jewelry and Novelty Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

33992 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 Sporting and Athletic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 Doll and Stuffed Toy Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

339932 Game, Toy, and Children's Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

33994 Office Supplies (Except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 Pen and Mechanical Pencil Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

339942 Lead Pencil and Art Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

339943 Marking Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

339944 Carbon Paper and Inked Ribbon Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 Carbon paper and inked ribbons

33995 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

339950 Sign Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

33999 All Other Miscellaneous Manufacturing

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 Gasket, Packing, and Sealing Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

339992 Musical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

339993 Fastener, Button, Needle, and Pin Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

339994 Broom, Brush, and Mop Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

339995 Burial Casket Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

339999 All Other Miscellaneous Manufacturing

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical

equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

Appendix C.

Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsc) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

WYOMING

There are no geographic notes for the state of Wyoming.

Appendix E. Metropolitan Areas

WYOMING

Casper, WY MSA

Natrona County, WY

Cheyenne, WY MSA

Laramie County, WY

